

# Complementary or Conflictual? Formal Participation, Informal Participation, and Organizational Performance<sup>†</sup>

(version: September 2016)  
(forthcoming in *Human Resource Management*)

Adam Seth Litwin  
Associate Professor of Industrial & Labor Relations  
ILR School  
Cornell University  
363 Ives Hall  
Ithaca, NY 14853-3901  
(607) 255-7326  
[aslitwin@cornell.edu](mailto:aslitwin@cornell.edu) / [@ProfASLitwin](https://twitter.com/ProfASLitwin)

Adrienne E. Eaton  
Professor of Labor Studies & Employment Relations  
School of Management and Labor Relations  
Rutgers, the State University of New Jersey  
50 Labor Center Way  
Piscataway, NJ 08903  
(848) 932-8561  
[eaton@work.rutgers.edu](mailto:eaton@work.rutgers.edu)

## ABSTRACT

Most studies of worker participation examine *either* formal participatory structures or informal participation. Yet, increasingly, works councils and other formal participatory bodies are operating in parallel with collective bargaining or are filling the void left by its decline. Moreover, these bodies are sprouting in workplaces in which workers have long held a modicum of influence, authority, and production- or service-related information. This study leverages a case from the healthcare sector to examine the *interaction* between formal and informal worker participation. Seeking to determine whether or not these two forces—each independently shown to benefit production or service delivery—complement or undermine one another, we find evidence for the latter. In the case of the 27 primary care departments that we study, formal structures appeared to help less participatory departments improve their performance. However, these same structures also appeared to impede those departments with previously high levels of informal participation. While we remain cautious with respect to generalizability, the case serves as a warning to those seeking to institute participation in an environment in which some workers have long felt they had the requisite authority, influence, and information necessary to perform their jobs effectively.

*Key words:* worker participation; formal worker participation; informal worker participation; employment relations; labor relations; industrial relations; healthcare; employee participation; employee involvement; worker involvement; participative management; case study; frontline work; institutional theory

## **Introduction**

Scholars of human resources and of the employment relationship have long insisted that empowering, engaging, or involving frontline workers enables managers and organizations to parlay workers' human capital, knowledge, and effort into improved operational performance (e.g., Appelbaum, Bailey, Berg, & Kalleberg, 2000; Nichols, 1962; Riordan, Vandenberg, & Richardson, 2005; Wilkinson & Fay, 2011). Indeed, what emerged from seminal human relations research as a response to early 20<sup>th</sup> century Taylorist ideals, cemented later in the century by employers seeking to address the “blue collar blues” of the 1970s and 1980s, was a genuine attempt to acknowledge workers' social needs and interests in a way that more authoritarian systems had not (Nissen, 1997; U.S. Dept. of Health, Education, and Welfare, 1973). Add to this the eventual construction of a solid theoretical foundation and its appeal as a “win-win solution to a central organizational problem” (Strauss, 2006, p. 778), and one can understand how frontline worker participation has emerged as a “central strategy for heightening productivity” (Hodson, 2004, p. 432). If that were not enough, intensified competition in product and service markets (Scott, 2014) and three decades of managerial delaying (McCaffrey, Faerman, & Hart, 1995; Useem, 1992) further secured its place in the managerial toolkit.

Amidst this enthusiasm on the part of scholars and practitioners, one might be surprised to learn of a central challenge to the empirical testing of participation's performance effects: the lack of a shared understanding of the term's precise meaning (Appelbaum and Batt 1994; Marchington and Suter 2013) on the part of researchers. In fact, the literature has yet to even converge upon a single label for the participation construct (Wilkinson and Dundon 2010). As noted in Litwin (2015, pp. 169-170), “Terms such as voice, involvement, and empowerment, sometimes prepended with qualifiers like employee, direct or indirect, or online or offline, can be defined any number of ways and with varying degrees of specificity.” In particular, Wilkinson and Dundon (2010, p. 168) note that researchers could be referring to something as narrow as “formal, ongoing structures of direct communication,” such as teams or team briefings, yet they might also be referring to something as informal as “any form of delegation to or consultation with employees.”

It is this latter distinction—between formal and informal forms of frontline worker participation—on which this paper will focus. To date, the most careful empirical studies have shown that worker participation, however labeled, when operationalized in a manner that makes sense to the actors in the workplace context in which it is being studied, benefits organizational

performance (e.g., Ichniowski, Shaw, & Prennushi, 1997; Litwin, 2011; MacDuffie, 1995). Nonetheless, received studies focus almost entirely on formal participatory structures to the exclusion of informal ones (cf. Marchington & Suter, 2013). In fact, while there are studies that examine the way different formal participative structures dovetail in the workplace (e.g., Gumbrell-McCormick & Hyman, 2010) and of “dual systems” of direct and indirect forms of worker participation (e.g., Purcell & Georgiadis, 2007), there are very few studies that examine the interplay of formal and informal participation on performance.

Even in a global economy with decreasing levels of conventional unionization, this proves problematic as the “representation gap” engendered by the decline in collective bargaining is increasingly being filled by other formal participatory structures such as employee involvement (e.g., problem-solving groups or what were once called “Quality Circles”) in the U.S., Joint Industrial Councils (JICs) or Employee-Management Advisory Committees (EMACs) in Canada, Joint Consultative Committees (JCCs) in the U.K., European Works Councils (EWCs), and other formal manifestations of management- or policy-promoted forms of worker participation (Freeman, Boxall, & Haynes, 2007; Kaufman & Taras, 2010).

This undoubtedly begs a question from managers: where employees already have a modicum of influence in everyday decision-making, does the establishment of formal problem-solving groups, for example, deliver any marginal benefit to the organization? As we will show, whether formal and informal participative structures complement or undermine one another’s effectiveness proves ambiguous from a theoretical perspective. Consequently, the question must be sorted out empirically. Until it is, we believe this is the sort of research void that leaves even the most progressive managers in the lurch.

The current study makes us early joiners in a conversation that is thankfully underway but long overdue. Building on and responding to Marchington and Suter’s (2013, p. 285) analysis of the interplay of “dilute and localized” formal and informal participation in the hospitality sector, we take aim at the (otherwise) rhetorical question we pose above by examining the performance implications of the introduction of a more far-reaching, formal frontline worker participation program in an organization in which some workers report high levels of influence, authority, and access to production-related information prior to the formal program’s creation. We triangulate between qualitative and quantitative data sources, exploiting variation in informal participation and examine changes in a context-relevant outcome measured identically across multiple

departments performing the same kind of work within a single, regional operation of a large, integrated, U.S.-based healthcare provider. Though this embedded, single-case design privileges internal over external validity leaving us cautious with respect to generalizability, we argue that many aspects of the research design render this a “critical” case, and thus, a conservative test of the emergent explanation for the ways that formal and informal participation conflict with one another in organizations and workplaces (Batt & Hermans, 2012; Yin, 2014).

We draw on research in employment relations and on organizations to offer competing arguments regarding the interaction of formal and informal participative structures. On the one hand, formal structures may provide much-needed institutional legitimacy to frontline workers long seeking to apply their creative problem-solving and tacit knowledge of the service delivery process to their everyday work. On the other hand, formal participation could work to squelch, suppress, or displace more effective, entrenched, and organic participative structures that exist only informally.

We weigh these compelling but competing arguments by comparing outcomes for roughly 30,000 patients. Through interviews, site visits, and archival research, we are able to identify a performance outcome that is both of great interest to the organization and theoretically tractable. This same “shoe leather” research afforded us a window into contextualized measures of formal and informal participation which we constructed through the company’s annual survey of frontline workers and then linked to patient-provided performance data. This allowed us to estimate the simultaneous impact of formal and informal worker participation on performance across 27 primary care departments over a two-year period. In this context, we find no evidence of complementarity between formal and informal participation. Rather, our analysis of individual workers embedded in departments embedded in this larger, regional healthcare operation suggests that while formal and informal participation are both positive drivers of operational performance, they dampen one another’s performance benefits. In light of this finding, we offer an explanation for these events founded in institutional theory, allowing us to consider the analytic generalizability of our findings. Thus, the case helps to illuminate a workplace phenomenon that likely vexes a great many managers and for which existing theory has yet to provide a satisfying answer.

## **Theoretical Background**

One would be hard-pressed to find a careful treatment of frontline worker participation that does not begin by acknowledging the aforementioned *mélange* of terms and their meanings (e.g., Barry, Wilkinson, Gollan, & Kalfa, 2014; Dietz, Wilkinson, & Redman, 2010; Wilkinson & Fay, 2011) that researchers have come to apply haphazardly and interchangeably. This discussion is important, because the choice of one label over another—voice vs. involvement vs. empowerment vs. engagement vs. participation, etc.—transcends semantics to reflect both denotation and connotation. The upshot of all of these discussions, however, is that researchers in this space should declare which label they are going to use and what they mean by it. Even more important, they must understand and analyze the specific practices that they are examining and what those practices mean to those in the research context (Wilkinson & Fay, 2011). Against this backdrop, we share Strauss’s (2006) view that “participation” captures a level of influence that is not necessarily reflected in “voice.” Whereas “voice” implies that the worker is speaking, “participation” suggests a deeper level of continuous, iterative engagement on the part of the worker and that what he or she contributes is not being altogether ignored.

The theoretical roots of the connection between participation and performance are broadly and firmly entrenched, coming from more micro-oriented organizational theorists and psychologists of work (e.g., Coch & French, 1948; Lawler & Hackman, 1969; Vroom, 1969) as well as from more institutionally-focused labor relations researchers (e.g., Freeman & Medoff, 1984; Slichter, Healy, & Livernash, 1960). With this wealth of theory, one might expect a commensurate degree of empirical substantiation. In fact, the productivity benefits of worker participation and even of its more broadly-encompassing cousin, high-performance work systems (HPWS), have not been demonstrated conclusively in large-*n*, national samples (e.g., Cappelli & Neumark, 2001; Freeman & Kleiner, 2000; Guest, Michie, Conway, & Sheehan, 2003).

One possible explanation for this missing evidence is that those who run the firm are not genuinely committed to frontline engagement. This could yield a situation in which workplace-level participative structures exist in principle, but are neither buttressed by an organization that has made a “strategic choice” to engage its workforce nor reinforced by an employment contract that sufficiently incentivizes frontline workers to put forth discretionary effort and tightly-held information (Appelbaum et al., 2000; Ichniowski & Shaw, 2003; Jones, Kalmi, & Kauhanen, 2010b; Litwin, 2015). Empirical work that has accounted for these sources of heterogeneity has,

indeed, demonstrated the participation-performance link (e.g., Batt, 1999; Litwin, 2011; Rubinstein, 2000). Likewise, those studies that are constrained to a large number of workplaces in a single, tightly-defined sector—allowing for physical rather than dollarized measures of outputs—have revealed evidence of a participation-performance link (e.g., Ichniowski et al., 1997; MacDuffie, 1995). This last group of studies, while tackling the so-called “black box problem” (Purcell & Georgiadis, 2007), has been much less successful at isolating the impact of worker participation from the influence of all those complementary innovative employment practices that reinforce it. This results not from a flaw in research design, but from the researchers’ subscription to the now well-accepted theory that innovative employment practices operate as a coherent, mutually-reinforcing “bundle” or “cluster” to drive performance.

To this we add another potential explanation for participation’s weaker-than-anticipated performance effects—the conflation of formal structures and processes attendant to worker participation with those less formal manifestations of participation. Most scholars have traditionally defined participation—or voice, involvement, etc.—as formal. Indeed, some treatments go as far as to explicitly exclude informal mechanisms from their definition of participation or of participative structures (e.g., Barry et al., 2014; IDE, 1993). Whether this is a conceptual oversight or simply a concession to the use of aforementioned large-*n* datasets that canvas formal participation but not informal participation is not clear. However, this observation does suggest that theoretical advancement on this front may well come from research designs built around the participation patterns of a constrained and well-understood set of workplaces (Yin, 2014).

### *Formal Participation*

In simplest terms, formal participation “relates to codified or prearranged structures” (Barry et al., 2014, p. 534). Examples range from conventional collective bargaining covering wages and other terms and conditions of employment to more workplace-level and work-focused bodies that have in some instances helped fill the void left by unionization’s decline, including works councils, plant safety committees, and quality circles. In the case we will present, the organization calls its formal participative bodies “unit-based teams” (UBTs), structures that provide frontline workers the chance to meet regularly offline to analyze workflows and to improve the work processes that influence performance outcomes. The program also affords frontline workers opportunities to

make material changes to how they undertake their daily work, so long as they can link those modifications to measurable performance improvements. Managers also encourage UBT members to step away from their work for short intervals on a daily or shift basis, where and when possible, to “huddle” to discuss the real-time functioning of their departments vis-à-vis the workflow and other process innovations being enacted by the UBT.

