Making a Measurable Difference:
Evaluating Quality of Work Life Interventions

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Submitted to the Canadian Nurses Association

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March 2006

ISBN 1-55119-814-2

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Executive Summary

Across the country, nurses and other front-line health system workers are taking actions to improve the quality of their work environment. A high quality work environment is being accepted, albeit slowly, as a prerequisite for building the human resource capacity needed to sustain the health system. As more time and money are invested in trying to improve the quality of work life for Canada's health-care workers, it is crucial to know whether progress is being made. The key question that must be answered is, "Are we making a measurable difference for individual employees, patients and the organization?"

There is broad consensus that more must be done to evaluate, document, and communicate these activities. Practical tools and techniques are needed for assessing the effectiveness of an intervention within a work site. This will go a long way to making quality of work life a top priority for health system decision-makers.

This report provides a resource for nurses, nurse managers, and their co-workers who are involved in activities to improve healthcare work environments. It has two objectives:

1. To support nurses involved in implementing and evaluating quality of work life programs with specific parameters and timelines.
2. To help in the evaluation of transformations in an organization's culture and work practices.

To these ends, the report provides some basic tools to help committees and individuals directly involved in change to achieve their intended goals. The report attempts to stimulate discussions within work units, committees and the health service organizations about how best to make evaluation an essential part of the journey to creating and sustaining higher quality work environments. Evaluation is a creative and evolving part of the change process.

The report begins with an overview of the organizational change process so that evaluation can be viewed in this context, followed by basic guidelines for conducting evaluations. The next section discusses what to measure, and provides a range of indicators that can be used in evaluating quality of work life initiatives. Examples of specific evaluation tools are also provided. This is followed by a review of different evaluation methods from published research literature as well as front-line initiatives. Returning to the process of organizational change, a tool for assessing change readiness for a quality of work life change initiative is provided. The next section provides guidelines for the use of survey findings. A final section provides an action checklist for organizational change, again situating evaluation as part of this process.

"How do we know we're there yet?"
Nurse researcher commenting on quality of work life initiatives, Saskatchewan.

Purpose

Across the country, nurses and other front-line health system workers are taking actions to improve the quality of their work environment. A high quality work environment is being accepted, albeit slowly, as a prerequisite for building the human resource capacity needed to sustain the health system. Whether the focus of interventions is on the quality of work life, employee health and wellness, safety, recruitment and retention, or professional practice settings, the goal is to achieve positive outcomes for nurses and their co-workers. This is a "win-win" situation because it enables nurses to better meet the needs of their patients or clients and to achieve their personal goals for quality of work life.

As more time and money is invested in trying to improve the quality of work life for Canada's health-care workers, it is crucial to know whether progress is being made. The key question that must be answered is, "Are we making a measurable difference for individual employees, patients and the organization?"

This kind of information will make it easier for nurses and nurse managers to further improve their work environment. Achieving the win-win of improved quality of work life and better health organization performance requires evidence on what works, how it works, in which contexts and for which groups of workers. This practical knowledge contributes to positive change, disseminating successful practices and strengthening health-care workplace cultures that value the contributions of all workers.

Recent consultations by the Canadian Nurses Association, the Canadian Council on Health Service Accreditation, other national, provincial and regional stakeholders – as well as presentations by nurses and nurse managers at conferences across Canada – found a groundswell of front-line initiatives to create healthier and higher quality work environments. Yet there is broad consensus that more must be done to evaluate, document, and communicate these activities. Practical tools and techniques are needed for assessing the effectiveness of an intervention within a work site. This will go a long way toward making quality of work life a top priority for health system decision-makers.

This report provides a resource for nurses, nurse managers, and their co-workers who are involved in activities to improve healthcare work environments. It provides some basic tools to help individuals directly involved in change to achieve their intended goals. This is not a definitive handbook on evaluation research; there are plenty of textbooks and other sources on the topic. Rather, the report attempts to stimulate discussions within work units, committees and the health service organizations about how best to make evaluation as an essential part of your journey to creating and sustaining higher quality work environments. Evaluation is a creative and evolving part of the change process.

This report has two objectives:

1. To support nurses involved in implementing and evaluating quality of work life programs with specific parameters and timelines.
2. To help in the evaluation of transformations in an organization's culture and work practices.

Cultural change initiatives often have a strategic focus, addressing the underlying determinants of high quality work environments. Improvements in work environments are seen as a means of achieving organizational goals, such as retention and recruitment, staff development, operational efficiency, or improved patient and client care quality. Documenting these relationships is a major challenge. Each organization needs to find its own way to making these links using approaches, language and evidence that is meaningful to its stakeholders.

Report Outline

The report is organized as follows. To begin, an overview of the organizational change process is provided so that evaluation can be viewed in this context, followed by basic guidelines for conducting evaluations. The next section discusses what to measure, providing a range of indicators that can be used in evaluating quality of work life initiatives. Examples of specific evaluation tools are then provided. This is followed by a review of different evaluation methods from published research literature as well as front-line initiatives. The report then returns to the process of organizational change, providing a tool for assessing change readiness for a quality of work life change initiative. The next section provides guidelines for the use of survey findings. The final section provides an action checklist for organizational change, again situating evaluation as part of this process.

Overview of the Change Process

Evaluation must be viewed as one component of a multi-step, dynamic process of organizational change. It should not be approached in isolation. To highlight the importance of taking an integrated approach to improving the quality of work life, this section provides an overview of the change process. A guiding principle in successful change is active learning, and monitoring and evaluating activities that directly contribute to this. In short, keep this bigger picture in view and don't get side-tracked with evaluation issues. They are merely a means to an end.

The following steps in the change process are intended as discussion points for the committee charged with designing and implementing a quality of work life initiative, but they can also be useful to individuals who want to be "change agents" in their workplace.

