

DISCRETION AS AN ADAPTIVE DEVICE:
FROM EXPERT RULE STRUCTURES TO NEGOTIATED SERVICE DELIVERY

A Dissertation

Presented to the Faculty of the Graduate School
of Cornell University

In Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy

by

Lesli M. Hoey

August 2012

© 2012 Lesli M. Hoey

DISCRETION AS AN ADAPTIVE DEVICE:
FROM EXPERT RULE STRUCTURES TO NEGOTIATED SERVICE DELIVERY

Lesli Hoey, Ph.D.

Cornell University 2012

This policy case study of Bolivia's Zero Malnutrition Program addresses gaps in understandings of the promises and pitfalls of rational and adaptive forms of public problem solving in low-income countries. I argue that pleas to shift social change processes toward more responsive strategies must first understand why rational management strategies continue to dominate. Alternatively, we need to identify concrete adaptive strategies policy actors can, and actually do implement in practice. I consider these questions in Bolivia from the perspective of national planners who design policies, mid-level supervisors who manage programs, and front-line staff charged with program delivery.

Using a grounded theory approach, methods included participate observation, document review, secondary data analysis, semi-structured interviews, "scuttlebutt informants", "itinerant actors" and action research. My findings suggest that rational planning behavior may often be a *reaction* to complex social change processes – coping mechanisms – instead of an approach policy designers intentionally plan or impose on implementers. Alternatively, where practitioners approach the task with a more "adaptive" mindset, I argue that considerable guidance, commitment and, paradoxically, strategy, are necessary.

My dissertation begins to add specificity to what we can tell practitioners who desire to apply adaptive strategies and what planners can do to structure policy designs differently. Findings also offer lessons for theory related to policy planning and implementation. Ultimately,

I advance the idea of “developmental administration” for crafting the necessary support systems, capacity-building approaches, and deliberative mechanisms that can intentionally build the ability to facilitate, build learning and continuously reinforce adaptive responses.

BIOGRAPHICAL SKETCH

Lesli Hoey is a doctoral candidate at Cornell University in the Department of City and Regional Planning, where she also received her Master's degree in 2008. She was born in Bolivia to Methodist missionaries where she lived for eight years in the rural Alto Beni region. After completing a Bachelors of Arts at Earlham College (1996) in Psychology, she worked for six years as an applied researcher and evaluator of U.S. childcare and education programs with Temple University, Campbell-Kibler Associates, and the National Center for Educational Accountability in Austin, Texas. Throughout this time, she also worked with four outdoor education centers teaching environmental education to children and youth.

Since then, opportunities Lesli has had to be privy to the lives, struggles and remarkable triumphs of the most remote, marginalized Andean communities as well as the politics, power and motivations of high-level policy actors across donors, UN agencies, ministries, and major NGOs made her uniquely committed to bridging these two worlds in her research, practice and teaching. These experiences have included her work as a Peruvian study tour leader, volunteer with rural development Andean NGOs, program evaluator with Heifer International, global hunger experiential educator, and Bolivia field coordinator for Cornell's Mainstreaming Nutrition Initiative and multi-donor project to develop a participatory nutrition planning workshop model, called the Program Assessment Guide.

To Dad, for making me a dreamer, and Mom for helping me realize those dreams.

ACKNOWLEDGMENTS

Thanking everyone who contributed in some way to getting me to this point in my life would require another dissertation-length list. Above all, stands my Ph.D. committee, to whom I will forever be grateful. Their patience, guidance, encouragement, and confidence in me was unfathomable. I remember how excited I was the day John Forester agreed to be my advisor, but I will remember even more vividly how honored I have been to have had him as an intellectual guide throughout this process. As an advisor, I have been amazed by his tireless generosity of time and how he honors even the faintest of ideas with genuine curiosity and profound insight. I became a better writer because of him, a more thoughtful researcher, and a more inquisitive observer of human interactions that can often seem mundane but hold fantastic lessons about problem solving.

I can thank David Pelletier for the course my life took at Cornell. First working for him as the Bolivia field coordinator for the Mainstreaming Nutrition Initiative introduced me to so many worlds I had never explored: the policy process, nutrition, action research and more. That fateful year in 2007 not only sealed my commitment to doing my dissertation in Bolivia, but it allowed me to work alongside a truly engaged researcher. Because of David, I began to think that I too might actually be able to thrive in academia, even with my deep commitment to carrying out research that has meaningful, direct impact for improving policies, programs, and communities. As a part of my Ph.D. committee, he played a vital role, not only in launching my publishing career, but for being the sounding board I always needed to walk out into the world inspired to create change.

Of my three committee members, I have known Mark Conostas the longest. He saw me in my fledgling days as a Master's student at Cornell, and was one of the first to make me feel like I had something to contribute to the world of practice as well as theory. He was originally the link I craved to a critical thinker of evaluation, but through our talks, I also learned many practical and strategic lessons about how to succeed in academia. His sage advice, to "think about who you want to have dinner with for the rest of your life" helped me think through a pivotal moment when I was deciding about entirely different career paths for a Ph.D. program, leading me back to Cornell – a decision I have been thankful for ever since.

Many other professors at Cornell were invaluable for (re)shaping how I see the world. From the first day I came onto Cornell's campus, I have been amazed by how genuine, accessible and engaging professors here have been. They have taught me more than I can say about teaching, mentoring, and questioning the world around me. I am especially thankful to professors in the Department of City and Regional Planning, who shifted my gaze to cities when I had always been so rooted in rural realities. Many professors in Development Sociology also completely changed how I understand and study development practices, and broadened my interest in food systems.

My mother especially deserves my gratitude for her countless hours editing this dissertation, not once, but twice, and for being ever ready to pick me up when I started to waver throughout my Ph.D. process. Kate Lowe has played a similar role, offering constant moral and practical support as a fellow fledgling in the world of academia and especially as a writing partner and critic, which has been invaluable for finishing this dissertation and many other writing projects. I thank Pat Campbell for enthusiastically wanting to read my dissertation, after

going through the process with my Master's thesis, and for being the first to suggest to me that I too could, and should, do a Ph.D. one day.

I thank, too, my core support system in Bolivia, including Susan Ellison, Gabe Hetland and Sara Shahriari, who helped me think through the puzzles in my research and kept me grounded. I thank Todd and Joe, my writing partners for their constant, positive support to get through this marathon of a dissertation process. I tip my mug to Stella's Café for providing me with many cups of jo when my home office became too stifling and for treating me like family. And I thank so many other friends in Ithaca and at the end of the phone who were always ready to talk things out, step in at a moments notice when crisis calls, and celebrate silent victories along this Ph.D. road.

I would also like to thank the Einaudi Center for the countless Travel Grants and the Graduate School for support I received for exploratory and follow-up phases of my research. The Inter-American Foundation Grassroots Development Fellowship funded the majority of my fieldwork, and also introduced me to a world of other Latin American scholars dedicated to similar issues of social justice.

Finally, this dissertation would not have been possible had it not been for so many actors in Bolivia who were so generous with their time and giving of their trust. I am especially thankful to staff in the Ct-CONAN, the MOH Nutrition Unit, SEDES Chuquisaca, SEDES Potosi, donors I spoke to, and the NGO in El Alto I worked with, as well as many individuals in El Alto, Sucre, Santa Cruz, Potosi, La Paz and the many municipalities I visited. I hope I do justice to the remarkable challenge of their jobs. Their dedication and conviction to improve the lives of marginalized Bolivians in the face of so many odds, is truly remarkable and inspiring.

TABLE OF CONTENTS

BIOGRAPHICAL SKETCH	iii
DEDICATION	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS.....	viii
LIST OF FIGURES	xii
LIST OF TABLES.....	xiii
INTRODUCTION	1
Why adaptive policy implementation?	3
Why low-income countries?	4
Why nutrition policy?	6
Why Bolivia?	7
Why the ZM Program?	8
ZM Background.....	10
Structure of the dissertation	13
SECTION I: PROGRAM DESIGN.....	16
CHAPTER ONE: Unintended consequences of adaptive choices in a multi-level system	17
ZM Paper Plans.....	18
Threats to ZM Sustainability	20
Political pressures	20
Bureaucratic bottlenecks.....	23
Decision-Making Processes	26
Flexible decision-making.....	26
Centralized decision-making	27
Coordination (or the lack of).....	29
Horizontal coordination	29
Vertical coordination	32
Effects on local implementation	35
Staffing the UNIs	40
Electing for consultants.....	41
Training gaps and duplications	42
Deflecting responsibility	44
Turf battles	45
Staff rotation	47
Questioning the efficacy of UNIs	49
Launching the Bono	51
Electing to launch the Bono early.....	51

Constant protocol changes	52
Enrollment problems.....	54
Questioning the efficacy of the Bono	56
Conclusion	58
CHAPTER TWO: Learning and adjustment of program design strategies.....	62
Decentralizing ZM management.....	63
Maintaining centralized decision-making above	63
Negotiating a bigger role for SEDES below.....	64
Possible tradeoffs of the SEDES arrangement.....	66
Increasing ownership	70
UNI changes.....	70
Bono changes.....	71
Facilitating horizontal coordination.....	72
MOH and SEDES efforts.....	72
The story of one Health Network Coordinator	75
Individual staff actions.....	78
Conclusion	80
SECTION II: PROGRAM ADMINISTRATION	84
CHAPTER THREE: Two faces of rationality	85
Rationalizing a rational management approach.....	86
Hidden operational problems behind quantitative indicators	89
Hidden problems with UNI implementation.....	90
Hidden problems with micronutrient interventions	92
Data quality concerns.....	93
Micronutrient data.....	93
Chronic malnutrition data	95
Management-introduced implementation problems	98
Lowered morale	98
Quality paperwork, not quality healthcare.....	100
Strained patient-staff relations	102
Wasted learning opportunities	103
Over-Emphasizing the “information” in Information Analysis Committees	105
Becoming blind to emerging solutions	108
Reinforcing staff self-censorship	110
Conclusion	112
CHAPTER FOUR: Strategic management.....	119
Supervising, and listening, as a “friend”.....	120
Intentionally building commitment.....	122
Place-based and collective problem solving.....	126
A “forum for debate” and so much more.....	126
“Quintupulating” knowledge and learning through case studies.....	128
Step-by-step adoption and data improvement through quality assurance methods...131	

Motivational strategies.....	132
Reinforcement.....	133
Linking data with experience with action.....	134
Simple, doable, immediate changes.....	135
Involving all staff and all centers.....	137
Transfer to local health authorities.....	138
Conclusion.....	140
Motivation.....	140
Problem solving.....	143
Simple, doable and immediate action.....	143
Dialogue, debate and negotiation.....	144
Multiple forms of knowledge.....	145
SECTION III: PROGRAM DELIVERY.....	149
CHAPTER FIVE: The banking model.....	150
Reasons for a banking model.....	151
Lack of training.....	151
Medical training and priorities.....	153
A simple view of the change process.....	154
Too little time for engagement.....	156
Messages to focus on the technical.....	157
Belief in authoritarian tactics.....	159
Sense of duty to debunk unscientific beliefs.....	161
Recognizing the knowledge – practice gap.....	162
Blame the mother for failing to change.....	163
Conclusion.....	165
Circumstances of the job.....	166
Single tunes.....	168
Giving up on mothers.....	169
Implications.....	171
CHAPTER SIX: Negotiated service delivery.....	173
Santolinas doctor and UNI staff.....	174
Belini UNI.....	178
Cantamporo health center nurse.....	182
Plan Seis Health Center.....	187
El Alto NGO project.....	188
Project design.....	189
Nutrition promotion strategies.....	191
Gaining trust.....	192
Co-responsibility, Negotiation, and Finding Answers in What They Do.....	193
Forming Alliances.....	194
Giving examples they'll understand.....	195
Improved understanding.....	196
Conclusion.....	198

Common approaches that define an adaptive approach.....	198
Building and maintaining trust.....	199
Where to communicate: stepping outside the clinic walls.....	200
How to communicate not just what to say.....	201
Involving mothers in generating and agreeing with solutions.....	202
Implications for nutrition policy.....	203
CONCLUSION: Toward A Practice of Developmental Administration.....	205
Chapter summaries.....	206
Implications for theory.....	209
Two faces of rationality.....	209
Two faces of discretion.....	211
Implications for practice: A developmental administration.....	214
Timeliness of this study.....	218
Appendix A: CONAN-MOH Organizational structure.....	221
Appendix B: Methodology.....	222
Appendix C: Zero Malnutrition health sector conceptual model (untranslated).....	246
Appendix D: Comparative Integrated Nutrition Unit (UNI) survey methodology.....	247
Appendix E: Micronutrient coverage across ZM priority rural municipalities.....	249
Appendix F: Comparative El Alto health center study methodology.....	251
Appendix G: Two strategies to nutrition program delivery.....	252
Appendix H: List of questions asked across functions and scales and average interview.....	253
REFERENCES.....	254

LIST OF FIGURES

Figure 1: Rate of malnutrition among Bolivian children under two years of age	10
Figure 2: Ministries in the ZM Program	11
Figure 3: Perceptions of malnutrition causes, NGO site.....	197
Figure 4: Perceptions of malnutrition causes, comparison site.....	197

LIST OF TABLES

Table 1: Number of municipalities implementing Nutribebe and with UNIs, 2009	90
--	----

INTRODUCTION

This is a story about the practice of policy implementation in the halls of Bolivia's Ministry of Health, the frigid, sparse quarters of rural health posts high in the Andes, and cramped, humid waiting rooms of urban clinics in Bolivia's tropical lowlands. It is told through a case study of Bolivia's Zero Malnutrition (ZM) program, a national effort to reduce chronic malnutrition. This is also a broader story that addresses theoretical gaps in understandings of the promises and pitfalls of rational and adaptive forms of public problem solving in low-income countries.

My interest in policy implementation, and specifically in rational and adaptive strategies, emerged out of my initial observations of ZM implementation during the program's first year. ZM coordinators invited me, as part of Cornell University's Mainstreaming Nutrition Initiative (MNI), to observe the ZM implementation process, document its progress and provide feedback over the course of a year of fieldwork and follow-up visits. The MNI team learned a considerable amount about getting and keeping nutrition on a national political agenda (Pelletier et al. 2011), but only began to touch on questions about implementation. My observation of ZM during its first year suggested that ZM planners had little guidance for operationalizing their lofty plans. As I stayed in touch with ZM partners, it became increasingly apparent that implementation questions remained a black box for most ZM actors. The frustration one ZM policy actor expressed about the state of the program three years after its launch succinctly explained why the ZM program promised to hold important lessons for policy implementation. These would be important lessons because ZM advocates had broken through nearly every other barrier that normally prevents policies from getting to the policy implementation stage (Patashnik 2008):

Despite having great financing, great political will, a clear (health sector) structure that reaches down to the community level, great intervention ideas, technical consultants of

high quality...despite all this, the (ZM) program is still haltingly moving forward, experiencing unbelievable problems at the operational level. How do we resolve this? This is *the* moment that a country could finally make great advances!

In my own search for answers from the international nutrition community, development scholars, and implementation researchers, I found that messages about how to approach policy implementation are contradictory, partial, and vague. Unanswered debates about whether to adopt rational or adaptive forms of implementation were particularly noticeable. This led me to ask: What can policy implementers working to reduce chronic malnutrition in a resource-poor country like Bolivia tell us about the feasibility and usefulness of adaptive and rational strategies for resolving a complex public problem? This could be answered through a series of more specific questions: What do rational or adaptive strategies mean for the details of implementation, such as supervisor-staff and staff-patient relations, staff motivation, accountability structures, learning processes, and time management? What factors push or pull policy actors along the rational-adaptive continuum, encouraging and discouraging use of more mechanistic, standardized approaches or flexible, responsive solutions? To what extent are there variations in the use of rational and adaptive strategies across functions/scales (i.e., national policy designers, mid-level managers and local implementers)? Finally, how does the use of rational or adaptive strategies at higher-levels of a policy system affect the implementation choices of staff at lower levels?

Despite several decades of research available on policy implementation, the complexity of implementing adaptive management and its interdisciplinary nature have left conceptual frameworks fuzzy and contradictory (de Leon and de Leon, 2002). I chose to interpret the interactions I observed among Bolivia's ZM implementers using lenses associated with policy implementation literature that I selected based on observations during earlier work and

dissertation fieldwork. Certainly these are not all the angles from which implementation can be understood. This analysis focuses on: policy sustainability (Patashnik 2008), strategic capacity (Pelletier et al.2011), incremental planning (Lindblom 1959; Mintzberg 1989), organizational learning (Mahler 1997), sense making (Weick et al.2005) discretion and street-level bureaucrats (Lipsky 1980; Elmore 1980), tools of legibility (Scott 1998), and the micro-politics of practitioner-client interactions (Forester 1989, 2009).

In what follows, I explain in more detail the rational-adaptive debate in the literature, and why nutrition policy, low-income countries, Bolivia, and the ZM program in particular offered unique platforms for understanding the dynamics of these opposing policy strategies. I end with more background on the ZM program and an overview of the dissertation's structure.

Why adaptive policy implementation?

Many of the elements of adaptive policy strategies emerged early in the planning literature after scholars began to reveal how impractical rational comprehensive planning was in practice, especially for resolving dynamic problems in multi-actor contexts (Lindblom 1959; Wildavsky 1973; Rittel and Webber 1973). More recent literature frames adaptive ideas around “complex” problems and policy systems, characterized as nonlinear, emergent, uncertain and dynamic (Wildavsky 1973; Plsek and Greenhalgh 2001; Manson 2001; Cilliers 2002; Fischer 2003). Known by many other names¹, a growing number of scholars² agree that the answer to taming these types of societal problems lies in “adaptive” strategies, based on flexible policies

¹ These labels range from networked governance to epistemic communities, boundary organizations, policy networks, adaptive co-management, polycentric or multi-layered governance, interactive governance, resilience management, and empowered democracy.

² This includes post-modernists, public administrators, geographers, health system scientists, policy evaluators, planners, international development scholars, and natural resource managers. See: Forester 1989, 1999; Rondinelli 1993; Manson 2001; Plsek and Greenhalgh 2001; Cilliers 2002; Glouberman and Zimmerman 2002; Litaker et al 2006; Sterman 2006; Brugnach et al 2007; Westley et al 2007; Callaghan 2008; Armitage 2008; Williams et al. 2009).

and program designs that draw upon multiple types of knowledge and continual, local problem-solving (Plsek and Greenhalgh 2001; Glouberman and Zimmerman 2002; Litaker et al. 2007).

Despite the enthusiasm for adaptive strategies, considerable ambiguity remains about concrete strategies that can be called “adaptive” (Lasker and Weiss 2003). The impression in much of the literature is that it takes a formal process to ensure multiple stakeholders participate and agree upon problem definitions and solutions, to instill values of risk-taking, and to establish flexible institutional structures (Armitage 2008, 19; Agranoff and McGuire, 2001). Scholars rarely focus on the influence of different contexts, the capacities required, and the varied social processes and power dynamics that determine whether and how such an approach can actually be adopted or institutionalized. Academia has also tended to develop an understanding of what adaptive governance is, should or can be without engaging policy actors in these same questions.

Why low-income countries?

This gap in understanding between theories and actual practice is especially noticeable in low-income countries, where debates about and policy choices are not as neatly in favor of academia’s more flexible, dynamic and negotiated approach. Research on the dynamics of policy implementation is also generally lacking in developing countries (Tendler 1997, Saetren 2005), even as development scholars and donors disseminate – and often require – the application of implementation paradigms developed in Western countries (Chang 2002).

Andrew Natsios (2010), who served as USAID’s Administrator from 2001 to 2005, argues that USAID and other Western aid organizations have turned contemporary development practice into an “audit culture”, focused on compliance and “measurement-based decision-making”. He dates the development of today’s “command and control system for foreign aid programs” (69) to 1968, when Robert McNamara applied quantitative, corporate management

tools as president of the World Bank. While working with the Ford Motor Company, McNamara learned related RAND Corporation-designed concepts and later applied them in Vietnam with the Department of Defense. USAID soon after (1969) introduced the Logical Framework approach that quickly influenced project planning throughout the development aid community (Natsios 2002).

By the early 1980s, Rondinelli (1983) observed that “the planning and management procedures adopted by governments and international aid agencies for preparing and implementing development projects became more detailed and rigid at the same time that development problems were recognized as more uncertain and less amenable to systematic analysis and design” (65). Such recognition became more widespread by the late 1980s and 1990s, when participatory methodologies began to reverse the standardized, top-down paradigm, to a “people” centered approach focused on values, capabilities, knowledge, and priorities (Chambers 2010).

The reversal back to a more mechanized programming approach and today’s more aggressive spread of rational planning and management strategies came in the early 1990s. Al Gore, under the Clinton administration, initiated regulatory reforms under the National Performance Review (Natsios 2010). This act instituted New Public Management – an approach based on business administration strategies that emphasize standards for performance measurement, cost-effectiveness, and decentralization (along with privatization and devolution) of authoritative structures (Osborne and Gaebler 1992).

New Public Management principles spread during this period throughout many low-income countries with a renewed focus on results-based management, impact assessments and other practices that focused on linear causality, predictability and “objectively verifiable

indicators” (Chambers 2010, 13). Chambers (2010) argues that the intangible aspects of good practice such as “commitment, honesty, energy and trust” were again lost to the measurement of indicators and targets, the logframe that has become “a methodological monoculture in donor requirements”, the raising of randomized control trials as the gold standard of impact assessment, and the general expectation that “if it can’t be measured, it won’t happen” (14).

Why nutrition policy?

Nutrition policy offers an important platform for this study, because of the complex nature of public nutrition problems and unresolved about the degree to which adaptive or rational elements should guide large-scale nutrition interventions. First, chronic malnutrition could be characterized as a classically “wicked” public problem (Rittel and Webber 1973), because dynamic determinants mix in unique ways to cause malnutrition (World Bank 2006). Thus it is difficult to design standardized solutions across different countries, regions or even households.

Second, the nutrition community has proven tools to reduce malnutrition, but lacks knowledge about *how* to implement them on a large-scale, across diverse contexts (Shekar 2008; UN 2009). Several scholars, in a high-profile 2008 Lancet series, suggested that undernutrition could be reduced by 25 percent in the 36 countries with the highest burden if “proven” interventions were implemented (Bhutta et al.2008). However, other authors in the series (Bryce et al.2008) pointed out that despite increasing interest in scaling up nutrition interventions, the “historical bias towards studies of the efficacy of specific interventions and against broader assessments of the effectiveness of program implementation remains”.

Bryce and others (2008) suggested that what may be lacking most is the “strategic capacity” to guide, build and sustain commitment for national nutrition agendas. Also lacking are operational capacities to design, manage, monitor, adapt and integrate nutrition programs into

other health programs. They also noted that the nutrition community's experience in the past – like with many large-scale nutrition policy failures of the 1970s (Field 1977) – demonstrate that solutions should also be generated locally (Bryce et al.2008). Paradoxically, however, these same nutrition scholars argued for greater “data-based decision making for nutrition” and “coherent national strategy that includes regular monitoring” (521). To develop a “coherent” strategy would be difficult if solutions were generated and continuously adapted locally. “Data-based decision making” also implies that decisions might place a lower premium on non-data-based decisions, including experience-based, collective agreements based on feasibility, adjustments made to accommodate local priorities, etc.

Why Bolivia?

Bolivia also provided a unique location for this case study because recent government reforms paradoxically aim to strengthen both top-down government as well as locally-led government. Initial laws in 1994 and 1995 instituted administrative decentralization and popular participation in local planning (Kohl 2003). The Morales administration has taken steps to further decentralize the government to strengthen the rights of excluded indigenous groups and respond to a call by political opponents for more government “autonomy” (Centellas 2010). Constitutional reforms in 2009 and a subsequent Law of Autonomy and Decentralization in 2010 grant the nine departmental (state) governments greater autonomy and allow regions and indigenous communities to form local governance structures, hold elections and create administrative systems.

These reforms, however, appear in conflict with another aim of the Morales administration, reestablishing the government's “sovereignty”. This goal was noted in the 2006 National Development Plan, and pursuing it would require ensuring that international aid and

private institutions align with the priorities of the state. For nearly two decades, NGOs have acted as major service providers (Lopez 1994; Bebbington 1997). For instance, a chapter titled “rectoria” (most closely translated as “authority”) in the *Ministry of Health 2010-2020 Plan* describes how the MOH is trying to:

recuperate the sovereignty and *rectoria* of the (health) system to lead intersectorally-focused health; with improved capacity to manage in order to guarantee the financial sustainability of the sector, protect the health of Bolivians, their living conditions, work, and their relationship with the environment. The aim is also to develop a health system that has legal, administrative and financial guidelines and a framework independent of external conditionalities. To implement this policy (the MOH) proposes a strategy to recoup and consolidate the health sector sovereignty, oriented to strengthen the state *rectoria* of the Family, Community and Intercultural Single Health System and of the health sector authority in all levels of management (MOH 2010, 113).

This excerpt suggests that as ministries try to ensure NGOs align with their priorities, they are also attempting to re-establish their authority to develop and carry out policy, in direct conflict with the decentralization process. As political scientist Centellas (2010) points out, the practical effects of the existing and recent decentralization laws “encourage a hyper-localism that makes coherent policymaking at the national level difficult” (para. 29).

Why the ZM Program?

Finally, Bolivia’s Zero Malnutrition program was also a clear choice for practical and conceptual reasons. First, my prior work with ZM allowed me to become familiar with Bolivia’s institutional setting for nutrition reform and to observe firsthand the challenges of integrating contextual knowledge into national decision-making. In addition to the local knowledge I gained, the extended time I spent in Bolivia helped me build and maintain strong connections within the Bolivian nutrition community at national, regional and local levels, and within the ZM program, MOH, and international aid community.

Second, the ZM program also revealed tensions between rational and adaptive implementation strategies. When I returned to begin fieldwork in the middle of ZM's fourth year, national administrators described their implementation approach as adaptive. In their daily decision-making, they acknowledged that "there is no recipe" for reducing malnutrition, and frequently noted how "you never know" and "it's all circumstantial" when talking about the implementation process. They described how "You can have your goal - which is key - but after that, it's not clear how you'll get there. There are so many factors that are uncontrollable that will arise." Some were even frustrated by my attempts to understand their management decisions, because they often felt they did not know from one day to the next what they might do. They seemed to see ZM as a grand "experiment" that they were learning from as they went. They also explained that they had resisted direct attempts at rational comprehensive planning suggested by the official ZM Planner. When the planner suggested developing departmental strategic plans, one ZM administrator retorted that this "would have taken until 2015!" The ZM administrator also described how the ZM planner "thinks in ways that aren't practical" when he suggested that administrators stop adding new interventions to the ZM package or establish a comprehensive monitoring and evaluation system. The Ministry of Health (MOH) micronutrient program manager also saw adaptations as opportunities to improve the intervention, not deviations to suppress. She described how:

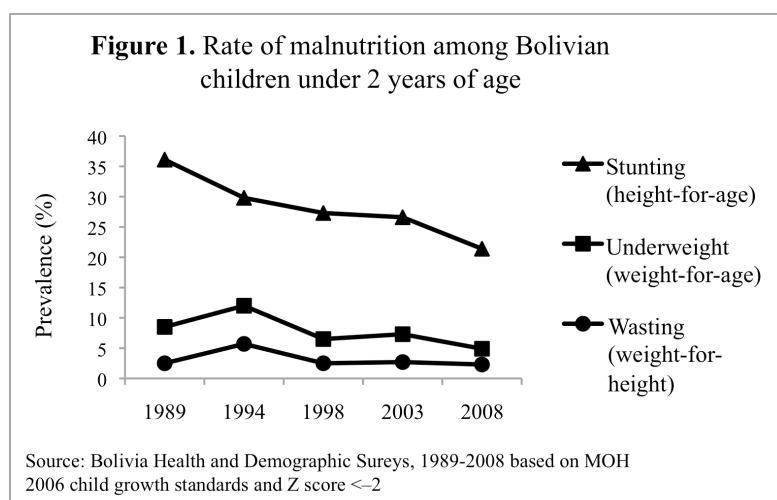
The dosage should be uniform, but after that, the instruments and other things should be flexible. If not, we'll be making decisions that (staff) should 'do this' which will only respond to the reality of three departments and not the others. Like in Oruro, they do what they call "CombuNutricional" where they combined supplementation, vaccines and counseling on exclusive breastfeeding when they monitor municipal data. Rather than distort national policies, the experience and initiative of the departments helps us. Flexibility is key at the national, SEDES [regional health office] and local level..."

Yet when I talked with policy actors outside the national ZM office, some described ZM as an “island” that was operating outside the existing health system and a “temporary project” that was applying uniform strategies across the country. Some saw ZM as “very technocratic, bureaucratic – centralized”, where administrators “impose everything”, staff “have to comply” and “can’t make adjustments because they’re orders and we have to complete them”. One ZM observer believed the issue was the lack of capacity to realistically adapt the health sector programs across diverse social, political and geographic contexts. She noted how:

It’s very difficult to work in a country across economic, social, political and climatic conditions like you find in the Altiplano and lowlands, especially in health. The health situation of a family in Potosi is very distinct from a family in Santa Cruz. To develop a program that is valid to fight malnutrition in these two realities is complex and there isn’t always the technical, political, economic capacity of MOH programs to develop programs that are adaptable to each of these realities. It’s a huge challenge that I think hasn’t been resolved appropriately. The program still works from a starting point of applying a program more or less similarly in all places. I think it should be adjusted much more, at least to the three ecological levels: Altiplano, valley and lowlands. ...with rural, urban and peri-urban areas you have six different contexts...and then you add Quechua and Aymara, linguist and cultural differences...

ZM Background

Bolivian NGOs and the public sector made the most progress with nutrition interventions in the 1980s and early-1990s (Figure 1). Chronic malnutrition among children under two (the age



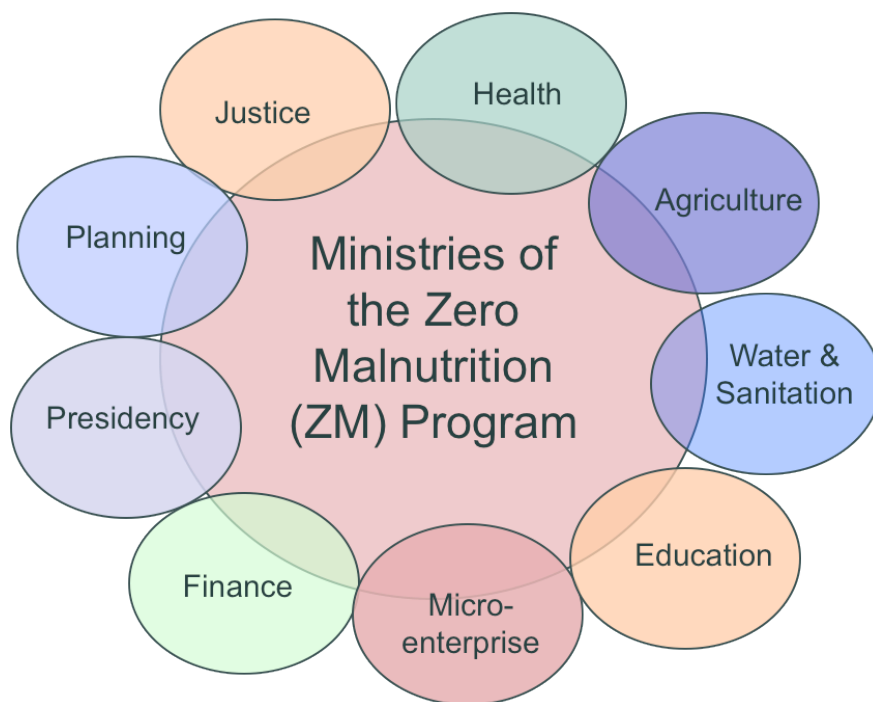
period when malnutrition can have the most lasting physical and cognitive impact) dropped from 38 percent in 1989 to 28 percent in 1994, nearly eliminating iodine deficiency.

Exclusive breastfeeding nearly doubled (World Bank 2002, 2). Chronic malnutrition rates went down only gradually after 1994. Malnutrition remained concentrated in the highlands and among the poorest quintile, at rates over 40 percent (CONAN, 2006). This stagnation prompted several Bolivian doctors to renew efforts to reduce³ rates faster. They designed the Zero Malnutrition (ZM) intending to unite fragmented nutrition efforts in the health sector, across the international aid community and Ministry of Health, and involve sectors outside health. President Evo Morales launched the program in 2007. At the time, the original strategic plan extended to 2011, though plans in 2011 were

underway to extend the program for at least five more years.

The larger program involves nine ministries (Figure 2) that make up the National Food and Nutrition Council (CONAN), headed by the Ministry of Health (MOH)

Figure 2. Ministries in the ZM Program



Source: Heredia 2008

(Appendix A). I focus on ZM’s health sector interventions, because they were launched earlier than other sector interventions (Hoey and Pelletier 2011), offering more of an opportunity to

³ Although rates fell by more than five percentage points between 2003 and 2008, the change is unlikely due to ZM program interventions, which only began to be implemented in 2007.

study implementation progress. They have each been launched at different points in the program, and today include, but are not limited to:

- Micronutrient initiatives (food fortification and supplements including Vitamin A, Zinc, and an iron and multi-nutrient packet called Chispitas, known as Sprinkles)
- Nutrition-focused Integrated Management of Childhood Illnesses⁴ (IMCI), referred to by its Spanish acronym in this study, AIEPI-Nut. This includes a clinic-based version of AIEPI-Nut, implemented by existing doctors and nurses as part of their daily routines, and a community-based AIEPI-Nut version led by community health promoters.
- Acute malnutrition treatment units in hospitals
- Provision of complementary food for children 6 months to 2 years old (Nutribebe)
- Nutrition promotion and prevention centers at the municipal or neighborhood level called Integrated Nutrition Units (UNIs), intended to monitor and facilitate the integrate of many interventions into local health systems, including AIEPI, micronutrients, nutrition promotion, some curative work and referrals
- A conditional cash transfer program focused on maternal and child health, called the Bono Juana Azurduy Program (Bono)

Most of these health sector interventions have been launched nationally, though the broader ZM program and its many donor and NGO partners have focused more resources and attention on approximately 52 Phase I and 114 Phase II rural municipalities (out of 327 total), identified by the World Food Program as most vulnerable to food insecurity (Ct-CONAN 2006). Cities have not been considered “priority”, because of the lower prevalence of chronic malnutrition. Nationally-implemented health sector interventions still reach them, however, like they do all non-priority municipalities. The only exception is UNIs, which were first established in Phase I municipalities as early as 2007, and starting a year later in most, but fewer Phase II municipalities and some cities.

⁴ See the UNICEF website for a more complete description of this approach:
http://www.unicef.org/health/index_imcd.html

Structure of the dissertation

The remainder of this dissertation is structured around three sections of empirical chapters and my conclusion. A discussion of methods selected and used appears in Appendix B. Section I focuses on planning, hiring, and institutional coordination carried out by national planners. Next, Section II explores the day-to-day supervision of front-line staff carried out by mid-level managers at the departmental health office (SEDES), the Health Network Coordinator who oversees several municipal health systems, and the Municipal Head Doctor in charge of the entire health system in one municipality. In Section III, I analyze service delivery in the ZM-established Integrated Nutrition Units (UNIs), the existing municipal hospital, more dispersed health clinics or people's villages and homes carried out by new staff hired directly by ZM or health staff (usually doctors and nurses) who already worked in local health systems. Within each section, the first chapter highlights the challenges ZM actors faced and the dominant approach most adopted. The subsequent chapter discusses ways staff addressed unexpected problems that arose or strategies that varied from the norm.

Specifically, I begin by looking at the program design in Section I. In *Chapter One*, I describe how national ZM planners began the task of addressing such a complex problem like chronic malnutrition. I identify two main challenges ZM planners faced. More detailed accounts follow of how they handled: a) coordination (or lack thereof) within and across other health programs, b) staffing choices in one of ZM's key interventions, and c) a decision to launch a second major program earlier than expected. I also consider how each of these design choices impacted lower-level implementers. *Chapter Two* describes adaptive solutions actors throughout the policy system used to reverse the confusion and resistance national ZM planners had caused with their initial design choices.

In Section II, I look at the program management in *Chapter Three*. The chapter explains how many mid-level managers were unsure how to interpret the confusing and competing tasks they were being handed. Managers leaned toward a results-based form of management, despite major data weaknesses. This focus created additional implementation problems: a) lowering staff morale, b) reinforcing “quality paperwork” over “quality healthcare”, and c) undermining staff-patient relations, d) preventing a key data analysis forum from improving learning, e) blinding managers from seeing emerging solutions, and f) reinforcing self-censorship among staff. In *Chapter Four* I describe alternative ways a smaller number of managers approached the task of getting staff to perform their functions. This approach was based on attempting to understand lower-level staff challenges, encouraging instead of stifling discretion, and trying a variety of ways to improve learning forums.

Section III details the complexity of program delivery. In *Chapter Five*, I show how health staff were often at a loss about how to interpret the ambiguous task of “reducing and preventing malnutrition”. They also struggled to juggle these activities with competing tasks – especially the extensive paperwork supervisors required to monitor implementation. As for their supervisors, the simplest option was to implement a rational approach. The approach was translated into a “banking model” of behavior change strategies, focused on supplying micronutrients and distributing information. Finally, in *Chapter Six* I show alternative examples of health staff who had the support and imagination to use a more adaptive, “negotiated” approach. This latter approach aimed to build trust, understand a caregiver’s unique situation, and mutually develop solutions.

Finally, in the Conclusion, I argue that rational and adaptive approaches may not always conform to ideas often suggested in the literature. Rational implementation is not always the

result of desk-planners imposing fully vetted, pre-planned strategies upon compliant staff. Rather, rational strategies are often mal-adaptive coping mechanisms that staff at lower levels of a policy system develop in *reaction* to complex change processes, just when adaptive strategies are needed most. Adaptive strategies, on the other hand, I argue are not simply unplanned reactions to a changing policy environment. I suggest that policy actors, using an adaptive approach, must do so strategically, actively *guiding* implementation, as they adjust, customize and re-shape policies based on emerging threats, opportunities and local realities.

Calling for adaptive responses obviously (after many years of such urging in the international nutrition system and elsewhere) doesn't suffice to produce such policy implementation. What then might help turn adaptive responses into practical realities, not just promissory "good ideas"? If the idea of adaptive management describes a response to complexity and the limits of traditional rational-comprehensive planning, how might political regimes ever implement adaptive responses in practice? What might prevent the rational idea of responsive-management from being rational in theory but useless or non-rational in practice? The Bolivia case, we shall see, suggests that adaptive action does not have to rely upon the savvy, intuitive front-line staffer, but can be facilitated, must often be learned, and requires continual reinforcement, but first we have to begin at the beginning....

SECTION I: PROGRAM DESIGN

CHAPTER ONE: Unintended consequences of adaptive choices in a multi-level system

After so skillfully getting nutrition on the political agenda, harnessing the funds to carry out a large-scale effort, and armed with evidence-based policy options, how did ZM planners begin the task of designing the implementation process? Did they set out along a rational path to develop a comprehensive plan, thinking linearly, setting up program goals and inputs at the top and expecting staff along the policy system to comply, or did issues emerge that instead forced ZM planners to muddle through, making decisions gradually, as Lindblom (1957) and Mintzberg (1987) would expect? In the process of responding to emerging issues, what “strategic capacity” (Pelletier et al 2011) skills did ZM planners demonstrate, or lack, especially for generating support for nutrition action across high-level political leaders, mid-level actors and local staff as Patashnik (2008) says is so crucial to ensuring policy sustainability? To what degree did the multi-level policy system ZM planners were operating within influence the consequences of their design decisions?

I set out to answer these questions in this chapter by reviewing the plans ZM initially made on paper and considering the two major challenges that ultimately shaped many ZM decisions: political pressures and administrative bottlenecks. The majority of the chapter analyzes how these two threats shaped the way ZM planners a) managed decision-making processes, b) coordinated (or not) horizontally and vertically in the health sector, c) staffed the Integrated Nutrition Units (UNIs), and d) launched the conditional cash transfer program Bono Juana Azurduy. Within these chapter sections, I also considered how national design choices limited or facilitated implementation at lower levels of the program. The findings reinforce, but also extend what we understand about policy sustainability. We see as Patashnik (2008) found, that national planners were more attuned, and capable of dealing head-on with national-level

dynamics threatening the program's implementation than they were about understanding or seeing similar threats at lower levels. Unlike Patashnik's work, however, we see here that threats to policy sustainability that existed below actually emerged *in response* to national efforts to keep the ZM program afloat, suggesting that policy sustainability choices present difficult tradeoffs.

ZM Paper Plans

On paper, the approach ZM planners took to design ZM was somewhat contradictory. Many aspects suggested that they were approaching ZM using a rational planning model, while the design of some individual programs intentionally introduced ways of customizing responses to local priorities and capacities.

The rational planning side of ZM was apparent in the countless deliverables from consultants that offered plans for every conceivable aspect of the program, including separate training, job and procedural manuals⁵ for individual program elements (e.g., UNIs, Nutribebe, SVIN-C, Clinic-based AIEPI-Nut, Community-based AIEPI-Nut, etc.), multisectoral and health-sector strategic plans for 2007-2011, and more. A consultant hired by the Ct-CONAN in 2008 to develop a comprehensive ZM monitoring and evaluation plan suggested the program collect no less than 96 indicators (Sanchez 2008, 11-24). The health sector strategic plan outlined a budget that was to be distributed across 4 health sector goals⁶, 10 strategies, and 32 activities, and monitoring based on annual targets for the 4 goals and 17 sub-indicators (Ct-CONAN 2008, 21-

¹To access some of these made public, see the ZM website:

<http://www.sns.gob.bo/aplicacionesweb/pmdc1/index.php?ID=Boletines&evento=1>

⁶ These four goals for the ZM health sector include: "1) Strengthen community participation of social networks and social actors through the promotion of nutrition habits and practices among women, newborns and children under five, interculturally; 2) Reduce micronutrient deficiencies in the target population by applying supplementation, fortification and complementary food strategies; 3) Strengthen the management capacity at national, departmental and health networks to provide integrated health care, (improve) nutrition and (address) prevalent illnesses of women, newborns and children under five; and 4) Strengthen the capacity (to carry out) nutrition surveillance at the national, departmental, health network and community level" (Ct-CONAN 2008, 21-23).

23, 32-33). A conceptual model developed for the health sector side of ZM (Appendix C) also depicts a linear logic model moving from the context that motivated the ZM program, to the inputs, processes, products, results and impact (Cordero 2007). In 2010, ZM planners also began the process of constructing a second, five-year strategic plan to start in 2012.

Other details in some of these documents suggested that the program was designed to be flexible and that national plans simply offered broad “guidelines and not the details of implementation” as many national ZM administrators sometimes described their role. In the *Sectoral 2007-2011 Zero Malnutrition Strategic Plan*, for instance, the authors noted that “It’s important to relate (?) that the results, strategies and activities that form the formal structure of the 2007-2001 *Strategic Plan*, are permanently considered using the principles of integrality, intersectorality, participation, equity and interculturality, in response to the family-based, community-based and intercultural health model (SAFCI)” (Ct-CONAN 2008, 8). If ZM planners truly intended to operate under the SAFCI model – a parallel initiative MOH planners were launching to reform the entire public health sector system – this would have meant that communities would be involved in prioritizing and designing health actions through the process the MOH called “co-responsibility” and “co-management” (Bolivia MOH 2008).

Many elements of the individual health sector interventions also appeared to plan for flexibility. One of the first actions national planners carried out when they launched ZM was to establish Food and Nutrition Councils at national (CONAN), departmental (CODAN) and municipal (COMAN) levels (See Appendix A). The idea was that these councils would become a new and permanent planning space to regularly convene government staff across different

sectors⁷, community organizations and NGOs to collectively devise strategies for reducing malnutrition, customized to each municipality and region. Municipal teams of staff making up the Nutrition Integrated Units (UNIs) were also expected to spend 80 percent of their time doing nutrition “prevention and promotion” and only 20 percent doing “clinical” work to treat malnourished children, but they were left considerable room to decide what to do for their prevention and promotion activities. UNIs were also trained to carry out operational studies to adjust ZM policies to their localities and to conduct SVIN-C, a random sample survey of mothers’ nutrition knowledge to help health staff focus nutrition education campaigns geographically within the municipality and topically on areas where mothers seemed weakest.

Threats to ZM Sustainability

From the very start of the program, ZM policy actors had to contend with two issues that threatened their ability to implement – and sustain – all programs in Bolivia – political pressures and bureaucratic bottlenecks.

Political pressures

Establishing a place for ZM within the Ministry of Health (MOH) required political maneuvering from the very beginning of the program, from negotiating to establish a Nutrition Unit in the MOH, to keeping nutrition activities a priority in the MOH budget, leveraging millions of dollars of donor and national government budget funds for health-sector interventions, and managing tensions with some of Bolivia’s major health-based NGOs (Hoey and Pelletier 2011). But the most debilitating political threat was a chronic problem that affects all public programs in Bolivia: entire administrations at national, department and local levels are

⁷ At the national level, the CONAN included the Ministries of Education, Justice, Rural Development, Agriculture and Environment, Water, Finance, Economy and Microenterprise, Health, and the Presidency that make up the National Food and Nutrition Council (CONAN) (See Figure 1).

routinely replaced after elections or mid-stream as elected officials replace key administrators in response to public pressure.

In the health sector, ZM planners started off in the best position possible when Bolivian President Evo Morales made Nila Heredia – a critical advocate of ZM (Hoey and Pelletier 2011) – his first Minister of Health in 2006. The technical secretary who acted as the Ct-CONAN Coordinator was part of the Ministry of Health, while all of directors of ZM health interventions (e.g., UNIs, AIEPI-Nut, micronutrients, etc) were part of this ministry, so the minister’s support was crucial. Like the majority of ministries, however, the Ministry of Health experienced six changes in ministers between 2006 and 2012 (Somos Sur 2012). After Heredia was replaced at the start of 2008, however, the ZM Coordinator gained the support of replacement ministers, until 2010, when the fourth Minister of Health, who was not a ZM supporter, fired between 50 to 80 health staff, 30 from the Bono Juana Azurduy⁸ program alone (La Razon 2010). The MOH Nutrition Unit Coordinator who had been with ZM from the start lost her job that day, and a SEDES administrator noted that “The continuation of the national ZM Coordinator was (also) in question...the Minister was scrutinizing her...The Coordinator had to knock on many doors to keep her job”. Nila Heredia resumed her place as Minister again in 2011, but only for a year. The ZM Coordinator eventually resigned in early 2012 after Morales replaced Nila Heredia again.

ZM health interventions have also been affected by changes at the department level as governors regularly reappoint SEDES directors, creating additional job uncertainty for SEDES administrators and staff at health network and municipal levels. These frequent changes can also mean that remaining and new staff conform to an entirely different set of priorities with each new director, as one NGO partner explained: “In general in Bolivia in the public sector, ministry, or health network, its (decision-making) is very vertical and authoritative – what directors say is

⁸ See *Launching the Bono* later in this chapter for a description of the Bono Juana Azurduy program.

what everyone does. So what happens in ZM depends a lot on the attitude and personality of SEDES directors. And they change frequently, even in a few months... In two departments where the directors changed, things are totally different (now) – they’re more receptive, more enthusiastic.” One SEDES administrator also described how the instability at the department level also relegates significant power to lower-level political actors who lobby or communities who protest for certain hires in SEDES and municipal appointments:

The governor’s office decides who will be director of SEDES and staff that will be hired. Municipal authorities also play a role – it’s a political party problem. Municipal authorities can ask for certain people for these UNIs. The SEDES Nutrition Unit should be the one to make the requests, but municipal head doctors should too. Without their backing and petitions, we’re lost, but (head doctors) don’t see the importance. They could even ask for more *item* hires. With the backing of the community, they have a lot of weight.

Administrative teams in mayors’ offices at the municipal level also change entirely after elections, affecting the partnerships and local government commitments local level staff can establish. As one NGO staffer explained, in his municipality “now there’s 80 percent unawareness of ZM policies, micronutrients, etc. because there was a huge change in municipal authorities in 2010 and rotation...” Health sector staff who rely upon community health leaders and promoters also experience constant rotation as communities re-elect their local leaders at least every two years, sometimes yearly, or as health promoters leave their posts to migrate in search of employment.

Furthermore, existing and recent decentralization laws “encourage a hyper-localism that makes coherent policymaking at the national level difficult” (Centellas 2010). Bolivia’s Law of Administrative Decentralization passed in 1994 and Law of Popular Participation passed in 1995 established the first layer of governance authority at the municipal level (Kohl 2003).

Constitutional reforms in 2009 and a subsequent Law of Autonomy and Decentralization in 2010

also granted the nine departmental governments greater autonomy and further deepened local-level authority, allowing groups of communities across a region and individual indigenous communities to form local governance structures, hold elections and administrative systems.

Bureaucratic bottlenecks

A mix of bureaucratic reasons also throws the entire staffing situation for ZM and MOH programs into a state of chaos. Health centers and health programs must often rely on dedicated staff to work as volunteers to maintain any semblance of stability because of delays in processing contracts. More often, offices and health centers go for months at a time without replacement staff or are run by recently hired staff who must re-establish local relationships and learn the particularities of the new institutional environment. Many of the causes for these delays are related to administrative problems and funding procedures, but a major cause is the reliance on one-year consultant contracts, as one donor explained:

Donors have also expressed, many times, that the issue of labor policies in the MOH is a public function that unfortunately has been maintained like this – with short and annual contracts, etc. This is a fiscal policy that isn't dependent exclusively on the health ministers... It's the accepted belief of the institutional culture of our countries that while the minister is there you're secure, but once there's a change, it's possible you could be let go. I think, too, that the local level doesn't know that that issue isn't about a lack of political will on the part of the minister, but that it's a national public labor policy that relies on decisions from the Ministry of Finance and the Ministry of the Presidency. I understand the arguments, but don't agree. It's related to the costs of formalizing (personnel): the costs for benefits like vacations, health insurance, incorporating staff into the payroll, etc. The public payroll is already large, so to make it larger could be a negative sign related to 'inefficient' management. That's the fear of formalizing positions. I think 30 percent of all health staff and other ministries are under contract. If you assume these, that's thousands or tens of thousands of staff – so it would be impossible to decide to formalize staff positions in only one ministry and not in another program or other office. This is what I understand the rationalization to be. I understand it, but don't agree, because in the end, it seriously affects the functioning of the MOH and its programs. There's lack of continuity, huge gaps, de-motivated staff and many who resign.

Starting at the national level, short-term and delayed contracts create situations where, as one NGO coordinator described, “staff are always changing. We’ve never been able to start and end (a project) with the same staff in the MOH”. One health network had five new Health Network Coordinators in four years, “each with a different rhythm, priorities, etc.” Staff in municipal finance offices who handle the disbursement of health funds are also often on short contracts, affecting health center budgets (and therefore, the purchase of many micronutrients). In one city, after months of no funding the previous year because of the introduction of a new documentation system, a SEDES Nutrition Unit administrator explained that these staff members were without contracts in January and February of 2011. So “while they were re-contracting, the office that reviews (budget) reports from the centers was without any staff to enter data and as a result, centers again went without funding”. Health centers also routinely have doctors and nurses working as volunteers. In one case, a doctor worked for six months as a volunteer, got her three-month contract and then had to renew it again at the start of the year.

Even the Ct-CONAN in the 2010 annual report noted⁹ that “the sustainability of working with ‘consultants’ needs to be analyzed, which make up 52 percent of the ZM budget according available financial information” (Ct-CONAN 2010). The instability this caused for ZM, one donor explained, has almost become routine for national administrative staff: “Even though these ZM staff also have temporary contracts, they’ve continued working. At this level, there’s an acceptance of this temporary situation. There’s no pressure or demand (to change this situation).”

A unique staffing situation this constant instability created was the rotation between numerous

⁹ Although not specified, this likely included both Ct-CONAN staff at the national level, regional staff and municipal staff working for ZM in all aspects – multisectoral as well as health-specific positions such as UNIs. The budget was 36 million Bolivianos (US\$ 5.1 million) in 2010. Using other numbers cited in the Ct-CONAN 2010 report, the portion of the budget that funded consultants was calculated at 45%, the rest covering administration (16%), equipment and supplies (19%) and funds to cover 16 municipalities for the Municipal Incentive program (20%).

ZM positions. At least ten staff I interviewed had held two or more ZM positions. One doctor involved with ZM moved between six different positions in ZM between 2008 and 2011, from the department level as a regional ZM coordinator to working in the Ct-CONAN, in the MOH with AIEPI-Nut, SAFCI brigades, as an UNI Coordinator in one SEDES, and other positions. Within each of the programs as well, the rotation meant that some programs shifted course as new directors entered. In four years, for instance, UNIs had three different national MOH coordinators. One SEDES UNI Coordinator explained how, over time, this meant that “We lost the essence of UNIs and didn’t keep policy implementation up to date... With the change in supervisors, UNIs do what they like and the sense of what UNIs are changes at the local level... allows them to go in different directions, not keep equipment functioning properly, etc.”

Staff instability was also apparent at lower levels of the program, within many of the specific ZM initiatives. The most notorious issues were with the UNIs (see *Staffing the UNIs* below). Many also complained about COMAN consultants rotating frequently. One COMAN consultant reported that out of 25 COMAN consultants that had been hired in her cohort in 2010, by mid-2011, only 5 were left. In one municipality, an NGO partner noted how “That’s the complaint of mayors, that they come, do their report and go. What do they do to help? We’ve had two or three COMAN consultants in the past years...” Staff rotation among Bono consultants was also frequent. One departmental Bono administrator estimated that only fifty percent of his Bono doctors had remained in the same municipality for the first two years of the program, since 2009. In one Potosi municipality, an UNI staffer reported that their Bono doctor had been replaced three times in two years, “They come, they get to know the job and they go. There’s no continuity. They resign. Or they don’t get paid for months, are unable to eat and are sleeping in the hospital.” In another Potosi municipality, one Bono doctor explained that he was

the fourth Bono doctor in two years, had been working for four months without a contract and only one month's pay.

Decision-Making Processes

This extreme institutional instability – and the reality that so much was outside the control of national policymakers – is likely why ZM administrators personally described their decision-making process as flexible and responsive or what Lindblom (XXXX) called incremental, as threats and opportunities arose. What is surprising – a detail Lindblom does not raise – is that many policy actors also described ZM decision-making as centralized within a small core of administrators. Centralized decision-making is usually associated with rigid, authoritative, and Weberian style bureaucracies. But in this situation, at least in the first years of the program, centralizing decisions may have been what allowed administrators to get things done, especially because those in the key leadership positions seemed so adept at avoiding political pressures (or taking advantage of sudden windows of opportunity) and going around bureaucratic bottlenecks.

Flexible decision-making

First, in their daily decision-making, ZM planners in the Ct-CONAN office and the MOH Nutrition Unit acknowledged that “there is no recipe” for reducing malnutrition, and frequently noted how “you never know”, “You don't know from one day to the next what's going to happen” and “it's all circumstantial” when talking about the implementation process. They described how “You can have your goal - which is key - but after that, it's not clear how you'll get there. There are so many factors that are uncontrollable that will arise.” Some were even frustrated by my attempts to understand their management decisions, because they often felt they

did not know from one day to the next what they might do, seeing ZM as a grand “experiment” in which they were learning as they went.

