Using Common Work Environment Metrics to Improve Performance in Healthcare Organizations

INVITED ESSAY

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ABSTRACT

This article proposes a comprehensive framework for assessing, reporting and improving the quality of work environments in healthcare organizations across Canada. Healthy work environments (HWEs) contribute to positive outcomes for healthcare employees and physicians. The same HWE ingredients also can reduce operating costs, improve human resources utilization and ultimately lead to higher-quality patient care. We show how health system employers, governments, quality agencies and other stakeholders can implement effective HWE metrics. The common reporting framework and metrics we propose enable managers and policy makers to use HWE ingredients as levers to improve organizational performance. Progress requires the active involvement of stakeholders in developing common metrics, the integration of these metrics into existing measurement and reporting systems, the building in of managerial accountability for work environment quality and support for ongoing improvements at the front lines of care and service delivery.

Over the past decade, hundreds of studies have shown that healthy work environments (HWEs) in healthcare contribute to higher-quality health services and positive work experiences for employees and physicians. Indeed, there is a growing consensus that the future sustainability, cost-effectiveness and performance of Canada's healthcare system depend on the quality of the environments in which workers provide patient care and related services. This case is compelling, given that close to 80% of healthcare budgets are for human resources. However, there is no consensus on how best to measure, report and improve the quality of HWEs.

HWE models and measurement tools have proliferated recently. These resources typically have been developed ad hoc by individual organizations, usually in the form of employee surveys. A growing number of organizations, notably hospitals, have started developing common approaches to healthy workplace change. No Canadian jurisdiction has implemented a comprehensive framework to guide, coordinate and incent actions aimed at raising work-environment standards across the entire healthcare system. From a public policy perspective, it is critical to have a common framework to enable all healthcare organizations to continuously improve work environments as a means of achieving higher levels of performance. The time is right to integrate HWE goals and measures into healthcare quality improvement frameworks and accountability agreements.

We propose a comprehensive framework for assessing and publicly reporting the quality of work environments in Canada's healthcare organizations. We summarize research on HWEs in healthcare, compare concepts and tools used to measure HWE in healthcare settings and recommend a measurement and reporting system for use at the organizational, provincial and national levels.

Defining HWEs

Workplace health research has moved beyond individual workers' health outcomes to examine the underlying workplace determinants of wellness and job performance. A healthy organization is defined as "one whose culture, climate and practices create an environment that promotes employee health and safety as well as organizational effectiveness" (Lim and Murphy 1999: 64). In a healthy organization, work environments positively contribute to the development and utilization of employees' capabilities essential for achieving the organization's goals. The foundation for a healthy organization is a culture that nurtures employee well-being, engagement and performance. In a healthy and high-performing workplace, behaviours are guided by people-centred values and supported by human resources (HR) management practices. (For an in-depth discussion of the building blocks of healthy organizations, see Lowe [2010].)

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These ideas are being applied in healthcare. The US Joint Commission on the Accreditation of Healthcare Organizations links care quality and healthy workplaces: "A healthy workplace is one where workers will be able to deliver higher-quality care and one in which worker health and patients' care quality are mutually supportive. That is, the physical and emotional health of workers fosters quality care, and vice versa, being able to deliver high-quality care fosters worker health" (Eisenberg et al. 2001: 447). In Canada, this

is echoed by the Quality Worklife–Quality Healthcare Collaborative (2007).

We have extensive knowledge of HWE determinants, outcomes and dynamics in a wide range of occupations and industries. A key conclusion in a 2002 Canadian Nursing Advisory Committee report was that after more than 20 years of research on nursing quality of work life and retention, we know what needs to be improved. This comment applies more generally: we know enough to take action in all healthcare work settings. Yet progress has been slow and uneven. From a perspective of continuous improvement, it is important to put available knowledge into action by testing, learning and refining HWE models and metrics. As outlined below, policy makers and organizational leaders can play an enabling role by supporting the development of the tools required to improve organizational health and performance.

Ingredients for a HWE

Healthcare workplaces pose a wide range of health and safety risks to workers (British Columbia, Office of the Auditor General 2004; Shields and Wilkins 2009; Williams 2003). Musculoskeletal injuries are well above the national average, although progress is being made in addressing injuries in hospitals and other healthcare settings. Front-line care providers, especially nurses, are subject to abuse by patients. Clearly, more needs to be done to reduce the risk of abuse, lost-time injuries (LTI), disability and workers' compensation claims. However, there are greater risks and organizational performance implications within the psychosocial work environment.