1. **Guided by vision and values**: Creating and maintaining a high quality work environment should be guided by a shared vision of what this looks like. Actions to achieve this vision should demonstrate the organization's values.

2. **Leadership:** Commitment from top management is critical, and must take the form of visible leadership on work environment issues. Employees judge commitment by the actions of the organization's leaders. Cultivate champions throughout the organization, especially among middle managers and front-line supervisors.

3. **Participative team approach**: Implementing a quality of work life strategy requires an integrated approach, guided by a team or committee that includes representatives from management, health and safety, human resources, employees, and unions. Direct employee involvement in all stages is critical to success.

4. **Define scope and objectives**: The committee charged with developing a quality of work life initiative needs to identify opportunities for change by assessing the needs of employees, organizational priorities, current strengths in people practices, and related initiatives that can be built upon. Set clear objectives that can be achieved in the short-term and longer-term. Consider starting small, with a pilot site, to learn and build internal support.

5. **Link to strategic goals**: Clearly link quality of work life issues and outcomes to the organization's strategic goals. Integrate employee health and well-being objectives into the organization's business planning process so that, over time, all management decisions take these factors into account.

6. **Customized plan**: Collaboratively develop an action plan with clear goals, timelines and outcome measures. Get feedback on a draft plan from key stakeholders, and revise accordingly. The plan must be tailored to the organization's current context and strategic direction.

7. **Evaluate and communicate**: Open and continuous communication is a key success factor in any organizational change initiative, and quality of work life is no different. Consistently evaluate outcomes, keep organizational leaders informed about the impact of the initiative, and use multiple channels to communicate progress to employees.

8. **Learning**: Successful change requires ongoing reflection and learning by the committee and other change champions. This dynamic approach involves continuous feedback loops and adjustments to the initial plan. Avoid taking a “paint-by-numbers” approach, where change is viewed as a linear, step-by-step method of implementing a program.

9. **Ongoing support**: Allocate resources that ensure that quality of work life actions can be sustained. Managers and supervisors may require training, time and other support and incentives to enable ongoing improvements in work units.

10. **Diffusion**: Expand the initiative to include other groups and work sites over time using the process described above to engage people through the organization so that the vision, and the actions needed to achieve it become theirs, too. Realistically, transforming the work environments of nurses and other health system workers can be achieved incrementally with persistence over several years.

Guidelines for Evaluation

Listed below are guidelines to consider when planning the evaluation component of an intervention. An intervention is a new program, practice, or initiative intended to improve quality of work life or employee health and wellness. It can be narrow or broad in focus, aiming to create positive outcomes for individual employees, work teams, and/or the entire organization.

1. **Goal-focused**: Always keep your objectives front and centre. It helps to create a shared vision of the kind of work environment you are striving to create. If you are having difficulty figuring out how to evaluate a program, perhaps it has too many goals or fuzzy goals. Don't let the tools or methods drive the process; rather, always keep your eye on the objectives of the intervention and only use evaluation tools that specifically address these.

2. **Model Your Vision**: Every step of the intervention process must contribute to your team's vision of a high quality work environment. Evaluation is not just data collection, but an opportunity for collaborative learning and organizational development. A robust evaluation process will give nurses more control over improvements in their environment, contributes to ongoing learning, and lives the organization's values.[i]

3. **Scope and pace**: Identify a limited number of changes and don't try to push the changes too quickly. Setting boundaries – not trying to take on too much – and having realistic expectations about the pace of change is very important.

4. **Positive Approach**: Evaluation should help the organization improve. Avoid the use of measures for punitive actions. Examples of what to avoid are using absenteeism data to target specific individuals through an absenteeism management program that does not address underlying causes, or inferring that the managers of specific units where survey results show low morale are poor managers. Evaluation data should encourage constructive discussions among stakeholders, beginning with the question, "How can we better support the staff in this unit?"

5. **Flexible**: While there are merits in using existing measures from published research, a flexible approach to measurement is important. Evaluation methods and tools must be designed with your change goals and organizational mission foremost in mind.

6. **Create a Model**: A model maps out your common-sense understanding of how specific changes should improve quality of work life and contribute to other organizational goals. For example, Trillium Health Centre's approach to creating healthy work environments links these conditions to individual leadership and empowerment, which in turn contributes to excellence in patient care and community health services. Establishing a "causal relationship" in scientific terms is difficult, but you can still build a convincing case and a model will help do this.

7. **Integrate**: Look for opportunities to integrate different kinds of measures, creating a composite picture of how the intervention contributes not only to employees but also to organizational goals such as the quality of patient care and client services and operational excellence. Connecting the data dots in this way makes your evaluation far more compelling to decision-makers.

8. **Simplicity**: Only collect and analyze the data you need. Report your findings in ways that support learning, action planning, and change implementation.

9. **Practical**: Measuring the quality of work life is "a work in progress." It will be years before the "validated" indicators that university researchers are developing filter down to health system work sites, so finding practical ways to implement improvements in the quality of work life in the meantime will have to use measures that are, from an academic perspective, imperfect.

10. **Meaningful and Actionable**: Think of the end-user. Who will use the evaluation information and for what purposes? The knowledge generated by the evaluation must be a catalyst for actions in support of high quality work environments. To this end, consider translating some of the indicators into costs, such as calculating overtime costs, costs of lost-time injuries, or the cost to replace a nurse who voluntarily leaves.

11. **Mine Existing Data**: Most organizations have data that can be useful for evaluations on outcomes such as absenteeism, time-loss injuries, incidence and length of disability, and voluntary turnover. Try to analyze and report these data in ways that assess the impact of an intervention, and look for ways to make connections to surveys of employees, patients and clients. This can be done by using a uniform reporting unit, such as worksites, functional unit or employee group.

