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Evaluation of Continuing interprofessional Client-Centered Collaborative Practice Programs

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Chapter 11

EVALUATION OF CONTINUING INTERPROFESSIONAL CLIENT-CENTERED COLLABORATIVE PRACTICE PROGRAMS

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ABSTRACT

This chapter highlights the value of developing program evaluation approaches that focus on the merit or worth of the learning in relation to the program's perceived accuracy, utility, feasibility, and propriety. A number of approaches to creating a program evaluation plan are provided. A case is made for the application of program logic models (PLMs) to continuing interprofessional education (CIPE) program evaluation. The argument is raised about the comprehensive nature in its application of an open systems approach that allows the linking back to the reason for the program.

A case study is then provided to demonstrate how a manager can apply PLM to a performance problem to build a beginning approach in designing the learning associated with needed performance change within an interprofessional team. A discussion is then provided on how the PLM approach integrates other frameworks advocated for CIPE.

Keywords: program development, program evaluation, program logic model, open systems approach, accuracy, feasibility, proporiety

INTRODUCTION

Evaluating a continuing educational program at the post-licensure level is often considered last when developing educational programs. However, it will be argued such measurement needs to be an integral component in any program development. To understand this important area, we first must define what we mean by program evaluation. Fitzpatrick, Sanders, and Worthen (2004) suggest program evaluation is "the identification, clarification, and application of defensible criteria to determine an evaluation object's value (worth or

merit) in relation to criteria" (p. 5). They further identify four criteria: (a) *accuracy,* relating to the "extent to which the information obtained is an accurate reflection . . . with reality" (Fitzpatrick et al. 2004, p. 7); (b) *utility,* relating to the "extent to which the results serve practice information needs of intended users" (p. 7); (c) *feasibility,* related to the "extent to which the evaluation is realistic, prudent, diplomatic, and frugal" (p. 7); and (d) *propriety,* "extent to which the evaluation is done legally and ethically, protecting the rights of those involved" (p. 7).

Accuracy in the context of continuing interprofessional development (CIPD) relates to ensuring the program addresses identified problematic team performance areas as viewed by the participants. As such, how well the learning activities are designed will assist in addressing and providing, where needed, additional knowledge, skill development, or exploration of underlying attitudes that may impede a change in performance. Thus, the program, in order to be accurate, must assist participants in creating plausible connections with what current practice is and how it can be viewed by them as modifiable.

Utility of the program flows from the agreement by the participants that the team's areas of performance needing enhancement, if attended to, will change practice in a realistic and beneficial way. This means they must see that there is a personal benefit to them in relation to their time and workload improvements for the program to have utility.

Feasibility of the program relates to how well the program is designed and implemented to allow for the planned outcomes to be realized given the (a) time available, (b) setting it is to be provided in, (c) facilitator who will support the learning, (d) characteristics of the participants, and (e) activities being provided to achieve the intended outcomes. When the plan can be implemented within the above it can be considered to be feasible.

Propriety relates to how the plan for feedback, assessment of learners, and evaluation of the program itself will be carried out. The processes to be adopted need to attend to the ethical issues associated with any collection of data. Participants providing the data must be assured that measures will be taken to ensure their confidentiality is maintained unless they personally choose to identify themselves. When these conditions are present the program is deemed to have propriety.

Thus, effective program evaluation planners must be cognizant of decisions reached by the program developers (who may be the same individuals) to ensure accuracy, utility, feasibility, and propriety of the program and its evaluation. They next must then consider the approach used in designing the program to identify what to evaluate. This chapter will focus on a variety of strategies that can be used to develop a CIPE program evaluation.

PROGRAM EVALUATION

The means to develop a program evaluation is founded on the decisions made in developing the program. These decisions allow for identifiers to focus on in determining the program's capacity to meet its goals or objectives. Program feasibility provides the parameters around what learning can be supported during the allotted time. Utility of the program influences the strategies that might be employed to address the means to help participants see the need for the performance change required. To gain insight, however, necessitates helping the participants understand their current practice in the chosen topic area

and how it is impacting on their team's performance limitations. Then providing the means for the participants to think about new ways to address the identified limitation and be able to try out new strategies to create alternative approaches to overcome the limits that are currently interfering with high-quality care in the chosen topic, in a safe in-program role-play situation. The depth of learning chosen for the program may flow from a variety of suggested frameworks found in the literature, these being Freeth and Reeves' (2004) presage, process, and product framework; the Kirkpatrick–Barr's assessment of learning framework (Carpenter, Barnes, Dickson, and Wooff 2006, p. 148); Armitage, Connolly, and Pitt's (2008) principles for practice framework; and Greenfield, Nugus, Travaglia, and Braithwaite's (2010) interprofessional praxis audit framework (IPAF), to name a few.

