A FRAMEWORK FOR EVALUATING ORGANIZATIONAL CHANGE IN HEALTH-CARE AGENCIES AND FACILITIES

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Abstract:  This article outlines a framework that health-care agencies can use to evaluate the different impacts of restructuring activities. The framework recommends that changes in the following dimensions be monitored: (1) patients’ and families’ perspectives on their health-care encounter; (2) staff and physicians’ perspectives as organization members, including their views on the quality of their working life; (3) roles and relationships of team members and work redesign; (4) efficiency, including measures of financial viability; (5) adverse occurrences; (6) community and board perspectives on relationships with the community; and (7) for teaching facilities, the health-care agency’s commitment to teaching and research activities.

Résumé:  Cet article présente un cadre conceptuel qui peut servir aux organismes de services de santé afin d’évaluer l’impact de la restructuration des services. Ce cadre conceptuel propose sept dimensions desquelles l’évaluateur devrait surveiller les changements: (1) le point de vue des patients et de leurs proches quant aux services de santé reçus; (2) le point de vue des employés et des professionnels membres de ces organisations, en particulier les aspects associés à leur qualité de vie au travail; (3) les rôles et relations des membres des équipes de soins ainsi que les reconfigurations de tâches; (4) l’efficience, incluant des mesures de la situation financière; (5) les effets non désirés; (6) le point de vue de la communauté et du conseil d’administration quant aux relations qu’entretient l’établissement avec la communauté; et (7) l’engagement des centres hospitaliers universitaires envers les activités d’enseignement et de recherche.
Organizational change in the health-care sector is a hallmark of recent years. What with re-engineering, a greater focus on patient-centered care, and a desire for more streamlined organizational structures, many organizations have engaged in restructuring. There is a growing literature on these activities, providing information on experiences and blueprints for change (French & Bell, 1984; Leatt, Lemieux, Aird, & Leggat, 1996; Mohrman et al., 1989). What has been missing is any analysis of how successfully these changes have met the organization’s goals and objectives. Although we may understand the steps an organization has taken to become more patient focused or improve its financial viability or achieve whatever objectives were behind the restructuring, we have relatively little information on whether or not these objectives were achieved.¹

There are likely a number of reasons why these organizational changes have not been evaluated. Tremendous energy goes into an organizational restructuring, and it is often difficult to maintain that energy through to the evaluation stage. Such evaluations are also not easy. There is often no clear-cut point of implementation, key players and components of the restructuring may change throughout the process, and extraneous changes in the environment consistently serve to confound the evaluation. In addition, and maybe just as importantly, there is no easily available framework that might be used to assist those involved in restructuring with their evaluation. Information on specific components (e.g., patient satisfaction) is available, but there is no comprehensive framework that might provide the perspective needed to capture the range of impacts these larger scale changes impose. The purpose of this article is to provide such a framework, one that can be used for evaluating the different impacts of restructuring activities.

The framework borrows from three perspectives. The evaluation literature suggests attention should be paid to structure, process, and outcome indicators (Flood, Shortell, & Scott, 1994; Posavac & Carey, 1997). Structure indicators refer to the infrastructure that enables the programs to operate, process indicators focus on how the programs actually operate, and outcome indicators look at the results of the programs. The action research literature recommends a focus on the perspectives of key stakeholders and the importance of participant feedback (Posavac & Carey, 1997; Reinertsen, 1993). In undertaking an evaluation, it is important to identify all individuals who are involved with or influenced by the program and ensure their perspectives are acknowledged and incorporated in the evalu-
ation. Finally, the “balanced scorecard” concept emphasizes the importance of developing sets of measures that cover the range of dimensions relevant to an organization’s goals and objectives (Kaplan & Norton, 1992, 1993). Those using the balanced scorecard concept argue that supplementing financial measures with information on customer satisfaction, internal processes, and the organization’s innovation and improvement activities will ensure that all outcomes, including trade-offs between outcomes, will be identified and considered in evaluating organizational performance (Baker & Pink, 1995). All three strands have been incorporated within the evaluation framework presented.