What to Measure

Quality of work life indicators measure a range of social, psychological, organizational and physical determinants (causes), processes (factors or activities that influence how determinants affect outcomes) and outcomes (effects). Figure 1 provides examples of these types of measures useful for evaluation purposes.

Indicators can provide information that enables action at four different levels:

- individual (e.g., personal health);
- job (e.g., workload);
- work unit or team (e.g., respect and collaboration); and
- organizational (e.g., support and opportunities for career development).

Individual level data can be aggregated and reported at the work unit or organizational level to obtain a diagnosis of performance and work life outcomes such as morale and work-life balance. It is important to clearly distinguish these outcomes from their underlying "causes." Factors influencing quality of work life outcomes include: job design, health occupational safety and health practices, learning and development opportunities, supportive supervision, job resources, job demands and control, communication, employee voice, organizational change, hours and schedules, co-worker relations, organizational values, and leadership commitment to employees.

This distinction between determinants and outcomes (i.e., cause and effect) is illustrated by the Canadian Council on Health Services Accreditation's (CCHSA) definition of work life as one of four dimensions of quality assessed in the accreditation process: "Work life provides a work atmosphere conducive to performance excellence, full participation, personal/professional and organizational growth, health, well-being and satisfaction."[ii] In other words, quality of work life depends on a supportive, enabling environment in which each employee and staff member can achieve personal and organizational goals. This definition is accompanied by three "descriptors", which are a starting point for assessing quality of work life: open communication, role clarity, and participation in decision making. Work site committees trying to improve their work environment need to come up with similar concepts, definitions and indicators that fit their context and objectives.

Figure 1: Evaluation Measures

The following selective menu of measures illustrates what could be used to evaluate actions, report outcomes and track progress within health-care organizations and to compare across organizations:

1. *Employee health and well-being outcomes*: absenteeism, work-life balance, lost-time injuries, workers' compensation claims, disability leave, stress and burnout, job satisfaction, and employee engagement.
2. *Organizational performance outcomes*: Adverse events, patient satisfaction, health providers' assessment of quality of care they provide, and other assessments of internal and external service quality, effectiveness and efficiency.
3. *Workforce retention and development outcomes*: Turnover, staff learning and development opportunities and investments, assessment of training and development benefits, exit interview findings, and assessment of new employee orientation and mentoring.
4. *Work environment determinants*: Workload and work schedules, staffing levels, supportive supervision, job autonomy, participation in decision-making, and communication.
5. *Organizational culture determinants*: Leadership commitment, resource allocation to creating a healthy and productive work environment, trust, and respect.
6. *Moderators*: Individual readiness for change, employee demographics, occupation or function.

While there is no consensus on which quality of work life indicators are "best practices", the following are being used across Canada: employee satisfaction, absenteeism, professional development, turnover, overtime, and span of control. Consultations by CCHSA in 2004 identified additional work life indicators as important to monitor: leadership effectiveness, quality of supervision, workplace safety (including accidents, injuries, abuse, and violence), grievances, workload, staffing, rewards and recognition, teamwork and collaborative relationships, and organizational culture.[iii]

Figure 1 organizes the evaluation measures by their level analysis and their position in the causal sequence. Examples of these different types of indicators are provided, for the purpose of generating discussion of what else would be useful for a specific project or context.

<table>
<tr><th colspan="5">Figure 2: Examples of evaluation measures by level of analysis and position in the causal sequence</th></tr>
<tr><td rowspan="5">Level of analysis</td><td></td><td colspan="3">Position in the causal sequence</td></tr>
<tr><td></td><td>Determinant</td><td>Process</td><td>Outcome</td></tr>
<tr><td>Individual</td><td>Sense of job autonomy</td><td>Assessment of supervisor as supportive</td><td>Perceived job stress</td></tr>
<tr><td>Unit or team</td><td>Mutual respect</td><td>Policies and practices to recognize team effectiveness</td><td>Team morale</td></tr>
<tr><td>Organization</td><td>Leadership commitment to people development environment as a strategic priority</td><td>Annual hours of training per full-time equivalent employee</td><td>Assessment of career development opportunities</td></tr>
</table>

Evaluation Tools

There are many surveys being used to measure individuals' attitudes, behaviours and assessments of determinants, processes and outcomes related to work environments and the quality of work life. Those described in Figure 3 have been specifically developed for use in health care settings and illustrate measures and approaches.

A critical decision in planning an evaluation is whether to create your own measures, use measures from external sources, or use some combination. Existing measures could be extracted from administrative data (e.g., absenteeism, voluntary turnover, overtime). Building your own evaluation tools could involve developing an employee survey, or adding new questions to an existing survey. Or, you can review existing tools, which are available free through published literature or at a cost through a licensing arrangement. Regardless of whether you borrow or build, it is important to assess the accuracy of the measures and the usefulness of the data they generate for decision-making and action.

The academic nursing literature offers various tools for assessing quality practice environments and quality of work life. Potential advantages of using assessment tools created by academic researchers include:

- Documented validity (they measure what they are intended to measure) and reliability (they measure the same thing across different groups and over time).
- A solid theoretical foundation.
- Clear definitions of the concepts being measured.

But there are trade-offs. Academic tools can create technical and conceptual overload, giving more than you need to meet your immediate organizational goals.[iv] And, measures designed to test academic theories do not necessarily have practical applications. Still, you might find what you need or get good ideas for adapting measures to suit your purposes.

Figure 3: Examples of Quality of Work Life Evaluation Tools

Healthy Hospital Employee Survey (©HHES): The ©HHES was developed in partnership by Brock University's Workplace Health Research Unit (WHRU) and the Ontario Hospital Association (OHA) (www.oha.com) and is available to any health care organization. The ©HHES includes quality of work life determinants and outcomes for individual employee health and the overall organization. Having been used in over 30 hospitals, it has the ability to compare (i.e., "benchmark") across health-care organizations. This tool assesses progress toward the goals of supporting employees to improve their own health and well-being and creating a high quality healthy workplace.