Healthcare occupations have the highest incidence of work-related stress compared with others occupations. Stress results from job strain, due to heavy work demands and a lack of control over these demands. High job strain leads to increased sick time and burnout (emotional exhaustion), reduced job satisfaction and increased workplace conflict and turnover (Baumann et al. 2001; Bourbonnais and Mondor 2001; Browning et al. 2007; Lavoie-Tremblay et al. 2008). For nurses, positive health outcomes are associated with high job control, a balance of job demands with sufficient resources (adequate staffing, time available to plan and carry out work), positive relationships with colleagues and supervisors, opportunities for skill development and use and good supervision as measured by regular communication and feedback (Gleason et al. 1999). Hospitals exhibiting positive work environments achieve better performance in terms of staff recruitment and retention and patient outcomes (O'Brien-Pallas et al. 2004; Rogers et al. 2004).

Workload, work pace and work scheduling are among the most serious work-environment issues facing healthcare workers (Bru et al. 1996; Denton et al. 2002; Zangaro and Soeken 2007). Workload pressures due to chronic understaffing, mandatory overtime and on-call duties, reduced time off for education and training and placements in areas outside of their specialty have become common conditions for nurses and other health professionals. Additional organizational factors associated with negative health outcomes include a lack of control over work, a lack of participation in decision-making, unsupportive working relationships, unsupportive leadership and a lack of communication and feedback.

Job burnout is a major concern in research on physicians (Canadian Medical Association 2003; Freeborn 2001; *National Physician Survey* 2004; Renzi et al. 2005; Shanafelt et al. 2002). The main causes of burnout, distress and dissatisfaction include heavy workloads, long work hours, a lack of influence over daily work processes, few opportunities for personal growth, institutional resource constraints and ineffective unit

management and organizational leadership. Negative consequences include suboptimal patient care, higher levels of absenteeism and turnover, disengagement from the organization, an increased frequency of accidents and adverse events, greater alcohol and drug abuse and suicide (Rondeau et al. 2005; Thomsen et al. 1998; Williams et al. 2001).

Studies confirm that workers' health and performance improve when they have active job conditions, which provide more autonomy and opportunities to use and develop their skills. A lack of control over work and lack of participation in decision-making have been associated with injury and disease among healthcare workers. There have been numerous initiatives in healthcare to increase employee involvement through various forms of work redesign, with goals such as better skill utilization and increased organizational commitment (Koehoorn 1999).

Mutual respect is the basis for collaborative, patient-focused care within and across health professions. A perceived lack of respect in relationships with supervisors or other professionals, or a perceived lack of fairness in organizational procedures, can reduce nurses' job satisfaction and trust in management, increase the risk of burnout and lead to perceptions of reduced quality of care (Laschinger 2004). Being treated with a lack of dignity and disrespect in relationships is associated with poor self-reported health status, psychiatric problems and high absenteeism among hospital staff (Elovainio et al. 2002; Kivimäki et al. 2002). In short, when respect and fairness define working relationships, employees have healthier and more productive work experiences.

Creating healthier work environments requires a shift in leadership thinking and a supportive organizational culture so that human assets are more highly valued and nurtured over the long term. There also are important lessons about healthy change processes in healthcare that will not put worker health or service quality at risk (Burke 2004; Laschinger and Finegan 2005). Change that is guided by a clear leadership vision and a culture that values open communication and staff participation contributes to better results.

Work Environments Impact Performance

Specific job, work-environment and organizational factors pose risks not only for workers' health and well-being but also for organizational performance. The current cost burden of unhealthy and unsafe workplaces for organizations and society includes reduced worker commitment and job satisfaction, absenteeism, turnover, accidents, rising drug benefits costs, related healthcare costs, errors and lost productivity.

Absenteeism is a major cost through lost productivity, exacerbating workload problems. The Ontario Hospital Association's (OHA) Healthy Hospital Employee Survey found that positive employment relationships, safe and supportive work environments and increased satisfaction were related to employee self-reported health status, absenteeism, job performance and intention to quit (Yardley 2003, September; for details on the survey, visit the association's website at www.oha.com). Healthy workplaces improve hospital effectiveness by substantially lowering the costs of absenteeism (US Department of Veterans Affairs 2004). Solutions that can reduce employee costs must address the root causes of this problem. This requires a comprehensive, systemic approach based on an understanding of how job dissatisfaction, stress and absenteeism are related (Shields 2006).