Given the literature’s (often implicit) focus on formal participation, we have, in effect, already laid out the fundamental theories linking formal participation to organizational or operational performance. We also want to make the case that formal participation remains important in practice even though many of the most-widely discussed innovations around participation in the U.S. have occurred in the context of unionized employment relationships (e.g., Kochan, Eaton, McKersie, & Adler, 2009; Rubinstein & Kochan, 2001). Yet, while the boldest experiments in this space in the U.S. may actually require the presence and cooperation of a union in the workplace, there is ample evidence of formal participation programs in nonunion workplaces as well (e.g., Eaton & Voos, 1994; Kaufman & Taras, 2010). In the U.K., Willman, Gomez, and Bryson (2009) find that the incidence of Joint Consultative Committees—which are management-initiated by definition—is actually slightly higher in unionized workplaces than in nonunion ones, whereas the incidence of team briefings is about the same irrespective of workplace union representation. Likewise, European Works Councils and Health and Safety Committees in the U.K. can operate in unionized and nonunion workplaces, and German Works Councils generally operate in parallel but independently of trade unions. In still other cases, union decline has actually created opportunities for nonunion, albeit still formal, opportunities for worker participation to emerge (Gomez, Bryson, & Willman, 2010; Kaufman & Taras, 2010). These include regular meetings or scheduled exchanges between management and frontline workers or the formal designation of problem-solving groups.

### *Informal Participation*

There is much less theory and research linking informal participation to performance, in large part because in contrast to formal participation, informal participation does not involve any explicit mechanisms. Once again taking our lead from Strauss (1998, p. 15), we define informal participation as “the day-to-day relations between supervisors and subordinates in which subordinates are allowed...input into work decisions.” To this, we add an informational

component. That is, the interactions that signal informal participation must allow for “information passing, consultation, and the seeking of ideas” (Marchington & Suter, 2013, p. 286). Marchington and Cox (2007, p. 189, emphasis added) further build on and clarify the construct, noting that

Informal participation can be characterized as a *product* of management style or a particular set of leadership behaviors, based on whether or not managers actively seek and respond to the views of employees or delegate when [m]aking decisions about workplace matters.

This implies that informal participation exists in the eye of the beholder, i.e., each individual worker’s assessment of the scope of the everyday, undocumented ways that he or she can take action alone or concertedly to address performance issues. Thus, informal participation captures workers’ perceptions of the extent to which they can exercise authority and influence in carrying out their work and that they have the requisite, real-time organizational or customer-related information to do this work and to apply this influence effectively.

This approach and orientation yields ramifications both mensural and conceptual. Not only must informal participation be measured by asking workers directly about perceptions of authority, influence, and access to information, but it can obtain even where workers have no access to formal participative structures.

One can look to the organizations literature for research linking informal forms of participation to organizational performance. The classic review by Cotton and colleagues (1988), for example, found that informal participation was positively associated not only with job satisfaction, but with productivity and performance. However, the authors never explain precisely how the studies they draw from in their review actually define informal participation. Other analyses of participation or engagement in a broader context, presumably beyond the bounds of formal structures, also suggest that participation drives discretionary effort on the part of employees (Fox, 1974), including through more carefully-measured constructs such as organizational citizenship behavior (OCB) (e.g., Cappelli & Rogovsky, 1998; Spreitzer, 1995).

### *Formal and Informal Participation: Complementary or Conflictual?*

While theory suggests that both formal and informal participation drive performance in a positive direction, there has been surprisingly little theorizing and even less empirical investigation

of how formal and informal participative mechanisms operate in tandem. Though Strauss (2006) eventually became disillusioned regarding the performance prospects for worker participation, his earlier thinking, itself informed by decades of research, seemed sanguine regarding the interplay of formal and informal participation. He notes two different paths by which formal and informal approaches could commingle, both of which imply complementarity (1998, p. 18). First, formal participation may itself evoke informal participation. Second, he expected that formal participation would be more successful when introduced “in an atmosphere of informal participation.”

To the contrary, other labor relations scholars offer elements of a theory to counter the complementarity argument. Martinez Lucio (2010) notes that in some cases, management may be instituting formal participative structures expressly to wrest power from existing, strong, union-backed participation structures. Indeed, scholars of the partnerships propounded by Britain’s late-1990s Labour government find empirical evidence to backstop the view that partnership delivers more to the management side than to workers and that these programs are, at best, a weak determinant of workers’ trust in their employers and, likewise, employers’ trust in their workers (Guest, Brown, Peccei, & Huxley, 2008; Guest & Peccei, 2001).

Nonetheless, even where it is not management’s strategic intent to use partnership to pry power or control away from workers, “the [mere] presence of formal structures could...hamper the growth, sustainability, and contribution of more informal voice practices” (Barry et al., 2014, p. 531). Both Barry et al. (2014) and Martinez Lucio (2010) note that in Europe, in particular, regulatory pressures for managements to establish formal participative bodies—as opposed to managers opting to create these structures of their own volition—could hasten these dynamics.

We know of just one explicit attempt to understand the interplay of formal and informal participation. Given the early stage of theory-building in this area, Marchington and Suter (2013) rightly chose to undertake a case study, on this occasion, in a large, U.K. chain of about 300 restaurants. Among other interesting findings, they conclude that in their setting, both managers and frontline staff prefer informal channels to formal ones, in part because of the need for managers and staff to be able to work together in a pressure-filled environment to meet customer demands. They also infer that despite this preference for informal over formal, the two styles of participation actually depend on one another to operate effectively, much as Strauss (1998) had theorized.

Remaining attempts to sort out this theoretical ambiguity must necessarily come from studies that look not at the mix of formal and informal participation but at various configurations of formal structures. Studies that do this generally conclude that mutually-reinforcing bundles of formal participative practices, including those “dual-voice” systems that mix direct and indirect participation, reveal performance complementarities (e.g., Purcell & Georgiadis, 2007; Pyman, Cooper, Teicher, & Holland, 2006), particularly when they are embedded in a broader, high-performance work system (e.g., Handel & Levine, 2004; MacDuffie, 1995).

Thus, whether and how formal participative structures and informal mechanisms complement or conflict with one another in driving performance remains an open question. And, given the paucity of theorizing undertaken to date in this area, the question is one that we believe is still best addressed by a case study approach (Yin, 2014).

## **Context and Design**

We undertook our research at Kaiser Permanente, an integrated health insurer and healthcare provider and the largest health maintenance organization in the U.S. At the time we conducted our fieldwork, it affiliated with over 16,000 general practice and specialty physicians operating out of 37 hospitals and 611 medical offices across eight semiautonomous regional operations, providing care for over 9 million patients. This required the services of over 172,000 technical, administrative, clerical, and care-providing employees, about 100,000 of which were members of one of thirty local unions that formed the Coalition of Kaiser Permanente Unions, and thus, were party to Kaiser’s unique labor management partnership.

Formed with an agreement between Kaiser Permanente and the Coalition, the partnership had a number of goals. These included improving the quality of care and involving employees and their unions in decisions. Notwithstanding many largely ad hoc manifestations of worker participation of varying degrees of formality<sup>1</sup>, during its first decade of existence, the partnership had not yet lived up to its goal of systematically leveraging Kaiser’s frontline workforce towards improved service to patients. In fact, only 40 percent of partnership-covered employees reported any involvement in the partnership, a finding that Kaiser Permanente leadership linked to the lack of consistent, upward movement in service quality measures and the dearth of empirical evidence linking features of the partnership, in particular, measures of participation, to care quality or service metrics. As a result, the parties resolved that the next crucial step for the partnership was to focus on operational improvement

by “bringing partnership to the frontlines.” This was formalized by the contractual establishment of unit-based teams as the “basic unit responsible for work and results in a particular area” as well as a larger regional and national infrastructure to support them. The latter would be necessary to ensure that UBT members were trained in performance improvement methods, availed of business information and near real-time performance data, and in receipt of other forms of support as needs arose (Kochan, Eaton, McKersie, and Adler 2009).

Our initial, preliminary examination of the UBT program was broad in scope and mainly qualitative. Given our interest in developing a fundamental understanding of how the program operated at the workplace level, our sampling was purposive—not random. We focused solely on unit-based teams that Kaiser Permanente management and union leaders determined had successfully worked through early challenges to become effective in their performance improvement efforts. With the goal of pinpointing what makes a high-performing UBT so successful, we studied 16 units in five regions identified by partnership staff as high-performing using pre-specified criteria and working in a range of settings, including primary care, a lab, environmental services, and hospital-based direct care. In each case, a member of our team observed either sit-down team meetings or daily “huddles” or both and, where possible, the undertaking of everyday work. We also conducted interviews with labor- and management-side UBT members and leaders, and sometimes, additional regional staff supporting the UBT program.

We learned from our work on the ground conducted as part of this preliminary study that successful unit-based teams enacted a very carefully-planned and ordered methodology to establishing themselves as a team. This included a collaborative exercise to develop a team charter as well as training in the terminology and the processes of quality improvement. The training provided UBT members with a common language for identifying, testing, and then either modifying or abandoning ideas for improving clinical outcomes or service delivery, key for unit-based teams that included a wide diversity of job classifications and thus, did not necessarily benefit from the social ties of profession or job classification. UBT training also socialized individuals into their new teams by creating a common set of rules and expectations, and, when successful, inculcated in members an understanding of and appreciation for the most effective ways that these frontline, participative bodies could contribute to the larger organization’s mission and often, to specific regional goals as well.

Having done this, often with the help of regional UBT trainers, high-performing unit-based teams would work together to achieve their objectives with support from the people they referred to as their

UBT’s “sponsors.” We determined that the sponsor’s role was crucial to the success of these bodies. Sponsors were management- and labor-side representatives who were not intended to be regularly-participating, ongoing members of a unit-based team, but were responsible for getting the group established and for clearing away any organizational obstacles that might exist outside the UBT’s ambit. Thus, as crucial as the sponsors’ role was, it was also a delicate balancing act. First-line managers and supervisors were generally active alongside unionized frontline workers in serving on and running unit-based teams. However, higher-level managers, multiple levels removed from regular interaction with patients, were not intended to sit on unit-based teams. In general, they were designated solely as sponsors, whose responsibility was—as one such sponsor quipped—“to run interference.”

#### *Primary Care in a Single Region: Embedded Units within a Single Case*

As noted above, the goal of the aforementioned preliminary study was to enrich our understanding of how UBTs function when they are, in effect, achieving their operational goals. And, since these were all departments or groups that had not been high-performing prior to the implementation of their UBTs, each could provide information on how they evolved and their lessons from that process. While enormously instructive, for a variety of reasons both analytical and practical, we also wanted to develop and test our hypotheses on a completely separate set of UBTs. We wanted to find a large number of UBTs undertaking similar or identical work, under the same regional managerial regime, working towards at least one common performance goal. In the course of undertaking the preliminary study, we regularly asked managers and union representatives in the organization where we could find a set of UBTs that would meet these quasi-experimental and practical (i.e., so we could establish ourselves in a single region in order to gather the data and observe all of the departments) requirements. A frequent response was that we should look at primary care, as every Kaiser region had many primary care departments. We settled on the primary care UBTs in one particular region (which we agreed not to identify), because its managers and workers were the most eager to work with and to share their data with us.<sup>2</sup> Accordingly, while our study is, in a sense, predicated on the single case of Kaiser Permanente, we actually leverage variation between 27 observed departments, employing what Yin (2014) labels an “embedded” case study design.

A number of features made these departments ideal for detailed study. First, there were few other examples of a large number of departments doing the same work within a single, regional

operation. Second, these departments were not given a choice of when to opt in or opt out of the formal participation program, allowing us to eschew the usual empirical challenges arising from self-selection. They also adopted their equivalent participatory structures at the same time and under the same regional management. Third, they all had at least one, common patient service goal, one that was measured reliably over a multi-year observation period and of concern not only to Kaiser Permanente itself, but to sectoral actors more broadly: reduced wait times—inarguably a key service measure and driver of patient satisfaction (Gittell, 2009; Givan, Avgar, & Liu, 2010), and thus a critical performance outcome in the primary care context. As a regional manager explained,

Part of the efficiency of the team comes down to, “Can you run the day on time?”. That’s a big complaint we get [here] and in medicine in general. We run behind. So, what can the team do to help run the day on time?