ZM decision-makers resisted direct attempts at rational comprehensive planning suggested by the official ZM Planner. When the Planner suggested developing departmental strategic plans, one ZM administrator retorted that this “would have taken until 2015!”. The ZM administrator also described how the ZM Planner “thinks in ways that aren’t practical” when he suggested that administrators stop adding new interventions to the ZM package or establish a comprehensive monitoring and evaluation system. The Ministry of Health (MOH) micronutrient program manager saw adaptations as opportunities to improve the intervention, not deviations to suppress. She described how:

The dosage should be uniform, but after that, the instruments and other things should be flexible. If not, we’ll be making decisions that (staff) should ‘do this’ which will only respond to the reality of three departments and not the others. Like in Oruro, they do what they call “CombuNutricional” where they combined supplementation, vaccines and counseling on exclusive breastfeeding when they monitor municipal data. Rather than distort national policies, the experience and initiative of the departments helps us. Flexibility is key at the national, SEDES and local level...”

Centralized decision-making

Many actors also described ZM decision-making as centralized. One social network study conducted on ZM identified the ZM Coordinator and the MOH Nutrition Unit Manager as having the greatest influence in the ZM program (Morales et al 2010). Some described how the ZM Coordinator “only trusts three people” even though her team had grown to more than twenty full-time staff and consultants. Even though these three men were technically on consultancy contracts, their commitment to ZM was unmatched, as they regularly worked as volunteers for months at a time while their own contracts underwent the slow renewal process. They also served in multiple roles, simultaneously taking over botched work of other Ct-CONAN staff,

helping to brainstorm and design new initiatives, writing annual reports, managing major initiatives, supervising new consultants, leading workshops, traveling at a moments notice, and more. Aside from these trusted confidants, however, some consultants in the Ct-CONAN office suggested that the rest of the national team was often confused about what was going on because of constant shifts in staff roles, and their dependency on the ZM Coordinator to delegate tasks for the day.

In the following, an ex-CT CONAN consultant criticized ZM administrators for not establishing a more traditional organizational chart and for not delegating stable lines of authority. Given the chaos in the institutional system, however, holding onto power, doing “everything” yourself, maybe a quasi-rational response. Practically as well, the best ZM administrators may have been able to do was maintain a semblance of stability among a core group of staff at the highest levels of the ZM administration, while working as best they could with other staff who came and went. The ex-CT CONAN consultant, however, believed the issue was that administrators were still operating as they had when the program was small, keeping decision-making – even about the smallest program changes – among centralized, within a core group of administrators instead of operating through more decentralized and stable organizational roles:

I think in the beginning (the ZM Coordinator) had a very clear vision which wasn't very shared; but that was pertinent because it was a small program, with activities that weren't very extensive. They had a budget of one or two million Bolivianos, but now it's around seventy million (\$US 10 million). You can't continue with a structure that's so centralized; you've got to delegate and decentralize. ZM continues to be a bit 'virtual' at the national level. The Ct-CONAN depends on the MOH for its structure, but it's not institutionalized. It's still viewed as temporary. The Ct-CONAN should be part of an agency that's very close to the MOH minister and structured in a very clear way. There is no organizational chart for a coordinator, three sub-coordinators and directors who are responsible for others. It's still structured through direct management, not shared. It's very solid, very intense, but not shared. I think a clear, official structure would help, with regulations that define functions, manuals to formalize the structure and management.

There are people who are in charge currently in the Ct-CONAN, but they're in charge thematically. There isn't a functional organization over *processes*... I don't see intermediary leaders. There's a central management with 20 or 30 people who are in charge of certain things, whose responsibilities change frequently over the course of the year, going from L, to X, etc. They need people in charge of communication, planning, M&E. They do have people who are in charge of these, but it's not formal and they have very limited power. The national coordinator delegates functions but she maintains authority over all staff, like with the person in charge of "planning". He's not responsible for three managers, who are each over five staff, and so on. Without this (structure), you end up leading 30 or 40 people and intervening in all their work. You don't have time. You end up neglecting certain things when you should have a five-member board that can then delegate responsibilities and power so that you don't have to interact in a manner so directly with everyone. The national coordinator also gives directions directly to the local level. Things have progressed a little. There are some intermediary leaders, but I think she's still very cautious about delegating power, which happens with many people. Once someone has power, it's hard to give it up. You fear that someone else won't do things well, so you end up trying to do everything... Frequently, I've noticed that the ZM Coordinator will delegate, but in the end she'll make even the smallest decisions, bypassing others to maintain power.

Coordination (or the lack of)

Many staff described how horizontal and vertical coordination of ZM interventions within the health sector were highly inconsistent. They said that ZM health sector interventions were scattered across the MOH, inviting criticism by some policy actors wanting a more coherent, stable structure and systematic coordination mechanisms. I argue again, however, that the reason ZM administrators seemed to coordinate pragmatically – and sometimes gave up trying – was likely out of administrative expediency and possible self-preservation in a politically and bureaucratically unstable policy environment. As I describe at the end of this section, however, the pragmatic choice of not coordinating much of the time – or doing it sporadically – tended to leave lower-level staff confused and frustrated.

Horizontal coordination

Health interventions and program activities discussed in this study were scattered across the MOH Health Services Unit, which ran both the clinic and community-based AIEPI

programs; the Health Promotion Unit which housed the Nutrition Unit, where UNI managers and micronutrient managers were located; the SNIS office which coordinated the SVIN-C surveys, and the separate Bono program office. One ex-Ct-CONAN staffer frustrated by this arrangement described his misgivings:

Right now, ZM doesn't exist (in the MOH), only in name. It's in the MOH Nutrition Unit (with UNIs and the micronutrient program). It's also under the MOH Health Services Unit (as part of AIEPI). It's here, there. It's not structured well to facilitate analysis and coordination. ...How can it be introduced within the MOH structure? I think the Nutrition Unit was born to die, with a life of five years. The idea, I think, wasn't to create a permanent MOH Unit. The Bono program has an office that's not in the Ct-CONAN office. ZM can't be in charge of the Nutrition Unit – it needs to be a unit that encapsulates (all of nutrition), like AIEPI. It's complicated, ridiculous the way it's organized. In my experience, ZM is in the MOH in name only, but it's not part of the MOH structure. With what authority could I ask the Nutrition Unit Coordinator for information? 'Yeah' she'd say. She responds to her boss in the Health Promotion Unit, just as the SVIN-C Coordinator responds to the SNIS Director...I don't think the program will disappear for years, but I also don't think it'll have very good results. I hope to God that I'm wrong, but it's a Titanic task. There are two sides to the coin – a technical component and a political component. Policy implementation is very complicated here in Bolivia, very particular. It's not unique, but very particular.

To “coordinate” in person, therefore, required moving across organizational units, and sometimes across the city to one of three MOH buildings or the separate Bono and Ct-CONAN offices. Many MOH managers who ran ZM nutrition interventions described situations where they were not included in implementation decisions that should have involved them. One staffer in the Nutrition Unit, for instance, described how, “The Ct-CONAN and other Units, like Health Promotion and Health Services, sometimes call UNIs together for trainings without coordinating with us, like for acute malnutrition, AIEPI. We've got to synchronize better.” An MOH administrator in another unit also described how coordination amounted to unsystematic “moments” when particular units came together to work on a specific project or report:

There's a mandate to work in the community more and to integrate (MOH) projects within the SAFCI policy. We're in the middle of this process...There isn't a clear alignment yet...across ZM strategies like Nutribebe, AIEPI-Nut...(or SAFCI-led) Health

Councils, Community Health Authorities, Community Health Councils, etc....For the moment, we don't coordinate at the national level the way we'd like. We do when there are moments to develop certain strategies or documents, but nothing permanent for us to meet.

ZM administrators did try to coordinate between various ZM health interventions, but as one ex-ZM Health Coordinator tasked with the job described, it was an uphill battle to try to unite the health sectors and ZM silo, "I wanted to cry blood...the Nutrition Unit, SVIN-C, and the UNI Coordinators all have their own goals that aren't aligned with the Ct-CONAN's – it's very complicated." In one case, ZM administrators may have also resisted coordinating with SAFCI at the risk of co-optation. ZM and SAFCI designers have long disagreed about which one is the "umbrella" program within the health sector. One ZM administrator believed the MOH Health Promotion Director running SAFCI "is one of the biggest obstacles for the ZM program. He thinks ZM should be under the prevue of the MOH Nutrition Unit. Ridiculous. Rather, it should be the reverse...(The Health Promotion Director) is very closed. He has a very narrow priority – SAFCI. Thinks AIEPI-Nut doesn't work..." On the other hand, an MOH administrator in the Health Promotion office expressed that "ZM is just a 'program' under SAFCI. SAFCI is the new policy that envelops all of health. It's the 'spirit' that guides the new SUS (universal health insurance, to be launched later in 2012 or 2013)." An administrator in coalition of health-based NGOs believed the same after carrying out a project focused on maternal and child health using a SAFCI model. As she expressed:

In our project, we've seen how much progress can be made with SAFCI – promotion, co-management, focus on determinants, etc...The ZM says that 'ZM facilitates the implementation of SAFCI'. That's the view at the national level – fighting over which is first, ZM or SAFCI. But we've seen the reverse; that SAFCI makes it possible to implement any action. (In our project) we had no COMAN, (multi-donor) Basket Fund, UNIs, municipal Incentivo...Have the municipalities that have access to all this advanced much in terms of health care provision? I don't think so...In (one municipality) we saw that they don't need a COMAN to focus on determinants.

Vertical coordination

Political tensions and bureaucratic bottlenecks also created a constantly shifting array of vertical coordination arrangements between SEDES and ZM staff in the Ct-CONAN and MOH. SEDES staff usually blamed national administrators for going around them, but some also admitted that their SEDES directors restricted their ability to coordinate and carry out their functions, sometimes forcing municipal staff to seek national level support directly.

Political tensions were at their height in 2009 when departmental governments began calling for “autonomy” from the national government, bringing most SEDES along in protest (which eventually resulted in the national Autonomy Law) (Centellas 2010). In one department involved with the autonomy movement, an UNI staffer described how “many doctors think ZM is political, of the MAS” (the *Movimiento al Socialismo* Evo Morales political party), while a health network administrator explained that: “There’s a lot of political tension here with the national level. Doctors here at first refused to implement some of the national programs”. An evaluation of ZM in 2009 noted that only three of the nine SEDES were actively involved in supervising UNIs, for instance, suggesting that the other six SEDES at the time were refusing to support ZM (Manzilla 2009). One NGO partner suggests, however, that tension between the national level and SEDES had been building long before because of complicated financial, technical and capacity concerns:

I haven’t seen a strong link between the national and department (levels), like with the municipal level. We have to work more on leadership at the department level... There’s a bit of jealousy with the national level. They feel like they’re owners of policy development (at the department level). They see ZM as “from La Paz”. It’s difficult to get them to take ownership. Municipalities are more receptive and enthusiastic – hardly any resistance to get them involved. But at the department level – there’s jealousy, skepticism, and fear that by getting involved they’d lose their territorial control. There’s also weak technical capacity at the regional level, few resources, staff. They haven’t established a vision for ZM. They see it as one more responsibility and don’t take advantage of it for accomplishing their responsibilities in health. Another issue in Bolivia

is that more funds are distributed to the local and national levels. What's allocated to departments is very limited, especially in health. So with few resources, they're not very willing to take on more responsibility, because they have few staff to do the supervision, etc. They always ask, "what funds will you provide?" when there's a new program or activity. There's only a small financial margin that they are permitted to allocate to ZM. In general, there's little enthusiasm or ownership of ZM in SEDES. But under this umbrella there are a few that become more involved than others.

In one SEDES, an administrator described how the problem was circular – the MOH established UNIs without involving SEDES authorities, angering SEDES officials who prevented SEDES staff from supporting the UNIs, leading UNI staff to seek help directly from the national level. One SEDES administrator first described how: "The UNIs came from the MOH, so that's why people saw them as 'an MOH program'. This doesn't create co-responsibility... It's contradictory for the head office to say 'you have authority' but when a memo says that they've hired staff that answers (directly) to the MOH, where's our authority?" Another administrator noted how this then meant that, "This SEDES never took ownership over ZM...the SEDES Director didn't let UNIs work...That was the problem – (the national level) jumping over SEDES with UNIs. The same thing happened with the Bono." Finally, an ex-UNI staffer then explained how the choice national actors made to "skip" over SEDES later was partly in response to the demands they were hearing from municipal actors who went directly to the national level in search of support because SEDES was not responding to their needs (see Chapter Four).

There was a strong political clash here in 2009. The SEDES director wasn't affiliated with the national level political party – there was a certain amount of rejection of national policies...and a time in 2009 when the national level couldn't work with SEDES or departmental governments in the majority of cases. That's why the national level formed alliances with some municipalities, like where I worked. It wasn't all one side. Municipalities were also jumping over departments to look for help at the national level. It wasn't an error the national level made – there was municipal demand (for their help) because SEDES wasn't helping them and municipalities wanted resources.

In La Paz, moments when ZM and MOH offices bypassed the authority of the Nutrition Unit seemed to be based on administrative expediency. SEDES La Paz is in the building next door to many MOH administrative offices, a few blocks from other MOH offices and half a mile from the ZM office. But even with such geographic proximity, SEDES administrators described how national ZM and MOH offices regularly went over their authority and in the process, failed to build their capacity to administer ZM interventions, particularly related to UNIs. One Nutrition Unit administrator, for instance, described how, “It’s like they built a bridge over us and go straight to the municipalities and health networks. Constantly, they send notes down to staff without consulting or informing us, about trainings, workshops, etc. ...It creates chaos and inefficiencies...The MOH and ZM don’t go through us like they should, they haven’t strengthened our capacity.” Another administrator in the same office also described how:

It’s so ironic. We’re here in La Paz, but we don’t get MOH materials. It’s all for the more distant departments. It’s very controversial. Even though we’re side by side, we don’t get the quantity we need. They say, “La Paz already has what they need”. Or they don’t pay per diems for workshops, not even for the staff in the rural municipalities. And because we’re so close, they normally call the UNIs directly without coordinating with their immediate supervisors. They used to call me directly when I was in an UNI. And many times, UNI staff are participating in workshops that we don’t know they’re holding, or they call them to events, to launch things, without consulting us. We’re complaining, trying to change this perception, that even though we’re side by side, they need to coordinate with us

Some SEDES staff also noted that the problem was not simply national levels skipping over SEDES, but the fact that national offices had told SAFCI, UNI and Bono staff that they could ignore SEDES authorities. One administrator described how:

UNI, Bono and SAFCI doctors should be part of the team, and not just observing what’s going on...SAFCI Brigades initially were going straight to the municipality without implementing with SEDES. Municipal staff would ask us, ‘What’s this?’....The same with UNIs. UNI staff would say to us ‘We have nothing to do with SEDES – we directly report to the MOH. The MOH pays us, so we coordinate directly with the MOH.’ It was difficult to change this mentality... We told the national level, ‘You can’t do this...’ The national level had all the SAFCI information, and here nothing. The same thing happened

with Bono data... The MOH didn't coordinate, so when Bono doctors came, they didn't come to SEDES – there wasn't coordination on both parts. It also depends on the commitment of staff, because if you're a doctor, you should get involved, but they had their own supervisors... It's important they form part of the team. In one municipality, one came voluntarily to coordinate, but others don't... SAFCI and Bono doctors aren't committed to vaccinating, service delivery, etc. They should be... or at least doing follow-up with children who receive treatment, not just registering children for the Bono, etc.

Effects on local implementation

On the ground, poor coordination at higher levels of the program often left staff confused about what they and others should be doing, frustrated that they could not hold new program staff accountable, and disrespected when supervisors assumed local planning was secondary to managers' sudden scheduling. The issues started with SEDES staff mimicking the lack of cross-program coordination they saw in their national counterparts.

The lack of cross-program coordination apparent at the national level carried over to coordination with each of the SEDES as well. In one SEDES, a Nutrition Unit administrator reflected how, “We should coordinate better. It's not good to meet in a municipality and be like, ‘Oh, you're here too? Hi! We're coordinating fine with SVIN-C, not too well with AIEPI. If our programs were to unite more, they'd work better, but it depends a lot on the managers of each unit.” A Nutrition Coordinator in another SEDES admitted that “I work with the AIEPI Coordinator, but not with the rest of the units in SEDES - Pharmacy, Health Promotion, SNIS...”. She also explained that coordination was nonexistent with the Bono office: “The Bono Coordinator is parallel to us. They go directly to the health establishments without coordinating with us. And we don't have their data. It goes directly to the national level. They're outside the health system.” In a third SEDES, the Bono Coordinator did not know what UNIs did, the Micronutrient Coordinator could not get the ear of AIEPI or the Nutrition Unit, and one administrator reflected about how, “It's as if people ask, ‘How much power can I have?’ It seems

like no one wants to let go of power in order to construct something together”. Finally, in the fourth SEDES, a Nutrition Unit administrator explained that “To date, we haven’t been able to coordinate with the Bono. Maybe we should go to them to coordinate, but they don’t come to us either”.

Finally, the issues SEDES staff raised about the Bono unplanned outcome of launching the program hastily – without a set plan – occurred as new national directors changed their minds about data access. One Bono administrator described how the second national Bono director treated the data coming out of the Bono (the only regularly collected, malnutrition data in Bolivia with individual identifiers) as if it was a “secret of the state”. An NGO described the same scenario, where the Bono data was accessible only to a “privileged” few, restricted even from the national ZM office at first. Two years into the program, no SEDES offices had access to the data yet, as one Nutrition Coordinator reported: “

SEDES and other staff also routinely felt as if they were missing important information about constant programmatic changes. Staff in one NGO attempting to institutionalize ZM and nutrition interventions at the local level discussed how, “Each model has its own structure, which generates a lot of confusion...No one knows their roles, not even ZM staff or municipal authorities.” In one ZM workshop, a health network administrator noted that “ZM isn’t taking us into consideration. UNI staff come, they quit, they go, consultants try to conform COMAN, etc, but there’s no coordination. In our health network they arrive directly to the municipality and we’re not even informed. But there they are, for five days, going around asking for information.” Another health network administrator also noted how “a consultant is asking us for a space for the COMAN, but we aren’t aware of the activities this consultant does. We don’t know his functions, activities”.

The poor communication that resulted between levels was especially apparent when I was asked to carry messages during my field research. Although I was not an employee of ZM, the constant interaction I had at national, regional and local levels was more frequent than the communication other actors felt they had between these levels. SEDES Nutrition Unit staff in one department, for instance, wanted me to ask the MOH UNI Coordinator to change the location of an upcoming regional UNI workshop, relied on me to stay up-to-date on the shifting date of the national UNI workshop, and at one point asked me to tell Ct-CONAN administrators, the ZM Coordinator and MOH UNI Coordinator about the crisis they were experiencing with staffing because of delayed UNI contracts. Administrators in at least two SEDES did not have copies of ZM documents which national actors had given me months or even a year earlier, such as the ZM strategic plan updated in 2009, or the newest UNI guide. At the national level, a Micronutrient Unit administrator in the MOH also asked *me* if I would remind managers I came across about enforcing micronutrient distribution. One NGO actively trying to implement SAFCI and ZM interventions often heard about these changes from me as well, despite their direct contact with the health network director, SEDES and national ZM and MOH administrators, as one NGO staffer explained:

We hoped to avoid the issues we have now, of being uninformed. For example, when the SVIN-C protocol came out we knew about it in name only, we didn't have the instruments. When the new AIEPI-Nut version came out, we have to directly ask for a copy and look for someone to train us. We also didn't know that the UNI manuals had come out... We wanted to have a series of periodic meetings, so that they could tell us, this is coming out soon, implement this, adjust this, or help us test this

Another point of confusion continued around the SAFCI-ZM debate. Some ZM administrators saw this as simply rhetorical debate, noting "We could care less if these spaces for coordinating across institutions and sectors are called COMAN...but that they have a space is key...". Local governments, however, still had to decide whether to establish SAFCI's Health

Councils, ZM's Municipal Food and Nutrition Councils (COMAN), or both (and in some cases, what to do about multi-sectoral councils that already existed in many places). One SEDES Nutrition Unit Coordinator continued to observe that "there are still two councils in some places where they haven't integrated the two". Meanwhile, the SAFCI coordinator in this SEDES also noted that "We still have this problem – confusion and parallel structures between the COMAN and Health Councils. The COMAN has their regulations... Although the MOH has established that the Health Councils should be higher, and below this the COMAN, there's still confusion, each one operating on its own." An NGO staffer working with multiple municipalities also felt that, "The COMAN are creating another structure of people who aren't considered legitimate at the community level. It'll be a problem if they work alongside the Health Councils..."

Most actors were particularly frustrated because they could not hold new staff accountable for their (lack of) work. One doctor in Chuquisaca described how, "The UNIs are like an island. They have their job manual and say, 'I only have to do this. They don't want to coordinate, but they're not the only ones who do nutrition activities. We also do nutrition activities in the hospital. It's like they want to be their own health centers.'" One SAFCI doctor also admitted that "we all think we're the head – the Head Doctor, Bono doctors, SAFCI doctors, UNI staff... The national level has to unify and all work towards one end, all the programs. If the national level doesn't coordinate, it's worse here". A health network administrator in Potosi believed the problem was that "SEDES sees UNIs as outside the health system. These staff don't work for the patients, only for their programs – SAFCI, Bono, UNI... The Municipal Head Doctors also don't have access to the UNI evaluations, or the evaluations of Bono doctors..." An MOH administrator also explained:

ZM, BONO and SAFCI have unfortunately all worked with consultants at this point. Some say that Bono doctors - who are essentially secretaries, registering people who

come in for their check-ups - are the best-paid staff. It's created a lot of anger from local staff, even mayors, who don't see these consultants doing any work - leaving on their own work schedules, getting paid more than anyone else. The UNI too has been isolated from the rest of the health staff. They're clinic-based (not preventive).

In another Potosi municipality, the Municipal Health Council member, UNI staff and the Municipal Head Doctor all indicated that Bono and SAFCI doctors were not doing their work, but if anyone critiqued them, they would repeatedly respond with "we don't answer to you, we answer to the national level". The Head Doctor described the situation this way:

If SEDES or the national level requires us to do something, we can carry it out. But when staff are sent from the national level, we can't... I'm appointed by SEDES. But COMAN, UNI and Bono Coordinators are consultants. They jump over a very important point of authority - the department. (The staff) say "I don't answer to SEDES". They think they're better than other staff. Bono doctors want to work at their desks. They don't leave. It's a lie that they're 'community' doctors. Each month they haven't worked five to ten days of work. They need to respect authorities. The national level is creating systems parallel to the Head Doctors and health networks. Bono doctors aren't spending twenty days in the community like they should, to identify causes of malnutrition in communities, families, to see if water is contaminated, if they have food security, low income, etc. SAFCI doctors are coordinating a little better, but they're also hired directly by the MOH... When they appoint staff from the national level, they create parallelism. SAFCI doctors have never delivered health care. After four to six months, they don't know local authorities. It seems that after doing their residency in a community (for three years), they don't want to return, and just sit at their desks... I don't know their objective.

Finally, municipal staff also described how the weak vertical coordination between them and national and departmental offices often interrupted plans they had established well in advance. One health center Head Doctor in the city of Potosi noted how "We meet and analyze data every two months. We should do it every month, but we aren't synchronized with SEDES. SEDES recommends we do it the fifth of every month, but they don't respect this themselves. Like yesterday (the fifth), they called us to a workshop." Other staff also described how they would make plans based on what they are told about future trainings, only to be told they are postponed, as one doctor in the city of Potosi noted: "In February we made a plan focused on ZM to lead some community trainings for the new local health authorities and community-based

health committees (COLOSAS). According to the MOH, they were going to train us in Community-based AIEPI-Nut in March (which would have prepared us to lead this community trainings), but (by April) it still hasn't happened.” In a neighboring center, another doctor noted,

Program planning should be more timely. They want us to establish community health promoters with Community-based AIEPI-Nut, but it's already April. They should follow through with what they say. The goal was to implement Community-based AIEPI-Nut last year, but it's only now beginning. It disorganizes us when something shows up in the middle of the year when we've already established our annual plan. They should start (new trainings) at the beginning of the year.

Staffing the UNIs

The story of how ZM planners staffed the UNIs exemplifies a situation where bureaucratic barriers threatened to slow ZM implementation to a virtual standstill. Integrated Nutrition Units (UNIs) were one of the first interventions ZM designers launched, what one donor called the “motor” of the ZM program. The plan was to develop nutrition prevention and promotion centers led by a multidisciplinary team (a nutritionist, nurse, doctor, social worker/psychologist). One Health Network administrator saw UNIs as “the filter of knowledge” for other health staff in the municipality. The UNI team was expected to monitor and strengthen both community and clinic forms of AIEPI-Nut among health staff and community health promoters, treat mild forms of malnutrition (and refer more severe cases), carry out nutrition education campaigns, monitor micronutrient distribution, work with community health promoters, carry out SVIN-C – a randomized, community-based nutrition survey to monitor mothers' nutrition knowledge and practices – and participate actively in the COMAN (Municipal Food and Nutrition Council) to encourage local governments to carry out additional multi-sector strategies to reduce malnutrition.

When national planners began to launch UNIs, however, they were forced to make a choice between getting program staff quickly on the ground as short-term consultants or as more

permanent civil servants that could have guaranteed the institutionalization of UNIs. This latter choice, however, would have required nearly impossible institutional reform to undo the deeply embedded labor practices discussed earlier. After explaining how ZM planners chose the consultant route, I describe how this caused training gaps and duplications, the deflection of responsibility for nutrition programs from health staff onto UNIs, turf wars with existing nutritionists, constant staff rotation, and skepticism that UNIs would ever be effective.

Electing for consultants

The options available for staffing UNIs quickly fragmented the pool of UNI staff so much that it created a cascade of other management problems. UNIs could be hired in four different ways, as SEDES IDH (Hydrocarbon Tax Fund) consultants, municipal government consultants, MOH donor-paid consultants, or MOH TGN (National General Budget) *item* hires. Gathering information about the characteristics of each of these hires was difficult, considering that some regulations governed some aspects of certain hires, while other features were flexible. The result was that UNI staff had a mix of different supervisors, benefit options, access to additional resources (e.g., per-diems to attend meetings, gas funds), training opportunities, accountability requirements, and contract lengths and (non)options for renewals. Only two of these hires – MOH TGN *items* and IDH SEDES hires – required staff to answer to existing MOH authority lines; others could technically bypass health authorities and report only to those who hired them – the mayor's office or the MOH Nutrition Unit. Only MOH TGN *items* were the most stable positions; holding an *item* staff member accountable for poor performance required a series of bureaucratic steps, guaranteeing them at least several years of job security.

As was discussed earlier, however, despite ZM administrator desires for more stable staff, securing hundreds of *items* for ZM would have been close to impossible because of

Bolivia's labor policies. Even attempting to speed UNI consultant contracts in the MOH, however, was a monumental task. One donor hired someone to work in the MOH Human Resources department to speed UNI contracts, but even this did little to help resolve the extreme "administrative incapacity", as they described it. NGO staff described how, "It's a challenge to push a huge structure with diverse weaknesses that accumulated after many years. It's like trying to generate a new institutional culture..." So for the first four years of the UNI initiative, less than 10 percent of UNI staff had stable *item* contracts, according to one ZM administrator. Early in 2011, an UNI Coordinator in one department reported that out of 55 UNIs, only 2 had *item* contracts. Increasingly, however, as governments and SEDES offices gained more interest in UNIs, others were also hired as SEDES IDH consultants or municipal consultants.

Training gaps and duplications

While the flexibility of hiring options allowed ZM administrators to staff many UNIs quickly, it had numerous affects on UNI operations. First, UNI staff were sometimes trained too much or not at all. One reason, as an MOH Nutrition Unit Coordinator explained, was that "UNIs hired through IDH (SEDES) or municipalities can't participate in (MOH) trainings because the municipality (or SEDES) has to pay – they have to put it in their budget and look for self-financing for per-diems, lodging, transportation, etc." Although national coordinators noted that "We want to resolve this administrative issue", the problem still existed in the fifth year of the program. Ironically, this sometimes meant that staff with somewhat more stable contracts as municipal government consultants were not eligible to get the training.

An UNI nutritionist in this situation in Potosi explained that, "I learned from other colleagues who arrived. I learned the five UNI modules from her, applying what she learned... In the three years I've been here, I've been trained only in one of the five UNI modules, how to

carry out operational studies. I learned more from my colleague, watching what she did. Like with the SVIN-C – I was never trained. I'm self-trained. Then I trained my current colleague.” One Health Network Coordinator also explained that UNI staff in his network had not received training in AIEPI-Nut, even though one of their roles is to monitor doctors and nurses carrying out AIEPI-Nut: “They had to self-train themselves in AIEPI-Nut”.

In a Chuquisaca municipality as well, another UNI staffer explained: “When I started, I didn't know who to ask about my work. (My colleague) had already been here five months, so I asked her. I also asked the doctor who had been in the UNI until last year when he would come to visit his girlfriend here. When (an NGO staffer) arrived a few months later, that helped a lot because of his experiences in SEDES and with ZM. I also learned by reading”. Her colleague also noted that, “The doctor was still here when I arrived. I also read about the UNI's functions, but I dedicated myself to going to the countryside. The doctor did the reports, so when he left, I didn't know where to start or anything about completing the paperwork! We had different offices then so I never asked him what he was doing. Now that we have the same office, it helps us learn.”

Duplicate training and lack of training also happened in the same UNI at times. UNI staff in one Chuquisaca municipality described how one nurse who had been in the UNI for eight months had not been trained in any of the five UNI modules. The second staffer had only received training in three of the five UNI modules, even though she had been working in UNIs for more than four years. In the past, they explained, only the MOH-hired consultant was invited but would not re-train the other UNI staffer. On the other hand, they were sometimes retrained in the same topics. They complained that ZM administrators, “should be more strategic with workshops – identify who should go to which, who knows what. We get distracted by

workshops. We have to suspend our activities. We want (our knowledge) to be up to date, (but) sometimes trainings are about things we already know, like the SVIN-C. It's awkward to be trained in something again – it's a waste of time...”.

Deflecting responsibility

Because many health staff often misunderstood the intention of UNIs, many saw “UNI nutritionists as *the* ones that need to resolve nutrition”, causing many to hand over their responsibilities for growth promotion, nutrition counseling and micronutrient distribution to UNIs or to continue to do nothing related to nutrition until they got their UNI. One MOH administrator observed how

Nurses, who for years were weighing and measuring children now see these UNI staff come in to do it, and they get angry - then say, fine, you do it. And when the UNI staff aren't there (i.e. leaving their positions vacant for months), what happens? The nurse says, ‘that's not my job anymore’. So ZM has really disintegrated what already existed before, because it's been run parallel to the existing system.

Another NGO also described how “Health staff at first rejected ZM. There wasn't commitment... Health staff thought that UNIs were the operational staff (for ZM). In CAIs, they always said they didn't have the staff (to implement nutrition interventions). They didn't understand that UNIs were *facilitators*.” One SEDES administrator went so far to suggest that a survey she had conducted revealed that, “As UNIs have been created, (micronutrient) coverage rates have gone down, because other staff stop seeing their responsibility as encompassing micronutrients. Both (the NGO) and I have done this analysis and seen this trend - where we've spent so much money on UNIs - this is critical. But we hope things improve this year...”

Although there is evidence to the contrary of this last statement, suggesting that micronutrient coverage was actually highest in the Priori I ZM municipalities (see Chapter 3), ultimately, these

types of perceptions were part of a growing frustration and skepticism that UNI investments made sense.

Turf battles

In many cases, the lack of coordination between national, SEDES and other local-level health authorities resulted in the establishment of UNIs in places where nutritionists already existed as part of the local health network team. Nutritionists in La Paz and El Alto explained that nutritionists became part of some SEDES and health networks, particularly in the departments of La Paz and Beni, after the National Food and Nutrition Institute (INAN) closed during the mid-1990s government decentralization process. When ZM was launched, many of these existing nutritionists felt slighted and excluded, pushed aside even though they felt they had long carried out the type of work ZM was promoting among new nutritionists. As one SEDES La Paz nutritionist described,

In 2006, we adopted the ZM policy, but before, our functions as nutritionists were similar – train staff, supervise health centers, monitor them... explain ZM, the importance of micronutrients, etc. We've always had problems with malnutrition, with Vitamin A, iron, iodine. We've always monitored and worked on malnutrition, but not as intensely as now with ZM or with AIEPI-Nut. We also worked on making sure that municipal governments know about nutrition supplies, do nutrition surveillance through data and Notebook Four correcting growth monitoring based on reference tables, etc.

These nutritionists were also critical of the way UNIs were set up, because they saw them as operating outside the MOH system. One El Alto nutritionist explained, “We've always implemented the MOH strategies and we've always worked *within* the system, *in* the health networks, *with* health staff. That's how UNI staff *should* work”. They were particularly bitter because they were excluded from the majority of ZM trainings and workshops or on decisions about how UNIs should interact with their existing work. A nutritionist in Santa Cruz got the impression that “ZM is a program for doctors and nurses. They receive trainings, but not

nutritionists (who already exist)... When I came, they launched the UNIs. The nutritionists of the UNIs have more access. Then doctors and nurses also became involved, not me. I'm not wanted..." A nutritionist in El Alto also noted a conflict between existing nutritionists and UNIs:

It's creating a parallel system, debilitating more than helping. Why aren't UNIs dependent on the same health system that exists? There are 15 nutritionists in the health networks in the department of La Paz. We answer to the La Paz Nutrition Coordinator in SEDES. And those that work for the 42 UNIs answer to the UNI Coordinator. We have two heads without a body... the UNIs have more resources and are less sustainable. They don't treat us nutritionists in the networks the same. After much, much insistence, they started training us in two (of the five) UNI modules – in management and operational studies. But normally they don't invite us to trainings. The UNI nutritionists are supported more...

An MOH UNI Coordinator saw this conflict emerging, but her response was for nutritionists to work the conflict out themselves:

La Paz and Beni health networks have nutritionists already, but it's caused a lot of problems and confusion over roles (with UNI nutritionists). It's complicated – the health network nutritionists are jealous of the UNIs nutritionists, especially in urban areas. Some don't let them work in the health centers, saying they should be in the community while others have said they should only be in the health center, not in the community. In the rural areas, they see the UNIs as helpful, maybe because the health networks are responsible for so many municipalities and have a huge area to cover. We want them to define their roles.

Leaving it up to the nutritionists to define their roles, however, appeared unrealistic in many scenarios where literal fights were breaking out. Mid-level policy actors were also unsure what to do. One SEDES administrator explained:

The issue of UNI staff integrating into the health system has been a real problem. They're constantly telling me that health personnel will look down on them, not respect them, look at them angrily, etc. Health personnel don't like them because they're seen as temporary hires, as 'consultants' who won't be there long. They themselves will say "I'm an MOH consultant", differentiating themselves from other health staff. ...I recently went to two CAIs. Oomph! Incredible the animosity between the UNI staff and the health personnel - literally yelling and fighting! I didn't know what to do. The MOH hasn't thought ahead about these kinds of issues. We tell them that they should 'integrate' into the health network, that they should 'work with' other health staff, but the reality is that we don't know how they should do this.

Staff rotation

The most obvious impact consultancy contracts had on the UNI program was constant staff rotation. In an UNI survey I conducted at the end of 2011 with 46 of the 55 UNIs in Chuquisaca and Potosi, 35 percent noted that they lacked adequate numbers of staff and 28 percent that they experienced high turnover among UNI staff (Appendix D). Staff spoke of problematic contracting processes that were either too short, constantly requiring renewals which can take months to process while staff continue working without pay, or that required more than two months to replace staff who resigned. Among the 52 priority Phase I ZM municipalities, UNI staff in 2009 only had contracts for two months, in 2010 none of these UNIs were able to secure staff, while in 2011, staff began work in September. One UNI coordinator described how he saw five people come and go in the span of 20 months, each newly contracted person working an average of 6 months, and one lasting only 2 months. An UNI staffer in Potosi explained that she had been in the UNI for three years with a secure *item* contract, but her partners came and went. One doctor stayed for six months in 2008, a nurse for two months in 2009 and another nurse came for ten months in 2010. In another UNI, staff complained “The UNI teams aren’t complete. Where are the famous fantasy social workers?...In 2010, there was a doctor and nutritionist in this UNI, but no nurses. Now, we’re two nurses but we have no doctor or nutritionist”. Many staff also reported working without pay, in some cases up to six months.

Ultimately, UNI staff rotation and vacancies debilitated ZM implementation in numerous ways. First, the rotations affected staff morale. As one UNI staffer explained, “the constant change in UNI staff de-motivates those of us still working in the UNI”. Second, with most staff getting paid directly by the MOH, the instability placed SEDES administrators in a difficult position as they tried to supervise UNI staff. One SEDES staffer in the Nutrition Unit explained:

It's very difficult to ask them for deliverables when you aren't paying them! In other years, they were paid for months. The majority that resign do so because they weren't paid". Another ex-Nutrition Unit administrator also explained that "when UNI salaries were delayed, first the MOH would say 'we'll pay you retroactively'. Another day they'd call and say 'we're not going to pay for two months – only when the contract comes.' With this kind of uncertainty, how can you motivate staff to work? The national level doesn't think of these things. Maybe these are details, but to achieve the objective it's very important to have motivated staff.

Third, the absence of UNI staff in many health centers meant that other health staff and municipal governments began to think that the UNIs were no longer active. In health centers where space and equipment were always scarce, allowing former UNI spaces to go unused made little sense. In one UNI I visited, beds set up for mothers to stay with interned malnourished children were now being used by regular patients. A SEDES Nutrition Unit administrator described a similar situation in his department:

The absence of staff for six months in Phase II municipalities has created a huge gap in implementation. Mayors and hospital staff don't believe they'll come back. In some cases, they're starting to allocate the infrastructure for other things. They still need to take ownership (of UNIs). This requires a constant advocacy campaign for ZM – really strong, and constant. I think it'll take at least three more years for us to implement ZM in its totality in the health sector in order to see the effects.

Fourth, losing UNI staff meant slowing the momentum of establishing partnerships and ZM allies, and losing the experiential knowledge, ideas and skills UNI staff accumulated. A doctor from Chuquisaca explained that because staff "change so often, they all have a different vision and have to start all over again...". In urban health centers I visited in Santa Cruz where UNIs had not been in operation for six months, health staff complained that "When the UNIs were here there were periodic evaluations. Health staff weighed and measured children correctly. They worked better with mothers and children. But now (doctors) do their work just to do it". Another center in this city also described how active the UNI nutritionist had been with health talks, supervisions, work with neighboring centers, referrals – none of which continued once he

left. Another UNI nutritionist in Santa Cruz also described how the gains she and her UNI colleagues made after two years were postponed, and eventually lost all together when only one of the three UNIs eventually received a contract in 2011, four months after this interview.

For a while, every two weeks they'd say it'll be another two weeks...but now they've stopped even saying that. They say it's because MI (an NGO/donor) did an audit of the MOH MI funds and because of that, MI can't distribute the money. But the problem is within the MOH. Even in 2010 we were without salaries for six months! We had so many ideas with the community health promoters, workshops we were going to do with AIEPI. We had motivated people. You have to grab these people, not abandon them. We were going to do a study on Chispitas (a ZM-sponsored micronutrient product) with an NGO with 300 children. All this we've had to postpone. Six months we've lost. So many advances have been set back. The evaluation of supplements we were going to do didn't happen. Staff are calling us and asking 'when are we going to do it?'

Finally, the instability of UNI staff also reinforced what stakeholders feared about new programs like ZM – that this is a temporary “project”. A SEDES administrator in Santa Cruz explained, for instance, how “The UNIs de-motivate the public and lose their investment when there's so much delay in their contracts.” In a center in Santa Cruz, the neighboring Catholic church worker who ran women's groups on nutrition also said to the new UNI nutritionist when she started, “How great, I hope you function and that you stay for a while and don't leave after a short while”. The community health authority at this center was also confused after the UNI nutritionist contract ended, telling me, “We used to have a nutritionist. She was great, but she disappeared. We didn't know why, if she was going to come back, what problems she had, etc. She used to do workshops and people came. I would send her mothers. When they inaugurated the UNI she invited me. But since she's left, no one has called me, I don't know what happened.”

Questioning the efficacy of UNIs

Finally, the problems UNIs continued to face began to affect the confidence of some of ZM's own advocates. One ex-Regional ZM Coordinator described how, “Administrators at the national level see things very much from above. When I started in the program and read the UNI

manual, I thought that it was ridiculous to think that UNIs would solve everything. Municipalities can have 50 communities. I was only in one community for two years (when I was a doctor at a rural center). You don't solve these things with one talk!" Another strong ZM advocate in one SEDES said:

We really need to analyze UNIs – it's not simple. We have a nutritionist but we haven't been able to make up the entire UNI team. What's a 'UNI' right now? One fourth have a desk, chair, computer and *one* person out of the four they should have to do the minimum an UNI should do: program management, nutrition promotion, operational and SVIN-C studies, etc. They won't do it. They don't have the capacity to do it all, on top of activities that the health centers add to their load. It's not a strategy that realistically is sustainable. I don't see it – that's my personal opinion. At any moment, this strategy can collapse. ... No matter how hard we try, an UNI team will *never* be able to cover an entire municipality - because that's *not* their function. Yet they continue to try to do this, even four years into their implementation, and we wonder why they haven't been able to ever reach all children... They remain holed up in their UNI, seeing malnourished children... and then they attempt to get out there to do promotion - never reaching everyone. It's pointless.

One El Alto nutritionist also began to conclude that rather than UNIs, an attempt should be made to work with existing health staff and nurses:

UNIs in El Alto are a disaster. Only one is fully equipped, but none are currently functioning. All contracts are still incomplete, so they're deserted. Even when they were staffed - three total - they acted like islands. They don't answer to the health network coordinators or Hospital Directors. They don't coordinate with health staff. They're constantly leaving for workshops and trainings being led by the MOH or Ct-CONAN. In the end, they often only work one day a week. All they do is copy the Number Four Notebook (that nurses use to keep track of patient data) and turn this in as their own work for the week. They aren't functioning; not showing results. In the end, I think they've been a huge waste of funds. UNI staff come, get highly trained, and then do nothing and leave if they don't like it or when their contracts are delayed for months at a time. I think we need to work within the health centers with existing health staff and nurses. We're all trained in AIEPI-Nut in El Alto, and we've already done five Community-based AIEPI-Nut trainings last year and this year...

Launching the Bono

Finally, one additional, unexpected situation that shifted ZM plans concerned a decision about when the launch the Bono Juana Azurduy (Bono) program. The Bono program is a

conditional cash transfer program¹⁰ that encourages expecting and recent mothers to complete health check-ups (and overtime, aims to create greater use of free public sector maternal and child health care services). The program offers mothers a total of 1,820 Bolivianos (\$US 260) over the course of 33 months (during their pregnancy and until their child is two years old).

According to Bono administrators, they were forced to abandon their intricately laid out plan so that the President could launch the program early and nationwide, forcing Bono administrators to make operational decisions that even they admitted created a “parallel” program outside the health system, much like UNIs were viewed. After describing how the early launch changed the entire concept of the Bono implementation plan, I describe subsequent problems administrators faced with constant protocol changes, program enrollment issues, and the incredible skepticism these problems raised among health staff, most of whom would have preferred the program to “disappear”.

Electing to launch the Bono early

According to a Bono administrator, the President’s sudden interest in the program required them to launch it nation-wide more than a year early. The sudden surge in health service demand alongside mounting political opposition against national government programs – especially those like the Bono that easily invite skeptics who assume cash payments buy votes – finally forced national Bono planners to completely change the “logic” of the program and work in isolation from the MOH. As one national administrator described:

The idea of the Bono was to change the logic of health delivery and change prenatal care... The Bono started in October of 2008 and by 2009, we had a design... We planned

¹⁰ Conditional cash transfer programs have spread rapidly throughout Latin America since the late 1990s. The World Bank has been behind many of these schemes, including providing partial funding for the program in Bolivia. The Bolivian government also implemented cash transfer programs targeting school children and retirees prior to the Juana Azurduy program (Barrientos 2008). The degree to which the World Bank was behind any of the motivations and plans for this program is unclear. As the story was told by administrators I spoke to, the World Bank was rarely mentioned as a key player in designing or launching the program.

to launch the program in May 2009 with the intention of starting the first pilot phase in 10 priority municipalities and later to expand to the 52 ZM priority municipalities, and later the other 114. That year was an election year, so between April and May, the government decided to launch the program to all 272 municipalities – blasting it throughout Bolivia!...But the idea had been to scale-up in steps, first in the 10 municipalities, working with SEDES and through MOH units and municipalities, to implement it with (existing) health staff who were going to do the registering...During the design phase we held workshops with SEDES to incorporate them and they had committed to working with us. The idea wasn't to jump over SEDES and work directly with the municipalities... Cochabamba was the most committed...but around then the *Media Luna* autonomy movement occurred and SEDES, including Cochabamba, rejected the program...When we launched the 27th of May (mother's day) – there were lines starting at 4a.m., lines and lines and lines – incredible!...Doctors threw up their hands...They didn't know the Program, had their concerns... Based on patient reports, health center doctors started resisting...Health networks said they didn't have the capacity...That's where the idea emerged of (hiring) the *Medicos 800*...So by July of 2009 we started trainings about how to register caregivers, etc. ...After we hired doctors through contracts, the idea was to convert them into doctors with items, but even now, there's a discussion – should they attend patients? Their role was reduced to just enrolling mothers because of the pressure we faced in launching the program...At first we said, “your boss is the Head Doctor and then the Health Network Coordinator. Go present yourself to the mayor's office and local authorities. The idea was that they'd get involved in the health sector and work with social organizations... We also trained doctors with SAFCI mobile brigade teams and were going to help SAFCI doctors, but that never happened either...Between the SNIS, CONAN (ZM), Bono there are issues with professional jealousies. We've never been able to form a single system. How much have we wasted by having these parallel systems?

Constant protocol changes

This rapid roll out and mid-stream change in plans caused numerous problems for the program. First, quickly hiring and sending Bono doctors out to municipalities meant they often had little understanding of their functions. One urban Bono doctor in Potosi complained, “At first, it wasn't clear what our functions were. Between 2009 and August of 2010, we thought we were supposed to come and sit at the desk. August of 2010 (a year after being hired), they gave us a guide. It became clear that we needed to do educational sessions, community extension, meetings with authorities, follow-up of malnourished children, etc.” Second, program designers no longer had the luxury of working with a small group of municipalities who understood that

the design was still in the development phase. Making adjustments on a national scale as problems emerged began to feed a growing frustration with the program. One rural doctor explained,

At first, it was like a bomb. The maximum number of mothers were enrolled, but we only had two to three days to enroll them. We had to go to many communities. Then after a while, the forms changed. Once again, we had to enroll everyone all over. At first they said they could use their 'RUN', which is like an identification card that many use in the rural areas. But later they decided that they could only use an official identity card. Later, many names were wrong or their identity card had expired or they entered names incorrectly by one letter. At first the military came to make the payments once or twice, here in the municipal capital, but that meant the mothers had to stay the night because there were something like 800 trying to get their payments in two days. That was problematic.

A Bono administrator also explained that during the first six months, Mayor's offices originally registered mothers but began to co-opt the program for their own purposes. The database began to show major problems with registrations, leading designers to make numerous changes that still did not resolve the many logistical problems, further entrenching frustration:

All parents needed was their identity card and the child's birth certificate, but the Mayors started taking advantage of the situation, asking for other things, like an electricity and water bill, tax payment receipts, etc. Mayor's offices also weren't open 24 hours a day, only eight hours, so there were huge lines. And they enrolled people incorrectly... They delayed us so much. Enrollment should have been for children under a year of two. A child of thirteen months couldn't enroll, but they were enrolling children up to two years of age... these mothers would be eliminated in the system. The mother would go to the center and no longer be in the system... We had also intended this information to be useful for the SAFCI, to start the family-based clinic records... but the design of the survey wasn't aligned with SAFCI. The computers froze and erased information. There were many problems with the database... There were 7 forms to fill out at first... so in the middle of the road, the Bono program decided to use another form that was specific to the Bono... And we decided not to work with the mayor's offices and just do the enrollment in the health centers. But when we started doing it in the health centers, there were complaints because of the confusion. The MOH received many letters. There were questions about SAFCI. The Mayor's offices complained that it was the law that they enroll people... We detected all these problems between August and November of 2009... So SEDES and doctors no longer wanted anything to do with us! We had to change the database system and retrain people four or five times!... Even now there are problems. If you follow the system from the health center to the municipalities, departments and national level you will find discrepancies. If they enroll 100 people in

the center, when you compare it to the national level only 70 appear, though this will hopefully change with the new (database) system.

Enrollment problems

One problem program designers did not consider early on was that many mothers did not have the proper documents to enroll in the Bono. As one SEDES administrator explained, “Many mothers don’t have identity documents, even in the city and peri-urban areas, because they’re migrants. Documenting people is a huge problem.” In one Potosi municipality, an UNI staffer estimated that 20 percent of mothers do not have documentation. In another Potosi municipality UNI staff reported that 50 percent of mothers do not participate, largely because of problems with documents. The Bono Director estimated that approximately 60 percent of eligible women are participating and 70 percent of children. The Head Doctor explained that,

This program wasn’t well planned. They planned it for the urban area, because mothers have to register in the municipal capital. Gradually, they accumulate their payments, 120 Bs., 240 Bs, but in some communities, the mother spends half of the amount that they pay her in transportation, lodging, etc., *if* they pay her. If not, she returns, crying. They’ve resolved some of the problems with payments now...but we’ve had to give mothers an incentive sometimes out of our own pockets so that they don’t cry. In some sectors of the municipality, they have to come by foot, walking many hours. The results are mediocre, but not great. We’ve shown that in those that are affiliated, we’ve reduced malnutrition by two or three percentage points. I’m tired at this point of the Bono doctors...They want to sit at their desks, not go to the communities. It’s a lie that they’re now called ‘community’ doctors! Every month they haven’t completed five to ten days of their work...They aren’t spending 20 days in the community as they should...

Issues with identity cards along with software and registration problems also caused the constant and sometimes permanent problems with payments for most mothers, as someone in El Alto described, “There aren’t timely payments. Yes, (theoretically) it’s helpful, but there’s no money...and mothers are abandoning the program. For ten months they haven’t been paid, and they don’t come to their health check-ups. It’s a huge problem. Where’s the problem? In the

MOH? Our own staff? The bank says the health center. This also isn't sustainable..." Mothers described similar experiences:

You have to get their birth certificate, and then register in the sub-Mayor's office, then they send you your registration and you have to go register in the health center. But then in the center they say you aren't in the system, even though I have my document. Twice I went to the bank and they told me I wasn't in the system. Why should I participate? You waste a lot of time and money.

Another mother described how:

I participated but never got my payment. At first they said we could register with any document. I used my expired identity card, but when the military came to offer payments, they said they couldn't use my expired ID. I went to Sucre to get my ID renewed, but they said one of my names was spelled differently. Then, I wanted to use my partner's last name because his ID is current, but I was told I couldn't. I'm still trying to resolve my ID situation. I never did get my Bono payment (her child is about 2 years 4 months old now). The majority of women I know have had problems with their Bonos. A whole group just went to Padilla to get their payments after being told that their names were on the payment list. When they got there, they were told their names still weren't in the system, were wrong or that they too had expired IDs. Some get 2 or 3 payments (all at once), others only one. It's too bad, because this is something really needed by families here.

Logistically, resolving these documentation problems and simply trying to get payments also made little sense for the poorest populations ZM was trying to target. One UNI staffer explained, "They distribute the Bono payments in the city, when mothers have to pay 10 to 20 Bolivianos to get to the capital of the municipality, and another 25 Bolivianos to get to Sucre, on top of other costs. They don't know where to stay the night in the city..." Even in urban areas, some staff reported how mothers would prefer to spend a day selling in the market than lose money on transportation and time trying to resolve problems with their Bono accounts.

By 2010, Bono administrators reported that these many registration problems had caused the number of program participants enrolled in the program to drop significantly. One administrator estimated that national enrollment fell from 500,000 in 2009 to 300,000 in 2010,

and suggested that this drop¹¹ had silenced talk of this program being the government's 'star' program. A health network administrator in the city of Potosi also reported that in one health center, numbers dropped from approximately 165 in 2009, to between 115 by April of 2011. One departmental Bono director thought the main reason was that the program's reputation had plummeted:

We've conducted an evaluation of coverage rates and have seen that registries have fallen since 2009. The reason is that mothers are tired of not getting paid promptly. At this point, our registries should be at least the same as last year... We now have better monitoring and evaluation and targets we give doctors, but 80 percent of doctors are not achieving their targets. Maybe they're registering 45 or 30 percent of what they should be registering...

Questioning the efficacy of the Bono

Ultimately, like with the UNIs, the complex problems the Bono program experienced began to create significant skepticism and push-back from other health staff. The most common phrase health staff uttered when they spoke about the program was that "the Bono is damaging our credibility". Several doctors and UNI staff explained that mothers "think we're stealing their money". And in another Potosi municipality, a rural doctor noted that:

We have many problems. We barely do any health checkups for the Bono. Mothers want their Bono immediately. They get angry. It makes things worse for us rather than helping. And they don't return – they increase their distance. For instance, I have one mother who doesn't want to have her child weighed, measured or vaccinated because of the Bono, and her children are malnourished. The Bono has complicated things for us.

One Health Network Coordinator explained that the program initially had strong support in his network, but constant protocol changes, payment problems and confusion eventually led doctors, local governments and communities to reject the program.

There have been many stages. In 2009, they launched it in all the municipalities when it should have started as a pilot in only some. There were 7 or 8 forms to use to enroll mothers. Later, it became 4, then 2, and now I think it's 1. There was a lot of acceptance

¹¹ No data was publically available to confirm these numbers at the time of this writing, though a commissioned evaluation of the Bono program was underway in 2012.

of the program at first, but because of so many problems with wrong dates, names, documents, it's caused delays in payments. In some municipalities, they've rejected the program. It makes sense. You lose the trust of mothers – it has the opposite effect. They're trying to resolve the issue with free identity cards and other strategies. But there continue to be protests in community meetings that the payments are still slow. The reality is that it's a mystery how they make up the lists (of beneficiaries).