In Freeth and Reeves' (2004) presage, process, and product approach, factors that influence how the program is developed, implemented, and outcomes assessed are related to the *presage* decision making. These include the context for the learning (what is the setting?) and the characteristics of the program developers (e.g., their expertise and topic of the program), the facilitators (who will deliver the program?), and of the learners (who will be the participants in the program?). While the *process* focuses on approaches being planned for the learning (what strategies are to be used to provide the knowledge, skills, and attitude shifts needed in the participants to determine success of the program) and finally the *product*. For example, the product could be client-centered interprofessional collaborative teamwork or a component within participants' teamwork (Freeth and Reeves, 2004, pp. 44–45). Hence the presage, process, and product framework provides both structural factors that lay a foundation of the program while also identifying the processes or learning activities that are provided that use the structural factors to assist in creating change within participants (Freeth and Reeves, 2004).

A further means used to guide program development is through the Kirkpatrick–Barr framework (Carpenter et al. 2006), which addresses the level of assessment desired through a learning program. Hence, it assists program developers to consider the level of outcome desired in the participants. Each level creates a higher level of learning outcome from the base of attitudinal reaction to learning all the way to change in patient care. It is comprised of four levels with two sub-levels. Level 1 focuses only on learners' reaction(s) to the learning, while Level 2a creates the need for a moderation in attitudes and/or perceptions among learners, while in Level 2b there is also an acquisition of knowledge and skills that influence these changes. Level 3 increases the learning outcome to result in changes in behaviors among the learners, thus necessitating a challenging of their assumptions and consideration of making changes in practice as a result. In the final Level 4 the focus is beyond the learner to 4a addressing changes in organizational practices and 4b in perceptible benefits to the recipients of learners' practice (Carpenter et al. 2006, p. 148). Thus, this framework will assist in determining what the focus on learning activities should be in the program — being designed. Hence, both of the above frameworks can be used in conjunction with each other. While the Freeth and Reeves' (2004) presage, process, and product framework allows for making decisions regarding a desired change based on the structural components available, the Kirkpatrick–Barr framework (Carpenter et al. 2006) allows the level of learning desired to be identified as well as the intended outcomes for the program. The principles for practice framework reported by Armitage et al. (2008) focuses on criteria that can be used as a checklist to ensure decisions are made related to the design and operationalization of the program. These include "effective coordination for strategy and implementation, recruitment

and selection of [learners], development of [facilitators], [program] design, delivery and management, practice learning, assessment of learning, monitoring and review, and recruitment of [facilitators]" (Armitage et al. 2008, p. 280). Thus, these principles can be applied as a checklist during both development of and evaluation of any CIPE program.

Finally, Greenfield et al.'s (2010) IPAF is an approach to address Kirkpatrick–Barr's Level 4a. Thus, the IPAF focuses on the organization in which participants are employed and how interprofessional learning and practice is currently being demonstrated. Five components are focused on the "context, culture, conduct, attitudes, and information" (Greenfield et al. 2010, p. 437). The IPAF's interesting audit framework employs an action research approach to create the case study assessment at a unit level. The IPAF may be used as a needs assessment of interprofessional practice by teams to identify their current strengths and areas for enhancement. Thus, the IPAF allows for both a needs assessment and a means to evaluate the transfer of learning from a CIPE program into practice at a team level. The assessment of this transference will be discussed more fully in Chapter 12.

While each of the above frameworks have their strengths, they do not provide an overarching means to develop, plan, implement, and evaluate CIPE programs for their accuracy, utility, feasibility, and propriety in achievement of outcomes through a comprehensive means. A number of approaches have been proposed in the literature. All of these approaches depend on the goals for the evaluation set by the requesters of the program evaluation. Given the need to focus on the impact of change in practice from the CIPE program, one approach to assessment of practice change is through the application of a PLM. PLMs employ an open-systems approach that link the reason for the program through a series of decision points believed to be required to lead to a change in performance that is expected to resolve the beginning problem that stimulated the need for the CIPE program.