Healthcare organizations are correct to be concerned about this determinant of patient satisfaction and efficiency, since increased competition in the healthcare marketplace in the U.S. underscores the need to satisfy patients (Gittell, 2009). Aside from wait times being a concern to Kaiser Permanente managers in particular, Savin (2006) shows that in the U.S. setting, one would have to think quite highly of his or her primary care provider to maintain their relationship with him or her if they are regularly forced to wait long beyond their scheduled appointment times. Thus, wait time represents what Givan et al. (2010, p. 37) call a “hard indicator” of quality and is the sort of proximal performance measure that others have called for (e.g., Hunter & Pil, 1995; Jones, Kalmi, & Kauhanen, 2010a), as it reflects less noisily than any financial or clinical measure how effectively the employees in a primary care department are actually meeting patients’ service needs (Noteboom, 2015). That is, wait times are highly tractable from a theoretical perspective in this context, whereas the same cannot be said for more globally pressing clinical outcomes or mortality measures.

#### Formal and Informal Participation in Primary Care Departments

Unit-based teams epitomize a formal participatory structure. And, where they were operating as intended, the members of these 27 UBTs agreed on who should lead and facilitate meetings, and then took a structured approach to determine where resources were stretched thin and where to expect bottlenecks in “rooming”—the name of the process of calling the patient’s name, escorting him or her into an examination room, taking their vital signs, and instructing them to wait for their medical

provider. They could then develop ideas and “hunches” for problem-solving, and then regroup weekly or even daily to determine which were working.

With help from their UBT sponsors, UBTs could redesign workflows, reallocate work, or create systems to prioritize different work at different times of day, dependent on patient congestion. UBTs could make material changes to patient scheduling, altering the number of appointment slots available at different times or ensuring that only certain appointment types (with their varying expected lengths and demands on staff) could be scheduled contemporaneously. If they determined that the source of patient backups were providers stepping away to return patient calls, for example, they could block off regular intervals of a provider’s schedule for these tasks rather than letting them repeatedly create a backlog of delayed appointments. The key is that aside from identifying the symptoms of the problem—a line of patients forming in the waiting room—and successfully remedying it in the immediate or near term, they could also step back to determine its root causes, experiment with different potential fixes, and make material changes to the processes that generated the problem or at least allowed it to persist. All of this occurred under the formal participatory apparatus, none of which existed until the creation of unit-based teams and the program that supported them.

At the same time, many frontline workers spoke of having authority and influence and information on the performance of their department, either over time or in relation to other primary care departments in the region. In fact, workers implied that these manifestations of what we think of as informal participation helped them meet the needs of the organization and of their patients. And, they believed these perceptions were longstanding attributes of their work.

Lacking any formal authority, influence, or access to information on departmental or organizational performance, how could workers parlay informal participation into reduced wait times? While individual, “informally participating” workers or even small groups of them could not enact larger sorts of system changes on their own without the aid and imprimatur of their UBT, they could and often did make exceptions to existing routines as a way to solve immediate or easily-predictable patient appointment bottlenecks. For example, they could resolve to call patients with scheduled appointments to update them on the backlog, encouraging them to come in later than originally scheduled or to reschedule their appointment for an hour later or perhaps for another day entirely. Thus, what we observed in the field proved consistent with research and theory on worker participation: one would expect that frontline workers in primary care could reduce wait times through both their unit-based teams and through informal channels.

Less clear a priori was whether formal and informal participation would reinforce one another in driving performance improvements, as some—but by no means all—theory has suggested. Had the formal participatory structures and informal mechanisms in primary care yielded distinct and unrelated approaches to addressing a performance issue, one could accept that their parallel operation would be complementary or at least nonconflicting. However, our time on the ground in the focal region, informed by our learnings from the overarching, national study revealed this was not the case.

Consider this comment from a frontline worker who had been temporarily assigned to a region-wide role in support of the formal participation program in the focal region. She noted that many of those working to deal with the wait times outside the purview of their departments' unit-based teams came to see the formal participative bodies as “taking them away from their work and their service goals” rather than as a device for helping themselves and other workers meet them. In fact, instead of their continuing to serve patients in smaller, informal ways, they were encouraged to contribute to the larger, systemic approaches being promulgated by managers and enacted by their unit-based teams. Furthermore, they were actively discouraged from rendering their effective “quick fixes,” as the routine use of exceptions in this way undermined efforts to measure and address wait times and to assess the effectiveness of experimental, systemic fixes to their underlying causes. So, for all the potential benefits one could expect from formal participation in this context, one could also see its tendency to crowd out other constructive steps that were being undertaken through purely informal mechanisms.

This led us to look into whether departmental supervisors and medical office administrators—first- and second-line managers—were—perhaps inadvertently—muzzling those workers and those departments achieving high levels of necessarily informal participation outside the ambit of formal structures. If so, then imposition of the formal participation program, even where it proved effective, would undermine the mechanisms of informal participation, making their interaction a negative one. In fact, as noted earlier, departmental supervisors were indeed meant to be full participants on their unit-based teams, but also to relinquish control to frontline workers and to act as coaches rather than as superiors. Yet, these supervisors generally felt the need to exert control over the people and the processes deployed in service to performance goals. Furthermore, medical office administrators, the second-line managers to whom these first-line supervisors reported, were not intended to be members of the unit-based teams in their charge. Thus, the most glaring example of managers' reluctance to give up control was administrators' ongoing, active participation in unit-based teams,

including regular attendance at meetings—thereby assuming the role of a fully-participating UBT member in addition to their prescribed role as a non-participating UBT sponsor.

Figure 1 conceptualizes lessons delivered by existing theory and by our qualitative examination of the 27 primary care departments under study. In sum, frontline workers can reshape the service delivery process through codified, prearranged participative structures or through undocumented means, sometimes individually and sometimes in concert with their co-workers. Whether or not these two mechanisms operating in parallel to boost or erode one another’s operational effectiveness is the question we aim to address more rigorously in the next section.

[-----Insert Figure 1 about here.-----]

## **Quantitative Data and Methods**

### *Measures*

#### **Formal Participation, Informal Participation, and Their Interaction in Service Delivery**

In exchange for constraining our analysis to the 27 primary care departments that operate in a single region of a large, multi-regional healthcare provider we can examine something much more granular than whether or not a firm “has” frontline participation: we can measure whether or not workers are part of nearly-uniform, formal participatory structures.

[-----Insert Table 1 about here.-----]

We detail the definition, construction, and source of this measure in Table 1 alongside the other variables called upon in the quantitative portion of our case study. Formal participation is derived from Kaiser Permanente’s survey of employees which is administered annually by a third-party vendor. Workers are assured confidentiality, are given frequent reminders, and can undertake the survey at their desktop computers during regular work hours. Thus, the response rate is about 89%.

Among the questions on the survey is one that allows us to construct a contextualized measure of participation: that is, whether or not a frontline employee self-identifies as a member of his or her unit-based team and thus, considers himself or herself part of the formal participatory apparatus. Employees answer the question yes or no. Note that this differs from the way Marchington and Suter (2013) assess formal participation; they ask workers in nine restaurant locations to select the frequency (on an 8-point scale) with which they read company newsletters, look at notice boards, or attend team meetings (that are held when operational pressures permit).

However, just as this made sense in their setting, we believe that in our setting, directly asking workers to self-declare their involvement in formal participatory structures allows us to eschew “frame of reference” problems (Hunter & Pil, 1995), a genuine possibility when respondents are posed questions from a generic battery as opposed to those capturing formal participation as it exists and is referred to in one’s own workplace. Moreover, Kaiser Permanente’s labor-management partnership itself relies on this same survey item to assess formal participation (Miles, 2015).

Were care delivered on a one-to-one basis between a single frontline worker and a single patient, there would be no need to aggregate this employee data whatsoever. However, our fieldwork and anyone’s experience as a primary care patient make clear that the many-to-one structure of work and care delivery in healthcare—the frontline workers in a given department collaborate to serve each individual patient—would require us to aggregate individual worker data into departments. While we do not know survey respondents by name, we do know the specific department in which each is based and, of course, the year of the survey. Therefore, we can calculate the share of department workers claiming to be members of their UBT in each year, akin to the measures and methods employed elsewhere in management research (Vázquez, 2004).

An additional appeal of this organizational setting and research design was that it afforded us an opportunity to measure informal participation from individual worker perceptions which, as we have already argued, received research compels us to do. That is, we can determine to what extent a given frontline worker reports having the authority, influence, and information necessary to perform his or her job. To construct this scale, we were able to rely on four survey items that the organization has itself long collected as part of the aforementioned annual survey of employees: (1.) “I have enough say in how I do my job.”, (2.) “I can quickly access the information I need to do my job effectively.”, (3.) “I have the decision-making authority I need to meet the needs of...patients and customers.”, and (4.) “In general, how much say or influence do you have over decisions affecting your work?”. Each item is anchored by a 5-point Likert-type rating scale. For items 1-3, the scale ranges from 1 (“strongly disagree”) to 5 (“strongly agree”). Similarly, for item #4, the scale ranges from 1 (“none”) to 5 (“a great deal”). We constructed the variable by summing each individual employee’s responses to each of the items and then dividing by the number of questions answered.

Since the measure of informal participation is rooted in survey items designed by the organization, it offers the same “frame of reference” benefits noted with respect to the formal participation measure. It is also highly reliable ( $\alpha = .84$ ). An eyeballing of the four items described in Table 1 reveals that they do pick up on all of the elements of informal participation included in our definition of the construct, bolstering both the content and convergent validity of the scale (Schwab, 2005). Furthermore, several of the items comport with those employed in previously published empirical accounts of worker participation programs (e.g., Batt, 2004; Jones et al., 2010a).

Just as we did for formal participation, we can aggregate and average values for the informal participation scale to the level of the department-year, yielding a value that can be linked to every single patient visit that took place to that department in that year. Where our treatment of this variable differs from our treatment of the others is with respect to timing. Each of the other variables is included and examined contemporaneously, i.e., at time  $t$ . Since we want to examine the dynamics of layering a formal participation scheme atop existing perceptions of informal participation, it makes sense to lag this variable, i.e., considering it at time  $t-1$ .

Finally, having used the employee survey to develop contextualized, linear measures of formal and (lagged) informal participation, we can create a two-way, multiplicative term to capture their interaction in the service delivery process. This, of course, serves as the focal independent variable in the quantitative portion of the case study.

## Performance

Assessing departmental operational performance requires a measure of how long each patient sits in the waiting room. We can construct this from information reported by the patient—the number of minutes past one’s scheduled appointment time that a patient must wait—on a post-visit patient satisfaction survey. For each of almost 30,000 primary care patients, we know which department the patient visited and on which exact day. This allows us to merge these data with the independent variables constructed from the employee survey. The instrument from which the performance measure was constructed is nearly identical to the one used in Litwin (2011), though it is now administered on-line rather than by mail. The response rate is 35 percent. What results from the marriage of these two datasets is a new dataset comprised of  $n = 29,743$  patient visits.

## Control Variables

Aside from including items that facilitate our construction of the two participation variables, the employee survey also provides each respondent's job classification, allowing us to measure what we label "functional representation." Functional representation captures the number of distinct job classifications, i.e., the span of job roles, represented on each department's unit-based team, a number which can then be linked to each patient. As noted above, our fieldwork suggested that those teams whose membership spanned more job classifications would be advantaged relative to departments whose unit-based teams included representatives of fewer job classifications. As it turns out, both the teams (e.g., Keller, 2001) and relational coordination (Gittell, Seidner, & Wimbush, 2010) literatures theorize this relationship—that the number of different functions represented serves as a proxy for how much of the work process is actually represented in team meetings. Therefore, both would predict this variable to be a positive driver of service quality. Moreover, almost by construction, we would anticipate a positive correlation at the department-year level between functional representation and formal participation—the higher the share of department workers on the unit-based team, the greater the span of jobs represented. Therefore, the omission of a variable capturing the number of distinct job classifications included on a unit-based team could potentially bias upward any positive estimate of the relationship between the incidence of formal participation and our measure of service quality (Wooldridge, 2010).