Many other health staff similarly complained about Bono problems and the repercussions the program had for their work. In one Potosi municipality, for instance, a doctor talked about how “It's a headache for health staff. Because of poor information about how, to whom, and in what way they can get their payments, people would come to us to complain. They thought we didn't want to process their payments. They fought with us.” A SEDES administrator also described how “rather than (being a helpful) *strategy* (to improve health care access), the Bono has affected our credibility. Since they don't make payments, mothers start to distrust health staff.” A nurse from a Chuquisaca municipality similarly explained, “It hasn't been much help to the health sector, to improve the number of health check-ups, etc. Even now, some have completed two years with the program and have still not received their payment, not one cent. They complain to me...It's a total headache”. An administrator for a Potosi health network further explained that “With the Bono, fewer children come now, not even the sick children...They sometimes go in vain to the city. It's been more of a problem than a help for us. There are problems with people's identities when they go to pay them. If one letter is wrong, they don't pay them. And we lose credibility...” Finally, one rural doctor concluded that “It's the reverse, it's not a help. It's negatively affected us. It's the program that's bad, but the community criticizes us, saying that we're taking their money. Sometimes it de-mobilizes. They'll say ‘Why will I go to my check-ups if they won't pay me my Bono?’...The better strategy would be for the Bono to disappear.” In some places, Head Doctors were so against the Bono, they were

personally trying to sabotage the program. In one Potosi municipality, for instance, a Bono doctor described how:

Nobody in the municipal health center wants to register mothers for the Bono because the Head Doctor doesn't agree with the program. I ask doctors for their forms, but they aren't doing them. I like to go to the community. I'm thinking of moving to another municipality, because I can't work this way... There was (also) one meeting with SAFCI, Bono, UNI for the entire Health Network, and only the Head Doctor and Head Nurse went. They didn't tell us. A Bono colleague (in another municipality) called me to ask why I didn't go... I thought I came here to work!

Conclusion

As my analysis showed, even though ZM decision-makers initially laid out the elements of a rational plan on paper, they were more adaptive in their actions. This was particularly evident in the way they dealt with the politically heightened and administratively unstable policy environment to keep program implementation moving – i.e. to put visible actions on the ground. Their largely responsive approach, however, also crippled implementation below by creating confusion, inefficiencies, and turf wars, while also lowering public and health sector staff support for the program. These findings reinforce, but also extend what we know about the interaction between policy sustainability (Patashnik 2008), incrementalism (Lindblom 1957) and strategic capacity (Pelletier et al 2011), particularly about the unique dynamics we find as large-scale policies are implemented in a multi-level policy system.

The way ZM planners proceeded – aware that they were prematurely launching the Bono Juana Azurduy (Bono) program to take advantage of a political window of opportunity, rolling out Integrated Nutrition Units (UNIs) using bureaucratically strangled consultant contracts, and avoiding coordination out of administrative and political expediency – likened the “ready-fire-aim” incremental planning philosophy Mintzberg (1993, 291) described. Rather than take inordinate time to plan without taking action following a “Ready-aim-aim-aim-aim” approach,

Mintzberg suggests that acting, even when such action is not fully thought out, is important for gaining momentum in complex operational environments. Wildavsky (1973) also suggests that swift action based on irrational planning – not taking into consideration all possible alternatives to make a decision – can also prevent other actors from delaying or obstructing action inevitably. “Better” alternatives were theoretically possible for staffing the UNIs with more stable staff and for gradually working out operational problems before going national with the Bono program. In both cases, however, going the more thoughtful, stable route conceptually, may have opened the interventions up to even less stability politically.

On the other hand, I argue that incremental planning in a multi-level, multi-site policy environment may be critical for ensuring policy resilience at the highest levels of the policy system, but potentially as a tradeoff for a program’s effectiveness, sustainability and adaptability at operational levels of the program. Keeping national decision-making centralized may have allowed ZM planners to make quick decisions and maintain a singular vision of the program. Avoiding horizontal or vertical coordination at times may have also allowed ZM planners to establish another UNI. In the process, however, these choices to get quick action on the ground limited the sense of ownership many actors in the system felt for the program. SEDES staff in particular showed the power they could wield to slow the program down when their authority was unacknowledged. Also, as ZM administrators hastily proceeded with UNIs and the Bono out of political and administrative expediency, front-line staff were left to deal with numerous problems that limited their ability to act. As we saw, UNI staff in particular could barely establish themselves long enough to build trust or accumulate local knowledge they needed to eventually customize ZM interventions to local realities. The public credibility health staff felt

the Bono was losing them also lowered their commitment to ZM, commitment planners so desperately needed if they expected to institutionalize nutrition interventions.

Whether these types of tradeoffs are always necessary is unclear, however. This study, and my early observations of ZM (Hoey and Pelletier 2011) suggest that national ZM planners were remarkably astute about how to build support for the program at the highest political levels among Ministers of Health, the President and donors. One ZM donor also described how ZM planners had established partnerships in recent years among the national leadership of women's organizations and indigenous groups. In their social network study, however, Morales and authors (2010) suggested that the ZM "leadership capacity to establish alliances appears to exceed their institutional capacity related to implementation" (23). That is, while ZM planners engaged in national-level advocacy and responded to political threats – they spent less attention on even the simplest of inquiries that could have reduced some problems. Bono registration problems mothers experienced were one example, as were the turf wars UNIs caused in some places where nutritionists were well established. Some of the actions ZM staff took may have been important for capturing the attention of the media and pleasing the President with the Bono, or to show donors that more and more UNIs were rolling out across the country. As the operational problems that ensued showed, however, such action was far more symbolic than it was instrumental, creating implementation wins that were short-lived and superficial. Again, ZM planners' initial, incremental approach was limited to their view at the top, and far less to the threats that existed below or that they would likely create by making certain decisions.

The challenges that accumulated during the first four years of the program were bewildering, but what may be more remarkable is that national planners began to learn from the repercussions of their early actions. As Chapter Two lays out, many of the changes ZM planners

and mid-level policy actors began to make to address these issues in the program's fifth year may ensure that the early kinks that developed at the operational level will not become permanent barriers.

CHAPTER TWO: Learning and adjustment of program design strategies

As Chapter One showed, by ZM's fourth year, aspects of the program once thought of as the "motor" of the program (UNIs) and the "star" initiative (Bono) had in fact become the program's greatest liabilities, while efforts to continue working in isolation of other MOH programs and administrative levels were *feeding*, not alleviating, skepticism about the possibility of reducing malnutrition. Earlier design choices kept up program momentum in some ways, but simultaneously led to staffing problems, communication problems, turf wars, and a growing resentment of the ZM program. When the push-back from below became too hard to ignore, how did ZM policy actors respond? Was it even possible to reverse these growing problems? Did the planners, as some literature might suggest, revise their comprehensive plan from above and look for ways to establish more control over operations below? Did they try to negotiate agreements to deal with specific obstacles? What role, if any, did policy actors at other levels of the system play in resolving issues that arose?

I answer these questions in this chapter by first looking at how national actors rejected an effort to decentralize the ZM Ct-CONAN management structure but negotiated to include SEDES more formally in ZM operations while simultaneously improving the UNI staffing situation, but accepting potential tradeoffs for program fidelity. I then discuss specific efforts UNI and Bono administrators took to increase ownership over ZM, through direct advocacy and administrative changes. Finally, I show how actors throughout the program also felt compelled to find ways to improve horizontal coordination across ZM and MOH programs, highlighting the efforts of one particular municipality and staff actions. The findings add further complexity to the way we understand strategic capacity (Pelletier et al 2011) – the skills, the unexpected actors that can emerge as policy champions (Kingdon 1995), and the institutional arrangements and

programmatic tradeoffs that may be necessary to ensure policy sustainability (Patashnik 2008) and policy diffusion (Dearing 2008).

Decentralizing ZM management

As ZM managers began to think about how to deal with the confusion and chaotic implementation situation that characterized ZM four years into the program, they reacted in two contradictory ways to the idea of decentralizing ZM management. As the following shows, planners rejected the idea of decentralizing the Ct-CONAN administrative structure, but actively began to look for ways to involve SEDES, likely because they saw that SEDES were their key to reversing the instability among UNIs – a clear and more imminent threat to ZM implementation. This choice, I show, was despite the potential tradeoff they made, losing some control over the program fidelity of UNIs, for the possibility of more active and institutionalized UNIs.

Maintaining centralized decision-making above

By mid-2011, a ZM consultant indicated that donors had convinced the ZM administrators to work with a team of external management experts and to at least consider the possibility of decentralizing and solidifying the roles and responsibilities in the ZM organizational structure. As she explained: “In October (2011) the team will recommend an administrative structure so that there are clear lines of responsibilities for different ZM processes....We hope that (ZM leaders) have a positive attitude and engage them...”. During my visit in December later that year, however, an ex-CT-CONAN staffer explained that the management experts had written a scathing report, saying that the SVIN-C “doesn’t work”, that the Municipal Incentive program “isn’t sustainable” and suggesting numerous ways to change management systems. The ex-staffer believed, however, that the management experts “totally misunderstood the program and wrote lies”, explaining how high-level ZM administrators had

decided to ignore the recommendations. Exactly what happened behind closed doors is uncertain, but the opposite decision ZM administrators made during this same period to devolve more management control to SEDES, at least with UNIs, suggested that they may have still believed that centralized decisions within the Ct-CONAN were necessary to maintain flexibility and some control over the larger program's vision, while ceding some control to SEDES may have seemed like a smaller concession for a situation that appeared so dire.

Negotiating a bigger role for SEDES below

Even as they continued to work in a bureaucratic and politically unstable environment, national actors began to realize they had little option but to devise a scheme for decentralizing some of the ZM management to ensure the stability of UNIs, even if in the process, they had to make a potential tradeoff with program fidelity. They seemed to recognize that simply getting UNIs on the ground, by often skipping over SEDES, had jeopardized the program's stability and neutralized the very purpose of the UNIs, to facilitate the integrating of ZM into local health systems.

One MOH administrator's reflection about the state of ZM at the end of its fourth year showed how some ZM leaders were beginning to concede that they had to interact directly with the broader institutional system, despite its flaws: "We've got to recognize different management levels – national, departmental, local, and that the national level will not be able to implement a policy alone and must take advantage of management in these other levels". As they began to devise a way to establish more stable *item* hires for UNIs, they also began to learn that there may have always been room to secure more of these hires through savvy negotiations, even in what seemed to be an entrenched bureaucratic system.

One early experience with such negotiations was led by a SEDES administrator who negotiated for more *item* hires through the SEDES director and departmental governor's office. While the department of Chuquisaca only had 2 *item* hires for its 25 UNIs by early 2011, its neighboring department, Potosi, had at least 14 for its 31 UNIs. At least eight of these had already been secured by the first year of the ZM program. One policy actor suggested it was because of the SEDES Nutrition Coordinator's "broad vision" – to think strategically about the future stability of staff – and also because the SEDES director at the time was supportive of ZM. The Nutrition Coordinator recounted, "When I met with the governor, I justified (the *items*) saying that 'if you want to eradicate malnutrition, you have to strengthen health staff, so that they aren't just doctors and nurses – that's not public health. So I pushed for nutritionists to build the public health capacity and do follow-up of hygiene, habits, diets, nutrition, etc.'"

As other ZM decision-makers began to recognize the importance – and possibility – of institutionalizing ZM interventions within the health sector, donors and national planners devised a plan to transfer between one and two million Bolivianos in donor funds (\$US 143,000 to 286,000) to each SEDES if they agreed to strengthen ZM in their departments, in part by agreeing to allocate more *item* contracts to UNIs. One ZM administrator explained that the plan grew out of a growing understanding that SEDES were critical actors, but also that the plan was taking advantage of a political moment when it seemed possible to bring SEDES more fully on board, allowing them to define many of the terms of the agreement without risking too much co-optation of ZM goals. He also mentioned that the idea emerged out of their positive experience with the conditional cash program they had developed for municipal governments, what they called the Municipal Incentives Program¹²:

¹² The Municipal Incentives Program was launched in 2010 to incentivize more municipal government investments in local food and nutrition actions. Similar to a conditional cash transfer program, but targeted at the municipal

We hope that the transfer of funds and power to SEDES will demonstrate how much the national level recognizes that the departments are at a critical juncture. We hope to empower them and hope that they offer technical help (to municipalities)... We're developing the plan based on the experiences of the (Municipal) Incentive (Program). We want to institutionalize ZM, incorporate health staff, show results. We think we'll only offer one amount, but make the transfer of funds in stages, until 2013. We'll define and negotiate the terms with each department. They will self-define their indicators and goals. The point of reference for their proposals will be what they produced during the Logic Modeling workshops. It's a necessity – that we transfer funds to SEDES. There was a certain amount of risk of doing this at one moment, but this is an opportune moment to do it. They're taking ownership and aligning with ZM more and more.

A second, similar, negotiation was occurring at this time. MOH Nutrition Unit administrators had convinced nearly all SEDES directors to fulfill the cost-sharing agreements one donor had stipulated as part of their grant. This agreement was intended to gradually transfer the hiring of ZM Priority I UNI staff fully to SEDES by the end of the grant, beginning the second year with a 25 percent transfer. According to an MOH UNI Coordinator, by the end of 2011, seven of the nine SEDES had committed 19 *items* for UNIs in 2012, nearly doubling the total number of UNI staff with stable *item* contracts, from ten to twenty percent out of the 145 existing UNIs.

Possible tradeoffs of the SEDES arrangement

While the SEDES incentive initiative was increasing the chances that ZM could ensure the stability of UNI hires and thereby, improving the likelihood that ZM would be implemented more effectively over time, many actors also began to express concerns that this deal had presented a tradeoff – program stability for program quality control – as national actors handed over program supervision and direct training of ZM staff to SEDES staff. One ZM policy actor called this agreement “conditional with a degree of discretion” and “intelligent negotiation”:

government, the initiative transfers \$US 50,000 in two installments to any of the 116 ZM priority municipalities that can show they have accomplished key ZM components – such as an active COMAN, an active UNI, etc. – and have presented a plan focused on nutrition or food security in some manner (for the first installment), and later will have demonstrated significant reduction in malnutrition (for the final installment).

It's important to develop operational policies and regulations, but I think that it has to be decentralized so that you can find adequate strategies to deal with the combined possibilities... So that's the reason you need a certain amount of flexibility, responsibility and discretion delegated to the department level, so that they can take ownership of the program and adjust implementation decisions based on their knowledge. The risk of delegating is that the program could become totally distorted... So it has to be a slow, careful process. It's complex, but necessary... We hope that SEDES will be able to use (the transfer of funds) to cover things that they normally can't cover, like supervision, trainings, strengthening the health centers with operational costs, equipping them with scales, etc. There's no absolute 'conditionality.' The importance is that they demonstrate commitment, but if they want funds the second year, they'll have to try to complete their contract and show that they've hired more stable (*item*) staff. I think it's a good tradeoff because staff supervision and trainings are necessary and complimentary actions, but not indispensable. Staff, on the other hand, are. So if SEDES assumes this indispensable function of staffing, then the program will be able to reduce its costs of supervision, monitoring (from the national level) and will substantially affect the function of UNIs. The difference today is that if the (national) program doesn't contract staff, the UNIs don't function – so it's a good tradeoff. ...

Other staff raised issues that made this potential tradeoff even more likely as they discovered the lack of capacity among SEDES management and continued to see the potential for political co-optation. First, two actors described how SEDES staff were in fact not fully prepared to take on the responsibility of managing staff and programs more directly, despite the repeated frustration SEDES administrators had expressed over being left out of ZM decision-making. One NGO that changed their funding strategy around this period, transferring donations directly to SEDES rather than working with national MOH offices as a go-between, believed the lack of capacity they were seeing was evidence that SEDES management had experienced a deskilling process after 1980s structural adjustment policies hollowed out much of the Bolivian public sector:

We finally got approval to work more directly with the SEDES. We're now funding the national MOH office directly, and also SEDES directly. But the 'direct' isn't so direct. Because of the new autonomy law, we have to go through the governor's office, but no one really knows how this works since it's a new process. We had to work through the Legal Services Office, the Health Secretary's office, Human Resources and Administration... SEDES have had to adjust... They prefer what they call 'direct' transfers, which really means that the NGO or donor manages the money and executes

things, without SEDES having to do much. SEDES staff have lost the financial management skills to administer funds and execute projects - preferring others to do it. These skills have deteriorated since the 1980s structural adjustment process, when the state was downsized and became more about setting up regulations and supervising - often assigning the role of administering entire districts to NGOs.

One SEDES administrator involved in the ZM negotiations to set up the SEDES

Incentive transfer also admitted that:

It's taken some time for us to get used to working in a 'project mode'. We don't normally do this. Instead, we wanted money to be given directly to us, not to have to develop a project. But there's a real problem with continuing to work that way. Because when there's instability - when someone new replaces me, they could decide to do something completely different with that money, and there'd be no repercussion. With a project, the goals we establish are set - and anyone who replaces me has to fulfill them. And, we have to show results - we can't continue to just do supervisions and process indicators to get by. So even though working with this project mode was challenging, it makes a lot of sense. It'll be challenging to operationalize and carry out, but I think it's an important step forward. In (this department), we developed the proposal by working across SEDES units, including Planning, Promotion and two other staff.

Several policy actors have also brought up this risk of political capture as ZM decentralizes more of the funding to SEDES and transfers more of the UNI hiring to this level.

One national Nutrition Unit administrator was nervous about the move, noting how "As I understand it, so far only Oruro and Chuquisaca are receiving the funds that the Ct-CONAN is giving them through their governor's offices... It's so frustrating to go through the governor's office though, since we're worried that it'll become politicized - that they'll want to put their staff in those positions." One SEDES administrator also had little faith that SEDES decisions over ZM program hires would not become politicized: "I think things have really deteriorated here in Chuquisaca. When ZM hired UNI Coordinators in 2009 and 2010 to help with the program, things seemed better. Now, it seems hires are very political... Since the Law of Autonomy was passed, the governors have much more power. SEDES still has to comply with

MOH policies but the governors have much more control over internal hires - not just the SEDES director position.”

Amidst this risk, however, are others who have begun to think that the tide might be turning in the other direction. Recently after one departmental governor appointed a new SEDES director, several ZM advocates obtained key director positions, but they knew their time in office was limited. One administrator hoping to support ZM implementation had no illusions about how long it would take to implement changes and how quickly he could lose his position. He noted that:

The new director...has been left a dirty house, disorganized, where you don't know what or who you have to work with. You have to first put your house in order, which is a difficult job. Then, we'll have to maintain our job. They'll (people opposed) want to get rid of us, once we establish things. But (the new director) has political will – that's a favorable point. We'll have to take advantage of that. (The director) is also in the governor's favor – that's strength. But we still have a long way to go...”

Another administrator in this SEDES also knew that it might be a ‘marathon’ to take advantage of the window of opportunity they had been given to quickly hire more stable UNI staff:

Maybe with this (political) party, people who don't have good results have to go. Interesting. ...The time of the fat cow for SEDES has fallen. The situation has changed and we have so many windows of opportunity. We should take advantage of this time to hire good people for the UNIs – it'll be a marathon. If we can't get items for the UNIs now, we won't have another opportunity. We need to get the work of UNIs on the road and show results in 2012. That's what we want. We want all the UNIs to reflect this passion.”

Whether these SEDES staffs were able to win the marathon is unclear. Some of these ZM advocates lost their jobs as administrative changes (once again) occurred in this SEDES at the time of this writing in early 2012, giving these staff less than a year to act.

Increasing ownership

National coordinators of the UNI and Bono programs also set out to reverse the negative “images” both of their programs had earned over time, and to actively integrate UNI staff and Bono doctors into local health systems. As the following describes, national UNI administrators were the most aggressive, developing a multi-pronged advocacy and management approach to reverse the “island” image UNIs had acquired, while Bono administrators were just beginning to realize that they too would need more strategies to win back public and staff support for the Bono, even after resolving most of the logistical and administrative problems.

UNI changes

Within the UNI program, while negotiations were taking place to secure more *item* hires, another change MOH Nutrition Unit made was to hire UNI Coordinators for many of the SEDES. As one National UNI Coordinator explained, “the Nutrition Unit Coordinators were fine, but they just had too much to do – to watch over micronutrients, supplementation, breastfeeding initiatives, the UNIs, etc.” Although SEDES-based UNI Coordinators appeared to be improving efforts to support and supervise UNIs, one MOH UNI Coordinator explained that the idea backfired at first in some places because of the turf wars they created in some Nutrition Units:

In 2010 we saw the need to help the Nutrition Coordinators in SEDES because the UNIs took a lot of time. We hired someone to focus on UNIs for several departments... It helped in two, but in one department there was a clash because the Nutrition Coordinator already had the help of an assistant – that was a lesson learned! We had to hire an UNI Coordinator again, but this time to work under the first Nutrition Unit assistant... There was also a conflict in another department. The Nutrition Coordinator there only wanted someone who worked for her (not alongside her.) Hopefully the person we got will work this time...(after the Coordinator rejected the first hire).

National UNI Coordinators also worked directly with Health Network Coordinators to develop plans of action for UNIs in their municipalities, and to instruct UNI staff themselves that they are not stand-alone staff:

We definitely realized that at the start, UNI staff went in thinking that they were islands – consultants that could work separately from the health networks and Head Doctors, etc. But our main goal this year has been to change this image – it’s definitely been tough, since there was resistance... When the new UNI Coordinators were hired (for SEDES), from day one, we had them hold a meeting with the Director of Bono, SAFCI and others to make sure it was clear what their function was and to coordinate better. We’ve also started working directly with the Health Network Coordinators, to ensure that they’re much more involved in the UNIs and to recognize them as part of their staff – as one additional staff, not as a consultant who’s separate and on their own. We developed a plan of action with them so that they start supervising UNIs. Also, with this batch of UNI staff, we instructed them differently this year – telling them that they are but one more health staff, not a consultant that can go in, do their work, and leave, without ever coordinating with other staff, with the Head Doctor, Head Nurse or Health Network Coordinator. Now, they have to have the personal seals (official stamps) from each of these actors or the SEDES UNI Coordinator won’t approve their reports. I think in most municipalities, this year we’ve really changed the way UNI staff are viewed, and for the most part, we have also ensured that they’re carrying out their functions as they should. This means that, they’re not *the* ones who weigh and measure children and do all things ‘nutritional’, but are the ones who are supposed to be strengthening the anthropometry of other health staff. They’ll never be able to be the ones to take care of all children – they have other things to do, like the SVIN-C (survey of mother’s knowledge), staff supervisions, etc. So far, however, The SVIN-C, is mostly being done by UNI staff, when the idea is that all (health) staff are supposed to be involved. This coming year, we’re trying to get the municipality to put in the resources to (fund the SVIN-C surveys). If that happens, we assume staff will see (the SVIN-C) as ‘theirs’ and become more involved.

Bono changes

Bono administrators have also been working to clean up the mess the early launching caused. By mid-2011, they had developed a new database system, were encouraging mothers to participate in a free documentation campaign as part of a larger national effort, had established a more streamlined reporting protocol and were initiating pilots of ‘mobile ATMs’ in cities and rural areas to improve payment problems (and attract attention). Although most doctors in this study described the problems they continued to see with the Bono program, some were seeing

signs that payments were smoother while others were hopeful that the newest database would make documentation processes faster. One departmental Bono Director, however, was concerned that these logistical changes would not be enough to rebuild the program's reputation, a process that was still uncertain to them:

The irony is that now that we're more organized in 2011, mothers don't want to participate because they don't want to waste their time... Our goal this year is to involve more health staff, to ensure that they're a part of the program and that they don't see it as *another* program, so that they all talk about the Bono. I'm not sure how we'll do it. Maybe through pamphlets. We also want the Health Networks to accept it. It makes sense that health staff reject the program, because it creates more work for them, because they haven't paid mothers on time until now, etc. We have meetings too with the health network coordinators in both rural and urban areas and also SEDES... but the changes in staff in SEDES and networks makes this very difficult. Many are new. I sometimes want to cry because they don't know about the Bono. They'll say "the Bono?". That's a lesson learned – to inform people, SEDES, everywhere, what the Bono is for.

Facilitating horizontal coordination

Actors throughout the health sector had also begun to search for ways to improve horizontal coordination across ZM interventions and other complimentary MOH programs, by hiring an MOH program coordinator, actively convening isolated SEDES program staff like the Bono to decide how to work together, and advocating for the support of UNIs. After describing each of these efforts within the MOH and SEDES, I also describe in more detail the variety of ways one Health Network Coordinator was improving teamwork at the local level and the tactics of individual staff to gain the acceptance of staff in their municipality.

MOH and SEDES efforts

First, at the national level, one MOH administrator explained that a person was hired in late 2011 to coordinate the many MOH programs. Considering how ineffective Ct-CONAN Health Representatives were in their efforts to coordinate between programs, however, this option may not be any more successful. One difference is that this person would be positioned

within the MOH – not the Ct-CONAN – and was already supported by the Health Promotion Unit that heads SAFCI. His allegiance to SAFCI, however, could also mean that he may support efforts to bring ZM interventions more intentionally under the SAFCI umbrella, against the better judgment of Ct-CONAN administrators. One MOH administrator explained the Coordinator’s new role this way:

We need to coordinate better. We’re all working separately. The Bono has its own trainings, other units theirs, etc. The first thing would be to start an internal dialogue within the MOH, so that we don’t confuse operational staff and repeat earlier mistakes. It’s not that the MOH units say ‘don’t coordinate’, but we haven’t come up with concrete plans, because we do everything urgently. But it’s sometimes important to breathe and take time for this kind of reflection... We’re most excited about having hired a coordinator who’s job it’ll be to try and unite all of the MOH programs - Bono, SAFCI, ZM, etc. He was a SAFCI residential doctor and has been with the MOH since 2006, so he knows the programs and SAFCI well. His position is at the same level as the Nutrition Unit - its own unit (MOH office) essentially, though we wanted him to be directly linked to the Vice-Minister of Health. He’s already starting to meet with former mobiles SAFCI and Bono doctors to learn their lessons and will be proposing some strategies to all the other programs at some point to try and develop a plan. We think this will really help to better coordinate across all the programs.

The unanswered question is exactly *how* this new coordinator plans to do the job. If he intends to develop a “plan”, as many lessons from the ZM program show, then efforts will likely continue to remain on paper. The actions he takes, the meetings he sets up, the structured opportunities he develops for interactions across programs, and especially the way he negotiates with other programs to set aside time for all of this will matter far more than a tidy conceptual plan.

The more concrete ways other staff were coordinating so far offer clearer lessons about how to integrate efforts. Many SEDES administrators in the Nutrition Unit, AIEPI or even the SNIS units were beginning to hold meetings with other staff, particularly Bono directors to “decide how the Bono program is going to work operationally” even though no formal link had been established with the Bono program. In El Alto, SERES (a sub-office of SEDES)

administrators took it upon themselves to organize Bono doctors for a two-day nutrition training session led by the private Albino Patiño Nutrition Rehabilitation Center. One administrator explained how “they didn’t know their role. They were mainly registering, filling out spreadsheets, but they should be doing health promotion, prevention. We clarified in June of 2010. Some still aren’t going out to the community, but the majority are, close to eighty percent.” SERES administrators also took control of the contentious nutritionist battle that raged when UNIs were first established. In late 2011, one administrator explained :

We held a meeting with the UNI nutritionists and the Health Network nutritionists to reduce the conflict and establish different roles. Each day, the nutritionists in the networks have to visit a different health center in her network and offer mothers with malnourished children personalized nutrition counseling. These nutritionists and the doctors will try to treat these children twice if they have moderate malnutrition. If this doesn’t work, they’ll pass them to the UNI. The UNI staff will be in their UNI two days a week, and the rest of the days they’ll do follow-up home visits with malnourished children who have been referred to them. They’ll give educational talks to neighborhood authorities too. I think things are working better now.

The direct advocacy of SEDES staff in one department also offered struggling UNIs the authoritative voice local health supervisors needed to hear to begin involving them as part of the local health sector team. The Nutrition Unit Coordinator in this SEDES described how she won over nurses in some municipalities who initially believed “UNIs are coming to do our work.” She clarified that UNI staff would actually be there to help *them*, with the monitoring of malnutrition, promotion, and supplementation. Now, she noted, the nurses “complain and worry”, asking her “Where are the UNI staff?”, because they finally began “seeing UNIs as additional help rather than competition”. A UNI staffer in this department also expressed how: “At first it wasn’t easy. Other staff gave the UNI all the work. But it’s improved – because the head has talked to the feet. During one of our evaluations where the Head Doctor and Head Nurse participated, SEDES emphasized that this is everyone’s responsibility. If we had said that,

I don't think it would have had so much impact". In a third municipality, a health network administrator also explained that she was now support UNIs primarily because SEDES had told her office to integrate UNIs into the health system. She explained,

Before, our technical council meetings were only for the Head Doctors and the Health Network Coordinator. So we started looking for strategies...Now, the Bono, SAFCI, and UNI staff participate (from across the health network). We ask each for reports, the results they can show and activities they plan to do. We just started having everyone meet in 2010... In these meetings, we focus on administrative problems, forms they were missing, equipment, if they needed to reinforce certain trainings, how to improve the vaccination program, workshops they needed or are carrying out, etc.

The story of one Health Network Coordinator

One Chuquisaca municipality in particular was emblematic of the critical role mid-level policy actors can play in integrating ZM interventions into the fabric of local health systems, if they have the skills, vision and interest to do so. After working with ZM in other capacities, and developing what he called "a certain affection for ZM", the Health Network Coordinator headquartered in the municipality I visited quickly noticed the weak support ZM and UNIs had among other staff. He also realized he would have to take matters into his own hands, in a department at the time where SEDES staff were largely absent from ZM interventions:

Doctors didn't know about ZM at first. We had to make them aware that this was an invention. ... We saw that the Head Doctors, Head Nurses and Health Network Coordinators weren't helping. There wasn't participation in workshops. UNIs were very isolated. They didn't participate in CAIs (Information Analysis Committees), etc. We tried to have SEDES manage the situation but found that there also was a lack of knowledge in the SEDES – what the UNI was, etc.

The Health Network Coordinator worked from a number of angles to change the situation. First, he started holding sporting events with all health staff in 2010, bringing all health network staff together to play basketball, soccer and other activities. He explained how:

We needed an event to bring people together so that they could quickly get to know each other. We saw that they were de-motivated. About 100 people came the first time. We also took the opportunity to talk about our management objectives. We finished in a great

position – in second place in Chuquisaca (based on health indicators). Before, we were at the tail end. And I think these sporting events helped motivate people.

The Coordinator also defended the work of UNI, SAFCI and Bono against any critics, which also seemed to infect the new Head Doctor in the municipality I visited to do the same. As a UNI staffer expressed: “The Health Network Coordinator is excellent. He fights for us. Sometimes some people want to attack us. He says ‘no’. The Head Doctor too. When our colleagues want to confront us, he defends us. He says ‘no’, and backs us up...” He also encouraged new program staff to recognize that they were all part of a united front and would be more effective working together. An ex-UNI staffer in this municipality explained: “The Health Network Coordinator gave us the idea that we needed to be well informed of each other’s work...I was already coordinating with the Bono doctor, but I didn’t think to coordinate with the SAFCI doctor, but I saw that we were doing the same thing, so it was to our benefit.” The Head Doctor spoke in the same manner, about how “We all now have the same objective – to improve maternal and child health, make sure they use the health care system. That’s why we coordinate promotion activities between the UNI, Bono and SAFCI and strengthen local authorities, community health promoters; so that they can make decisions, etc.” For one UNI staffer, the sense of working together was so strong that she’s careful to respect the work of other doctors when she sends mothers to them: “We don’t question the treatment that other health staff and doctors give. The hospital was doing that to us (speaking badly about us to patients), but I believe it’s only ethical. I can’t throw my colleagues under the bus.” She also spoke about her work as being part of SAFCI, having a vision unlike any other UNI staffer I met, most of whom tended to see ZM as a separate, if not higher-order program:

We’re under SAFCI, the new health policy. ZM and Bono are strategies under SAFCI. The Bono is to improve family food security. It all adds up, like the weaving of a web. Like it or not, this is the new policy, but doctors are treatment oriented – it’s not

important to them. SAFCI is the major thing right now – it’s the policy and ZM and Bono are strategies of SAFCI... We need to adjust to it , but I like SAFCI. In the end, we’re all SAFCI.

This “joint language” they developed, as one SAFCI doctor called it, based on mutual respect and a collaborative spirit, also means that they are able to inform people about each of their programs, not simply their own, and support one another when one of their programs begins to flounder:

We’re gaining alliances... we come up with prevention plans together (to focus on washing hands, etc.)... Since the beginning, we’ve said that we need to walk together. If someone asks me, I can tell them about the Bono, or the UNI. We all talk the same language. We’re going to develop a joint budget to present to the Mayor’s office and have already received funds from UNICEF, Plan International. We design our monthly schedules together. We know that if the Bono isn’t doing well, we’ll all help out, and that the reverse is also true. The Health Network Coordinator pushes us. He’s been an important ally.”

The Health Network Coordinator also involves UNI, Bono and SAFCI in any workshop and CAI, as well as field supervisions, that often only involve the Head Doctor and Head Nurse. He described how “We all go together. We analyze aspect by aspect and come up with conclusions together. The Head Doctor follows through on the corrective measures.” He also instituted the idea of ‘brigades’ similar to the community visits staff are carrying out in the Potosi municipality. In these, UNI, Bono and SAFCI do their own prevention and promotion work, but also assist health staff with other health services outside of their official functions, such as tuberculosis, elderly care, etc., as a Bono doctor explained:

We do promotion and prevention work, to promote the Bono and offer integrated health care services. We check for signs of Chagas, vaccinate, control tuberculosis patients, do SPAM (health care for the elderly), and carry out programs for the prevention of uterine cancer. For the annual pelvic exams that women have to have, we give them a number. We don’t tell them that it’s obligatory, but that it’s important that they do the exam within a year. The health staff asked us to do this to help them with their pelvic exam rates. We also help with supervision of health centers... We take advantage of multi-programmatic visits to go to health posts where there are no doctors – we go on motorcycles, in the ambulance or the Mayor’s Office jeeps, two to four times a month.

The COMAN consultant, UNI staff and Health Network Coordinator also decided they would be able to build commitment to malnutrition reduction efforts in the municipality if they understood the existing level of commitment and awareness of the problem. The COMAN consultant described their thinking:

With the Health Network Coordinator we did a diagnostic of the municipal government staff and authorities. We asked them what they thought food security and sovereignty was, what the Municipal Incentive Program was, what the COMAN was, and what associated projects they knew the municipality was carrying out. (We learned that) no more than 50 percent had knowledge of these things. They didn't realize that our greatest problem is malnutrition. They weren't well informed. There wasn't interest. Even authorities in health didn't say that food security can cause malnutrition... We can talk about how we need 'food security' but if people don't understand the COMAN, UNI, ZM, malnutrition data and what food security is they won't do anything...

COMAN, Bono, UNI and SAFCI staff in this municipality have also worked with the mayor's office staff to carry out several food security projects that are becoming the envy of neighboring municipalities. These projects are not described here, but demonstrate the extent to which collaboration has reached, far beyond the boundaries of the health sector programs that are their primary, official responsibilities.

Individual staff actions

Individual staff at the local level also found ways to become part of the local health team on their own. Some offered to do things they knew other actors needed in order to gain their trust, even if it meant working outside their 'official' work responsibilities. An ex-UNI staffer now in SEDES described this as a process of "creating dependency" on their work: "UNI staff have to *create* a dependency in the municipality, and then on the (staff in the) municipality – that's integration". In one Potosi municipality, another ex-UNI staffer did this by offering the Head Nurse and other doctors "help with their projects", even if they were unrelated to her UNI

functions. She attributed the resulting improvements in her work situation to her ability to establish strong relationships with other health staff in the municipality:

When you have a good relationship with staff, you can get reports from them, etc... Our relationship was so good, they'd come get me to go out to their health centers and they would participate in meetings we held with mothers and community leaders. Because we couldn't reach them all, they would bring me their Notebook Four (with growth monitoring data, etc.) personally. The Mayor's office would offer me rides to do follow-up visits and would let me make photocopies, gave me materials – not like the experience of UNIs in other municipalities.

Several UNI, Bono and SAFCI doctors talked about doing 24-hour rotations to gain the trust of their colleagues and Head Doctors, even though their supervisors often instructed them that this was strictly *not* one of their functions, making them feel that “we'd have to return our money if we report ‘24-hour rotation’ as one of our activities”. One Bono doctor in Chuquisaca explained that playing by the same rules of every other doctor was an important part of gaining the respect of other health staff and local health authorities in most municipalities:

It was hard to work with health staff when I first arrived... I explained to staff how to fill out the registration form, etc... It wasn't easy. They didn't place much importance on the Bono, because of so many mothers' complaints... We had a bad reputation. “It's political” many said. The same things were said in (another municipality). There they made me do 24-hour rotations and external consultations. Here too. I did it, wanting to gain the respect of the Head Doctor and Health Coordinator...”

For another UNI staffer in rural Potosi, however, the trick was not doing rotations. She focused on proving to her colleagues and Head Doctor that her work was improving micronutrient coverage and malnutrition rates as a door for establishing her credibility and for staff to get to know her personally. She described this process:

I explained to my Head Doctor that I have to be in communities for three or four days (a week). I showed him my numbers, my job manual, and convinced him that I didn't have to do 24-hour shifts, except for emergencies. I've explained that we do prevention and promotion work. I attend all the Technical Councils, show which staff aren't distributing micronutrients, etc. They almost threw me out for not doing 24-hour shifts at first, but I showed them what I can and can't do when I'm doing those long shifts... When I began

showing results, and they saw the number of malnourished children, all the staff started to get to know me and they can't say anything negative about my work.

In Santa Cruz as well, the effort mainly took persistence and “fighting”, as one UNI staffer explained:

We began from zero. We had to raise awareness, get space, secure budgets, explain our objectives and what functions we were going to complete, starting first with authorities at the top. We had to work with the Health Network Coordinator too, because he didn't believe it would work; because they say ‘all the programs come and go’. Talking about malnutrition is also something huge, broad. Impossible, they thought. We had to fight for this, explain... They eventually gave us space and inaugurated the UNIs. Health staff at first didn't help us, but SEDES and the Health Network did. Holding health fairs helped, because they saw that the topic was important, and people responded.

Conclusion

After four years of “ready-fire-aim” program administration (Mintzberg 1993), ZM planners, mid-level policy actors and front-line staff had all learned, sometimes painfully, about the challenges of implementing a national health reform. At each level of the program, this learning motivated ZM advocates to correct ongoing obstacles they had encountered, and sometimes created. Their actions suggest a number of lessons about the role that multiple actors can play as policy champions (Kingdon 1995), the diverse tactics that make up the strategic capacity (Pelletier et al 2011) and the possible tradeoffs – even some that program planners may think of as illicit (Lipsky 1980) – involved in facilitating program diffusion (Dearing 2008) and ensuring policy sustainability (Patashnik 2008) at all levels of a policy system.

Continuing to keep SEDES and other health sector actors outside the ZM structure may have been necessary at first to ensure fast action, but as these findings suggest, over time, ZM administrators began to realize they were ignoring the growing confusion and animosities earlier program design choices had caused. The crisis that was mounting across UNIs seemed to indicate that the only choice left was to involve SEDES more formally. As some suggested, this

move was risky, but the experience in Bolivia fits with what scholars argue – that a certain amount of program coherence must be lost if the broader goal and initiative is to survive (Selznick 1949; Patashnik 2008). Alternatively, the choice not to decentralize the national-level ZM office may indicate that this move was seen as either riskier, or less necessary – in either case, requiring a dramatic restructuring of decision-making. It is still too soon to tell, however, whether involving SEDES and other mid-level actors more actively in local-level action plans, supervision, training and other operational tasks will improve ZM implementation and how much it may also distort the intentions national planners had in mind. The tradeoffs, nevertheless, may be necessary.

Regardless of the outcomes, efforts staff made to integrate ZM into the local health sector fabric suggest that the process of policy diffusion takes active facilitation at all levels of the program, and sometimes tactics that challenge the “rules” policymakers devise. Front-line staff, for instance, who went against supervisors’ orders to not do 24-hour rotations reflected the “neat paradox” Lipsky (1980) found, whereby “Lower-level participants develop coping mechanisms contrary to an agency’s policy but actually basic to its survival” (19). Doing these rotations, in other words, allowed staff to carry out their jobs, even though supervisors saw their actions as illicit, because it reduced the time they had to do their “official” functions. The question is how to change supervisors’ perspectives so that they can see beyond compliance questions to strategies that will create the supportive environment staff need to carry out their jobs.

The findings in this chapter suggest that one way of creating this shift in thinking, and to facilitate local problem solving, is to identify and incentivize more “policy champions” at the front-line and middle-levels of the program. This idea adds a new twist to the role Kingdon (1995) saw such champions play during the policy agenda-setting stage. Supporting the policy

implementation process is less about savvy political maneuvering and more about setting the conditions for local actors to adapt to local contexts. Such champions could use tactics as the Chuquisaca Health Network Coordinator did, like encouraging coordination through unified budget proposals, going together to the field, or holding sporting events so that staff could begin to interact outside their official roles where new staff are often seen as a threat to existing power bases, as we saw with the UNI turf wars. Individual staff also showed us that the work of such “champions” may be as simple as taking on the same tiring task everyone else has to, and helping other staff with their pet projects.

This study also suggests that such champions and the types of negotiations going on with SEDES work best during windows of political opportunity, extending another idea of Kingdon’s (1995) to the policy implementation stage. Unlike the single moments Kingdon saw policy champions react to in his work, however, my own study suggests that windows of opportunity can open and close inconsistently across multiple levels of decentralized policy systems. As we saw in Chapter One, there was a time when at least half of the departmental governments (and SEDES) were rejecting national programs like ZM and its UNIs, at the same time that President Morales suddenly gained interest in the Bono program. Establishing stable policy champions early and throughout the policy system, therefore, is critical so that they may be attuned to local threats and opportunities that may not be visible at higher levels.

Finally, the fact that we see traces of policy models and concepts like policy champions or policy windows developed with national dynamics in mind at lower levels suggests too that dynamic policy environments present challenging interactions between structure and agency not fully recognized in Kingdon’s (1995), Patashnik’s (2008) and other studies of the policy process.

Additional ways national choices structured the implementation decisions of mid-level policy actors are explored in Chapter Three.

SECTION II: PROGRAM ADMINISTRATION

CHAPTER THREE: Two faces of rationality¹³

This chapter considers more closely the role mid-level actors played – particularly SEDES administrators, Health Network Coordinators and Municipal Head Doctors – in shaping ZM implementation. I look at managers’ day-to-day interactions with front-line staff, particularly public health staff manning the clinics and health posts who were critical for distributing micronutrients, keeping track of a child’s growth, and counseling mothers. Considering the state of confusion in which many staff found themselves in Chapter One, how did mid-level actors make sense of their ambiguous tasks and determine how to guide implementation? How did managers utilize knowledge to inform operational decisions? Ultimately, how did the management styles of supervisors affect staff performance? These questions are logistically and administratively grounded in issues mid-level actors faced in Bolivia, but the answers, we will see, have broader implications for how we theoretically and analytically understand the role of mid-level actors in the policy process and the factors that can lead them to obstruct or facilitate adaptive strategies.

The chapter begins by describing how many mid-level managers rationalized the use of a rational management approach – an authoritarian, order-imposing approach – *because* they were unsure about how manage ZM activities. I discuss how their focus on collecting, managing and analyzing quantitative indicators lulled them into believing ZM was making progress because the quantitative data they used did not reveal fundamental problems with: a) UNI implementation, b) micronutrient interventions, and c) the quality of the data itself. I then show how their management style created additional implementation problems along the way, by a) lowering staff morale, b) reinforcing “quality paperwork” over “quality healthcare”, and c) straining staff-patient relations. Finally, I discuss how a hyper-focus on indicators wasted the opportunity to

¹³ This phrase is taken from Bachrach and Baratz’s (1962) article on the “Two Faces of Power”.

learn about how to improve ZM implementation, by a) structuring one of the only potential learning forums – Information Analysis Committees (CAIs) – in such a way that focused on information sharing, not learning about or resolving the above problems, while also b) blinding managers from seeing emerging solutions, c) and reinforcing self-censoring among staff and a “mafia against sharing experiences”.

The findings further our understanding of the role mid-level actors play in the policy process (Pelletier et al 2011), particularly in rethinking the greater role they play – rather than national policymakers – in perpetuating rational management practices (Scott 1998; Lindblom 1959). The contradictory effect of rational strategies used here – helping managers make sense of their work, while confusing the work for lower-level staff – also pushes our understanding of rationality and its relationship to sensemaking (Weick 2005), tolerance for ambiguity (Moses and Lyness 1990), goal setting (Ordonez et al 2009; Freeman 2002) and cultures of learning (Mahler 1997).

Rationalizing a rational management approach

The authoritarian persona many supervisors adopted appeared to be a way to overcompensate for not being entirely sure how to manage ZM implementation. In numerous conversations, managers and supervisors confided that they were learning how to manage ZM as they went. Many mid-level supervisors found it particularly difficult to handle the competing programs the MOH was launching at the same time, without sufficient thought to the way they or even front-line staff might facilitate the public health change these programs intended. An Ex-SEDES administrator described, for instance, “Sometimes it seems the MOH does things just to do them, without thinking about how they will work...ZM is about many dreams, lots of investment, but few results. It's not impossible to eradicate malnutrition... but many strategies are

still lacking. I think sometimes we think, here's the project, let's launch it, without much thought..." In one SEDES, a Nutrition Coordinator admitted that she was losing a sense of the bigger picture because of the many elements she ultimately had to determine how to manage simultaneously, "We sometimes don't know what we're looking for because there are so many components – health insurance, SNIS, AIEPI, health promotion, all with their own models, policies". Even within each of these programs, supervisors sometimes displayed that they were unsure what to do. An ex-UNI nutritionist, for instance, described how it was easy to bluff during evaluations because SEDES administrators "didn't know what to do with the UNIs" and "when my supervisors would evaluate me using the [Estrella Kiviat] form, I realized you could deceive them easily because they didn't know what to ask." To better define how to carry out their roles, many supervisors like one SEDES administrator noted how they wished national actors would first, understand the situations they worked under, and then help to co-strengthen their management approach:

(MOH administrators) think we're responsible for everything, but there's only one person at the department level – I can't respond that very moment. Although they've strengthened the national (Nutrition Unit) team, it's not reflected in the help you see here. In the Logic Model workshop we saw the need for developing a plan to strengthen management so that the national level goes to the departments to see their situation and realize they are (all) different...This will help me a lot.

At best, the uncertainty many managers found themselves in left field staff unsure about their work as well, feeling like "we work alone" or that their supervisors were "lost", because they offered little guidance about how to improve their work. But for most front-line staff, the result was a supervisor who often went the opposite direction, wielding their authority over them in their attempt to exert "control", even if behind their veneer they too were struggling to know how to make sense of ZM's ambiguous change process. When I asked why so many staff were afraid of one particular supervisor, one employee told me that, "I guarantee you that [my

supervisor] is more afraid of everyone else than they are of him. He's terrified that people will realize that he doesn't always know what he's doing...". In another case, a Health Network administrator knew about many of the challenges staff faced, but ultimately believed that she had to play an enforcing role to ensure staff achieved program goals:

There are 24 tri-mester reports we have to turn in and 20 each month. Staff have to focus on filling out form after more forms. How will they offer counseling, touch on the five steps and orient a mother 100 percent? To make sure they've understood or not? They're overloaded with administrative aspects. Right now, every week they have to report about the vaccination campaign. But if we don't get staff to fill out these forms, how do we control them and see whether we're achieving our goals or not?

Nutrition Unit Coordinators in one SEDES who were conflicted about how to "get results" from UNIs also settled on an authoritative management style. They reflected about the importance of offering UNIs support so that you can "show staff that you know their reality" and knew that, "Management isn't about ordering people, but helping them grow... a firm hand isn't always the best". One administrator also reflected about how the "The best boss I ever had ensured that we completed our schedule, rain or sun, no matter what. But when you talked to him, he'd see you as a person. He'd understand." But ultimately, these managers rationalized that they had to be authoritative to keep staff from "deceiving" supervisors. As they considered how to get across the staff, they reflected out loud, "Maybe we should be more forceful, that's how it seems some people get results. We might need to be more firm, but just". They also believed staff had to be "prodded" and would only "learn how to obey" if they used "harsh words". They looked for evaluation tools that could be lie-proof, incredulous that another SEDES might allow UNI staff to do a self-evaluation, saying "but they can lie...(and) will want to paint themselves in the best light". Their own plan was to develop a "new form...(on which) it'll be difficult to deceive supervisors, because it asks about how many times this month you visited communities, what trainings they did, like on Nutribebe – it's more specific..." They also designed an

evaluation intentionally to instill fear in staff, hoping “staff won’t like it, they’ll be afraid, it’ll put them in a state of suspense”. They also suggested that “correcting” and scrutinizing staff was more important to them than co-generating solutions, reacting to a collaborative planning approach a different SEDES was planning to use by saying “great that [that SEDES] wants to use a more *qualitative* approach, but we want to look at results and indicators and to compare across sites...[that approach seems] not as questioning, more simple, more laid back, and more about looking for solutions...(we want to) see staff deficiencies, the bad, so that we can correct them, so that they don’t make the same mistake”.

Hidden operational problems behind quantitative indicators

Rational management would have made sense if it succeeded in achieving the “results” supervisors sought. Part of the problem, however, was that supervisors were often fixated on process indicators, “trapping” them into a false belief that they were making progress if they simply increased the number of staff, trainings, mothers counseled and many other “inputs” typically found in the first column of a program logic model, as one SEDES administrator explained,

We get stuck on trying to fulfill the many logistical, equipment, staffing details that the national level has set out and don’t consider how to actually get results... We need to stop focusing on process indicators like ‘completing’ the UNI teams, making sure they have all the equipment we think they need, etc. In the end, all we think about are these process indicators and we never ensure that they’re having an impact. They should be focusing all their effort on building the capacity of other staff to integrate nutrition actions and promotion into their daily activities....I hate the Estrella Kiviat (to monitor UNIs)! I think it was useful at the start of the program, to set out important goals for trying to make an UNI team complete, etc, but now, four years into the program, we’re still focusing on those process indicators and not on ensuring results...Process indicators trap us!...

Managers were especially quick to point to indicators for two of ZM’s signature interventions – UNI and Nutribebe – as a sign of implementation progress. One ZM evaluation (Mansilla 2010) reported that 127 UNIs had been established by mid-2010 (Table 1) while an

MOH Nutrition Unit Coordinator noted that an additional 18 UNIs were formed by the end of 2011. The number of municipalities purchasing Nutribebe, even by the end of 2009, had reached nearly half of all municipalities in the country – 167 out of 327. Over sixty municipal governments had adopted Nutribebe voluntarily, despite not being targeted by ZM as “priority” municipalities (Table 1).

Table 1. Number of municipalities implementing Nutribebe and with UNIs, 2009

Municipality type	Nutribebe*	UNIs**
Priority I (N=52)	38 (85%)	38 (75%)
Priority II (N=114)	59 (52%)	62 (54%)
Non-Priority (N=161)	63 (39%)	24 (16%)
TOTAL (N=327)	160 (49%)	127 (39%)

Source: *Pentene 2009; **Mansilla 2009

Coverage rates for Nutribebe, and two other micronutrient interventions that had already been launched prior to ZM, but which were promoted more heavily as part of ZM’s “package” of interventions – Chispitas and Vitamin A – also suggested that ZM investments had either improved distribution of these products, or at least maintained higher coverage rates in municipalities where ZM program interventions were invested more heavily, in the 52 Phase I municipalities (Appendix E).

A closer look at these numbers below – within UNIs and micronutrient interventions – as well as the quality of the data itself, shows that the quantitative data available to managers does not go far enough in revealing many of the operational problems that likely kept some of ZM’s successes partial and fleeting – operational problems that remained hidden from supervisors when they believed “the documentation speaks” instead of the staffer’s experience.

Hidden problems with UNI implementation

The most obvious issue that lay hidden behind the indicator of “127 UNIs established” was the constant rotation among consultants described in Chapter One, suggesting that these

numbers too often only referred to the infrastructure and equipment than it did effective functioning. In addition to those that remained vacant when staff waited for their contract renewals, others got their staff, but not the supplies, guidance and support, particularly in the first years of the program. In one department, an ex-SEDES administrator described how:

When I was in an administrative role, usually all we cared about was results, results, and it didn't matter to us *how*... (Once) I was told to suddenly hire 20 UNIs, but 15 to 17 resigned within a week because there were no offices, a place to work, having to go here, there to print, to do anything, without help from health staff or the municipality. How can someone ask for results when you don't give them means to achieve them? I think when a project or different strategy is launched that you need to think about the means to do it – what will they need so that staff can enter, arrive and do the work? Not just at the level of logistics or equipment, but also at the level of training to prepare them? But what we did is sent them and said “go, present yourself” with a simple letter. And health staff then said, “and now what?”

In other cases, sites had supplies they did not need, as an UNI staffer in the department of Potosi described: “We have all this equipment but no acute malnutrition – we have seven beds we've never used”. Some health staff also received the infrastructure, but did not know what to do with the space when they had no UNI staffer, as one NGO partner observed: “In Tarvita, Azurduy, Santa Cruz and Tarija, they built six UNIs, but after a year, many still had the lock on their front doors, never having been used because no one knew *how* to implement them”. A nutritionist in El Alto described a similar situation, and how easily the concept of successful “implementation” became associated with equipping and building UNIs, not ensuring results:

The SEDES UNI Director only wanted to focus on getting staff and ‘implementation’, what she interpreted as equipment, infrastructure, setting up more UNIs, but this doesn't ensure results. We need to be focusing on strategies.... We have major problems with the UNIs, very few results, after all that's been invested. Lots of infrastructure and trainings, for what?...We continue with activities, activities, activities, spending so much money for so much equipment, without using it!...I think (supervisor) doesn't want to look at operational issues. She looks at the infrastructure, that an UNI has equipment, staff etc. but if there aren't any results...why does this matter? She seems to think the UNIs are functioning well...I've told the MOH Nutrition Unit Director about the ideas I have about UNIs, and she says, “we'll see”. But what things will we see?

Hidden problems with micronutrient interventions

Micronutrient indicators were especially deceptive. First, although nearly half the municipalities were *purchasing* Nutribebe in 2009, only 16 percent of children were *receiving* Nutribebe nationally (Appendix E), and at most, 26 percent of children in the 52 Priority I municipalities (SNIS 2009; Zenteño 2010). In Potosi city, less than one percent of children received Nutribebe (SNIS 2009). There, as in most places, the problem was a lack of municipal government commitment to purchase sufficient amounts to cover the entire population of children under two. In 2010, health network administrators explained that the city government agreed to purchase only 100,000 Bolivianos worth when they needed 3 million Bolivianos, forcing staff to use Nutribebe as a treatment for malnutrition, rather than as a prevention measure. Furthermore, disaggregated data (Appendix E) specific to the eight study sites shows that coverage rates vary across and within sites, suggesting that coverage relies upon variable capacity and commitment of local staff to ensure adequate supplies from year to year.

Secondly, the operational challenges of ensuring that mothers actually used micronutrient products was lost in the analysis of coverage rates. One doctor was frustrated that the MOH for more than five years had not listened to local staff observations about mothers and children who did not like the metallic taste of Chispitas and how difficult it was to keep mothers from using the product inappropriately in hot foods or liquids such as soups, the mainstay of people's diets in most of the highlands. One nutritionist in El Alto explained problems she also had with implementing Zinc and :

The MOH measures our malnutrition rates, our coverage rates, but they don't listen to us and help us with problems we've identified. Zinc, for instance, should help children with stunting, but the treatment requires three continuous months. The tablets they promote don't make sense for mothers here. They require 10 mg but the tablet is 20mg, so they have to cut it in half, dissolve it, save the other half, etc. They forget, especially because so many work such long days. We thought the liquid would be easier to administer, but

the MOH says the kind we had available doesn't meet the requirements - that one spoonful isn't 10 mg, so we can't use it. So what do we do? They require us to distribute it, yet don't listen to the operational problems we've observed. How can we work this way?