Worksite programs aimed at injury reduction, supporting employee health and wellness and proactive return to work save costs and improve overall health system

performance. Questions remain, however, about how the psychosocial work environment contributes directly and indirectly to presenteeism (going to work in spite of illness or injury). Compared with other industries, healthcare has fairly reliable information on what turnover costs employers (Gess et al. 2008; Waldman et al. 2004). Research on nurses shows that work-environment factors contribute to job satisfaction, which, in turn, affects turnover (Flynn 2005; O'Brien-Pallas et al. 2006). Magnet hospitals are successful at recruiting and retaining highly skilled nurses because of the professional practice environments they provide (Aiken et al. 2008; Stolzenberger 2003). This has positive impacts on nurses' quality of work life – job satisfaction, safety and psychological well-being – and patient care. The 2004 National Physician Survey showed that job satisfaction is an important factor in retaining the physician workforce. According to this survey, solutions to physician work-life balance improve satisfaction and retention (Canadian Institute for Health Information [CIHI] 2006).

Many HWE ingredients also are instrumental in achieving quality and safety outcomes. The US Institute of Medicine has recommended improvements in nurses' work environments, adequate staffing levels, mandatory limits on nurses' work hours and strong nurse leadership at all levels to improve safety outcomes (Institute of Medicine of the National Academies 2003; see also Agency for Healthcare Research and Quality 2003). Similarly, the US Agency for Healthcare Research and Quality's integrative model of safety climate in acute care, home care, long-term care and primary care settings emphasizes the importance of supportive and empowering leadership and organizational arrangements (Haberfelde et al. 2005). Moreover, patient and worker safety are connected: workers in low-injury work environments are more likely to report providing higher-quality patient care than workers in high-injury worksites (Yassi and Hancock 2005; see also Sikorski 2009).

Work Environment Improvement Frameworks

Drawing on the above evidence, we propose an HWE framework that is *comprehensive in scope* by measuring HWE determinants and outcomes, is *inclusive in coverage* by applying to all healthcare workers and settings, is *government-sponsored* and uses *common tools*. Most existing frameworks do not meet these criteria. For example, several frameworks focus on nurses' work environments (Magnet Hospital, American Association of Critical Care Nurses and Registered Nurses Association of Ontario) or hospitals (World Health Organization and OHA). The Quality Worklife–Quality Healthcare Collaborative model applies to all healthcare workplaces; but, like most of the other frameworks, it does not provide a common measurement tool and reporting methodology. Accreditation Canada's Pulse Survey is a purpose-built tool, designed to assess one dimension within a multi-dimensional accreditation process.

There are government-sponsored initiatives in New Zealand, Australia and England. New Zealand's Health Workforce Advisory Committee released in 2006 *National Guidelines for the Promotion of Healthy Working Environments.* This committee envisions a healthy workplace as a positive environment in which staff are valued and supported to work in an effective manner. However, guidelines are voluntary, and there are no accountability mechanisms or incentives for improvement at the organizational level. The government of Queensland, Australia, measures and reports the quality of healthcare work environments using results from the annual Better Workplaces Staff Opinion

Survey (University of Southern Queensland 2007). However, there are no workplace indicators in Queensland's Quarterly Public Hospitals Performance Reports (Queensland Government 2008).

England has advanced the furthest in measuring and reporting healthcare work environments. The measurement tool is the annual National Health Service (NHS) Staff Survey, sponsored by the Department of Health working with university and private sector partners. The Care Quality Commission, the independent inspection and regulatory body for healthcare in England, reports and monitors survey results. Each NHS trust is required to participate in the staff survey and to take follow-up actions on survey results in order to meet the Department of Health's targets for 24 core performance standards (Care Quality Commission and Aston University 2008). Staff Survey results are integrated into a comprehensive performance report card, the Annual Health Check (Healthcare Commission 2008). Survey results for each trust are reported on the Care Quality Commission's website (2008). The Department of Health also uses the survey to assess the effectiveness of national workforce policies and strategies in areas such as training, flexible work arrangements and safety.

Of all the frameworks above, NHS alone offers a policy-driven, system-wide, mandatory measurement and reporting system based on common metrics. The NHS Staff Survey results are integrated within the context of annual targets for improving health system performance. Research that links the survey data with organizational data (i.e., patient satisfaction, methicillin-resistent *Staphylococcus aureus* [MRSA] infection rates, Annual Health Check ratings, staff absenteeism, staff turnover and agency staff costs) provides a clear picture of how work environments and staff health and well-being contribute to high performance (Department of Health, England 2009; see also Ipsos MORI 2008).

Designing a Framework for Canada

The NHS experience shows the potential for integrating common HWE metrics into a comprehensive performance improvement framework. Of course, Canada's complex healthcare governance and delivery structure require a different approach from that in England, where there is one government health department and approximately 150 trusts managing budgets for local-level primary and hospital care. Still, there have been calls for embedding HWE indicators in accountability agreements between governments and healthcare employers (Shamian and El-Jardali 2007). The basic lesson from NHS is that HWE indicators belong within comprehensive quality improvement and accountability systems at the provincial and national levels and, within organizations, should be incorporated into strategies, management practices and HR systems. Indeed, HWE indicators are the missing piece of the quality improvement puzzle.

