Consequences to Federal Programs When the Logic-Modeling Process Is Not Followed With Fidelity

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Consequences to Federal Programs When the Logic-Modeling Process Is Not Followed With Fidelity

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Abstract: The Office of Management and Budget has recommended the termination of numerous federal programs, citing a lack of program results as the primary reason for this decision. In response to this recommendation, several federal agencies have turned to logic modeling to demonstrate that programs are on the path to results accountability. However, approaches to logic modeling in some agencies have not followed the strategies that evaluators recommend as necessary to lead to a high-quality logic model. Models of poor quality are unlikely to contribute to improved program accountability or better program results. In this article, the author assesses the quality of the logic-modeling approach taken by one agency to illustrate how a flawed approach to logic modeling may lead to incorrect conclusions about programs and about the benefits of logic models. As a result of this analysis, the author questions the conditions under which capacity building should be considered and whether the field of evaluation needs to be more judicious when mainstreaming methodologies.

Keywords: *evaluation; federal programs; logic model*

In the 2005 State of the Union address, President Bush stated,

> America's prosperity requires restraining the spending appetite of the federal government. I welcome the bipartisan enthusiasm for spending discipline. I will send you a budget that holds the growth of discretionary spending below inflation, makes tax relief permanent, and stays on track to cut the deficit in half by 2009. My budget substantially reduces or eliminates more than 150 government programs that are not getting results, or duplicate current efforts, or do not fulfill essential priorities. The principle here is clear: Taxpayer dollars must be spent wisely, or not at all.

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As a part of the Bush administration's budget reconciliation process, federal programs are to undergo extensive review to determine which programs will receive appropriations and which will be phased out. As Bush warned, those programs that cannot be held to account for good performance will be reduced or eliminated. One major factor in deciding which programs to cut is how they score on the Performance Assessment Rating Tool (PART) (Office of Management and Budget, 2004b). The Office of Management and Budget (OMB) uses the PART to score programs in the following four areas: purpose and design, strategic planning, program results and accountability, and program management. A series of questions is used to operationally define and rate each area. Purpose and design focus on matters such as whether a program addresses a specific need and the extent to which it is redundant with other federal, state, or local programs. Strategic planning concerns whether a program has clear long-term outcomes that reflect the purpose of the program and a reasonable strategy to assess performance, including baseline and annual measures. Program management scores are based on items such as whether data are collected to inform ongoing program refinements and monitor how funds are spent. Finally, program results items focus on things such as whether a program is meeting its goal and is cost effective (Office of Management and Budget, 2005). On the basis of their PART scores, programs are classified as effective, moderately effective, adequate, ineffective, or results not demonstrated (Office of Management and Budget, 2006). Obviously, programs scoring in the latter two categories are prime targets for funding termination.

In response to the impending threat of funding termination, many federal programs (e.g., Area Health Educations Centers [AHEC], Health Careers Opportunity Program, Maternal and Child Health) have turned to logic modeling to demonstrate that they are responsive to the criticisms leveled against them and take a proactive approach to resolve their shortcomings. Logic modeling provides a mechanism to ensure that the important dots between underlying assumptions, strategies, and outcomes are meaningfully connected (Gale, Loux, & Coburn, 2006). The inference, of course, is that if these critical elements are in fact logically connected, the likelihood of demonstrating program results and accountability will improve and be reflected in the PART score. However, for this to hold true, the logic-modeling process must be done well enough to produce a high-quality and useful product. If the logic-modeling process is poorly carried out, then the likelihood of a model leading to improvements in program accountability can be reasoned to be negligible. There are at least two undesirable consequences that may result from a poorly conducted logic-modeling process. First, federal agencies may erroneously conclude that logic modeling is an ineffective methodology. The second consequence may be that programs that have the potential to become effective are terminated prematurely because they were unable to capitalize on the benefits that logic modeling can confer.