Data quality concerns

Finally, among the worst issues with supervisors relying on data and indicators as their principle management tool, was the incessant skepticism among front-line staff that the data being used to hold them compliant was unreliable and contradictory. Many staff were also confused by data systems that covered similar topics but used different population samples and methodologies¹⁴. These issues made many staff concerned that “you’ll deceive yourself with these data”, skeptical that supervisors could selectively use some data to fit their agenda, or to simply disregard certain outcomes because they did not trust the numbers, as one NGO coordinator worried: “With all this confusion, it lowers people’s confidence – they can easily blame the data or choose data they want to justify certain decisions. Depending on what they consult, you draw different conclusions.” Micronutrient data and growth monitoring (used to classify a child as chronically malnourished or not) were especially problematic, but two of ZM’s key sources for monitoring progress.

Micronutrient data

Micronutrient data were problematic because of issues policy actors raised about recording keeping, gaps in the data, inconsistent data sources, and questions about how coverage rates were calculated. First, during a nation-wide supervision in 2009 covering over half of the municipalities, the national MOH Micronutrient Director explained that only 10 percent of health

¹⁴ Health and Demographic Surveys, conducted world-wide, use a two-stage cluster sampling, and is therefore not large enough to be disaggregated to the municipal level (Aliaga and Ren, 2006). SNIS data is based on the number of families who access health care centers or who can be reached by health staff, while the Bono program only records children participating in the program. According to some staff, the Bono covers up to 50 percent of mothers in some rural municipalities and at most, 72 percent of families in urban areas (if we exclude approximately 28 percent of the population with government health insurance ineligible for the program (Ledo and Soria 2011).

centers were recording micronutrient data and managing micronutrient distribution correctly. She claimed that up to 50 percent of centers visited in 2010 were in compliance, but many staff were skeptical that such supervisions would continue and reach enough centers to sustain improved record keeping. Problems with record keeping seemed particularly acute in cities, especially Santa Cruz, where one SEDES administrator called the micronutrient registries the “biggest bottleneck” they faced with the intervention. Second, one NGO partner was concerned that Zinc distribution was not being tracked, noting how: “there’s certain data that’s still missing that’s key - like Zinc distribution. The SNIS (Health Information System) office says ‘it’s not on the form’ so it can’t be collected... For three years we’ve been pushing for this data.” Third, many discussed inconsistencies between SNIS data and the new SVIN-C survey that surveyed mothers. While SNIS data suggested that only 16 percent of children in the country in 2009 received Nutribebe, and at most 25 percent in Priority I municipalities, SVIN-C data reported that 60 percent of mothers in 137 municipalities had given their child Nutribebe at the time of their SVIN-C survey (Ct-CONAN 2010). Finally, many staff disregarded supervisor criticism about coverage rates because they complained that the indicators were calculated on population projections from the 2001 census, meaning that rural populations were overestimated and urban populations underestimated because of high rates of rural to urban migration. For instance, a Bono doctor in one rural Potosi municipality noted that she “supposedly” had 722 children under two in her municipality according to population projections. She is expected to enroll 61 new children every month based on this number, but has “barely” reached 32 percent of her required goal because she believes the population is overestimated.

Chronic malnutrition data

Chronic malnutrition data faced even more troubling data quality concerns, as well as a growing debate about what data sources were the most valid to use. Many actors were concerned that child height and weight measurements were unreliable for numerous reasons, though hard data on the issue is not consistently collected. In one case, a nutrition rehabilitation center in El Alto recorded that 29 percent of 426 children referred for chronic malnutrition in 2009 actually had normal height, suggesting that many children *with* chronic malnutrition were likely going undetected.

Most accounts of the poor quality came from doctors and nurses who admitted they simply did not have the time to monitor or improve their growth monitoring systems. One doctor in a health center that routinely referred some of these patients to the El Alto clinic admitted that the interns they relied on to do growth monitoring, “aren’t monitored by the nurses. We don’t know if they’re weighing and measuring correctly. If they’re off even by centimeters it can vary (their classification) greatly. They aren’t always going through all the steps – taking of the child’s diapers, clothes, etc. Some children have even shrunk!” Until 2010, when two health networks in Santa Cruz began participating in an NGO project to improve growth promotion and AIEPI-Nut in public centers, one UNI staffer also described how:

Sometimes on the AIEPI form on the back where it says what nutrition practices staff talked about with mothers, they’d put ‘yes, yes, yes’ (without actually talking to mothers). At first, they’d mis-classify children who were malnourished. Other healthy children, they’d say were malnourished. They weren’t interpreting the growth curves correctly.

In rural areas, one ex-UNI staffer described how accurate classification is difficult because of problems determining the exact age of children, since mothers are often unsure and have no birth certificates. Some actors also explained that supplies affect measurements

throughout many rural health posts where staff are still forced to use measuring tapes or have no scales, particularly when they have to hike long distances to village growth promotion days. One NGO working to improve growth monitoring throughout multiple rural municipalities also noted how supplies and low staff priority of growth promotion affects their accuracy: “The child health card sometimes doesn’t exist or is incomplete, even though the MOH has worked with these for so many years! Staff don’t measure and weight correctly – it has to be exact. Staff don’t understand the importance”.

Discrepancies in malnutrition data between the newly added Bono data, existing data in the SNIS, and the more aggregate data available from the periodically collected Health and Demographic Survey was also causing a major debate among supervisors and staff about which one to believe. National chronic malnutrition data between 2008 and 2009 ranged from 21 percent in the Health and Demographic Survey, to as low as 10 percent in the SNIS, and 16 percent in the Bono program (Ct-CONAN 2010). Bono doctors in one municipality were claiming that chronic malnutrition had fallen from 33 to 31 percent between 2010 and 2011, but the UNI staffer estimated that the rate had stayed at 37 percent across this period. One regional nutrition coordinator frustrated with Bono data also noted:

I’ll keep giving the national and department level my perspective until they hate me and want to stop inviting me to meetings! I disagree with using the Bono indicators. (The national administrator) insists that we use the Bono data, because she says we don’t have a stable population or real denominator (because of population projection problems). But the Bono data aren’t real either. Many mothers have dropped out of the Bono because it’s so bureaucratic. Even in the city, it doesn’t make sense to participate because of so many problems with the bank payments. And I don’t agree that we use prevalence data. They want to count by population. We want to do it by the number of patients attended. With prevalence, every time someone comes to the clinic, they count them as a person attended (for the nominator), even though some can come up to 10 times a month! We use the number attended in the denominator. Every one of these that had malnutrition, we put in the nominator.

UNI staff in one rural municipality in Potosi were also concerned about the duplication of malnutrition cases when mothers with children who are malnourished come two or three times in one month. One nutritionist noted how the SNIS data indicates that her municipality has 1,187 children that have chronic malnutrition, while her own reporting system indicates only 1,059, suggesting that 127 of the children in the SNIS data are duplicates. She was frustrated that after talking to her Municipal Head Doctor, Health Network Coordinator, SEDES administrators, and the national AIEPI coordinator that five months had gone by with no answer. Her response, so far, has been to develop her own system to track child-level malnutrition data each month, resolving the issue in her mind, but introducing one more source of conflicting malnutrition data.

This contradictory malnutrition data ultimately affected staff support for ZM efforts or allowed them to justify their selective use of certain data to justify their inaction. In one rural region of Potosi, for instance, a Health Network Coordinator pointed to the variation in rates to justify her belief that data was “biased” and standards “inappropriate” for her region, where malnutrition rates continued to be over forty percent:

We lack a unified information system. If we manage data here and there, they aren't credible – there's a lot of biased information...It seems like we've increased chronic malnutrition because we used to use the global malnutrition indicator before. I think the new standard isn't appropriate for our area. I think they gave us a standard from the United States that's more appropriate for Santa Cruz. I think the standard here should be much lower because of genetics.

One doctor in El Alto also wondered if the government may be exaggerating ZM numbers to “show the world results”, while a doctor in the city of Potosi also reflected how:

I don't believe some data. In one meeting, they showed that in only six months, they reduced malnutrition in the population from fifty to forty percent, and only with education. How? I don't believe it. When I was working in the rural area and was working with the World Food Program, we distributed milk. The children didn't drink it. I couldn't lower malnutrition. The WHO says, being realistic, you can reduce malnutrition by 0.2 to 0.5 percent each year. *Zero* malnutrition? I don't think so.

Management-introduced implementation problems

Although supervisors believed orders to “obey”, harsh words and a search for deficiencies through these indicators would “get results”, staff on the ground explained that this engineering-style management actually weakened their performance in three ways. First, managers’ depersonalized style lowered staff morale, particularly because they felt supervisors overlooked the remarkable “sacrifices” they made on a daily basis to deliver programs under difficult working environments. Managers’ focus on indicators also had practical effects on their ability to carry out their work. For many staff, the data supervisors needed for monitoring translated into additional paperwork, paradoxically taking time away from their work with patients. Finally, many staff felt that supervisor demands to complete certain activities or “get the numbers” sometimes compromised the delicate trust, confidence, and credibility they attempted to build with communities, which were essential to their ability to effectively implement programs.

Lowered morale

Front line staff regularly discussed how they became frustrated by the constant barrage of criticism, with little recognition for what sometimes looked on paper like an insignificant victory. As one doctor noted, “It’s easy to supervise, but it’s difficult to work in the field, to understand the obstacles... based on the MOH focus on coverage, a center that makes 100% is considered ‘good’, but it doesn’t matter to them how they arrived at that number – if they had the inputs, personnel, etc.” One doctor described how this focus on numbers made SEDES supervisors forget “the simple things” about the challenging work operational staff carried out, creating the image that staff were one more peg in the health sector machine:

All the trainers that have come from SEDES have also had experience working in the field. But they say, “you have to do it like this, like this, like this.” They should come see

how we're doing. They know that only one person can't cover it all – giving quality health care attention. Supervisors think that because they experienced the same stress, we have to experience the same. We need an incentive for those of us who do our work well. I've never heard them say "congratulations" – the incentive could even be symbolic. But no, they just give us more work. It's stressful. The Head Doctor just comes to look at our numbers. SEDES supervisors have forgotten about simple things. They think more about their work. They view us as machines, not as people. We're also our own world. Every day, we fight (to create change), and our bosses don't know. There was a time when they were instituting regulations and if you didn't follow them, you'd lose three days off!

In rural areas, obstacles to getting "good" ratings often meant living alone in a remote village in difficult housing conditions, miles of hiking to reach only one child, and initially "cold" receptions from populations that often distrusted health staff. One Bono doctor said he "wish(ed) SEDES would base their decisions on what really goes on, not just coverage rates. They should live here in the community to understand the reality". A nurse in a remote outpost was also discouraged to repeatedly hear supervisors talk about "numbers" without seeing staff "sacrifices":

Supervisors just look at numbers from their desks. They don't see the sacrifices we make to get those numbers – how we've walked three hours to vaccinate one child...I wish the national level would come visit our communities, not just to see the bad, but the good too... When I arrived in 2004, (I didn't have mother's trust)...It's a long process to win their trust. But they don't see it that way at higher levels, that it takes time. I put in so much effort, I sacrifice a lot, yet they criticize...They should understand the actual needs here, like for improving nutrition. Sometimes, we don't have a place to hold our monthly meetings or to weigh children naked, in order to have exact measurements. A small room would help. It's especially a problem when it's raining or there's wind – it affects the child and our paperwork starts flying everywhere. But supervisors don't see these things...None of the supervisors do, not even a "thank you".

In urban areas, staff faced coming to work at 8a.m. to a line of thirty waiting patients, staff shortages, and a constant flow of emergencies that made it difficult to calmly focus on preventive care. As one ex-UNI nutritionist explained, "in the urban area, they start lining up at 4a.m. and the center is always full. Mothers are demanding attention, they're in a hurry because

they need to get to work. I think personalized counseling and attention really suffers because it's stressful. Fifteen minutes is little time to explain everything.”

Quality paperwork, not quality healthcare

For health center staff in particular, each new program added to the pile of paperwork they had to manage, making staff feel that supervisors were concerned with “quality paperwork” more than “quality health care”. One Health Network administrator described how this results in 20 reports centers must turn in each month, in addition to 24 reports every 3 months, and weekly vaccination data during campaigns. A study one NGO conducted, where an investigator documented the daily routines of a rural health staffer for a month in 2006 – before ZM's launch and increase in other MOH programs – estimated that as much as 40 percent of staff time was devoted to paperwork and other administrative tasks (Llanque 2011). Perversely, this paperwork to track staff performance itself reduced performance.

In the city of Potosi, one doctor described how, “The directors of each program require more, more, more – we're saturated...It's so much paperwork, it limits our ability to do some things correctly. When we weigh a child, we have to note it six times, in six different forms...We do what we can, but we can't do everything that we're required to do...The paperwork doesn't allow us make progress!” Staff admit that the reality is that they “get lost” in all these requirements, “forget” and simply “don't have time” to complete this paperwork. A nurse at a center in the city of Potosi noted, for instance, how “The paperwork I have to fill out is a lot. Community AIEPI-Nut is now using a different registry for each patient – it takes forever, I don't have time. I have that, plus registries, the clinical file, their identity card, prescription, etc. At the same time, we don't have enough information, because we forget to fill out certain things because – we get lost.” One health center director in Santa Cruz also admitted, “when

supervisions are very dispersed, ooh! Staff do what they want, because the truth is that it's so much paperwork to complete".

The combination of mounting programs and the constant demand in urban centers explains why staff felt they could devote little quality time to their patients. It also created a situation where staff admitted making mistakes, did not carry out many of the required steps of individual interventions (such as AIEPI-Nut) or chose not to apply particular programs, as one doctor explained in painful detail:

There are prescription receipts, a lab form, clinical history file, a form for Clinic-based AIEPI-Nut, four separate notebooks for different groups, a separate receipt for Nutribebe because it's considered a 'program'... And each time, we have to copy basic information like their name, identity card number, etc., sometimes up to six times. We need 30 minutes for all this in addition to counseling, though the norm says 15 minutes. Recently, we went to a 'psycho-social' workshop to learn about a new program in early stimulation. Doing this on top of what we already do would take an entire hour – that's why we don't do it, or we fill out forms quickly. We'd need a person strictly dedicated to this... Wednesday they passed onto us yet another program, for renal-failure. Now we have to do a lab exam for anyone with diabetes, obesity or malnutrition, which means a completely different clinical history, forms, etc. In one program alone, we have 7 forms to fill out. Tuberculosis patients have an entirely different clinical history and their own follow-up protocol. Every month, I spend between the first and the fifth just filling out forms, to turn in my reports. Apart from this, the Mayor in 2006 created his own health insurance – called Su-Municipal...but it means that we had to start filling out forms for that program as well – but it's just archived – we've never received a dime.

Some staff in more remote areas also spoke about inordinate paperwork. Some discussed the added difficulty of often doing this work by hand where rural centers had no computer. In one such case, a doctor noted that paperwork each month took a week to complete – a fourth of their time. In another rural center, the nurse and doctor worked on paperwork until 10 or 11p.m., sometimes until 1a.m. when the nurse was alone. A doctor also wondered if urban staff are actually better off because of the number of staff urban sites have to take care of paperwork:

The biggest problem in this country is bureaucracy, and more with the mayor's office. There's so much paperwork for everything, always 20 documents. The national level requires the municipal government to fill all this out. Maybe we have more paperwork in

the rural area – like for PAI (vaccines), tuberculosis, ten programs, each with their own forms. In the city, they have more specialists which helps cut down on the paperwork. Here, there are only two of us at the center.

Strained patient-staff relations

Aside from the obvious effect competing priorities and mounting paperwork had on the quality of the interactions between staff and mothers, many also raised ways an engineering-style form of management compromised their delicately nurtured community relationships. Chapter One described how the Bono program’s hyper-focus on getting numbers had a widespread effect on staff “credibility” when mothers blamed them for logistical problems with their payments. The way one departmental coordinator explained the focus of the Bono, it was clear that the emphasis on establishing and maintaining trusting relationships with mothers was secondary to what he called “fishing”, finding mothers and children to register in the program. He noted how “When they’re in the health center, they help weigh, measure and offer nutrition counseling, but that isn’t their primary function. The national level gives us our goals – the number of pregnant women and children we have to find. For (our department) it’s 350 mothers each month and 400 children each month – our principal goal.”

Like the Bono program, staff distributing micronutrients felt a similar pressure to increase coverage rates, without the products they were telling mothers to consume. Doctors described how they often felt sandwiched between supervisors telling them to “teach (mothers) to take Chispitas (and other micronutrients), but just in theory, because we don’t have it to give”. Even when the problem is technically a logistical issue national level administrators must resolve, mothers are not aware of this, naturally blaming doctors: “For three months we didn’t have Atlu or Chispitas. When we don’t have them, we can’t improve our coverage rates. The public doesn’t think badly about the *state*’s policies, they think badly about *us*.” A nurse in a

health center in a rural municipality in Potosi also described how, “I haven’t had Chispitas for three months... They push you to get a certain coverage rate, but if I don’t have the inputs, what can I do? We lose credibility. You can’t just say ‘come another day’ for someone who lives where motorcycles can’t enter. It’s a three-day walk one-way, three to return...” The Head Doctor of a municipality in Potosi, additional described how:

We’ve bought Nutribebe for four years now, with the intention that this will make mothers worry about malnutrition. At first, we had good results, because Nutribebe was something new and free. But interest has diminished, because our purchases haven’t been continuous, sometimes we don’t have it – this demotivates the mother because they don’t know if it’ll be at the center or not. Now, there’s less interest – they’ve abandoned it.”

UNI and other staff also described how supervisors misunderstood how difficult it was to organize and form relationships with volunteer health promoters and authorities. One nurse explained how what seemed to a manager as a simple training could compromise the confidence she built: “My supervisor once said ‘How is it possible you haven’t held this training...you *have* to do this’. But how difficult is it to organize the community to win their confidence? People have to walk for hours, after hours of caring for their animals, and after, have their child weighed and measured. With all the activities they have, doing *another* workshop is a lot to ask.” An UNI staffer similarly described how an order she received would have completely severed her delicate relationship with community leaders:

Often, SEDES staff plan from their desks, and they tell us, “you need to do this, and this, and this”. Recently, they told us that local health authorities will be obligated to be local authorities for two years. But if we tell them that, immediately they’ll send us packing! We work with *Ayllus* and *Sindicatos* here (traditional government systems). *Ayllus* are very closed. If they say ‘no’, until they die, it means ‘no’. And you can’t fail your *Ayllus*!

Wasted learning opportunities

Throughout these conversations about the blanket orders from desk-based managers, staff were expressing that they wanted to have the opportunity to explain in rich detail what their

working conditions were like, but most of all, a space to share the many field-based ideas they had about how to improve nutrition interventions. The inordinate time they spent on paperwork for supervisors who believed only “the documentation speaks” the truth, was particularly frustrating to many because they often felt that their effort served only the purpose of a reporting tool and to ensure their compliance, not to inform the change they often desired in the workplace. As one exasperated doctor in Santa Cruz asked, “So these reports – for what? They make us work, fill out forms, for nothing!” A national consultant with ZM talked about how staff were “drowning in indicators” and “wasting their brains and time” writing reports solely for the purpose of meeting the requirements of supervisors, who then spent time “systematizing” or typing these into the computer. But “for what?”, he too asked, since he rarely saw the data used strategically to analyze “where we are” or the “state of the situation”. An NGO partner similarly asked, “Information management is all the while more and more, but for what and for what use?”

While there were numerous ways the ZM program had initiated systematic approach for collecting new forms of data (SVIN-C, Bono) and held countless workshops each year at regional, national and international levels to “review” program progress, staff on the ground – particularly regular health staff whom ZM planners were most eager to convince to apply ZM activities – still felt they were not being heard, largely because of the way supervisors interacted with them around “indicators” or in a “hierarchical” manner. In one department, a Municipal Head Doctor called SEDES administrators “coveragists” who stopped visiting once they could check off that they had “launched” an UNI there. Ironically, he craved an “evaluation” of his municipality’s work, seeing it as a chance to engage in meaningful dialogue about what they were accomplishing, what else they could do, and to talk about the *how* so often missing in indicators that covered the *what* of their work:

Any program should involve operational staff to get suggestions. From above, they send us programs that are easier to manage in the city. There aren't spaces to tell our experiences or to tell us about things that may have been mistakes. We've never had a large meeting to share experiences. SEDES doesn't visit. Once the UNIs were established, they don't visit anymore. We'd like them to visit – it's motivating and builds our capacity, so that they see how we're doing, how we can improve. They don't evaluate us. They only look at coverage rates – they're coverageists. They don't look at *how* we do activities. We don't necessarily want them to go visit the communities, but wish that they would at least visit us here (in the municipal capital).

A Bono doctor in the city of Potosi was also dismayed that he had never been able to share his ideas with supervisors, concluding that maybe the silence between their center and supervisors was because supervisors “don't accept us”, or that only those with “weight” could be heard:

I wish they would listen to us, improve communication, take us seriously. The MOH is still hierarchical. SEDES has never called us to a meeting to ask what ideas we have. Like my idea of a mobile pharmacy – we want to offer ideas, but we don't have access. It's very bureaucratic. ...Maybe they don't pay attention to us because we're young. We don't have any weight. They don't accept us. I guess that's why. We do what we can.

Over-Emphasizing the “information” in Information Analysis Committees

Information Analysis Committees (CAIs) – meetings to regularly review health indicators from SEDES to village levels of the health system – offered one of the most obvious, long-established spaces that could have acted as a learning forum to capture ideas and to co-generate solutions around shared challenges. Two issues with CAIs, however, prevented them from serving as spaces to improve nutrition interventions – the type of data analyzed, and the lack of more strategic analysis or follow-up action.

First, many staff explained that they were not discussing the type of nutrition intervention data or ideas that might have revealed significant improvements. The problem began with malnutrition remaining a low priority at the highest form of a CAI that SEDES led at the department level, giving other levels of the health system little incentive or model for doing the

same, as one Head Doctor explained: “We don’t look at malnutrition indicators during the Health Network CAI...or the Departmental CAI either. We look at 15 indicators, but none of them focus on malnutrition.” Most CAIs focused on the coverage of vaccinations, the number of women seen for pelvic exams, etc. When CAIs did track nutrition data, it typically focused on the *distribution* of Vitamin A, Chispitas and other micronutrients. One health center director described how, “supervisors measure us with cold data; this data doesn’t reveal the prevention or promotion aspect of our work”, such as how many children had recovered from malnutrition from one month to the next, how many remained malnourished, how many become malnourished, and how staff actions or other factors might be influencing these numbers.

A national MOH administrator was also skeptical that CAIs were the best space to promote a more preventive-focused analysis focused on health indicators. She admitted, however, that part of the problem may have also been the way national-level program designers were introducing new data to local health systems and suggested that more productive analysis would require significant changes to the current way CAIs function, including who and how community members are involved in analysis, how such data is used to plan and follow through:

CAIs have become very institutionalized but in an unhelpful way. It tends to be very technical, involving only health staff, and only looking at coverage rates. They might say, “huh, our coverage is low there or there, we should do something”, but no real discussion about why that is, or how it happens, and almost never any follow-through - so it’s not useful. We’ve only briefly discussed that we really need to train staff to use the SAFCI clinic histories - to know what to do with all this information and to hold analysis meetings with communities that are more balanced (involving community members). We want this data to be the basis for decision-making and priority setting, but we haven’t gotten very far on coming up with concrete ideas of how to do that.

Secondly, many staff explained that CAI sessions were not geared to generating *strategies* for resolving weaknesses in health program operations. A health center administrator in Santa Cruz explained how CAIs were more “informative”, because of a lack of time, the

structure of the meeting, the number of topics covered, and simply, because staff were not interested in this depth of analysis: “In CAIs, because we have so many programs to cover, we can’t try to focus on only one to improve. The meeting is more informative (than strategic). Each center or program presents for just a few minutes. There’s no time to talk, analyze, think about ideas. Most staff also aren’t motivated to do this”. The Health Promotion coordinator in one SEDES also expressed how part of the issue was a lack of any analysis or comparison across programs:

We really need to analyze CAIs as a space for information analysis. It’s just a way to review information, but there isn’t any cross-over of variables. We’ll say, “What happened?” “We don’t have access”. “They don’t want to take iron sulfate”. Then we’ll move on to another municipality and the same. We should be looking at PAI (vaccinations) and nutrition variables. If some coverage rates are high and others not, why? And not just here but at the level of the MOH too.

Others described how, even in cases where staff came up with an action plan, it was typically not implemented. One doctor grew so frustrated with this constant pattern of spending hours in a CAI only to hear excuses and no action, he shouted out at a city-wide Potosi CAI: “It’s the same song with these CAIs – ‘we’re going to’...we always say. We toss the ball to someone else”. The problem with not following through on plans, one Head Nurse in Potosi admitted, was that no one held them accountable for the plans: “We look at numbers. Sometimes the hospital director will look at it out of surprise when he sees some data. He’ll say, “oh, four dead?”, but we analyze more theoretically and we forget about the actions that we wanted to take – we don’t complete these. There’s no sanction if we don’t do it.” One SEDES Nutrition Coordinator believed the issue was that these plans were superficial, rarely getting the commitment of all staff – just a routine action at the end that predictably fell apart after the meeting: “In CAIs, a lot of the time they don’t monitor their commitments or it was just the commitment of the director, which isn’t sufficient. Many don’t have the leadership necessary (to take action)”.

Becoming blind to emerging solutions

Several cases also suggest that a fixation on ‘indicators’ blinded some supervisors and staff from recognizing strategies operational staff were already trying. One reason for this may have been because supervisors were literally choosing not to look for “solutions”, as the focused on ensuring that staff were “obeying” their orders. One nurse in a rural Potosi center I visited described to me a laundry list of fascinating strategies (described in Chapter Six) she had been implementing, some for years, including workshops, trainings and surveys she had co-developed with mothers and community health promoters. She explained, however, that “A lot of these workshops I don’t report to my supervisors – there’s nowhere to report them”. Not having an official place to talk about or report innovative practices that did not fit the “official” indicators, meant that she carried out her ideas in virtual obscurity. In fact, she described how supervisors and colleagues at first believed she was lying when she explained that she had come up with the idea to work with “women leaders” long before ZM or SAFCI suggested their formation. They discovered what she was doing only after supervisor were required to begin counting the number of clubs staff were forming, as she describes:

I only changed the name from “mother’s club” (the name I chose) to “women leaders” (the term SAFCI is using), but I was already doing SAFCI. When supervisors asked for our reports, they didn’t believe me, because I told them that I had been organizing women for a while. The eventually visited me so that I would explain it to them, so did an NGO. They thought I was doing what all the other staff were doing... all supervisors say is “there aren’t any numbers”. They think we just go to the communities to vaccinate...In CAIs I tried to explain my strategies, but they didn’t believe me, but eventually the UNI staff came to see me and other health center staff...One time an NGO and UNI coordinator congratulated me during an education fair that I did all this without a budget. But my colleagues are jealous...

In another case in Potosi, supervisors and other colleagues during a regional UNI meeting overlooked the innovation a colleague described, because they all fixated on the fact that part of the strategy involved their use of the hotly debated Bono indicators – but the debate derailed the

conversation, and learning, from the innovative strategy itself. The idea was a suggestion of national ZM administrators, to begin an “emergency plan” to rapidly reduce malnutrition rates in their municipality. The plan involved UNI staff using Bono data (the only malnutrition data with individual identifiers) to locate malnourished children living in the municipal capital, where the highest population was concentrated. Although this often only amounted to 24 children, this was a significant proportion in low density municipalities that only had upwards of 100 malnourished children. UNI and other health staff then “adopted” two to three children and mothers to work with closely until the child’s nutrition improved.

When this UNI nurse brought up the strategy in a regional UNI meeting, however, SEDES and UNI staff from other municipalities became concerned about the *indicator* municipal staff were using to identify the children, because it differed slightly from the official MOH SNIS indicators they typically used to track malnutrition rates. “We all need to speak the same language”, some staff said. The UNI meeting ended with an unsettled debate about which indicators to use, and SEDES staff directing UNIs using Bono data to change their indicator, but no one discussed whether the “emergency plan” strategy itself might work to reduce malnutrition and how. During my visit to her municipality, one of the UNI staff using this approach reflected on this meeting, describing how supervisors were missing the point and overlooked the opportunity to replicate such a simple strategy elsewhere.:

Our emergency plan is just that – not a parallel way to track data. SEDES and other colleagues only worry that we’re creating a separate two-way system to identify children with malnutrition. “Where will this data go into the SNIS?” they asked. SEDES is badly informed. This *is* a strategy. If not this, how will you prioritize your work with just one person? Focusing on 24 children will have a huge effect on our indices... This should be a strategy for the entire department, not just here.

Reinforcing staff self-censorship

Finally, one of the worst repercussions of the authoritarian management-by-numbers approach was that it often overlooked – and likely contributed to – the way staff intentionally self-censored their ideas out their fear of supervisors and perceived professional hierarchies. Several staff had concerns and ideas about operational problems they wanted to share with supervisors, but were worried that they would be punished for doing so. Even at the level of a SEDES administrator, one manager admitted he shared the same fear of many lower-level staff, noting, “I didn’t want to tell [supervisor] my ideas or observations because I didn’t want to lose my job!” A nurse at a rural health center in a rural Potosi municipality also described her fear: “I want to share my ideas (about organizing women) with my supervisors, but I’m suspicious. I’m afraid of sharing because I feel like they’ll criticize me”. Whether it was hearsay or not, one mid-level manager explained that some supervisors had earned reputations for lashing out at staff who questioned particular interventions like the UNIs, “I want to tell [supervisor] about the problem we have with the UNIs, but people have told me that he won’t hear it. The moment you start talking to him about the problems with UNIs, he’ll stop helping you, they’ve warned me.” Similarly, one NGO reported a situation where ZM supervisors ordered them not discuss operational questions about staff contracts, reports, or other administrative weaknesses of the program in public reports, which I was also told on two occasions.

Supervisors were also often unaware of – or chose not to mediate – situations where Health staff self-censored or suppressed each other’s ideas out of perceived professional hierarchies, competition and self-preservation. One UNI nurse, for instance, was surprised to see how: “Health staff try to protect their things – they’re egotistical. When I went to Sucre for an UNI meeting, for a SVIN-C training, it was pure nutritionists and doctors. They were talking

amongst themselves...I couldn't participate. The doctors talked the most..." In at least two cases, nutritionists chose not to share their ideas because they believed doctors would see their suggestions as a personal affront. In one Potosi municipality, for instance, a nutritionist described how, "I've told my supervisors some of my ideas, but I prefer to keep them to myself because sometimes they believe that I have something against the doctors." Even a nutritionist at a nutrition rehabilitation center explained how it took time to convince the doctors that her role and ideas were important:

I haven't shared my ideas. Doctors value the ideas of a nutritionist less than a cook's. It's difficult to fight with doctors and supervisors, though now there are nutritionists in the MOH and in Health Networks. Their technical and scientific experience is critical. Even here, I had to tell doctors "I'm not a cook, I'm a nutritionist – I need a space to talk about children's weight, height, the importance of eating certain foods, diarrhea..." Sometimes doctors think that my job is to take foods to health fairs. But we've made a lot of progress. Before, nutritionists were only put in charge of cooking. In 2010, with the UNI, an NGO and some other staff here, we showed doctors that the nutritionist is important. I'm satisfied now with the work we do...

In other cases, staff were afraid that colleagues would steal their ideas. One nutritionist, for instance, completed a large household survey on malnutrition, intending to use it to shape nutrition actions in her health network. She was afraid to share the results, however, because she worried that colleagues would plagiarize the report and information. She noted how this happened recently when a colleague took her ideas for a study she had suggested and presented it as if it was hers. She also claimed that the same staffer used a report from a doctor no longer in the regional health system and presented it as if she had written it. An ex-ZM staffer in the same department also recounted how a SEDES administrator took the credit for much of the work she had facilitated. In another department, an UNI staffer conducted an operational study he was excited to share with national ZM actors, but not his own colleagues, afraid others might use the

same idea to move up to higher-level positions. In one Potosi municipality as well, a health center doctor noted how:

We sometimes get together between centers for trainings, but there aren't any spaces to exchange ideas, like to understand how some got 100 percent coverage rates. But there's also selfishness, not sharing ideas or experiences. People criticize more. We're destructive, not constructive. We should be working as a family in the municipality, to generate ideas, like a team. But there's always some people who think they're better than the rest. They try to look better than the rest of us, but they're the ones who do nothing... But we all have the same objectives. So that we don't reinvent the wheel, we've got to share experiences. I worked in a clinic before. The theory is something, but practice another – it's so important to learn from practice.

Conclusion

Paradoxically, rather than national policymakers defining the rigid rules as Scott (1998) suggests, I argue in this chapter that in Bolivia, it was often mid-level policy actors that put parameters around staff roles in ways that made 'legible' unclear policy directives. In the process, they simplified a complex change process, debilitating the ability of front-line staff to deliver contextually-dynamic solutions as Zero Malnutrition (ZM) planners had envisioned. Scott (1998) and other bottom-up policy (Lindblom 1959) scholars who identify policymakers as the source of rational management, therefore, may be correct only in some situations. My findings show that mid-level actors can also undermine the desire of national staff to use adaptive strategies. While this implies that strategies for increasing more adaptive strategies should be targeted at the mid-level of policy systems, I also argue that the rule structures mid-level policy actors imposed in Bolivia were not entirely their own, suggesting that a wider, systemic approach would still be needed to substantially change the way complex problems are solved.

Karl Weick, who introduced the idea of "sensemaking" in organizational studies, and his colleagues (Weick et al 2005) suggest that when actors confront situations in their work

environment that are uncertain or unexpected, they seek ways to “make sense” of the situation, and establish order conceptually so that they can determine what actions to take. Managers are often “evaluating several situations, interpretations, choices and actions simultaneously”, so the type of accurate information necessary for rational decision-making is unrealistic. Instead, people bracket the situation as best they can, “settle on plausibility” (419) and come up with actions that “appear to move toward general long-term goals” (415). This is similar to what Lindblom (1956) explained in incremental decision-making and Simon (1956) described as the process of “satisficing” when actors cannot “optimize” decisions in situations of bounded rationality (129). In Weick et al’s (2005) assessment, taking action based on what “makes sense” to the actor then

generates new data and creates opportunities for dialogue, bargaining, negotiation, and persuasion that enriches the sense of what is going on. Actions enable people to assess causal belief that subsequently lead to new actions undertaken to test the newly asserted relationships. Over time, as supporting evidence mounts, significant changes in beliefs and actions evolve (416, citing Sutcliffe 2000).

This idea of sensemaking begins to explain what ZM managers did when they too confronted an ambiguous work environment, but it does not go far enough. Bolivian managers featured in this chapter did not engage others in “dialogue, bargaining, negotiation and persuasion” to help them make sense of their environment, as Weick et al (2005) suggest. They stuck to simplified performance indicators – especially coverage rates – and data about program inputs (e.g., equipment obtained, number of staff hired, etc.). Supervisors took this information to mean that they were moving toward the ultimate goal of reducing malnutrition, while bracketing out other, tangible cues that suggested otherwise (e.g., staff who were saying that some micronutrients were too complicated for mothers to use, UNIs with constantly rotating staff who could get nothing done, emerging innovations, etc.).

This maladaptive reaction can occur, Ordonez et al (2009) describe, when staff are given multiple goals. In the private sector, they found that staff tend to focus on the easiest, quantifiable and immediate goals, and also see goals as “ceilings rather than floors for performance”, choosing to relax after a goal is met instead of pushing beyond it. This helps explain why a common action plan that emerges during CAIs is to push for a micronutrient distribution (and vaccination) campaign at the end of each year, because they are such simple, short-term targets – rather than pushing for more strategic ways to improve health promotion practices, community relations, or a health center’s chronic problem with micronutrient procurement, etc. Ordonez et al (2009) also note how goal setting itself can have perverse effects on staff performance, blinding staff to important issues unrelated to goals, reducing learning and cooperation. We saw this happen in Bolivian numerous times, as colleagues kept their ideas from each other and supervisors became blind to emerging innovations.

Ancona’s (2011) explanation about factors that can prevent *effective* sensemaking also helps explain why so many managers reacted to the multiple programs, mounds of indicators and ambiguous work tasks in a way that created an ultra-simplistic view of reality. The paradox of sensemaking, Ancona (2011) describes, is that it “may be most needed when we feel under threat or crisis, (even as) the very mechanisms that get engaged to deal with fear are the ones that can hamper sensemaking” (11). In these situations, “threat and fear lead to rigidity”, so that people actually process fewer cues and information in their environment, and revert to familiar practices (Staw et al 1981). Actors may also wait for guidance and direction or revert to “inertia, protection of the status quo and sometimes even inaction – the deer in the headlights syndrome” (Ancona 2011, 12). Supervisors in Bolivia who reacted to nonsensical tasks with retorts that “we must obey”, who often blamed national actors for not offering them guidance, or who just

focused on enforcing the simplest requirements of ZM policies (i.e. distribute the micronutrients) all showed evidence of this mal-adaptive form of sensemaking.

Another reason so many of the managers featured in this chapter focused on rule-making and establishing order was likely because they had a low tolerance for ambiguity in a highly ambiguous work environment. Sherrill's (2001) study on medical students in the US found that those who opted for dual degrees in both business and medical school – those who *selected* a career path that would eventually lead them to managerial positions – rated higher on tolerance for ambiguity. Paradoxically in the Bolivia case, staff who move into managerial positions tend to be those who first perform well as physicians – actors with a lower tolerance for ambiguity who thrive under a rule-bound system. The complex job and environment, however, calls for managers with a high tolerance for ambiguity, who can adapt their behavior to the situation (Moses and Lyness 1990), cope with difficult situations, explore new ideas and look at issues from multiple perceptions (Frenkel-Brunswick 1948).

The silver lining, knowing that a rational management approach may be emerging largely in response to an ambiguous work environment – and not the strict orders of a powerfully-backed comprehensive plan from above – offers some hope that supervisors in Bolivia would be open to more guidance about how to re-think their management roles. As we saw, some mid-level staff – especially Head Doctors and Health Network Coordinators – actually *asked* for evaluations and more interactive dialogue with SEDES and other ZM administrators so they could learn what they were doing well and what they could do better.

An important part of this change is the role mid-level actors play in shaping a culture of learning. One SEDES UNI coordinator described how the process of trying to break through the “mafia against sharing experiences” means that “We need to *learn* a culture of learning...(to)

make (our experiences) public.” As the accounts staff told here, this process of *learning* a culture of learning, however, would be a daunting one, up against egos, jealousies, but most of all, pride in the ZM program that can make staff unwilling to see even novel ideas as “an affront, and as suggesting that they aren’t doing something *right* to begin with”, as a SEDES administrator explained. He asked, “How do we find out about innovative experiences? Many people guard their ideas, because they’re worried that others will critique their ideas, that their boss will undercut them... There’s jealousy, egoism, so many things we need to analyze... We don’t like to hear criticism. Many people are very proud of ZM.” Two places to begin in Bolivia may be with the data mid-level actors have been using to manage front-line staff, and CAIs, a learning forum that already exists.

Mahler’s (1997) research on public organizations and cultures of learning suggests that moving management systems towards more of a culture of learning first requires removing old routines and rules, before staff will be able to use new approaches to facilitate learning. In Bolivia, one old routine, like the way CAIs are typically structured (with rapid-fire power points, multiple data points, only several minutes of questions and rebuttals, etc.), will have to be replaced or actively changed, before staff will begin to re-create their current culture of learning. The current approach of introducing separate spaces for more innovative learning forums – ZM’s participatory analysis of SVIN-C surveys (focused on mother’s nutrition knowledge, use of micronutrients and other practices), and community-based health planning sessions as part of SAFCI model – will likely allow the CAI approach to continue shaping how staff think about collective analysis.

This study also suggests the need to understand how accountability systems were ever allowed to develop to a point that they potentially take up thirty to forty percent of health staff

time, particularly when the data collected tends to be used so rarely for local problem solving. Problems with horizontal coordination we saw in Chapter One are likely part of the problem, allowing new programs to add more indicators without considering what paperwork staff were already burdened with, in addition to indicators the aid community has sometimes advocated to add to the MOH SNIS. The logic of such paperwork and indicators is clear, just as results-based management makes conceptual sense. But when that logic is applied multiple times over in each new program, the reality for staff who must carry it out is stifling.

There was some indication that health authorities in Bolivia were beginning to reconsider the monster data system that has grown unchecked since it was launched in 1990. The National Health Information System (SNIS) office held meetings in 2010 to discuss a plan for creating a “unified” information system to cut down on duplicate data sources, but as the issues in this chapter showed, the problem is not simply duplicate data. The SNIS plan said little about the frequency at which staff are expected to collect data, who really needs it, if at all, and most importantly, how to facilitate effective use of data and other exchanges of knowledge, experiences and evidence official systems will never be able to record.

Another step towards building a learning, rather than a compliance, culture would also have to change supervisor’s current use of data to critique and punish, which has led staff to defend their actions rather than learn from them, as Argyris and Schön (1996) warn can happen. Freeman (2002), studying the use of performance indicators to improve health care quality, also found that the “use of performance indicators in a summative way as a basis for praise or sanction is almost inevitably corrosive and corrupting of the indicators themselves. Such accounting systems place trust in systems rather than individuals, further undermining the conditions of trust required for quality improvement” (134). One change Locke and Latham

(2006) suggest is the use of “learning goals” rather than “performance goals” to help staff build the skills they need to work in unstructured, complex situations. More importantly, involving mid-level managers in more learning-based assessments will require breaking supervisors free of the practical ease of focusing on quantitative measures of performance and finding a way to encourage them to search for, embrace and actively encourage new ideas and innovations, rather than limit what is considered worth counting. As Elmore (1980) suggest, ultimately, the issue comes down to encouraging mid-level policy actors to embrace front-line staff discretion, more than their compliance:

adaptive behaviors by street-level bureaucrats are never well understood by policymakers because they are viewed as illicit. Variability and discretion at the delivery level can just as easily be viewed as an asset, a broad-based body of data on unanticipated, adaptive responses to highly specialized problems. To capitalize on this knowledge, however, one's view of implementation has to put a higher value on discretion than compliance (610).

Chapter Four explores alternative options for establishing a learning culture, led by managers who indeed “put a higher value on discretion than compliance”. Chapters Five and Six also consider how front-line staff perpetuate a lack of learning, or alternatively, infuse learning into their every-day interactions with mothers and communities.

CHAPTER FOUR: Strategic management

When supervisors think of implementation not as a prescribed, expert-led approach, how does this change the actors or the knowledge they think are necessary for problem solving? How might supervisors set the tone for learning through their relationships with staff? And what would motivate staff to perform to their greatest potential, rather than the constant barrage of monitoring focused on “the numbers” that was so ineffective, and even corrosive, in Chapter Three? A small number of actors featured in this chapter help us answer these questions, including mid-level administrators in the MOH who were beginning to see their management role differently, supervisors in SEDES, Health Network Coordinators and Municipal Head Doctors. The chapter also features staff in two NGO projects who were intentionally trying to develop new cultures of learning and management for public sector nutrition interventions.

I first show how these supervisors acted more as attentive and responsive professionals attempting to understand the challenges staff faced, in local language a “friend”, rather than a constant critic. I then discuss ways they tried to build staff motivation through small and often symbolic incentives and by improving, not controlling discretion. Most of the chapter focuses on supervisor strategies for improving individual staff and collective learning, by: a) reviewing specific cases or workplace problems, not simply abstract data, b) focusing on only key malnutrition data useful for local problem solving, and, c) involving actors typically left out of such analysis (e.g., receptionists).

Strategies featured in this chapter offer concrete approaches that make up the type of “strategic capacity” (Pelletier et al 2011) needed to wisely guide and improve nutrition policy implementation without resorting to the rational management strategies most ZM supervisors assumed were necessary. Findings also add to our understanding of program adoption (Dearing

2008), staff discretion (Lipsky 1980), supervisor-staff relations (Weber 1956/1958), participatory problem solving (Forester 2009), and the role of indicators (Ordonez et al 2009; Freeman 2002) and storytelling in problem solving (Forester 2009; Weick et al 2005).

Supervising, and listening, as a “friend”

Unlike supervisors in Chapter Three who spoke of needing to “teach them to obey” or “control” staff, supervisors featured here used terms like “listen”, “friend”, and “connection” to describe their interactions with staff, alluding to the more horizontal relationships they tried to establish with staff so that they could learn more about their challenges, and negotiate, to “come to an agreement” about the work staff would carry out. As one SEDES administrator noted, the point was to “not make supervision coercive but participatory...not from the desk, but going to visit ourselves – that’s motivating”. In recognizing the importance of “going to visit ourselves”, this supervisor emphasizes the importance of actively, physically showing staff an interest in the particulars of their work and learning about challenges and silent successes not captured in established indicators.

Others who talked of “friendship” were implying that they were gaining staff trust, changing the way staff saw them as individuals and flattening power relationships. An UNI staffer in the highly contentious city of Santa Cruz, where doctors routinely thought of her work as being “of the MAS political party” recounted how she was able to convince doctors to apply the preventive-oriented AIEPI-Nut practices only after six months of changing the perception they had of her: “I’m a doctor, I know more than you” they said to me at first. It was difficult to get them to classify the foods, treat malnutrition. They only saw illnesses. “You’re well paid” they said to us. But we continued and today, doctors are experts (in nutrition). They explain to the mothers why they need to return, explaining everything.” She explained that “once we were

friends, they understood better. I started from zero to increase their commitment and understanding – it took nearly six months!” Once they were friends, meaning once the doctors saw the UNI nutritionist as an individual with a sincere interest in improving children’s malnutrition – and not a tool of the government there to impose a political agenda – then they began to offer her the respect, recognition and time it took to understand what she was trying to convey.

Similarly, a former NGO worker who suddenly found himself in a national MOH administrator position explained that one of the things he learned was that “we have to be skilled at listening to others. My opinion isn’t the only valid one. We have to listen to the other technical staff in the MOH, and also the public. I’m learning imposition isn’t fruitful! In one way or another, we have to come to an agreement.” In the act of offering a place for other people’s opinions, he is noting the importance of respect, of dealing with staff as individuals, and not simply interacting with them to gather information apart from their opinions. One former UNI nutritionist described a similar lesson she learned when she became a supervisor. Rather than impose her orders during moments of conflict, she found how much more productive – i.e. how much more likely it was that they could come up with a plan of action – if she began to “talk with them as a friend” and also to “listen through their experiences” – to the details of the very real challenges staff were encountering, beyond the abstract numbers that summarized their work. As she described it:

Human relations are fundamental to understand other people. I had to learn this when I was sent to do supervisions of the SEDES. Sometimes the interactions don’t go well and staff clash with you. It’s important to keep dialogue open. Their concerns are very important. You have to talk with them as a friend and listen through their experiences. The key is to collect their experiences.

Finally, a SEDES UNI Coordinator who had previously established two successful UNIs also talked about how the process of supervising required strategy, varying how you approached your work with each person, but always by actively showing them “understanding”, by physically helping them fill out forms and even sleeping at their health centers:

You have to treat people in different ways – that’s what’s interesting. Everything you know, you have to teach them, and also give them materials, etc... You can’t just ask them for reports... To establish this connection, they can’t see us as ‘the doctor’, but more as a friend who will help us. If you come down to their level and if they understand that you’ve lived what they live and not just say ‘you’ve done this badly’, but sit with them, correct things with them, help them fill out forms – that’s ‘capacity-building supervision’. I used to go to see how things were, sometimes helped do some of the work and even slept there sometimes.”

Intentionally building commitment

Although many staff showed that they had a natural depth of commitment to the mothers and children they worked with that was able to withstand the barrage of criticism they always heard from supervisors, more surprising were situations where supervisors developed ways of building this type of commitment intentionally. The lessons one NGO in El Alto learned were especially instructive. Although the pilot project there was carried out by NGO field staff, they worked out of a public health center and were trying to develop a model for implementing ZM interventions in other public health centers using a community-based, home visit approach inspired by the MOH program *Familial, Communitarian and Intercultural Health* (SAFCI).

First, staff explained that the depth of commitment needed was tremendous for the type of work they did . In my own short period with the NGO, I witnessed how strenuous the work was, under rain and piercing sun, and how dangerous it was as well, in a neighborhood where one manager had recently been mugged and four of the six field staff had been bitten by dogs at least once, and one veteran three times. Field staff noted, “You can’t expect compensation or results in that moment. You have to do this work because it satisfies you. I don’t go out in these

streets because they pay me! ...I do these things because my heart is in this.” One manager went as far as calling the “fierce” commitment this work required “the work of missionaries – requiring much love for people”.

While some staff insinuated that this type of commitment is simply innate – you either love the work or you don’t – supervisors described a number of intentional ways they helped shape staff dedication and teamwork. One manager suggested that the process of building commitment was partly about conveying your own commitment as a supervisor:

I think we have to start from the attitude of staff. This type of work requires a fierce commitment to the public. You have to first ask yourself if you’re really convinced that this is what you should be doing – it’s a personal question - and then see if your attitude will be positive. Because if I do a job without conviction about what I’m doing, it won’t have any results. This is very important. I’ve learned that when someone is convinced of something, this is transmitted to those you work with, to communities – passion, conviction, commitment. I can’t describe it, but you can feel it...

She also believed that the dedication to this kind of work might begin in trainings, though she too was struggling with how best to do this:

As we’ve led workshops to train other health staff in this work, it’s been a challenge. How do we talk about these topics – values, commitment, conviction, honesty about whether you want to do this type of work. Because if I get tired of the families and say “I’m tired, I tried contacting this family 20 times and they’ve rejected me,” and if I’m still not open to trying the 21st, 22nd time, I won’t succeed. This is a topic we have to work on intensely.

Another manager suggested that they had to intentionally resolve tensions and “break certain paradigms, myths and habituation...of talking about illnesses and not identifying and controlling for risk factors”. Changing paradigms and ensuring that “staff are committed to carry out this model”, he noted, requires the development of “a “coherent language from supervisors down to the operational level, ensuring that we’re all moving the car in the same direction. This

requires clear objectives, instruments, messages, etc.” A second manager used the same car metaphor:

When we start a project, I’ve learned that we have to make sure that we’re all in the same car and understand the same things; that we’re all trying to accomplish the same thing. Once we unite our ideas, the process can begin in a better way... What we do, when we start is have a first meeting with the entire team where we read the project in detail and at that point we detail what we want to accomplish, and how we think we can do it. This has been important”.

Field staff in the NGO also felt they were part of this process of co-developing the program approach early on and throughout the process: “(This NGO) has listened. We’re always invited to meetings. Especially in the beginning, we talked about the values of (the NGO) and our own vision. This helps us become committed because we feel like part of the institution, as if we also are helping to construct it.”

Another manager described how she had to learn about staff weaknesses and strengths, to pay attention to ‘details’ that can seem insignificant but can be critical for building staff morale and to find a way to “ensure the wellbeing of the team without being noticed as the supervisor, so that they feel like what they accomplished was something they did”. Building staff discretion, she notes, is about “respecting the manner in which each person works”, allowing each person to develop an approach to achieve results, only suggesting *necessary* corrections and establishing the most basic rules along the way:

When someone says to you, “I have confidence in you”, it means that that person knows it’s not necessary to have to control your work schedule nor stand behind you to know that you’re doing your work, because that person assumes you are a responsible person, a professional. We work based on results. So if you’re so good that you meet your results in half the time that it normally requires, that’s fine. This approach makes a person feel a huge responsibility. We’ve never found staff that take advantage of this arrangement, only situations where colleagues might complain that someone wasn’t working their hours. But when we’ve looked into it, they’re always meeting their goals. It’s a way of respecting the manner in which each person works... obviously correcting what isn’t done well, but it’s about communicating a level of confidence and respect towards their work that I believe is fundamental... A definition of leadership that once struck me is a person

who draws the best out of her team without staff recognizing her role, without noticing her, so they feel it was them doing it. That's important.

This manager went on to describe how she tried to work with each staff member individually, "listening" not just to what they said, but also their "expressions, ideas, emotions and feelings" to build their "passion" and "conviction":

...In our own work, we have many methodologies, tools, various successful experiences, but if we stop and think about what factors have been key, I think it's been the attitude and commitment of staff...Maybe it's helped because of the work we've done with each staff member – listening to their expressions, ideas, emotions and feelings. I've always believed, when we hire personnel, something important to me is their attitude, even more than their technical knowledge, because attitude is harder to shape. Knowledge I can teach – no problem. But attitude is very personal...so I think working with each individual has been fundamental.

By focusing on "listening to their expressions, ideas, emotions and feelings" as a manager, rather than relying only on the tried and true "methodologies, tools, various successful experiences" that the NGO has accumulated over the years, this manager is emphasizing that no amount of aggregated indicators, lists of external "best practices" or "evidence-based" policies can offer a manager the answers she needs for supporting a specific staffer in a specific moment. Here, she is adjusting what she may know from her past experience and technical knowledge to the person in front of her, watching that staffer's facial and body "expressions" to determine if something more lies behind what the person says. The manager is learning about the staffer's challenges and experiences by asking for her "ideas", judging what might be a person's true priorities, values and motivations by the "emotions" she shows, and paying attention to her "feelings" to determine what tacit knowledge someone might have that that person cannot express in words.

Place-based and collective problem solving

The following describes three sites that offered specific strategies for creating participatory spaces for problem solving and for building a culture of learning, including one rural municipality, an NGO working in El Alto, and an NGO working in Santa Cruz. Each helps us to differentiate between the variety of questions, interactions, knowledge, and actors that help to collectively understand a complex situation and devise practical – and often innovative – ways to improve program implementation.

A “forum for debate” and so much more

Health staff in one municipality described several ways that they worked together to determine how to interpret the messy, ambitious task of reducing malnutrition and improving public health. The first strategy they described, specifically aimed to improve ZM implementation, came out of a “forum for debate” health staff decided to hold, sparked by their concern over problems they were seeing in Bono data. As one of the doctors involved in the forum describes, this approach varies considerably from CAIs, which focus on abstract numbers, and rarely lead to innovative action. Instead, this approach used an analysis of the situation that blended expert knowledge and data that was available, but then opened the floor for people to discuss “everything”, based on their experiences, opinions, and ideas. The outcome was an innovative solution that will not only solve the problem of increasing the Bono numbers, but many other health sector weaknesses they identified that day:

In 2010, we were registering 80 percent of mothers in the municipality. Now in 2011, only 61 percent. In 2010, we’d see 50 to 80 mothers a day! A huge line. The doctors said we had made mothers accustomed to come here (to the capital), that they no longer were waiting for us in the communities. To understand what was happening, we held a debate with health and community authorities to plan and come up with solutions, to identify the causes of malnutrition, food security – all in a day. It was in the Municipal Council that this idea arose. First we gave reports about the UNI activities, SAFCI, Bono – all the activities focused on malnutrition. Second, we analyzed the health network, Municipal

council. Third, we had an open debate. We talked about everything. The UNI expressed what they thought about the Bono, SAFCI, etc. Then, people offered their ideas for projects and solutions. One idea that came out of the forum for debate was that we need to go to communities in brigades made up of the Bono, SAFCI, UNI, COMAN Coordinator, Health Network and Head Doctor. The idea is that we'll stay four or five days in one community. The first one will be in (Community A), where we'll do multidisciplinary work – diagnoses, home visits. We'll start with the most vulnerable municipalities, leave health staff there well prepared. We're also going to look for children who have not been registered in the Bono and register them, even if they don't have documents. We're thinking of doing a community-based extension work with the Civil Registry where people need identity documents, or to look for another way to deal with this. We're also going to motivate community authorities to carry out their functions. Each brigade will also be evaluated. We're going to try and do three communities this tri-mester (the UNI and COMAN staff noted one per month).

