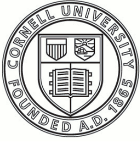


Cornell University
ILR School

Cornell University ILR School
DigitalCommons@ILR

Articles and Chapters | ILR Collection

8-2016

Editorial Essay: Introduction to a Special Issue on Work and Employment Relations in Health Care

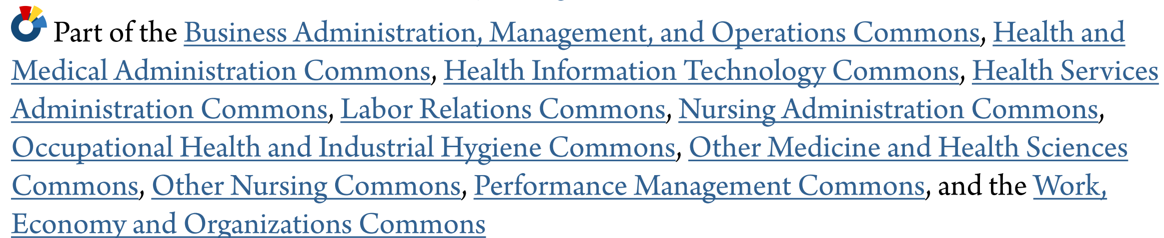
Ariel C. Avgar
Cornell University, aca27@cornell.edu

Adrienne E. Eaton
Rutgers University

Rebecca K. Givan
Rutgers University

Adam Seth Litwin
Cornell University, aslitwin@cornell.edu

Follow this and additional works at: http://digitalcommons.ilr.cornell.edu/articles



Part of the Business Administration, Management, and Operations Commons, Health and Medical Administration Commons, Health Information Technology Commons, Health Services Administration Commons, Labor Relations Commons, Nursing Administration Commons, Occupational Health and Industrial Hygiene Commons, Other Medicine and Health Sciences Commons, Other Nursing Commons, Performance Management Commons, and the Work, Economy and Organizations Commons

Thank you for downloading an article from DigitalCommons@ILR.
Support this valuable resource today!

This Article is brought to you for free and open access by the ILR Collection at DigitalCommons@ILR. It has been accepted for inclusion in Articles and Chapters by an authorized administrator of DigitalCommons@ILR. For more information, please contact hlmdigital@cornell.edu.

Editorial Essay: Introduction to a Special Issue on Work and Employment Relations in Health Care

Abstract
[Excerpt] This special issue of the *ILR Review* is designed to showcase the central role that work organization and employment relations play in shaping important outcomes such as the quality of care and organizational performance. Each of the articles included in this special issue makes an important contribution to our understanding of the large and rapidly changing health care sector. Specifically, these articles provide novel empirical evidence about the relationship between organizations, institutions, and work practices and a wide array of central outcomes across different levels of analysis. This breadth is especially important because the health care literature has largely neglected employment-related factors in explaining organizational and worker outcomes in this industry. Individually, these articles shed new light on the role that health information technologies play in affecting patient care and productivity (see Hitt and Tambe; Meyerhoefer et al.); the relationship between work practices and organizational reliability (Vogus and Iacobucci); staffing practices, processes, and outcomes (Kramer and son; Hockenberry and Becker; Kossek et al.); health care unions' effects on the quality of patient care (Arindrajit, Kaplan, and Thompson); and the relationship between the quality of jobs and the quality of care (Burns, Hyde, and Killet). Below, we position the articles in this special issue against the backdrop of the pressures and challenges facing the industry and the organizations operating within it. We highlight the implications that organizational responses to industry pressures have had for organizations, the patients they care for, and the employees who deliver this care.

Keywords
health care, work organization, employment relations, quality of care, organizational performance

Disciplines
Business Administration, Management, and Operations | Health and Medical Administration | Health Information Technology | Health Services Administration | Labor Relations | Nursing | Nursing Administration | Occupational Health and Industrial Hygiene | Other Medicine and Health Sciences | Other Nursing | Performance Management | Work, Economy and Organizations

Comments
Required Publisher Statement
© Cornell University. Reprinted with permission. All rights reserved.

Suggested Citation
Avgar, A. C., Eaton, A. E., Givan, R., K., & Litwin, A. S. (2017). Editorial essay: Introduction to a special issue on work and employment relations in health care [Electronic version]. *Industrial and Labor Relations Review, 69*(4), 787-802. doi: 10.1177/0019793916649171

This article is available at DigitalCommons@ILR: http://digitalcommons.ilr.cornell.edu/articles/1203

EDITORIAL ESSAY: INTRODUCTION TO A SPECIAL ISSUE ON WORK AND EMPLOYMENT RELATIONS IN HEALTH CARE

ARIEL C. AVGAR, ADRIENNE E. EATON, REBECCA KOLINS GIVAN, AND ADAM SETH LITWIN*

Health Care Industry Background and Overview: The Next Employment Relations Frontier?

Few if any sectors are as critical to society and as dynamic in the arena of work and employment as health care. From a purely economic perspective, the United States spends more than $9,500 per person per year on insurance premiums, out-of-pocket costs, hospital and physician care, and prescription drugs—$3 trillion in 2014—exhausting 17.5% of GDP. Almost half of these costs are borne by federal, state, and local governments, and thus taxpayers, and another 28% falls directly upon American households. Furthermore, despite White House–led health care reform and a shared goal among policymakers to reduce the projected rate of increase in per capita health care spending—that is, to "bend the cost curve"—health care expenditures in the United States are still expected to grow faster than the rest of the economy over the next two decades, further increasing their overall share of GDP and the resulting burden on the economy (CMS 2015).

Rather alarmingly, this sizeable investment does not seem to drive quality of patient care. The United States spends 50% more per capita on health care than does the next closest country while experiencing above-average rates of medical errors and infant mortality and below-average life expectancies—not to mention the largest uninsured population of any

*ARIEL C. AVGAR is an Associate Professor at the School of Labor and Employment Relations, University of Illinois, Urbana-Champaign. ADRIENNE E. EATON is a Professor in the School of Management and Labor Relations, Rutgers University. REBECCA KOLINS GIVAN is an Associate Professor in the School of Management and Labor Relations, Rutgers University. ADAM SETH LITWIN is an Associate Professor in the ILR School, Cornell University. Articles in this special issue were presented at a conference cosponsored by Rutgers University and the University of Illinois at Urbana-Champaign and held at Rutgers in March of 2014. We are extremely grateful to the School of Labor and Employment Relations at the University of Illinois at Urbana-Champaign and the School of Management and Labor Relations at Rutgers University for their generous support for this conference. We also thank conference participants for their input and insights, which contributed to the quality of this special issue. Finally, we thank Christina Frye and Jinyoung Park for their helpful research assistance. Correspondence can be directed to the authors at avgar@illinois.edu, eaton@work.rutgers.edu, rgivan@work.rutgers.edu, and aslitwin@cornell.edu.