The evaluation framework was initially developed to assist in monitoring the restructuring activities at Sunnybrook Health Sciences Centre (SHSC), a large, teaching, active-treatment hospital in Toronto. In the fall of 1992, SHSC announced its intention to become an organization based on the tenets of patient-centered care. To monitor the impact of the changes from the viewpoints of staff, patients, and others connected with the organization throughout the three-year implementation process, SHSC enlisted the help of researchers from the Hospital Management Research Unit (HMRU) at the University of Toronto. Over the next 12 months, HMRU and SHSC collaborated to develop an overall approach to monitoring, a strategy that was endorsed by SHSC’s senior management team and by its Implementation Advisory Council, a body representing all major constituencies in the hospital, including management, staff, and unions (HMRU, 1997). The framework outlined in this paper is based on that work.

There was considerable debate, in developing the framework, over whether it should be considered a “monitoring” or an “evaluation” framework. It was clear that any changes observed during the course of the project could not be simply linked to the organizational changes associated with the shift to patient-focused care — too many other changes were occurring at SHSC, and in the external environment, during the years of the study. For this reason, the project was referred to as a monitoring exercise. The use of this terminology also served to alleviate key stakeholders’ concerns that they were in some way being “judged” or “evaluated” on the success of the restructuring activities, and satisfied the basic scientists who wished to limit the term evaluation to randomized controlled trials. In our conceptualization of the framework, however, we refer to it as an “evaluation framework.” We are working from a tradition that includes monitoring as part of evaluation (Posavac & Carey, 1997),
and believe that the term *evaluation* more nearly captures the full range of structure, process, and outcome objectives included in the framework.

The framework was developed for an active-treatment, teaching hospital that was undergoing an organizational change, and its components undoubtedly reflect this. Although we are aware of the debate about the transferability of lists of performance indicators from one organizational setting to another, we would argue that many health-care agencies will find factors useful to their own situations within the framework. Thus, specific measures may have to be adjusted, but the components of the model provide a framework for organizing the evaluation. For example, average length of stay is a measure specific to a hospital, but home-care programs and community health centers have similar measures to assess the length of time a client receives their services. We view the dimensions included in the framework as sufficiently generic to assist those with ultimate responsibility for the health-care agency to monitor the impacts of the changes they are undergoing, and highlight areas that might need attention.

**THE FRAMEWORK**

The evaluation framework recommends that changes in the following dimensions be monitored over time in evaluating the impact of organizational restructuring: (1) patients’ and families’ perspectives on their health-care encounter; (2) staff and physicians’ perspectives as organization members, including their views on the quality of their working life; (3) roles and relationships of team members and work redesign; (4) efficiency, including measures of financial viability; (5) adverse occurrences; (6) community and board perspectives on relationships with the community; and (7) for teaching facilities, the health-care agency’s commitment to teaching and research activities. The framework is illustrated in Figure 1, along with potential performance indicators, and is discussed below.

**Patients’ and Families’ Perspectives**

Patient care is the core business of health-care institutions and the first dimension of the evaluation framework. Health-care agencies need to check the impact of restructuring on patients’ and families’ perceptions of the quality of care they received while in the facility over the period of change. A variety of patient satisfaction meas-
ures are available (Aharony & Strasser, 1993; Charles et al., 1994; Hall & Dornan, 1988a, 1988b; McDaniel & Nash, 1990; Ross, Steward, & Sinacore, 1995; Rubin, 1990; van Campen, Sixma, Frick, Kerssens, & Peters, 1995), but most collect three types of data:

**Figure 1**

A Framework for Evaluating Organizational Change in Health Care Agencies and Facilities