This municipality was also implementing the SVIN-C survey and community-based analysis of mothers' nutrition knowledge and practices. The staff there found staff meetings helpful for improving their work, largely, it seems, because they were open to receiving and offering critiques, and “shared a trust” that made them feel safe to “talk about what you think”, as one UNI staffer described:

Once or twice a year, we divide up the SVIN-C surveys so that we each have to do three or four (household surveys). When we do the analysis with community authorities and health staff, we look at what we're lacking and give ourselves homework to improve in three or four months. Then we do the surveys again. Every month we also meet with local health committees to talk about problems, deficiencies, the percentage of the population that visited the centers, those who didn't go, what's lacking for implementation, and we plan directly with them. Every month, we get together in Technical Councils to analyze problems. Everyone gives their opinion. This includes all the doctors from the health centers, the Health Network Coordinator, Head Doctor, UNI, etc. We indicate as individuals what we accomplish and we offer ideas for resolving problems. Criticism is welcomed – you can criticize here. We see that it all helps improve health. We share a trust among us. If you don't have trust, it's difficult to talk about what you think, but I'm not sure how it was created.

The fact that this municipality actually had such productive problem solving process and a staff who believed that “criticism is welcomed” was especially interesting because many staff described that there were considerable animosities between the SAFCI and Bono doctors and the rest of the team – the UNI staff, the Head Doctor, COMAN consultant, who believed SAFCI and

Bono doctors were not doing their jobs or contributing to the work of the team. The “trust” this UNI staffer described may have only existed among the rest of the staff, but it may have also been possible that problem solving spaces were managed in such a way that allowed staff to put aside their differences to constructively come up with solutions, like the mobile brigades.

“Quintupulating” knowledge and learning through case studies

One other unique aspect of the NGO’s work in El Alto was the variety of ways managers and staff have developed to continuously learn and make adjustments based on a review of their indicators, the program’s logic model, instruments, operational challenges, solutions, actions in the community, and more. As one supervisor put it, “we don’t just triangulate data, we ‘quadruplicate’ and ‘quintuplicate’ data to get a full picture”, based on the notion that “analyzing nutritional changes is a long and dynamic process, something that always has to be monitored”. The pilot project began with a baseline census of all families in the program area, underwent a mid-term review and a final comparative impact evaluation. Ongoing monitoring also included impromptu meetings, three-month field staff reports and review meetings (which occurred monthly at the start of the project), three-month supervision visits and yearly staff-led reviews. Every month, staff also reported back to community authorities about issues that had arisen with the project, successes, etc., primarily to get their feedback, reactions and additional ideas that might help them improve their work.

Field staff describe how the variety of ways they review their work “helps us reflect on what’s missing, what we haven’t completed.” Another staffer described how “it helps to adjust goals or what forms we might want to improve, aside from seeing whether our children are becoming or avoiding becoming malnourished”. Supervisors also use staff reports and reviews to make programming decisions and to identify where to build more capacity.

One of the key sources of information that guides staff decisions is the “Family File” (*Carpeta Familiar*), similar to the one the SAFCI program is beginning to replicate throughout the country to identify and pro-actively try to address the major determinants of malnutrition and other health problems. The NGO’s Family File is based on an initial survey that asks family members information related to their economic situation, educational background, characteristics of each family member (primary language, age, health status), and other information the staffer asks about or observes over time about their living conditions (access to water, sanitation system, housing quality, marital relations and signs of abuse, who helps care for the child, etc.). Staff then make decisions about how to facilitate changes in a family’s situation based on this information and a child’s growth, monitoring data over time.

SAFCI Family Files, so far, have simply been introduced in pilot municipalities, often ending up unused, stacked in piles in health center corners, as many doctors sheepishly admitted. In the El Alto NGO, however, supervisors recognized that “our staff can’t just apply these types of forms like the SAFCI Family Files – they have to be *trained* in an integral way to understand social issues like what a ‘functional’ family looks like, and also to be able to make keen observations”. They developed two strategies to help staff make practical sense of such valuable background, and regularly updated, information about a family to make more informed decisions about action that could begin to change household behaviors, or other external factors. First, they thought about what knowledge staff needed in addition to technical knowledge they gain in AIEPI-Nut trainings. Staff highlighted how unique trainings they have received in negotiation, communication, leadership, Andean cosmovision, inter-culturalism, and more opened their eyes to new aspects of family’s values, concerns, fears, assets, and more.

The second strategy – Case Study Review – are intended to analyze field staff practices in great detail with other NGO field staff, supervisors and health center staff, to collectively develop concrete strategies for recognizing risky “social determinants” and to consider how to respond to different family situations. The process involves one staffer each week who prepares a presentation focused on a specific family they found particularly interesting or challenging. During two sessions I observed, staff started by writing out all of the social determinate data related to a specific family on a large poster board. They then walked through the data, usually telling a story about the family – how they got to El Alto, who lives in the home, what their living quarters look like, things in their history that were challenging, practices or resources the family already had that could be reinforced, and what they thought were the greatest risks for a child in that family becoming malnourished (or staying malnourished). They then opened up a group discussion about what the staffer may have already done that other staff might have done differently, what other information staff want to know that might help them make a better assessment, about specific ideas they have from their own experiences with similar families that might be tried, questions they could ask the next time, certain family members they might target, and most importantly, the issues they should prioritize as they continue working with the family.

Ultimately, this learning space helps reveal the tacit knowledge and strategies staff are using, and makes explicit how staff think through a problem, as one supervisor explained, “This allows us to see the tools staff are using and how they facilitate the process of ensuring that a child escapes malnutrition”. So we learn what it actually means to “promote” nutrition or “prevent” malnutrition – observing in one case the interactions staff had with different family members, ways they tried to establish a good first impression, how they reacted to unexpected events and rationalized certain actions, why they decided to return to the data, when they worked

out a problem with other staff, new questions they asked the family, the consequences of new things they tried, and so on.

Staff also shared that these discussions and collective analysis of a particular case helps staff build the intuition they need to react strategically when they are actually with families, preparing them to use their discretion, but now based on improved judgment abilities. As one staffer described, “sometimes I think a certain issue is urgent, but then other staff help me see that I should focus on something else first”. Learning how to prioritize is key, considering the array of factors to which they could pay attention – lack of child care, spousal abuse, low income, unemployment, work schedules, lack of knowledge, etc.

Staff also learn as much about each other as they do about the case at hand in these Reviews, aiding the process of team building, shared understanding about the task at hand, and mutual learning. One staffer described her realization coming out of these sessions that, “Sometimes we have different perceptions within the team, but those with more experience, 7, 24 years, help us understand. We all have distinct experiences.” In the end, unlike the CAIs that focus on aggregate numbers, this space allows these experiences to come out and to be debated, challenged, reinforced, so that the next time around, a staffer or a manager actually has a better sense of what to do to “improve the numbers”.

Step-by-step adoption and data improvement through quality assurance methods

A second NGO project in Santa Cruz funded by USAID and using the quality assurance model¹⁵ also seemed to defy the odds: getting many public health staff to apply the prevention-focused growth monitoring and AIEPI-Nut in urban centers where staff were bombarded with demands for curative care and in a city where many health staff were energized by anti-

¹⁵ For a description of the methodology used in Bolivia in prior years with Tuberculosis (and work with this method on other topics in other countries) see: <http://www.urc-chs.com/project?ProjectID=114>

government sentiments. The following describes how the managers of the program: a) used motivational strategies, b) reinforced skills and knowledge, c) focused on making simple, doable and immediate changes, and d) made strategic decisions about who to involve in “learning” sessions to encourage more diverse and open sharing of experiences and ideas.

Motivational strategies

Trying to change doctors’ attitudes was one of the hardest issues faced by AIEPI-Nut project managers and UNI staff who were helping to facilitate. They focused on two things: conceptual ways of changing staff attitudes and incentives that were cheap and symbolic.

First, one center supervisor explained how a change in attitudes was the main reason doctors began adopting AIEPI-Nut practices: “The AIEPI diagnostic form is very detailed. Sometimes doctors reject it. It takes a lot to change their attitudes. Before, they often didn’t know how to weigh and measure correctly, without the child’s clothes on, etc... This (NGO) project has been a real strength... The changes in attitude have been most important.” An UNI staffer also explained: “It was very difficult to work with health staff. There was a certain resistance. They saw various components of the ZM program as more responsibility (for them, like) the AIEPI-Nut form or the anthropometry, which requires precision and control.” Another UNI staffer described how she changed doctor’s attitudes about AIEPI-Nut by reframing it as the “latest thing”, appealing to doctors’ desires to use the newest and best strategies: “They didn’t apply AIEPI – it was so expansive. They have so many programs, they didn’t want to apply it. But I explained, ‘it’s the latest thing, the most up-to-date strategy.’” The NGO coordinator also explained that the program walked doctors through a “step-by-step, very systematic” logic that explicitly engaged staff in thinking and discussing issues that affected their motivation:

The idea is that they come up with innovations to solve problems in service delivery. It’s a collaborative methodology to improve nutrition in children under five... A major

component is motivating staff. Because if you tell someone to do something, they won't do it. Right? So we worked with motivational aspects a lot. We talked about what their responsibilities were as professionals, to society and legally...an entire session to talk about each of these motivations... That's where we define with them "what's quality health care". We defined it from below, not a definition dictated to them – you can't just do a workshop and then say 'do it'. We had continuous meetings each month, doing workshops, exercises, reacting to what they were doing – trying to take them out of their routines, but always following MOH policies as a guide... After being trained, they had to apply (what they learned) in their centers immediately because they would be measured each month. Showing them their baseline before training is an important moment in the process.

Several staff involved with the program also described how incentives played an important part in motivating staff as well. One UNI facilitator explained that incentives were important because: "They (staff) would say, 'this (working with UNIs to improve their programs) isn't important' because they have their *item* (stable employment) and believe that it's forever – secure; and because of that, they believe they don't have to improve and don't work well. That's why you have to offer incentives". One center supervisor explained how, "We now have posters that show staff weighing, measuring. It was a prize for the centers that were doing best: to get their pictures taken for the posters. (The donor) also gave out prizes like blenders and an electric water boiler to the centers working best with AIEPI, It really motivated people..." Ultimately, these small, and even symbolic "prizes", appeared far more effective than expecting staff to perform by hounding them for the numbers.

Reinforcement

Many staff involved in the AIEPI project explained that reinforcement of their skills, motivation and knowledge, in a variety of forms, was also critical. The NGO coordinator noted that "After reviewing Notebooks Four, child health cards, etc. we saw that the staff were at zero in many areas. They were impressed that they were trained by the MOH – so much investment in AIEPI – but they didn't know the policies. One training isn't enough. There has to be a

monitoring and follow-up strategy – it requires a lot of reinforcement...” One UNI staffer also reiterated the importance of their center-by-center supervisions: “We started in 2009 monitoring centers as a team. Before, nobody was applying AIEPI-Nut. We started to reinforce this. Staff had been trained, but didn’t apply it. Now, all the doctors and nurses are implementing AIEPI”. She also explained that centers were going to begin exchanging visits with other departments to do “crossed-monitoring”. One health network administrator also believed these more regular visits, along with other constant contact helped bring about positive changes: “SEDES before only supervised about 50 percent of centers and just once a year. Now we supervise all 11 centers. With follow-up, visits, calls, visits, investigation – that’s how we changed.”

Linking data with experience with action

One UNI staffer also noted that the difference she saw in the regular meetings that were held was that staff began to “see” differently, linking data analysis with plans to try new approaches or to try approaches other centers had already used, rather than using these spaces like the CAIs to simply make excuses for low indicators:

(What helped were) these NGO’s project meetings, talking with doctors, the health center supervisor, workshops with staff, demonstrations with mothers. In these meetings with the NGO at least two people from each center participated. We met every month. Before, we weren’t analyzing our problems, inputs, equipment, tables to measure infants. We didn’t fill out the health insurance form. In these meetings we analyzed all this and offered solutions, suggested we ask another center about what they did. That’s how we did it, looking at data... These meetings were more useful than CAIs. In CAIs they talk about ‘We’re low here, there aren’t enough personnel, there aren’t enough vaccines...’ What’s lacking is the desire to see differently – staff don’t plan. Maybe because they have *items*. Whether their indicators are low or high, they believe they’ll still have a job. Maybe it helped that they were being viewed by others in the comparative meetings of the NGO project... There are still some problems though – SNIS data is bad, sometimes they still weigh children with all their clothes, etc.

The NGO coordinator also explained that data was used to help staff monitor their personal progress as well. Staff selected one simple indicator that would quickly demonstrate

whether they were making progress: whether a child was still malnourished after 30 days.

Additionally, she described how, “We now have a MOH CD-ROM that helps staff reinforce their training and add to it. We did a baseline to show them their level of knowledge at the beginning. In Beni, for instance, they started at 20 percent. This motivated them to improve. After the second training, their knowledge rose to 60 percent. After the third, 90 percent. That showed that they had been using the CD-Rom to strengthen their knowledge...”

Simple, doable, immediate changes

The NGO coordinator explained that another important aspect of the project was that many of the changes introduced were doable, small and immediate. This meant thinking of specific and concrete solutions to problems that could make their work easier – rather than abstract notions of “coordination” or “communication”. It also meant choosing actions that would not overwhelm already overextended staff and using already available resources, knowledge and time. Identifying these types of problems and solutions may seem obvious, but as the coordinator explained, program managers had to explain to staff that a “creative idea” wasn’t just “wishful thinking” – something someone else out there would someday do, but “something that will improve the process”. Her opinion was that “if it won’t help, it’s not creative” – meaning that a “creative” solution was not based on an active imagination or good intentions, but on actual issues that affect every-day work and realistic solutions that are implementable. The process of getting to solutions also involved negotiation, ensuring “immediate responses to their problems” and asking “What is it that you need to accomplish this policy?” As the program coordinator described, when facilitators asked participants in meetings what they thought was “doable”, they were also implicitly building their commitment and motivation to make a change. In CAIs, she implies, “commitments” are too often made abstractly and only by the center

director, to be accomplished in some future, unspecified time and then rarely revisited: “In the final meeting, we bring all staff together to look at changes. The meeting is to exchange experiences, where facilitators would say ‘this wasn’t considered before, do you think it’s doable?’ They focus on and motivate immediate changes (in all). In CAIs, they often don’t monitor commitments, and only the director makes a commitment, which isn’t sufficient.”

Some of the small changes that emerged out of these types of discussions included putting someone in charge of following-up with each malnourished child (to do home visits, remind the mother, etc.); using a nutrition map (*nutri croquis*) to identify neighborhoods where more children were malnourished and to target local nutrition fairs and other interventions; using colored tabs on clinic records to tag cases of malnutrition; making children’s health cards larger so that mothers could see them better; using colors on clinic histories to identify malnourished cases rapidly, and preparing a separate reception area and space to do growth monitoring. Only when budgets did not allow for changes would the centers then approach the municipal government for funds, to supply them with new scales, for instance. In two other cases, the coordinator described how the logic that led staff to think about additional changes involved making observations about child behavior or simply asking mothers what might work better when they resisted certain practices:

Staff noticed that many of the children cried when they were put on the scale. They had a rock to calibrate it, so they got some heavy objects and covered them with dolls. So now when they have to weight a child, they calibrate with the doll. The child sees that they’re weighing the bear, ‘so what about me?’, they think. Such simple things – they saw the dolls and stopped crying. ‘It’s your turn’ staff would say. Staff also realized they had a problem with the children’s clothes, trying to follow the regulations to weigh them without clothes. But some mothers said, ‘No, they’ll catch a cold’. So they worked with the mothers to see what they could do to change the room. They ask, ‘How would you like it – warmer, maybe close the door?’. So we started changing the space based on what families wanted – still staying with the policies but satisfying the requirements of families too.

Ultimately, doing something fast was also part of the project's aim to motivate staff – breaking a new program like AIEPI-Nut into its smaller components, and accomplishing even small actions quickly sets the pace to gradually make enough changes to fully adopt the program.

Involving all staff and all centers

Finally, program managers also thought strategically about the types of actors they needed in the room and how to facilitate more useful and productive problem solving in meetings. Importantly, the program coordinator called analysis meetings “learning sessions”, symbolizing that the space was intended to get many actors to test, debate, suggest and share ideas.

First, all staff were invited to key center-based meetings to think through the results of evaluations. As the NGO coordinator explained “involving all the staff in the center was also important in the learning sessions – administrators, directors, the head nurse, auxiliary nurses, receptionists, someone from the community. It was important that they all deliver the same message. If they weren't involved in these processes, then at some point, they could become an obstacle. They identified their processes, deficiencies...” As she notes, involving these diverse actors was in part to involve more minds in thinking through problems, but more importantly, to make everyone feel part of the process.” Meetings to think through next steps were also facilitated in a way to focus again on “doable” actions,

Second, the NGO coordinator learned that involving all centers from a single health network in analysis meetings helped foster a sense of working as a collective, mutually-beneficial “family”. This was not the atmosphere that had surrounded those meetings when only a few centers were asked to discuss their work with centers from other health networks:

[During our first phase] we didn't work with entire health networks. We just worked with one health establishment from this network, or three from that one,

etc. So staff became jealous. When they knew that another network was improving more than they were, they did not want to share... We realized that we needed to do an analysis of the entire network. So during our second phase we worked with entire networks, like the entire South Health Network in Santa Cruz, or the East Health Network... (Once we did this), when they came together to talk about what they were doing, in what manner they had improved, what they were lacking, etc. they felt like they were working as part of a family. But when they were working alone, they were competitive and only wanted to show their successes, not reveal their difficulties.

Transfer to local health authorities

Although some UNI staff, SEDES administrators and doctors still doubt that there will be a full transfer and sustainability of this program to local health authorities once the project ends in 2012, and despite many of the challenges the project encountered along the way, there is evidence of some lasting practices. In one health network, an administrator described how they were forming a capacity-building supervision team to continue visits to centers. How such supervision data is analyzed has also changed. Now, he noted, “We bring staff together the same day of a supervision to do the analysis, making notes on newsprint and analyzing with them their weaknesses, etc., so that they’ll change.” SEDES staff also expressed support for the program and their intention of making an effort to maintain the team of local supervisors the project trained, even if on a less consistent schedule. The NGO coordinator noted their decision to wait to involve SEDES was “strategic”, as they hoped to be able to convince authorities that this approach could actually work:

The help of SEDES has been key. We were trying to get staff to complete the policy, not increase their work, so it was hard to make them understand. But SEDES came to meetings, etc. – they were an important support. In the first phase of our project, we worked without a lot of SEDES help, which was a strategic decision, because they want to see results, so we wanted to show them numbers and coverage rates – that’s what interests them, to convince them. After two years, SEDES saw the coverage rates we were getting (with micronutrients, vaccinations, AEIPI application) and they said ‘Wow, this is something different’.

Considering that most project participants described “starting from zero”, other changes they noted were considerable. One UNI staffer explained how “The NGO project has a lot of weaknesses, but the nutrition diagnostic and application of AIEPI has increased...Now, not everyone still applies it – but maybe 95 percent of staff are trained and 60 to 70 percent apply it. The NGO process really helped.” One health center supervisor also noted:

Since 2010 when we started applying the ZM policies more closely, we saw a lot of changes, like the way we managed the AIEPI-Nut registries. Classifying children’s level of malnutrition was a lot of work – using the measurement tables, reading the growth curves. We needed many trainings. We used to not do nutrition counseling with the mothers. We now implement it, even though there isn’t time available – we use the time we have to fill out the child health card, offer nutrition counseling, but we become saturated. Mothers also insist that we see them (immediately) – it doesn’t matter to them that there’s a mother in front of them.

One health network administrator also explained, proudly, how:

All the centers have integrated AIEPI-Nut. The NGO project helped put it in practice. Before...staff didn’t place much importance on the AIEPI form. Even those who had been trained didn’t do growth monitoring. ... We’re becoming empowered, seeing that we’re capturing more children (who are malnourished). At first, everything was negative. “They tell me to do this, but there isn’t anything (to give)”. They had so many programs, nutrition and AIEPI were ‘just one more thing’.

One doctor excited by the approach was frustrated that “there’s little interest - there are doctors who are trained who aren’t applying it”, but still described numerous changes:

In 2010 we had a seven-day course in Clinical AIEPI-Nut, all of us, including the nurses and custodians, so that we work as a team. It’s started to function. (The NGO project managers) pushed us to weigh and measure. We didn’t do it before, we started from zero. When they did the baseline evaluation, we didn’t know how to weigh or measure – they had to train us again...We just did a visual diagnostic of a child before. Now, there’s more interest in children under two. We place more importance on them. We’ve gotten a scale. We have the standards to calibrate it ourselves. We look at the warning signs, classify them as slight, moderate (malnutrition), etc., if they have diarrhea, vaccines, etc. We promote breastfeeding and complementary feeding after six months and ask if they’re already doing it. We apply different plans for different women. If the child is malnourished we do counseling and give them Atlu. On the backside of the form we have to do follow-up. We tell them to return in 7 or 15 days, depending on the severity, or we send them to the UNI who organizes nutrition talks.

Although these struggles continue, they seem miniscule compared to the challenges staff described at the start of the project. The NGO coordinator noted that, “Although they had been introduced to the anthropometry tables, they weren’t being used in the centers. The clinical histories were below tables, all over the place, not organized.”

Conclusions

A ZM consultant who visited over fifty of ZM’s priority municipalities described to me once that he had met supervisors and managers that stood as testament to the remarkable, facilitative role they could play in ZM implementation, rather than the obstructive – or at best, absent – role many supervisors like those in Chapter Three played. He believed, however, that these sites were rare and “spontaneous...not *created* by the national level”. This appeared to be the case with the actors featured here as well. The national ZM office was not actively shaping mid-level adaptive management strategies. The choices and decisions managers made in this chapter, however, were certainly not “spontaneous” reactions to their environment, but rather, proactively “created” actions, focused particularly on motivating staff and facilitating spaces for local problem solving. Considering more closely their strategies tells us about the limits of rational management and the possibilities of adaptive management for getting things done more effectively.

Motivation

To motivate staff, supervisors focused on four things: offering incentives, encouraging – and even building – staff discretion, focusing staff attention on key issues, and approaching supervisor-staff relationships as a “friendship” might, as attentive and responsive facilitators. First, the incentives some managers used in these cases were low-cost, but more importantly, symbolic – offering simple recognition of staff work. Second, the El Alto NGO taught us that

discretion may not always be what street level bureaucrats use in situations where they are left with ambiguous or inappropriate work tasks as Lipsky (1980) found, but an actual skill that can be strengthened. It is a form of judgment that helps a staffer build better instincts about what to do at a moments notice when they are working with a family, based on a blending of their technical knowledge about malnutrition reduction strategies, abstract information about a family's "social determinants", their previous experience and the lessons of colleagues.

Third, many of the changes these managers and NGOs facilitated reflect an element Dearing (2008) found important for program adoption: identifying the components that are essential and others that are "peripheral", which could be adjusted or ignored without compromising the intention of the program. In El Alto, Case Study Reviews helped staff focus on the few key issues that might make the greatest difference in preventing malnutrition for a specific family – and not to focus on every single determinant for which they had information. In Santa Cruz, coordinators boiled down the entire purpose of AIEPI-Nut and ZM interventions to one key indicator – whether a child's nutrition was improving each month – simplifying the focus for staff, while also giving them a measurable target they could track for their own progress, focused on each child rather than aggregate measures that become depersonalized. Both of these tactics kept staff on task in line with the broader ZM goal, but also helped them see that they did not necessarily have to get all of the other elements of AIEPI-Nut perfect to accomplish its principal goal. Focusing on the essential indicator also suggested to staff that some of the protocols in AIEPI-Nut or the strategies for working with families might not always be appropriate or fully worked out, giving them room to vary and make changes that would better help them reach the key target. This too fits Dearing's (2008) suggestion that program adoption is improved when staff can focus more on "outcome fidelity" – getting to that ultimate

goal – more than “process fidelity”, which requires implementation of the protocols perfectly, even if they may not be appropriate (106). In the Santa Cruz NGO project, for instance, when staff used the doll for weighing, added nutrition maps to their work, and or added colored tabs to clinic files – none of their actions violated AIEPI-Nut policies, but aided their ability to get their work done more effectively.

Finally, when supervisors spoke of their relationship with staff as “friends”, they were not saying that they gave up on their official responsibilities, letting staff do whatever they liked. Rather – they were speaking of changing the hierarchical supervisor-staff relationship to a more caring one, based on attentiveness to the challenges staff faced or the factors that motivated them to work harder. They were implying that the manager could be compassionate, listening to “emotions and feelings”, as a way to show respect, but also as a way to understand what was motivating or impairing staff work. They stopped imposing regulations and started asking staff about their experiences and opinions. Managers shared something about themselves so that staff saw that they were not political pawns, they persisted patiently – even up to six months – to establish trust, did not wield their power instantly if staff resisted, and got out from behind their desks to show up personally in the clinics and villages where staff worked tirelessly.

Forester (1999) similarly described urban planners who were adept at facilitating change processes in the face of contentious relationships, calling them “critical friends”, or planners “who care enough to listen for more than what has been said, who care enough to wonder about what has been missed, who are engaged and collaborative enough to help, yet detached and independent enough to carry forward their own projects” (196). More rational, authoritative managers, we saw in Chapter Three, do the opposite, relying on things like indicators and measurement while ignoring individual emotions, values and concerns or “eliminating from

official business love, hatred and all purely personal, irrational and emotional elements which escape calculation” (Weber 1956/1958, 215) – all of which can ultimately shape the way a staffer interprets a manager’s suggestions or perceives their intentions. What supervisors featured here seemed to understand was that implementation is inevitably an act of power, displacing some existing practice, resource, time, staff, decision-making power, and more (Friedmann 1993).

Problem solving

Many of the problem-solving approaches staff used likely contributed to staff motivation as well, particularly because they helped them improve their work environment. The examples cited in this chapter all shared a common a) focus on actions that were simple, doable and immediate that focused on tangible problems in the work environment, b) processes that did not simply analyze data, but involved dialogue, debate and negotiation, and c) blended multiple forms of knowledge and multiple actors to make sense of a situation.

Simple, doable and immediate action

First, as obvious as it seems to focus management on simple, doable and immediate actions, this is often not the focus of rational planning. Dominant implementation plans tend to set broad indicators that are future-oriented, but missing in these models is what to do on a day to day basis. What we saw happening in Chapter Three is that too many of the ideas, strategies and possibilities for action were lost because managers continued to look exclusively at these more abstract indicators, never stopping to consider small ways to make improvements.

Broad indicators would also let many staff inch along, slowly distributing micronutrients, for instance, until they would suddenly yell, “launch a campaign!” at the end of the year to get coverage numbers up. But after (nearly) reaching targets, staff tended to return to their old routines. These kinds of indicators set the type of goals that staff tended to see as “ceilings rather

than floors for performance”, choosing to relax after a goal was (almost) reached instead of pushing beyond it, as Ordonez et al (2009) found in the private sector as well. Alternatively, the examples in this chapter show how focusing problem solving on questions tied to specific issues with implementation inadvertently helped improve the larger, more abstract indicators, while beginning to change routines. The immediacy – to see tangible changes in their work environment – also sparked more ideas about more routines to change, in much the way Mahler (1997) suggests is necessary to move management systems toward a culture of learning.

Dialogue, debate and negotiation

Second, calling the problem solving event one municipality held a “forum to debate” did not capture the nuanced interactions that allowed participants to arrive at an innovative solution – processes that were apparent in the El Alto Case Study Review and the “learning sessions” that went on in the Santa Cruz project. In each of these examples, managers did not restrict their focus on performance measures alone, but instead a) facilitated a dialogue to understand the problems and obstacles staff were facing, b) structured debates about better and worse solutions, and c) mediated negotiations to agree on a course of action, as Forester (2009, 185) described as necessary for effective participatory problem-solving processes, and as Weick et al (2005) described as useful for collectively understanding what to do next in a complex situation.

Participants in the “forum for debate” did not simply intend to argue over entrenched positions. First, this forum was a *dialogue*, a conversation that allowed people to see what was important to others and what they should pay attention to, without necessarily seeking agreement at first. Talking about “everything” and having an “open” discussion allowed everyone to have input. Second, it was a *debate* in the sense that experts argued for better or worse explanations, and heard other views. So, when they tried to “identify the causes of malnutrition and food

security”, and then “analyzed the health network”, they were not proposing to do a full-blown, scientific study that would have taken months or longer to complete. Instead, they debated their way into helping each other “understand what was going on”. To say that they were going to do this “all in a day” was implying that many forms of knowledge were being combined to come up with a plausible story that made sense to the actors involved and, that gave them a reasonable idea of what to do next about malnutrition in their municipality. Third, the forum created a space for *negotiation*, sharing thoughts about what to actually do, during which the participants considered “ideas for projects and solutions” – those that were possible, new, inventive and forward looking, rather than only looking at past problems.

Multiple forms of knowledge

Finally, the problem solving approaches used here also revealed a different way of understanding the type of knowledge that can be useful for evaluating a situation or coming up with a solution. A focus on indicators as occurs in CAIs suggests that we trust the systems of accountability, the data collectors, the standards set by program designers and the experts, more than the individuals involved in implementation (Freeman 2002). Such faith in indicators also reduces the need to involve diverse actors in the analysis, like the receptionists that the Santa Cruz project involved, or the mothers they eventually consulted. Indicators also encourage a focus on accountability – to answer questions about who got their numbers this month? – rather than learning. The experiences in this chapter suggest that such learning requires an interrogation of the indicators – to set them alongside *specific* experiences, opinions, values, perceptions, beliefs and tacit knowledge, and only then deciding what to do. Considering the remarkable data quality concerns discussed in Chapter Three, any of these other forms of knowledge seem just as or even more trustworthy and useful for understanding what to do.

The Case Study Review was an example of how much more goes on in implementation than centralized models and abstract argumentation through data analysis could ever capture. These review sessions suggest that we need much more creative ways of understanding and learning about what “implementation” really entails. The focus on one family also offers staff a story to tell, helps them move from generalities to particulars, and gives them the opportunity to evaluate their response to specific challenges. Stories can also serve as a useful way to move staff attention away from contentious debates or attacking each other, to exploring issues involved in the case (Forester 2009, 183). Weick et al (2005) also talk about the importance of stories for offering a frame for sensemaking, to think through a causal chain sequentially and to use inductive logic. Stories, they suggest, are especially useful when actions are difficult, issues cannot be handled in a routine manner, or when you confront an unusual and unexpected event. As we saw in El Alto, the stories of specific families helped staff examine issues more fully than they had time to in real life, where the tendency can be to narrow our focus to simple cues when we confront pressure (Ancona 2011; Weick et al 2005).

The local learning forums featured here raise two questions. First, two of the models described could be used as one-shot meetings to resolve a sudden implementation problem that arises (especially the “forum for debate”), or to train new staff and occasionally reinforce skills through the Case Study Analysis. However, the more comprehensive management approach the Santa Cruz project was introducing, using the quality assurance model, may be more difficult to sustain without a fulltime facilitator. Research on quality assurance models that exist in at least 66 developing countries and the United States is still inconclusive about the degree to which staff continue the multiple elements involved, and whether the approach is more or less cost effective for improving health care delivery than other approaches (Franco and Marquez 2010; Øvretveit

et al. 2002, 346-347). A review of 92 quality assurance collaboratives in 25 health care organizations in the United States concluded that, “Success, however defined, appears to depend on the subject chosen, how the collaborative is managed, the culture of the team’s organization” as well as other factors related to building and sustaining motivation, dealing with staff turnover, institutionalizing the approach beyond the first targeted problem, collecting and using data, and spreading improvements to other health centers (Øvretveit et al. 2002, 346-347).

The second question relates to the degree to which any of the learning forums described here could resolve more systemic implementation issues that higher-level managers or national planners may be in the best position to solve. The Santa Cruz quality assurance program managers noted that larger bureaucratic issues that emerged during local discussions were tabled, and then dealt with later through an advocacy effort to convince the health network or municipal government to respond. But what if the same logistical bottlenecks exist within many clinics, as we saw in high relief with micronutrient problems in Chapter Three? Advocacy may be the best option if multiple centers and health networks recognize their common problems. However, research on the degree to which the quality assurance approach can be effectively scaled up is inconclusive, particularly related to sharing lessons across health centers (Franco and Marquez 2010; Castambas et al 2008). Not finding a way to share these experiences clearly precludes them from being able to join together to push for broader changes.

Another option for facilitating more systemic analysis would be to occasionally bring actors together from across the system. In recent years, National ZM staff have led a variety of workshops to assist with this kind of multi-level analysis. What ZM actors referred to as the Logic Modeling Workshops (to develop the next ZM strategic plan) and the Results-Based Management Workshops (originally intended to introduce a results-based management culture

into the MOH) engaged more diverse actors than ZM analysis meetings had in the past and used interactive exercises that encouraged staff to combine a review of indicators with their experiences and innovative ideas. I was involved in a third workshop ZM leaders sponsored in 2009 to improve implementation in the Chispitas micronutrient program, based on a pilot of the Program Assessment Guide (PAG) (Pelletier et al 2011). This workshop intended to “1) Elicit and facilitate the integration of evidence, contextual knowledge and experience in the design, implementation, management, scaling up and evaluation of micronutrient programs, and 2) Help strengthen the shared understanding, commitment, ownership, motivation and capacity to advance the micronutrient agenda and forge explicit links with broader nutrition and health agendas” (Hoey et al 2009, iii). While policy actors noted that they all learned significantly about each other’s implementation challenges and realities in all of these workshops, the greatest weakness of each, as was apparent in the PAG evaluation (ibid), and as policy actors in Bolivia recounted after the other two ZM workshops, was the apparent lack of national-level follow-through on the recommendations. The challenge of holding workshops that involve actors from throughout a policy system is that they need to be sponsored by national-level administrators, or risk their lack of involvement and ownership.

However, the diversity of strategies described here also suggest that the pathologies of the mindless indicator-based management strategies can also be accomplished through relatively small, strategically targeted actions mediated by mid-level managers. Chapters Five and Six also show how front-line staff add yet another layer to the policy implementation process, applying their own form of discretion in ways that can either greatly impede or facilitate the change process further.

SECTION III: PROGRAM DELIVERY

CHAPTER FIVE: The banking model

Although UNI staff, health center doctors and nurses, and Bono doctors may have operated under a mix of different management configurations, ultimately, one thing united their work: all were expected to advance malnutrition prevention and nutrition promotion. In this chapter, I focus on staff who used what Freire (1970) termed the “banking” model of social change, treating a mother as a tabula rasa with little prior knowledge, beliefs, values or influences who simply needed micronutrients in her hands, instructions and sometimes harsh orders to change her child’s nutrition. The inevitable result, we might not be surprised, was a gap between what mothers knew and what they actually did to affect their child’s nutrition.

Bolivian practitioners, however, are not alone. The banking model is widely applied and the knowledge-practice gap it produces is a widely shared problem in global health and nutrition behavior change programs (Aboud and Singla 2012; Prochaska and Prochaska 2011). So what is the attraction of such a simple rational problem solving model in settings where the causes, the motivations, the priorities and capabilities to take action are not at all simple? When the world of service delivery is complex, why might nutrition professionals still act as if all they need to do is "tell people the right answers" about what to do? How do we explain the not quite rational insistence on acting as if traditional rationality is all we need when our situations threaten to undermine such apparent rationality? Are staff even aware that such practices are ineffective, and when they are, how do they react?

In this chapter, I add to the literature that continues to remind us that uncultured, information transfer models will do little to change household nutrition practices – not matter how evidence-based the messages are (Aboud and Singla 2012). However, I look more closely at the reasons that staff may be compelled to use a banking model in the first place. In Bolivia,

these reasons seemed to be tied to practitioners' a) lack of training in behavior change methods, b) curative-focused medical training and priorities, c) simplistic view of the change process, d) time constraints for engaging with patients, e) pressures to focus on technical aspects of their work, f) belief in authoritative tactics and g) sense of duty to debunk unscientific beliefs. I end by discussing the degree to which staff recognized that the banking model was ineffective, and how they reacted to mothers when they saw little change.

Reasons for a banking model

Many reasons seemed to push staff to use a banking model as their fall back plan when they had little guidance about how to approach nutrition promotion. These suggest that reversing a banking model would require multiple changes, from who is hired and how they are trained, to how staff time and other priorities are managed, to explorations with mothers themselves about the effect a banking model has on their motivation and capacity to act.

Lack of training

All health staff had extensive training in AIEPI-Nut, UNIs had the SVIN-C surveys to track nutrition knowledge and practices among mothers, and the numerous monitoring systems reinforced that staff should be holding nutrition fairs, offering nutrition trainings, giving nutrition counseling and more. Despite these trainings, lists of evidence-based messages, monitoring tools, and reminders about “doing” nutrition promotion, however, many staff discussed how they had little guidance about *how* to actually convince mothers to change their practices. Some clearly saw this discretion as an invitation to devise their own approach. One Bono doctor in Potosi believed “National policies and interventions allow for local adjustment and adaptation. The issue is whether local staff will take the initiative. Supervisors can provide you with everything, but (it doesn't matter) if you aren't interested in working.” an ex-UNI staffer also saw national

policies as general guidelines, allowing local staff to fill in the details: “The national level gives us the *rayas de la cancha* (boundaries of the playing field), but it’s the local level that says how we’ll do things, who we’ll use.”

Other staff, however, were less enthusiastic, and far less certain, about having to develop a behavior change strategy on their own. Doctors in a citywide Potosi meeting complained that they were not trained in “educational pedagogy”. One UNI nutritionist in rural Potosi also suggested that UNIs needed a communication specialist as part of their teams, even more than doctors, “because that’s their realm, they know more strategies, methods, IEC (information, education and communication) plans. Nutritionists, doctors or nurses don’t have experience in IEC. You have to know how to reach families, put yourself in their place – we’ve not had this kind of training”. He was especially frustrated – instead of celebrating the fact that supervisors conducting reviews of UNI work (using a protocol they called Estrella Kiviát) were often meaningless for informing their strategies on the ground. As he noted:

(We) work based on our own criteria. There’s no instrument to help us develop our work or measure what we do, like the number of talks we give. The Estrella Kiviát is filled out by looking over our ‘libros de acta’ (official notes), not on interviews with us, observations. It’s very general. We don’t send SEDES any monthly reports. We don’t have a job manual, no instruments that tells us how many talks we should do or strategies we could try. We do all this in our own ways.

Furthermore, the experience of another UNI with the SVIN-C (the periodic, random-sample survey they would conduct to gauge mothers’ nutrition knowledge and practices), also suggested that the survey might tell staff *where* in the municipality to target their nutrition promotion strategies, or even which nutrition messages to prioritize, but still, gave no answers about *how* to have an impact. One of the UNI nutritionists suggested that many staff like her did not have the ability to extract strategies from SVIN-C data. Even after completing three cycles of

the SVIN-C, and involving numerous actors and a tremendous amount of time in the data collection and analysis process, she wondered “if it’s really worth it”:

In October 2009, they wanted to go ahead and implement the SVIN-C even though they hadn’t trained us and even though we had no budget. “You have to do it” they told us, “it requires your initiative”, they demanded, a little authoritatively. But we didn’t know how to implement it. We started in 2009, but it was difficult. We’ve now done it three times. Now the problem is the budget. We train promoters or other volunteers. They do practice interviews on each other. Afterwards, they select families using the LQAS method. Once they do it, the information goes to staff who tabulate it and calculate the percentages and present the information to other health staff and local authorities, showing where geographically numbers are low. From there, they do a plan of action with authorities in the COMAN and all health staff. But...I don’t know if it’s really worth it. Mothers know a lot of the information but it’s the practice that’s lacking. The SVIN-C doesn’t give you ideas about how to improve. ...And four times a year (which is the official policy) is a lot. It takes time. With just one person in the UNI it’s as if all we’re doing is dedicating ourselves to the SVIN-C, without any new ideas of what to do differently. We’ll just do the same things – just IEC. There isn’t anything else to do. The SVIN-C doesn’t guide us toward what else to concentrate on. There isn’t this type of assistance. We keep expecting that IEC alone will improve things.

Medical training and priorities

A number of actors suggested that ZM should consider working with less trained staff, even promising community health promoters that might be trained as auxiliary nurses because of their community-based orientation. One SEDES administrator reported that, “Fifty percent of UNI staff left their jobs - not proud of their work because they didn’t have the skills to do it (because they were doctors and nutritionists). It’s one thing to read about public health and another to do it - you learn in the field.” This SEDES site also chose to hire more nurses, because “doctors and nutritionists are more *asistencialistas* (clinic-based).” In Santa Cruz as well, health network administrators decided to continue improving the AIEPI-Nut intervention through the nurses, because “nurses are closer to the patient. Sometimes doctors work by ‘the law of least effort’”. One UNI nutritionist suggested that doctors may not be needed in the UNI, because in his experience, “it’s difficult to work with doctors. Eighty percent of their training is clinical – so

going to the community is difficult for them. Sometimes we have to act like clowns for the community to understand us, which doctors would never do.”

Like the NGO supervisor in Chapter Four who preferred to hire new staff based more on attitude, since “we can always teach them the content”, one SEDES administrator also believed the professional ranking of a staffer affected staff “attitudes” that are so critical in community-based work. He described how “All the training we give, all the instructions, all the theory – if staff don’t have a positive attitude, all this goes out the window, it’s worthless. It depends a lot on the attitude of a person...we’ve forgotten to spread these attitudes.” He too wondered if UNIs in particular had the right personnel to ensure the commitment needed to work in communities. As a doctor himself, he was most skeptical of putting doctors in these positions, noting how “as doctors, we don’t have a preventive vision – forget it! We want to offer clinical care.” However, like so many of the changes ZM actors hoped to facilitate, when he suggested to the MOH consider hiring a “technician” for the UNIs, who would have less formal training (two to three years) and less pay than a licensed nurse or nutritionist, he was told that the salary scales in the MOH didn’t include anyone with the title “technician”.

A simple view of the change process

Few ZM actors argued with the need for nutrition education and the role it could play in changing household feeding practices and diets. But most saw health staff as the “experts” that could simply teach people what to do. The assumption was that with the right knowledge, mothers would change their practices. Many doctors expressed, as the following one did, how they should just “explain well” why people should be concerned: “we’ve got to teach them, explain well, because the malnutrition problem is big. Our data shows this – we can’t deny it. We

agree formally that malnutrition is one of the worst health problems. We've got to explain this with photos, talk about the 'dwarf' children, what consequences it has, etc."

What was more troubling was that mothers and community leaders also believed the change process was simple, reinforcing medical staff who believed the same and making it difficult for staff to see how to do things differently if their best recourse was often to ask their local health promoters and mothers what to do. One local mother and community health promoter in Chuquisaca, for instance, believed that the change process would be easy, that "All you have to do is train, so people know what foods to eat. We have habas, wheat, etc...plenty. ...I breastfed. It's easy to apply these practices... My suggestion is to give us more training – so people know these practices." A neighborhood leader in El Alto also expressed that people simply needed to be aware and informed about the issue: "The most important thing is that they are aware. How? House by house, with data, maybe using video or power point presentations so people can see the information visually... We need doctors to explain things to us.... Mothers aren't informed. We need something like a seminar in our community meetings." In Santa Cruz, a neighborhood health leader also believed training and promotion was the solution:

We've got to change something. Children are eating pure rice and noodles – this isn't nutritious. We see how it makes a person and children weak. Because they're in a hurry, it's easy to prepare this. How could we change? We should promote grains through trainings, to teach mothers, so they know to eat vegetables and fruits, soy, beans, quinoa, garbanzo. We have all that here. Most people don't know how to prepare it."

The community-based president of a city-wide civic health council also understood the malnutrition problem to be a structural and fairly complex problem, noting issues with taste, impatient doctors, the time factor involved in decisions and the cultural changes in diets, but again, he settled on the idea that people simply needed "guidance" and "awareness" to change:

Mothers are hiding things like Chispitas because they don't like the taste. It requires awareness building, through the TV, mass media, to explain the importance and benefit.

Right now, doctors are impatient. They don't tell them the importance, its purpose... We should have programs on nutrition. We eat fast food in the city – people like what's easiest – rice, noodles, chicken. But we have Creole wheat, fruit, quinoa and more that we don't eat. When we go to buy fruit, we buy the prettiest fruit, the biggest, that's imported from Argentina, but these taste bad and are full of chemicals. The ones from Bolivia are juicy and good, but small. People need guidance, and this knowledge they'll transmit to their child. We have to work more on promotion and prevention, through TV, mass media, even making authorities aware about the causes, the needs and weaknesses, and then about consequences.

Too little time for engagement

An additional factor that encouraged staff to simply train-and-go was the lack of time they felt they had to devote to a preventive focus. Even UNI staff were often criticized for remaining in their UNI clinics instead of going into the community or neighborhoods to do nutrition promotion, though it was unclear if the issue was a lack of transportation or the co-optation of UNI staff for clinic-based work. A 2009 evaluation of ZM, for instance, noted that UNI staff had a “tendency to carry out clinic-based activities, at the expense of others (management, community extension, etc.)” (Mansilla 2009, 12).

The real issue with time, however, was most apparent among doctors and nurses tasked with carrying out AIEPI-Nut. As one NGO partner explained, the move to implement AIEPI made sense theoretically, but in practice, was one more added responsibility on top of an overwhelming number of programs staff had to manage: “The health system has changed with AIEPI...so that when a child comes in, they get integrated attention. Before, a sick child went one way to be treated for whatever illness they had, like diarrhea, while the healthy child got their weight taken, vaccines, etc. But the issue is that staff are overloaded needing to attend to all children in an integrated way.” Even a national MOH administrator knew that “many don't want to implement AIEPI-Nut because they say it takes time”.

This left staff to carry out counseling almost on the run, quickly and using “broad strokes” that came off as standardized messages, as a Santa Cruz doctor explained, “orient mothers in broad strokes, because there isn’t time. We can’t do our work well.” In an urban center in Potosi, a Bono doctor admitted, “There isn’t enough time. Normally there are 60 mothers in one session!” A nurse in El Alto also lamented that limited staffing prevented her clinic from doing home visits or health campaigns in the neighborhood, while also weakening their ability to offer effective counseling that mothers can understand:

When the MOH launches a new program, we don’t have the capacity. I work alone in the afternoons. I weigh, measure, give vaccinations... It can be difficult to ensure that I also offer counseling – it has to be quick, and often parents don’t understand me. In nine years, the situation hasn’t changed. The population has doubled, but the work falls on one person still...we aren’t seeing the increase in staff to reach this population...It’s total chaos.

Another SEDES administrator also noted that choosing not to implement AIEPI, or to do the bare minimum, was an issue of practicality when doctors, particularly in urban areas, had to deal with emergencies and disease breakouts:

Even though we’ve told them to abandon their curative focus (*asistencialismo*), they dedicate themselves to emergencies, like dengue – since it’s the same staff dealing with these issues, they neglect AIEPI-Nut preventive actions. Only about 41 percent are applying AIEPI-Nut in the city – not even implementing the AIEPI form. Since October of 2010 we started supervising all the centers...and we saw that staff aren’t distributing micronutrients, because doctors don’t have an integrated focus – they focus more on medical attention and illnesses.

Messages to focus on the technical

Another problem, I argue, is that much of the reinforcement staff received focused on the technical aspects of AIEPI-Nut, and not the nature of their interactions involved in nutrition counseling and promotion. In either case, when implemented well or poorly, supervising UNI staff talked about how “they aren’t filling out the clinical history form well...” or other technical components, rarely mentioning if they were able to talk convincingly with mothers: “They’re

using the monitoring forms, I see they're giving the right treatments, weigh and measure correctly, touch on all the danger signs, and classify (children's level of malnutrition) well."

Similarly in Santa Cruz, a health center director was most concerned with issues related to the paperwork:

(We see) problems with the AIEPI-Nut forms – they're incomplete, don't list all the illnesses aside from respiratory, diarrhea, nutrition. But, it's so much paper... We had problems with staff filling out the clinic histories – it's the same question you ask every time and there's no benefit for the patients (i.e. no micronutrients to give). One doctor would fill out it out quickly, just partially. We explained that it has to be more specific, that it has to be filled out more, so they're doing it, when there are continuous supervisions.

The reason staff likely focused on technical details, one SEDES administrator pointed out, was because AIEPI-Nut protocols were so detailed and complicated – even for rural staff. He suggested that only those who had the "right attitude" to take on such a task and who were adept with the approach could implement it within the 15 minute time slot doctors technically had to spend with patients:

I think AIEPI-Nut, both Clinic and Community-based, is something we have to reconsider. It just isn't being implemented. We've wasted so much money on implementing these models - in all the many trainings. But it's way too complicated. Even I don't know it, and I'm not interested in it. I'd rather apply what I was trained to apply as a doctor. People who can implement it well can do it in 15 minutes, but the rest need 30 minutes or more. And you know how it is - when staff go out to do their fieldwork they get 30 children lining up. They can't devote 30 or minutes to each child. They can't. We need to simplify the approach... AIEPI-Nut is the least refined, with the most errors and problems... We haven't finished implementing this strategy. It's a question of having staff with the right attitude to implement AIEPI.

Indeed, health staff who did carry out AIEPI-Nut also described their education strategies in largely technical terms, as one-way interactions where they "detect", "categorize", "give", "send", and "tell" mothers in a way that maintains a clear separation between the expert and the (presumed) knowledge-less patient. A health network manager in the department of Potosi, for instance, talked about how, "We've got to repeat information until mothers learn". Another

doctor in the city of Potosi described her frustration, how “The more we *explain*, the more people don’t understand.” A doctor in El Alto similarly described the cascade of processes a mother goes through in their center in highly technical, expert-led terms:

When a mother comes into the center, we do anthropometry, taking their child’s weight and height measurements. We categorize their malnutrition as low, moderate, etc. The nurses give the mothers the first part of the counseling based on IMCI standards – asking them how they are feeding, breastfeeding, if they’re receiving micronutrients. They also talk about what foods they should give their child to increase their weight, like cañawa, lentils, cereals. We tell them about the lack of vitamins in the foods that they give their children, like food in plastic baggies or popcorn. We tell them how they can improve. When they see the doctor, we give them micronutrients, vitamin A, sprinkles – 60 sachets for two months... When we detect malnutrition, we give them Zinc for two weeks, and after two weeks we tell them to come back for a follow-up. If they are still malnourished, we do the treatment again and check for other pathologies that might be a separate cause... Or we send them to Simon Patiño or the Olandez Hospital if their weight doesn’t increase.

Belief in authoritarian tactics

Many staff went further, not just “telling” mothers what to do, but trying to force or scare mothers into complying. In a Potosi health center, the Bono doctor described how they told 18 mothers that had chronically malnourished children that monthly nutrition talks were “obligatory” for receiving their Bono checks and used home visits to do surveillance, “to check on what they say they’re doing.” A nurse in El Alto also described how she hoped mothers would become “alarmed or respond to threats that they may continue to receive the free micronutrients:

We talk about the future and the consequences, that their child’s weight could fall, that their weight should be here on the chart, not there. In that way, the mother becomes alarmed, since they usually think that if a child doesn’t have any visible wounds, they’re o.k... Mothers now know what Nutribebe, Vitamin A, Sprinkles are, but sometimes they don’t value them. They sell Nutribebe in the streets for 15 or 20 pesos. Now we give them the bags already cut open, but they still keep selling them! We have to repeat what it’s for. Iron sulfate – it’s gross, the children don’t like it, and mothers say that it turns their children’s feces black. Or they’ll say “I gave it to him and he vomited, got diarrhea.” We have to explain that this is for their child’s benefit, and that it costs a lot and that they won’t be able to keep getting it if they don’t use it.

In some cases rural nurses and doctors imposed fines on mothers who did not show up to meetings. One nurse in Chuquisaca explained how, “Everything is about fines, but it works. Out of fear of having to pay money they come to meetings. In some communities we fine 25 Bolivianos for not attending. Even we (health staff) have to pay 10 Bolivianos for not going to a CAI. If a mother is late on growth promotion days, we charge them 50 cents for the first hour, 1 Boliviano for the second, 2 Bolivianos for the third, etc.”

Finally, some of the more confusing approaches staff used walked the line between shaming, building peer pressure and competition, and simply giving mothers a visual to help them understand their child’s malnutrition. In a rural center in Potosi, a nurse noted how “We make it obligatory that mothers have their children weighed, so that a mother who does not have her child weighed is reprimanded.” In cases of severe malnutrition, some UNI staff and doctors also believed “it’s a law that children should not be malnourished”, justifying their work with the police and child services to take children from families, even if temporarily, in order to treat them in the UNI or nearest nutrition rehabilitation center. Such harsh tactics, instead of doing home-based treatment were in dispute, however, particularly because mothers “think we’re going to steal or sell their children”. One nurse in El Alto who repeatedly saw mothers selling Nutribebe in street stalls, began warning mothers that “that it costs a lot and that they won’t be able to keep getting it if they don’t use it.

One of the most common approaches used public shaming tactics. One SEDES administrator also started taking pictures of malnourished children in the municipality she was visiting that day, and then using the photos in the power point presentation she gave authorities to shame them into doing something about their most precious cargo under their watch. Once, she explained,

I take photos of children in the streets, dirty, showing what they're eating, the ones in the in-patient clinic. It doesn't work to use photos of other departments or countries. This wakes people up and motivates them. One time, the major told me that it was parents' fault that children were malnourished. So during my presentation, I showed a picture of his own son in the UNI in-patient clinic. Now he's committed!

A Head Nurse in a Potosi municipality also described how community health promoters she works with developed: "a system to publically list mothers – black if they and their children were dirty (when they came to meetings), white if they were clean." UNI staff and nurses in three other municipalities also used colored flags to publically display whether a child was normal (green), yellow (at risk) or red (danger zone), after NGOs introduced the ideas. At least one nurse noted, however, how "If we didn't have the flag, it wouldn't have as much impact just explaining the growth curve or with numbers, or just telling them. When they see their baby in red, they put more energy behind doing something." In another rural center, the doctor described how "If their flag is red, all the mothers say "ooooh! What happened? What'd you do?" Maybe the embarrassment affects them psychologically...the mothers interact. They sigh with relief when it's not red. Though some don't care – they prefer that their child die."