In this article, I assess the quality of a logic-modeling process executed by the Bureau of Health Professions (BHPr). I was directly involved with the BHPr initiative to incorporate logic models in response to the impending threat of funding termination and therefore had a bird's-eye view of how parts of the process proceeded. I compare the logic-modeling approach implemented by the BHPr to a logic-modeling process I developed, the ATM (antecedent, target, measurement) approach. I then argue that federal programs are unlikely to improve if logic modeling is approached as it was by the BHPr.

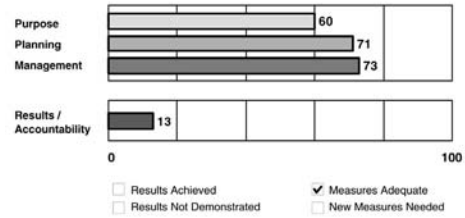
The BHPr

Health professions programs are part of the Title VII mandate to address the shortage of health care professionals in rural and underserved areas. Forty-two federally funded health

Figure 1
The Performance Assessment Rating Tool Assessment for the Bureau of Health Professions Programs

Program: *Health Professions*

Agency: *Department of Health and Human Services*
Bureau: *Health Resources and Services Administration*



☐ Results Achieved ☑ Measures Adequate
☐ Results Not Demonstrated ☐ New Measures Needed

Key Performance Measures	*Year*	*Target*	*Actual*
Long-term Measure: Proportion of persons who have a specific source of reliable, continuing healthcare (New measure)	1999		84%
	2000		85%
	2001		86%
	2010	96%	
Long-term Measure: Proportion of health professionals completing funded programs that are serving in medically underserved communities (These communities have too few primary care physicians, higher infant mortality rates, lower family incomes and often an older population.) (New measure)	2010	40%	
Annual Measure: Proportion of health professionals completing Health Professions funded programs who are underrepresented minorities and/or from disadvantaged backgrounds (New measure)	2004	40%	

Rating: *Ineffective*

Program Type: *Competitive Grants*

Program Summary:

The Health Professions program provides grants to academic institutions to help meet the costs of training and educating students as nurses, doctors, dentists and other health professionals and provides additional support to minority and low income students and faculty.

The assessment found:
1. There is disagreement regarding the purpose of the program and a clear and focused purpose is not found in the authorizing legislation, external views and program documents. For example, the agency believes the purpose is to address the failure of the market to distribute health providers to all areas of the country and to serve all population groups. Others believe the purpose is primarily to help rural areas or to subsidize schools.
2. While the program is managed well overall, it has not regularly used performance data to improve program outcomes. The General Accounting Office noted in 1997 that effectiveness has not been shown and the impact will be difficult to measure without common goals, outcome measures, and reporting. The program has adopted new performance benchmarks, but lacks data to demonstrate progress.
3. Outcome data on some program activities are available and indicate the impact of the program may be limited. One study found only 1.5% of physicians trained by institutions receiving a family medicine training grant between 1978 and 1993 provide health care in areas with a shortage of physicians, compared to 1.1% of physicians trained by institutions not funded by the program.
4. An expert panel convened by George Mason University in 2002 recommended an increased emphasis on agency activities to support and promote basic nursing.

In response to these findings, the Administration:
1. Proposes to continue the phase-out of most health professions grants consistent with the 2003 Budget and direct resources to activities that are more capable of placing health care providers in medically underserved communities.
2. Proposes to redirect $34 million from advanced education nursing to basic nursing activities, including $12 million to the Nursing Education Loan Repayment program for loan repayment awards and newly authorized scholarships to increase the supply of practicing nurses.

Program Funding Level (in millions of dollars)

2002 Actual	2003 Estimate	2004 Estimate
378	95	82

professions programs are under the jurisdiction of the BHPr, which is within the Health Resources and Services Administration (HRSA) in the U.S. Department of Health and Human Services.