ILR Review, 69(4), August 2016, pp. 787–802
DOI: 10.1177/0019793916649171. © The Author(s) 2016

industrialized country in the world (Institute of Medicine 2001; Kaiser Family Foundation 2011, 2012, 2013, 2014; Skopec, Holahan, and McGrath 2015).

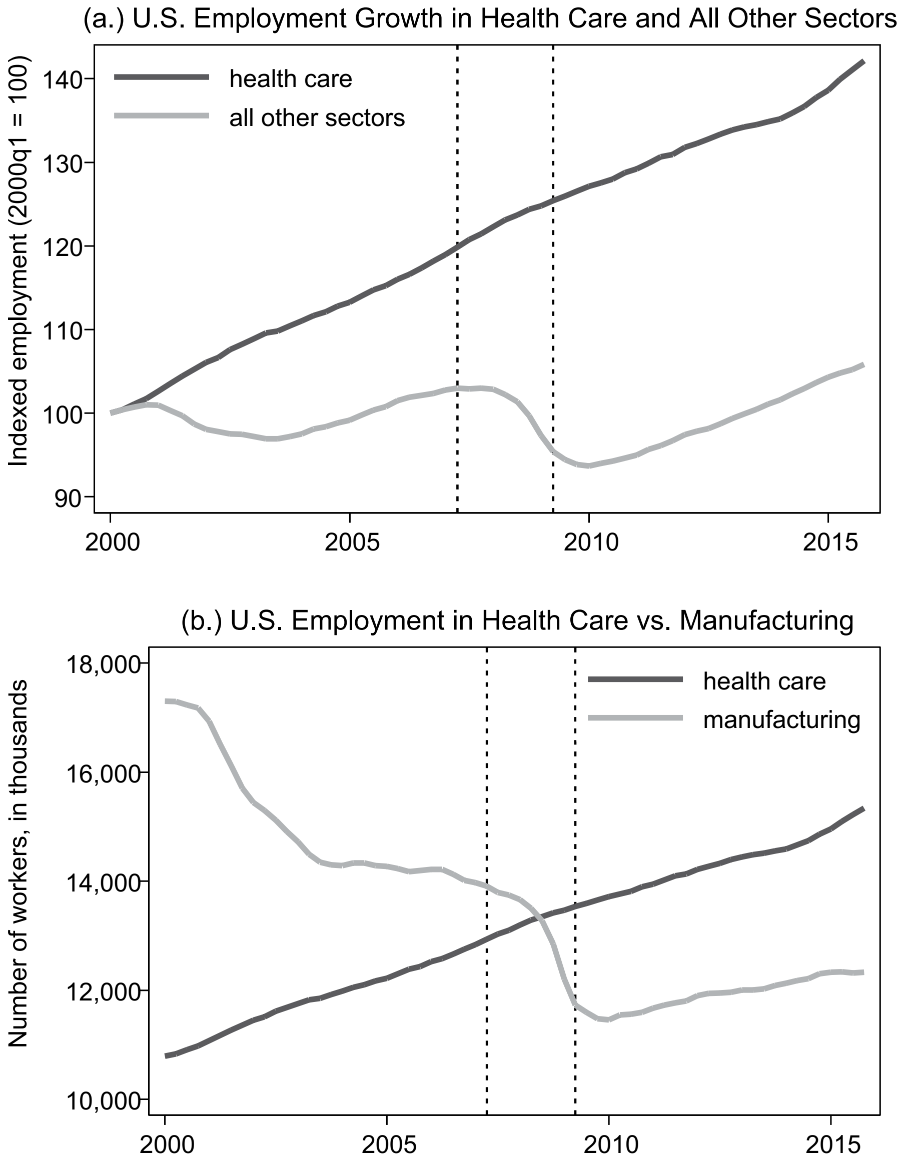
Even if the sector were somehow lauded for efficiency and quality, it would still be worthy of scrutiny by employment relations scholars. Today, more than one of every 10 private-sector wage-earners in the United States works in health care. This proportion is not surprising to us given historical trends. While the United States hemorrhaged 5.6 million jobs during the Great Recession of 2008–2009, health care added more than 1.4 million jobs during the same period (Altarum Institute 2012). Employment in health care proved to be recession-proof, and it continues to grow almost linearly (Figure 1a). Consequently, the sector now employs more than 15 million people (Figure 1b). And, by all accounts, these trends are expected to continue. According to the U.S. Bureau of Labor Statistics (BLS), health care far surpasses every other industry in projected employment growth and will exceed 13.5% of the labor force by 2022. Seven of the top 10 fastest-growing occupations in the United States are in the health care sector as well (BLS 2015).

Moreover, since midway through the Great Recession, the absolute number of workers employed in health care has exceeded the number working in this country's historical labor market mainstay and the focus of much employment relations research—manufacturing (Figure 2). For scholars of work and employment relations, this evidence raises a key question: Will health care serve as a new frontier for research, akin to the role that manufacturing played in the 20th century?

We argue that the sector certainly deserves researchers' attention. First, consider that while employment in health care includes registered nurses (RNs), physicians, and surgeons, it also includes home health aides and hospital cleaners. These low-wage service jobs generally offer little in the way of pay, benefits, status, and quality of life (Kalleberg 2011; Osterman and Shulman 2011). Second, while productivity measures in health care are complex and controversial, evidence does not support that productivity is growing. Instead, evidence shows that during the period between 1987 and 2006—when manufacturing productivity increased by an average compound annual rate of 1.37% per year—productivity in health care declined on a year-to-year basis (Harper, Khandrika, Kinoshita, and Rosenthal 2010). The contrast is even more stark when one considers that over the 50-year period ending in 2000, which includes manufacturing's heyday as employers of choice, that sector's productivity grew at about 2.9% annually (Cobet and Wilson 2002).