Sense of duty to debunk unscientific beliefs

Staff subscribing to the banking model also believed they had to debunk myths. In a community health promoter meeting in Potosi, a nutritionist emphasized that it was important to correct "bad beliefs that turn into wrong understanding that's passed on for generations, like if a child eats cheese, he won't learn to talk". The Head Nurse in Ocuri also described, proudly, how:

We've changed some beliefs, like giving urine to newborns. They think that it "cleans" the child. Or their belief that colostrum makes a child mentally slow. They also used to cut umbilical cords with a piece of broken ceramic, because they used to think that if they didn't, the child would become a thief or spend all their money on clothes. You have to do a lot of teaching, going to the community, working with local health promoters... Some also don't wash after giving birth for an entire month because they believe they'll get cold (and sick), godmothers and women's mothers especially believe this. This causes infections.

Recognizing the knowledge – practice gap

Over time, numerous staff were growing increasingly frustrated that their teaching methods were not changing mothers' nutrition practices or use of micronutrients. Many spoke of a knowledge-practice gap, particularly with the use of micronutrients, as a doctor described in one municipality in Potosi: "In the SVIN-C surveys we do, mothers know a lot, but they still aren't putting it into practice. The trash collector told us 'I see Sprinkles that had never been opened, thrown out in the trash. Nutribebe too, never used'." Health promoters involved in a workshop in a Chuquisaca municipality also noted how "Families aren't using Chispitas and Nutribebe – they're throwing it out... Even when we do trainings and tell them, they don't understand. It goes in one ear and out the other." SVIN-C data consolidating surveys from 137 priority ZM municipalities also confirmed their fears, suggested that at least 40 percent of mothers who receive Nutribebe do not give it to their child, and another 23 percent do not give their children the Chispitas they receive (SNIS 2010).

A coordinator of a Santa Cruz program that trains community health promoters to lead house-by-house health and nutrition education campaigns also described how: "In one month, if we reach 42 malnourished children, only 10 percent improve through trainings we offer mothers. We're thinking about a different way to reach mothers, not just by talking." Others, however, were simply at a loss over what to do, starting to believe that education was not the answer, as one doctor in rural Potosi noted: "With only education, we can't have much of an impact. Every month, I weigh and measure and give nutrition talks, but families now know but don't have the tools to implement what they know..." In another Potosi municipality as well, a doctor noted:

We've had a few cases where children have been admitted (to the clinic), but they come back again. We explain to the parents how to do things, but their habits don't change. This one child walks around town dirty, without shoes. The mother's second child is the

same. Supervisors come at us from all sides saying ‘stunting’, ‘stunting’, that we have high rates of chronic malnutrition, but... we don’t know what to do.

Many mothers I spoke to could recite the vitamins in different vegetables, describe key nutrition practices or explain how to prepare certain micronutrients, but then admitted they often did not apply this knowledge. Some believed “doctors don’t understand our situation”, implying that what they are told to do makes little sense for their reality. They described how their children did not like the taste of certain micronutrients, that they lacked time or income and many other reasons. This is certainly no scientific sample, but confirms the existence of a knowledge-practice gap staff perceived. One pregnant woman I spoke to in a clinic waiting room also suggested that the authoritarian approach doctors use stops them from asking questions that could help clarify some of their fears and confusion about particular products:

Maybe we lack information. I didn’t know I had to ask for iron tablets for my first check-up. The pharmacy here was closed, so I bought it myself – it’s expensive. Health staff don’t tell you the risk, about the appropriate diet, etc. Sometimes you are afraid, so we prefer to not say anything. It seems like we bother the doctors and nurses when we ask questions.

Blame the mother for failing to change

All too often, staff who hit a brick wall, unable to change many mother’s practices or micronutrient consumption, blamed mothers for not choosing to change, not their own strategies. A view these staff shared was that families did not “value” their children or personal health as much as their farm animals. As one Health Network manager in Potosi cited, “Children are an externality, animals more important. If her child dies, the mother is happy. If her child lives, she’s also happy”. In rural Potosi too, a Bono doctor described how families were feeding Nutribebe to the pigs:

Many prioritize their animals. We tell them ‘you need to bring your child to the center when they’re sick’, but they’ll say ‘but my animals, who will take care of them?’ They’re focused on their livelihood; they live off of this. They say that they prefer their child to

die than their animals. With Nutribebe, we'll indicate that this is so that their child will grow, so they'll give it to their animals since they want their animals to be strong.

You can see a similar conclusion in the way a Head Nurse in a Potosi municipality explained why her municipality continued to have such high rates of chronic malnutrition. She suggests that communities do not ensure their own food security and squander handouts out of laziness:

We'll never achieve *zero* malnutrition. Community members don't place much importance on nutrition. They value their animals more. Most often, they come to the hospital when they're about to die. There isn't food production, but (the NGO) IPTK is building green houses, but communities don't take advantage of this. They're planting animal fodder instead. They prefer to die of hunger themselves. They migrate to the cities – they don't take advantage of their land. They have meat, grains, *pito de grano*, everything, but they sell it usually and buy carbohydrates – bread, noodles, etc. They're mal-accustomed. They wait until they're given handouts. Like seeds – when you stop giving them seeds, they don't buy more. The majority here have homes in the city – they also invest there. We explain about exclusive breastfeeding and prolonged breastfeeding, but they don't do it...Because people are illiterate, they can't remember numbers of plates of food or spoonfuls. If we write it on a piece of paper, they don't understand because they don't read.

A nurse in one of the rural posts in Potosi framed the issue as the caregivers not fulfilling their “responsibility” and blamed mothers for “always talking”, as if she were surprised that her lectures would not be captivating enough to keep them attentive:

What really draws my attention is that community members do not take much responsibility for their health. We make them aware of ZM, but we need to work harder at achieving the goal. We do talks but they don't value nutrition. Even when we offer them food, they don't begin to value nutrition. We do home visits, talks, so that they go to the centers to get their micronutrients, do their check-ups, but they don't think there are any benefits to going to the centers...Every month, I meet with mothers to weigh and measure children, and give educational talks. I always talk about the most prevalent illnesses, hygiene, pelvic exams, etc. But during my talks, they don't pay attention. They're always talking. I have to yell ‘listen to me!’ sometimes.

A common conclusion many of these staff drew was that change would only be possible if the program began educating school children about nutrition, because they saw adults as a lost cause. One UNI staffer in Potosi, for instance, described how

Families are very closed about their customs – you sometimes can't affect them. They think that what they know is good, what they've lived. Few of them have changed their customs since they were children. My objective is to change the children – you can still change them. We should start working with the schools – that's where we'll change habits and customs. It's more difficult with adults.

Particularly concerning was that many supervisors shared staff views about giving up on the adults. One administrator in SEDES Potosi, for instance, wondered “Maybe we'll only be able to accomplish change if we begin reaching youth and adolescents. When they're adults, sometimes you can't change them.” A departmental CODAN coordinator also agreed that “What we really need is a communication strategy that focuses on school kids because it's nearly impossible to change adult practices. This is the *gran lucha* (major battle) – to change practices.” A Health Network Manager in one Potosi municipality similarly expressed how “A child doesn't have a lot of value here – that's difficult to change. It's also difficult even to get people to wash their hands. Maybe material about health can be taught in the schools...” Finally, a Municipal Head Nurse from a municipality in Potosi discussed how:

In my 20 years of work in the health sector, I've only seen a 10 percent improvement. Out of every 10 people, only 1 really understands that more can be done to improve food security. It's hard to get them to demand these types of actions in POAs (municipal budgets). Few have a broader vision. That's why I think we need to start working with school children. They learn to change their habits and also remind parents.

Conclusion

The fact that a banking approach to nutrition promotion and prevention in Bolivia, yet again, contributed to a knowledge-action gap is not surprising. What is, is recognizing in this chapter that many circumstances of the job and characteristics of staff made it likely that they would use this approach by default, in part because they had so little guidance to carry out an ambiguous task, but even more so because they were simultaneously confused – and possibly socialized – by the many controls supervisors imposed upon them. While staff featured in this

chapter likely influenced some mothers through simple information transfer strategies, I argue how the single tune they played in their standardized messages was self-perpetuating, preventing them from realizing that it was usually them, not the mothers, who were the problem when their approach repeatedly failed.

Circumstances of the job

Lipsky (1980) suggests that staff attempts to find short-cuts for carrying out mandates is common among staff tasked with carrying out ambiguous policies under difficult working conditions. He described that staff can begin to approach program delivery using formulaic “rigid and unresponsive” patterns because of five working conditions, all of which were apparent in Bolivia: 1) chronic resource shortages (with equipment, micronutrients, staff), 2) an increase in demand to meet supply (particularly as the Bono program was launched), 3) organizational goals that are “ambiguous, vague or conflicting” (i.e. directions to do “promotion and prevention” with only the technical messages at hand, not the guidelines about how to do effective counseling, and messages to make multiple programs a priority) 4) performance that can be hard to measure (e.g., the *quality* of an interaction with a mother) and sometimes, but not always, 5) “nonvoluntary” clients. In combination, these working conditions, Lipsky suggests, pushes front-line staff to create short-cuts as they attempt to carry out their functions, which ultimately requires staff – for mere survival purposes – to distance themselves from clients and do the minimum they can get away with, as we saw with the counseling staff would do quickly and sometimes with sixty mothers at a time.

While this offers a plausible explanation of what was occurring in Bolivia, the ZM findings suggest that one more condition might be added to Lipsky’s list – not simply “ambiguous, vague or conflicting” goals, but too many. The sheer number of programs staff had

to manage, along with mounds of paperwork, forced many to simplify their approach to nutrition promotion. Part of Lipsky's argument also suggests that street-level bureaucrats make up their own rules because managers have not created clear rules for them to follow. In Bolivia, though, we saw that too many management controls may also force staff to decide which rules to pay attention to or encourage them to find other ways to simplify their tasks, like the banking model.

In fact, supervisors' multiple controls may have socialized staff to work in a rule-abiding bureaucratic environment, stifling and diminishing their skills until they only knew how to apply strategies with clear rules. Weber (1909/1944) described how people can become so dependent on procedures and the "supreme mastery of the bureaucratic way of life" that in the face of a more ambiguous task – like trying to *prevent* rather than cure – staff can "become nervous and cowardly if for one moment this order wavers, and helpless if they are torn away from their total incorporation in it" (127-128). So, in Bolivia, health staff, habituated to the hierarchical, medical model where they were the experts who transmitted scientific standards and procedures, may have been "helpless" when asked to carry out a job that was so undefined as "promotion".

In Chapter Three, Pressman and Wildavsky (1984) described a similar paradox ZM supervisors may have created with their constant call "show us the numbers". They noted how: "when implementation consists essentially of controlling discretion, the effect is to reduce reliance on knowledge and skill at the delivery level and increase reliance on abstract, standardized solutions." Such "narrow, planned environments", Scott (1998) also argues, can then "foster a less skilled less innovative, less resourceful population" (349). In ZM, reading off nutrition messages listed on AIEPI-Nut health cards conformed most neatly to the simple, consistent, clear rules medical staff were used to handing out.

Single tunes

Such cold and standardized nutrition messages are bound to influence only a few mothers, considering what we know about how little knowledge is retained through lectures. Clearly, somehow staff need support to develop a variety of other ways to get their message across. In Forester's (2012) profile of planner and community organizer Jim Diers, he quotes a passage where Diers talks about "there's a different call for every duck. So there's one for the mallards, and one for the ganders, and ones for the other ducks and the loons and the coots and everything. Too often as organizers, we're just sounding the loon call – and we wonder why only the loons show up to our meetings! And in fact, everybody'll come. We just need to find their call" (20). Although Diers is talking about getting residents involved in community change, the same idea can be applied to involving mothers in child care practices. Speaking and interacting with them in only one way may reach and influence some mothers, but others will need entirely different types of messages, messengers, and forums.

Most mothers will need staff to change their interactions more than their messages. Theories of communicative action (Forester 1989), help explain from the perspective of the mother why a doctor might have experienced the uncomfortable situation where, "the more we explain, the more they don't understand". What this doctor failed to notice was that the problem likely had little to do with *what* she was saying, and more to do with the *way* she was conveying the information. By speaking quickly, telling instead of asking, demanding rather than negotiating, a mother can easily perceive that the doctor is not sincere, lowering her trust and willingness to make the effort to "understand", no matter how factual – or even how relevant – the information might be for her.

Giving up on mothers

Ultimately, we must understand why some staff give up on mothers all together, and how this connects back to their understanding of the change process and the role they can play. Literature on social change processes and implementation suggests four, alternative explanations. First, Lipsky's (1980) notion of the interactions staff have with "nonvoluntary" clients may explain why so many staff blamed mothers for not changing. Nonvoluntary clients, Lipsky describes, are those who "cannot easily withdraw" from the relationship – clients who usually have little with which to bargain, giving staff little reason to maintain, or improve, the relationship. He explains that this – and not necessarily "moral superiority" – may be why medical staff in his own study would often "refer to patients as 'garbage', 'scum', 'liars', 'deadbeats', and so forth...labels that imply that the exit of the client is attributable to a defect of the client" (56). This is also akin to how Widalvsky (1973) described how decision-makers will often think "planning is good if it succeeds and society is bad if it fails" (151). In this case, nutrition education succeeded if mothers changed, but if they did not, staff assumed their methods were sound, but the mothers' choices were wrong.

On the other hand, community organizers might disagree with Lipsky here, and explain this as a morally superior reaction that emerges out of a "banking" model of social change. Freire (1970) explained that for change agents using a banking model, the "task is to 'fill the students with the contents of his narration -- contents which are detached from reality, disconnected from the totality that engendered them and could give them significance'" (58). In a banking model, Freire goes on to explain how "The oppressed are regarded as the pathology of the healthy society which must therefore adapt these "incompetent and lazy" folk to its own patterns by changing their mentality (61). Weber warned as well that a narrow trust in science – believing it

to be the highest form of “intellect” – is ultimately “unbrotherly”, making those with the science believe that they are morally superior, “The intellect, like all culture values, has created an aristocracy based on the possession of rational culture and independent of all personal ethical qualities of man. The aristocracy of intellect is hence an unbrotherly aristocracy. Worldly man has regarded this possession of culture as the highest good” (in Gerth and Mills, 1946: 355).

A third explanation for why so many health staff simply began to give up on changing adults might be explained by the fact that staff preferring to work in the curative model were handed a preventive model. Merrill and colleagues (1994) found that medical students in the United States who displayed a low tolerance for ambiguity were more likely to develop “an intensely negative explanatory style” towards groups of patients that were difficult to control through medical intervention (i.e. geriatric, alcoholic, chronic pain and hypochondriac). Using attribution theory, they argue that for these types of doctors, “motivation to react positively to a patient is a function of how much one expects to succeed in treating that patient”, so they either avoid working with such patients or perform poorly, ensuring failure. In Merrill et al’s (1994) study, doctors simply choose different career paths where they will encounter less ambiguity (surgery, radiology), but in the Bolivian case, doctors used to less ambiguous work – curing illnesses – have been thrust into more highly ambiguous preventive work without any choice.

Finally, Forester’s (1989) research on planning practitioners suggests that the difference between these staff – who became so cynical and hopeless – and those that express hope for change (as we see in Chapter Six) may center on the capacity to “listen” and not just “hear”. In his work, Forester finds that “a planner’s ability to listen is tied to his or her ability to hope...(to) probe for deeper interests, for still undisclosed but relevant information, for new ideas about possible strategies...” (110). In the process of listening, that is, practitioners can identify how

they might begin to chart out a strategy for change. So when mothers expressed to staff that they would rather their child die than their animals, if staff had really “listened”, they would not have taken her statement at face value, but seen it for what it conveyed about her hopes, fears, the violence she experiences, the daily struggle to find food, and more. “Let them die” may also have nothing to do with her child, and everything to do with showing the doctor or nurse that she is offended when they talk to her condescendingly. Therefore, if health staff actually saw behind these literal words, they might have seen other possibilities for action – beginning with the way they just spoke to the mother. As Forester contemplates:

Why do we so often fail to listen critically? Listening can make us vulnerable, while simply hearing provides distance. Listening is work, and other work may call. Hearing is less demanding, if also less rewarding. To listen requires care, while hearing requires the more passive receipt of literal information – and sometimes we just do not care... In listening we create a relationship, a sense of mutuality, a “we”, but in hearing, the flow of information is the only connection between sender and receiver (110).

Implications

Each of these explanations for giving up on mothers, and our understanding of what leads staff to use a banking model in the first place, have different implications for what policy planners might do to reverse this tendency. This analysis suggests that simply hiring more community-oriented staff might help, especially those inclined to carrying out a relational, dynamic, negotiated approach with mothers. But if we are not to give up on doctors, as they did on mothers, then more system-wide work would be needed, particularly at the level of mid-level policy actors who could play critical, facilitative roles, as shown in Chapter Four. Supervisors would be particularly critical for improving the training staff receive, and mediating collective thinking about the way health promotion can be carried out – to determine what those multiple “loon calls” might be. Staff also need to be encouraged to be more self-reflective about what else they communicate nonverbally when they counsel mothers, perhaps in the style of the Case

Study Reviews we saw in Chapter Four. One option not discussed in this study, which is used by a number of NGOs including the El Alto NGO, is to facilitate collective learning among mothers, particularly using the Positive Deviance approach¹⁶. Although not pointed out explicitly, staff gather mothers together, but as we saw with one doctor, often sixty at a time and almost always to offer a mass lecture.

Perhaps the best remedy for staff giving up on the mothers would be to support the staff in using health promotion approaches that actually work. Michie et al (2005) suggest that there are no less than 128 factors that can influence the behavior of healthcare professions even when they have good guidelines to follow. In Bolivia, guidance about how to do effective counseling would have been a good first step, but Michie's work suggests that much more than "clear guidelines" will be necessary to shift the way staff work with mothers. If they are not simply to blame the mothers for failed programs, programmatic support systems are needed to guide staff towards doing much more than convey information. Chapter Six suggests many promising practices that staff can use, and supervisors can facilitate, geared toward learning more about mothers, customizing and reflecting on the success and weakness of their strategies, and more.

¹⁶ See <http://www.positivedeviance.org/>

CHAPTER SIX: Negotiated service delivery

As ineffective as the overly simplified banking model was in Chapter Five, many circumstances of the job that staff faced made it likely they would use this approach by default. What was remarkable, then, were staff featured in this chapter who made their work far more complex than they were officially required to do, customizing their approaches to each mother's situation. What were the conditions that might have allowed them to think about and respond differently to the process of change they were being asked to facilitate with caregivers? If they were not simply telling mothers the scripted answers about what to do, what were they doing to convince mothers to change their nutrition practices?

Examples that help us answer these questions include a rural health center doctor and a UNI nutritionist in the rural municipality mentioned in Chapter Two where the Health Network Coordinator took many measures to buffer nutrition interventions from surrounding critics, and two rural municipalities where supervisors were largely absent, leaving front-line staff to work in relative isolation. In the city of Potosi, one health center also worked for a health network office that recognized front-line staff had significant discretion to define how they wanted to carry out the details of AIEPI-Nut. And in a fifth example, staff working in the El Alto NGO, featured in Chapter Four, were encouraged by their supervisors to develop "adaptive" approaches for carrying out ZM interventions using a community-based SAFCI model focused on home visits.

The degree of detail covered in these examples varies, but the actors featured used many similar tactics that collectively can be described as "negotiated", because their strategies, and the steps they took to arrive at solutions with each mother, looked similar to what negotiators do when they negotiate agreements (Lewicki, Saunders and Minton, 1999). The diverse approaches staff used to arrive at a point where they might negotiate a strategy with mothers reinforce and

add to our understanding about facilitating social change processes, including how ZM staff built trust, and other aspects John Forester suggested as important: informal spaces or “indirection” (2009, 185), humor (ibid, 155) and listening (1989).

Santolinas doctor and UNI staff

Betricia and Maria worked in the Chuquisaca municipality where the Health Network Coordinator was a strong ZM advocate. His efforts to protect nutrition interventions from the attacks of local health staff may have allowed them to develop more customized approaches to reducing malnutrition. However, because he was often disregarded by ZM authorities at higher levels – as was described in Chapter One – he could not buffer staff from the barrage of conflicting orders UNI staff received directly from the MOH, ZM and SEDES. The way UNI staff pushed back, refusing to comply fully, shows just how sure they were about what it took to facilitate a process of change.

First, Maria, a doctor located in a small post an hour outside of the capital of Santolinas, shared that the secret of her success with mothers was the trust she developed over time through humor and playfulness. She described always being on-call, always responsive, transmitting her commitment to the broader community. When she explained that she never “demands things of them” and never says “you have to...” because “our friendship is more important”, she was implying that an imposing attitude would prevent those moments when “women (come to her because they) know who to call” when they want advice, and open up about their lives, giving her a chance to begin the process of changing their nutrition practices, as she described:

Almost everyone knows me. We talk as if we’re family, less as if we’re health staff. In one community, I served the food that we cooked – they laughed. They said, ‘your our mother’. We’re more like friends – we laugh, play together. Sometimes we play soccer. We live together. I don’t demand things of them – I don’t say, ‘you have to eat this, do this!’. Our friendship is more important. Unfortunately in these health centers we don’t have a schedule. We work on the weekends, on holidays, in the middle of the night.

Aside from going to the countryside there can be emergencies, deliveries in the middle of the night. But, I'm content because my women know who to call. We laugh, play, and sometimes they'll take me in their confidence to tell me something about their life – we're here to give them advice. They're very pleasant experiences and satisfying for me.

During the longer visit I had with Betricia, in the municipal UNI, she noted that she did not speak Quechua, a fact many other doctors would have assumed would become a barrier for her. As her story unfolded, however, it was clear that the manner she conveyed, the time she took to listen, and her ability to empathize conveyed more to mothers about how much she cared than she might have been able to using more precise language:

I love what I do. I don't speak Quechua well, but when mothers come back, it's a success and I can see that I had an influence... I put myself in the shoes of a patient. Like it or not, it's because of them that I have this job. I view every baby as if he were mine; when it hurts, we cry... When you go to the rural area and see so much inequality, you say 'wow, how can that be?' What if I had been a mother here, in the rural area, dirty, without clothing, sick, what if all this had fallen on me? So I ask myself, 'What can I do to improve this situation?', because I see my son there, not able to write.

The level of compassion and dedication Betricia showed families reflected the way she saw effective public health care delivery as focusing on “trust”, “human capital”, “psychological” aspects and “social relations”. She also recognized that “you have much more impact with kindness” and that affecting one person can have a “chain reaction” for social change throughout a community:

Sometimes we move forward with our protocols that we need to follow and we forget about human capital – about the quality and holistic aspect of our interactions – rather than just focusing on pathologies. We have to win a mother's trust, so that she comes to me, and I can have an influence on her. The social and psychological part of this work is key. A lot of the time, health staff judge mothers and afterwards, the mother says, “I'm not going to go anymore, because they criticize me”. You have much more impact with kindness. And the interaction you have with the mother affects the entire family, and from there, the community – it's a chain reaction.

When Betricia talked with mothers, I noticed how she “takes time”, “adjusts” strategies, finds different wording, and most of all, respects mothers and negotiates with them even when

they push back. In the following account, Betricia does not tell but instead “suggests”, asks a mother to “try” a certain action and asks “how could *we* do this?”. This last question in particular frames the problem as if the responsibility for improving the mother’s child is shared. These types of open questions and suggestions of *possible* solutions, rather than hard and fast answers, also convey to the mother that Betricia does not have all the power and answers, and that the mother has knowledge she can contribute to the evolving process of learning what works better where and how.

Social relations are key. We explain, take time talking with mothers until they understand clearly. We’ve tried to adjust strategies to our reality. For example, mothers told us “I don’t want the iron syrup”. I respect what the mother says, so I suggest other things. “Perfect, great that you gave them this and that, but maybe you can do a test for just a week and see?”. When I ask them, “How many spoonfuls does your baby eat?”, they’ll often say “I don’t count how many”. So I respond, “Ah, yeah, ok, well now, try counting”. You have to change your vocabulary so that they understand you. He eats “a little” says the mother. “Oh good, good that he eats all the time, so every day that passes, you’ll give him a little more...from 11 spoonfuls, two more in two days, until he’s eating 15. With this, his stomach will grow, the food will enter”. You use vocabulary so that they understand we want to fatten up the baby. And we don’t force iron syrup on them, or whatever we want them to take. We want to serve the community – so we have to accept what they say and say “How could we do this?, let’s do this!, try this?”

Another aspect that makes Betricia stand out is the critical importance she places on maintaining the relationships she forms with mothers. She is selectively choosing which health staff she sends mothers to when she makes referrals. She also stays long past her working hours to talk with mothers whose children are now healthy, who typically would not need to see her, knowing that taking time to say “hi”, to talk about their lives, and to praise their efforts can leave a lasting impression on them – implying that they may spread the word about Betricia to other mothers or they may seek her out especially if their child begins to falter:

Other health staff don’t want to see their faces. I only send them to health staff who won’t lose the trust I’ve gained. And other health staff send mothers to me because they say “they like it when you say hi to them”. With a smile – “how great that you’ve maintained

his weight”, I’ll say. We stay until 8p.m. sometimes talking with them. The idea that a professional has listened to them – wow!

Finally, Betricia is remarkable as well because she pushed back against MOH and SEDES supervisors when she believed she was being subjected to their thoughtless and uncoordinated planning. She felt that sudden orders to participate in and organize workshops disrespected her as a professional, treating her as if she were a “puppet” and in the process, undermining her ability to make any progress implementing ZM. Ultimately she took the “power struggle” between the MOH and SEDES, as she saw it, as an opportunity to decide “to work with both, in our own way”, based on what she knew would be best for continuing the process of change in her municipality:

Everything is a chain reaction. I think that the major problem we face is the power struggle between SEDES and the MOH. We’re in the middle. So you have to say, I’m going to pay attention neither to SEDES nor the MOH. I’m going to do what I know I need to do... I’m not trying to go against SEDES or the MOH, because I’m part of SEDES. I’ll give you an example. Yesterday, Marcelo said to me, ‘Why didn’t the UNI participate in the workshop yesterday?’ You have to understand how to manage things! You can’t send a workshop announcement and say ‘you have to train 10 people’ and not include the names of other people who supposedly need to be at the workshop. That’s why we planned other activities during these dates (because the UNI wasn’t on the list). Even though they’re from SEDES or the MOH, sometimes you have to tell them, ‘Wait a minute, I’m not anyone’s puppet’. Right? Why are you pulling me from one side to another? I owe it to an institution to give them what they want, but what happens to my identity as a professional, or as a person, as Betricia? They can’t just manipulate us as they want. They can’t just say, ‘you’re going to do this, you’re going to do as I say because I’m the Ministry’. No. So, sometimes it’s preferable to say, ‘I’m going to do things in my own way, on my schedule, based on what my responsibilities are’.

Supposedly they sent us the letter July 15 for a workshop to be held August 1st to the 3rd, but we got it with only five days notice. So, when do they expect us to organize people? We already had another workshop planned for Saturday (two days before the August 1st workshop). We have funds to carry out activities during certain dates. And right now, it’s harvest season. If hardly anyone came yesterday for a workshop that we organized a month in advance, how will they come in one week? Maybe if (the national and departmental offices) did annual planning they could say, ‘UNIs, we’re going to come in September with this training’, so we could put it in our calendars. Because we’re not just waiting around until they come to train us. ... We’re happy to receive more trainings, but we need to know about them with plenty of notice.

I think the problem is this power struggle between the MOH and SEDES. The MOH will tell me I have to do something, and then SEDES will say that I have to do what they say – the MOH on one side, SEDES on the other. So we prefer to work with both, but in our own way. If they pass me a memorandum, I won't do it if I don't have time. When they plan activities here and there, how will we finish our work or do it well? ... You end up with nothing – you see no results, no impact. That's what it is for me – this power struggle. (There's a sense that) you owe me because I'm from SEDES Chuquisaca... and when the MOH comes, (they say) 'This is a *national* instruction, from headquarters'. Pucha – I wish they'd go somewhere else because they don't let us work in peace!

Last year the Ct-CONAN also wanted to do a study. I said no, that the other UNI staffer could do it if he wanted, because I had my schedule. They do activities when they want. Before, the MOH didn't care. They'd come whenever they wanted. ... They care more about activities. 'Have they done the activity?' they ask. 'Oh good, here's your salary'. But it doesn't matter to them if anything results in the community.

Friday there's an UNI meeting, but I have a SVIN-C workshop I'm leading Saturday and Thursday a CAI in Presto. We have to look at all this – will it just be another waste of time? They told us about the UNI workshop July 13th, but we had already sent out our invitations to communities a month prior, and we had already postponed that workshop twice before.

When Betricia ends her comments, asking “we have to look at all this – will it just be another waste of time?”, she is using her local knowledge to decide whether these many workshops will be useful or not for the process of change she is facilitating, placing more importance on her delicately built trust in the community above the importance of capitulating to SEDES and MOH demands. Her concern about the conflicting dates and having to postpone a community-based workshop yet again, is not about simple scheduling questions, but about making and keeping promises in the community and respecting their time to maintain her future credibility. Her ultimate wish that higher-level supervisors would just let her “work in peace” also conveys that she knows much more about what it actually means to do the detailed work of creating change.

Belini UNI

The case of the Belini UNI suggests that the same personalized, relational approach that Betricia developed can also emerge in cases where staff are not supported actively by a mid-level

champion, and also in cases where staff have not been in their position for long. Cecilia and Julia described how the work they developed was self-led. They had little help from their Health Network Coordinator who would sign their reports but offer little guidance about how to carry out their work. They also expressed “There’s so much weakness with the MOH and SEDES”! Julia shared that when she began her job, she asked for SEDES guidelines, but heard nothing and was told to carry out her work without training, only to receive the training after the fact:

In every place, any job, supervisors give us indicators (goals) that we need to accomplish. So when I started here, I went to SEDES and asked for indicators in February. They said ‘we’ll send them to you’. We’re now in August and they haven’t sent me them. ... (Later) they said ‘do’ the SVIN-C survey. So we just finished doing a survey and *now* they train us! In what way are we ‘prioritizing’ the priority municipalities? They’re forgetting us.”

Neither Cecilia nor Julia received formal UNI training during their first ten months. Like many UNIs, they described working with communities that “think mostly about pathologies” and with municipal government authorities who were not fully supportive and involved in making nutrition a part of their discourse and priorities. They also faced tension with their own health colleagues in the hospital, who expected them to take their turn doing 24-hour shifts while handing them “everything that has to do with nutrition. They’ll say we weren’t here to take a child referred to us, sometimes speak badly about us... when I visit communities, I have to go as a nurse and as part of the UNI”.

Despite all this, Cecilia and her partner Julia were remarkably committed to the communities they served and to the task of reducing malnutrition. Cecilia explained how at one point, “In May, SEDES told me that I should leave, that my contract had ended (after starting the job in March). But I stayed, because I had so many activities. I stayed voluntarily for a month and a half without salary.” Keeping commitments, in fact, was a key part of the strategy Cecilia and her partner used to build and maintain their credibility in communities, noting: “What we

promise, we complete. They stop believing you if you don't keep your promise." This credibility was so important to them, when I was visiting, they had just refused to attend a SEDES-led UNI "evaluation" meeting. To SEDES, this refusal made these staff "rebellious", when the act in fact showed their dedication – and their savviness about what was key for carrying out this type of work. Not keeping promises to their communities was more important to them than not obeying SEDES orders. Like Betricia in Santolinas, they, too, noted that the meeting had been called at the last minute: "SEDES called us to an UNI evaluation last week, but we didn't go. We had already programmed other communities in advance...It must have been interesting, but we got the invitation the same day of the meeting!"

To determine how to do their work, Cecilia and Julia read the UNI manual, deciding to focus on nutrition promotion, which they believed UNIs and other health staff were doing too little of – or at least, not well: "I see that we're forgetting about promotion – sure, we should do follow-up, weigh and measure, perfect. But what about promotion?" They approached this task spending most of their month personally attending 17 to 20 of the community weighing and measuring sessions. They were most proud about a unique event they had designed to simultaneously – but indirectly – monitor other health staff nutrition promotion efforts, reinforce nutrition knowledge among mothers, raise the visibility of nutrition topics in communities, and strengthen relationships among communities and staff:

We're doing encounters (using funds from an NGO, the municipal Child Protection Office and the UNI budget). The idea is to improve friendships between communities. We'd like to do these with other UNIs and municipalities in the Health Network too. The event is like a fair – we ask mothers about what they know, to see what mistakes they may make or where their knowledge is weak. We focus on breastfeeding, complementary food, nutrition during pregnancy, school-age nutrition, nutrition for the elderly, micronutrients, etc. We have them prepare foods... We treat it like a joke (a game). We want to see how health staff from their clinics have been building (people's) capacity. First, we choose two or three health centers from similar types of communities. We've done it twice with three different centers, and in a week, we'll do it with four

communities. Then, we coordinate with health staff to select one mother to represent each community. During the event, we ask about their nutrition practices. They show the typical food they prepare. We look for creative and dynamic games to ask them questions in the form of a competition, with small prizes, but which are distributed among everyone. They really have fun. They eat. And we reinforce (help) their answers if they don't answer well. We have this one game where we tell them to go "fishing", but they don't know that the more they "fish" the more questions they have to answer! We also do a dancing competition. (All of these activities are so) that they forget about their animals, their houses, their chores, etc. We also play sports. Health staff also play. We want to increase the trust between staff and families. They call us by our first names too, to increase our friendship. During these events, job titles don't exist. For me, these events are huge!

We see in this "fair"- like event a number of strategies Cecilia and Julia think work to facilitate the process of improving community-based nutrition. When they note that "we treat it like a joke" they do not mean that they literally treat malnutrition as a laughing matter, but are trying to make the process of learning about nutrition fun, taking the pressure off mothers who may not want to admit their ignorance. They do this, too, when they help mothers with answers they stumble on. Not using job titles is another technique that de-formalizes the relationship between mothers and health staff, again helping mothers feel more at ease, not under the watchful gaze of an expert who has all the answers. During these events, mothers are not simply telling and showing health staff what they know, but other mothers as well, while also learning new strategies from their own peers. While there is an element of competition involved, it is a playful competition, in which everyone gets prizes. These games, the food, and the sharing also convey a message that nutrition does not have to be a serious topic, but something that can be enjoyable to think and learn about. Finally, the way Cecilia and Betricia involve other health staff in this event, asking them to nominate a mother to "represent" their health center, helps them see which health care centers might need to improve their nutrition promotion activities. Health center staff involved in the event can also personally witness how "their" mother compares to those representing nearby health centers. The fact that the event also brings together

nearby centers conveys a message that if health center staff in one center can improve mothers' practices than so can others in similar geographic, cultural and demographic parts of the municipality.

Like in Santolinas, Julia and Cecilia also explained that not knowing Quechua in this highly-Quechua speaking region was not an impediment, because they could communicate much more through their expressions, using their hands, laughing and other strategies to build a mother's trust. As they noted, approaching a mother "coldly" stops them from building a connection with a mother: "it matters *how* you talk to mothers", demonstrating to them that we know the reality they face in trying to maintain their child's health:

If a child has an illness or is malnourished, we talk calmly to mothers. I don't speak Quechua, but I don't think it's a barrier to win their trust. A lot depends on your expression, how you use your hands, etc. We try to speak a little Quechua – a few words in health and nutrition – and they laugh. But we use key words and turn to health staff who understand Quechua well during workshops. The government says "here in Bolivia, you have to speak two languages". But we haven't seen this as a barrier. We laugh with mothers. We explain things and they understand... How we act depends on the characteristics of the activity you need to carry out. The 'encounters' we described are places where mothers already know us, and we make it fun. But if health staff with a bad temperament approach a mother coldly, you can't make the connection or get close to her. Many staff do their activity (weigh, measure, etc.) and go. It matters how you talk to mothers. You have to tell them, 'I've also lived in the campo (countryside), I also ate this, I also raised my child like this. That way, mothers start to feel like you're family.

Cantamporo health center nurse

In the Potosi municipality Cantamporo, Marta had served in her health post for more than seven years, but like the Belini UNI, her relative isolation seemed to allow her to develop an approach that differed markedly from the imposing banking model we saw in Chapter Five. She was literally isolated, working out of a remote rural post nearly three hours from the municipal capital, and eight hours from the departmental SEDES. Throughout our talk she described how health supervisors rarely visited or cared to know much about the details of her work as long as

she sent in her “numbers”. This sense that staff in this municipality were left to their own devices was also apparent in the UNI, where the nutritionist described how the numbers behind the Estrella Kiviat evaluations were often meaningless for informing their strategies on the ground, leaving them to do “work based on our own criteria...and in our own ways”, as he explained:

We work based on our own criteria. There’s no instrument to help us develop our work or measure what we do, like the number of talks we give. The Estrella Kiviat is filled out by looking over our ‘libros de acta’ (official notes), not on interviews with us, or observations. It’s very general. We don’t send SEDES any monthly reports. We don’t have a job manual, no instruments that tell us how many talks we should do or strategies we could try. We do all this in our own ways.

Marta started describing how she approached her work by explaining that doing community-level public health and malnutrition prevention first requires that you “listen” and “start from what they know”, to help communities take ownership over their actions.

You have to start from what they know, about health, etc. Normally, those who design programs don’t go to the field. They don’t see what people already know, and what people want to do. If they were to do that, the people would say, “this was our idea”. ZM says that we shouldn’t have malnutrition, but the reality is to go to these places and listen... There are many factors, like illnesses. It’s not always about food consumption. Here, water isn’t potable – bacteria makes people sick. There’s more malnutrition after children turn six months, when they start to eat solid foods. Food is a factor though – they don’t have vegetables...

When Marta started the idea of a communal cooking event, she did not wait to find an NGO or the municipal government to provide the food, but asked mothers to each bring a small contribution, explaining to them that she personally had too little salary to provide the food. This decision set up a scenario where mothers could begin to see that action was still possible even with few resources, and that making a change would largely depend on them getting involved, not simply waiting for the expert to provide the answers or external resources. Her explanation about her salary also humanized her, and expressed that she wanted to be transparent about her work. This was true too about the way she respectfully responded to their accusations that she

was making a profit off every child weighed, likely realizing that she had to reverse a legacy of disrespectful health staff that left lasting suspicions in these communities. She explained:

I started with a women's club and took the initiative to start weighing and measuring children on my own, before ZM started doing it. We did an 'olla comun' (translated as 'common cooking pot' where mothers all contribute a food item) to teach about local products. They asked me to contribute the food, but I told them I don't get much of a salary. We plan to make a different dish each month. In each community, we have a fixed date. Between the 8th and the 18th, of each month, I go to a different community every day... Mothers would say I was getting more money for every child I weighed. I explained that I earn the same, weighing or not, and what they lose by not weighing their children is their children's health. They started understanding. Now, they bring me their children if I can't make it to their meetings...

Many of the activities Marta led also lay outside her official functions, largely based on the interests of mothers and many of which had no direct link to health, but made mothers "feel more independent". Some ideas, like the green houses they tried to build with old Nutribebe plastic bags sounded like a failure, but the importance of this action is that she continually responded to mother's ideas, showing them that the process of coming up with solutions takes continual, creative experimentation.

Before becoming a nurse, I was a teacher for six years. I like going out to communities, to explore the countryside. First, I started teaching mothers how to read and write. I gave them incentives, bought them notebooks with my own money. During the monthly meetings, first we'd do their homework. We used stones, the ground like a blackboard. All my mothers can now write, at least sign their names, and some can count. We also knit together. We make socks, sweaters, for their children, for themselves. They saw my daughter with her sweaters and they wanted to learn. Now, their children have hats and other things. It makes the mothers feel more independent. We also tried building green houses, which was an idea that came from the mother's groups, but we don't have seeds. We tried to build them 1-meter squares using used Nutribebe bags for plastic. Later, an NGO helped us build others.

Marta was especially proud that her relationships with mothers had reached a point that they "joke around" with her. She became quite frustrated that her "sacrifice" was rarely noted by supervisors or her colleagues, but it was also clear that what kept her motivated was the affection of mothers and other community members.

When mothers meet with me, they joke around with me. But when I arrived in 2004, it wasn't like that – it's a long process to win their trust. But they don't see it that way at higher levels; that it takes time. I put in so much effort, I sacrifice a lot, yet they criticize. But, what interests me most is that my mothers are happy and learn... But mothers thank me, with their harvest, etc. I'm happy. They don't forget about me. The doctor (at the health center) is even jealous and tries to win the affection of the community.

Marta also discussed her compassion for health promoters, realizing this is difficult work without pay. She notes the importance of congratulating them, gathering their ideas, respecting when they cannot work and “giving” them responsibility. She also uses competition to challenge them, but in a playful way. And when she describes the outcome of their work, she talks not about how promoters increased coverage rates but about how she “gained their affection” and the discretion and capacity they have to manage growth promotion days when she cannot attend, or to come up with new ideas.

You have to recognize what promoters do, understand that they don't get salaries, that sometimes they won't be able to work, gather their ideas, congratulate them. That's why I've gained their affection. They'll make up the list of mothers and children (who attend the growth promotion day) without my asking them to do it. I give them that responsibility. They know how to measure, etc. Right now I'm telling them that they're in a competition, to see who can do the most home visits or send me more children. I emphasize who won and say “he did this, and this, and this – who did more?!” They'll say, “I'll win next time!”. It's motivating. If we don't motivate them, if we don't push them, they'll do nothing.

With no budget, she found other ways to offer promoters incentives, again, moving outside her “official” responsibilities and possibly even violating health policies to build health promoter skills.

Before ZM or SAFCI, we already had health promoters and “women leaders” who are part of the mother's groups. Mothers also know how to weigh and measure children. They can do it alone, and they do it when I can't go. They bring me the names of children I need to vaccinate... Being a health promoter is a sacrifice. They can't work when they do this. Without a budget, I've offered them workshops like AIEPI where I teach them to treat diarrhea, give injections, etc. Maybe it's not “correct”, approved by supervisors, but they wanted to learn how to give injections. It makes them feel important... I give them books, tell them that they'll be like the “community doctor”. We also have a box of medicines I give them. The mobile pharmacy isn't paid for by the SUMI (national health

insurance); we're just using our own money to start a rotating fund. It includes things like headache medicine, things to treat diarrhea, etc. Families buy the medicines. We also use SUMI money ... (for) medicines they had to use for emergencies, or Nutribebe and micronutrients...

The "home visit plans" that promoters devised could have included shaming tactics that other health staff used with mothers, but the ratings they decided to use went only as low as "average", so that they would act more as an incentive rather than a chastisement. Results were also analyzed *with* mothers, as a tool to dialogue about home-based hygiene practices.

We've (also) come up with a home visit plan – we analyze the cleanliness of the home. It was the idea of the promoters, to improve hygiene and reduce illnesses. We look at the patio, kitchen, bedrooms... see if they wash plates, etc. We classify the house as average, good, very good and then we analyze the results with mothers. And we have incentives – congratulate them if they have 'good' ratings which makes them feel good.

Notice as well that Marta discussed how she was flexible about the various ways health promoters and mothers devised to distribute Nutribebe, letting them determine the arrangements that made sense for each individual situation, rather than trying to come up with a single approach, which would likely have made her own logistics easier. Again, she noted that respecting promoters' discretion is key, knowing that "they won't do something if you give them an order".

In another community – Mantay – we have a different way of organizing. This was the idea of mothers there. They rotate turns between five mothers who distribute Nutribebe. They come to the center to get the Nutribebe for their monthly meeting. That way, the health promoters don't get tired, because they rotate the responsibility. In other communities, either the local health authority (ALS), health promoter (RPS) or I take the Nutribebe. These decisions are based on the initiative of the promoters. "You have the authority, you know" I tell them. "If we wait to do things until someone pays you, we'll die!", I told them at the beginning that paying them wouldn't be possible. They won't do something if you give them an order – they have to feel important.

Finally, one additional difference between Marta and other health staff was her reaction to local health authorities (ALS). While the growing power of these authorities under SAFCI threatened many health staff, Marta invited them to "check up on me", calmly explaining why

she may not have made a meeting. She knew her work was sound, her relationships strong, and so the work of ALS in her mind was positive, showing communities were committed to ensuring they got good health care:

The local health authorities (ALS) monitor the participation of health promoters, mothers, health staff (in different meetings, at the center). ALS will come to the center to check on me. I'm not afraid – let them check up on me! Sometimes when I can't go to a monthly meeting in a community they'll come to confirm what happened. I explain that I had an emergency and they understand.

Finally, Marta ended her interview saying “With what we have, we try to be as creative as possible. Everything is possible.” By this, she did not mean that everything she did was easy or that she had resolved all nutrition problems in the communities where she worked. She was expressing, however, that she had accomplished much during her time in Cantamporo that many of her colleagues often believed was impossible, especially through inventive, collective work with health promoters and mothers in ways that repeatedly generated new ideas for rethinking ways of addressing old problems.

Plan Seis Health Center

In the city of Potosi, some of the unique ideas the Plan Seis health center attempted to put in place for reaching mothers seemed to stem from a common belief among the staff that there was an unspoken freedom to decide how to carry out their work. One Bono doctor at the center, for instance, believed all health staff had the opportunity to innovate, but simply needed the motivation: “National policies and interventions allow for local adjustment and adaptation. The issue is local staff taking the initiative. Supervisors can provide you with everything, but (it doesn't matter) if you aren't interested in working.” The potential for this discretion may have been conveyed by the Health Network office, where an administrator admitted, “AIEPI-Nut policy says that staff ‘have to do it’...(and) we have to require that staff follow national policies

through memorandums we send, official notes, etc., but the reality is we don't know what they're doing to change habits.”

Staff at the Plan Seis health center began the process of changing nutrition habits by going out into their surrounding neighborhood. For the Bono doctor, this had an important effect, quickly humbling her and influencing how she began to work with mothers to change their practices, in a more “tolerant” and compassionate manner:

We have to put ourselves in their place – and see how they live, by being in contact with them and visiting them. I now can't be as demanding as I used to be because I realize how they're living – like with washing their hands, etc. We have to be more tolerant. With the Bono, for instance, we're fine if they do their controls back in their rural community, as long as they've kept them up....but even if they're off a bit in terms of timing. I'm more in solidarity with them now. Largely, my relationship with families has been influenced thanks to the work of the social worker – she speaks fluent Quechua, which is key, and she maintains close contact with the families.

In addition to the regular home visits, staff tried additional ways to reduce social barriers with the neighborhoods they served to increase trust. The Bono doctor described how they formed a board made up of mothers who decided how to socialize, supporting spaces where they “talk about other things” unrelated to health and to build mothers financial independence:

Last Christmas, the social worker got some money to bring in a clown, food and gifts for mothers – washing tubs. The mothers were so excited. It's things like this, to try and improve our relations with them, to create a space to talk about other things and to make them feel comfortable that increase trust. This week, before the (miners') strike happened, we were going to hold an event for mothers to teach them how to make cakes for them to sell – an activity that would increase their independence.

El Alto NGO project

Finally, one additional example focuses on the NGO project in El Alto. In this case, the flexibility and discretion staff had was clearly due to the buffer the NGO affiliation created, with different sources of (stable) funding, different accountability and learning systems, and more supportive supervisor-staff relations, as was described in Chapter Four. However, this project is

still instructive, for three reasons. First, the project was following ZM policies associated with AIEPI-Nut and micronutrient distribution. The NGO was simply introducing new components to add specificity to the “prevention and promotion” aspects of ZM interventions, out of a recognition that health staff still had very little, practical guidance about these aspects of their work. Second, the approach the NGO applied was specifically designed to develop a model for reducing chronic malnutrition that they hoped to replicate in public health center. Their strategies always kept in mind the practicality of what they were doing for the public sector context, and involved constant discussions with other health staff and managers in the health center out of which they operated. By the end of the project, trainings were held with a wider group of mid-level managers, as well as meetings with SEDES and national ZM administrators to discuss the feasibility of replicating their approach. Third, many of the field-based interactions that front-line staff developed mimic the approaches of UNI staff, nurses and doctors featured earlier, suggesting that the approaches the NGO staff used are possible in the public sector, and therefore useful to learn about in more detail. The following offers a more detailed account of the project design, the specific strategies field staff developed, and an analysis that suggests the difference this approach made, compared to a more rational approach, to bring about staff understanding of the causes of malnutrition and possibilities for action.

Project design

The NGO’s principle strategy revolved around continual home visits, where staff would regularly measure children’s growth and weight and do their counseling. The approach was based on principles and theories the MOH was promoting with its new *Family Community and Intercultural Health* (SAFCI) model and the experience the NGO had accumulated over two decades implementing public health programs and health centers, often under contract with the

Ministry of Health. Two full-time supervisors managed the program, while six field staff (4 auxiliary nurses and 2 licensed nurses) were each assigned to two or three of the 15 neighborhoods encompassing the health center where they worked, which included 9,460 residents.

Staff in the NGO explained that the ZM-SAFCI project was critical for pushing their thinking about a preventive focus. They described how their earlier approach was similar to how most MOH staff implement nutrition interventions: making decisions about nutrition counseling or rehabilitation based principally on a child's weight, height, age, and illnesses. They also attempted to tend to all families and nutrition promotion topics equally. What sparked some of the ideas in this new project was a realization among staff that knowing a child's growth measurements or even a mother's nutrition knowledge did not explain sufficiently what might be influencing a caregiver's ability to improve their child's nutrition – the 'risk factors' each family faced. They also saw that a blanket instruction covering all nutrition promotion practices overwhelmed mothers, and that "field staff were only talking and not facilitating a change in practice."

This project explicitly tried to move away from a curative focus to preventing children from becoming malnourished in the first place, working alongside community members and families to identify the most preventable issues. The SAFCI-ZM project used a Positive Deviance¹⁷ approach in group cooking classes, prioritizing families in need of the most urgent attention, and customizing solutions for each family. As one field staffer described, "Before, we would define A – areas where we could make significant changes, B – issues we could not

¹⁷ This approach identifies caregivers in the neighborhood who have healthy children, and encourages them to discuss their practices during group cooking classes so that caregivers in similar economic and social circumstances can learn how to improve their children's nutrition directly from their peers. See the following website for a description of the Positive Deviance theory and how it is applied to a range of different problem solving efforts, but primarily in health: <http://www.positivedeviance.org/>

resolve, etc. Now the process reinforces much more that families are incredibly distinct. Our earlier model told you generally what the problem was, but it said nothing about customs”. They also summarized their new approach today as, “prospective – not reactive in the moment”, because of their constant reflection about a family’s social indicators and their attempt to do something about the key factors that could potentially cause a child to become malnourished (described more in Chapter Four).

Nutrition promotion strategies

The type of health promotion that staff did in this NGO , rarely relied on the lectures, one-way information transfers or coercion that staff used who subscribed to a banking model. They used a range of strategies, always looking for “alternatives” if one strategy did not work. The more detailed account below describes how their practical, day-to-day strategies revolved around a) the critical importance of gaining family members’ trust, b) approaching the task by working alongside families to prevent malnutrition, through “co-responsibility”, negotiating solutions and finding many answers in what families already do, c) strategically creating “alliances” among several family members, and d) thinking of metaphors and examples families could understand. Ultimately, one manager noted that staff carrying out this more relational approach required a deep conviction that would keep them going;, to not see this work as “a job, a routine”, but a true process of change that could open them to understand the difficult realities families face:

it can't just become a job, a routine, staff *must* be committed one hundred percent, like missionaries, to have the energy to fight for families and to bear the burden that they'll feel as they begin to learn about the realities these families face...people's values have to fit the job...and you need this energy because if after 20 families of rejection you aren't ready to get to the 21st, you won't be able to do this work.

Gaining Trust

Above all, health staff described that the most important part of their work involved trust. Among local authorities, staff built this trust by “respecting authorities and boosting them a little higher than others” or “always mentioning the name of authorities so that their work is valued”. They *consistently* attended neighborhood meetings to show commitment to and respect for local organizations, to the point that one staffer said local leaders began to think she lived in the neighborhood. They gained the trust of families by “being kind”, being a part of the community, visiting often, responding to their needs, showing respect, and putting themselves in families’ shoes. First impressions were key and required staff to think fast on their feet from the “first moment you meet someone” to begin to establish a family’s trust, and not be judgmental about what they encountered behind the door of a new home. As one staffer described, to “make a more exact and better diagnosis”, they first required this level of trust, because “kindness and charm...helps people open up” about their lives, giving staff more useful information to craft a plan of action:

When you visit a family, you’re challenging yourself. You don’t know what kind of people you’re going to encounter. There are well-educated people, others without any knowledge, good people, bad ones, etc. You have to be prepared. You can very easily change people’s attitudes, but you have to be committed.

Ultimately, this relationship can be so strong that one family wants one of the NGO field staff to become a godparent. Another field staffer described that, “We feel like part of their family and they feel the same about me. I’ve made a friend that feels like a brother because of this work. When I run into people I worked with before, they greet me warmly. This also motivates me”.

Co-responsibility, Negotiation, and Finding Answers in What They Do

Staff in this NGO rarely used words like “telling” or “teaching” when describing interactions with families, but instead used phrases like “learning, analyzing, asking, listening, (and) evaluating with them”. They approached families with a sense of “co-responsibility” – assuring a family that they were not alone in trying to think of different options for improving or maintaining their child’s nutrition. As one staffer explained, she would say to a mother “If you could try this, *we* can see what results it brings *us*.” Choosing to say “if you could *try*” suggests a negotiated approach, where staff are not telling, but suggesting, seeing what might be possible, and coming to an agreement with the mother about an action she could attempt.

Most staff also talked about “working from what they know”, based on a family’s existing knowledge and actions, and listening for possible solutions in a mothers’ response: “More than anything, you have to listen. Based on what they tell you, you can push them, taking up again what they told you. Sometimes they also give you the responses (of what to do to improve a child’s nutrition). If we don’t let them talk, we don’t know. You can reinforce what they are already doing.” Other staffers also noted how, “You can’t underestimate their knowledge, practices, capacities. Each one is its own world. You have to learn from them”.

This idea, of needing to “learn from them” does not refer to staff incompetence – that they do not know the many scientific reasons for malnutrition or evidence-based solutions available. It refers to the importance of learning about a family’s “world”, so that a strategy can be customized to fit their particular resources, priorities, skills, daily struggles, ideas, and practices they already do that could be encouraged further. As one staffer explained:

Creating a dialogue of knowledge means constructing *with* the family, based on their knowledge, which practices *they* think are effective and why *they* think their child is or is not well nourished. If the child is well, we congratulate them. If not, we describe what other mothers do, mothers like them, living under the same

conditions. We don't say what we think – as technical staff. We ask: 'Do you think it would be possible to put this idea into practice?' We then see if they agree. Some respond quickly. Others are slower to respond. If they don't respond, we have a responsibility to them, we're obligated to do another diagnosis, to see where we made a mistake. We try to offer them an alternative, solutions that aren't always part of the protocol, like how to generate income. Focusing on these other issues also helps to build trust – they accept you more easily.

Even when mother at first resisted help or rejected staff, this commitment to co-responsibility and looking behind a mother's answers meant that the staff persisted, understanding that "when a mother isn't committed to working with us to ensure her child doesn't become malnourished, it's usually because she has other problems – no husband, in a constant state of violence, etc." This understanding – that something other than mere knowledge is often behind a mother's seemingly irrational behavior to allow her child to become malnourished – motivates NGO staff to be patient, re-evaluate the situation and look for alternatives ways of working within particularly challenging situations.