Our estimates will also control for time-constant, unobserved variation between departments—namely patient and case mix—using a vector of department dummies. One can imagine that certain primary care departments serve higher-income or lower-income areas or that some serve more elderly patients, differences that could impinge unevenly on performance. Though our time on the ground gives us no reason for caution with respect to unobserved differences in human capital or other workforce-related characteristics, these same dummy variables allow us to partial out unobserved differences along these lines as well. Second, while there is no simple statistical fix to control for time-varying unobservables, our sample, purposely constrained to a reasonable number of broadly homogenous organizational subunits, leaves no obvious drivers of this sort of bias. Rather, what time-varying unobserved variation exists is more likely the result of seasonal differences in the size and composition of the case load, time-specific shocks that we capture with the inclusion of weekly time dummies, following Jones and Kato (2011).

### *Analytical Procedures*

We next construct the model that allows formal and informal participation to influence performance as described above. We cannot use ordinary least squares (OLS) to predict wait times, because it would be unreasonable to assume that the residuals in a linear regression predicting wait times would be normally distributed. All observed wait times will be greater than or equal to zero, whereas the support set for the normal distribution includes all real numbers (Allison, 2010; Castilla, 2007). Furthermore, the distribution of observed wait times is asymmetrical: most patients barely wait at all, causing an enormous spike around zero with monotonically decreasing wait times thereafter. Consequently, we prefer a duration model, i.e., survival or event history analysis.

When estimating a duration model, one is essentially predicting the probability (or the “hazard”) that the focal event occurs each minute, conditional on the values of the independent variables and the fact that the event has not yet occurred. Given our knowledge of the data and the setting, it is reasonable for us to buy efficiency by assuming a shape for the hazard function. From the class of parametric proportional hazard models, the Weibull distribution provides a monotonically increasing or decreasing shape for the hazard function, governed by an estimable shape parameter (Castilla, 2007).<sup>3</sup> In particular, we are estimating

$$h(t | x_i) = pt^{p-1} e^{(\beta_0 + x_i \beta_x)},$$

where  $t$  represents the wait time (in minutes) as a function of a vector of patient-level predictors,  $x$ , for each of  $i$  patients. The shape parameter is  $p$ , and  $e$  is simply the base of the natural logarithm. Depending on which model we are estimating, the row vector,  $x_i$ , will include linear terms for formal participation and informal participation, and in some cases, the multiplicative term to capture their two-way interaction. Also included are controls for functional representation and dummies for each week of observations and for each department.

In this framework, a positive coefficient estimate, e.g.,  $\hat{\beta}_x > 0$ , implying  $e^{\hat{\beta}_x} > 1$ , also implies that a single-unit increase in  $x$  has a positive, multiplicative effect of  $e^{\hat{\beta}_x}$  on the baseline “hazard” of a patient being called in for his or her appointment. That is, holding all other variables in place, an increase in  $x$  would be associated with a *decrease* in wait time or an *increase* in operational performance.

Finally, recall that the construction of the dataset required the use of department-year-level means, meaning that the data feature a complex dependence structure. That is, the focal predictors do not truly vary at the patient-level, but rather by department-year. Without accounting for this dependence structure, estimated standard errors would be biased downward. We address this challenge by augmenting our parametric model with a shared frailty term at the level of the department-year. In this way, the shared frailty term can account for known intragroup correlations created by our construction of the dataset (Gutierrez, 2002).<sup>4</sup>

## Quantitative Results

### *Descriptive Statistics*

Table 2 displays means, standard deviations, and pairwise correlations for the data. Note that since these variables were constructed by aggregating responses to the employee survey by department by year, and then folding them into the patient data, they reflect implicit weighting based upon how many patient responses there were for a particular department over the course of each year. The statistical substantiation for this aggregation method rests on one-way ANOVAs we estimated for each of the two, linear participation variables in each of the two years of observation (Litwin, 2011). When estimating an ANOVA, a statistically significant  $F$ -statistic implies that there are differences in means *between* the groups that significantly exceed the differences in means *within* groups. Put more crudely, it means that the responses for a given group—in this case, a particular UBT in a particular year—“clump together” rather than yield their mean from a mix of widely-distributed, extreme responses (James & Williams, 2000). Across the four tests, the smallest (and thus, most conservative) of the test statistics is  $F = 2.36$  ( $p = .0003$ ), implying that there are truly differences-in-means between departments as opposed to noisy data within each department creating the false appearance of different means. With that in mind, notice that the mean level of formal participation is 49 percent. That is, given the way the 29,743 patient visits were spread across department-years and given the mean level of formal participation in each of those departments in each year, just under half of the frontline workers serving these patients were part of the formal participation program.<sup>5</sup> On average, each unit-based team included between 3 and 4 unique job classifications, the most common being registered nurses, licensed practical (or vocational) nurses, and medical assistants.

[-----Insert Table 2 about here.-----]

To most anyone who has frequented medical offices in the U.K. or the U.S., these departments perform extremely well with respect to wait times. The average patient waits just over three minutes from the time he or she arrives in the waiting room until the moment they are called into the exam room by a medical assistant. However, the relatively large standard deviation makes clear that the data are right-skewed: those waiting one standard deviation beyond the mean, for example, wait over 12 minutes.<sup>6</sup> Furthermore, wait time is not pairwise correlated with any of the other variables called in the study.

With respect to informal participation, on average, these employees scored 3.42, to the right of the neutral point on the scale. Rounding out the independent variables is the two-way, multiplicative interaction term. Note that the pairwise correlations, generally small in magnitude, provide evidence of discriminant validity between constructs (Schwab, 2005). The only variables that appear to co-vary strongly are the two-way, multiplicative interaction term and its component, linear terms. However, it makes sense that these variables would be very highly correlated and does not portend challenges for interpreting results from multivariate estimates (Friedrich, 1982).

### *Duration Models*

Table 3 reveals the estimates for the duration models. While Model 4 is the model that will ultimately reveal the lack of complementarity between formal and informal participation, that model is best understood by casting it against a set of simpler, nested models—Models 1-3. Aside from the control for functional representation and the spatial and temporal dummies, Model 1 includes only a single regressor for formal participation. In this case,  $\hat{\beta}_{\text{Formal Participation}} = 0.13$ . That the estimate is positive suggests that increases in formal participation are associated with increases in the “hazard” of one’s being called in for his or her appointment, implying reductions in wait times, and therefore, improvements in service quality. However, the point estimate in no way approaches statistical significance, meaning this model does not provide evidence in support of any relationship between formal participation and wait times. While this appears to contradict the theory alluded to above that links formal participation to performance, we are not especially concerned. Since this estimate effectively constrains the coefficients on informal participation and on the two-way interaction term to be zero, it is, in a sense, misspecified.

[-----Insert Table 3 about here.-----]

In Model 2, we substitute lagged informal participation for formal participation, yielding much the same result as the previous model. While the coefficient is negatively signed, it in no way approaches statistical significance. Like Model 1, this model renders a similar non-verdict with respect to informal participation. That is, controlling only for functional representation and in the presence of the week and department dummies, there is no association between informal participation in the prior year and operational performance. For interpretive ease and for the remainder of this paper, the informal participation variable has been centered at its neutral value of three on a five-point scale. In preparation for a direct examination of the commingling of formal and informal participation, Model 3 includes both the formal participation and the lagged informal participation variables simultaneously in a purely additive framework (Friedrich, 1982). This proves useful for understanding the way these two variables interact in the fourth and final model. Once again, both enter with insignificant point estimates, suggesting that neither variable has a simple, universal relationship to wait times completely unconditional on the value of the other variable.

The next model serves as the most telling of the estimates. Model 4, the multiplicative model, illustrates quantitatively the relationship between formal participation, informal participation and performance. Since lagged informal participation has been centered at its neutral value, the positive estimate for formal participation implies that at neutral levels of informal participation, increases in formal participation are associated with increases in performance. Likewise, the positive estimate for informal participation implies that in a department without a single worker claiming to be part of the formal participatory machinery, increases in informal participation the prior year are associated with improved performance in the form of shorter wait times. In other words, once we control for functional representation and for unobservable temporal and spatial drivers of performance as well as for the interplay of formal and informal participation, we can finally see a clear, statistical connection between participation and performance. Moreover, the negative partial slope on the interaction term implies that when workers report high levels of informal participation in the prior year, increases in formal participation this year are actually associated with *poorer* performance. That is, Model 4 illustrates that while formal and informal participation each independently drive performance in a positive manner, formal and informal participatory structures do not appear to boost one another's effectiveness in this particular setting. In fact, the estimates suggest that increases in either erode the effectiveness of the other.

[-----Insert Figure 2 about here.-----]

These estimates are better understood graphically, and thus, we present them as such in Figure 2. Both panels show hazard functions fitted from Model 4 in Table 3. That is, they are the relative likelihood that a patient gets “roomed” each minute beyond his or her scheduled appointment time. In panel (a.), informal participation is held at its minimum. When we do this, we see that the hazard function at full formal participation sits above the fitted hazard function for either half or zero participation. Since the “hazard” is getting “roomed,” a positive measure of service quality, we can say that when informal participation is low, increases in formal participation reduce wait times. The second panel fixes informal participation at its maximum. In this case, note that the order of the fitted hazard functions reverses. That is, where workers report high levels of informal participation, increases in formal participation are actually associated with *reductions* in the hazard, i.e., longer, not shorter, wait times. Thus, the figure lays bare what emerged from the estimates: in the case of these primary care departments, formal and informal participation do not complement one another in their impact on operational performance. In fact, they appear to undermine one another’s positive impact on service quality.

## **Discussion**

We intend neither the qualitative narrative nor the statistical analysis of this participation program to stand on its own. Rather, we see the interview and observational materials, on the one hand, and the analysis of worker and patient data, on the other, coming together against the backdrop of existing theory on worker participation to form a rich explanation for how and why formal participatory structures and informal participative mechanisms could coalesce in the production or service-delivery process. More specifically, we determined that in this particular setting, formal and informal participation did not reinforce the benefits of one another, but instead worked at cross-purposes to undermine one another’s effectiveness in reducing patient wait times.

While we cited theory above predicting these dynamics, we also noted that the bulk of existing theory pointed toward a complementary rather than a conflictual relationship between these constructs (cf. Martinez Lucio, 2010). Furthermore, we noted that we knew of only a single empirical study that explicitly examined the commingling of formal and informal participation. Yet, despite a similar case study design and mixed-methodological approach, Marchington and Suter (2013) conclude that formal and informal systems are, in fact, likely to complement one

another. That is, in their setting, they found that informal participation, albeit preferred by managers and frontline workers over its formal alternatives, actually needed to be combined with a formal system in order to be effective.

Given the extent to which Marchington and Suter's (2013) findings deviate from ours, it is worth scrutinizing the differences between their case and ours to advance an explanation for the negative interaction that we found between formal and informal participation. First, Marchington and Suter's multi-method analysis is well-contextualized, and thus, instructive and convincing. Yet, the authors do not actually measure operational performance directly or indirectly or even perceptually. Second, it is noteworthy that the apparent complementarity emerged at "RestaurantCo," Marchington and Suter's pseudonym for the nonunion chain of restaurants in which they undertook their research, whereas our negative interaction obtained in a unionized healthcare provider. One can argue that unionization status is the key contingency determining the performance impact of layering a formal system on existing informal participative practices. Indeed, rather than considering unionism per se, one can imagine that unionized workers are more likely than nonunionized ones to view a formal participation program as a managerial "power grab" or in some other way as dissolving of trust (Guest et al., 2008; Guest & Peccei, 2001; Martinez Lucio, 2010). This is one method by which union status could explain the discrepancy in findings.

However, while unionization could somehow proxy for an absence of trust, it is probably even more likely to signal the breadth and depth of a formal worker participation program (Cox, Marchington, & Suter, 2009). Whereas Marchington and Suter describe the formal participation program in their research setting as "dilute and localized" (p. 285), the one we examine—with manifestations at both the strategic and functional levels of the employment relationship, in addition to the workplace level (Litwin, 2015)—appears to be much more far-reaching and deeply-rooted. Theoretically, these attributes should advantage Kaiser Permanente's program over the one in their organizational setting, as existing research makes clear that the most effective participation programs are those that are more deeply embedded in the organization (Cox, Zagelmeyer, & Marchington, 2006; Levine & Tyson, 1990; Litwin, 2015).

Third, their case study analyses a chain of restaurants. In our view, the routinized structure of work and the sources of motivation for frontline workers in the restaurant industry prove rather similar to those in the very manufacturing settings in which most participation research has been

undertaken and most participation programs have been instituted. In those settings, participation schemes were a welcome response to rigid, Taylorist work structures in which workers were asked to “check their brains and their opinions at the door.” Thus, opening the door to participation meant that opinionated workers with deep knowledge—be it explicit or tacit—finally had an opportunity through formal participative structures to influence the way they and their organizations undertook their work.