Program Logic Model Evaluation Approach

A PLM is based on program theory of change, which "defines all the building blocks required to bring about a given long-term goal" (Center for Theory of Change 2013, para. 1). Another source for PLM design is Wyatt Knowlton and Phillips' (2013) approach to PLMs, which stresses the need to focus around three key questions: "Are you doing the right work? Can you make better decisions? Are you getting superior results?" (p. 12). These questions may be applied in Greenfield et al.'s (2010) IPAF case study approach, but for the purposes of this chapter discussion we will consider the approach advocated for a group change as would be expected within interprofessional client-centered collaborative teams. According to Coffman (1999), A PLM is a depiction of a set of interrelated connections comprised of: *inputs* (what are the resources you needed for the program), *activities* (learning strategies used to achieve the program goals/objectives), *outputs* (products from the program), *short-term outcomes* (changes from the program itself), *long-term outcomes* (changes observed in practice to determine the outcomes from the learning), and *impacts* (changes in previous practice based on the program).

Logic models begin with a hoped for change that will improve the current situation. Hence, the program developers must know clearly why there is a need for the change in performance and have insight into what is the current practice. Thus, the program focuses on the gap between the current and the desired. When known, the intended change in

performance achieved through the program is assumed to result in an improved outcome from what is currently present (Fitzgerald et al. 2004, p. 79). Another approach is through the application of appreciative inquiry developed by Cooperrider and Whitney (2005), in which participants are encouraged to consider what are their strengths in a given practice area and then to contemplate what their ideal practice in the area would be. The focus again for the participants is the gap between the their strengths and their desire. Learning is then focusing on actions that can be taken by the team to stretch to the desired outcome. The advantage of the appreciative inquiry approach is the focus not on the team's performance problems but on existing strengths in their practice and how to build on these to gain an envisioned higher quality than just overcoming their weak area. The learning activities set out for either approach will vary.

Some may argue other factors outside of the team's practice control may influence their current performance. These may arise from organizational policies, procedures, or controls that are beyond the program being planned and may influence the level of change that can be achieved. Therefore, it is prudent for any program evaluators to state such possibilities as a limitation to practice outcomes. That being said, the needed change providing the basis for development of the educational program and identified change (outcome) remains the focus of the program evaluation.

The foundation for any logic model is the identification of needs or problems with the current practice situation. In the past, potential participants were always invited to complete a needs assessment for their own learning. The problem with this approach is the ability for potential participants to determine whether or not they have a clear understanding of what the ideal (change) in their practice could be. Hence, one's ability to identify needs is restricted by his or her own experiential knowledge. If, for example, some of the team members are new to practicing within interprofessional teams and are unfamiliar with the interprofessional collaboration competencies, they may be unable to identify, in a needs assessment, what learning they need to be able to practice within the team.

Newer approaches to collecting performance needs use literature reviews or assessment of an aspect of practice by having potential participants to complete instruments (questionnaires) that are based on theoretical concepts associated with the area for the program. Identification of needs arise from their relevant conceptual gaps in their knowledge, skills, or attitudes based on their ratings of items associated with each concept. The ratings have a greater likelihood of helping provide a mean of needs for the total team and how they view their current ability to practice in the team as compared to competence in the items.

Generally, in CIPE, the request for a program is often made by a manager or other administrator.

Thus, the perception of the gap between actual and desired practice may not be fully shared by all the potential participants. This may set a reticence of staff members to attend the CIPE session. Using the above survey approach allows the results to be shared with the participants and often creates credibility of the results with the participants. This may allow for a greater buy-in by the participants when the results are shared with them at the beginning of the program. The program is then structured to address the weakest areas identified.

This credibility arises from the fact that the data came from them. Examples of some instruments that can be used for the above purposes are provided in Chapter 12.

Survey data obtained from questionnaires can then be used to formulate learning goals that may more effectively address needs for changes than the traditional self-reported needs

assessments. Using such approaches to gather information can provide a baseline of knowledge for shaping the program. Thus, general needs assessment may lack the above level of rigor and can fall short of helping to identify needed changes in practice. A case study will be provided to assist in demonstrating application of a program logic model (see Figure xiv) to a continuing education program.
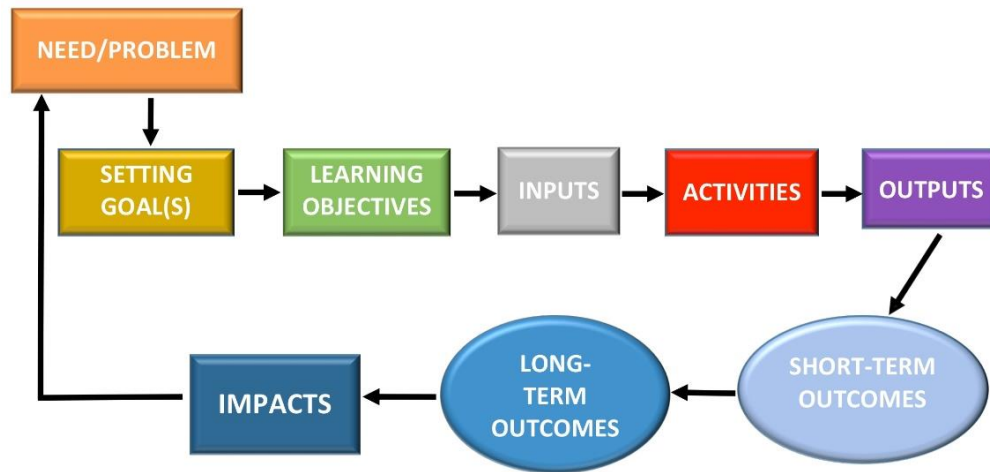

Figure xiv. Program logic model components.