The sector has also served as a useful laboratory for the study of technological change. Health care has been slow to adopt information technologies that reduce the costs of collecting, storing, and sharing data and that potentially improve care quality through better coordination of services across providers and networked organizations. Prior to the federally funded policy push for providers to shift from paper-based recordkeeping to

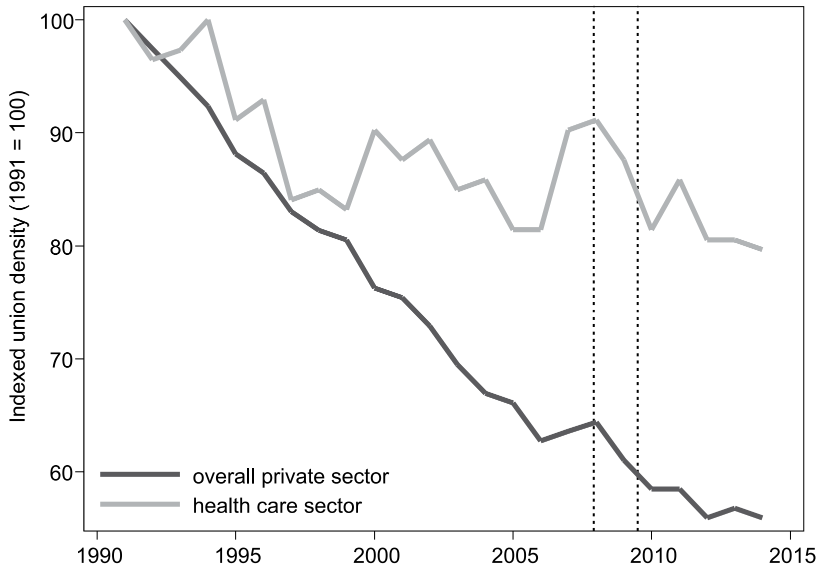
Figure 1. Employment in the Health Care Sector in the United States, 2000–2016



Source: U.S. Bureau of Labor Statistics, Current Employment Survey.
Notes: All data are seasonally adjusted. The vertical lines demarcate the start and end of the Great Recession (December 2007 to June 2009) as dictated by the National Bureau of Economic Research.

electronic health records (EHRs), IT investment per worker per year in the health care sector was $3,000 compared to the private-sector average of $7,000 and the $15,000 per worker per year spent in other information-intensive sectors such as retail banking (Porter and Teisberg 2006). Since then, however, new government incentives tied to Medicare and Medicaid reimbursements have led to a proliferation of EHR systems in the nation's

Figure 2. Changes in Union Density in the United States: Overall Private Sector Compared with Health Care Sector, 1991–2014



Sources: U.S. Bureau of Labor Statistics, Current Employment Survey; Hirsch and Macpherson (2014).
Notes: The vertical lines demarcate the start and end of the Great Recession (December 2007 to June 2009) as dictated by the National Bureau of Economic Research.

hospitals as well as in its medical offices. As of 2014, the last year for which we have data, 75% of U.S. hospitals reported having at least a basic EHR system, up from just 8.7% in 2008 (Jha, DesRoches, Kralovec, and Joshi 2010; Adler-Milstein et al. 2015). Likewise, by 2013, 78% of physicians reported having at least a basic system up and running in their offices, up from 17% in 2007 (DesRoches et al. 2008; Hsiao and Hing 2014).

While technology alone is insufficient for improving industry performance, its deployment under the right employment relations practices can be expected to benefit patients and providers (Litwin 2011; Lipsky and Avgar 2012). Health care systems have been at the forefront of innovative labor relations initiatives designed to improve both employee and patient care outcomes. The labor–management partnership at Kaiser Permanente, the nation's largest managed care organization, for example, encompasses about 30 union locals and 120,000 unionized workers. In exchange for pledges of employment, wage security, and credible assurance that their ideas and discretionary effort cannot be used to their detriment, workers have taken an active role in organizational change and performance improvement efforts, work reorganization, even facilitating the health plan's efforts to attract new members by improving patient and organizational outcomes (Kochan, Eaton, McKersie, and Adler 2009; Litwin 2011). As such, it has become a model not only for other health care organizations and their employees but also for firms and workers in other sectors. Similarly, aside from negotiating better wages, terms, and conditions, 1199 SEIU/United

Healthcare Workers East—the largest union local in the country—has taken an active role in partnering with employers to upskill its members to fill high-paying jobs that are short of qualified applicants, thereby creating sustainable career trajectories for members. Indeed, in these and other cases, unions have pushed for, or have often led, organizational change efforts in partnership with employers, to create more employee-centered solutions than the ones management might typically opt for on its own (Givan 2016).

At first glance, one might conclude that this progressive orientation on the part of the sector's unions has not been advantageous: Union density has fallen by 2 percentage points since 1991, to 9%. And yet, union density in health care has been more resilient than in other sectors; overall private-sector union density has fallen to less than 7% in the same period. Moreover, since 2012, union membership fell by 200,000 across the economy, but the health care sector organized 47,000 new members. These unionized employees not only earn more than their nonunion counterparts but also their unions succeeded in negotiating wage hikes in excess of what unions have achieved over the same period in other sectors (Bloomberg/BNA 2015).

This special issue of the *ILR Review* is designed to showcase the central role that work organization and employment relations play in shaping important outcomes such as the quality of care and organizational performance. Each of the articles included in this special issue makes an important contribution to our understanding of the large and rapidly changing health care sector. Specifically, these articles provide novel empirical evidence about the relationship between organizations, institutions, and work practices and a wide array of central outcomes across different levels of analysis. This breadth is especially important because the health care literature has largely neglected employment-related factors in explaining organizational and worker outcomes in this industry. Individually, these articles shed new light on the role that health information technologies play in affecting patient care and productivity (see Hitt and Tambe; Meyerhoefer et al.); the relationship between work practices and organizational reliability (Vogus and Iacobucci); staffing practices, processes, and outcomes (Kramer and Son; Hockenberry and Becker; Kossek et al.); health care unions' effects on the quality of patient care (Arindrajit, Kaplan, and Thompson); and the relationship between the quality of jobs and the quality of care (Burns, Hyde, and Killet). Below, we position the articles in this special issue against the backdrop of the pressures and challenges facing the industry and the organizations operating within it. We highlight the implications that organizational responses to industry pressures have had for organizations, the patients they care for, and the employees who deliver this care.