On the contrary, Kaiser Permanente and the sector in which we analyze participation, healthcare, differ substantially from those settings in which much of the previous research and theory on worker participation has been advanced. At Kaiser Permanente and in many other organizations and sectors that are just now embracing formal participation schemes, incumbent work structures are far from Taylorist, and their production processes or service-delivery systems already rely upon participation mechanisms, albeit, informal ones. Thus, increasingly, we should expect to see formal participation introduced into environments in which it could potentially displace or interfere with the beneficial effects of informal participation.

While it might surprise those who have only seen it used to describe the diffusion of policies and practices throughout an industry or an economy—institutional *change*, as theorized most notably by Tolbert and Zucker (1983) and Baron, Dobbin, and Jennings (1986)—, institutional theory also offers useful and effective language to describe processes surrounding the creation, establishment, or emergence of institutions. We believe this latter body of work illuminates the mechanisms that led to the conflictual relationship between formal and informal participation in our research setting.

Two key ideas from the literature on institutional emergence proved especially helpful. First, central and seminal to the institutions literature is the notion that institutions can be either “enacted”—designed strategically and intentionally by purposive actors—or, in Sumner’s (1906) parlance, “cressive”—evolving unintentionally via the interdependence of actors’ behaviors over an extended period of time. Berger and Luckmann (1966) advanced this enacted vs. organic dichotomy by considering inter alia the processes that lead to the creation of institutions along this continuum, and more recent work has considered the extent to which institutions come about by authorization or writ as opposed to more gradual and less clearly-planned and less meticulously-executed processes operating within societies or organizations (Strang & Sine, 2002).

In our view, these designations map naturally into the two forms of participation that we observed at Kaiser Permanente. One's membership in a unit-based team constitutes formal participation, and formal participation itself captures workers' explicit involvement in the participatory structures created intentionally and designed deliberately by the organization, i.e., "agent-authorized" participatory structures (Strang & Sine, 2002). What we observed at Kaiser Permanente was that informal participation can precede and maintain alongside formal participatory structures. These are not agent-authorized like their formal counterparts, but would instead be characterized by seminal institutional theory as cressive and by contemporary theorists and researchers as "naturalistic" (Strang & Sine, 2002, p. 502)—

...the unconscious way in which activities evolve as multiple actors...make sense of their common situation and then develop responses that over time become habitualized, reciprocally reinforced and passed onto others as "the way we handle this type of issue" (Scott, 2014, p. 114).

Second, aside from there being two highly stylized "flavors" of institutions and avenues for their creation, enacted institutions are not created nor do organic institutions emerge abiogenetically in a space devoid of existing institutions. Consequently, there is no reason to believe that the agent-based and naturalistic paths for institutionalizing participation would operate additively and independently at Kaiser Permanente or elsewhere. Rather, the establishment of formal structures and processes, with their use of organizationally-authorized coercion as a mechanism for evoking participation (DiMaggio & Powell, 1983; Dornbusch & Scott, 1975), could actually constrain or suppress the positive relationship between informal participation and operational performance. This would occur if those workers who might otherwise boost performance through the normatively-promoted informal participatory channels instead find that their adherence to formal rules and newly-institutionalized norms surrounding participation limits their ability to do so (Harlos, 2001).

In more concrete terms, if frontline workers perceived themselves as participating even in the absence of a formal participation program, we would no longer necessarily expect the grafting of agent-authorized participatory structures upon naturalistic ones to boost operational performance. Neoinstitutional theorists argue that this phenomenon—in which agent-based institutions are not created in a vacuum, but rather must contend with and may well displace pre-existing naturalistic

ones—is quite common (Scott, 2014; Strang & Sine, 2002), particularly during times of institutional change such as that represented by an organization-wide attempt to formalize participation (DiMaggio, 1991). In this case, the formalization of participation can work to control, constrain, or suppress the benefits of informal participation. When this occurs, formal participation can dampen the otherwise positive effects of informal participation on performance.

If one accepts this theory, then it can be used to proffer an explanation for the negative interaction between formal and informal participation that we observed in our research setting. The agent-authorized participatory structures on which most received research has been singularly focused are generally not designed and implemented in a “greenfield.” Rather, they clash with workers’ existing beliefs and with established norms (Greif, 2006) regarding the extent of their influence and authority and the extent to which they can use it, in this case, in service to patients. These naturalistic participatory institutions or practices are “built into” the social order (Jepperson, 1991), as many frontline workers had long been and continued to be concerned with increasing patient wait times and their impact on organizational performance and patient satisfaction.

In short, we believe that a well-designed, formal, participative institutional structure—unit-based teams—proved effective at boosting performance in the organization that we analyze. However, in some cases, these structures bumped up against *existing* institutions—informal participatory behaviors—that were themselves a positive influence on performance. Where this occurred, the effect of the two institutions operating in tandem was not additive. Rather, they eroded one another’s effectiveness.

### *Generalizing beyond the Specific Case*

Readers are rightfully wary to generalize from case studies like ours, particularly if they view our single case as some sort of “sample” from which to extrapolate statistical probabilities, just as they would for large-sample, quantitative studies. Instead, we would urge readers to extend our findings to situations outside of our study, based on the relevance of the theoretical explanation offered above—what Yin (2014) terms “analytic” as opposed to “statistical” generalization. Following this, the most important next step is to subject the theory to a larger and perhaps broader set of organizational settings in an effort to better determine scope conditions. Simply contrasting our findings with those of Marchington and Suter (2013) points to the work setting, unionization status, the jobs themselves, the breadth and depth of the formal participation program, and the

details of the incumbent or pre-existing informal participative mechanisms as sensible attributes on which to pivot.

Another way to jumpstart efforts toward generalization is to think more concretely about the circumstances that can give rise to a negative interaction between formal and informal participation like that we uncovered at Kaiser Permanente. The most obvious possibility is that organizational leaders intentionally and perhaps strategically created what some have labeled “pseudo-participative” structures (Detert & Treviño, 2010). Under this scenario, formal participatory structures that first appear to increase the influence of frontline workers actually facilitate increased control on the part of organizational leaders (Barker, 1993; Martinez Lucio, 2010; Mulder, 1971).

Even within a single organization in which management leaders are genuinely committed to participation—which we believe to be true at Kaiser Permanente—the negative interaction could nonetheless come about where managers do not adequately account for the interests and concerns of those intermediate workers in the organizational hierarchy—not themselves or the frontline workers around which the participative management program is directed, but rather first-line supervisors and the managers to whom they report. While their actions and reactions to the program are a key determinant of its success, these managers have much to lose from the effective implementation of a participation scheme. Even where organizational leaders have been careful to realign the commitments of frontline individuals with their organizational tasks and responsibilities, incentives for supervisors and second-line managers still favor control and outright accountability. Without further attention, what results is a situation in which managers are asked to cede some decision-making and authority without giving up responsibility or true accountability for performance outcomes (McCaffrey et al., 1995). Faced with incentives and interests better aligned with legacy work systems than with the participative ones they are supposed to be enacting, supervisors and second-line managers can appear to meet the order to create participatory structures while protecting their own interests, even in a labor relations climate as structured as the one we study, particularly if managers have any leeway to decide how to institute participation (Purcell & Hutchinson, 2007; Wilkinson, Dundon, Marchington, & Ackers, 2004). They can do this by setting the boundaries of participation to be more consultative than co-determinative, offering participation opportunities that do not extend real power or decision-making to frontline workers (Wilkinson & Dundon, 2010).

There is certainly no shortage of empirical evidence supporting this phenomenon in other settings, even unionized ones (e.g., Batt, 2004; Frenkel, Korczynski, Shire, & Tam, 1999). That is, despite the careful design of formal, frontline participatory structures, they instead get absorbed into the existing institutional framework, with much less power and instrumentality over performance than higher-level managers had intended (Khilji & Wang, 2006). These participatory structures spur backlash as a result of workers' unfulfilled expectations with respect to newly-promised discretion (Heller, Pusic, Strauss, & Wilpert, 1998)—particularly where important decisions are made by managers, behind closed doors, before frontline employees are brought into the process (Mintzberg, 1979).

Given these dynamics and the theory that we offer to explain the negative interaction between formal and informal participatory structures, the events at Kaiser Permanente form a “critical case”—critical of our theory in the sense that it presents an environment in which one might least expect the theory of negative interaction to hold. First, unlike the vast majority of formal participation programs, the one we analyze was not initiated solely by the employer. True union involvement in the design and administration of the program circumscribes the likelihood that Kaiser Permanente management's true motivation was union substitution or union suppression, dynamics that one could easily see allowing for the creation of formal structures that transfer power from the frontlines and thus displace the benefits of longstanding informal participatory mechanisms (Martinez Lucio, 2010).

There were a number of other factors at play in our research setting that further work against our case's ability to substantiate the negative interaction theory, and thus, bolster the case's criticality. Primary amongst these are that in contrast to workers in most organizational settings, Kaiser Permanente employees had both employment security and wage security. Thus, they were in the rare but important position to find credible managers' assertions that operational improvements resulting from the success of the frontline worker participation scheme would not come at the expense of participants' own employment or wages or those of a co-worker. Indeed, Pfeffer (1994) has argued such perceptions and policies, as rare as they are, are critical to the success of a formal worker participation program. More broadly, others have argued that workers must perceive a relative balance of power with their employer (Eaton & Voos, 1994; McCaffrey et al., 1995) and have good reason to believe management leaders are genuinely committed to engaging workers in the formal participation program (Alvesson, 1995; Detert & Treviño, 2010).

In part because of its union status, our research setting actually provided workers with this sense of confidence in the formal participation program. Consequently, were formal participation to complement informal participation in driving performance anywhere, it should be at Kaiser Permanente under the aegis of its labor management partnership. Thus, in the net, we would argue that our chosen case presents a rather conservative test of the theory we propound (Batt & Hermans, 2012).

### *Implications for Practice*

In an environment in which economic and regulatory pressures increasingly call for their adoption (Freeman et al., 2007; Kaufman & Taras, 2010), formal participative structures will only grow in their appeal to managers. And, while we find that formal and informal participation undermine one another's effectiveness in our research context, managers would be ill-advised to interpret these findings as a blanket advisory against joint consultative committees, works councils, and the like. After all, our findings suggest that while formal participation appears to "crowd out" or displace much of the beneficial performance impact of informal participation, the main (or linear) statistical effect of formal participation on performance is positive. As we noted above, our findings emerge from a case study, which means that managers must be wary of the fact that the context in which they manage assuredly differs from the one in which we established our results. This puts the onus on them to determine the extent to which these differences should influence the applicability of our findings to their organizations. If one accepts our institutional explanation for what transpired in our study, then a good rule of thumb would be to ask whether one's organization operates more like Kaiser Permanente or more like the Taylorist workplaces that gave rise to early thinking and practice around worker participation. Where formal participation programs are truly a reaction to Taylorism, then the negative interaction between formal and informal systems that we found may be less likely to obtain.

Even in workplaces with high levels of informal participation, there may still be advantages to the introduction of formal structures, even if the establishment of the latter are costly and time-consuming. Consider, for example, that at Kaiser Permanente, in the absence of unit-based teams, there would be no mechanism for sharing emergent best-practices with other primary care departments, let alone organization-wide: when left to purely informal devices, circumstances and norms will tend to limit frontline workers to what Tucker and Edmondson (2002, 2003) label "first-

order” problem-solving behaviors. They, too, developed their theory in a healthcare setting, and explained first-order solutions as those that come about when a

worker compensates for a problem by getting the supplies or information needed to finish a task that was blocked or interrupted. The worker does not address the underlying causes, thus not reducing the likelihood of a similar problem [occurring again] in the future. (Tucker & Edmondson, 2003, p. 60)

In the primary care departments that we studied, a medical assistant’s proactively reaching out to patients to postpone or reschedule an appointment, illustrated above, would constitute first-order problem-solving behavior, which in fact, address the immediate issue. However, it does so by treating the symptoms and not the source of the underlying problem. UBTs on the other hand are sanctioned, indeed are expected, to make much more material changes to the service delivery process, undertaking the sorts of problem-solving behaviors that researchers would label as “second-order.” In our qualitative findings presented earlier, we explained how UBTs could experiment with altered scheduling practices and even staffing. These sorts of solutions come about more deliberately and result from structured trial and error. Moreover, as result of their being agent-authorized, they also benefit from their ability to effect deeper, systemic changes to existing routines, effectively broadening the boundaries of the set of possible solutions to a given service problem. Tucker and Edmondson (2003) argue that organizations should prefer these second-order over first-order problem-solving—treating the sources rather than the mere symptoms of dysfunction. Indeed, what undergirded Kaiser Permanente’s UBT program was the idea of identifying and disposing of underlying inefficiencies in the service process.