Quality Practice Setting Survey (QPaSS): Improving Your Work Environment: The Practice Setting Consultation Program™ (PSCP) is a nurse-driven, management-sponsored continuous quality process. Developed in 1997 by the College of Nurses of Ontario (CNO), it includes a survey tool, QPaSS, developed in collaboration with researchers at McMaster University. The PSCP™ examines seven key attributes that facilitate professional practice and support nurses delivering quality services: care delivery processes; communications systems; facilities and equipment; leadership; organizational supports; professional development systems; and response systems to external demands. QPaSS measures some drivers of quality of work life as attributes of professional practice environments. The program is currently under revision and it is anticipated that a revised program will be available in 2006.

Quality of Work Life Pulse Survey (QWLPS): This survey is a collaboration between the Canadian Council on Health Service Accreditation (CCHSA) and the Ontario Hospital Association (OHA).[1] It builds on the ©HHES and the CCHSA's accreditation program. This 20-item web-based survey tool was developed for use in all types of health-care organizations. The tool has been successfully piloted and CCHSA is considering whether to make it available as part of the accreditation process. Indicators include: work environment (e.g., involvement in decision making, job control, role clarity); individual outcomes (e.g., perceptions of overall health, perceived job stress); and organizational outcomes (e.g., absenteeism, presenteeism, patient safety). This tool provides a quick snapshot of quality of work life, and is not intended as a substitute for an in-depth employee survey.

Currently, researchers are working to validate measures of quality of work life for use in nursing settings and more broadly, health-care workplaces. For example, a team of researchers in Ontario is developing and feasibility testing indicators of nurse staffing and nursing work environments.[v] The Institute for Work and Health, in Toronto, is developing a healthy workplace evaluation framework built around four categories: healthy workplace drivers; working conditions; health outcomes; and organizational benefits. Frameworks like this one help to integrate different types of performance measures, providing a more complete picture of workplace health.[vi]

Gaps remain in evaluating workplace health and safety interventions:

"Intervention research is the testing and evaluation of interventions, programs, and policies. To date, a variety of approaches to intervention has been developed to protect worker safety and health across a broad spectrum of industries. Although there have been measurable improvements in worker safety and health, only a few interventions, alone or in combination, have been systematically evaluated. Consequently, many interventions are undertaken based on faith and expert judgment without convincing evidence that these approaches are effective."

Source: U.S. National Institute for Occupational Safety and Health, National Occupational Research Agenda, 1999. www.cdc.gov/niosh/nriefr.html

Qualitative information is a complement or alternative to the quantitative evaluation methods described above. Examples include open-ended questions in surveys, focus groups, other forms of employee consultation, and individual interviews. These techniques can be useful at an early stage in planning an intervention – for example, to identify areas of concern or needs or other forms – or as a follow-up to a quantitative evaluation to further probe and explain findings or to develop solutions.

Diverse Evaluation Methods

This section illustrates different approaches to evaluation reported in scholarly literature. The point is not to replicate these methods, but to reflect on why these approaches and measurement tools were used and to discuss what aspects might be adaptable to your project as you consider evaluation options. There is no “best way” to conduct evaluations. Practically speaking, the best method is the one that fits your context and meets your immediate objectives.

Become acquainted with the pros and cons of the approach you are considering. It may be useful to search university e-journals online data bases (e.g., Medline, PubMed, Cumulative Index to Nursing and Allied Health Literature, Health Sources, ABI-Inform,) or Google™ Scholar (http://scholar.google.com) for recent publications relevant to your intervention. Partnerships with universities can help to tap available expertise on methods. Two criteria should guide the involvement of outside experts: they must understand your practical needs; and they are willing to find a win-win where your change goals and their academic research objectives converge. Also useful are informal communities of practice, comprised of practitioners in one organization or from different organizations, who share a similar vision or approach to quality of work life improvements.[vii]

Collaborative Partnership:

Interventions aimed at reducing musculoskeletal injuries provide clear-cut examples of the use of rigorous scientific methods in healthcare workplaces. The Occupational Health and Safety Agency for Healthcare in British Columbia (OHSAH) has developed and evaluated in partnership with employers and unions an integrated musculoskeletal injury (MSI) prevention, early intervention, and return to work process.[viii] The goal of PEARS (Prevention and Early Active Return to Work Safely) is to reduce the incidence, duration, time loss, and related costs of workplace MSIs through early intervention and the implementation of preventative strategies such as ergonomic assessments and workplace accommodation. Evaluation of pilot sites tracked incidence rates for musculoskeletal injuries and the duration of associated time loss.[ix] Results showed no reduction in incidence; however, the program was effective in returning injured nurses and health science professionals (but not facility support staff) to work more quickly. The evaluation also calculated savings in time loss and compensation payments, proving evidence to support the expansion of the program.

Longitudinal Case Study:

Patient lifts also have been carefully evaluated for their contributions to reducing the risk and associated costs of injuries caused by lifting, transferring and moving patients. The Ontario government is investing $60 million to install more than 11,000 patient lifts in the province’s health-care workplaces. A research team lead by the Institute for Work and Health will assess the impact of lift equipment on caregivers’ musculoskeletal function, injuries, workload, the quality of training provided to caregivers, and the overall economic costs and benefits of patient life equipment. (www.iwh.on.ca). In British Columbia, OHSAH conducted a longitudinal case study in an extended care facility, examining injury trends over a six- year period, three years before the introduction of lifts and three years after their introduction.[x] Analysis of injury trends showed a sustained decrease in days lost, workers’ compensation claims, and direct costs associated with patient handling injuries. This translated into cost savings that support further investments in patient lifts.