Forming Alliances

These NGO staff also described how forming strategic "alliances" within the household can be critical to reinforcing messages and supporting a mother to follow through on nutrition plans. Mothers seemed to appreciate these alliances instead of seeing them as threats to their authority, because it either convinced their wary husbands of the need to try something new, or gave them extra eyes, ears and hands to try out new practices when their lives were often so hectic. Aside from working with husbands, several staff found that older siblings could act like a mother's "memory", especially in situations where care giving was shared with older siblings. One field staffer, describing how children as young as seven can be "allies", noted how, "You can explain a lot to them. Later, they'll say 'Mommy, you need to do this,' or they'll tell me, 'My mommy didn't do this'. They do follow-up." Another field staffer recounted how recently,

an eight year-old sibling asked him during a visit if his brother's weight had increased, and then said, "Mommy, the doctor told you five times that you need to feed him well". In another case when the NGO staffer was asking about Chispitas, including how many sachets the mother had given the child, what they were mixing it into, etc., a daughter said "she didn't give her even one!" Several mothers visited for this study have also actively encouraged their daughters to learn from the NGO's staff, who then remind them or teach them what they know. One has sent her 14 and 16 year-old daughters several times to the NGO mother's group sessions to learn new recipes.

Giving examples they'll understand

Staff also spoke of giving concrete examples that help parents relate to the type of care, diet and attention they needed to offer their children. Several staff made comparisons to grandparents – having families think about what their diets were, the rare times they got ill, and what families are eating today. "If you only say 'this is important', they'll say 'yeah', but the conversation stops there", staff noted. One field staffer had families reflect on their own childhood, asking them to think about how their parents treated them, what they ate, and how they wish they had been treated. "How did you feel when your father was angry? Happy?", he asks. "Everyone of us deserves this type of care". He also gave examples of animals. Comparing two chickens, if one is given all of the feed it requires and the other one is not, "How do they develop?", he asks. Or, he has parents think about their farms and what it takes to have a good harvest – fertilizer, pest control, ongoing maintenance, etc. Several staff also talked to mothers about their own attempts to put into practice what they preached. One described how, "I tell mothers about my experience with my husband. He said once, 'I'm not a chicken', when I gave

him a grain with his dinner. I told him, ‘If it’s good for chickens, and you eat chicken, it’s good for you!’”.

Improved understanding

As part of a comparative evaluation I helped conduct for this NGO, one analysis suggests that the NGO’s adaptive approach provided staff with a clearer, more complex understanding of the local causes of malnutrition, or at least, the perceptions of causes (See Appendix F for the complete methodology). Figures 1 and 2 compare the perceptions of mothers, neighborhood leaders and staff involved with the NGO project, where an adaptive approach was used (Figure 3) against the perceptions of similar actors involved with a neighboring, comparison center where health staff used a banking model of nutrition promotion (Figure 4). Each of the circles in the figures represents the responses of these three groups of actors. In Figure 3, the answers nearly all concentrate in the center of the figure, where the circles overlap, showing that nearly all groups offered similar answers. In Figure 4, actors in each of the groups believed in many causes not mentioned by the other groups, suggesting that there was less consensus among them about the causes.

Furthermore, actors involved with the NGO project offered a more complex view of the causes of malnutrition, citing 13 different possible causes compared to only 7 listed by actors involved with the neighboring health center. This may indicate that the questions and types of interactions the NGO was facilitating between staff, mothers and community leaders were helping them all better understand local malnutrition, where the lack of deliberation involved in the banking model kept these actors from agreeing, and also being less certain about the many issues that might be causing malnutrition.

Figure 3. Perceptions of malnutrition causes, NGO site

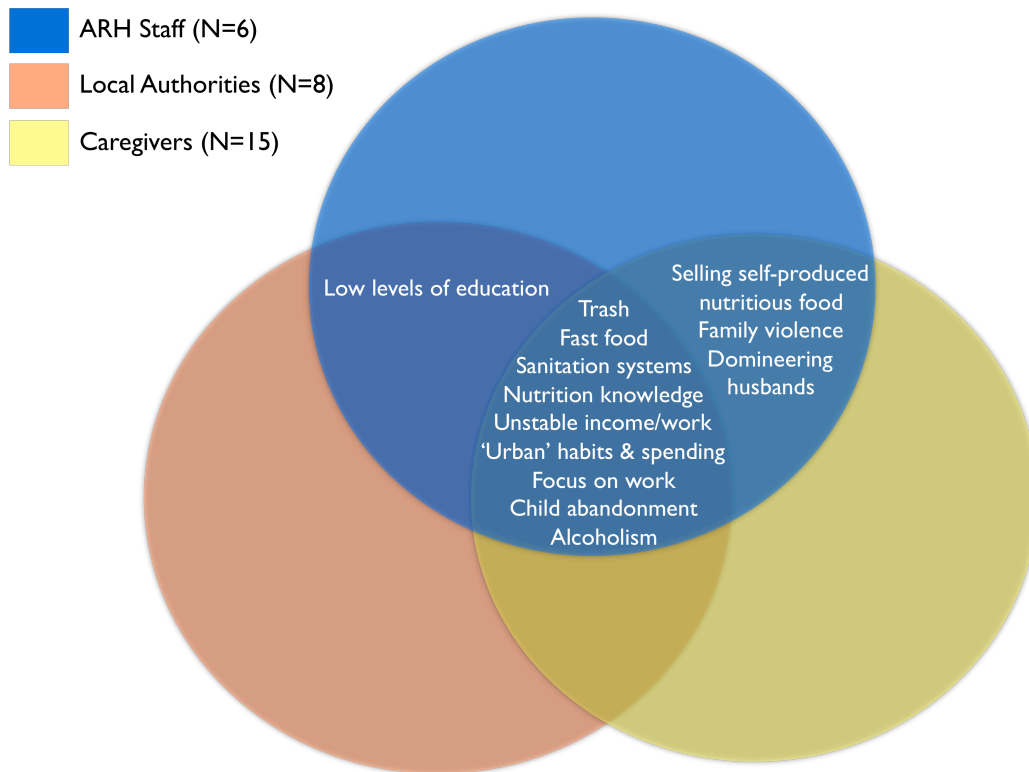
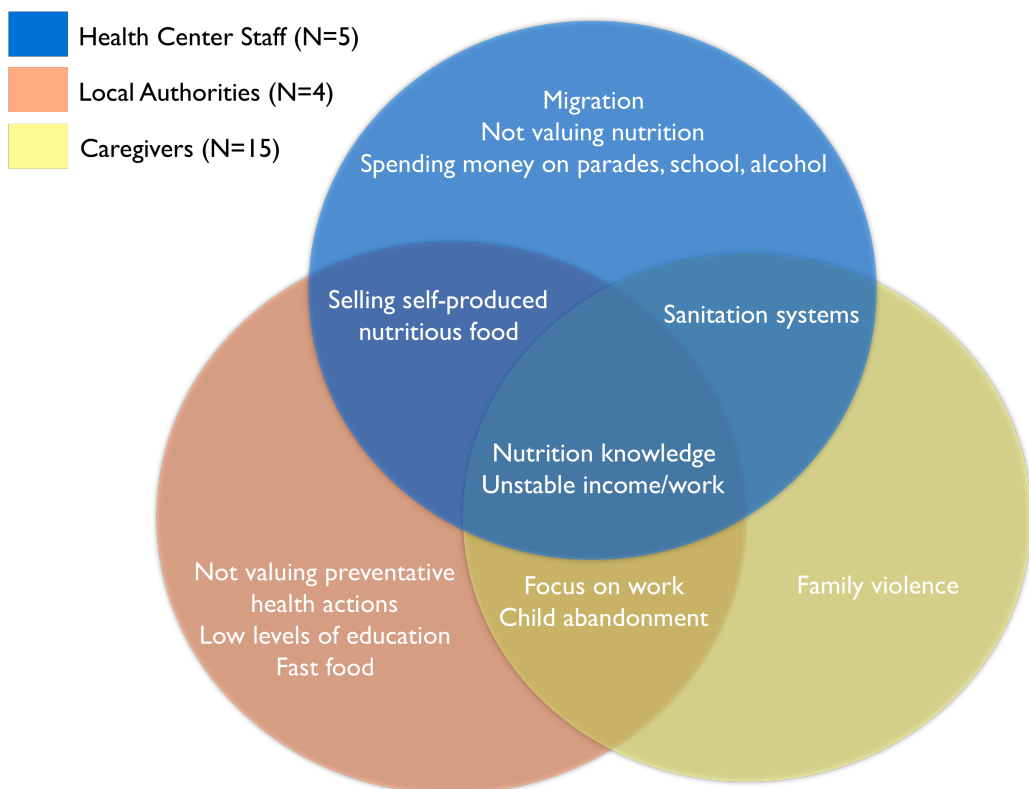


Figure 4. Perceptions of malnutrition causes, comparison site



Conclusion

Front-line staff featured in this chapter who avoided the banking model seemed driven by a sense that the multiple directives they had to juggle, alongside little guidance about how to actually do “promotion and prevention”, allowed them considerable license to craft their own approach. Staff who operated under this assumption could be found under different types of supervision – those actively protected by immediate supervisors, whether as part of an NGO or under a Health Network Coordinator who was a ZM advocate, and those largely left to their own devices, who still had to show supervisors their “numbers”, but who were rarely scrutinized for what they actually did to produce those numbers. Both situations buffered them from many of the pressures other staff felt in Chapter Five, which allowed them to think creatively about their work with mothers and communities. The following considers what the approaches actors used in the examples described here had in common, that we might collectively refer to as a “negotiated” approach. I conclude by considering what these findings suggest for redesigning nutrition policy implementation to support this more adaptive approach.

Common approaches that define an adaptive approach

I call the approach staff used in this chapter “negotiated”, because they took their time to lead up to the stage of devising solutions, in much the same way negotiators do “pre-negotiation planning” (Lewicki, Saunders and Minton, 1999). They first learned more about the mother which helped them define her specific problem (i.e. lack of knowledge, abuse, food security, child care) and understand her priorities. Then, and only then, staff began to find ways to frame the problem and craft solutions in ways the mother might respond, while still being technically sound. Finally, when staff proposed ideas, they asked like a negotiator about how the solutions might be co-generated, asking “how could *we* do this?”, “could you try this”, or “maybe you can

do a test for just a week and see?”. As the following outlines, the “pre-negotiation” strategies ZM staff used focused on four elements: a) building and maintaining a mother’s trust, b) thinking about *where* they could communicate best, especially choosing to step outside the clinic walls, c) thinking about *how* they were communicating, not just *what* they were saying, and d) involving mothers in the process of generating and agreeing with solutions (See Appendix G).

Building and maintaining trust

First, staff featured here realized that mothers would neither share much about their lives nor consider possible solutions unless they first trusted staff. Many spoke of the importance of following through on promises, recognizing that “They stop believing you if you don’t keep your promise”. Others went beyond the call of duty to build this trust, showing their commitment to mothers and communities by working on their days off, respecting families’ schedules, offering classes that benefited the mother more directly (e.g., knitting, literacy), implementing ideas mothers and health promoters suggested, or acting as a counselor even when mothers wanted to speak about non-nutrition aspects of their lives. El Alto NGO staff talked of the importance of showing up consistently at neighborhood meetings, not simply when they had an agenda. Some also spoke about not correcting, outright, a mother’s unscientifically-founded belief that they likely learned from an influential person in their life, what we could call the rule of “don’t contradict the mother-in-law”. Betricia also thought hard about the “chain effect” of both the trust she established with one person, who could then influence the trust others would be willing to confer in her, and the reverse; how insensitive health staff she referred mothers to might destroy the trust she had struggled to build with the mothers.. Finally, one of the more surprising ways staff maintained their delicately nurtured trust was by sometimes disobeying rules and orders. In two cases, staff did not go to workshops SEDES held when it conflicted with

community obligations they had made. One UNI staffer in Belini continued working as a volunteer when she was told her contract had ended, again to follow through with her commitments. Betricia also refused to hold workshops for the MOH and SEDES or do a study they wanted if it appeared to be inconvenient for community members to participate or did not seem useful to the process of change she was facilitating. Marta also trained health promoters to give vaccinations and manage a mobile pharmacy which may not have been entirely sanctioned, showing she was more committed to them and the process of change in their communities than she was to following rules that restricted this process.

Where to communicate: stepping outside the clinic walls

Second, these staff also recognized that mothers opened up about their lives and were more willing to learn about nutrition practices outside the clinic walls – in their homes, on the playing fields, in knitting groups, in cooking circles, during literacy classes, and other social events. Through these spaces and unplanned moments, health staff learned more about the mothers, helped mothers learn from one another, and gradually reversed historically tense relations by building trust and helping each to see the other as individuals, not nameless numbers or government operatives. Going outside the clinic broke people free of old routines and hierarchical roles, de-formalizing relationships, especially when staff insisted on not using titles. On the playing field, your doctor suddenly becomes your teammate and your patient, your number one scorer. Sports, crafts, cooking and other activities also allowed mothers to demonstrate that they were competent at something, could contribute (a knitting skill, a soccer goal, a potato, etc.) and not always be on the receiving end, even if they could not keep their child healthy. Visiting someone's home also allowed health staff to see with their own eyes the conditions under which mothers lived – a reality that mothers might not be able or willing to put

into words. Most importantly, these spaces, where things are less planned, created unplanned moments Forester (2009) calls the “wisdom of indirection” (185), when mothers talked about topics that could reveal more about their lives than structured questions could ever generate in the clinic. A mother might also be more willing to pay attention to a nutrition topic casually thrown into the conversation in these spaces than if the doctor is lecturing her in the clinic, where she may have already decided that she will not trust what he will say before he says it.

How to communicate not just what to say

Third, staff who used more of a negotiated approach thought about more indirect ways to communicate than outright telling a mother what to do. *How* these staff said things, to ensure that mothers could relate to the information and would listen – even if it meant conveying messages in an unorthodox manner – was more important than *what* they were saying. They involved others to relay nutrition messages whom the mother might respect more or be more likely to listen to, like their own children, their husbands, community promoters or other mothers. Many staff thought about different wording or stories through which to convey their message, using metaphors about farm animals or helping caregivers remember when they were children. They thought about their facial expressions and body language – how they used their hands when they spoke and smiling. And all the while they tried to use “charm” and “kindness”, never criticizing or demanding “you have to eat this, do this!”. They made the process of learning playful, as with the fairs Belini UNI staff held, and spoke frequently of “joking” around and “laughing” rather than inducing fear, respect, obligation or obedience.

Forester (2009) described how “irony and humor, at once imaginative, creative, and serious too, can play important roles of simultaneously recognizing past suspicions and hurts, disrupting the conventional political expectations of parties and encouraging new actions and

social relationships” (155). This is particularly critical in a situation where there is a history of distrust and unequal power relationships; when problems are complex. As we saw in these examples, particularly the Belini nutrition “fair”, a sense of humor has far less to do with jokes or being funny, and more about being respectfully attuned to a person’s experiences, acknowledging the perplexity of a situation, leveling hierarchies to build trust, “encouraging engagement rather than resignation, by welcoming rather than punishing multiple points of vision on painful topics and difficult issues at hand” (Forester 2009, 172).

Involving mothers in generating and agreeing with solutions

Finally, all staff did things that showed mothers that they too should be involved in the process of generating and agreeing with solutions, and that the staffer and mother would be in this process of change together. Instead of assuming mothers had no prior practices, knowledge values or beliefs, staff often “started from what they know”, learning about what mothers already knew and did, especially the things they already did well. And most importantly, they “listened” to more than they “heard” mothers (Forester 1989). This may be why none of the staff featured here gave up on mothers, because as Forester (1989) reminded us in Chapter Five, they looked behind what mothers said to see possibilities for action. We saw this particularly with the El Alto NGO, when staff noted “when a mother isn’t committed to working with us to ensure their child doesn’t become malnourished, it’s usually because she has other problems – no husband, in a constant state of violence, etc.” All of these staff especially showed the side of listening Forester describes as requiring a certain vulnerability on the part of the practitioner, to close the distance between them and the person they hope to involve in a process of change. Many of these staff were incredibly compassionate, putting themselves in the shoes of the mothers to the point of “crying”. The El Alto NGO manager also described how the most effective staffer, who would

stick by families until they could chart out an effective course action, would have to “bear the burden that they’d feel as they began to learn about the realities these families faced”.

Ultimately, the comparative analysis of the El Alto NGO and health center using a banking model also suggested that more intimate listening can produce an understanding of the causes of malnutrition that is more complex and more aligned with the way mothers and community leaders see the issue as well, likely aiding their ability to co-develop solutions.

Implications for nutrition policy

These findings suggest several changes for hiring, training, management and accountability systems that might support a more adaptive approach. Program designers, for instance, might seriously consider questions raised in Chapter Five about the type of person best prepared, and interested, in applying a more adaptive form of nutrition promotion – focusing on lower certified nurses, social workers or more advanced community health promoters, and less on nutritionists and especially not doctors.

Trainings would also have to move beyond the technical knowledge that staff currently receive in programs like AIEPI-Nut and offer far more guidance – particularly on behavior change techniques – instead of only providing staff with evidence-based nutrition messages as Aboud and Singla (2012) also found in behavior health programs throughout developing countries, not just Bolivia. The idea of “training” would also work better if it was not seen as a one-off event at the start of an intervention, but a process more like the one the El Alto NGO adopted, using spaces like the Case Study Reviews to help staff think through their strategies at local and even regional levels. Other training sessions could use role plays to practice using metaphors to convey nutrition messages, displaying “caring” body language, and learning how to negotiate solutions with difficult mothers.

Most importantly, staff would have to be convinced, and shown, how the wisdom of negotiators can be brought into their work, particularly when the idea of adding more complexity to a case can simplify the process of finding a solution. Especially staff who learned most intimately about mothers' lives – about what they cared about most, what they feared, and what they worried over – could see more clearly that mothers might be more willing and capable of changing certain aspects of their practices over others. Building this trust and empathizing with mothers adds complexity to a staffer's approach, but ultimately opens more room for action than purely attempting a scientific solution. Dickin et al (1997) suggested that staff can be trained to develop this more intimate understanding of mothers' lives through "consultative research", used to adapt nutrition counseling recommendations. They noted that interactions with mothers through this process "creates greater empathy and awareness of household-level constraints and enhances recognition of the need to listen to mothers when providing services and advice" (10.1). The authors stops short, however, of recommending a way of ensuring that staff continue using a similar approach, even after nutrition messages are adapted to a particular place.

Along with facilitation and learning strategies, new forms of accountability systems might further reinforce "negotiated" approaches. Indicators could focus more on the learning that goes on among staff, rather than such single-minded concerns with coverage rates. Something akin to the qualitative analysis I conducted with the El Alto NGO (after further testing) could show whether local actors are effectively implementing an adaptive approach, based on the alignment of perceptions about the causes of malnutrition between staff, mothers and local leaders. Other indicators might also focus on assessing how much mothers trust staff or react to "get to know you" events – as well as the more creative approaches staff come up with to carry out nutrition promotion to replace the standard "charla" (group lecture).

CONCLUSION: Toward A Practice of Developmental Administration

For decades, bottom-up implementation scholars and planners have insisted, and convincingly shown, that rational comprehensive planning rarely works to resolve dynamic problems in multi-actor contexts (Wildavsky 1973; Lindblom 1959). The global nutrition community painfully discovered this same lesson in the 1970s, when 26 well-funded, expert-led, country-wide plans to reduce malnutrition quickly collapsed when paper planning hit the pavement (Escobar 1995; Field 1987; Levison et al 1999). Lately, as practitioners are attempting to resolve issues related to health, food systems, climate change and other increasingly complex public problems, the emerging answer is similar to what planning scholars – and a few nutrition scholars among them (Field 1987) – determined more than forty years ago: move incrementally, respond to context, plan on surprises, and involve many minds in inventing a course of action.

But how many times do we need to learn from our rationally-inspired failures, and conclude that an “adaptive” approach is the answer? During nearly every decade since Lindblom (1959) first convinced policymakers that rational planning is an expert’s dream, not a decision-maker’s reality, prominent development, implementation, evaluation and planning scholars have continued to tell us that only the most adaptive public problem solving efforts will help us make sense of our most pressing societal concerns (Rittel and Webber 1973; Rondinelli 1983; Scott 1998; Patton 2006; Chambers 2010). What then, could I begin to add to this conversation, if not simply another story that convinces us we are on the wrong track? If we ever hope systematically to change the ways we solve problems in complex situations, I contend that we cannot simply tell practitioners to “be flexible”, “collaborate” or “respond to emerging opportunities”.

I argue that what has often been lacking in the pleas to shift social change processes is a clearer understanding of why rational management strategies continue to dominate policy

planning and implementation. Alternatively, we need to understand what concrete adaptive strategies policy actors can, and actually do implement in practice. If we cannot answer these questions, then adaptive proponents may be going down the same road as rational comprehensive planners did so long ago – dreaming up schemes that are themselves too unfeasible for practitioners to actually use (Field 1977). Ultimately, my findings in Bolivia suggest that rational planning behavior may often be a *reaction* to complex social change processes – coping mechanisms – instead of an approach policy designers intentionally plan or impose on actors tasked with implementation. Alternatively, where practitioners act differently and approach the task with a more “adaptive” mindset, I argue that considerable guidance, commitment and, paradoxically, strategy, are necessary.

As the following summary and discussion outlines, my dissertation begins to add some specificity to what we can actually tell practitioners who desire to incorporate adaptive strategies into their problem solving repertoire and what planners can do to structure policy designs so that one actor’s adaptive choice does not become another actor’s need to rationalize. Findings also offer a number of lessons for theory related to policy planning and implementation. Here, I focus on two of the major questions this study raises: the interaction of adaptive and rational implementation strategies in a dynamic policy system, and the relationship between sensemaking, discretion and accountability in adaptive policymaking.

Chapter summaries

In Chapter One I suggested that many of the seemingly irrational decisions national ZM administrators made – to keep decision-making centralized, coordinate selectively with other health sector programs and mid-level actors in each SEDES, and to abandon the original Bono implementation plan and efforts to institutionalized UNI staff – were actually strategic decisions

to maneuver around political and administrative landmines that made the original, rational ZM plans fancy follies. Bureaucratic bottlenecks forced ZM planners to rely on constantly rotating consultants to carry out most of the program, especially the UNIs. The Bolivian president's interest in showcasing the Bono forced an explosive national launch without having worked out even the simplest logistical questions. Political opposition in many SEDES made it more logical to "build a bridge" over them to get things done in the municipalities. And because of these constant, unexpected pressures, maintaining control over national decisions appeared to be the most strategic way to keep the program moving forward. Ultimately, however, the singular goal of getting action on the ground at whatever cost complicated implementation, creating confusion, turf wars, skepticism of ZM's efficacy and more.

In Chapter Two, I described how the measures taken by national ZM planners to correct some of the tradeoffs of their initial flexibility – particularly the fragmentation and resistance it created in daily operations – were also strategic, involving "intelligent negotiation" with SEDES offices and intentional advocacy to encourage mid-level policy actors to adopt ZM interventions. Mid-level policy actors and front-line staff who initiated efforts to integrate ZM interventions into the existing health system were equally calculating in their approach, collectively deciding how new MOH staff in the UNIs and Bono program would collaborate with other health staff. Savvy front-line staff also went outside the bounds of their "official" duties, to actively "create dependency" or build trust.

In Chapter Three, I moved down the policy system to look more closely at the roles mid-level actors played in managing ZM's day-to-day implementation. We saw that most managers adopted a rationalist approach, paradoxically, I argued, in response to the chaos ZM planners had unintentionally caused by being responsive to larger threats. I showed how mid-level managers

introduced rigidity into the implementation process, turning ambiguous roles and tasks into concrete actions – get the inputs, collect the paperwork, and enforce the numbers. Yet, even as they created order and stability in their minds, their rationalizing strategies undercut implementation below, making staff feel like misunderstood cogs in a bureaucratic machine where paperwork was more valuable than patient relations. Supervisors also unknowingly blocked opportunities to self-correct these problems in supposed learning forums while reinforcing a “mafia against sharing experiences”. Ultimately, findings in this chapter suggested that rationalist interventionist practices – standardized responses that flatten local variability and impose rigid rules on front line staff – may often be the result of mid-level actor interventions in the policy process, even when policymakers adopt a more adaptive stance.

Despite the default rational coping mechanism most managers adopted, Chapter Four showed that an alternative scenario was possible. Rather than find solace in simplified performance measurements, a smaller number of supervisors tried to make sense of the implementation process *with* staff, first trying to understand their challenges, actively building staff motivation and encouraging rather than controlling discretion. More importantly, they did not rely on abstract data to monitor the implementation progress, but led targeted, problem-based analysis to adjust nutrition interventions to local realities through strategies like the “forum for debate”, Case Study Reviews and a quality assurance model.

In Chapter Five we considered how front-line staff reacted to supervisors who insisted on too many and often conflicting controls, without offering practical guidance about how to reduce malnutrition and promote nutrition. Paradoxically, we saw that they, too, reacted to complicated working conditions through a rational approach, routinizing their interactions with caregivers and even imposing authoritarian tactics through a “banking” model of social change, even when the

predictable result was a gap in mothers' nutrition knowledge and action. Again, however, I argued that this was a reaction – a coping mechanism not guided by the type of calculated, pre-planned strategy we expected to see behind rational implementation.

Finally, in Chapter Six, we saw that there were promising strategies for closing the mothers' knowledge-action gap based on adaptive or “negotiated” approaches. Unlike their rationalist colleagues, adaptively oriented ZM implementers thought about steps that would allow them to eventually negotiate customized solutions *with* mothers, including ways of building trust, planning not just *what* to say, but *how* and *where* to communicate with mothers to learn more intimately about the distinct ways children became malnourished. They did things like keeping promises, going beyond the call of duty, protecting relations over following rules, moving outside the clinic walls, involving more actors in the change process, communicating through metaphors, using humor, and listening to what mothers conveyed nonverbally as much as to what they said.

Implications for theory

These findings move us toward a theory of adaptive policy implementation through the surprising lessons it offers about what we might refer to as the two faces of rationality, and the two faces of discretion.

Two faces of rationality

The first major surprise that emerges out of this study is the idea that rational and adaptive strategies interact in unexpected ways as agency and structure interact in a dynamic policy environment. If we had stopped observing ZM early in the life of the program, we would have seen national ZM designers planning out the steps of a typical, rational comprehensive program. Knowing about the failures of rational planning (Lindblom 1959, Pressman and

Wildavsky 1973), we would have predicted that the ZM program would have had little chance to survive beyond its beautiful plans, despite having overcome so many of the factors that tend to become obstacles to major policy reforms like ZM (as noted in the *Introduction*).

As we continued observing, however, we saw that national actors realized that they would have to put many of their plans aside to respond to political and administrative issues that threatened their ability to get action on the ground, even if the action was imperfect. Had we stopped observing the program or only observed it from the national perspective at this point, we might have concluded that ZM was an example of “adaptive” policymaking. Further observations over time and at lower levels of the system, however, showed the rationalizing effect of adaptive strategies, when responsive national decisions caused chaos below, causing most mid-level actors to cope through rational strategies. In addition, we also saw two faces of rationality: rational mechanisms mid-level managers used to bracket the chaos around them then constrained effective action among operational staff, who settled on a rational approach as well. These findings ultimately suggest that continuing to assume that rational planning is always, and only, a fully intentional planning strategy – based on agency – overlooks the potential for rational strategies to also become maladaptive options policy actors use to bring order and stability to a chaotic environment – to react to the structure other actors’ choices create in a dynamic policy environment.

The alternative scenarios we saw developing among more attentive and responsive mid-level managers and the negotiated forms of policy delivery some front-line staff applied, however, suggest that the above reactions are merely tendencies many policy actors may have – especially in fields like health where there may be more policy actors with a lower tolerance for ambiguity. In the ZM program, these adaptively oriented policy actors appeared to be acting on

their own intuition and motivations, or in administrative scenarios that either gave them adequate support or let them operate in peace. Their mere existence, however, and the promising changes they seemed to be facilitating, are encouraging. So are the pleas of even the most rational managers and front-line staff who began to recognize that their rational coping mechanisms were leading nowhere, or even causing more harm than good.

Some of the adaptive strategies to promote policy adoption and integration of ZM into the existing health system that we observed in the ZM program at mid-levels and even at lower levels, showed elements of models and concepts developed to study policy process at the national level, such as Kingdon's (1999) policy streams model, or Pelletier et al's (2011) idea of strategic capacity. This suggests that future research could continue applying other national-level policy models to studies at lower levels of the system, to help us understand the dynamics of policy implementation more fully. One such model that would be particularly appropriate for nutrition policy studies is Shiffman's (2007) work on political priority setting in health.

Two faces of discretion

This study also raises another puzzle not fully resolved in the literature about the relationship between sensemaking, discretion, and accountability in policy implementation. Organizational scholars like Weick et al (2005), talk about discretion as a sensemaking device staff use to determine what to do when they confront situations in their work environment that are uncertain or unexpected. The Merriam-Webster dictionary defines "discretion" as a positive ability, a "quality of having or showing discernment or good judgment". As mentioned in Chapter Four, Lipsky (1980) talked about how "street-level bureaucrats" use their discretion as a sensemaking device when rules are partial, ambiguous or conflicting. He also implied that strategies developed by lower level staff often allow a policy to function effectively, what he

described as a “neat paradox”, whereby, “Lower-level participants develop coping mechanisms contrary to an agency’s policy but actually basic to its survival” (19).

Lipsky himself, however, was among those who also present a view of discretion as something that should be controlled. Several years prior to his book in which he talked about the “neat paradox”, Lipsky and Weatherly (1977) suggested that program planners should aim to establish controls – rewards and punishments for performance based on the intentions of policy – to relieve staff of having to use their discretion. This perspective is apparent today in standard views of evaluation as a sensemaking device for planners to “oversee” the implementers:

Evaluation assists sensemaking about policies and programs through the conduct of systematic inquiry that describes and explains the policies’ and programs’ operations, effects, justifications, and social implications. The ultimate goal of evaluation is social betterment, to which evaluation can contribute by assisting democratic institutions to better select, oversee, improve, and make sense of social programs and policies (Mark et al 2000, 3).

The concern about systems of accountability that develop out of evaluation schemes, Scott (1998) suggests, is that “practical knowledge” or “know-how, common sense, experience, a knack, or metis”, which are the “practical skills that underwrite any complex activity” are the types of skills that “authoritarian, high-modernist schemes...ignore – and often suppress” (311). Elmore (1980) similarly expressed concern more than thirty years ago that program designers were not “capitalizing” on the skillful side of discretion, especially in complex situations. He was especially concerned that hierarchical compliance mechanisms meant to improve implementation would force staff to either continue using their discretion in a “subversive” manner or that “abstract, standardized solutions”, would replace the “competence” staff develop through their use of “discretion as an adaptive device” (612), as he eloquently described:

The dominant view that discretion is, at best, a necessary evil and, at worst, a threat to democratic government pushes implementation analysis toward hierarchically structured models of the process and toward increased reliance on hierarchical controls to solve

implementation problems. ...Compliance with orders and procedures displaces competence, or becomes the equivalent of competence, in interactions between lower-level public servants and clients. Nowhere in this view is serious thought given to how to capitalize on discretion as a device for improving the reliability and effectiveness of policies at the street level. Standardized solutions, developed at great distance from the problem, are notoriously unreliable; policies that fix street-level behavior in the interest of uniformity and consistency are difficult to adapt to situations that policymakers failed to anticipate. Adaptation under these circumstances consists either of subversive, extralegal behavior or a complex procedure of hierarchical clearance. There is little or no room for the exercise of special skills or judgment, not to mention deliberate invention and experimentation. When implementation consists essentially of controlling discretion, the effect is to reduce reliance on knowledge and skill at the delivery level and increase reliance on abstract, standardized solutions. Hence, a certain proportion of the learning that is required to adapt a broad policy to a specific set of circumstances is lost; adaptive behaviors by street-level bureaucrats are never well understood by policymakers because they are viewed as illicit. Variability and discretion at the delivery level can just as easily be viewed as an asset—a broad-based body of data on unanticipated, adaptive responses to highly specialized problems. To capitalize on this knowledge, however, one's view of implementation has to put a higher value on discretion than compliance (610).

My findings in Bolivia suggest that the two sides of this debate – whether discretion should be controlled or allowed to reign freely, may not be recognizing a middle ground, where discretion could be encouraged, but guided and even taught. In fact, my findings suggest that most of the time, if staff are left to their own devices, they will not choose the “inventive and experimental” approach Elmore suggests, but an authoritarian and depersonalized strategy.

We saw many times in the ZM program how the singular focus many supervisors placed on abstract “numbers” may have been demoralizing to staff, but still left them with the discretion to determine how to get those numbers, or how to do other things that were never counted that improved their work with mothers and communities. We also saw, however, that this “discretion” could go in one of two directions, either toward the banking model or toward the negotiated model of service delivery. In the former case, staff needed, and often asked for, more guidance and more rules about how to carry out nutrition promotion. In the second case, in at least two examples, staff using the more adaptive, negotiated model actually had considerable

support and guidance from an NGO program or supportive supervisor. Case Study Reviews, in particular, helped staff learn how to make more strategic decisions in unpredictable situations, based on judgment they built up over time, informed by their technical knowledge, experience, ongoing review of data, and colleagues' lessons. Staff working in isolation developed a similar, adaptive approach on their own in only a few examples. This suggests, therefore, that adaptive responses most of the time will have to be facilitated, learned and continuously reinforced, especially when such an undefined, dynamic task like "reducing malnutrition" is introduced in a sector like health where medical staff are less tolerant of ambiguity.

Implications for practice: A developmental administration

This last conclusion in particular – that adaptive responses most of the time will have to be facilitated, learned and continuously reinforced – has major implications for policy management. It tells us that the answer to encouraging more adaptive implementation strategies is not to simply tell supervisors to "respond" to the demands staff make. It also stops us from marveling at national policymakers who inevitably find themselves needing to abandon carefully planned designs to make incremental decisions, or praising staff who are intrinsically driven and intuitively skilled at adapting complex national policies to local particularities. Instead, this single conclusion suggests that program planners and managers can intentionally and proactively establish organizational strategies that can help staff engage in a form of sensemaking more appropriate for a complex change process, while ensuring that innately adaptive staff thrive.

Building on Patton's (2006; 2011) idea of "developmental evaluation", I suggest that this new form of implementation management might be called "developmental administration". The approach would be to build mechanisms to help staff pay attention to unexpected patterns in behavior or outcomes, emerging threats and opportunities, while also co-inventing new strategies

based on a compilation of knowledge: formal data, experiences, hunches, etc. The approach would not rely on pre-set indicators – or only the most essential – allowing planners and managers to systematically, but flexibly, consider the concrete operational issues they should be addressing as they go, explore promising practices, and try new ideas that emerge out of inventive conversations, all of which they could not accomplish in using only aggregate, abstract indicators. While the approach is open-ended, it would offer a way of continuously, purposefully looking for clues that can direct decision-making. As it was, ZM planners and managers were making decisions based on sudden reactions to crisis events, “putting out fires” as one ZM actor described, or diligently focusing on indicators that obscured anything they were not counting.

I argue that developmental administration offers a programmatic philosophy that can be used as a more general guide for rethinking program decision-making, opening up a number of ways to regularly reflect and act upon emerging ideas, concerns, innovations, failures and more. I suggest that the approach could be implemented through¹⁸ regular meetings with a sample of ZM policy actors, appreciative inquiry strategies (Coghlan et al 2003; Patton 2003), periodic events like the “forum for debate” held in one municipality (Chapter Four), deliberative mapping (Burgess et al 2007), search conferences (Emery 1995), or occasional program evaluation workshops like the one proposed in the Program Evaluation Guide (Pelletier et al 2011).

¹⁸ While the quality improvement approach one NGO used in Santa Cruz appeared to have a considerable impact on the health centers involved in the project, questions about the ability of health centers to keep up the process after external facilitators leave, in Santa Cruz and many other countries, (Franco and Marquez 2010; Øvretveit et al. 2002, 346-347), suggest that the complicated mix of components and steps involved might be too difficult to scale up in their entirety for something like the development evaluation approach I am proposing here. However, Rowe (2009) from the Centers for Disease Control suggested an intriguing idea based on quality assurance strategies, which he claims would cut down significantly on the time front-line staff spend collecting data, resolve data quality concerns, motivate improved performance, and improve multiple programs simultaneously, while rethinking the logic of what is counted and by whom. The model he describes – using a country of nine million people as point of reference, nearly the size of Bolivia – would involve permanent survey teams that would cluster sample over 200 communities and neighborhoods each year to collect data on more macro-level health outcomes and indicators. Locally, each health center would form quality assurance teams to continuously identify problems affecting health care delivery, understand the causes, try different solutions, reflect on the success of the solutions, and modify them.

If used widely across a program – and only if old rules and routines (e.g., old accountability systems or authoritarian management styles) were removed that could undermine its very purpose (Mahler 2007) – I believe that a developmental administration approach could also establish a certain mindset among all policy actors, encouraging a constantly inquisitive stance, not just in formal spaces, but even and especially during unplanned moments, where Forester (2009), too, found that there as a certain “wisdom of indirection” (185). What staff might notice during everyday interactions, social events, overheard conversations, non-ZM meetings, and other situations would then feed into the more regular, formal spaces where a developmental administrative agenda would guide ZM discussions and analysis. While some of the multi-level workshops ZM planners were leading in the program’s fourth and fifth year approximated elements of the kind of creative thinking that could be fostered through developmental administration, these events were still too focused on pre-set questions defined by national actors that did not allow certain innovations or issues to emerge. The following explains how a developmental administration approach might have changed some of the choices ZM actors made or what they might have noticed what they failed to see, particularly among mid-level managers who were using a more traditional compliance model.

In Chapter Two, we saw evidence of learning among national ZM planners, but some of their decisions to adapt – particularly to SEDES and the instability in UNI hires – came only after the pressures and fragmentation below became too difficult to ignore. The early negotiations one dedicated SEDES Nutrition Unit Coordinator in Potosi mediated to get stable UNI hires the very first year of the ZM program suggests that someone at the national level was not paying attention, or did not recognize the vision behind this decision to institutionalize UNI staff. If part of the reason ZM planners did not push so quickly to negotiate similar deals to get

stable UNI hires in other SEDES was because they believed consultants would be just as effective as stable *item* hires, then they could have informally studied the natural experiment the Potosi decision made to UNI implementation. They could have also taught other SEDES administrators about the Potosi Coordinator's tactics.

Had mid-level managers engaged in this type of "developmental administration" as well, they could have picked up on, learned more about, and potentially disseminated many of the innovative practices local staff were implementing, like the "emergency plan" where health staff "adopted" malnourished children to monitor, "mothers groups" one rural nurse formed long before they were required by the MOH, the playfully competitive nutrition "fair" one UNI held, the "forum for debate" held in one municipality, the urban "mobile pharmacy" idea one Bono doctor had, and many other actions. Instead, supervisors either never heard these ideas or did not recognize them as potentially useful adaptations because they were so distracted by the abstract indicators they were monitoring. Furthermore, these open learning sessions would likely have clued planners and managers into how contradictory the paperwork was for staff performance.

Finally, at the local level of implementation, a developmental administration approach to implementation is similar to what the El Alto NGO was implementing with its Case Study Reviews, as a way to regularly make explicit, learn about and test staff strategies for customizing solutions for each family. A local problem-solving model specifically developed to reduce malnutrition in Iringa, Tanzania in the 1980s called the Triple A Cycle, offers another example of an approach that could be scaled up to form part of a broader developmental administrative structure. In his review of the Iringa Nutrition Program, Pelletier (1991) identified the training component of the program as one of its "distinguishing features". It focused not on training for service delivery, but rather "set out to re-educate society vertically and horizontally, at all levels

from regional management to villages, and from civil servants to political administrators to the public...in how to analyze the causes of PEM (protein-energy malnutrition) at their respective levels, from household to region, and how to search for solutions using the resources available at each level” (14-15). Pelletier also argued that the triple-A approach was an “iterative, flexible process of problem identification and problem-solving, in contrast to an inflexible project management bent on implementing preconceived interventions from above” (26).

The Triple-A cycle (assessment, analysis, action) begins when village health workers (after an extensive, 6-month training period) *assess* malnourished children during monthly village health days. They or others of the village health committee then follow-up on children identified as severely malnourished with an *analysis* of the problem in which they talk with caregivers to “explore, in an open-ended manner, the various immediate factors contributing to growth failure and work backward to the contributing factors”. If the causes go beyond the capability of what a family can deal with, these issues are raised in village health committees until all agree on a doable *action* plan (Pelletier 1991, 23-24). Village-level committees might recommend establishing a day care center, improved pit latrines, etc. Pelletier also notes that the “nutrition and mortality report acts more as a cover page for the really important information contained in the minutes” which acted as a place to request support and point out constraints that were faced (i.e. needing technical advice, etc.).

Timeliness of this study

An important lesson can be drawn from the Iringa Nutrition Project (INP) that sheds light on the timeliness of this study for advancing not only nutrition policy in particular, but also wider public problem solving efforts in complex policy environments. The INP was so successful, the prevalence of underweight children fell from 56 percent to 38 percent in four

years, and severe underweight from 6.3 to 1.8 percent, while rates in surrounding regions not involved in INP remained the same (35). The Triple A Cycle approach and what the program learned about the determinants of malnutrition impacted the international nutrition community so much, it contributed to the development of the 1990 UNICEF conceptual framework. In a study of the diffusion of UNICEF's model, Pelletier (2002) found that the framework has "become one of the most familiar images within the international nutrition community and has helped foster improved understandings and dialogue about the nature and causes of malnutrition" (Pelletier 2002, 6). However, he also noted that the Triple A Cycle analysis has largely been ignored, despite this forming the "core" of the UNICEF Nutrition Strategy.

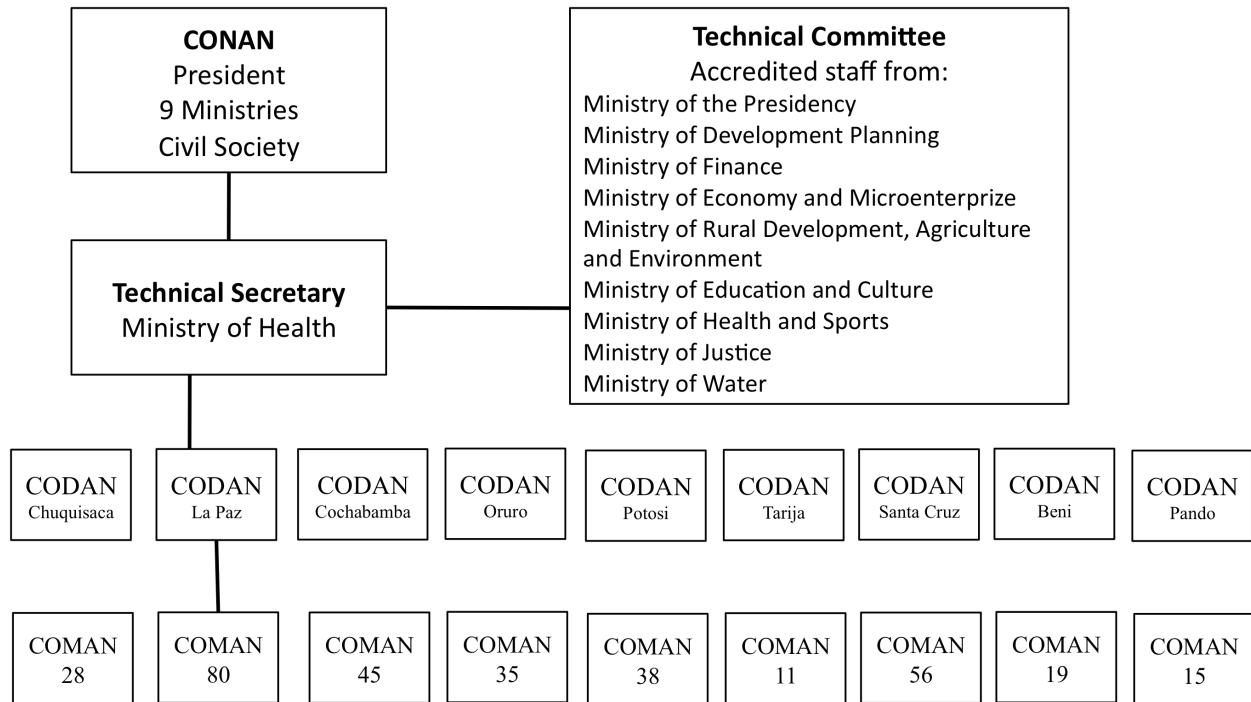
This has not been the first time that wisdom about balancing the nutrition knowledge researchers contribute with place-based, problem-specific knowledge has been lost, as we saw with repeated failures in multisectoral nutrition planning efforts of the past (Field 1977; 1987) and the continuing use of disappointing behavior change interventions like those used in Chapter Five (Dickin et al 1997; Aboud and Singla 2012). Today, nutrition research, policy and planning each focus on efficacy-trialed interventions, under the assumption that this evidence-base will strengthen the ability of policy actors to eventually eradicate malnutrition (Bhutta et al. 2008; Shekar 2008). Ironically, however, the more the international nutrition system focuses on accumulating expertise and evidence of what works, the more this adds to staff confusion about what to do. Throughout policy systems in the developing country, like in Bolivia, data and paperwork also continues to accumulate under the assumption that this is what will aid "results-based management", again, however, only leaving practitioners none the wiser and even more overwhelmed. Writing for USAID, De Stefano and Crouch (2005) observed the same issue Bolivia is experiencing, where "Data use is currently far more constrained by demand and by the

lack of technical skill and *imagination* in using what is already gathered, than it is by the supply of data” (25, emphasis added). These experiences with evidence and data that continue to be thrown at practitioners is akin to the doctor in Chapter Five who exclaimed in exasperation “the more we explain, the more they don’t understand”.

Morris et al (2008) also found that such a myopic view on indicators, scientific guidelines and the next-best evidence of what works has led to fragmentation in the global nutrition system, making it “difficult for any one organization to muster sufficient resources to act at scale and (preventing) a shared understanding of the range of interventions that are currently being deployed. Worst of all...national actors must negotiate conflicting signals about where they should prioritize their limited resources” (618). The same is true in the broader development community, where Chambers (2011) notes “in the name of rigor and accountability what fits and works better in the controllable, predictable, standardized and measurable conditions of the things and procedures paradigm has been increasingly applied to the uncontrollable, unpredictable, diverse and less measurable paradigm of people and processes” (14).

As long as we continue to search for external answers of *what* to possibly do about the societal ills we wish to change, the options – even evidence-based options – could be endless for today’s public problems that have so many determinants that manifest in so many combinations in so many diverse contexts. Putting an end to continual failures to learn, my study suggests, will only happen if international debate, university research, and national planning moves towards better understanding of *how* to address “wicked” problems like malnutrition and their like – the support systems, capacity-building approaches, and deliberative mechanisms that can internally build the ability to facilitate, build learning and continuously reinforce adaptive responses.

APPENDIX A. CONAN-MOH Organizational Structure



Source: Ct-CONAN 2006

APPENDIX B: Methodology¹⁹

To answer my questions about how policy actors respond to complex implementation situations, and the degree to which, how and why, they use adaptive or rational approaches, I chose to do a policy case study of Bolivia's Zero Malnutrition (ZM) program by using grounded theory to guide my data collection and analysis. This chapter describes the rationality for this study design along with my sampling plan, data collection procedures, data analysis approach, strategies I used to strengthen the validity of my findings, possible influences of my positionality, research approvals, steps I took to maintain confidentiality, and the study timeline.

Study Design

First, I chose a case study design because of the emergent, complex and dynamic nature of policy implementation processes which precludes a study of only certain, bounded variables. According to Yin (2003), case studies are especially useful for answering “how” and “why” questions (13). Stake (1995) also describes how the aim of a case study is to “appreciate the uniqueness and complexity of the case, its embeddedness and interaction with its contexts” (16) in a way that offers “holistic treatment of phenomena” through its “temporal and spatial, historical, political, economic, cultural, social and personal” context (43). Context, in other words, is not controlled for in case studies, but actively used to help understand a phenomena.

Secondly, the contradictions, multidisciplinary orientations, and gaps in the literature that contribute to our current understanding of adaptive policy implementation also led me to use a grounded theory design, to build theory iteratively and inductively, grounded in practice (Ezzy 2004; Miles and Huberman 1994)). This meant that I began with initial questions and a general

¹⁹ My theoretical orientation blends aspects of positivist and interpretive paradigms (Lincoln and Guba 2000). I think it is possible to see generalizable patterns and to derive theory from studying social phenomena, but I also acknowledge that inquiry is not value free, that researchers interact with and influence topics of study, and that understanding of phenomena can vary across time and actors.

outline for my research protocols, but as I compared theories about implementation, my observations, and different perspectives of actions in the case, I was regularly challenging my conclusions, (Stake 1995; Ragin 1992; Flyvberg 2006), sometimes redesigning my research plan appropriately (e.g., adding or refining question in my interviews or changing my sampling plan (Yin 2003, 61), as I explain below.

Sampling plan

My sampling plan was multi-staged, moving from selecting the country to the policy area, national program, nutrition interventions, implementation processes, settings, and actors. To structure my selection of “actors” even further, I also had a plan for selecting implementation sites. Each of these sampling choices were purposive, rather than random (Miles and Huberman 1994).

Country, policy area and program

First, although the initial thread of my questions about policy implementation emerged out of the first year of research I did with the Zero Malnutrition program in 2007, I could have selected – and considered – studying the nature of adaptive and rational implementation processes in a different country, policy area (not nutrition), and program. As I explained in the *Introduction* however, my choice to return to Bolivia to work with ZM was both pragmatic—recognizing that I already had access to the nutrition policy community, no minor issue in conducting this type of policy analysis in developing countries (Walt et al 2008)—and theoretically strategic because of the “wicked” nature of nutrition problems, the debates about using rational and adaptive policy designs in the international nutrition community, and the rational-adaptive tensions that were already apparent in Bolivia, and specifically within the ZM program. Ultimately, these different factors suggested that ZM made a good “critical case” for

generating theory, what Patton (1990) describes as a case that “permits logical generalization and maximum application of information to other cases because if it's true of this one case it's likely to be true of all other cases”.

Program interventions, processes, settings, and actors

Once I selected the Zero Malnutrition program, I chose to focus on only ZM’s health-sector interventions, because these had been implemented the longest and because they offered an opportunity to observe the types of debates about rational and adaptive forms of implementation occurring in the broader international nutrition community, as I noted in the *Introduction*. I then focused on the interventions that were being implemented nation-wide and were considered by ZM actors to be fundamental to reducing malnutrition or what they referred to as the “motor” or “star” components of ZM, even more so than multi-sectoral projects. These included the Integrated Nutrition Units (UNIs), the Bono Juana Azurduy conditional cash transfer program (Bono), the clinic-based version of AIEPI-Nut, and micronutrient interventions (particularly the two newest programs ZM added to the existing mix of micronutrients children received, Nutribebe and Chispitas), all of which were described briefly in the *Introduction* and are described in more detail in subsequent chapters.

Second, I focused on three key processes that make up program implementation: program design, program management and program delivery. I also focused on settings where these implementation processes occur, selected and spent most of my time with the “major” policy actors that carry out those actions, and identified “minor” actors who could offer additional perspectives about ZM implementation. More detail is offered below and in Table B.1.

Table B.1. Sampling choices among program levels, processes and settings

Processes	Settings	Major actors	Minor actors
Policy design	<ul style="list-style-type: none"> - Ct-CONAN - MOH Units heading nutrition interventions, particularly the Nutrition Unit, but also AIEPI-Nut, and Bono 	<ul style="list-style-type: none"> - Ct-CONAN administrators - MOH Nutrition Unit administrators over UNIs, Bono, micronutrients, and AIEPI-Nut 	<ul style="list-style-type: none"> - United Nations, donors, and NGOs
Policy management	<ul style="list-style-type: none"> - SEDES - Health Network offices - Municipal administrative offices (rural) 	<ul style="list-style-type: none"> - SEDES managers over UNIs, Bono, micronutrients, and AIEPI-Nut - Health Network Coordinators - Municipal Head Doctors 	<ul style="list-style-type: none"> - NGOs
Policy delivery	<ul style="list-style-type: none"> - Urban and Rural UNIs - Rural municipal public hospitals and clinics - Urban, neighborhood public clinics 	<ul style="list-style-type: none"> - UNI staff - Bono doctors - Doctors and nurses applying out AIEPI-Nut and distributing micronutrients 	<ul style="list-style-type: none"> - Local leaders - Mothers - Locally-based NGOs

First, I looked at how policy design decisions ultimately structure lower-level implementation, such as hiring, institutional coordination, and where and how to launch programs. These decisions were made in the national ZM program office (referred to as the Ct-CONAN, or technical arm of the National Food and Nutrition Council), and in the Ministry of Health (MOH). In the Ct-CONAN I interviewed ZM administrators who were in charge of the major tasks of designing, planning, and coordinating the entire ZM program. In the MOH, I primarily focused on administrators in the Nutrition Unit who managed the Integrated Nutrition Units (UNIs) and micronutrient interventions. I also interviewed MOH representatives of the Bono program and AIEPI-Nut. In total, I interviewed eight national MOH and Ct-CONAN actors, at least four of them up to six times over my year of fieldwork. The “minor” actors I interviewed at the national level included nine staff from five agencies that either offered ZM

administrators technical advice, co-financing, or participated in national health-sector working groups focused on nutrition, including the United Nations, donors, and NGO-networks.

Second, I looked at how mid-level managers translated national designs into more concrete tasks for overseeing implementation, including how they supported lower-level staff, held them accountable for performance and how they identified programmatic bottlenecks. At the department level, I interviewed managers in SEDES, the departmental health office that manages departmental health systems, focusing again on managers of the UNIs, Bono, AIEPI-Nut and micronutrients. In the city of El Alto, I involved nutrition intervention managers from the SERES (a sub-level of SEDES that only exists in El Alto). I also interviewed Health Network Coordinators. In rural areas, these Coordinators had offices within a rural municipality and managed all health sector interventions across several municipalities. In cities, Coordinators managed a single health network in a larger system of urban health networks. At the municipal level I also interviewed the Head Municipal Doctor who managed all health sector interventions within one rural municipal health system. NGOs again served as the “minor” actors I interviewed to gather more perspectives about the role of SEDES in ZM implementation. In total, I interviewed 23 SEDES managers, 17 Health Network Coordinators or Municipal Head Doctors, and staff from 4 NGOs (Table B.2).