Managers should also contemplate whether or not their own mental model for participation has been limited to formal participative structures as it was for so long for the scholarly researchers in this area, after which they should acknowledge the possibility that informal participatory mechanisms are already operating on the frontlines in their organizations. This opens the door to their considering the dynamics of informal participation as it is practiced locally and to measure its impact on performance, much as we did here.

Even in workplaces that reveal themselves to have high-functioning informal participative mechanisms, managers need not conclude that there is no place for formal participatory structures in their organization. Rather, in designing and implementing the program, they should be sensitive

to the ways in which incumbent, informal practices operate on the frontlines. Even more important, they must work proactively to mitigate the forces that bring formal practices into conflict with informal ones. Namely, intra-organizational institutions, perhaps more consonant with legacy work systems than with newly-formalized participatory ones, are likely to encourage first-line managers to cling to control rather than to relinquish it to their frontline subordinates (Jackall, 1988). Norms and customs regarding accountability and rewards tend to promote a particular power structure in which managers are both in charge of and responsible for departmental performance and frontline workers are responsible for doing what they are told. Therefore, of particular import with respect to the managerial approach to worker participation is the power shift that potentially results from the deployment of formal participatory structures. In short, first-line managers and supervisors do not want to let go of power (Boxall & Purcell, 2010; Fenton-O’Creevy, 1998), particularly to the extent they will remain responsible for the economic success or failure of their particular organizational subunit (Klein, 2003).

## **Conclusion**

This study leverages the spatial and contextual constraints and the relative homogeneity of the organizational subunits under study to hold steady many variables often unobserved (and sometimes even unacknowledged) in existing studies of frontline worker participation, including variation in product markets, technologies, labor costs, and competitive conditions (Batt & Hermans, 2012). Moreover, the sharp focus of the research design permitted us to draw on a reliably-measured performance metric that was contextually relevant, valued by the organization, and tightly-coupled to the formal and informal participatory structures under examination. It also enabled us to simultaneously collect fine-grained measures of formal and informal participation as opposed to simple indicators of whether or not a given firm employs participatory arrangements, a typical limitation of large-*n* studies of the participation-performance link. And, the design permitted us to collect these employment relations and human resource management variables from a totally separate instrument and sample from those used to construct performance measures, thereby eschewing common-method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Even more critically, our research design allowed us to mesh qualitative and quantitative support in service to one another—showing or demonstrating the emergence of the phenomenon by leaning

on a rich account of the processes that generated the data, i.e., the events surrounding the formalization of participation in the focal organization.

Thus, while we appreciate that this case may raise as many new questions as it answers, we also believe that the events in this organization and in these workplaces contribute important insights into the circumstances that give rise to ways that formal and informal participation could work together to *erode* rather than *complement* one another's beneficial impact. The design of the case, enabled by a unique level of access to the organization and its constituent workplaces, allowed us to triangulate between interviews, observations, worker surveys, and patient satisfaction surveys to analyze the dynamics and the impact of grafting a well-designed formal participation program on workplaces that—to varying degrees—already had informal forms of participation in place. While this approach permitted us to open up the “black box” to understand the processes that generated the data, the growing number of workplaces embodying both formal and informal forms of participation underlines the need for future research to establish scope conditions and the precise limits to this case's generalizability. Accordingly, we hope this case study will serve as an early step in an ongoing conversation between scholars of labor relations, work, organizations, and human resource management on the ways that formal and informal manifestations of frontline worker participation come together to shape organizational performance.

**ADAM SETH LITWIN** is Associate Professor of Industrial and Labor Relations at the ILR School at Cornell University. He studies work structures and technological change with a focus on the health care sector, and recently co-edited “Work and Employment Relations in Health Care,” a special issue of the *Industrial and Labor Relations Review*. Prior to his work at Cornell, he was Assistant Professor at the Carey Business School and the School of Medicine at Johns Hopkins University.

**ADRIENNE E. EATON** is Professor of Labor Studies and Employment Relations and Associate Dean for Academic Affairs at the School of Management and Labor Relations, Rutgers, the State University of New Jersey. Her research focuses on labor-management partnerships, union organizing, and the impact of unionization on particular occupational groups including managerial workers, graduate student employees, and, most recently, informal workers. She is co-director of the Center for Work and Health at Rutgers and former editor for the Labor and Employment Relations Association.

## References

- Allison, P. D. (2010). Survival Analysis. In G. R. Hancock, & R. O. Mueller (Eds.), *The Reviewer's Guide to Quantitative Methods in the Social Sciences* (pp. 413-424). New York: Routledge.
- Alvesson, M. (1995). *Management of Knowledge-Intensive Companies*. New York: de Gruyter.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Ithaca: Cornell/ILR.
- Barker, J. R. (1993). Tightening the Iron Cage: Concertive Control in Self-Managing Teams. *Administrative Science Quarterly*, 38(3), 408-437.
- Baron, J. N., Dobbin, F. R., & Jennings, P. D. (1986). War and Peace: The Evolution of Modern Personnel Administration in US Industry. *American Journal of Sociology*, 92(2), 350-383.
- Barry, M., Wilkinson, A., Gollan, P. J., & Kalfa, S. (2014). Where Are the Voices? New Directions in Voice and Engagement across the Globe. In A. Wilkinson, G. Wood, & R. Deeg (Eds.), *Oxford Handbook of Employment Relations: Comparative Employment Systems* (pp. 522-540). New York: Oxford.
- Batt, R. (2004). Who Benefits from Teams? Comparing Workers, Supervisors, and Managers. *Industrial Relations*, 43(1), 183-212.
- Batt, R., & Hermans, M. (2012). Global Human Resource Management: Bridging Strategic and Institutional Perspectives. In J. J. Martocchio, A. Joshi, & H. Liao (Eds.), *Research in Personnel and Human Resources Management* (Vol. 31, pp. 1-52). Stamford, CT: Emerald.
- Batt, R. L. (1999). Work Organization, Technology, and Performance in Customer Service and Sales. *Industrial and Labor Relations Review*, 52(4), 539-564.
- Berger, P. L., & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge* (1<sup>st</sup> ed.). Garden City, NY: Doubleday.
- Boxall, P., & Purcell, J. (2010). An HRM Perspective on Employee Participation. In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *Oxford Handbook of Participation in Organizations* (pp. 29-51). New York: Oxford.
- Cappelli, P., & Neumark, D. (2001). Do 'High-Performance' Work Practices Improve Establishment-Level Outcomes? *Industrial and Labor Relations Review*, 54(4), 737-775.
- Cappelli, P., & Rogovsky, N. (1998). Employee Involvement and Organizational Citizenship: Implications for Labor Law Reform and 'Lean Production'. *Industrial and Labor Relations Review*, 51(4), 633-653.
- Castilla, E. J. (2007). *Dynamic Analysis in the Social Sciences*. New York: Elsevier.
- Coch, L., & French, J. R. P., Jr. (1948). Overcoming Resistance to Change. *Human Relations*, 1(4), 512-532.
- Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L., & Jennings, K. R. (1988). Employee Participation: Diverse Forms and Different Outcomes. *Academy of Management Journal*, 13(1), 8-22.
- Cox, A., Marchington, M., & Suter, J. (2009). Employee Involvement and Participation: Developing the Concept of Institutional Embeddedness Using WERS2004. *International Journal of Human Resource Management*, 20(10), 2150-2168.
- Cox, A., Zagelmeyer, S., & Marchington, M. (2006). Embedding Employee Involvement and Participation at Work. *Human Resource Management Journal*, 16(3), 250-267.

- Detert, J. R., & Treviño, L. K. (2010). Speaking Up to Higher-Ups: How Supervisors and Skip-Level Leaders Influence Employee Voice. *Organization Science*, 21(1), 249-270.
- Dietz, G., Wilkinson, A., & Redman, T. (2010). Involvement and Participation. In A. Wilkinson, N. Bacon, T. Redman, & S. Snell (Eds.), *The Sage Handbook of Human Resource Management* (pp. 245-268). London: Sage.
- DiMaggio, P., & Powell, W. W. (1983). The Iron Cage Revisited: Collective Rationality and Institutional Isomorphism in Organizational Fields. *American Sociological Review*, 48(2), 147-160.
- DiMaggio, P. J. (1991). Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920-1940. In W. W. Powell, & P. J. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis* (pp. 267-292). Chicago: University of Chicago.
- Dornbusch, S. M., & Scott, W. R. (1975). *Evaluation and the Exercise of Authority*. San Francisco: Jossey-Bass.
- Eaton, A. E., & Voos, P. B. (1994). Productivity-Enhancing Innovations in Work Organization, Compensation, and Employee Participation in the Union Versus Nonunion Sectors. *Advances in Industrial and Labor Relations*, 6, 63-109.
- Fenton-O'Creevy, M. (1998). Employee Involvement and the Middle Manager: Evidence from a Survey of Organizations. *Journal of Organizational Behavior*, 19(1), 67-84.
- Fox, A. (1974). *Beyond Contract: Work, Power and Trust Relations*. London: Faber.
- Freeman, R. B., Boxall, P., & Haynes, P. (Eds.). (2007). *What Workers Say: Employee Voice in the Anglo-American Workplace*. Ithaca: Cornell/ILR.
- Freeman, R. B., & Kleiner, M. M. (2000). Who Benefits Most from Employee Involvement: Firms or Workers? *American Economic Review Papers and Proceedings*, 90(2), 219-223.
- Freeman, R. B., & Medoff, J. L. (1984). *What Do Unions Do?* New York: Basic Books.
- Frenkel, S., Korczynski, M., Shire, K., & Tam, M. (1999). *On the Front Line: Organization of Work in the Information Economy*. Ithaca: Cornell/ILR.
- Friedrich, R. J. (1982). In Defense of Multiplicative Terms in Multiple Regression Equations. *American Journal of Political Science*, 26(4), 797-833.
- Gittel, J. H. (2009). *High Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Resilience*. New York: McGraw-Hill.
- Gittel, J. H., Seidner, R., & Wimbush, J. (2010). A Relational Model of How High-Performance Work Systems Work. *Organization Science*, 21(2), 490-506.
- Givan, R. K., Avgar, A., & Liu, M. (2010). Having Your Cake and Eating It Too? The Relationship between HR and Organizational Performance in Healthcare. *Advances in Industrial and Labor Relations*, 17, 31-67.
- Gomez, R., Bryson, A., & Willman, P. (2010). Voice in the Wilderness? The Shift from Union to Non-Union Voice in Britain. In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *Oxford Handbook of Participation in Organizations* (pp. 383-406). New York: Oxford.
- Greif, A. (2006). *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge: Cambridge University.