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>PROPOSED MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients’ and Families’ Perspectives</td>
<td>Patient satisfaction questionnaires</td>
</tr>
<tr>
<td></td>
<td>Patient focus groups</td>
</tr>
<tr>
<td></td>
<td>Complaints monitoring</td>
</tr>
<tr>
<td>Staff and Physicians’ Perspectives</td>
<td>Perceptions of work environment (culture and climate)</td>
</tr>
<tr>
<td></td>
<td>Staff satisfaction questionnaires</td>
</tr>
<tr>
<td></td>
<td>Staff focus groups</td>
</tr>
<tr>
<td></td>
<td>Turnover trends</td>
</tr>
<tr>
<td></td>
<td>Absenteeism rates</td>
</tr>
<tr>
<td>Roles and Relationships</td>
<td>Team effectiveness questionnaires</td>
</tr>
<tr>
<td></td>
<td>Workload measurement data</td>
</tr>
<tr>
<td></td>
<td>Workload sampling data</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Operating margins</td>
</tr>
<tr>
<td></td>
<td>Average cost per weighted case</td>
</tr>
<tr>
<td></td>
<td>Variable revenue</td>
</tr>
<tr>
<td></td>
<td>Percent change in foundation assets</td>
</tr>
<tr>
<td></td>
<td>Average length of stay</td>
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<td></td>
<td>Percent change in service volumes</td>
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<tr>
<td></td>
<td>Test results turn-around times</td>
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<tr>
<td></td>
<td>Waiting times for elective procedures</td>
</tr>
<tr>
<td></td>
<td>Nursing hours per weighted case</td>
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<tr>
<td>Adverse Occurrences</td>
<td>Rates of readmission/complication</td>
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<tr>
<td></td>
<td>Rates of medication errors</td>
</tr>
<tr>
<td></td>
<td>Rates of nosocomial infections</td>
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<tr>
<td></td>
<td>Numbers of procedure cancellations</td>
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<tr>
<td></td>
<td>Numbers of patient falls</td>
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<tr>
<td></td>
<td>Numbers of patients awaiting transfer</td>
</tr>
<tr>
<td>Community and Board’s Perspectives</td>
<td>Community needs assessments</td>
</tr>
<tr>
<td></td>
<td>Community health status rates</td>
</tr>
<tr>
<td></td>
<td>Relationships with community agencies</td>
</tr>
<tr>
<td>Commitment to Teaching and Research</td>
<td>Research funds attracted by staff</td>
</tr>
<tr>
<td></td>
<td>Publications/presentations</td>
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<tr>
<td></td>
<td>Students involved in training</td>
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<tr>
<td></td>
<td>Survey of staff on perceptions</td>
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<td></td>
<td>Survey of deans/directors on perceptions of academic commitment</td>
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</tbody>
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1. global evaluations of the hospital and perceived outcomes, including questions about whether “I would recommend this hospital” or “I would return to this hospital,” and overall assessments of the quality of the care and services received from the hospital and the degree that patients and family were helped by their hospital stay.

2. process evaluations of their stay, including information on such dimensions as admissions and discharge procedures, the quality of nursing and medical care received, “hotel” arrangements such as food, parking, and cleanliness, and communication items such as maintaining confidentiality and having access to information as needed.

3. demographics of the patients, which generally include their age, sex, and the severity of their illness. Such information can be used to monitor shifts in patient profiles over the period of the change, shifts that might interact with changes in satisfaction scores independently of the restructuring.

Information on patient satisfaction is usually collected on a systematic schedule (e.g., monthly or quarterly). Tracking levels of patient satisfaction during the change will highlight any changes in trends, either positive or negative, for further follow-up.

Physicians’ and Staff Perspectives

Although patient care is the core business of the health care agency, it is the individual physicians, nurses, and other members of the health-care team that deliver such care. The second component recognizes their contribution by examining their perspectives over the time period of the change.

Dimensions of staff and physician perspectives include their perceptions of the work environment, including its culture and climate, and the satisfaction they experience in working in that environment. Culture refers to the norms, values, beliefs, and expectations shared by people working in a given unit or organization (Cooke & Rousseau, 1988). The extent to which a particular culture dominates an organization will have an impact when major changes are being planned. For example, an organization that has had a “command and control” approach to decision-making and decides to decentralize some of its decision-making activity will need to assess the extent to which this has actually taken place. The Organizational Culture Inventory (Cook & Lafferty, 1987) is one example of the available measures of culture.
Staff perceptions of their work environment include such areas as satisfaction with working conditions, including rewards and management practices, perceived opportunities for advancement, and participation in decision-making; morale; interprofessional relationships; and work-related stress. Trends in absenteeism are an indirect evaluation indicator of employee satisfaction. Many organizational changes involve downsizing, and hence the use of staff turnover rates, a measure that has been used in the literature to assess staff satisfaction, may be problematic. If turnover rates are to be used, the impact of the downsizing needs to be factored out.