The funding problems for health professions programs have been ongoing for many decades. Most of the recent administrations, regardless of political party, have not included various Title VII programs in their budgets; instead, the congressional appropriations committee reinstates the funding. This process has been costly to program recipients in the forms of time, energy, stress, and even funds. The funding problem reached a pinnacle with the 2002 release of the OMB report regarding BHPr programs. Using the PART, OMB concluded that within the BHPr, disagreement existed regarding the purposes of programs, the failure to use performance data to improve program outcomes, and the limited impacts of some programs on the basis of outcome data available (Office of Management and Budget, 2004a). The actual PART report is shown in Figure 1. On the basis of these findings, the "administration proposes to continue the phase-out of most health professions grants consistent with the 2003 Budget and to direct resources to activities that are more capable of placing health care providers in medically underserved communities" (p. 127).

In response to the pressure of OMB's recommendation, the BHPr engaged in a logic-modeling process designed to develop better performance measures and to more clearly delineate the relationship between program-specific, bureau-level (also called Core measures), and national performance measures (Health Resources and Services Administration,

2005). I had direct experience with this process by working with the BHPr HRSA National Performance Measures Working Group, chairing the National AHEC Committee on Research and Evaluation, contributing to program publications, and through several workshops and presentations on the logic-modeling process to BHPr officials and program constituents (Huntington & Renger, 2003; Renger, 2003a, 2003b, 2003c, 2005a, 2005b, 2005c, 2005d). Thus, my assessment of the process is informed by firsthand observation, as well as access to documents associated with the process. Before describing the logic-modeling process used by BHPr, the logic-modeling approach used as a standard of comparison in the current article is presented.

The ATM Approach to Logic Modeling

Numerous logic-modeling approaches have been published in the evaluation and popular literature (e.g., den Hayer, 2002; Goertzen, Fahlman, Hampton, & Jeffery, 2003; Kellogg Foundation, 2001; McLaughlin & Jordan, 1999; Millar, Simeone, & Carnevale, 2001; United Way of America, 1996). The ATM approach (Renger & Titcomb, 2002) was chosen because it is the approach with which I am most familiar and is typical of approaches in the literature. Additionally, I favor the approach because it clearly specifies how a logic-modeling process ought to proceed and integrates evidence-based knowledge into the process of thinking through the logic of programs.

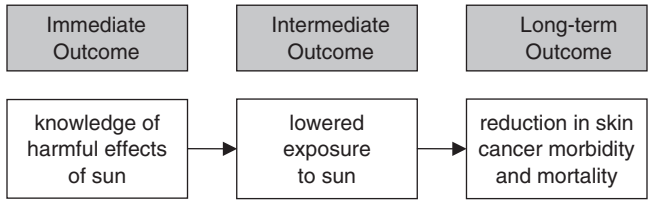
As with most logic-modeling methodologies, the ATM approach begins by defining the problem of interest. Most problems are influenced by behavioral, environmental, social, and biological conditions; these factors, or *antecedent conditions*, must be identified and understood to focus intervention efforts (Green & Kreuter, 1999). The ATM approach uses interviews with individuals who have content expertise in the area of a problem to identify antecedent conditions. Each expert is interviewed individually and is asked a series of questions using the format "Why does this condition occur?" Throughout each interview, a visual map of the relationships of antecedent conditions to the problem and to other antecedent conditions is developed. These maps are then integrated into a single map summarizing all the interviewees' descriptions of the antecedent conditions. The purpose of the resulting visual map is to illustrate the relationships between problems and their causes; this visual representation of the problem allows decision makers to best understand where program efforts should be focused.

A review of the literature provides documentation to determine the extent to which the interrelationships between antecedent conditions and the linkages between antecedent conditions and a problem can be supported by research. In those rare instances in which no supporting evidence is found, the expert interviewees are contacted to determine if they are aware of any supporting evidence and, if not, whether the antecedent conditions should remain in the evolving visual map. This step ensures that the program is based on solid research, not anecdotal evidence.