Aligning Metrics

Healthcare performance indicators have proliferated in the past decade, leading to a situation that many describe as "indicatoritis." For example, there are five indicators of acute myocardial infarction (AMI) readmission in Ontario, each developed by different stakeholders for different purposes and with separate dissemination channels. (The five different indicators belong to the following: [1] CIHI, for reporting national comparisons; [2] the Institute for Clinical Evaluative Sciences, for research purposes; [3] hospital service accountability agreements; [4] Ministry-Local Health Integration Network accountability agreements; and

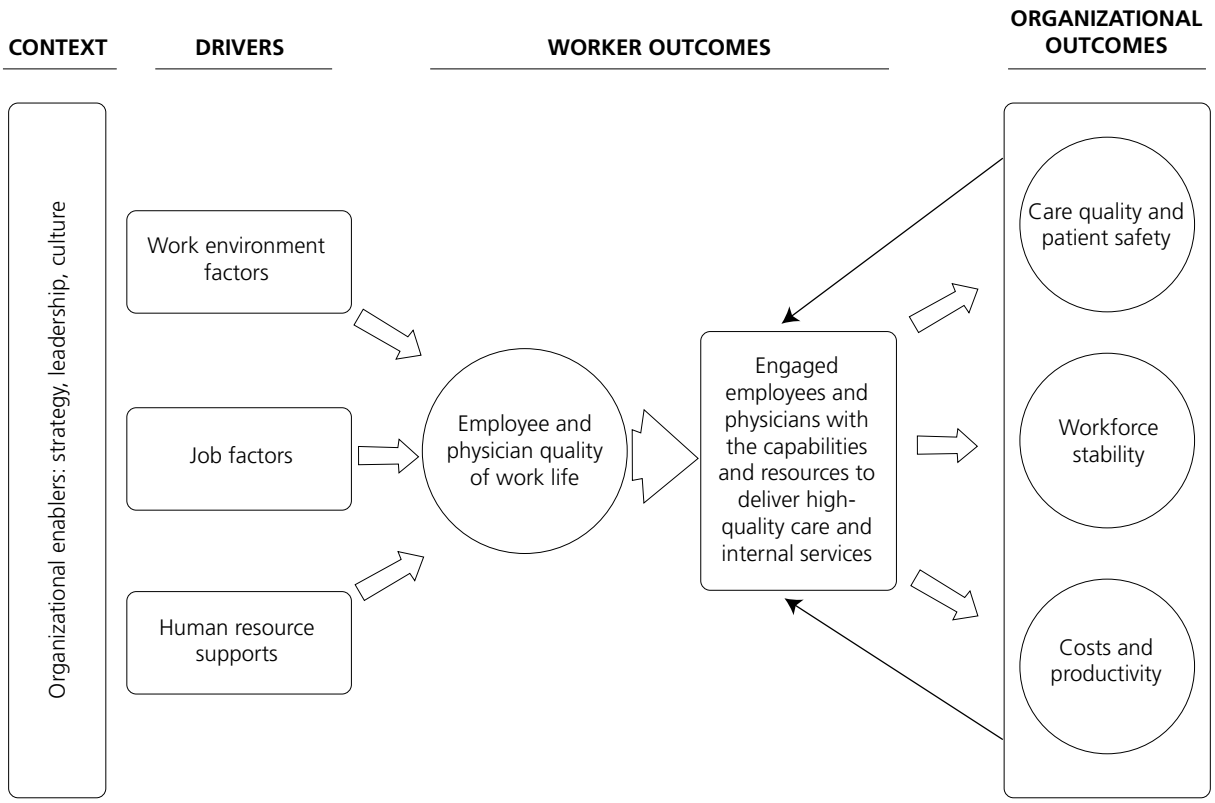
[5] Hospital Reports, for public reporting on individual hospital performance.) This duplication of efforts is inefficient and confusing. Time spent on reconciling what different indicators mean could be better spent on improving quality.

The HWE area can avoid this problem. No Canadian jurisdiction includes HWE metrics in performance reporting. CIHI's indicators for health human resources focus mainly on workforce supply issues. However, the 2005 National Survey of the Work and Health of Nurses that CIHI co-sponsored with Health Canada and Statistics Canada is a detailed (albeit one-time) assessment of work environments and well-being in one healthcare profession. The Canadian Health Services Research Foundation's Quality of Healthcare in Canada Chartbook does not include measures of work environment or healthcare providers' quality of work life within its quality framework.