Randomized Controlled Trail:

Randomized controlled trials (RCT) – considered the "gold standard" in evaluation methods – are rarely used to assess organizational change. This is for many practical reasons including the commitment of time, resources and management required and the disruption of workplace routines. Here is how RCT was used to assess the efficacy of nurse-manager consultation and problem solving meetings for improving staff morale and care quality and reducing absenteeism.[xi] Thirteen consenting in-patient units were randomly assigned to treatment and control groups, with the experimental group receiving retraining from McMaster University School of Nursing experts in a cooperative form of problem solving. Assignment to the control and experimental groups took into account other factors that could bias results. Outcomes were measured through a survey of employee morale, absenteeism, and incident reports and patient satisfaction to assess quality of care. The results showed statistically significant improvements in perceptions of the work environment and working relationships.

Participatory Action Research:

Participatory action research (PAR) is more than a research method; it is an approach to organizational change and development. Stakeholders in a work site are actively involved in defining common problems or change goals, designing a plan to bring about improvements, then engaging in a process of reflection on change actions, and refining the changes. If the goal of the intervention is to improve aspects of patient care or client services, then these groups also would be involved with researchers and care providers in the entire process. PAR can utilize standard qualitative or quantitative data-gathering and analysis tools to enable learning.[xii] The experience and practical knowledge of front-line employees is as important to the process as "expert" knowledge obtained from scientific research. PAR is an interactive cycle of collective observing, reflecting, and action. There is no pure form of PAR and the term has been used to describe a wide spectrum of grass-roots, team or committee-led change initiatives with a research or evaluation component.[xiii]

Exploratory Assessment:

The examples described above show evaluations of change initiatives designed to address documented problems or needs. There will also be occasions when front-line health-care workers will need to use evaluation tools in the preliminary stages of developing an initiative. For example, one health-care organization explored ways to strengthen the role of junior managers in addressing work stress.[xiv] A combination of critical incident diaries and semi-structured interviews with six junior managers was the method used to understand how this group perceived and responded to work stress. Information collected in this way can then inform specific interventions to help build organizational capacity to address problems like stress.

Thinking about costs:
"…nurse and patient outcomes can be quantified in dollars. However, the social costs also need to be considered. Occupational injuries that result in disability for nurses have a high social cost, as well as negative economic results related to disability insurance payouts, suits, and the like. The social costs to patients and their families for the pain and suffering of complications, additional days in the hospital, and/or the loss of a loved one are also sizeable."
Note: From *"The future of the Magnet Hospital,"* by Margaret L. McClure and Ada Sue Hinshaw. In McClure, M.L. & Hinshaw, A.S. (eds.) (2002). *Magnet Hospitals Revisited: Attraction and Retention of Professional Nurse.,* Washington: American Academy of Nursing, p. 125.

Integrating Measures

Evaluations become more powerful catalysts for action when they utilize data from diverse sources. This “dot connecting” can be achieved by tapping into existing sources of administrative data, and combining this information with new information collected from, say, an employee survey (see Figure 4). The key to data triangulation is using a standardized reporting category, such as department, functional unit or work site. Using a Microsoft® Excel spreadsheet, you can present data from different sources side by side and look for patterns, asking questions such as, “Are units low in employee satisfaction, for example, also high in overtime utilization and absenteeism, as well as below average in patient satisfaction scores?”

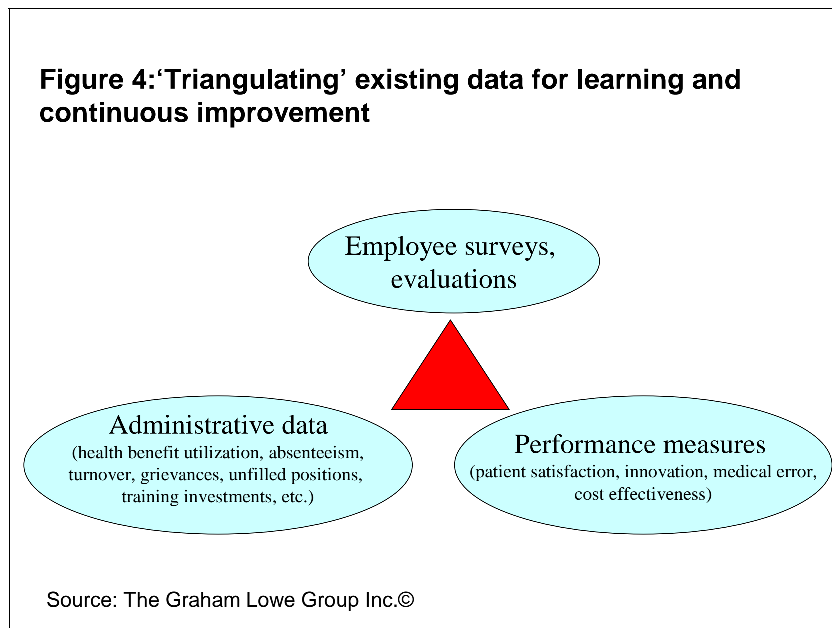

Figure 4:‘Triangulating’ existing data for learning and continuous improvement

Source: The Graham Lowe Group Inc.©

Change initiatives that have multiple goals will need multiple measures. For example, the introduction of a work redesign model, called Patient Care 2000, in an academic health-care and tertiary referral centre was intended to have a positive impact on salary costs, patient satisfaction, quality of care, nurse-patient contacts, and nurses’ quality of work life.[xv] Assessing these outcomes required data from diverse sources: cost analysis reports, questionnaires, chart reviews, and direct observation. This information was synthesized – or “triangulated” (see Figure 4) – to provide a composite picture of how the work redesign affected the organization and its employees and patients.