CASE STUDY

Charles Sawyer is an administrator of a newly established family health team in a small rural community. The team includes two family physicians, two nurse practitioners, one registered nurse, one registered dietitian, one social worker, two receptionists, and one administrator. The intent was that the team would work collaboratively to provide client-centered care. Charles arrived in his role 1 year ago and began to hear from both staff and clients that team members often did not know what other members were communicating to their clients and the same information was often being asked of the same clients.

Charles received a report about an error in care of one of their clinic clients from the regional health board representative following a complaint from a client. An error in both the client's assessment and diagnosis had occurred. This error resulted in the client being rushed by ambulance to the referral hospital Emergency Room in heart failure. Charles received the report and then brought staff involved in the incident together to discuss what might have caused this incident and what changes need to be made to ensure such an error does not occur again. It became clear that one of the physicians had seen the client and ordered puffers to resolve a breathing problem and sent the client on her way. The client returned 2 days later to report she was no better and finding her breathing more difficult. This time one of the nurse practitioners assessed her and noted swelling in her ankles and also wet rales in her chest. She sent a note to the physician about the new findings and suggested that this client needed a cardiac workup. The physician, not having worked with this nurse practitioner before, questioned her assessment and chose to continue on the previous treatment plan. Although the

nurse practitioner tried to politely challenge this decision, her concerns were ignored. The receptionist also commented to the nurse practitioner that the client's husband had indicated to her that he did not feel the first treatment was 'right.'

Charles felt that the outcome of his findings from the case was a clear indication that the team was not employing collaborative practice, and staff input into discussions was not being valued or listened to by the physician. In this case, Charles was also concerned that the power being exerted over the nurse practitioner by the physician was resulting in ethical problems for the nurse practitioner. He had read in research studies that such situations could lead to turnover intent.

Charles began by starting to draw up a PLM to help him in determining how to address this teamwork problem. The outcome needed to be interprofessional client-centered collaborative practice with a particular focus on four interprofessional competencies: client- and family-centered care, interprofessional communications, team functioning, and interprofessional conflict resolution. He contacted the IPE office in the nearby university to seek assistance. Charles and the faculty member both agreed to consider asking the staff to complete two instruments: (a) the Interprofessional Socialization and Valuing Scale (King, Shaw, Orchard, and Miller 2010) that measures their socialization towards working interprofessionally and (b) the Assessment of Interprofessional Team Collaboration Scale (Orchard, King, Khalili, and Bezzina 2013) that measures the team's client-centered collaborative practice. Charles approached the staff to ask if they would be willing to complete these instruments. He was surprised that all staff agreed. They commented that they wanted to ensure another error in care did not occur. The outcome of this assessment identified their attitudes towards working with each other were interfering with their socialization towards wanting to work together, and their partnership with their clients and each other as well as cooperation amongst team members were also weak areas. After further consultation, the IPE expert at the university suggested that Charles and his staff pick only one area to focus on first. The staff felt that their cooperation with each other was the most important area to work on. Charles then asked staff members if they would like to help in developing the program. Two members indicated their willingness (a nurse practitioner and a family physician).

The first step in developing the PLM was to identify the change that they wanted to see in their team practice. The planning group felt they wanted to be more client and family focused, and to be valued by all team members for the knowledge, skills, and expertise they bring into care planning within the collaborative team. They also wanted to explore ways to include clients and family members more in their care. This meant that two foci would be considered:

- Goal #1: Collaborative teamwork with each other.
- Goal #2: How to include clients and family members in their care.

In the next step they needed to consider what learning objectives would be needed to achieve each goal. The learning outcomes for Goal #1 resulted in identification of seven learning objectives:

1. To gain an understanding of what constitutes interprofessional cooperative team practices.
2. To discuss how to apply cooperation to their teamwork.

3. To identify what they already do to support cooperative team practices.
4. To identify what they would like to see demonstrated in the team to support cooperative team practices.
5. To assess the gap between current cooperation in the team and what would be the ideal.
6. To determine what action they will take to overcome the gap.
7. To choose how they will assess when the ideal cooperative teamwork is demonstrated.