Finally, I looked at how front-line staff shaped program delivery and structured their interactions with program participants, particularly mothers. Actors carrying out health-sector ZM interventions included staff who led the UNIs, doctors specifically hired to carry out the Bono program (referred to as Bono doctors), and existing health staff (usually doctors, nurses and also social workers in the city of Potosi) who applied AIEPI-Nut and distributed micronutrients. The “minor” actors I interviewed to better understand program delivery included

Table B.2. Study participants at department and local levels

Department	Site	SEDES managers	Health network and municipal managers	Health center staff	Local leaders	Mothers	NGO staff
Santa Cruz	City: Santa Cruz	4	3	8	5	14 in 2 focus groups	8 in 3 NGOs
La Paz	City: El Alto	5	2	10	2 10 in 2 focus groups	11 19 in 3 focus groups	12 in 3 NGOs
Potosi	City: Potosi	7	3	10	2	43 in 3 focus groups	1
	Rural 1		2	5	8	5 in 1 focus group	1
	Rural 2		3	4	6	1	2
Chiquisaca	Rural 3	7	1	6	4	1	1
	Rural 4		2	4	4	1	1
	Rural 5		1	5	5	1	1
Total interviews		23	17	52	36	15	27
Total focus groups (or NGOs)		n/a	n/a	n/a	2 (10 participants)	9 (81 participants)	13

program participants (usually mothers), NGOs, and local leaders. In cities, local leaders included presidents of neighborhood councils and community members elected as community health leaders. In rural municipalities, local leaders included staff from the mayor’s office, municipal council members, COMAN coordinators and community health leaders. In total, I interviewed 52 health center and UNI staff, 46 local leaders (10 in two focus groups, 36 individually), 96 mothers (81 in 9 focus groups, 15 individually) and 27 staff from 13 NGOs (Table M.2).

Selection of implementation sites

I selected eight cases—five rural municipalities and three cities (Table M.1)—based on a purposive sample. The only criteria that was common across all sites was that all of the four interventions – UNIs, Bono, AIEPI-Nut and micronutrients – were being implemented, with the exception of UNIs which had not received their contracts to resume work in the cities by the time I was able to begin my field research. Beyond this criteria, I chose sites both for “balance and variety” of demographic characteristics (Stake 1995), but when possible, chose two sites that shared a major characteristic to compare with other sites where this was absent.

Before selecting the local sites, I considered the balance of departments that might demonstrate a diversity of ways SEDES offices may have influencing local-level implementation. I selected them based on their geographic, political and malnutrition characteristics. I chose four of the nine departments, including three highland departments (Potosi, Chuquisaca and La Paz) and one tropical lowland department (Santa Cruz). Potosi and Chuquisaca are neighboring departments that share similar cultural, demographic and geographic characteristics. They also have the highest rates of chronic malnutrition, and therefore contain the highest number of ZM Phase I “priority” municipalities (Ct-CONAN 2006). Focusing on these two departments offered an opportunity to compare whether management styles made a difference for ZM implementation if other factors were similar.

Although La Paz is primarily a highland department as well, this is the seat of legislative and executive branches of the government. SEDES is therefore literally next door to the MOH and close to the Ct-CONAN office, offering an opportunity to observe if this proximity mattered to the way national and mid-level managers interacted. Chronic malnutrition rates in the department of La Paz are also not as high as Chuquisaca and Potosi, but it has the most Phase II ZM municipalities. Finally, semi-tropical Santa Cruz, the agricultural and industrial center of Bolivia, has an entirely different culture, climate, geography, poverty rate, and political leanings, the epicenter of the *Media Luna* autonomy movements I mentioned in the *Introduction*. This department also has some of the lowest rates of chronic malnutrition. This combination offered a stark contrast to the other departments across all factors.

As I decided which specific sites to include, my decision to add urban cases emerged out of a series of discussions among key informants who made it clear that understanding ZM implementation and variations across sites would not be complete without including urban sites.

Even though they were not technically targeted by ZM as “priority” sites, NGOs, donors and particular nutrition champions in local health systems began applying ZM interventions in urban areas in 2008. Key informants emphasized that urban and peri-urban sites implementing the ZM program were understudied, despite a) being located in contexts remarkably different from the rural municipalities which served as the basis for most ZM management system and intervention designs, and b) serving populations with high *absolute* numbers of malnourished children.

I chose cities which represented diverse geographic, political and demographic characteristics: the largest and fastest growing informal city, El Alto; the poorest highland city with the fewest migrants, Potosi; and another fast-growing lowland city, Santa Cruz (Table B.3). Key informants helped identify eight, urban public health centers to include in the study: those that were the most active in implementing health-sector ZM interventions and located in peri-urban neighborhoods where malnutrition rates were highest. Although El Alto had been the site of considerable UNI activity, at the time of my study, the most active site was where an NGO was carrying out ZM interventions out of a public health center. Potosi never had an official UNI, but had a nutritionist since 2007 who worked out of the Health Network Office. Santa Cruz had three of the most active UNIs until the end of 2010. Contracts in 2011 were not renewed until September, after my fieldwork, and in only one of the three UNIs, but the former UNI staff were hired by local NGOs to facilitate with a Santa Cruz AIEPI-Nut project mentioned.

I selected the rural case studies from among 52 municipalities that had been implementing ZM the longest, identified as meeting ZM’s highest ratings of malnutrition and food security vulnerability and targeted for Phase I of the program (Ct-CONAN 2007). My purposive sample was balanced across three criteria: 1) a municipality’s department or health

Table B.3. Demographic characteristics study sites

Study site	Department	Health network	2010 projected population (INE 2001)	Geography	Percent chronic malnutrition*	Percent poverty (INE 2001)
El Alto	La Paz	District 8	953,300	Highlands, next to La Paz	13 to 28	67
Potosi	Potosi	Potosi Urban	154,700	Highlands	18 to 61	56
Santa Cruz	Santa Cruz	East and South	1,616,100	Lowlands	4 to 8	19
Rural 1	Potosi	Network 1	> 40,000	Highlands, 1-2 hrs from capital	28 to 31	94
Rural 2	Potosi	Network 2	> 20,000	Highlands, 6 hrs to capital	35 to 47	98
Rural 3	Potosi	Network 2	> 20,000	Highlands, 9 hrs to capital	36 to 46	99
Rural 4	Chuquisaca	Network 3	> 20,000	Highlands, 1-2 hrs from capital	30 to 33	94
Rural 5	Chuquisaca	Network 4	> 10,000	Valley, 5 hrs from capital	23 to 27	95

*Chronic malnutrition rates for children under two vary widely depending on the source. Here, data is based on the 2009 National Health Information System (SNIS) and 2010 Bono Juana Azurduy data. Urban data also takes into consideration recent surveys conducted in the specific district (number 8) where this study was conducted in El Alto (Andean Rural Health 2011) and in the city of Potosi (Mamani 2011).

network: municipalities were first selected from the neighboring departments of Chuquisaca and Potosi. In Potosi, two municipalities were selected from within the same health network to consider whether local variation was due in part to the influence of immediate supervisors, political contexts, and administrative cultures, rather than geographic and cultural characteristics, 2) the municipality size, to consider whether the number of children staff must work with affect their ability to carry out ZM interventions effectively, and 3) the municipality's location in relation to their departmental capital, to consider whether accessibility of supervisors made a difference in the support staff received for carrying out ZM interventions.

While I would have preferred to choose both rural and urban sites from the same departments, I was only able to do so in Potosi. In Chuquisaca, there was no UNI in the capital city, while in Santa Cruz, there were only four municipalities that were part of the ZM priority list, but none met ZM's highest category of malnutrition and food insecurity vulnerability. In the

department of La Paz, the decision to only focus on La Paz was primarily out of convenience and changes in the SEDES Nutrition Unit office, where I had less political capital. In Chuquisaca and Potosi, on the other hand, I had established relationships with SEDES actors as early as 2007, so their support gave me far more access to municipalities.

Not counting the focus groups, an average of 25 actors participated in the urban sites and 16 in the rural sites (Table M.2). The difference in these numbers reflects the larger staff sizes of health centers in urban areas and the relative difficulty of reaching actors in the dispersed rural municipalities. Focus groups were also primarily held in the cities, where it was particularly easy to engage with groups of mothers waiting in health center reception areas.

Data collection

Data collection followed four stages, beginning with exploratory research, a “pilot” site study to finalize my research protocols, the core of data collection, and a follow-up visit five months after fieldwork ended. Strategies included participate observation, document review, secondary data analysis, semi-structured interviews, use of what Patton (2010) refers to as “scuttlebutt informants”, a focus on what I called “itinerant actors” and action research.

Based on a grounded theory approach, I started this my research by taking the first three months to conduct thirty informational interviews, review recent ZM documents, and participate in ZM meetings as a participant observer. My aim, at this early stage of my fieldwork, was to listen to questions that were emerging from within the Bolivia nutrition policy community, and to blend these with my initial questions that emerged out my earlier research in Bolivia and the relatively few answers I found in the literature. This period was also important for re-establishing my connections with key informants.

For the next three months, I began working more closely with Chuquisaca and Potosi SEDES Nutrition Unit administrators, who had agreed to be a part of my study. I also began my first site study in El Alto, where an NGO carrying out ZM interventions invited me carry out the qualitative component of an impact evaluation they were conducting on their work based on the research protocols I was developing for my own research. This offered me a chance to work with them more closely to review my methodology, adjust my theoretical questions, refine procedures, field-test my interview questions and engage them in interpreting the findings. This was similar to the “pilot case study” Yin (2003) suggests doing as a final preparation for data collection. The experience these staff and managers had in rural areas also allowed me to consider if my research protocol and interview questions would be appropriate in other contexts.

For five months, I carried out the remainder of my departmental and local site visits. During that period, I conducted *participant observation* of 21 ZM and relevant MOH meetings, events and workshops (4 at the national level, 3 at the regional level, and 14 at the local sites). These were all events ZM actors invited me to participate in, which offered me an opportunity to observe what types of questions about implementation they asked, how they made decisions together, how they dealt with conflicting views of implementation and courses of action, what types of knowledge they found valid to assist in their decision making (e.g., technical-expert, experiential, value-based, etc.). These events included CAIs (Information Analysis Committees), during which health staff analyze local health statistics and devise action plans, national and regional ZM workshops to review program progress and develop the next five-year strategic plan (what they referred to as Logic Modeling Workshops), regional workshops to teach diverse ZM policy actors about results-based management, meetings of the National Food and Nutrition Council (CONAN) and the municipal equivalent (COMAN), SEDES planning and evaluation

meetings with UNIs, trainings or refresher courses for local health promoters and staff in a variety of nutrition interventions.

I collected dozens of documents ZM actors readily offered me on ZM protocols, promotional materials and reports. For this analysis, I used *document review* to compare what staff actually did in practice with the ZM plans and protocols, when they were available. This included the UNI manual, AIEPI-Nut manual, a 2010 ZM annual report, and the 2007-2011 ZM strategic plan.

I used *secondary data analysis* to verify implementation progress staff reported and other studies that covered relevant implementation topics. These included secondary data on micronutrient coverage rates, chronic malnutrition rates, the results of UNI evaluations that used an instrument people referred to as the “Estrella Kiviat” used approximately yearly to review UNI implementation, micronutrient supervision reports, a cross-country analysis of SVIN-C survey results (a survey most UNIs were conducting two or more times a year, to sample mothers’ nutrition knowledge and practices). I also reviewed reports that provided additional secondary data or analysis, including a national ZM evaluation conducted internally, and a network analysis conducted by the Inter-American Bank (Morales et al, 2010).

Semi-structured interviews formed the core of my data collection approach. Appendix H lists the types of questions I asked different groups of actors. When individual interviews could not be conducted, especially with mothers and some local leaders, these questions served as the basis for focus groups. Questions used in the interviews with local leaders, partnering NGOs and mothers primarily asked about what they believed were the strengths and weaknesses of ZM implementation, based from their perspective. Questions for ZM actors implementing were

largely based on principles Forester (2001) uses to conduct practitioner profiles²⁰ or “practice stories” that “offer intimate windows onto the richness, messiness, and complexity of work in the field.” Through these intimate profiles, he reminds researchers that part of the craft of doing case studies is not just to look for patterns, and to observe behavior – which can strip actions of their meaning – but to attempt to understand the actors themselves. He describes:

...the risk of explanatory positivism from the ‘outside’ is that the explainers have little way of accounting for the real and practical actions that they are actually explaining. This is the old critique of behaviorism: unless we account for the (perhaps manipulatory, perhaps technocratic, etc.) intentions of the agents, we do not know how really to describe their actions. Schutz made the point clearly with his example of the woodcutter: is this person cutting wood, exercising, taking out his or her anger, trying to dull the axe or what? (Forester 2001, 264).

This approach attempts not just to document actions, but *how* actors did something – the particular approach they used in certain situations and not others to deal with complex scenarios, even if actions seem similar to the observer. In my probes, I hoped that by asking about who they engaged or not, in what way, under what circumstances, and why their approach differed over time when encountering the same situation would help me understand people’s responses to the complexity they faced, their own sense of agency, and strategies that worked better or worse. Practitioner profiles attempt to resolve issues of “data without meaning”, by learning about “lived experiences” in ways that are often not understood adequately in implementation literature (Callaghan 2008).

Based on Patton’s suggestion (2010), I also engaged with approximately 16 national ZM and MOH administrators, SEDES administrators, and partnering NGOs who were in strategic positions within the ZM structure, who felt comfortable giving me frank, “insider” information, and who were observant of the broader discussions and changes in the policy environment. I met with each of these “*scuttlebutt informants*” at five or more times throughout the year to talk

²⁰ See: <http://courses.cit.cornell.edu/practicestories/index.htm>

informally about what they were hearing and observing regarding ZM implementation. This allowed me to stay attuned to more open-ended topics that were most salient to ZM policy actors.

During my fieldwork, another technique I realized would give me a more nuanced understanding of the dynamism of ZM implementation across national, regional and local scales, was to focus upon policy actors who had held more than one position in the ZM system, who I referred to as “*itinerant actors*”. As I note in Chapter One, one of these doctors had moved between six different positions in ZM between 2008 and 2011, from the department level as a regional ZM coordinator to working in the Ct-CONAN, in the MOH with AIEPI-Nut, SAFCI brigades, as an UNI Coordinator in one SEDES, and other positions. Others had moved from an UNI to a SEDES or even a national coordinator position. Some moved from a major NGO into a key MOH administrator position connected to nutrition interventions, between MOH offices, or from the Ct-CONAN or MOH to an NGO. These actors provided rich insight about the challenges that accompanied each of these jobs as well as the opportunities for change that often remained hidden from policy actors who remained over time at the local, regional or national level.

Finally, my inclusion of *action research* elements builds on Kurt Lewin’s idea, as Schwartz-Shea and Yanow (2012) paraphrase, that “the best way to understand something (e.g., an organization) is to try to change it” (110). I say my approach used “elements” of action research, however, because my intention was not to partner with ZM actors collaboratively to the degree that action research typically requires (Reason and Bradbury 2002). I wanted the freedom to blend questions that emerged from policy actors, the literature, and my previous work, and I wanted a broader, more comparative view of ZM than would have been possible had I remained

at one site. However, I regularly tried to engage my key informants in reacting to my emerging findings and suggested strategies to improve implementation. Their reactions helped me understand factors they saw as barriers or opportunities for implementation changes that were not always apparent through my observations or interviews. I also took advantage of many opportunities to do more traditional action research on a smaller scale, when the questions local staff had aligned with my own. In each of these cases, I co-developed the designs and engaged (as much as they had time to) staff in the analysis for reports I provided them. I also supported nominal costs out of my research fund (US\$50 to 100). These included:

1. A regional UNI “evaluation” and annual planning workshop in Potosi I helped co-design and lead using a collaborative inquiry approach,
2. A participatory workshop the nutritionist in the city of Potosi asked me to help co-design and lead to gauge the level of awareness and interest in ZM and ideas for improving local implementation,
3. The El Alto NGO qualitative evaluation I mentioned earlier, which involved a comparison between the NGO’s approach to nutrition promotion and prevention, and that of a neighboring public health center (See Appendix F), and
4. An open-ended UNI survey I conducted in partnership with the Potosi and Chuquisaca SEDES Nutrition Unit offices (See Appendix D). This survey provided me with comparative data across Phase I and Phase II municipalities regarding their capacity, implementation strategies and external factors influencing ZM implementation.

Data Analysis

My analysis was based on a prospective quasi-longitudinal approach, was causal-comparative, and used a grounded approach to theory formation. My analysis strategies included use of contact summary sheets, a research database, memoing and several stages of coding.

First, a *prospective quasi-longitudinal* approach (Hakim, 1987) involves building a ‘chain of evidence’, to understand why particular actors’ implementation approaches might have changed over time (i.e. reframing of the problem, pressure from other actors, something learned, etc.). Second, *causal-comparative analysis* assisted in explanation-building between the cases, using ‘pattern-matching’ across sites to explain differences in ZM implementation (Johnson

2000; Yin 2003). This approach allowed me to try and explain the “cause” of differences that emerged across sites or actors – attributing these differences to the implementers themselves, their supervisors, national-level events, community contexts, etc. *Grounded theory* also shaped how and when I did my analysis. I started analysis during the data collection process and iteratively moved between my emerging conclusions, collecting more data to test them, and occasionally referring to literature. (Stake 1995; Ragin 1992; Flyvberg 2006) (Yin 2003, 61).

As I conducted interviews and made observations, I used several techniques Miles and Huberman (1994) suggest for managing qualitative analysis. First, I wrote up my field notes the same day or no later than three days after the interview or observation, and I attached a “contact summary sheet” that outlined any issues or main themes that stood out in the interview, new questions or hypotheses the interview raised, and any follow-up needed (e.g., to probe further about a particular topic with the interviewee, to triangulate with other data sources, or to return to the recorded interview to fill in gaps I missed during my note taking). Second, as I collected documents and interviews, I started a research database to file documents, interviews, field notes, and interview recordings. Interviews were filed based on what level of the program the actor worked within (national, departmental or local), whether their local site was rural or urban, the specific local site, and what position they held in the ZM program (UNI staffer, local leader). Third, I occasionally reflected on a particularly interesting event or interview, and I stepped back every month or two of data collection to think more deeply about what I was seeing and hearing through “memoing”. My memos were an opportunity to reflect informally, without systematically coding data. I wrote about what I found fascinating, troubling or puzzling, either across many cases or inspired by a particular event, savvy remark, inspiring individual, a revealing poster, gossip I heard, etc.

When I began analyzing for the content of the interview or observation after my first site visit in El Alto, I created a starting list of provisional codes based on my research questions, emerging hypothesis I had generated during data collection and major issues that had arisen. Over time I adjusted these as I coded more interviews, sometimes returning to past interviews to recode if an entirely new category emerged in other interviews that I realized I had lumped into a broader code or overlooked in past interviews. This final list of codes was about staffing issues, logistical issues, adaptations and adjustments staff made to interventions, how actors used data in decision making, evidence of learning, and different theories of change. Aside from these content-level codes, I also used intervention codes (e.g., UNI, Bono, micronutrients, AIEPI-Nut), and relationship codes (i.e. to track problems or successes with coordination within and between levels of the health system, and to identify instances where staff talked about issues of fear, trust or credibility with the public).

After I coded all interviews using this list above, as I began writing I first organized the above codes into larger “pattern codes” that revealed an emerging theme under which several codes fit, a possible explanation for adaptive or rational implementation, or key relationships between policy actors that related to implementation. These broader themes were about interactions between staff and families, coordination across and within health system levels, relationships between supervisors and staff, staff instability, staff discretion, and types and issues with problem analysis (strategic, focus on inputs, problem-based, innovations, etc.).

Data validity checks

Many of the program design choices I made and techniques I took during my data collection helped me improve the quality of my data and test my emerging explanations and conclusions. These included prolonged engagement in the field, the inclusion of multiple data

sources for triangulation during data collection and analysis, member checking and peer debriefing my emerging findings, thick description during writing, and steps to ensure reflexivity throughout.

First, my research design allowed for *prolonged engagement* (Creswell 2009), important for developing a detailed understanding of Bolivia's nutrition policy community and institutions. As I mentioned previously, my findings drew upon fieldwork I carried out for a year, between September of 2010 and August of 2011, and a follow-up visit five months later. However, I also framed many of my questions and interpretations based on my prior research with ZM for fourteen months between 2007 and 2009.

I used *multiple data sources* to maximize the range of data that helped me understand my case (Yin 2003; Stake 1998) and *triangulated* across them to look for “converging lines of inquiry” to justify the themes I focused on for my analysis (Miles and Huberman 1994; Yin 2003, 98). This involved comparing secondary data, document analysis, and interview findings between and among participants representing different stakeholder groups (national ZM planners, mid-level managers, local implementers, international donors, partnering NGOs, local leaders and mothers).

Furthermore, *member checking* allowed me to gather feedback about my interpretations. I did this through follow-up interviews, by adding questions to future interviews, and more casual conversations with key informants, especially the 16 “scuttlebutt” informants and the “itinerant actors” I interviewed. My trip in December of 2011, four months after data collection ended was also primarily an opportunity to do final member-checking interviews based on more well-formed conclusions. During these conversations or interviews, I checked for reactions to the themes, explanations, and initial theories I was beginning to form. However, unlike some

methodologists suggest, I did not do this simply to seek confirmation or accuracy (Creswell 2009). When some actors embraced my interpretations while others rejected them, I checked to ensure that the problem was not based on data accuracy. I then reflected on the characteristics of the actors who disagreed to determine if their reactions had to do with their role and experience in the ZM program, based on the notion that at times, I as a researcher had “epistemological purchase” that ZM actors at various levels of the system did not always have—because of their position in the program, their lack of familiarity with academic literature I was drawing upon, etc. (Schwartz-shea and Yanow 2012, 107).

I also used *peer debriefing* to enhance the validity of my account. This primarily involved ongoing discussions about my emerging theories and interpretations with several other doctoral students in sociology and anthropology working on dissertations with the Bolivian government. I periodically discussed my emerging findings with PhD committee members as well.

In writing this dissertation, I used *thick description* to convey my findings, as Creswell (2009) describes, to “transport readers to the setting and give the discussion an element of shared experiences...(to) provide detailed descriptions of the setting...provide many perspectives about a theme...(so that) the results become more realistic and richer” (191-192). The structure of my dissertation—three sections, with the first chapter in each focusing on the most common themes and the second chapter alternative strategies—also conforms to the technique in qualitative research of presenting *discrepant information* (Becker 1998: 192-194).

Finally, I also consciously incorporated *reflexivity* (Schwartz-Shea and Yanow 2012), frequently reflecting about and being transparent about potential sources of bias that may have affected the way participants responded to me as a researcher and how I may have interpreted the data. I am fully aware that the perspective I present here is based on partial knowledge of ZM – a

program that has now national reach in the health sector, has multiple programs in other sectors I could not cover, other initiatives to raise awareness that had not reached municipalities I visited. The following section also details how my “positionality” may have influenced how actors reacted to me and how this may have influenced my interpretations.

Potential influence of my positionality

Similar to challenges Walt et al (2008) describe about doing health policy analysis, how I was “situated” and viewed as a researcher in Bolivia presented opportunities and challenges for conducting this research in ways that may not have been the case for other researchers. Which actors were more or less willing to speak with me openly, ways actors responded to me, and how I interpreted my findings were all inevitably shaped by my prior involvement with the ZM policy community, my affiliation with Cornell University and nutrition scholar David Pelletier, and my perceived legitimacy as an academic researcher, fellow Bolivian, external observer of ZM, and non-nutritionist.

The year-long action research I carried out with Cornell University in 2007, at the invitation of ZM and MOH administrators (see *Introduction*), greatly improved my access to the ZM policy community. Some still referred to me as “Lesli from Betanzos”, impressed that I had lived for six months in 2007 in the municipality of Betanzos as part of our observations of ZM implementation. Depending on the actor, my association with ZM administrators, or alternatively, my work “in the trenches” assured them I was trustworthy and could empathize with the challenges of their work at any level of the program, apparent in ways numerous actors confided in me. At the same time, however, articles from this earlier work that began to be published halfway through my dissertation research complicated some of my national-level relationships, while strengthening my partnerships with others. This experience, and my interest

in maintaining ties to the nutrition and health policy community in Bolivia, may have also influenced me to offer a more favorable interpretation of ZM.

My specific affiliation with Cornell University also conferred me a certain legitimacy among higher-level administrators and donors who often knew Cornell's name. My tie to David Pelletier was especially important among some nutrition advocates connected to the international nutrition community, where Pelletier's work in nutrition is well respected. Furthermore, as an academic researcher, I was sometimes seen as an "expert", and received requests to lead workshops, carry out evaluations or offer ideas for how to improve management, planning and implementation. Particularly because I was based out of a US university, some actors also saw me as a potential source for funding. In most cases, I reminded them I was also a poor student, directing actors to other NGOs or actors with more time, funds and expertise. Some of these requests, however, opened opportunities to engage in the action research component of my research. To this day, several mid-level SEDES administrators, ZM consultants and NGOs continue to ask for my assistance with research designs for other investigations they are managing, are discussing possible future collaborations with me, and remain interested in hearing the ideas emerging from my research.

If all else failed, I knew I could call on my "Bolivian" status to lower barriers by telling people I was born in La Paz and lived in the rural, tropical rainforest area of the Alto Beni as a child, which would usually assure me a warm welcome as a fellow "Paceña" (from La Paz and the highlands), or "Camba" (from the lowlands). I also capitalized simultaneously on aspects of my "outsider" status as an external observer of ZM and a non-nutritionist. This "stranger-ness", as Schwartz-Shea and Yanow 2012 (29) call it, allowed me to be curious – to ask taboo questions (e.g. about staff fears of supervisors) or probe about certain practices that may have been

mundane to other actors (e.g., how to convince mothers to change their practices, what logistics were involved in getting micronutrient supplies, etc.).

Research approvals

ZM consent for this study was provided through a *Memorandum of Understanding* signed by me, my PhD Committee Member, David Pelletier and the ZM Coordinator. My research was also approved by the Cornell Internal Review Board (IRB) and Bolivia's *Comité Nacional de Bioética, Comisión de Ética de la Investigación* (National Committee on Bioethics and Ethical Investigation). I obtained written consent from all research participants for formal interviews and oral consent for informal conversations, focus groups, and surveys.

Steps to maintain confidentiality

Because of the sensitive nature of many conversations I had about supervisors, I concealed identifying information to maintain the anonymity of individuals using a variety of mechanisms, in some cases switching pronouns, using generalized descriptions of participants' affiliation (e.g., calling them "supervisor" instead of the "ZM Coordinator"), describing participants sometimes by their past affiliation when they had changed jobs (e.g., "ex-UNI staffer") even if they held a different administrative position in ZM at the time of the interview, etc. I also chose not to reveal the names of rural municipalities, as these tended to have only one UNI staffer, only one Bono doctor, one Head Doctor, etc. I was transparent about the cities I included in the sample because each had unique attributes that were difficult to conceal and important for the larger story (e.g. Santa Cruz was the epicenter of the *Media Luna* political autonomy movement against the Evo Morales government). The city sites were also large enough (with 30 or more health centers each), that the identity of health centers or individual actors could remain hidden.

Timeline

My fieldwork took place over a full year (Table M.4), from September 2010 to August 2011, during ZM's fourth year of implementation. For the first three months, I conducted thirty national- and department-level exploratory interviews, participated in national ZM program review workshops, and collected secondary data and ZM documents to help me refine my research questions, finalize my research design and identify possible study sites. During this time, I also identified a site to conduct a "pilot" of my fieldwork. For the following four and a half months, I assisted the Chuquisaca and Potosi SEDES offices with regional UNI evaluations and carried out the comparative UNI survey (See Appendix D).

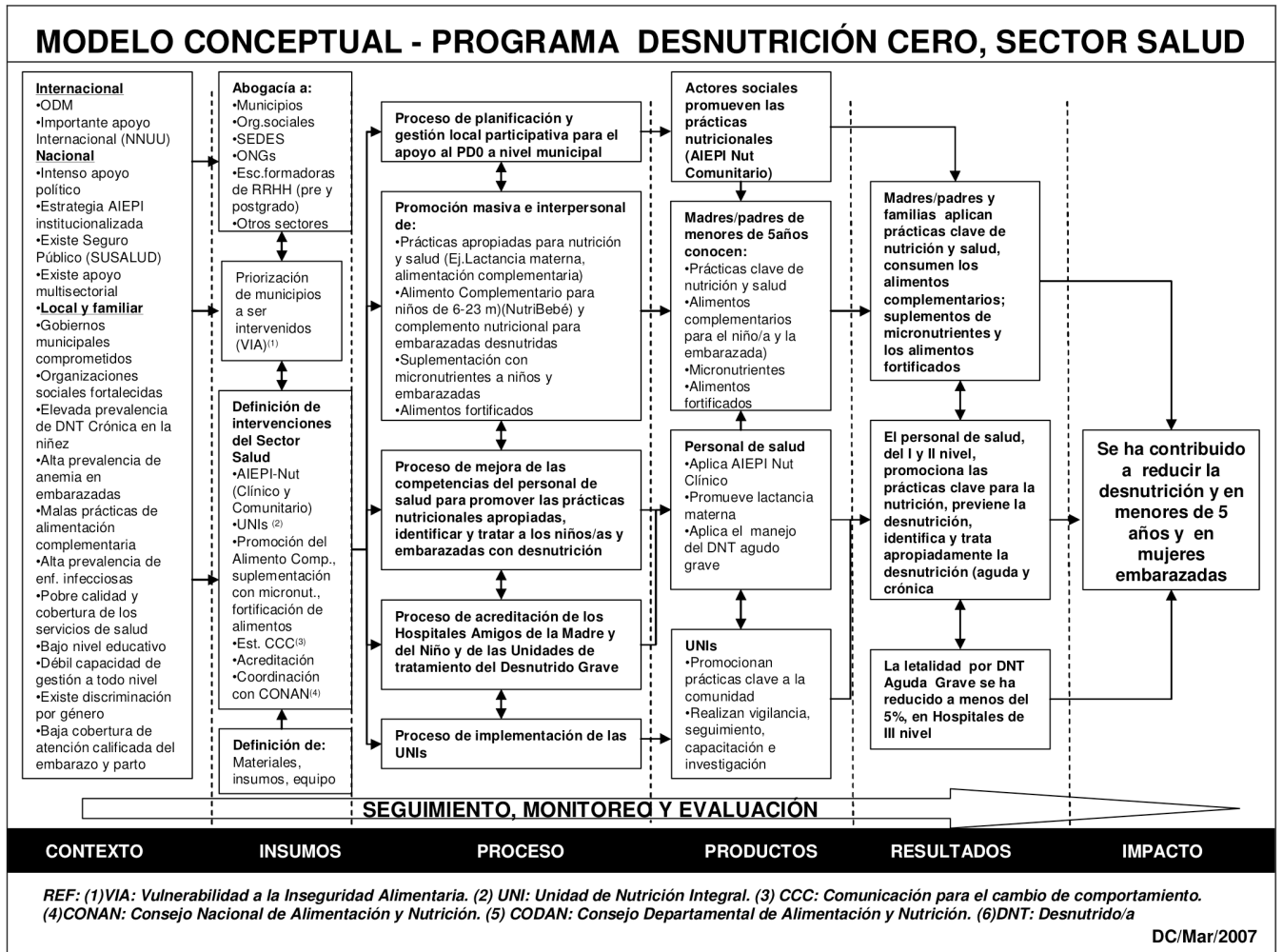
At the height of the rainy season (January through March), when many rural sites are difficult to access and most professionals take vacations (or do not work until their contracts are renewed), I carried out my pilot field site study and assisted my partnering NGO with a comparative qualitative impact study (See Appendix F). I then devoted five months to collecting field data for the case studies, first in the three cities and then the five rural sites. I spent more time completing the urban cases, as they required involvement with a higher volume of actors. While completing research in the city of Potosi, I also took advantage of simultaneously completing my department-level interviews in SEDES.

For my final two weeks, I completed additional national-level interviews, but returned in December to finish additional national interviews and hold informal member-checking meetings about my emerging findings. Although my fieldwork followed this general plan, I also accommodated participant schedules and interacted with key informants throughout the process.

Table B.4. Study timeline, 2010 to 2011

Activity	2010				2011												
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Exploratory interviews with key informants	█	█	█														
Observation of ZM program review workshops	█	█	█														
Preliminary secondary data and document collection	█	█	█														
Participation in El Alto evaluation design and preparatory meetings	█	█	█														
Refinement of research questions and design	█	█	█														
Participation in Chuquisaca and Potosi regional UNI evaluation workshops				█	█												
UNI survey and analysis to select rural cases in Chuquisaca and Potosi				█	█												
El Alto comparative evaluation, pilot site visit and data analysis				█	█	█											
Update of site visit data collection procedures				█	█	█											
Analysis of secondary data to make final case study selection				█	█	█											
Santa Cruz and Potosi urban case studies, 2-3 weeks each							█	█	█								
SEDES interviews							█	█	█								
Five rural case studies, 1-2 weeks each										█	█	█					
SEDES interviews										█	█	█					
Participation in regional ZM meetings										█	█	█					
National-level interviews													█				
Member-check preliminary data																	█
Remaining national-level interviews																	█

APPENDIX C. Zero Malnutrition health sector conceptual model (untranslated)



Source: Cordero 2007; MOH-Bolivia 2010

APPENDIX D. Comparative Integrated Nutrition Unit (UNI) survey methodology

The UNI Survey was conducted in collaboration with Chuquisaca-SEDES and Potosi-SEDES ZM Coordinators in December 2010. The survey asked UNI staff to: 1) rate a series of activities according to the degree to which they provide the skills, knowledge and ideas UNI staff require to improve ZM implementation, 2) identify actors that are key to carrying out ZM interventions at the local level and indicate the degree to which these actors have ‘five needs’²¹ required to effectively contribute to nutrition actions – *awareness* of malnutrition, *information, knowledge and skills* to address the problem, *motivation and commitment* to act, *resources* to act and the *support of others* to change, initiate or sustain actions. They were also asked to analyze these actors’ level of *interest* in supporting and *influence* on nutrition interventions, to compare with a similar analysis the ZM Planner led with national and departmental ZM administrators and partners²², and 3) respond to a series of open-ended questions about the successes and challenges they have experienced since their UNIs were launched.

Staff from 46 UNIs completed the survey, 81% of UNIs in Potosi (25 out of 31, including the city of Potosi UNI) and 88% in Chuquisaca (21 out of 24). In Potosi, participating UNIs were primarily formed in 2008 (28%) or 2009 (36%), while the majority of UNIs in Chuquisaca were formed more recently in 2009 (29%) and 2010 (33%) (Table D.1). A similar number of UNIs participated from municipalities prioritized for Phase I of ZM (11 Potosí, 12 Chuquisaca) and

²¹ See: Pelletier, D, Corsi, C, Hoey, L, Faillace, S and Houston, R. (2011). The Program Assessment Guide: An Approach for Structuring Contextual Knowledge and Experience to Improve the Design, Delivery and Effectiveness of Nutrition Interventions. *Journal of Nutrition*, 141(11): 2084-2091.

²² These two factors – ZM interest and influence – were first introduced by ZM Planner Jaime Rojas during a ZM Logic Modeling Workshop conducted in September 2010 to review ZM challenges and develop a strategic plan for 2011 - 2015. Eight working groups (one which analyzed two components) – composed of an average of eight Ct-CONAN Administrators, international cooperation partners and SEDES ZM Coordinators – were asked to identify and rate actors and organizations that are critical for implementing particular ZM components, including Community-Based IMCI-Nut (Nutrition-focused Integrated Management of Childhood Illnesses), Fortification Programs, CODAN (Departmental Food and Nutrition Committees), COMAN, SNIS (National Health Information System), Supplement Programs, UNIs, Maternal Breastfeeding Promotion and ZM Administration.

Phase II (13 Potosí y 9 Chuquisaca). More nurses run UNIs in Potosi, so nurses filled out 88% of the surveys in Potosi, while staff participation was somewhat more even across doctors (43%), nutritionists (57%) and nurses (38%) in Chuquisaca.

Table D.1. Launch dates and staff positions of UNIs participating in the survey

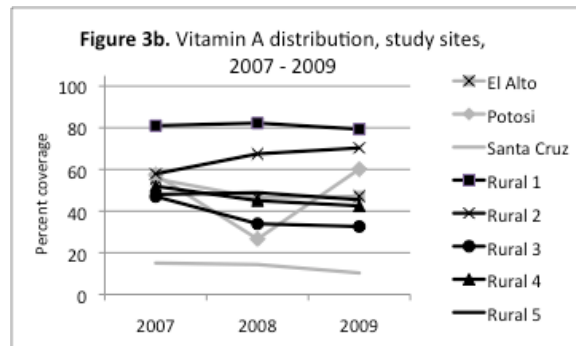
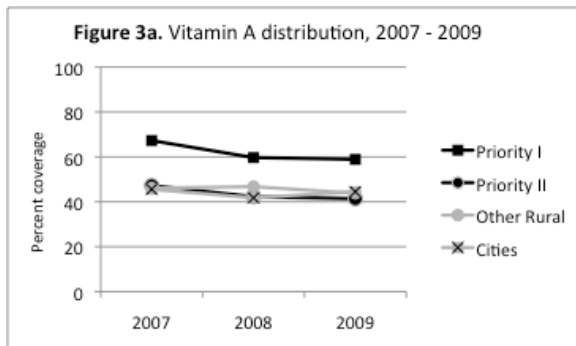
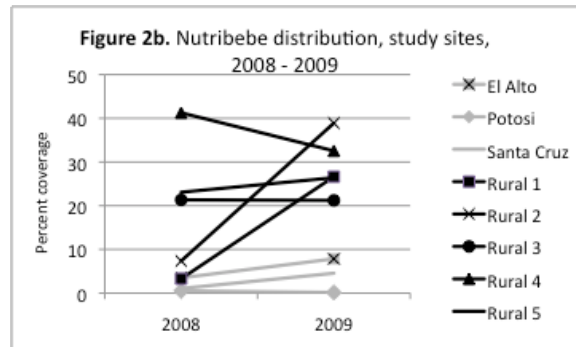
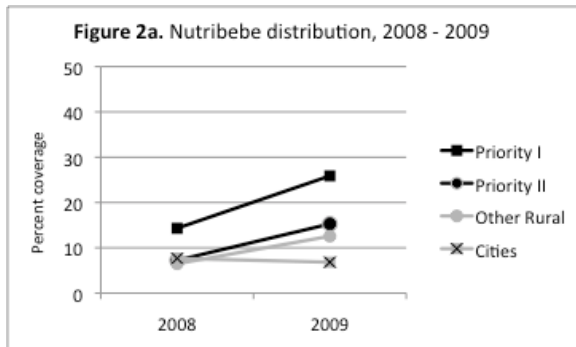
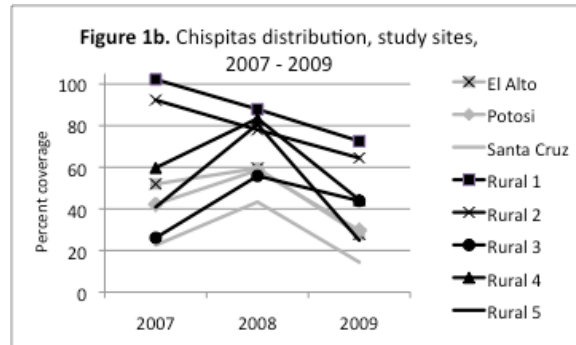
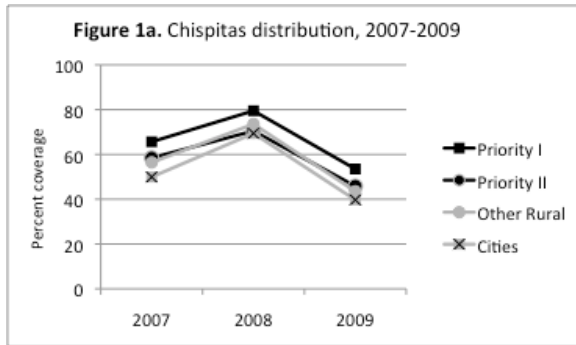
Department	Priority Municipalities		Year UNI Launched*				Staff Member Who Completed the Survey**		
	Phase I	Phase II	2007	2008	2009	2010	Doctor	Nutritionist	Nurse
Potosí (N=25)	11	13	4 (16%)	7 (28%)	9 (36%)	4 (16%)	6 (24%)	7 (28%)	22 (88%)
Chuquisaca (N=21)	12	9	2 (9%)	5 (24%)	6 (29%)	7 (33%)	9 (43%)	12 (57%)	8 (38%)

* Staff from one municipality in each department did not indicate when their UNI was formed.

** In some cases, several staff members jointly completed the survey. Percentages, therefore, equal more than 100%.

Survey analysis included themed coding of open-ended answers, descriptive statistics, and unpaired, two-tailed T-Tests comparing answers between Chuquisaca and Potosi UNIs as well as the opinions of UNI staff and national/departmental ZM administrators and partners where additional comparative data was available. Unpaired, one-tailed T-Tests were also conducted to compare responses of UNIs from Phase I and II priority municipalities (grouped across the two departments). Tests were also run to determine if there was a relationship between the number of challenges or successes UNIs reported and the size of municipalities in which UNIs worked (which can range in population from 2,000 to over 40,000).

Appendix E. Micronutrient coverage across ZM priority rural municipalities, other non-priority rural sites, cities, and study sites, 2007-2009



APPENDIX F. Comparative El Alto health center study methodology

Between January 2011 and March 2012, the donor funding an El Alto NGO included in my study, launched a comparative evaluation to document the NGO's approach and assess its impact on malnutrition. The NGO's objective was to develop a model to operationalize Zero Malnutrition (ZM) interventions using an explicit *Familial, Communitarian and Intercultural Health* (SAFCI) model, an approach the Ministry of Health hopes will change the public health system in Bolivia towards a more community-based strategy, across all health sector programs. The NGO's intention was to develop an approach for reducing chronic malnutrition that other health centers throughout Bolivia would be able to model.

The quantitative component of the evaluation began with initial survey work in early 2011, and another round in early 2012. I conducted the qualitative component of that evaluation, comparing the public health center where the NGO was based, with a neighboring health center the NGO evaluator chose as a comparison site. The qualitative study was based on semi-structured interviews and focus groups conducted with a total of 65 participants, including NGO staff, health center staff from the NGO's health center and the comparative health center, local authorities and families associated with both centers, as well as the manager and nutritionist at the District 8 Health Network Office (See Table F.1).

Interview questions covered the degree to which the comparative health center and the NGO team were able to implement or adapt national nutrition policies to their local capacity, institutional and demographic realities, how each operationalized the SAFCI model, and what they have learned in the process about local-level malnutrition and strategies for intervening. Caregivers and local leaders were also asked about their perceptions of local malnutrition, actions they have taken to improve nutrition, and about their interactions with the

NGO and comparative site staff. The analysis focused on the 1) differences in the strategies, processes and preparation of the NGO and comparative site staff to implement ZM interventions and apply the SAFCI model, 2) the effects of both approaches on local malnutrition understanding, health center access and satisfaction, and actions taken by staff, local authorities and families, and 3) how each team of staff react to similar implementation

Table F.1. Interview and focus group participants in the El Alto comparative impact evaluation

Interviewee	NGO public health center	Comparative center
Health care staff	5 total <i>2 doctors, 2 nurses, 1 Director</i>	5 total <i>2 doctors, 2 nurses, 1 Director</i>
Local authorities	8 total <i>4 neighborhood council presidents, 1 Vice-President, 3 COLOSAS</i>	4 total <i>1 neighborhood council president, 3 COLOSAS</i>
Caregivers	15 total <i>2 focus groups with 4 participants each who assisted cooking workshops, 7 home visits with families who do not attend workshops</i>	15 total <i>11 parents in the Center waiting room invited for a focus group, 4 home visits</i>
NGO staff	11 total <i>6 field staff, 3 local and national supervisors, 2 local and national data managers</i>	n/a
TOTAL	39	24
Health Network		2 total <i>1 Manager and 1 Nutritionist</i>
COMBINED	65	

Appendix G. Two strategies to nutrition program delivery

	Banking-engineering	Adaptive
Actor targeted	- Target the mother	- Expand to family, community
Relationship	- Authoritative experts - Correct and instruct - Serious, fear inducing	- Critical “friends” - Explain and encourage - Playful, kindness
Strategy	- Obey orders even if it hurts relations - Communicate in formal spaces - What you say is most important; stick to official messages - Find answers in technical knowledge, correct bad behavior - Tell, obligate or shame into doing	- Go outside official duties to protect trust - Communicate in the informal spaces - How you say it is important; help them relate, use familiar examples - Find answers starting with what they know and do, congratulate, reinforce - Listen, don’t obligate, and negotiate
Cause of failure	- Blame the mother	- Blame your strategy

APPENDIX H. List of questions asked across functions and scales and average interview length

ZM staff from national to local levels (average of 45 minutes)

- The degree to which each actor felt they had been able to implement different components of ZM (e.g., UNI, SVIN-C, AIEPI, micronutrients, multisectoral actions) and how feasible they believed ZM's goals and strategies were.
- Lessons learned about how to effectively implement nutrition interventions, including what strategies and skills had been key, and what factors and which actors facilitated or created obstacles to implementation. For this last question, follow-up questions asked about the role of local leaders, colleagues, health managers at various levels of the program and NGOs in supporting or obstructing implementation.
- Adjustments and innovations they or other colleagues introduced to improve ZM implementation, and what knowledge sources contributed to these improvements (more technical training, experience over time, dialogue with other actors).
- How they analyzed ZM strategies, procedures and tools to identify potential implementation weaknesses and how other colleagues or supervisors responded to ideas and innovations they personally offered.
- Aspects of ZM that would need to change (i.e. planning, administration, monitoring and evaluation strategies) so that the program could become more responsive to local realities.

Local authorities and NGOs (average 25 minute interview)

- From their perspective, the degree to which ZM interventions had been implemented in their neighborhood or community, municipality or department.
- What they believed caused malnutrition, and if they believed ZM was focusing on the most important issues to reduce malnutrition where they lived and worked.
- The strengths of the ZM program they had observed, and suggestions for improvements.

Mothers (average 15 minute interview)

- Actions and changes they would most like to see in their communities, and the importance they placed on nutrition interventions.
- What they believed caused malnutrition where they lived, actions they had personally taken to prevent malnutrition in their children, and what they had learned – if anything – about malnutrition from health and ZM staff.
- To what degree they felt that health and ZM staff had responded to the most pressing needs in their community.
- The strengths of the ZM program they had observed, and suggestions for improvements.

REFERENCES

- About, F and D. Singla. 2012. Challenges to changing health behaviors in developing countries: A critical overview. *Social Sciences and Medicine*, 75:589-594.
- Bebbington A. 1997. New states, new NGOs? Crises and transitions among rural development NGOs in the Andean region. *World Development*, 25:1755–65.
- Bezanson K and P. Isenman. 2010. Scaling up nutrition: a framework for action. *Food Nutrition Bulletin*, 31:178–86.
- Bhutta, Z.A., Ahmed, T., Black, R.E., Cousens, S., Dewey, K., Giugliani, E., Haider, B.A., Kirkwood, B., Morris, S.S., Sachdev, H.P., and M. Shekar. 2008. Maternal and Child Undernutrition Study Group. Maternal and Child Undernutrition 3—What works? Interventions for maternal and child undernutrition and survival. *Lancet*, 371(9610):417-40.
- Burgess J, Stirling A, Clark J, Davies G, Eames M, Staley K, and S. Williamson. 2007. Deliberative mapping: A novel analytic-deliberative methodology to support contested science-policy decisions. *Public Understanding of Science*, 16:299–322.
- Chambers, R. 1983. *Rural Development: Putting the Last First*, Harlow: Longman Scientific and Technical.
- Chambers, R. 2010. *Paradigms, Poverty and Adaptive Pluralism*. IDS Working Paper 344. Brighton, UK: Institute of Development Studies.
- Chang. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*. London: Anthem Press.
- Cordero, D. 2007. *Hacia el Desarrollo Integral y Armonico de las Intervenciones para el Cuidado de la Ninez en el Hogra y en la Comunidad: La Herramienta “Estrella Kivia”*. Plan Internacional, Bolivia.
- Ct-CONAN. 2006. *Desnutricion Cero al 2010: Compromiso Multisectorial*. La Paz, Bolivia: Author.
- Ct-CONAN. 2008. *Plan Estrategico 2007-2011 del Programa Sectorial de Desnutricion Cero*. La Paz, Bolivia: Author.
- Ct-CONAN. 2010. *Informe Annual Gestion 2010: Programa Multisectorial Desnutricion Cero*. La Paz, Bolivia: Author.
- Emery M and R. Purser. 1995. *The Search Conference*. San Francisco: Jossey-Bass Inc.
- Escobar A. 1995. *Encountering Development: The Making and Unmaking of the Third World*. Princeton, NJ: Princeton University Press.
- Field, J. O. 1977. The soft underbelly of applied knowledge: conceptual and operational problems in nutrition planning, *Food Policy*, 2(3):228- 239.
- Field, J. O. 1987. Multisectoral nutrition planning—a postmortem. *Food Policy*, 12:15–28.
- Forester, J. 1989. *Planning in the Face of Power*. Berkeley: University of California Press.
- Forester, J. 1999. *The Deliberative Practitioner*. Cambridge, MA: MIT Press.
- Forester, J. 2009. *Dealing with Differences*. New York: Oxford University Press
- Freire, P. 1970. *Pedagogy of the oppressed*. New York: Seabury Press
- Frenkel-Brunswick E. 1984. Intolerance of ambiguity as an emotional and perceptual personality variable. *Journal of Personality Assessment*, 18:108–143
- Heredia, N. 2008. Desnutricion cero. Estrategia para erradicar la desnutricion en niños menores de 5 años en 5 años. Power point presentation given September 23, 2008, in La Paz, Bolivia.

- Hoey, L and D. Pelletier. 2011. Bolivia's Multisectoral Zero Malnutrition Program: Insights on Commitment, Collaboration and Capacities. *Food and Nutrition Bulletin*, 32(2):S70-S81.
- IAICA - Inter-American Institute for Cooperation on Agriculture. 2009. *The Outlook for Agriculture and Rural Development in the Americas*. San Jose, Costa Rica: IICA.
- Kingdon, J. 1995. *Agendas, Alternatives and Public Policies*. New York, New York: Harper Collins College Publishers.
- Leroy J, Habicht J-P, Pelto G, and S. Bertozzi. 2007. Current priorities in health research funding and lack of impact on the number of child deaths per year. *American Journal of Public Health* 97:219.
- Levinson, F.J. and M. McLachlan. 1999. How did we get here? A history of international nutrition. In: Marchione T, ed. *Scaling Up, Scaling Down: Overcoming Malnutrition in Developing Countries*. Amsterdam, The Netherlands: Gordon and Breach Publishers.
- Lewicki, R., Saunders, D. and J. Minton. 1999. *Negotiation: Readings, Exercises, and Cases*. New York: The McGraw-Hill Companies.
- Lindblom, C. 1959. The science of muddling through. *Public Administration Review*, 19(Spring):79-88.
- Lipsky, M. 1980. *Street-Level Bureaucracy*. New York: Russell Sage Foundation
- Lopez A.S. and J.F. Petras. 1994. Nongovernmental organizations and poverty alleviation in Bolivia. *Development and Change*, 25:555-68.
- Melvin M., Henry, G. and G. Julnes. 2000. *Evaluation: An Integrated Framework for Understanding, Guiding, and Improving Policies and Programs*. San Francisco: Jossey-Bass.
- Merrill, J.M., Camacho, Z. L., Lorimor, L. F., Thornby, J. I. and C. Vallbona. 1994. Uncertainties and ambiguities: measuring how medical students cope. *Medical Education*, 28:316-322.
- Mintzberg, H. 1978. Patterns in strategy formation. *Management Science*, 24(9):934-948.
- Mintzberg, H. 1989. Crafting strategy, pp 25-42 in Mintzberg, H. 1989. *Mintzberg on Management: Inside our Strange World of Organizations*. New York: The Free Press.
- Michie, S., Johnston, M., Abraham, C., Lawton, R., Parker, D., and A Walker, on behalf of the "Psychological Theory" Group. 2005. Making psychological theory useful for implementing evidence based practice: a consensus approach. *Quality and Safety in Health Care*, 14:26-33.
- Morris SS, Cogill B, and R. Uauy. 2008. Maternal and Child Undernutrition Study Group. Maternal and Child Undernutrition 5—Effective international action against undernutrition: why has it proven so difficult and what can be done to accelerate progress? *Lancet*, 371:608-21.
- Moses JL, Lyness KS. 1990. Leadership behavior in ambiguous environments. In: Clark K, Clark MB, eds. *Measures of Leadership*. West Orange, NJ: Leadership Library of America, 1990:327-345.
- Patton, M.Q. 2011. *Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use*. NY: Guilford Press.
- Pelletier, D., Frongillo, D., Frongillo, EA., Gervais, SG., Menon, P., and T. Ngo. 2011. The nutrition policy process: The role of strategic capacity in advancing national nutrition Agendas. *Food and Nutrition Bulletin*, 32(2): S59-S69.
- Pelletier, D. 1991. *The Uses and Limitations of Information in the Iringa Nutrition Program, Tanzania*. Washington, DC: Cornell Food and Nutrition Policy Program.

- Pelletier, D. 2002. *Toward a Common Understanding of Malnutrition Assessing the Contributions of the UNICEF Framework*. New York and Washington DC: World Bank/UNICEF.
- Prochaska J., and J. Prochaska. 2011. A review of multiple health behavior change interventions for primary prevention. *American Journal of Lifestyle Medicine*, 5: 208-221.
- Pressman, J. and A. Wildavsky. 1973. *Implementation: How Great Expectations in Washington are Dashed in Oakland; or, Why it's Amazing that Federal Programs Work at All*. Berkeley: University of California Press.
- Reason, P. and H. Bradbury (Ed). 2011. *The SAGE Handbook of Action Research. Participative Inquiry and Practice*. 1st Edition. London: Sage.
- Rondinelli, D. 1983. Designing development projects: The limits of comprehensive planning and management. Pp. 65-88 in D. Rondinelli, Ed., *Development Projects as Policy Experiments: An Adaptive Approach to Development Administration*. London: Methuen.
- Sánchez, M.A. 2008. *Elaboración del Marco de Resultados del Programa Multisectorial de Desnutrición Cero y Diagnostico de la Capacidad Institucional para el Diseño de un Sistema de Monitoreo y Evaluación*. La Paz, Bolivia: Ct-CONAN.
- Scott, J. 1998. *Seeing Like a State. How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press.
- Selznick, P. 1949. *TVA and the Grass Roots: A Study in the Sociology of Formal Organization*. Berkeley: University of California Press.
- Shekar, M. 2008. Delivery sciences in nutrition. *The Lancet* 371:1751–51.
- Somos Sur. 2012. Gestion Evo Morales: Gabinete ministerial. Accessed June 12, 2012: <http://somosur.net/index.php/bolivia/politica/seguimiento-al-nuevo-estado-plurinacional/823-gestion-evo-morales-gabinete-ministerial>
- Weber, M. 1909/1944. Max Weber on bureaucratization in J.P. Mayer, *Max Weber and German Politics*. London: Faber & Faber.
- Weber, M. 1946/1958. Essays in sociology. In M. Weber, H. Gerth, & C. W. Mills (Eds.), *From Max Weber*. New York: Oxford University Press.
- Weick, K. and K. Sutcliffe. 2005. Organizing and the Process of Sensemaking. *Organization Science*, 16(4): 409-421.
- Wildavsky, A. 1973. If planning is everything, maybe it's nothing. *Policy Sciences*, 4:127.
- Yin, R. K. 2003. *Case Study Research: Design and Methods* (3rd Ed.). Thousand Oaks, CA: Sage