An Industry Facing Multiple and Conflicting Environmental Pressures

The articles in this special issue together paint a portrait of an industry facing great challenges. Faced with competitive pressures, resource constraints, and regulatory uncertainty, health care organizations are trying to reduce

costs and to improve the quality of care through a variety of strategies (Porter and Teisberg 2006). As several of the articles show, few innovations have unambiguously positive effects. In reality, many new practices create new tradeoffs, for example, between long- and short-term improvements and between staff needs and patient needs.

The Quality Imperative

At the top of the list of pressures facing health care organizations in the United States (and in most other countries) is the need to provide high-quality and reliable patient care in an extremely complex, dynamic, and resource-constrained environment (Institute of Medicine 2001; Porter and Teisberg 2006). Despite substantial efforts and countless industry-wide initiatives designed to address a variety of quality-of-care and safety deficiencies, health care systems across the globe are still confronting an uphill struggle on this important front. Sixteen years after the explosive and frequently cited Institute of Medicine report, which estimated that 98,000 annual deaths in the United States are preventable (Corrigan, Swift, and Hurtado 2001; Kohn, Corrigan, and Donaldson 2001), recent research suggests that the situation has not improved, that earlier estimates may represent a significant undercount, and that at least 210,000 preventable deaths occur each year (James 2013). In addition, hospitals and other health care organizations report an unacceptably high number of medical and medication errors that have the potential to harm patients and staff (Keers, Williams, Cooke, and Ashcroft 2013). The gap between the quality-of-care goals set forth by the industry and its regulators and what is actually delivered in health care organizations has driven initiatives that span clinical, technological, and work-related domains. As illustrated here, health care organizations are fertile ground for a wide array of diverse workplace experiments.

Competitive Pressures

Intense competitive and economic pressures in the industry make it even more difficult to improve the quality of care. The escalating cost of delivering health care in most developed countries has placed a great deal of pressure—from the government as the primary payer in most countries and from the private sector in the United States—on health care organizations to contain costs and to increase efficiencies (Weinberg 2003; Porter and Teisberg 2006; Bloom, Propper, Seiler, and Van Reenen 2015). Given that labor costs account for a significant proportion of expenditures in health care, cost containment has had clear implications for the employment strategies pursued by organizations. Hospitals have responded to rising costs by seeking both numerical and functional flexibility through the restructuring of work arrangements. For instance, many hospitals have reduced their employment levels and achieved numerical flexibility by turning to part-time and temporary employment arrangements (see Norrish and Rundall 2001). Hospitals have also

sought arrangements that could provide functional flexibility, such as a shift from an individualized method of delivering patient care to one that is based on teams (Grumbach and Bodenheimer 2004; Lemieux-Charles and McGuire 2006). In addition to new staffing strategies, health care organizations have sought to adopt new information technologies that can boost quality of care and reduce costs (Hillestad et al. 2005).

In sum, health care organizations have experimented with innovative ways to survive in difficult and turbulent environments. They have introduced changes to care delivery, restructured work practices, and adopted new technology; these in turn have had a dramatic effect on frontline employees and the organizations that employ and represent them.

Workforce Challenges

Health care organizations face a variety of workforce-related challenges. Particularly salient is the shortage of skilled staff. While the level of skill shortages in health care has been widely debated (see, for example, Lafer 2005), the health care industry seems to operate on the assumption that such shortages present a real future threat. Analysts have predicted a shortage of skilled professionals as a result of the expanded coverage under the Affordable Care Act and an expected rise in the population of chronic disease patients (Dall et al. 2013). Experts estimate a shortfall of 45,000 primary care physicians and 46,000 medical specialists by 2020 (Kirch, Henderson, and Dill 2012; Dall et al. 2013) as well as shortages for other health care professionals including RNs (Juraschek, Zhang, Ranganathan, and Lin 2012). These projections imply that health care organizations need to revamp their selection, recruitment, and staffing strategies along with their wage policies and other attraction and retention practices. Exacerbating the growing demand for care, health care is an extremely demanding work environment with especially high rates of stress and burnout (Aiken et al. 2002; Ruotsalainen, Verbeek, Mariné, and Serra 2015). Health care organizations must combat such levels of stress and burnout in an effort to retain a skilled and trained workforce and to prevent their negative consequences for patient care. The articles in this special issue provide empirical evidence that can inform management practices as well as broader public policies.

Organizational Responses to Industry Pressures and Employee Outcomes

One of the central contributions of the articles included here is to highlight the ways in which organizational practices and innovations have affected the workforce. Industrial relations has long been concerned with the effects that industry dynamics and changes have on employees and their working conditions. In addition, employee outcomes often serve as intermediary variables between workplace practices and organizational structures, and outcomes for both patients and employers. As such, employee outcomes are

essential to a comprehensive understanding of the health care industry, its challenges, and prospects for reform.

As noted above, more than one of every 10 private-sector wage-earners in the United States works in health care. Jobs in the health care industry—ranging from subcontracted hospital cleaners to university-affiliated specialist surgeons—reflect the kind of inequality we see elsewhere in the economy. On the one hand, BLS data from May 2014 demonstrate that median annual wages for health care practitioners and technical occupations are substantially higher than those reported for all occupations in the economy ($61,710 as compared to $35,540). On the other hand, median annual wages for health care support occupations are substantially lower ($26,440) when compared to all other occupations. Given the complexity of health care and the inherent interdependence across high- and low-skilled professions, cost-cutting measures directed toward low-wage employees are likely to undermine health care organizations' ability to deliver high-quality care (Litwin, Avgar, and Becker 2016). Working conditions for health care employees also vary greatly. Much scholarly attention has been focused on conditions of work for nurses and physicians (see, for example, Kellogg et al. 2006). What do we know about the working conditions of all health care employees?