While some quality of work life indicators (such as job satisfaction or job demands) can be used in any type of industry, as an evaluation framework expands it is important to use measures appropriate for health care. For example, the work environment characteristics of magnet hospitals (such as nurse autonomy, career development opportunities, participation in workplace decision making, positive relations with physicians, adequate resources and administrative support, and adequate staffing levels) are assessed using measurement tools designed for nursing settings.[xvi] The next major step forward in performance measurement in will be the integration of human resource capacity measures with healthcare system outcomes.

Figure 5 presents three types of measures related to activity or process, staffing, and patient care outcomes that have been used to monitor and evaluate the overall effectiveness of comprehensive human resource strategies. Assessments of work environment interventions – the human resource side of the equation – will be greatly strengthened by examining relationships to these other areas.

Figure 5: Examples of indicators used to assess the organizational effectiveness of human resource interventions

Activity/Process-related	**Beds**
	Occupied beds
	Outpatient visits
	Client contacts
Staffing-related	**Job satisfaction (measured by attitudinal survey)**
	Accidents/injuries
	Absence
	Assaults on staff
	Vacancy rates
	Overtime
	Turnover/stability/retention
	Use of temporary staff
Care-related outcomes	**Patient length of stay**
	Readmission rates
	Live births
	Mortality rates
	Urinary tract infections
	Pneumonia
	Shock
	Upper gastrointestinal bleeding
	Deep vein thrombosis
	Pressure sores/ulcers
	Cross-infections
	Patient satisfaction survey

Note: From *What difference does ('good') HRM make?*by James Buchan. *Human Resources for Health 2:*6, 2004. www.human-resources-health.com/content/2/1/6

Evaluating Front-Line Quality of Work Life Innovations

Some of the examples we reviewed above are from published studies that use "state of the art" evaluation techniques. The academic objectives, costs, and organizational resources required for some of these studies underscore the need for more stream-lined evaluation methods that serve the practical needs of those involved in change. While "practical" approaches would not pass the muster of a peer review process for publication in a scholarly journal, they nonetheless have the potential to provide useful information for learning, decision-making, and action.

The following examples of innovative quality of work life initiatives exemplify this practical, grass-roots approach to evaluation.

Saskatchewan Registered Nurses' Association Quality Workplace Program The Saskatchewan Registered Nurses' Association (SRNA) developed the Quality Workplace Program (QWP), in partnership with the Saskatchewan Nurses Union, to improve nursing work environments in Saskatchewan. The QWP program uses consultations with management, unions and front line staff to build consensus and reach collaborative decisions, using a community approach. Goals include improved nurse retention, increased staff morale and development of front line leadership. The Health Quality Council of Saskatchewan conducted pilot site evaluations of the QWP's process and outcomes. Process evaluation used interviews with QWP participants, a review of documents and reports, and observations of feedback meetings with the site working groups. Outcome evaluation compared the three pilot sites with a control site where the QWP was not implemented. Methods included surveys of staff and patients before and after the intervention.[xvii]

Newfoundland and Labrador Regional Integrated Health Authorities and their Partners Creating a Culture of Safety Project

The objective of this project is to create a culture of safety in regional health authorities. Using a collaborative approach, the project will enable the health and community services system to identify why previous investments in safety training have not been effective, and then design a program that creates greater employee recognition of the value of safe and effective work practices. A key outcome measure is to what extent safety knowledge is put into practice. The project will be directed by a multidisciplinary steering committee drawn from all health authorities and their partnering agencies. The committee will be guided by a widely-used eight-step model of organizational change developed by Harvard University's John Kotter.[xviii] The project has strong leadership support. An evaluation methodology was in place from the start, adapting a results-based management accountability framework developed by the Government of Canada for measuring and reporting outcomes throughout the life of a project.[xix] This framework will guide the development of specific indicators that will not be limited to the trailing indicators that have guided similar efforts in the past.

East Central Health's Quality of Work life Project

East Central Health, a regional health authority in Alberta, launched a collaborative initiative aimed at engaging front-line staff in identifying quality of work life problems and implementing solutions. With the help of facilitators, interdisciplinary teams and site managers identify the positive and negative aspects of their work settings and develop action plans in the areas of morale, stress and information flow. There are six specific goals, each with baseline measures and targeted improvements that will be tracked over several years, using an employee attitude survey and absenteeism data. The goals are: reduced stress-related absenteeism; increased staff morale; improved information flow in workplaces; improved staff retention; increased capacity of staff to deal with stress and conflict; and empowering individuals to make decisions.

Figure 6: Evaluating Cultural Transformation
Achieving significant breakthroughs in quality of work life and health service quality requires a systemic strategy that builds a people-centred culture. One of the hallmarks of health-care organizations that have embarked on sweeping cultural change is a relentless pursuit of improvement through measurement, accountability and follow-up actions. Everyone understands that excellence in health service delivery is achieved by enabling and supporting employees to be physically, mentally, emotionally and socially healthy and well. Here are three examples.

Trillium Health Centre, Mississauga, Ontario: This community hospital's strong employee philosophy is central to its vision: "Leaders in Health Innovation." At Trillium, creating and maintaining healthy workplaces is a strategic goal. Trillium emphasizes individual leadership and promotes innovation by empowering employees to make decisions and take ownership for them. This creates psychologically healthy work, which contributes to excellence in patient care. Accountability is achieved through an annual "healthy workplace" employee survey. Survey results are reported down to the work unit level, where local managers engage staff to create action plans for the coming year. Interdisciplinary Partnership Councils also are involved in survey follow-up actions. In addition to the survey, data on sick time, overtime, job applications, and turnover are used to measure progress.
Source: http://www.trilliumhealthcentre.org/

Seven Oaks General Hospital, Winnipeg, Manitoba: This acute care facility's mission is "a healthy community dedicated to providing holistic health and wellness services with skill and compassion." A unique Wellness Institute promotes a holistic approach to health and wellness, including goals such as a learning environment and work-life balance. However, in 1998 Seven Oaks had a demoralized workforce, inconsistent patient care, and high rates of job vacancy, absenteeism, and workers' compensation time loss claims. Guided by people values and a healthy workplace vision, and with strong leadership support and union involvement, Seven Oaks addressed these problems by transforming its culture. This organizational development initiative included a rigorous measurement process that tracks employee health risks, employee satisfaction, absenteeism, WCB rates, disability rates, retention, and work-life balance. Some of these indicators are benchmarked externally.
Sources: http://www.sogh.mb.ca ;
http://www.c ha.ca/conference/presentations/Session_11b_Neskar_Solmundson.ppt; Canadian Labour and Business Centre, Twelve Case Studies on Innovative Workplace Health Initiatives: Summary of Key Conclusions, November, 2002.