The visual map produced, depicting in some cases as many as 80 antecedent conditions, can be overwhelming. Clearly, even a collaborative does not have the resources and expertise to address all the identified antecedent conditions. Agencies complete a systematic prioritization process to identify those antecedent conditions on which a program might focus. This prioritization approach allows for the engagement of stakeholders to begin identifying those outcomes held important to the agency or coalition (Renger & Bourdeau, 2004). Renger and Bourdeau (2004) published a more detailed description of the prioritization process, which is described using the theory of values inquiry.

At this point, agencies can begin brainstorming potential strategies to target the prioritized antecedent conditions. As agencies decide on specific program strategies, they are challenged to (a) explain which of the prioritized antecedent conditions proposed program strategies

Figure 2
Comparing Immediate, Intermediate, and Long-Term Outcomes



target, (b) explain how the proposed strategies are hypothesized to produce change in the prioritized antecedent conditions, and (c) provide detailed written documentation in the form of implementation protocols.

Making an impact on antecedent conditions and changing the outcome are central to assessing the merit and worth (i.e., the impact and outcome) of a program (Mark, Henry, & Julnes, 2000; Renger & Bourdeau, 2004). Because the visual map produced in the first step depicts the relationships among antecedent conditions, it is relatively straightforward to define immediate, intermediate, and long-term outcomes (see Figure 2). Antecedent conditions earlier in a sequence become the immediate outcomes (e.g., lack of knowledge of harmful effects of the sun), while antecedent conditions in the middle become the intermediate outcomes (e.g., sun exposure). All the antecedent conditions eventually relate to some long-term outcomes, which are usually related to solving the problem of interest (e.g., skin cancer).

Once the outcomes have been identified, a logic model table is completed that summarizes the key elements of the process. The table includes the conditions being targeted (sometimes referred to as program assumptions), a brief description of the activity designed to affect the conditions, and the immediate, intermediate, and long-term outcomes. It is important to note that the logic model table is created after the process and is simply a summary. Since its publication, the ATM approach has been used in a variety of contexts, and many lessons have been learned in its application (Renger & Hurley, 2006). The reader is referred to Renger and Hurley (2006) for a discussion of the limitations of the ATM approach.

The BHPr Logic-Modeling Process

The logic-modeling process completed by BHPr began by asking each of the 42 programs to generate a logic model summary table. To accomplish this, bureau staff members were assigned to develop a draft logic model summary table and to present the table to the program grantees for feedback. These one-page summary tables contained the following elements: program goal, problem statement, key strategies, program outputs, program outcomes, and performance measures. Although feedback related to all elements of the logic model was welcomed, requests for input centered primarily on what were termed program-specific measures. It is important to note that the context for discussion of program-specific measures occurred independently of any discussion regarding program activities. The question was simply, "What types of measures do you [the grantees] feel reflect the work you do?" The program-specific measures are directly related to the activities of individual programs and "were designed to capture the unique accomplishments of each BHPr program" (Health Resources and Services Administration, 2005, p. 4). On a continuum from immediate to long-term, program-specific measures are more immediate.

Table 1
Comparing the Logic-Modeling Approaches: Theory Versus Practice

Step	ATM Logic-Modeling Process	BHPr Logic-Modeling Process	Impact of Skipping Step on Possibility of Improving Program Effectiveness
1	Consult experts to develop underlying rationale.	Not done	The scope of possible issues affecting workforce shortage may not be understood. Important issues may be missed.
2	Support evolving underlying rationale with research.	Not done	Programs may not be based on research evidence. In the absence of research evidence, it is simply hit or miss as to whether what a program is trying to change is in fact important to affecting the problem.
3	Prioritize antecedent conditions.	Not done	Individual programs are left to decide what to target. Disjointed effort toward affecting change in a common goal.
4	Develop programs to target antecedent conditions.	Legislated activities remain fixed.	Activities generally do not target antecedent conditions. Change may be observed in the things being measured by individual programs, but these may not relate to changing the outcome.
5	Define outcomes.	Program-specific, Core, and national measures defined independently	No logical relationship between immediate, intermediate, and long-term outcomes. Data may be gathered that is easy to collect rather than appropriate to collect.
6	Create logic model summary table.	Created first	Elements in the table may not link "logically".