Common HWE metrics can provide significant benefits. Comparisons between organizations are accurate. It is easier to identify leading practices that should be held up as exemplars, or to showcase organizations whose results could be used to set HWE improvement goals for others. There are good quality data for a coordinated national research program examining how particular practices influence other quality and safety outcomes in different organizational contexts. Recognizing progress and leadership in the HWE area are more meaningful if there is a single set of criteria for provincial or national awards. And, perhaps most important, common metrics are inclusive, placing all organizations on the same playing field with the goal of raising the level of everyone's game over time.

Below we outline a guiding HWE model,

Figure 1. Healthy work environment logic model



common indicators and an integrated reporting system that we believe can move all stakeholders toward the linked goals of better healthcare work environments and a humanly sustainable healthcare system.

A Guiding Model

The ideal of an HWE incorporates a number of concepts. Figure 1 presents a logic model for how the different concepts of an HWE are related. The model broadly defines health to include physical and mental health, safety and psychosocial well-being. It also recognizes the enabling role of organizational factors. Specifically, organizational culture and leadership influence employee and physician well-being and performance, as does the strategic emphasis on providing a safe and healthy work environment. The research reviewed above suggests that these work environment drivers affect worker outcomes, which, in turn, influence organizational outcomes (see, for example, Aiken 2002; Clarke and Aiken 2008; Collins et al. 2008; Institute of Medicine of the National Academies 2003; Ipsos MORI 2008; Lowe 2008; Michie and West 2004; NRC Picker Canada 2007; Rondeau and Wagar 2006; Scotti et al. 2007; Sikorska-Simmons 2006). In short, a healthy, safe and engaged workforce contributes to better organizational performance, ranging from higher-quality patient care to lower costs. Further research is needed to confirm these relationships and identify which specific drivers have the biggest net impact on worker and organizational outcomes. We expect Figure 1 to evolve as new research evidence emerges on the dynamics of these relationships.

Hierarchy of Concepts and Indicators

Performance measurement and reporting systems for organizations typically use a hierarchy or cascade of indicators. Balanced scorecards and other integrated corporate performance report cards follow this approach. However, few healthcare organizations have an integrated performance "dashboard" that includes quality of work life or HWE metrics.

We propose a three-tiered hierarchy of indicators, as illustrated in Figure 2. At the top of the hierarchy are a small number of key performance indicators (KPIs), also known as "big dots" or whole system measures (Martin et al. 2007). These measures are of interest to the board and chief executive officer, and there may be one or two health workforce KPIs that are part of a dozen other measures that comprise the organization's quality dashboard or balanced scorecard. Leaders in high-performing organizations that use these scorecards typically pick items that reflect core priorities in their strategic and operational plans, set targets for improvement and monitor variances from their target.

If we want a scorecard approach adopted as common practice, then what would be the best candidates for HWE KPIs? We believe that these KPIs should report and track worker outcomes, and we offer three for consideration: a global measure for injuries, a measure for overall worker satisfaction or engagement and a measure for voluntary staff turnover. Individual organizations and jurisdictions may choose one or more of these measures. While we do not want to prescribe what metrics should be placed into a corporate dashboard, we do recommend the development and use of standardized KPIs across healthcare sectors provincially and nationally. That way, organizations that choose any of these options will be able to compare themselves with their peers.

The next tier down the hierarchy includes the drivers of the KPIs. For example, if workforce engagement were a KPI, then an organization might select as mid-level indicators communication and work-life balance.

The logic model suggests that if each of these individual items were improved upon, then overall engagement levels in the workforce would increase. The choice of mid-level indicators reflects the quality improvement strategy for the organization. Managers would be responsible for tracking mid-level indicators within their department and setting improvement targets, and for involving staff in ongoing workplace improvement efforts.