Baptist Healthcare, Pensacola, Florida: This not-for-profit health-care organization employs 5,500 employees in five acute care hospitals, nursing homes, mental health facilities and an outpatient centre. It is on *Fortune* magazine's list of "100 best companies to work for" in America. It achieved service excellence by transforming its culture and work environment, guided by three principles: employee satisfaction, patient satisfaction and leadership development. Renewing the culture, which began in 1995, and the challenge of sustaining it is the responsibility of employee-led committees. There are teams on culture, communication, customer loyalty, employee loyalty, and physician loyalty. Teams use a variety of measures to create transparency and accountability for key goals. Regular surveys of employees, physicians and patients inform continuous communication and action planning.
Sources: http://www.baptistleadershipinstitute.com/;. *The Baptist Healthcare Journey to Excellence,* by Al Stubblefield. Hoboken, NJ: John Wiley & Sons, 2005.

Assessing the Change Process

Evaluation contributes to positive organizational change. The committee or team leading the quality of work life project should scan the organization to determine how best to position the initiative. Among the issues to consider are the following:

- Clearly defining what needs to be evaluated.
- Deciding how this information will be used.
- Building leadership support.
- Co-ordinating the initiative, including evaluation, with other stakeholders (e.g., Human Resources, Chief Nursing Officer, Professional Practice Councils).
- Designing an evaluation follow-up process.
- Planning how evaluation findings will be communicated across the organization.
- Creating accountability among line managers for follow-up actions.
- Using the evaluation results to create shared responsibility for change.

Criteria for selecting project outcome measures should include what will generate information that is going to be meaningful to decision-makers as well as front-line workers, increasing the probability of actions in support of further positive change.

While surveys can make employees hopeful about improvements in working conditions, a lack of follow-up action can be a major source of cynicism and distrust. A challenge facing any organization is genuinely listening to employee feedback and following through with timely and relevant actions. Successful follow-up to a survey requires senior management to take these actions:

- Clearly communicate key survey findings to staff.
- Make a commitment to address a several priority areas for improvement.
- Create mechanisms that hold line managers accountable for action plans.
- Provide timelines for doing this.

Figure 7 provides a tool for assessing your organization on a change readiness continuum. This type of assessment should be one of the initial steps in planning a quality of work life intervention. Tailor the change strategy – including the evaluation component – to fit the picture that emerges. Indicate if each of the characteristics listed below is:

- A current or potential source of resistance to introducing changes to improving the work environment;
- Ready to be tapped as an actual or potential source of support for positive workplace change; or

- Already providing “momentum” to improving the quality of the work environment or related people practices.

Enter a check mark in the appropriate box. If you check either the “resistance” or “readiness” boxes, think about what you can do to move this factor to the next level. There is no ideal score: the point of the exercise is to generate discussion among individuals involved in planning change to see opportunities for support that can be leveraged, potential barriers that will need to be addresses, and existing strengths that can be built on. From an evaluation perspective, there are implications for the kinds of measures used and the way they are communicated throughout the organization.

Figure 7: High Quality Work Environment Change Readiness Assessment			
Organizational Characteristics:	**Resistance (or nonexistent)**	**Readiness**	**Momentum**
1. Organization's values.			
2. Organization's vision statement.			
3. Organization's mission statement.			
4. Organization's strategic plan.			
5. Organization's dominant culture.			
6. Your department/unit/team's culture.			
7. Organization's social responsibility commitments.			
8. Performance management system.			
9. Other rewards and incentives.			
10. The Board.			
11. The CEO.			
12. Senior managers.			
13. Line managers.			
14. Your manager.			
15. Your co-workers/team.			
16. Your staff (direct reports).			
17. Human resources, organizational development, and labour relations professionals/managers.			
18. Occupational health & safety and wellness professionals/managers.			
19. The organization's structures and systems.			
20. Corporate communication.			
21. Work unit communication.			
22. Employee consultation and feedback.			
23. Local union representatives.			
24. Union leadership.			
25. Professional practice councils and other professional groups or associations.			
TOTAL CHECKS			
Source: The Graham Lowe Group Inc©			

Surveys as Catalysts for Action

More health-care organizations are using surveys to evaluate work environments and obtain employee input. Doing a survey is the easy part; a great challenge is using the survey findings as a basis for actions aimed at improvement. Three principles guide effective survey follow-up: positive focus, participation, and communication.

- *Positive focus:* The survey is a tool to help build a better workplace for employees and patients or clients. It must not be used for punitive ends. If particular indicators are low for specific issue, work unit or employee group, the organization needs to provide support and resources to turn this around.
- *Participation:* Involve as many staff in discussion, planning and implementing changes based on survey findings. Engage informal quality workplace champions early in the process. Also build links with other committees that address quality of work life issues.
- *Communication:* Communicate results, implications, and follow-up actions at every opportunity and enable two-way communication, so decision-makers can hear employee reactions to the survey findings.

The following guidelines are intended to help change agents translate survey findings (or any evaluation results, for that matter) into action.