Roles and Relationships

Health care is increasingly delivered through teams, and in this third evaluation category the team’s perceived effectiveness in managing its work processes and achieving its objectives is examined. The team literature (Gladstein, 1984; Hackman, 1987; Katzenback & Smith, 1993) suggests there are many factors that may influence the extent to which a team is effective. These factors can be grouped into the following four categories:

1. Organizational context, which refers to organizational characteristics that influence the group and are largely beyond its control. Specific factors that are often included are assessments of resources (equipment, space, and materials), managerial support, and organizational incentives that support productive work.

2. Group characteristics, which refers to internal factors unique to the group. Factors often included here are heterogeneity (the extent to which team members have diverse backgrounds and skills), self-management (the extent to which the group has control over its day-to-day functions), and potency (the team’s confidence that it can perform outstanding work).

3. Task design and group functioning, which refers to the processes and strategies the team uses to perform its work. Items that might be included are assessments of the appropriateness of the team’s approach to its work and the extent to which the team leader’s behavior is felt to be conducive to work-group effectiveness.

4. Team effectiveness, which refers to how effective the work groups felt they were in achieving their objectives. Four possible measures are suggested: (a) an assessment of whether
or not the team’s results are acceptable to those who review or receive them; (b) an assessment of the extent to which team members’ needs are more satisfied than frustrated by the group experience; (c) an assessment of the degree of the team’s improvement over the period of the restructuring, in achieving their objectives; and (d) an assessment of the team’s effectiveness on several key management dimensions such as controlling costs, quality, productivity, employee commitment, and innovation.

These measures can be supplemented by direct measures of the impact of restructuring on work design. Workload measurement systems (Cockerill & O’Brien-Pallas, 1990) provide a tool for assessing the percentage of time that is spent on direct and indirect patient-care activities. These systems are standardized, and hence provide a way of tracking the activities of the major categories of staff (nursing, occupational therapy, physiotherapy) over the period of change. Work-sampling studies (McNiven, O’Brien-Pallas, & Hodnett, 1993) are also a source of information if data from workload measurement systems are either not available or of questionable reliability. In work-sampling studies, representative employees are monitored in discrete time frames to determine how they are spending their time. How these patterns change over time is an indicator of the impact of the restructuring; more time devoted to administrative functions, for instance, may not be in line with the objectives of the restructuring.

Efficiency and Productivity

The fourth evaluation category looks at efficiency and productivity measures of the health-care agency. Commonly used financial measures include operating margins (operating income divided by net operating revenues), average cost per weighted case, variable revenue, and percentage change in the value of foundation financial assets (Baker & Pink, 1995). These measures can be examined on an institutional basis, as well as for specific subcomponents, as the restructuring activities unfold.

Specific productivity measures depend on the nature of the health-care agency undergoing change, but common measures in the hospital sector include average length of stay, percent change in service volumes, test result turn-around times, waiting times for elective procedures, and nursing hours per weighted case.
Adverse Occurrences

Monitoring health-care performance by tracking the rates of adverse occurrences is a widely accepted (and used) measure of performance. The actual adverse occurrences that should be monitored over the period of restructuring will depend on the nature of the health-care setting, but common measures for hospitals include rates of readmission or complication, rates of medication errors and discrepancies, rates of nosocomial infections, numbers of procedure or admission cancellations, numbers of patient falls, and numbers of patients awaiting placement with application.