Many direct-care health care workers—particularly nurses, interns, and residents—work long and irregular shifts. Health care workers are more likely than some service workers to engage in alternate schedules (i.e., work outside of the hours of 6 am to 6 pm), but are less likely than some other categories of service workers (McMenamin 2007). Shift work is correlated with a host of negative health outcomes for health care (and other) workers (see below for further discussion of this issue). Furthermore, long hours and shift work have been linked to negative outcomes for patient care and safety and increased errors among nurses (Rogers et al. 2004) and residents (Landrigan et al. 2004).

Particularly ironic is that at least some evidence supports that health care workers tend to be less healthy, on average, than other occupational groups. A study using 2010 data that examined the links between obesity and certain occupational characteristics found that health care support workers had higher than average rates of obesity even after controlling for various demographic factors (Luckhaupt, Cohen, Li, and Calvert 2014). This finding was affirmed in a Thomson Reuters study that found that hospital workers were more likely than the general public to be obese and to have diabetes (Reuters 2011). Concerns about the health of its workforce, the attendant human and financial costs, and the example set for employers purchasing their health plans led the parties to the Kaiser Permanente Labor Management Partnership to negotiate a workplace wellness program known as "Total Health" (Eaton and Kochan 2014). Health care workers, at least those who work in hospitals or nursing homes, also experience high rates of occupational accidents and illnesses, higher than in manufacturing or construction (OSHA 2013; BLS 2014). In addition, much health care work is highly stressful, which can lead to significant rates of absenteeism and burnout (Parasuraman and Hansen 1987; Avgar et al. 2011b).

Articles in this issue contribute new evidence regarding the consequences of work in the health care industry. In Amit Kramer and Jooyeon Son's article, "Who Cares about the Health of Health Care Professionals? An 18-Year Longitudinal Study of Working Time, Health, and Occupational Turnover," the authors demonstrate the impact that work schedules have on individual employees. Building on the existing body of work that links occupational stress to turnover for health care professionals (Clark, Clark, Day, and Shea 2001; Avgar et al. 2011b), the authors focus on nurses and licensed practical nurses, occupations for which there is a supposed shortage of qualified and interested applicants. Using longitudinal survey data, the authors examine the impact of longer work hours on overweight and obesity. They also consider the effects of alternative work shifts on body weight and the interactive effects of long hours and alternative shift schedules on employee turnover. Their results suggest that health care workforce challenges should be addressed by improving working conditions and focusing on the movement out of rather than into the "pipeline" (see Lafer 2005).

One factor previously linked to high stress levels of health care workers is work–family conflict. Buxton and Jacobsen (2014) linked work–family conflicts to sleep deprivation of health care workers, which they, in turn, relate to risk for cardiovascular disease. In the article "Filling the Holes: Work Schedulers as Job Crafters of Employment Practice in Long-Term Health Care," Ellen Ernst Kossek, Matthew M. Piszczek, Kristie L. McAlpine, Leslie B. Hammer, and Lisa Burke look at the ways in which work schedulers in nursing homes balance the needs of their employers and the frontline staff, especially the work–family needs of employees. They draw on the job-crafting literature to make sense of the ways these workers "fill holes" in the schedule, finding that some actively expand their scope and influence to the benefit of their employer, their fellow employees, residents of the facility, or a mix thereof. In particular, the authors identify four job-crafting archetypes for the work scheduler role. They then consider the ways that individuals in this job can help managers and policymakers balance the competing interests of health care's many stakeholders. In a complex system that requires a great deal of staffing agility, organizational roles such as schedulers have the potential to influence the ability of organizations to adapt to some of the workforce pressures discussed above.

Employee outcomes—important in their own right—often serve as a mediator between organizational practices and arrangements and other performance outcomes (for a similar argument see Avgar et al. 2011a). In particular, employee outcomes may serve as an important link between organizational responses to economic and competitive pressures and patient care. In "How Financial Cutbacks Affect the Quality of Jobs and Care for the Elderly," Diane J. Burns, Paula J. Hyde, and Anne M. Killett provide evidence on the consequences of cost-cutting strategies in nursing homes in the United Kingdom. Using findings from 12 nursing home case studies, the authors detail the severe financial pressures under which these organizations function. Burns and colleagues highlight the manner in which these

financial pressures have led to a deterioration of both the quality of working conditions for frontline staff and for the residents for whom they care. They show how cuts to staffing, wages, and training, and declines in other working conditions, have the potential to spill over to the care provided to residents. The authors point to distinctions in the delivery of resident care that moderate the relationship between financial pressures and the quality of care. These findings link job quality and care quality and provide a more nuanced understanding of how financial pressures can lead to poor quality of care and the mediating role that work practices play.

Organizational Responses to Industry Pressures and Performance Outcomes

In addition to employee outcomes, this special issue highlights the relationship between labor and employment relations and a relatively broad array of performance outcomes. Health care scholars have built on a well-established body of research in a broad set of industries that examines how work organization and human resource management (HRM) practices affect a range of performance outcomes. These studies have investigated workplaces from steel mills to call centers and have generally found a direct relationship between work organization, HRM practices, and performance (Huselid 1995; Ichniowski, Shaw, and Prennushi 1997; Batt 1999). In health care, an emerging body of research has also documented a significant link between work organization and employment relations and organizational outcomes, from patient care to financial outcomes (Givan et al. 2010; Avgar et al. 2011a,b).

Health care is a critical setting in which to examine the link between work organization and performance given the wide array of central performance outcomes, including quality of care, patient satisfaction, productivity, and financial performance (for a similar argument see Givan et al. 2010). Early research on the relationship between work practices and performance has tended to focus on single outcome measures, such as survival rates from heart attacks (West et al. 2002; Ash and Seago 2004; Propper and Van Reenen 2010). More recent studies have broadened the set of clinical outcomes examined and have complicated the relationship between organizational structures and practices and clinical outcomes (Gittell 2002; McConnell et al. 2013).

Patient safety is also a central performance outcome and has received a great deal of attention in the health care literature. In "Creating Highly Reliable Health Care: How Reliability-Enhancing Work Practices Affect Patient Safety in Hospitals," Timothy J. Vogus and Dawn Iacobucci document the link between a specific bundle of practices designed to increase the level of organizational reliability and measures of patient quality of care. Reliability-enhancing work practices (REWPs) represent an effort on the part of hospitals to emulate other industries that have achieved a much higher level of safety. In addition to a hypothesized direct effect, the authors propose two separate mechanisms by which REWPs advance patient care—attitudinal and discursive. The authors find a positive association between

these work practices and employee attitudinal and behavioral outcomes, as well as partial support for a mediated relationship between REWPs and the quality of patient care. The article advances our understanding of the complexity of the multi-stakeholder health care environment and sharpens our focus on the frequent tradeoffs resulting from new organizational practices.

