EVALUABILITY ASSESSMENT OF STAFF TRAINING IN SPECIAL CARE UNITS FOR PERSONS WITH DEMENTIA: STRATEGIC ISSUES

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Abstract: Ontario’s Strategy for Alzheimer’s Disease and Related Dementia (1999) and many others call for increased staff training for those who work with persons suffering from dementia. Evaluators prefer to have the evaluation practices prepared at the design and curriculum development phase of educational programs but to what extent can the evaluability of staff training be assessed? An evaluability assessment of staff training in special care units for persons with dementia was completed, applying a four-step model of training evaluation. The data showed that there were barriers to best practices. The discussion reflects on eliminating these barriers through strategic management.

Staff training is a way to maintain a competitive edge by continuously improving and adapting performance. Re-engineering, total quality management, patient-centred trends and results-based performance management that influence the business of health care (Anderson, 1993; Björvell & Brodin, 1992; Brennan, 1989;
Brennan, 1993; Burns & Beach, 1994; Jorjani, 1998; Lee & Skarke, 1996; Shere, 1993) demand more and more outcome-based accountability to justify the administration and delivery of services. Improving performance through training may be an appropriate method of preserving quality with fewer resources.

A better-educated, better-trained, and efficacious workforce is expected to contribute more to the quality-improvement process (Greengard, 1993). However, there is a dearth of training in long-term care, training that is particularly needed for staff who care for persons with Alzheimer’s disease and related dementia (Burgio & Burgio, 1990). Ontario’s Strategy for Alzheimer Disease and Related Dementias: Preparing for Our Future (Ontario Ministry of Health and Long-term Care, 1999) has recognized the need for staff training on Alzheimer’s disease and related dementia and is promoting new staff training and development initiatives. As evaluators, this is our cue to also begin planning for optimal evaluation practices related to staff training and development. The following study provides details of a pre-evaluation that assesses the program and organizational climate in long-term care facilities to gain insights into the feasibility of a full program evaluation. Challenges to optimal evaluation practices are discussed.

SPECIAL CARE UNITS FOR PERSONS WITH DEMENTIA

Due to the unique needs of persons with dementia, there has been a move toward segregated treatment within long-term care facilities. These units are called Special Care Units (SCUs). Holmes et al. (1990) offer a detailed list of the staffing, programmatic, and environmental differences that make the ideal SCU a unique treatment setting. As suggested, these units may include structural changes that aid treatment and attend to the social and safety needs of patients; moreover, unique programming delivered by specially trained staff differentiates SCUs from the common nursing home milieu.

Staffing in SCUs is predominantly health care aides, licensed practical nurses, and to a lesser degree registered nurses (Flett & Davis, 1991). A British Columbia study (Gutman & Killam, 1989) that addressed staff training in long-term care showed two-thirds of staff respondents had been given general information about dementia and information on management of disorientation and problem behaviours, but the majority of staff had received little training. The Ontario Ministry of Health (1993) requires ten in-services to be provided
in long-term care facilities annually. The provision of in-service training does not speak to staff attendance at training sessions. Staff are often too busy on their shift to participate in training, there is a lack of funds to facilitate training courses, and the expertise required to lead sessions is often unavailable.

*Putting the Pieces Together: A Psychogeriatric Guide and Training Program for Professionals in Long-term Care Facilities in Ontario* (Ontario Ministry of Health, 1997) is in its second year of implementation and year-one evaluation results (Le Clair, Stolee, Harris, Kessler, & Montemuro, 1999) were unavailable at the time of writing. Some training is thus available to some staff in SCUs, but the adequacy of the training is undetermined. For this reason, the evaluability of training in long-term care facilities that serve persons with dementia requires review.

**BEST PRACTICES IN TRAINING EVALUATION**

Kirkpatrick (1998) sets out his most recent iteration of a four-step protocol for training evaluation in the second edition of *Evaluating Training Programs: The Four Steps*. The four steps for training evaluation are as follows:

- Step 1. Trainee Reaction to the training experience (happy?);
- Step 2. Trainee learning (knowledge gained?);
- Step 3. Trainee behaviour change (skill transfer to task?); and
- Step 4. Results (impact, cost effectiveness, relationship to organizational goals?).

The model elegantly allows the evaluator to comprehensively explore training outcomes. *Putting the Pieces Together: A Psychogeriatric Guide and Training Program for Professionals in Long-term Care Facilities in Ontario* (Ontario Ministry of Health, 1997) has recognized the four-step model in train-the-trainer curriculum as a valid model for the evaluation of staff training.