Note: ATM = antecedent, target, measurement; BHPr = Bureau of Health Professions; Core = PLS. DEFINE.

The logic-modeling process also centered on identifying Core and national performance measures. The Core measures "summarize accomplishments in areas common to many BHPr programs" (Health Resources and Services Administration, 2005, p. 4). Core measures are more intermediate and are designed to assess changes in primary care and public health services. It is further reasoned that such changes will lead to improving the health status of the nation. I was not directly involved in generating Core measures and so am unable to comment on the exact process by which these came to be defined.

National performance measures indicate whether changes in the health status of the nation are realized and are the responsibility of HRSA to collect rather than individual grantees. A national working group of experts was convened to assist in defining the national performance measures. On the continuum of outcomes, national performance measures are quite distal. The national working group met on several occasions; initial conversations centered on whether change could be observed in distal outcomes that depended on so many factors outside the control of HRSA initiative. Despite these concerns, HRSA officials requested that such performance measures be defined, with which the working group complied.

Comparing Logic-Modeling Approaches: BHPr Versus ATM

Table 1 provides a summary comparing the BHPr approach to logic modeling with the ATM approach. The six steps of the ATM approach are listed in the left-hand column. The extent to which BHPr followed the approach is described in the neighboring column, followed

by a brief summary of the impact on improving program effectiveness. Each of these steps is now discussed in greater detail.

Step 1: Make the Underlying Rationale (Program Theory) Explicit

I was unable to locate in any of the BHPr documentation (e.g., requests for proposals, notices of funding availability) references to the logic or underlying theory of their supported programs. There were indirect references to the underlying theory embedded in the goal statements and some of the stated objectives, but I could find no specific statement about what was being targeted for change and why.

Ensuring that the underlying rationale or program theory is made explicit is of utmost importance (McLaughlin & Jordan, 1999, Renger & Tictomb, 2002). The underlying theory forms the foundation on which to build a meaningful program and an evaluation plan (Chen & Rossi, 1983; Weiss, 1997). Program theory not only describes the conditions affecting the problem and how these conditions are interrelated but gives structure to the planning process by identifying program content most likely to facilitate change (Chen, 1989; Renger & Titcomb, 2002). The underlying program theory makes clear what conditions are most likely to lead to desired outcomes and why. Knowing the program theory is essential to ensuring that (a) objectives are related to the conditions being targeted, (b) program content is linked to the objectives, and (c) the measurement tools selected assess the conditions being targeted for change. If content is not aligned with the objectives, then the likelihood of observing change is small. Similarly, if the measurement tools do not assess the conditions targeted in the objectives, program success cannot be demonstrated. Programs that lack theory-based planning processes have little likelihood of success at achieving program goals and objectives (Weiss, 1997).

As previously noted, the ATM approach recommends that experts in a given subject matter be interviewed to create the underlying rationale. This is deliberate, because it allows the underlying rationale to be established relatively quickly and cost effectively, as well as creating buy-in. The BHPr did include several subject matter experts in the logic-modeling process, but these experts were used to define outcomes (see Step 5 below) rather than to establish the underlying rationale. BHPr resources were devoted to deciding what to do rather than understanding why to do it.

Step 2: Support the Evolving Underlying Rationale With Research

The BHPr programs, like many federal programs, are primarily service oriented. As such, they should be founded on solid research evidence so that program activities are based on reliable methods in accomplishing social change. In only a few instances was I able to find parenthetical references in the BHPr literature to research evidence justifying the implementation of legislated activities. For example, in the AHEC legislation, there is reference to professional isolation as a reason why health professionals choose not to practice in rural settings (Azer, Simmons, & Elliott, 2001; Xu & Veloski, 1998). However, it is more generally the case that there is a paucity of such explanation.