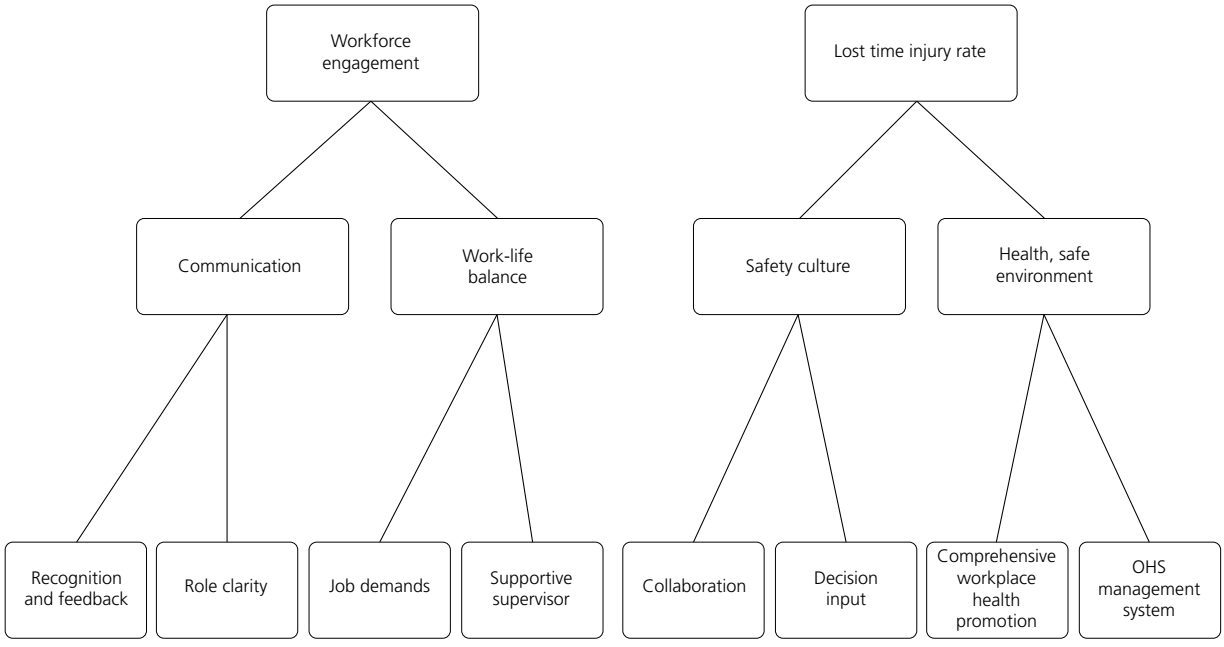
The third and most detailed tier of concepts and indicators would be tracked by specific HR functions or by quality improvement teams on the front lines. At this level, the focus could be improving specific indicators related to the work environment that would lead to improvements in the mid-level indicators. As Figure 2 suggests, third-tier indicators might include role clarity, recognition and feedback, job demands, supervisor support and other job, work environment and HR factors necessary to drive improvements in communication and work-life balance.

Integrating Staff Survey Data into an Annual Reporting Framework

Many of the drivers and worker outcomes can only be measured by employee and physician surveys. These survey components of the measurement and reporting framework help to create accountability for ongoing HWE improvements within each organization.

If we want common HWE indicators for healthcare across Canada, then we need a common survey tool. For example, NHS uses a measurement tool that has a common core, optional sector-specific components and some room for individual organizations to add their own customized measures. We believe that such an approach makes sense for Canada. The creation of a common core is supported by research, noted above, that suggests that there are many HWE ingredients and quality of work life outcomes that transcend occupations and industries. Indeed, looking across the various frameworks and measurement tools noted above, once one gets past different labels

Figure 2. Examples of healthy work environment indicator hierarchies



OHS = occupational health and safety.

and terminology (e.g., *magnet hospitals* versus *quality practice environments* versus *healthy workplaces*), there are remarkable similarities. The addition of sector-specific components recognizes that some sectors have unique features that influence worker outcomes.

Other healthcare performance indicators, such as AMI readmission, have ended up being multiplied because of a lack of coordination and alignment. However, the HWE area can avoid this trap by ensuring that the common survey serves multiple purposes, including public reporting, fulfilling accountability agreements, reporting to accreditation bodies and enhancing internal quality improvement efforts and research. To accomplish this, different organizations or jurisdictions that are already using employee surveys will need to demonstrate flexibility and adapt their instruments to a common standard.

Public reporting and accountability agreements might focus on only the KPIs or, at most, some of the mid-level indicators identified from common survey results. It will be important to agree upon data collection methods and target response rates in order to ensure that results are accurate and comparable across organizations. Larger organizations might be able to conduct sample surveys, while smaller organizations would have to survey their entire workforce. Consideration also would have to be given to how to compare results, so that "peer" organizations could be selected by characteristics such as size, healthcare sector, staff mix and geographical location.

The biggest benefits of an HWE common survey are reaped when survey results inform organizational improvement. In some organizations, this will require a shift in thinking and practice. Managers will need to implement follow-up actions that address areas of weakness (opportunities for improvement) identified in the survey. For this purpose, managers will draw on the actionable questions in the survey – that is, metrics from the third tier of the hierarchy described earlier. Ideally, organizations should administer the survey annually. However, we expect that leading organizations will opt for more frequent and focused HWE feedback, helping improvement teams assess interventions and test out improvement ideas.

Common Concepts and Indicators

Appendix 1 outlines the HWE concepts and indicators that can form the basis for a common reporting system and measurement tools. For each of the concepts, an example of an indicator is provided for discussion purposes, given that most concepts have a range of valid and reliable measures available from the research literature or other public domain tools.