In interpreting the variations in rates and the distribution of adverse occurrences over time, the evaluator must also reflect on differences in case mix and practice patterns. Restructuring often changes the nature of the patient population, and the impact of such changes needs to be considered as the rates of adverse occurrences are monitored. As case-mix becomes more complex, rates of adverse occurrences might be expected to increase. It is important to standardize such rates, so that the change that is due to an increasingly complex case-mix is not confused with the change due to restructuring.

Measures of adverse occurrences reflect inadequacies, negligence, and shortcomings. Measures can also be included of appropriate practices or benchmarked indicators. For instance, a health-care agency may have established a quality indicator (e.g., all patients will be seen within three hours of first contact) that can be monitored over the course of the restructuring.

Board and Community Perspectives

The sixth component of the framework suggests that health-care agencies need to examine the impact of their restructuring activities on the communities they serve. Drawing upon both board and community perspectives, we can pinpoint two dimensions that might be examined over the period of the re-structuring activities:

1. the extent to which services are responsive to community needs. Nerenz, Zajac, and Rosman (1993) report on a performance measurement system being developed by 23 vertically integrated health systems in the United States that includes population health and community benefit meas-
ures. Although evaluators can easily attest to the difficulties of linking changes in individual health-care institutions to community-level changes in health status, some attention needs to be paid to ensure that specific groups of patients (e.g., the elderly) or disease categories (e.g., mental health) are not neglected or marginalized during the process of restructuring.

2. relationships/integration with community agencies. Few health-care institutions are agencies unto themselves. Health care systems may not be formally integrated, but they are often closely linked at an operational level. Restructuring may have significant impacts on these interrelationships, and it is important to track those impacts, from both the perspective of the patient and their family and that of the system members, who need to know how to help their clients to get the services they need when they need them.

Academic Perspectives

The final evaluation criterion is targeted at teaching facilities, which have a mandate that includes teaching and research as well as patient care. It is important to ensure that these activities are not lost or jeopardized during the period of restructuring.

Both direct and indirect measures can be included in this category. Direct measures might include tracking the amount of research funds attracted by staff and physicians, the number of publications and presentations linked to the agency, and the numbers of students passing through the training process. More subjective measures might include surveys of physicians’ and staff perceptions of the impact of the restructuring on their time to devote to academic and training activities. This information could also be supplemented by similar surveys of deans/directors of schools (i.e. medicine, nursing, pharmacy, social work, rehabilitation) that rely on the institution for training purposes.

CONCLUSION

The framework presented above provides a guideline for those responsible for evaluating the impact of restructuring. By monitoring changes in these dimensions over time, an organization will have the information it needs to assess the impact of its restructuring activities. The framework has the advantages of being comprehen-
sive, and focused on the outcomes and processes central to the successful delivery of quality care.

One of the biggest challenges in working with the framework is being able to separate out change that can be attributed to the restructuring activity. The health-care environment is turbulent, with many changes occurring together. In many cases it is not possible to separate out influences. However, the task for the evaluator, and the individual or individuals responsible for the well-being of the health-care agency, is to ensure that there is a monitoring process that can highlight positive and negative trends and facilitate a comprehensive assessment of the restructuring activities.

In working within this framework, evaluators also need to be mindful of the basic tenets of good evaluation. Thus, it is important to structure the evaluation in a way that includes and provides feedback to the “users” at all stages. The framework lays out an evaluation plan, and the coordinator of the evaluation must ensure that all participants understand the project and their role within it. Coordination of data collection may be called for and, to ensure timeliness, it may be necessary to set priorities among the different evaluation objectives. To ensure the results are acted upon, it is also important for the evaluator to develop a dissemination plan — to the management and board as well as to staff and patients (see Soberman, Norton, Van Maris, & Tasa [1997] for an example of a comprehensive dissemination strategy). Ultimate implementation may not be within the scope of responsibility of the evaluator, but it is his or her responsibility to ensure that key stakeholders understand the results and the implications for health-care delivery.

ACKNOWLEDGEMENT

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NOTE

1. There is a body of literature providing evaluations of organizational change in industries other than health care (see Robertson, Roberts, & Porvan, 1993). These evaluations tend, however, to be meta-analyses of change and are unclear on what (if any) evaluation framework has been used.
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