**THE EVALUABILITY ASSESSMENT**

Literature Review

There is a dearth of staff training in long-term care facilities that care for persons with dementia, even though SCU staff are ideally
expected to have specialized training (Berg et al., 1991; Gold, Sloane, Mathew, Bledsoe, & Konanc, 1991; Holmes et al., 1990; Sand, Yeaworth & McCabe, 1992; Williams & Trubatch, 1993). In addition, application of evaluation and related methodology to training is a required part of documenting performance accountability, but most training programs receive little outcome evaluation (Ontario Ministry of Health & Ontario Ministry of Community and Social Services, 1993; Burgio & Burgio, 1990; Goldstein, 1993; Smith et al., 1994; Sonnad & Borgatta, 1992).

Trainee and organizational qualities that influence the learning process should be considered when designing and evaluating programs. The emphasis in training evaluation should be placed not only on initial reaction to training but also on the individual trainee’s learning, improved on-the-job performance, and the degree to which the organization’s goals and expectations for training were met (Caffarella, 1988; Goldstein, 1993; Greengard, 1993; Kirkpatrick, 1998, Senge, 1990). Post-test satisfaction measures of the curriculum content (happy sheets) or trainer qualities are often the only evaluation criteria used when evaluating training (Corbeil, 1993; Fisher & Weinberg, 1988). An evaluability assessment aids the planning phase of evaluations (Program Evaluation Branch, Treasury Board of Canada, 1981; Rossi & Freeman, 1989) and is a timely venture given the need for better assessment models in training evaluation and education (Rose & Leahy, 1997).

An evaluability assessment is a pre-evaluation activity that helps identify key stakeholders, clarify evaluation questions, and adopt appropriate methodology based on the program realities. Often the evaluability assessment collects qualitative data through interviews with program staff (Smith, 1990). The following study explores long-term care facility staff and management concerns through the piloting of a self-administered survey and questionnaire instruments as well as interviews with management staff. The data collected show that there are barriers to applying the four-step training evaluation model.

**Methodology**

Seven facilities in a medium-sized community in southwestern Ontario were approached to participate in the study. The participating facilities were selected by convenience and represented most facilities that contained a SCU in this community. The average number
of beds in each SCU was 42.7. The major defining feature of the SCU for the purpose of the study was security. All units had keypad combination locks on the doors to deter unwanted egress from the unit by residents with dementia.

All unit staff except management operated within the confines of a union collective agreement. The universal bargaining premise in the collective agreements is that staff are recruited to the SCU and provided with shift assignments based on seniority. A Health Care Aid (HCA) certificate was the minimum requirement for hands-on care by staff in all facilities. The average number of staff working in the SCU during a 24-hour period is 12.5 across all facilities. An estimate of the total staff complement across the seven SCUs is 108 staff.

The instruments were pre-piloted on a convenience sample of staff who were not participating in the study, and minor modifications were made to improve readability and avoid misinterpretation of survey and questionnaire content. Survey and interview data were collected from the participant long-term care facilities. The instruments and methods of collecting data are identified in Table 1. Seven manager interviews and 62 staff surveys were completed for a return rate of 68%. Table 1 provides information on the data collection instruments.

The sources column in Table 1 cites sources of original material that stimulated ideas for content of the measures or provided the actual tool, as was the case for the Employee Empowerment Scale (EEQ). The criteria column addresses the domains considered important in the Kirkpatrick four-step model (1998) including trainee satisfaction, knowledge gained, skill transfer to task, and relationship of training to organizational goals. Overall, the evaluability assessment also served the purpose of piloting the manager and staff survey and interview questions and the Knowledge of Dementia Scale (KDS) (the EEQ has established validity and reliability data).

Findings

The manager interview data was manually concept-mapped using constructs that linked the data to each step of the training evaluation protocol. Quantitative data such as that provided by staff completion of the KDS, EEQ, and self-report survey questions were analyzed for both simple descriptive output and multi-variant rela-
tionships using stepwise multiple regression techniques. The following results presented are those that best related to issues that influenced training evaluation practices.

All facilities administered a trainee reaction form (a happy sheet) after delivery of staff development programs (Step 1, Trainee Reaction). Only 17% of staff reported their knowledge was tested (Step 2, Trainee Learning) after training, and 30% said their performance was monitored (Step 3, Behaviour Change) after training. There was no evaluation of training outcomes as they relate to organizational goals or cost effectiveness (Step 4, Results). Consequently, best practices suggested by completion of the four-step training evaluation protocols were not evident.