The indicators would be obtained from four sources: surveys of employees and physicians (referred to here as *staff*), employer administrative data, workers' compensation data and a proposed organizational audit. Appendix 1 suggests a possible wording of questionnaire items. Several concepts, such as safety culture and staff engagement, are measured using multi-item scales based on different question responses in the staff survey. Even with standardized items for each of these themes and concepts, organizations will still have the options to focus on those indicators that are most important to them within their local environment and to design their own indicator cascade and dashboard to reflect strategic goals.

Refining the High-Level Indicators

We suggested earlier that there are three options for KPIs: worker satisfaction or engagement, injuries and retention. Within each of these options, there are a number of alternative metrics. Worker satisfaction

or engagement could be measured as the percentage of workers rating the workplace as very good or excellent, the percentage who are satisfied or very satisfied with their job or an index of overall workforce engagement (combining job satisfaction, organizational commitment and willingness to contribute). Research on nurses consistently shows that job satisfaction is a good measure of overall quality of work life and, furthermore, that it influences job performance. However, engagement is a broader gauge than job satisfaction of an employee's overall work experience – what researchers increasingly are connecting to the patient/client experience. The worker experience measure may be technically superior in that regard, but worker satisfaction may be easier to explain, which may be an important factor in grabbing the attention of leaders.

Injuries could be measured by LTI rates, based on data from workers' compensation boards. The advantages of this measure are that it is readily available, already has standardized definitions, can be reported by occupation and healthcare setting and can be benchmarked against non-health workplaces (a good example is Work Safe Alberta and Alberta Employment and Immigration [2008]). LTI data are provided by the National Work Injury Statistics Program administered by the Association of Workers' Compensation Boards of Canada. (For details, see the web pages in the reference list for the following associations: Association of Workers' Compensation Boards of Canada 2007; Ontario Safety Association for Community and Healthcare n.d; Workplace Safety and Insurance Board 2010.) However, some employers may report true LTIs as non-LTIs and absorb the cost of modified duties in order to avoid increases in premiums. Addressing this undercounting would require a composite measure of LTI plus non-LTI rates. A third option – more difficult to calculate – would be a measure of total injury costs, including the costs of replacement workers, workers' compensation premiums and associated administrative costs.

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Retention affects direct and indirect costs related to the loss of knowledge and experience, recruiting and training new workers and lower initial productivity of new recruits. High rates of voluntary turnover can increase staff workload, add to overtime and agency costs and reduce team performance. An alternative KPI is absenteeism, a widely used indicator of the quality of work life and the overall health of a workforce. Data from Statistics Canada's Labour Force Survey (LFS) are available for health occupations nationally and in most provinces for the three healthcare subsectors (hospitals, ambulatory, nursing and residential care). Average annual days lost per employee can be used to calculate lost productivity costs. LFS absenteeism rates could be used in the short term as a readily available KPI and then substituted for retention when better organizational-level information is available. Also in the medium term, the LFS question measuring self-reported absenteeism could be adapted for use in a common workforce survey tool, providing comparable organizational-level data.

While we list options for three HWE indicators, we emphasize that such indicators need to be part of a comprehensive performance dashboard, which would include KPIs for other dimensions of quality such as global patient/client satisfaction and global patient safety.

Implementing Common Metrics

We have presented options for high-level KPIs, described common HWE drivers and their indicators and made the case for a common survey. We offer these suggestions to illustrate what is necessary – and entirely within reach. Our point is that stakeholders across Canada who are interested in HWEs must come together to weigh the pros and cons of each option and agree on a standardized approach. These stakeholders include employers, research centres, accreditation bodies, workers' compensation boards, quality agencies, professional associations, unions, federal/territorial/provincial Ministries of Health and, possibly, Ministries of Labour.

An HWE common metrics program will require strong champions who can communicate the urgency and benefits of common metrics, tools and reporting systems. Also important for moving to implementation is being able to leverage and link with related initiatives. Specifically, the HWE framework must be aligned with existing quality and patient safety programs, particularly at the provincial level. Equally essential is finding ways to incorporate HWE metrics and improvement goals within existing quality frameworks. For example, the Ontario Health Quality Council's quality model will be adapted not by adding HWE as another quality dimension but, rather, by building it in as foundational for existing dimensions. Similarly, most jurisdictions are using some form of accountability agreement, so a working group could examine the best options for integrating HWE metrics and goals into agreements between ministries and organizations providing healthcare services. This is the most effective way to encourage the use of HWE metrics.