Another example of the role that quality-of-care pressures may play in shaping employment relations within organizations can be found in Arindrajit Dube, Ethan Kaplan, and Owen Thompson's article, "Nurse Unions and Patient Outcomes." The authors find that unionization efforts in California were more likely to take place in hospitals with poor and declining quality of patient care. But in those hospitals with union election victories, organizational performance improved across a host of clinical measures. This article is an important reminder that unions should not be overlooked as a valuable vehicle for improving care quality (for additional evidence regarding the role that unions play in advancing quality of care, see Ash and Seago 2004).

Patient satisfaction is another important outcome, one that is growing in importance under the ACA even though the relationship between patient satisfaction and clinical outcomes is a complicated one. The movement toward a greater emphasis on patient needs has substantially increased the attention given to the patient experience. The Centers for Medicaid and Medicare Services have emphasized patient satisfaction by introducing patient surveys (also referred to as HCAHPS) that allow for broad comparisons of patient experience data across health care organizations. A few studies have considered the relationship between patient satisfaction and employee satisfaction (Linn et al. 1985), and more recent work has studied the complex relationship between patient satisfaction, employee satisfaction, and clinical outcomes (Givan et al. 2010; Avgar et al. 2011a,b).

Jason M. Hockenberry and Edmund R. Becker examine hospital staffing strategies and their effects on patient satisfaction in their article "How Do Hospital Nurse Staffing Strategies Affect Patient Satisfaction?" Specifically, they consider whether the proportion of RNs to nurse aides, as well as whether the use of contract RNs, affects patient satisfaction. They find significant effects of these staffing strategies and conclude that—whether driven by perceived labor shortages or cost cutting—some staffing models produce unintended and highly problematic consequences.

This issue also includes two articles that focus on the relationship between technological advances and performance outcomes, testing the proposition that one way to deliver cost savings is through the adoption of new technology. Evidence already supports that the benefits associated with health IT are, among other things, contingent on employment relations factors, such as organizational work practices (Kochan 1988; Litwin 2011; Lipsky and Avgar 2012). Lorin M. Hitt and Prasanna Tambe extend this stream of research in a study of 304 New York State nursing homes. In their article, "Health Care Information Technology, Work Organization, and Nursing Home Performance," they find support for productivity and efficiency gains associated with health IT use. Furthermore and central to the theme of this

special issue, they report that the use of health IT in combination with employee involvement practices have complementary, or multiplicative, effects. In other words, fully delivering on the potential vested in new health IT requires attention to work practices.

Finally, in the article titled "The Consequences of Electronic Health Record Adoption for Physician Productivity and Birth Outcomes," Chad D. Meyerhoefer, Mary E. Deily, Susan A. Sherer, Shin-Yi Chou, Lizhong Peng, Michael Sheinberg, and Donald Levick examine the productivity consequences of adopting electronic health records. Using both qualitative and longitudinal, quantitative data, the authors report their findings from a study of physician productivity and quality-of-care outcomes after the implementation of health IT in a large health network focusing on primary care obstetrics and gynecology practices. In contrast to Hitt and Tambe, these authors present mixed results: an overall decline in productivity in the initial nine month period of their study coupled with improved quality of care over time. In an environment in which health care organizations are required to improve their financial viability while also increasing care quality, this article illustrates the difficulties of achieving both objectives with a single innovation.

Conclusion

This special issue highlights the centrality of work and employment relations in the health care sector while also highlighting broader conceptual debates that cross industries. Each of the articles advances our understanding of important links between employment relations factors and key outcomes. Taken together, these articles highlight the role that work organization and employment practices play in ensuring quality of care, improving patient satisfaction, protecting employees from deteriorating working conditions and negative health consequences, and capitalizing on the potential inherent in health IT. The research here serves as an important reminder of the inextricable relationship between employment relations and the health and stability of the health care industry.

The health care industry is facing unprecedented pressures and challenges. Public policy makers, health care administrators, and academics have all been enlisted in the efforts to develop organizational, care delivery, and reimbursement models that can improve the current quality of patient care and contain costs. In an effort to pull off this delicate balancing act, various innovations have been proposed and implemented across a range of health care systems. We believe that the scholarship presented in this special issue shows that efforts to reform the health care system must recognize the role that workplace dynamics play in delivering positive outcomes for all of the system's stakeholders.

These articles also highlight the need for future research. As policymakers and administrators continue to experiment with new payment and delivery models, employment relations scholars will need to continue to call attention to the essential role that work organization, HRM practices, and

labor relations factors play in contributing to the effectiveness of these innovations. Given the complexity of this industry, the monumental challenges it faces, and the consequences that hang in the balance for multiple stakeholders, health care is sure to provide academics with a rich setting in which to conduct employment-related research for many years to come.

References

Adler-Milstein, Julia, Catherine M. DesRoches, Peter Kralovec, Gregory Foster, Chantal Worzala, Dustin Charles, Talisha Searcy, and Ashish K. Jha. 2015. Electronic health record adoption in U.S. hospitals: Progress continues, but challenges persist. *Health Affairs* 34(12): 2174–2180.

Aiken, Linda H., Sean P. Clarke, Douglas M. Sloane, Julie Sochalski, and Jeffrey H. Silber. 2002. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association* 288(16): 1987–93.

Altarum Institute. 2012. *Labor Brief*. Washington, DC: Center for Sustainable Health Spending, November 2.

Ash, Michael, and Jean Ann Seago. 2004. The effect of registered nurses' unions on heart attack mortality. *Industrial & Labor Relations Review* 57(3): 422–42.

Avgar, Ariel C., Rebecca K. Givan, and Mingwei Liu. 2011a. Patient-centered but employee delivered: Patient care innovation, turnover, and organizational outcomes in hospitals. *Industrial & Labor Relations Review* 64(3): 423–40.