1. The project team or committee that designs the evaluation needs a clear mandate from senior management to guide the follow-up process. The executive "sponsor" of the survey should obtain this commitment before the survey is conducted. The committee acts as a catalyst for others to interpret and act upon the findings.
2. Recognize that no survey can be definitive. Treat the survey as one mechanism for getting employee feedback, so it is a tool for communication, engagement and change. There may be few surprises. Chances are the findings will reinforce what you already know intuitively or from other sources of information.
3. A positive focus can be achieved by reporting only the percentage of positive responses (depending on the response categories) for evaluative questions on the survey. This also makes results easier to interpret.
4. Follow-up actions are a shared responsibility, involving employees, unions, supervisors, managers, human resources, occupational health and safety or wellness, the chief nursing officer, corporate communications, and the executive of the organization.
5. Human resources managers should be encouraged to assess and readjust current human resources policies and practices in light of survey findings in priority areas.
6. Consider a sequential approach to reporting. For example, begin with a presentation to the executive, followed by middle managers, human resources, supervisors, professional practice councils, employee forums, and work site team meetings. Consultations give the committee and survey sponsor opportunities to refine, focus and validate the priority action areas and key messages.

7. As part of its commitment to act on survey findings, the executive must support employee groups to find time to undertake action planning and implementation. Otherwise, the survey process will detract from, not enhance, the quality of work life.
8. The committee should review the results and identify areas of strength and two or three areas that provide the organization with "opportunities for improvement." Present these key findings as the committee's view, and invite others to add their own interpretations. Encourage discussions within work units about what everyone needs to keep doing to maintain areas of strength.
9. Action planning has to happen within each work unit, so data need to be reported in this way to enable meaningful discussions and action. Give units their results compared against the rest of the organization. Balance corporate-wide priority action areas with unit-specific actions.
10. Most health-care organizations have "pockets of excellence" – a particular unit, for example, may be team-based, highly collaborative, and where staff are happy and healthy. The survey can help identify such units, so their "story" (how they got that way and how they maintain it) can be shared across the organization.
11. The committee should also examine the data for variations by demographic groups, looking for groups that stand out as being considerably higher or lower than average (you will need to set these levels, such as 20 or 25 percentage points above or below the overall average on an indicator). Targeted or corporate wide interventions can be planned based on this group analysis.
12. Co-ordinating actions at the organization-wide, work unit and individual levels is an important on-going role, often done by human resources, the committee or the survey champion.
13. If you used open-ended questions, categorize the responses by theme and use the results to amplify and give a human face to the numbers in the survey.
14. Share the complete survey findings with any employees who are interested. This is easily done on an intranet site, but hard copies should be available to employees who do not have computer access.
15. If you are repeating a survey, also distill the key trends for communication and follow-up. Where are you making progress, holding your own, or backsliding? Did you achieve any targets or improvement goals set the previous year?

Figure 8: Assessing the Quality of Survey Results

Data quality is rarely 100 per cent, so identify quality issues and commit to fixing any problems next time, as part of a continuous learning and improvement approach to quality of work life. Here are some basic data quality considerations.

- Overall response rate. The higher the response rate, the more representative the survey is of the employee population; anything below 50 per cent raises concerns that those who did not respond may have substantially different perceptions than those who did complete the survey, or that some groups had difficulty accessing the survey instrument or finding time to complete it.
- Low response rates among demographic or occupational groups, based on comparison with employee demographic data. If one or more groups of employees are underrepresented in the survey, consult with them to find out why.
- Specific questions with low response rates.

Quality of Work Life Action Checklist

This Action Checklist will help you during the critical stages as you develop and implement a comprehensive healthy workplace or quality work environment change initiative. It provides an integrated road map to change, building in evaluation as one component, albeit an essential one.

The checklist looks at the conditions necessary to create change, the change process, and the scope and focus of the program items. This list is also a set of values for successful change. It is a guide that needs to be fully considered and discussed by individuals, formal committees, or informal networks in an organization. You can use or adjust this checklist to fit what works best for your organization by changing an action or their order. Add your own points![xx]

Action:	**Planned (✔ when done)**	**Ongoing (✔ if under control)**	**Implemented (✔ when done)**
1. Committee (or the human resources, occupational health & safety, or wellness unit) to plant seeds, propose options, float a vision.			
2. Build alliances across the organization to create a shared vision of a healthy workplace from which actions can flow.			
3. Use a broad definition of employee and workplace health to mine existing data for strengths, gaps, opportunities.			
4. Tie healthy workplace goals into corporate strategic plan, values, vision, mission, human resource plan, performance reporting.			
5. Build a case that a healthier work environment will address other priority issues (e.g., retention, workload, engagement, learning, work-life balance, leadership)			
6. Take every opportunity to shift thinking: this is cultural change and not a 'program'.			
7. Develop language and guiding principles that resonate with all stakeholders.			
8. Find a senior management champion.			
9. Meet with senior management to identify needs, build the case, and get commitment and resources to develop a healthy workplace strategic direction.			
10. Initiate frank discussion with senior management about trust-building through actions.			
11. Assess readiness for change and identify barriers that need to be removed, support, momentum.			
12. Design ways to help line managers 'own' the process so they become accountable change agents.			
13. Engage line managers in discussions of their role, perceived challenges and needed supports.			
14. Have same discussion with human resources, occupational health & safety, wellness, or organizational development professionals/internal consultants.			
15. Establish and maintain open dialogue with union(s), including union reps on committee.			
16. Refine the healthy workplace vision, including its focus, and state case for 'why we need to do this.'			
17. Consult with employee groups about priority healthy workplace needs and required actions.			
18. Engage other 'change agents' formally and informally as change strategy evolves and crystallizes.			
19. Communicate, communicate, communicate.			
20. Think ahead to measurement and accountability. Strive for 2-3 priority goals with measurable outcomes. Don't do too much!			
Source: The Graham Lowe Group Inc ©			

Endnotes

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