### Table 1

**Data Collection Instruments**

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<tr>
<th>MEASURES</th>
<th>SOURCES</th>
<th>CRITERIA</th>
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<tr>
<td>Semi-structured Interview with Management (Interviews were tape-recorded and transcribed for analysis)</td>
<td>Malott and McAiney (1995) provided some of the architecture for the interview questions.</td>
<td>SCU demographics, qualitative data on training and evaluation practices such as observed changes in task performance and organizational goals and vision for learning</td>
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<td>Staff Questionnaire (part 1) General Questions</td>
<td>Malott and McAiney, 1995; Flett and Davis, 1991; Gutman and Killam, 1989.</td>
<td>Staff demographics, training experiences and self report on training benefits</td>
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<td>Staff Questionnaire (part 2) Knowledge of Dementia Scale (KDS)</td>
<td>Dieckmann, Zarit, Zarit and Gatz, 1988; Scott, Bramble and Goodyear, 1991; Sounder, 1992 provided some domain content adapted for the new scale.</td>
<td>Baseline knowledge of dementia</td>
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<tr>
<td>Staff Questionnaire (part 3) Ministry of Health True/False</td>
<td>Ontario Ministry of Health and Ontario Ministry of Community and Social Services (1993).</td>
<td>Staff awareness of education standards and expectations as well as a minimum benchmark for training availability</td>
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<tr>
<td>Staff Questionnaire (part 4) Employee Empowerment Scale (EEQ)</td>
<td>Hayes, 1994</td>
<td>Baseline for staff attitude and organizational climate</td>
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The study demonstrates that reaction to training, knowledge acquisition, and staff self report or manager reports of observed changes in staff performance can be assessed using the tools developed. However, there was insufficient information available from managers on cost effectiveness or organizational goals to address step four of the model. The knowledge of dementia scale, as piloted in the study, demonstrated some internal consistency ($r=.72$) and criterion validity related to staff years of experience and educational background and would require re-administration after domain-related training to demonstrate changes from baseline knowledge. Self reports addressed changes in performance as a result of training. However, the manager interview data were not successful in garnering information for step four from management staff. Nevertheless, qualitative narrative data from manager interviews helped clarify barriers to applying the four-step training evaluation protocols.

The following excerpt from qualitative data furnishes an example of how reaction measures (Step 1, Trainee Reaction) can be unscientifically applied by a manager with little training in evaluation protocol.

Researcher: Were any of the training events formally evaluated?

Manager: No, I do a little mini-evaluation. I hand it out to some of the staff at each in-service and say please evaluate this but as far as a formal evaluation for research data, no.

Researcher: The evaluation you hand out, do you selectively hand it out or does everybody get an evaluation to complete?

Manager: Sometimes, if it’s just for registered staff, I will hand one or two out, but if it’s a general meeting or in-service, I will hand out enough to cover people from all disciplines in the building, so that you don’t just get one department’s view of things.

Further anecdotal evidence suggested that the reaction measures were not analysed after they were received by the manager. The minimal and selective distribution of the reaction measure makes the data suspect in terms of being representative of all trainee par-
participants. In addition, reaction measures are notorious for frequent ceiling effects suggesting that even appropriate administration and analysis of reaction data may provide non-value-added information (Corbeil, 1993).

The Knowledge of Dementia Scale (KDS) represented Step 2, Trainee learning of the training evaluation protocol, and scores discriminated between staff title (Registered Nurse, Registered Practical Nurse, and Health Care Aid), as well as years of experience, with Registered Nurses achieving the highest scores and Health Care Aids, the lowest. This type of discrimination suggests criterion validity. The scale also demonstrated internal consistency when applying Cronbach’s Alpha Coefficient ($r=.72$), suggesting the content was from a single domain (reliability), but the scale would require further testing in a pre-post evaluation design in order to determine the full utility of the measure, and this was outside of the scope of the present study.

Garnering Step 3, Behaviour Change information of the training evaluation protocol was problematic. Managers reported that outcomes were often difficult to observe. The literature review supported the managers’ perspective, suggesting that patient outcome is a prevalent staff performance indicator despite lacking utility as an indicator of staff behavioural change as a result of training (Burdick, Stuart, & Lewis, 1994; Marek, 1989; Shaw & Whelan, 1989; Sheridan, Fairchild, & Kass, 1983).

Step 4, Results information was perhaps most problematic in that the researcher witnessed a lack of management understanding of organizational learning in the context of the organizations’ culture and goals. Questions about training budgets were telling; the organizations lack aggregate data to help delineate the training function (i.e., there was no separate budgetary envelope for training). Lastly, staff role-related politics also obstructed application of new learning. The following manager’s narrative demonstrates the complexities.