Avgar, Ariel C., Rebecca Kolins Givan, and Mingwei Liu. 2011b. A balancing act: Work–life balance and multiple stakeholder outcomes in hospitals. *British Journal of Industrial Relations* 49(4): 717–41.

Batt, Rosemary. 1999. Work organization, technology, and performance in customer service and sales. *Industrial & Labor Relations Review* 52(4): 539–64.

Bloom, Nicholas, Carol Propper, Stephan Seiler, and John Van Reenen. 2015. The impact of competition on management quality: Evidence from public hospitals. *Review of Economic Studies* 82(2): 457–89.

Bloomberg/BNA. 2015. Unions and the health care industry: Trends in organizing and bargaining, 2014. *Bloomberg/BNA Legal Highlights*.

[BLS] Bureau of Labor Statistics. 2014. Occupational injuries and illnesses (annual) news release. Accessed at http://www.bls.gov/news.release/archives/osh_12042014.htm.

———. 2015. *Occupational Outlook Handbook: Fastest Growing Occupations*. Compiled by U.S. Bureau of Labor Statistics, Washington, DC.

Buxton, Orfeu M., and Henrik Jacobsen. 2014. Work-family conflict, sleep and the heart. NIOSH Science Blog: Safer Healthier Workers, November 19. Accessed at http://blogs.cdc.gov/niosh-science-blog/2014/11/19/work_sleep_heart/.

Clark, Paul F., Darlene A. Clark, David V. Day, and Dennis G. Shea. 2001. Healthcare reform and the workplace experience of nurses: Implications for patient care and union organizing. *Industrial & Labor Relations Review* 55(1): 133–48.

CMS. 2015. *National Health Expenditure Fact Sheet*. Compiled by U.S. Centers for Medicare and Medicaid Services.

Cobet, Aaron E., and Gregory A. Wilson. 2002. Comparing 50 years of labor productivity in U.S. and foreign manufacturing. *Monthly Labor Review* 125(6): 51–65.

Corrigan, Janet M., Elaine K. Swift, and Margarita P. Hurtado (Eds.). 2001. *Envisioning the National Health Care Quality Report*. Washington, DC: National Academies Press.

Dall, Timothy M., Paul D. Gallo, Ritasree Chakrabarti, Terry West, April P. Semilla, and Michael V. Storm. 2013. An aging population and growing disease burden will require a large and specialized health care workforce by 2025. *Health Affairs* 32(11).

DesRoches, Catherine M., Eric G. Campbell, Sowmya R. Rao, Karen Donelan, Timothy G. Ferris, Ashish Jha, Rainu Kaushal, Douglas E. Levy, Sara Rosenbaum, Alexandra E. Shields, and David Blumenthal. 2008. Electronic health records in ambulatory care—A national survey of physicians. *New England Journal of Medicine* 359(1): 50–60.

Eaton, Adrienne E., and Thomas A. Kochan. 2014. The evolution of a labor-management partnership: The case of Kaiser Permanente and the coalition of Kaiser Permanente unions. In William K. Roche, Paul Teague, and Alexander J. S. Colvin (Eds.). *The Oxford Handbook on Conflict Management in Organizations*, pp. 297–310. New York: Oxford University Press.

Gittell, Jody Hoffer. 2002. Coordinating mechanisms in care provider groups: Relational coordination as a mediator and input uncertainty as a moderator of performance effects. *Management Science* 48(11): 1408–26.

Givan, Rebecca Kolins. 2016. *The Challenge to Change: Reforming Health Care on the Front Line in the United States and the United Kingdom*. Ithaca, NY: Cornell University Press/ILR Press.

Givan, Rebecca, Ariel Avgar, and Mingwei Liu. 2010. Having your cake and eating it too? The relationship between human resource management and delivery of care practices and organizational performance in healthcare. In David Lewin, Bruce E. Kaufman, and Paul Gollan. *Advances in Industrial and Labor Relations*, vol. 17. Bingley, UK: Emerald.

Grumbach, Kevin, and Thomas Bodenheimer. 2004. Can health care teams improve primary care practice? *Journal of the American Medical Association* 291(10): 1246–51.

Harper, Michael J., Bhavani Khandrika, Randal Kinoshita, and Steven Rosenthal. 2010. Nonmanufacturing industry contributions to multifactor productivity, 1987–2006. *Monthly Labor Review* 133(6): 16–31.

Hillestad, Richard, James H. Bigelow, Anthony G. Bower, Federico Girosi, Robin Meili, Richard Scoville, and Roger Taylor. 2005. Can electronic medical record systems transform health care? Potential health benefits, savings, and costs. *Health Affairs* 24: 1103–17.

Hirsch, Barry T., and David A. Macpherson. 2014. *Union Membership and Earnings Data Book: Compilations from the Current Population Survey*. Washington, DC: Bureau of National Affairs.

Hsiao, Chun-Ju, and Esther Hing. 2014. Use and characteristics of electronic health record systems among office-based physician practices: United States, 2001–2013. *National Center for Health Statistics Data Brief* 143.

Huselid, Mark A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal* 38(3): 635–72.

Ichniowski, Casey, Kathryn Shaw, and Giovanna Prennushi. 1997. The effects of human resource management practices on productivity: A study of steel finishing lines. *American Economic Review* 87(3): 291–313.

Institute of Medicine. 2001. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academies Press.

James, John T. 2013. A new, evidence-based estimate of patient harms associated with hospital care. *Journal of Patient Safety* 9(3): 122–28.

Jha, Ashish K., Catherine M. DesRoches, Peter D. Kralovec, and Maulik S. Joshi. 2010. A progress report on electronic health records in U.S. hospitals. *Health Affairs* 29(10): 1951–57.

Juraschek, Stephen P., Xiaoming Zhang, Vinoth Ranganathan, and Vernon W. Lin. 2012. United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality* 27(3): 241–49.

Kaiser Family Foundation. 2011. *Employer Health Benefits: 2011 Annual Survey*. Washington, DC: Kaiser Family Foundation.

———. 2012. *Employer Health Benefits: 2012 Annual Survey*. Washington, DC: Kaiser Family Foundation.

———. 2013. *Employer Health Benefits: 2013 Annual Survey*. Washington, DC: Kaiser Family Foundation.

———. 2014. *Employer Health Benefits: 2014 Annual Survey*. Washington, DC: Kaiser Family Foundation.

Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*. American Sociological Association's Rose Series in Sociology. New York: Russell Sage Foundation.

Keers, Richard N., Steven D. Williams, Jonathan Cooke, and Darren M. Ashcroft. 2013. Prevalence and nature of medication administration errors in health care settings: A systematic review of direct observational evidence. *Annals of Pharmacotherapy* 47(2): 237–56.

Kellogg, Katherine C., Elizabeth Breen, Stephen J. Ferzoco, Michael J. Zinner, and Stanley W. Ashley. 2006. Resistance to change in surgical residency: An ethnographic study of work hours' reform. *Journal of the American College of Surgeons* 202(4): 630–36.

Kirch, Darrell G., Mackenzie K. Henderson, and Michael J. Dill. 2012. Physician workforce projections in an era of health care reform. *Annual Review of Medicine* 63: 435–45.

Kochan, Thomas A. 1988. On the human side of technology. *ICL Technical Journal* 6(2): 391–400.

Kochan, Thomas A., Adrienne E. Eaton, Robert B. McKersie, and Paul S. Adler. 2009. *Healing Together: The Labor-Management Partnership at Kaiser Permanente.* Ithaca, NY: Cornell University Press/ILR Press.

Kohn, Linda T., Janet M. Corrigan, and Molla S. Donaldson (Eds.). 2001. *To Err Is Human: Building a Safer Health System.* Washington, DC: National Academies Press.

Lafer, Gordon. 2005. Hospital speedups and the fiction of a nursing shortage. *Labor Studies Journal* 30(1): 27–46.

Landrigan, Christopher P., Jeffrey M. Rothschild, M. P. H., John W. Cronin, Rainu Kaushal, Elisabeth Burdick, Joel T. Katz, Craig M. Lilly, Peter H. Stone, Steven W. Lockley, David W. Bates, and Charles A. Czeisler. 2004. Effect of reducing interns' work hours on serious medical errors in intensive care units. *New England Journal of Medicine* 351: 1838–48.

Lemieux-Charles, Louise, and Wendy L. McGuire. 2006. What do we know about health care team effectiveness? A review of the literature. *Medical Care Research and Review* 63(3): 263–300.

Linn, Lawrence S., Robert H. Brook, Virginia A. Clark, Allyson Ross Davies, Arlene Fink, and Jacqueline Kosecoff. 1985. Physician and patient satisfaction as factors related to the organization of internal medicine group practices. *Medical Care* 23(10): 1171–78.

Lipsky, David B., and Ariel C. Avgar. 2012. Caregivers and computers: Key lessons from the adoption and implementation of electronic medical records in New York State nursing homes. *Advances in Industrial and Labor Relations* 20: 75–104.

Litwin, Adam Seth. 2011. Technological change at work: The impact of employee involvement on the effectiveness of health information technology. *Industrial & Labor Relations Review* 64(5): 863–88.

Litwin, Adam Seth, Ariel C. Avgar, and Edmund R. Becker. 2016. Superbugs vs. outsourced cleaners: Employment arrangements and the spread of health care–associated infections. *ILR Review*, in press.

Luckhaupt, Sara E., Martha A. Cohen, Jia Li, and Geoffrey M. Calvert. 2014. Prevalence of obesity among U.S. workers and associations with occupational factors. *American Journal of Preventive Medicine* 46(3): 237–48.

McConnell, Richard C. Lindrooth, Douglas R. Wholey, Thomas M. Maddox, and Nick Bloom. 2013. Management practices and the quality of care in cardiac units. *JAMA Internal Medicine* 173(8): 684–92.

McMenamin, Terence M. 2007. A time to work: Recent trends in shift work and flexible schedules. *Monthly Labor Review.* Accessed at http://www.bls.gov/opub/mlr/2007/12/art1full.pdf.

Norrish, Barbara R., and Thomas G. Rundall. 2001. Hospital restructuring and the work of registered nurses. *Milbank Quarterly* 79(1): 55–79.

[OSHA] Occupational Safety and Health Administration. 2013. *Caring for Our Care Givers: Facts about Hospital Worker Safety.* Washington, DC: OSHA. September. Accessed at https://www.osha.gov/dsg/hospitals/documents/1.2_Factbook_508.pdf.

Osterman, Paul, and Beth Shulman. 2011. *Good Jobs America: Making Work Better for Everyone.* New York: Russell Sage Foundation.

Parasuraman, Saroj, and Donna Hansen. 1987. Coping with work stressors in nursing effects of adaptive versus maladaptive strategies. *Work and Occupations* 14(1): 88–105.

Porter, Michael E., and Elizabeth Olmsted Teisberg. 2006. *Redefining Health Care: Creating Value-Based Competition on Results.* Boston: Harvard Business School.

Propper, Carol, and John Van Reenen. 2010. Can pay regulation kill? Panel data evidence on the effect of labor markets on hospital performance. *Journal of Political Economy* 118 (2): 222–73.

Reuters. 2011. Hospital workers outspend others on medical care. September 12. Accessed at http://www.reuters.com/article/us-workers-outspend-idUSTRE78B45020110912.

Rogers, Anne E., Wei-Ting Hwang, Linda D. Scott, Linda H. Aiken, and David F. Dinges. 2004. The working hours of hospital staff nurses and patient safety. *Health Affairs* 23(4): 202–12.

Ruotsalainen, Jani H., Jos H. Verbeek, Albert Mariné, and Consol Serra. 2015. Preventing occupational stress in healthcare workers. *Cochrane Database Syst Rev*, p. 4.

Skopec, Laura, John Holahan, and Megan McGrath. 2015. Health insurance coverage in 2013: Gains in public coverage continue to offset loss of private insurance. *Kaiser Commission on Medicaid and the Uninsured: Issue Brief*. April. Accessed at http://kff.org.

Weinberg, Dana Beth. 2003. *Code Green: Money-Driven Hospitals and the Dismantling of Nursing*. Ithaca, NY: Cornell University Press.

West, Michael A., Carol Borrill, Jeremy Dawson, Judy Scully, Matthew Carter, Stephen Anelay, Malcolm Patterson, and Justin Waring. 2002. The link between the management of employees and patient mortality in acute hospitals. *International Journal of Human Resource Management* 13(8): 1299–1310.