The planning group began with the first learning objective and considered what *inputs* (resources) they would need to be able to achieve this objective. Resources they identified included (a) literature about cooperation in team working that would identify the knowledge, skills, and attitudes needed for the team to be able to achieve the goal; (b) the clinic staff to participate in a team-building program; (c) a facilitator with expertise in teamwork cooperation to support the learning; (d) time release from providing care to deliver the program so all staff could participate; (e) a place to hold the learning sessions; (f) flip charts and markers; (g) a projector and laptop computer; (h) learning materials; and (i) data related to team cooperation from the baseline survey.

Next the planning group sought a meeting with the interprofessional expert from the university IPE office to assist in helping them to consider what *learning activities* would help to achieve their objective. The IPE expert explored with them three key areas: (a) setting principles for working with each other; (b) understanding each other's roles, knowledge, skills, and expertise; and (c) creating guidelines for communicating with each other and dealing with disagreements. Each of these areas was considered as a learning activity in the PLM. Their university colleague guided the planning group in how to develop their learning activity by exploring the first key area — setting principles for working with each other. She shared one potential strategy they could use. This strategy applies a modified nominal group process in which each staff member is asked to write down on a post-it note (using one note per idea) how they want to be treated by each other, then all staff share their ideas and post these on a flip chart. The group is encouraged to identify and eliminate duplications and have staff members rate the most important remaining items to them by using five votes each. The facilitator then adds up the votes and the top five ideas are translated into statements that reflect what the team's principles are for working with each other. The members are then encouraged to use these principles to hold each other accountable as to how they behave with each other.

Charles realized that these steps also help to identify the *outputs* for this objective, that is the development of a set of principles for working with each other and also looking at a way to track when staff have used reminders with each other about the principles. This then led the planning group considering what should be the *short-term outcomes* for this objective. Planning group members suggested development of a short checklist for staff to complete to record each time they used the principles with each other, and further they could create a simple questionnaire to rate on a 5-point ratings scale (from 1 = not at all to 5 = all the time) their perceptions of how they feel respected, listened to, and valued for their expertise. This assessment would be carried out once a year on an ongoing basis, and the results would be reported back to all staff. They then considered how to determine what the *long-term outcomes* should be. They finally came up with the idea that if staff really cooperated with

each other in the team, then no one would want to leave the team, so turnover would be one indicator. They had also heard that absenteeism should decrease and, therefore, could be assessed by Charles and reported back to the team annually as well. The planning group also noted that, since they are a relatively new team, it will be difficult to do a comparison from before their current practices in these areas, but the current figures would be used as the standard against which to assess the future rates.

Finally the *impact* of team changes in cooperating with each other could be assessed by asking their clients and family members about how well the staff members work with each other, and in supporting their care. Thus, Charles and the planning group had worked through one of activities for one of the learning objectives within one of the goals set. Their complete PLM would take more time to develop. He also knew that this was just the start of the process for transforming his clinic group into a client-centered and collaborative team.

DISCUSSION

Within the above case study the inputs equate to the presage in the Freeth and Reeves' (2004) framework, while the activities relate to Levels 2a, 2b, 3, and 4b from Kirkpatrick-Barr's assessment learning framework (Carpenter et al. 2006, p. 148).

This example also focused on several of the principles for practice advocated by Armitage et al. (2008). The location of the case also allows the impact to assist in determining an aspect of interprofessional practice associated with Greenfield et al.'s (2010) IPAF.

Hence the above discussion and example of the application of a PLM provides a means for evaluating a continuing interprofessional education program. Furthermore, the PLM for evaluating the program also meets the four criteria set out by Fitzpatrick et al. (2004): (a) *accuracy*, identifying a real problem in the practice environment provides an accurate focus for the program; (b) the program will have *utility* since the learning provided will address changes in practice needed to improve client care; (c) the program's *feasibility* will be achieved by assessing the impact of the team performance change using practical and available evidence identified by the planning group and based on team's data results; and (d) the evaluation will have *propriety,* since collection of evidence about the change is designed to solicit information without coercion from those involved either in making the change or as recipients of the change.

CONCLUSION

CIPE without attention to well-designed program evaluation limits the ability to ensure the design of the program is based on available resources, with learning activities flowing from participants' identified weaknesses in performance, and assessed against short-term evaluation of goal achievement. The transfer of learning into team practice is then evaluated as a long-term outcome that is compared with change in team performance from the reason for the CIPE program. In the next chapter the focus will shift to the assessment of the learning within each individual.

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