Researcher: Do you think the training you are getting is cost effective?

Manager: I’m not comfortable in saying yes to that, and I’ll tell you why. Because one person goes out to a course and, if you’re a health care attendant, you talk about
empowerment. And you go out to a course and you come back with all these new ideas. How do you get other people to say this was good, this is the way we should do it? I guess part of the fault is ours. We don’t utilize that person’s knowledge when they come back from the course. I wouldn’t say they are not encouraged, but it’s pretty hard if you’re just one person working with six other people and they’re all kind of doing it the old way and we’re all doing it the new way learned at a course. They’re not the ones that have got the power to say let’s try it this way. There are a few people but they’re few and far between. You almost need someone higher up the ladder to make the change. We send HCAs out to a course and we don’t encourage them to share the information or give them the opportunity to share that because we’re so involved in something else and then it’s the next day and then it’s six weeks after they’ve been, oh well.

Researcher: Do you think the training in the last 12 months met the organization’s expectations?

Manager: We’ve reduced our managers and given a lot of the tasks to RPNs who are in the bargaining unit. Now these RPNs are supposed to function as team leaders and have all these wonderful new skills, but we have not really given them the training with which to have all these new skills. If I were to start and say next time the [name of local publication] magazine comes out about some of the programs that are going to be taking place and I want to send some of the bargaining unit people (RPNs), I’m going to have to be somewhat careful because if the RNs haven’t got that and some of the RPNs come back and say, “Well, I’ve learned this, I’d like to do this,” and if the RN does not buy in to the whole program and this one’s trying to do something, I have a worse “kerfuffle” on my hands.

There are opposing pressures on the Nurse Manager. The RPN/HCA newly ascribed task assignments require more training but this manager is resistant to empowering these front-line staff with the training. She suggests that the application of new knowledge by lower-ranked staff will not be supported by higher-ranked staff. Most
notably, new task assignments suggest a training need that, in this case, is not being met. Senge (1990) suggests a suspension of usual roles and an acceptance of each other as colleagues is essential for team learning. Moreover, Kirkpatrick (1998) suggests that it is highly unlikely that training will be transferred to task in an unsupported or discouraging environment.

CONCLUSIONS

Table 2 illustrates how the study findings relate to each step of the proposed evaluation protocol as suggested by Kirkpatrick (1998). Moreover, suggestions for strategic planning and management are made to facilitate the removal of barriers to successful training evaluation.

Table 2 depicts how the evaluability assessment has provided data on the barriers to the training evaluation four-step protocol as they relate to operational processes. The following recommendations promote these strategic ideas to ameliorate problematic processes:

- Get heuristic buy-in from management in advance of training (Camillus, 1996). This might include managers learning about evaluation practices as they relate to the training function.

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<th>Table 2</th>
<th>Barriers and Enablers to the Training Evaluation Four-Step Protocol</th>
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<td>STEPS</td>
<td>BARRIERS</td>
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<td></td>
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<tr>
<td>Step 1: Trainee Reaction</td>
<td>Evaluation Expertise is Missing</td>
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<tr>
<td>Step 2: Trainee Learning</td>
<td>Baseline Measurement is Absent</td>
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<tr>
<td>Step 3: Trainee Behaviour Change</td>
<td>Culturally Not Encouraged</td>
</tr>
<tr>
<td>Step 4: Organizational Results</td>
<td>Vision of Organizational Learning is Absent</td>
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• Use sound evaluation designs and measurement tools (Rose & Leahy, 1997). This requires keeping up with the evaluation and assessment literature.

• Consider employee incentives, recognition, and rewards to aid the transfer of training. This might include recognizing learning that occurs outside of the formal training schedule (Johncox, 1996).

• Include cost effectiveness in your repertoire of evaluation practices.

• Be plan-oriented, keeping in mind the value of training and education for individuals, groups, and the organization. Individuals who are continually deepening their personal vision hold the key to a revitalized organization (Rose & Leahy, 1997).

SUMMARY

The evaluability assessment of staff training outcomes in SCUs for persons with dementia demonstrated that assessment instruments can be developed and applied in combination with a best-practice training evaluation model to disclose valuable insights about organizational learning. The study also revealed operational processes that created barriers to the training evaluation function. Visionary strategic management that plans for organizational learning can culturally influence both front-line and management staff attitudes, learning, and behaviour so that the benefits of training can be fully realized.

REFERENCES