- Guest, D., Brown, W., Peccei, R., & Huxley, K. (2008). Does Partnership at Work Increase Trust? An Analysis Based on the 2004 Workplace Employment Relations Survey. *Industrial Relations Journal*, 39(2), 124-152.
- Guest, D. E., Michie, J., Conway, N., & Sheehan, M. (2003). Human Resource Management and Corporate Performance in the U.K. *British Journal of Industrial Relations*, 41(2), 291-314.
- Guest, D. E., & Peccei, R. (2001). Partnership at Work: Mutuality and the Balance of Advantage. *British Journal of Industrial Relations*, 39(2), 207-236.
- Gumbrell-McCormick, R., & Hyman, R. (2010). Works Councils: The European Model of Industrial Democracy? In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *Oxford Handbook of Participation in Organizations* (pp. 286-314). New York: Oxford.
- Gutierrez, R. G. (2002). Parametric Frailty and Shared Frailty Survival Models. *Stata Journal*, 2(1), 22-44.
- Handel, M. J., & Levine, D. I. (2004). Editors' Introduction: The Effects of New Work Practices on Workers. *Industrial Relations*, 43(1), 1-43.
- Harlos, K. P. (2001). When Organizational Voice Systems Fail: More on the Deaf-Ear Syndrome and Frustration Effects. *Journal of Applied Behavioral Science*, 37(3), 324-342.
- Heller, F., Pusic, E., Strauss, G., & Wilpert, B. (1998). *Organizational Participation: Myth and Reality*. New York: Oxford.
- Hodson, R. (2004). Organizational Trustworthiness: Findings from the Population of Organizational Ethnographies. *Organization Science*, 15(4), 432-445.
- Hunter, L. W., & Pil, F. K. (1995). How Do You Survey Firms? In P. B. Voos (Ed.), *Proceedings of the 47<sup>th</sup> Annual Meeting of the Industrial Relations Research Association* (pp. 152-162). Madison: IRRRA.
- Ichniowski, C., & Shaw, K. (2003). Beyond Incentive Pay: Insiders' Estimates of the Value of Complementary Human Resource Management Practices. *Journal of Economic Perspectives*, 17(1), 155-180.
- Ichniowski, C., Shaw, K., & Prennushi, G. (1997). The Effects of Human Resource Management Practices on Productivity: A Study of Steel Finishing Lines. *American Economic Review*, 87(3), 291-313.
- Industrial Democracy in Europe Research Group (IDE). (1993). *Industrial Democracy in Europe Revisited*. Oxford: Oxford University.
- Jackall, R. (1988). *Moral Mazes: The World of Corporate Managers*. New York: Oxford University.
- James, L. R., & Williams, L. J. (2000). The Cross-Level Operator in Regression, ANCOVA, and Contextual Analysis. In K. J. Klein, & S. W. J. Kozlowski (Eds.), *Multilevel Theory, Research, and Methods in Organizations: Foundations, Extensions, and New Directions* (pp. 382-424). San Francisco: Jossey-Bass.
- Jepperson, R. L. (1991). Institutions, Institutional Effects, and Institutionalism. In W. W. Powell, & P. J. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis* (pp. 143-163). Chicago: University of Chicago.
- Jones, D. C., Kalmi, P., & Kauhanen, A. (2010a). How Does Employee Involvement Stack Up? The Effects of Human Resource Management Policies in a Retail Firm. *Industrial Relations*, 49(1), 1-21.
- Jones, D. C., Kalmi, P., & Kauhanen, A. (2010b). Teams, Incentive Pay, and Productive Efficiency: Evidence from a Food-Processing Plant. *Industrial and Labor Relations Review*, 63(4), 606-626.

- Jones, D. C., & Kato, T. (2011). The Impact of Teams on Output, Quality and Downtime: An Empirical Analysis Using Individual Panel Data. *Industrial and Labor Relations Review*, 64(2), 215-240.
- Kaufman, B. E., & Taras, D. G. (2010). Employee Participation Through Non-Union Forms of Employee Representation. In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *Oxford Handbook of Participation in Organizations* (pp. 258-285). New York: Oxford.
- Keller, R. T. (2001). Cross-Functional Project Groups in Research and New Product Development: Diversity, Communications, Job Stress, and Outcomes. *Academy of Management Journal*, 44(3), 547-555.
- Khilji, S. E., & Wang, X. (2006). 'Intended' and 'Implemented' HRM: The Missing Linchpin in Strategic Human Resource Management Research. *International Journal of Human Resource Management*, 17(7), 1171-1189.
- Klein, J. A. (2003). Changing Relations between Supervisors and Employees: From Deal Making to Strategic Negotiations. In T. A. Kochan, & D. B. Lipsky (Eds.), *Negotiations and Change: From the Workplace to Society* (pp. 54-69). Ithaca: Cornell/ILR.
- Kochan, T. A., Eaton, A. E., McKersie, R. B., & Adler, P. S. (2009). *Healing Together: The Labor-Management Partnership at Kaiser Permanente*. Ithaca: Cornell/ILR.
- Lawler, E. E., & Hackman, J. R. (1969). Impact of Employee Participation in the Development of Pay Incentive Plans: A Field Experiment. *Journal of Applied Psychology*, 53(6), 467-471.
- Levine, D. I., & Tyson, L. D. A. (1990). Participation, Productivity, and the Firm's Environment. In A. S. Blinder (Ed.), *Paying for Productivity: A Look at the Evidence* (pp. 183-243). Washington, DC: Brookings.
- Litwin, A. S. (2011). Technological Change at Work: The Impact of Employee Involvement on the Effectiveness of Health Information Technology. *Industrial and Labor Relations Review*, 64(5), 863-888.
- Litwin, A. S. (2015). Nose to Tail: Using the Whole Employment Relationship to Link Worker Participation to Operational Performance. *Advances in Industrial and Labor Relations*, 21, 143-176.
- MacDuffie, J. P. (1995). Human-Resource Bundles and Manufacturing Performance: Organizational Logic and Flexible Production Systems in the World Auto Industry. *Industrial and Labor Relations Review*, 48(2), 197-221.
- Marchington, M., & Cox, A. (2007). Employee Involvement and Participation: Structures, Processes and Outcomes. In J. Storey (Ed.), *Human Resource Management: A Critical Text* (pp. 177-194). Mason, OH: Cengage.
- Marchington, M., & Suter, J. (2013). Where Informality Really Matters: Patterns of Employee Involvement and Participation (EIP) in a Non-Union Firm. *Industrial Relations*, 52(s1), 284-313.
- Martinez Lucio, M. (2010). Labour Process and Marxist Perspectives on Employee Participation. In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *Oxford Handbook on Participation in Organizations* (pp. 105-130). New York: Oxford.
- McCaffrey, D. P., Faerman, S. R., & Hart, D. W. (1995). The Appeal and Difficulties of Participative Systems. *Organization Science*, 6(6), 603-627.
- Miles, O. (2015, Fall). I'm in a UBT? Hank: Frontline News for KP Workers, Managers and Physicians, 12-13.
- Mintzberg, H. (1979). *The Structuring of Organizations: A Synthesis of the Research*. Englewood Cliffs: Prentice-Hall.
- Mulder, M. (1971). Power Equalization Through Participation? *Administrative Science Quarterly*, 16(1), 31-38.

- Nichols, R. G. (1962). Listening Is Good Business. *Management of Personnel Quarterly*, 1(2), 2-10.
- Nissen, B. (1997). Unions and Workplace Reorganization. In B. Nissen (Ed.), *Unions and Workplace Reorganization* (pp. 9-33). Detroit: Wayne State University.
- Noteboom, M. R. (2015, May 20<sup>th</sup>). Thoughts on Fixing the Patient Waiting Game, *Healthcare IT News*.
- Pfeffer, J. (1994). *Competitive Advantage through People: Unleashing the Power of the Work Force*. Boston: Harvard Business School.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Purcell, J., & Georgiadis, K. (2007). Why Should Employers Bother with Employee Voice? In R. B. Freeman, P. Boxall, & P. Haynes (Eds.), *What Workers Say: Employee Voice in the Anglo-American Workplace* (pp. 181-197). Ithaca: Cornell/ILR.
- Purcell, J., & Hutchinson, S. (2007). Front-Line Managers as Agents in the HRM-Performance Causal Chain: Theory, Analysis and Evidence. *Human Resource Management Journal*, 17(1), 3-20.
- Pyman, A., Cooper, B., Teicher, J., & Holland, P. (2006). A Comparison of the Effectiveness of Employee Voice Arrangements in Australia. *Industrial Relations Journal*, 37(5), 543-559.
- Riordan, C. M., Vandenberg, R. J., & Richardson, H. A. (2005). Employee Involvement Climate and Organizational Effectiveness. *Human Resource Management*, 44(4), 471-488.
- Rubinstein, S. A. (2000). The Impact of Co-Management on Quality Performance: The Case of the Saturn Corporation. *Industrial and Labor Relations Review*, 53(2), 197-218.
- Rubinstein, S. A., & Kochan, T. A. (2001). *Learning from Saturn: Possibilities for Corporate Governance and Employee Relations*. Ithaca: Cornell/ILR.
- Savin, S. (2006). Managing Patient Appointments in Primary Care. In R. W. Hall (Ed.), *Patient Flow: Reducing Delay in Healthcare Delivery* (pp. 123-150). Boston: Springer US.
- Schwab, D. P. (2005). *Research Methods for Organizational Studies* (2<sup>nd</sup> ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Scott, W. R. (2014). *Institutions and Organizations: Ideas, Interests, and Identities* (4<sup>th</sup> ed.). Los Angeles: Sage.
- Skrondal, A., & Rabe-Hesketh, S. (2004). *Generalized Latent Variable Modeling: Multilevel, Longitudinal, and Structural Equation Models*. Boca Raton: Chapman and Hall/CRC.
- Slichter, S. H., Healy, J. J., & Livernash, E. R. (1960). *The Impact of Collective Bargaining on Management*. Washington, DC: Brookings.
- Special Task Force to the Secretary of Health, Education, and Welfare. (1973). *Work in America*. Cambridge, MA: MIT.
- Spreitzer, G. M. (1995). Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation. *Academy of Management Journal*, 38(5), 1442-1465.
- Strang, D., & Sine, W. D. (2002). Interorganizational Institutions. In J. A. C. Baum (Ed.), *Blackwell Companion to Organizations* (pp. 497-519). Oxford: Blackwell.

- Strauss, G. (1998). An Overview. In F. Heller, E. Pusic, G. Strauss, & B. Wilpert (Eds.), *Organizational Participation: Myth and Reality* (pp. 8-39). New York: Oxford.
- Strauss, G. (2006). Worker Participation—Some Under-Considered Issues. *Industrial Relations*, 45(4), 778-803.
- Sumner, W. G. (1906). *Folkways: A Study of the Sociological Importance of Usages, Manners, Customs, Mores, and Morals*, Boston.
- Tolbert, P. S., & Zucker, L. G. (1983). Institutional Sources of Change in the Formal Structure of Organizations: The Diffusion of Civil Service Reform, 1880-1935. *Administrative Science Quarterly*, 28(1), 22-39.
- Tucker, A. L., & Edmondson, A. C. (2002). Managing Routine Exceptions: A Model of Nurse Problem Solving Behavior. *Advances in Health Care Management*, 3, 87-113.
- Tucker, A. L., & Edmondson, A. C. (2003). Why Hospitals Don't Learn from Failures: Organizational and Psychological Dynamics That Inhibit System Change. *California Management Review*, 45(2), 55-72.
- Useem, M. (1992). Corporate Restructuring and Organizational Behavior. In T. A. Kochan, & M. Useem (Eds.), *Transforming Organizations* (pp. 44-59). New York: Oxford.
- Vázquez, X. H. (2004). Allocating Decision Rights on the Shop Floor: A Perspective from Transaction Cost Economics and Organization Theory. *Organization Science*, 15(4), 463-480.
- Vroom, V. H. (1969). Industrial Social Psychology. In G. Lindzey, & E. Aronson (Eds.), *Handbook of Social Psychology* (Vol. 5, pp. 196-268). Reading, MA: Addison-Wesley.
- Wilkinson, A., & Dundon, T. (2010). Direct Employee Participation. In A. Wilkinson, P. J. Gollan, M. Marchington, & D. Lewin (Eds.), *Oxford Handbook of Participation in Organizations* (pp. 167-185). New York: Oxford.
- Wilkinson, A., Dundon, T., Marchington, M., & Ackers, P. (2004). Changing Patterns of Employee Voice: Case Studies from the U.K. and Republic of Ireland. *Journal of Industrial Relations*, 46(3), 298-322.
- Wilkinson, A., & Fay, C. (2011). New Times for Employee Voice? *Human Resource Management*, 50(1), 65-74.
- Willman, P., Gomez, R., & Bryson, A. (2009). Voice at the Workplace: Where Do We Find It, Why Is It There and Where Is It Going? In W. Brown, A. Bryson, J. Forth, & K. Whitfield (Eds.), *The Evolution of the Modern Workplace* (pp. 97-119). New York: Cambridge University.
- Wooldridge, J. M. (2010). *Econometric Analysis of Cross-Section and Panel Data* (2<sup>nd</sup> ed.). Cambridge, MA: MIT.
- Yin, R. K. (2014). *Case Study Research: Design and Methods* (5<sup>th</sup> ed.). Los Angeles: Sage.