Developing common tools undoubtedly will generate debate and resistance. Two expected sources of resistance will be from organizations that already have employee surveys or from others that view such surveys with trepidation. Staying focused on developing an efficient, cost-effective and high value–added survey that can be adapted for employees, physicians and different healthcare settings will, over time, benefit the entire system. For organizations that already conduct surveys, there are several options for avoiding survey fatigue. These include incorporating core indicators into existing surveys, performing sample surveys (rather than surveying the entire workforce), conducting different surveys on alternate years, moving to a 12-month data collection process where a different unit is surveyed each month or transitioning from the existing survey to the new tool over time. Any decisions in this regard must be guided above all by considerations about the organization's capacity to learn from and take action on survey results. The other common tool – an organizational audit – could be developed, piloted and launched by a consortium of quality councils and leading employers.

Finally, assuming progress on common metrics and tools, how will a reporting system be implemented? Launching an annual HWE report card and then integrating the high-level indicators from this report card into existing healthcare quality reporting mechanisms could happen quickly, given the availability of absenteeism and LTI data. Timelines need to be set for incorporating other high-level metrics in the HWE report card and system-wide quality reports. Coordinating these efforts at the provincial level is critical for success, so it makes sense that quality agencies lead the way.

Just as it is not realistic to expect all organizations to embrace in the short term a common employee survey tool, so too we expect one or two provinces will move more quickly than others on reporting. Ideally, the five-year goal should be a national reporting system that tracks trends, provides meaning-

ful comparisons across organization types and jurisdictions, and offers helpful insights about effective HWE practices. Realistically, all provinces may not participate. So there will need to be a way for individual healthcare organizations in any jurisdiction to use the common measurement tools. In this scenario, the national reporting system will profile those organizations committed to improving healthcare services by improving the quality of work environments. Surely this would mark enormous progress toward a more humanly sustainable healthcare system.

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Appendix 1. Healthy work environment themes, concepts and indicators for performance reporting

Theme	Concept	Indicator Examples	Reporting Level	Source
Care quality and patient safety	Patient/client satisfaction Patient safety Perceived quality of care delivered	Multi-item scale score. Global adverse event rate. "I am able to deliver the patient care I aspire to."	High High Mid	Patient/client surveys Audit tools or other data Staff surveys
Workforce stability	Retention	Annual rate of voluntary turnover excluding retirements.	High	Employer data
Costs and productivity	Absenteeism Injury costs	Annual absenteeism rate. Worker replacement costs and/or workers compensation premium increases.	High High	Employer data; LFS Employer data
Engagement	Engagement	Multi-item scale score.	High	Staff surveys
Staff quality of work life and worker safety	Job satisfaction Work-life balance Worker safety	"I would recommend my organization as a place to work." "My employer is committed to helping staff balance their work and home life." Annual lost-time injury rate, or lost-time + non-lost time injury rate.	Mid or high Mid High	Staff surveys Staff surveys Workers' compensation data
Work environment factors	Decision input Communication Respectful and trusting relationships Supportive supervisor Supportive co-workers Healthy and safe environment Collaboration Recognition and feedback Fair processes Learning and development opportunities	"I am involved in deciding on changes introduced that affect my work area." "Communication between senior management and staff is effective." "The people I work with treat me with respect." "My immediate manager can be counted on to help me with a difficult task at work." "I am satisfied/dissatisfied with the support I get from my work colleagues." Multi-item scale. "Does your team regularly discuss its effectiveness and how it could be improved?" "I get clear feedback about how well I am doing in my job." "Does your employer act fairly with regard to career progression/promotion regardless of ethnic background, gender, religion, sexual orientation, disability or age?" "There is strong support for training in my area of work."	Detailed Mid Detailed Detailed Detailed Mid Detailed Detailed Detailed Detailed	Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys
Job factors	Job control Job resources Job demands Role clarity Skill utilization	"I can decide on my own how to go about doing my work." "I have adequate materials, supplies and equipment to do my work." "I cannot meet all the conflicting demands on my time at work." "I have clear, planned goals and objectives for my job." "I am able to make improvements happen in my area of work."	Detailed Detailed Detailed Detailed Detailed	Staff surveys Staff surveys Staff surveys Staff surveys Staff surveys
Human resource supports	Strategic human resource approach Workplace health promotion Occupational health and safety management system	Integration of people goals and targets within strategic plan. Range of integrated wellness programs that are evaluated for participation and impact. Follows OHSMS guidelines from the Ontario Safety Association for Community and Healthcare (or similar provincial agencies).	Mid Detailed Detailed	New audit tool New audit tool New audit tool
Organizational enablers	Culture Leadership	"Care of patients/clients is my organization's top priority." Multi-item scale score – culture of safety. "Senior managers here try to involve staff in important decisions."	Mid Mid Detailed	Staff surveys Staff surveys Staff surveys

LFS = Labour Force Survey from Statistics Canada; OHSMS = Occupational Health and Safety Management System.