**TABLE 1. Definitions and Construction of Variables**

<i>Variable</i>	<i>Definition/Survey Item(s)</i>	<i>Construction</i>	<i>Source</i>
Wait Time	“About how long did you wait in the waiting room past your scheduled appointment time?”	continuous variable measured in minutes	post-visit patient satisfaction survey
Formal Participation	“Are you a member of a Labor Management Partnership (LMP) unit-based team (UBT)?”	binary variable in which 1 = “yes” and 0 = “no”	annual employee survey
Informal Participation	extent to which department members report having the authority, influence, and information necessary to perform their jobs	summative scale measured as a continuous variable ranging from 1 to 5, i.e., low to high, constructed from 4 items ( $\alpha = .84$ )	annual employee survey
	“I have enough say in how I do my job.”	ordered categorical variable ranging from 1 to 5, i.e., “strongly disagree” to “strongly agree”	annual employee survey
	“I can quickly access the information I need to do my job effectively.”	(Same as above.)	annual employee survey
	“I have the decision-making authority I need to meet the needs of... patients and customers.”	(Same as above.)	annual employee survey
	“In general, how much say or influence do you have over decisions affecting your work?”	ordered categorical variable ranging from 1 to 5, i.e., “none” to “a great deal”	annual employee survey
Functional Representation	number of distinct job classifications reporting UBT membership	continuous variable ranging from 1 to 6	annual employee survey

**TABLE 2. Means, Standard Deviations, and Correlations for Embedded Units**

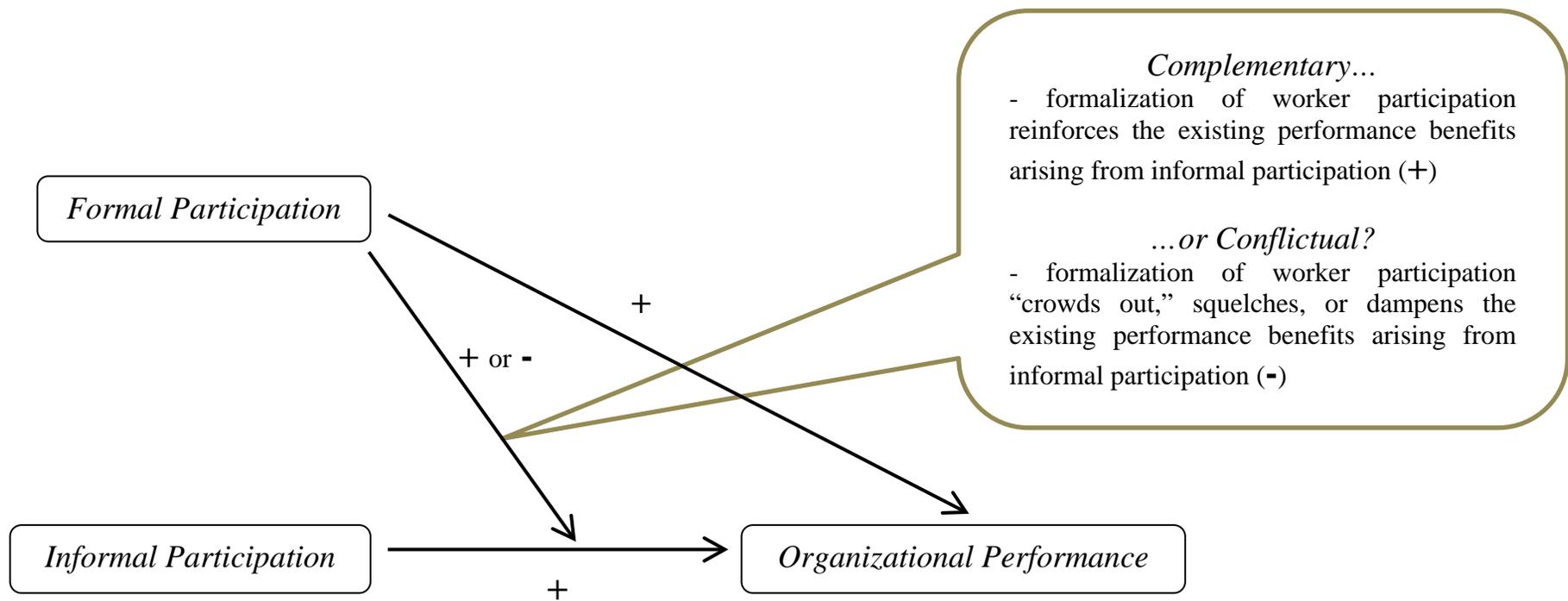
#	Variable	Mean	SD	1	2	3	4
1	Wait Time <sub>t</sub>	3.05	9.36	1.00			
2	Formal Participation <sub>t</sub>	.49	.18	.02***	1.00		
3	Informal Participation <sub>t-1</sub>	3.42	.31	.01**	-.09***	1.00	
4	Formal Participation <sub>t</sub> × Informal Participation <sub>t-1</sub>	1.69	.62	.02***	.96***	.17***	1.00
5	Functional Representation <sub>t</sub>	3.79	1.19	-.01	.10***	.03***	.12***

Notes n = 29,743 patient visits.

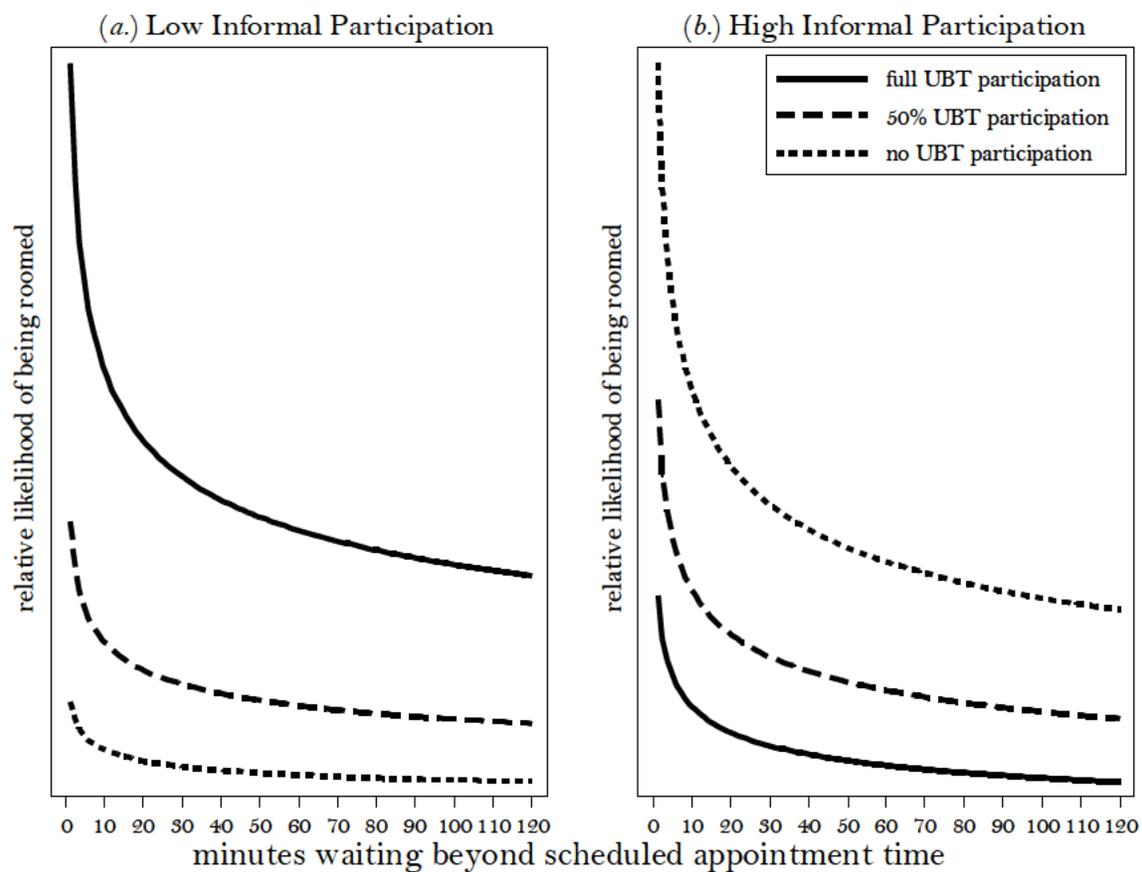
Key \* p < .10, \*\* p < .05, \*\*\* p < .01.

**TABLE 3. Shared-Frailty Weibull Proportional Hazard Models of the Impact of Formal Participation and Informal Participation on Reported Wait Times**

<i>Variable</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
Formal Participation <sub><i>t</i></sub>	0.13 (0.10)		0.13 (0.10)	0.39*** (0.13)
Informal Participation <sub><i>t-1</i></sub>		-.04 (0.05)	-.04 (0.05)	0.38*** (0.16)
Formal Participation <sub><i>t</i></sub> × Informal Participation <sub><i>t-1</i></sub>				-0.73*** (0.26)
Functional Representation <sub><i>t</i></sub>	0.05* (0.03)	0.06** (0.02)	0.05* (0.03)	0.05** (0.02)
includes department dummies	yes	yes	yes	yes
includes time dummies	yes	yes	yes	yes
number of departments	27	27	27	27
number of department-years	53	53	53	53
number of patients	29,743	29,743	29,743	29,743
<i>Notes:</i> Table reports coefficient estimates (and standard errors) from shared-frailty Weibull regressions of the number of minutes a patient waits in the waiting room beyond his or her scheduled appointment time. Frailties are shared at the department-year level.				
<i>Key:</i> * $p < .10$ , ** $p < .05$ , *** $p < .01$ .				



**FIGURE 1.** Model of the Relationship between Formal Participation, Informal Participation, and Organizational Performance in 27 Primary Care Departments



Notes: Plots show fitted hazard probabilities derived from Model 4 in Table 3, with all non-focal independent variables held at their sample means.

**FIGURE 2.** Fitted Weibull Hazard Functions of the Relative Probability that a Patient Gets Called in for His or Her Appointment as a Function of Wait Time

---

<sup>†</sup> The authors are grateful to many employees at Kaiser Permanente, but in particular, to J. Peter Nixon, Deborah Konitsney, and Nicole Vanderhorst for their contributions to this project. This research also benefited from the dutiful research assistance of Nicole Lott as well as thoughtful suggestions from Paul Adler, Eileen Appelbaum, Ariel C. Avgar, Rose Batt, Dale Belman, Peter Berg, Marya Besharov, Roman V. Galperin, Thomas A. Kochan, Richard K. Mansfield, Craig Olson, Saul Rubinstein, Pamela S. Tolbert, and Ezra Zuckerman. The authors also wish to thank seminar participants at Cornell University, the University of Illinois—Urbana-Champaign, the Massachusetts Institute of Technology, Michigan State University, and Rutgers University as well as those at the annual meetings of the Academy of Management, the Industry Studies Association, the Labor and Employment Relations Association, and the International Association for the Economics of Participation.

<sup>1</sup> For one such example, see Litwin (2011). For more details on Kaiser’s labor management partnership, see Kochan, Eaton, McKersie, and Adler (2009).

<sup>2</sup> Of the 16 UBTs in the preliminary study, two of them were in the same region as the 27 departments we study in-depth in the present analysis. However, neither of those two UBTs from the national study were primary care UBTs. Thus, there is no overlap or intersection between the “original” 16 UBTs and the departments analyzed herein.

<sup>3</sup> All of the models estimated in this paper have been re-estimated using a number of functional forms other than the Weibull model, including OLS, probit, and tobit. In all cases the results are directionally identical and are generally *more* precise than the Weibull estimates we report.

<sup>4</sup> A less conservative method to address these intragroup correlations would be to simply cluster the standard errors at the department-year level. These estimates are qualitatively identical to the shared frailty estimates reported here. However, the clustering of standard errors is more appropriate where one wants to treat *possible* intragroup correlations as a nuisance factor (Skrondal & Rabe-Hesketh, 2004). In this case, intragroup correlations exist by construction, demanding that we confront them more directly. We thank Craig Olson for urging us to consider this modelling issue.

<sup>5</sup> Note that just because there is a mandate from the top of the organization for formal participation does not mean that that mandate is manifesting itself at the workplace level as organizational leaders intend it to (e.g., Litwin, 2015). In fact, Kaiser Permanente documented this specific problem of workers not even realizing they are UBT members and how alarming that is to Kaiser Permanente managers (Miles, 2015).

<sup>6</sup> We recognize that by U.K. National Health Service (NHS) standards, these wait times are remarkably reasonable. In the mainly private-sector, competitive healthcare landscape of the U.S., service and cost reign supreme. Kaiser Permanente’s business model is one that relies on scale, scope, and low costs, suggesting that patients give up a degree of intimacy in exchange for efficiency, timeliness included. Furthermore, Kaiser Permanente operates a closed network. Thus, when patients are dissatisfied, they are likely to leave the plan altogether, not just their particular provider.