There are several consequences of not ensuring and/or providing the research evidence for the underlying rationale. First, it creates confusion for those implementing a program as to whether they must gather evaluation data to assist in decision making (i.e., a service program), knowledge development (i.e., a research program), or both (Mark et al., 2000). Being clear as to whether a program is service or research oriented has a significant impact on the evaluation plan and funding allocations. For example, in a service program, process evaluation is instituted to assist with ongoing refinements. Making changes to protocols to assist delivery is perfectly acceptable in a service program, whereas changing protocols midstream is a

questionable practice in a program of research. Also, knowing whether immediate and intermediate objectives were met (i.e., the impact evaluation) will assist program staff members in deciding whether course content and/or activities need to be altered. A lack of clarity about the purpose of a program, amplified by the failure to explicitly cite research evidence for the program, can result in an unnecessary drain of resources. For programs under severe budget restraints, like those with the BHPr, this means funds that are desperately needed to improve the likelihood of demonstrating an impact (e.g., implementation, content improvement) are being depleted and diverted to gather evaluation data for an unnecessary research agenda.

Second, and perhaps the most important reason for requiring that service programs be based on solid research evidence, is the assurance that program activities are in fact targeting conditions that will produce desired outcomes. It is often the case that the funding cycles of service programs are of insufficient duration to track long-term outcomes. Thus, it is necessary to demonstrate that changes in more immediate outcomes (e.g., information about the harmful effects of smoking), will lead to changes in intermediate outcomes (e.g., smoking cessation), which will ultimately lead to changes in long-term outcomes (e.g., reduction in cancer morbidity and mortality). In the absence of an explicitly stated program theory, it is uncertain whether the legislated activities target conditions necessary to produce changes in the problem of interest. This may partially explain why there has been no discernable change in the shortage of workforce professionals in the past two decades (Office of Management and Budget, 2004a).

Because developing program theory grounded in research can be a time-consuming and arduous task, it is easy to forgo making this initial investment. However, despite being a resource-intensive task, it is critical because "everything which follows depends on how well the project is initially conceptualized" (Trochim, 1989, p. 1). Simply put, you get out what you put in.

The BHPr's attempt to use front-line staff members and legislative language as a first attempt to make the program theory explicit is not uncommon and an excellent first step to improving accountability. However, it is the ability to explicitly provide the underlying program theory that is necessary in impressing the PART examiners.

Step 3: Prioritize Antecedent Conditions

As noted earlier, the mapping process results in myriad conditions that are beyond the scope of any single funding initiative to address. The program evaluation standards are clear in the need to engage stakeholders to identify outcomes held important to the agency or coalition (Joint Committee on Standards for Educational Evaluation, 1994). Thus, it is important to include decision makers in the process of deciding which antecedent conditions should be targeted and which agencies should target them. Prioritization ensures that antecedent conditions are targeted by the appropriate agencies with enough capability to produce change in a condition. Although more than one agency may address a given antecedent condition, this step also guarantees that an overduplication of services does not exist.

The BHPr did not engage in a prioritization process. As a result, there was an uncoordinated effort between the 42 BHPr programs. Some of the programs targeted immediate conditions of less importance rather than observing change in long-term outcomes, whereas others targeted conditions completely unrelated to the problems. This made it virtually impossible to combine information from across program sites to arrive at overall conclusions regarding effectiveness.

Perhaps most important, the prioritization process would enable the BHPr to realize that its coalition of programs targets only a small subset of the conditions that affect the workforce shortage problem. Knowing this would help the BHPr understand that there are numerous antecedent conditions affecting the workforce shortage problem (i.e., the long-term outcome), which the BHPr had little or no control to change, such as the low socioeconomic status of rural areas (Huntington & Renger, 2003). Consequently, the likelihood of observing change in the long-term

outcome on the basis of the efforts of BHPr alone is remote. Once again, this may help explain why the BHPr has been unable to demonstrate any change in the shortage of health professionals. It also brings further into question the utility of defining additional national performance measures (see Step 5 below), which are even further out of the immediate control of BHPr to change.

Step 4: Develop Programs to Target Antecedent Conditions

It is essential that the program content (i.e., activities or strategies) be linked to the objectives (Chen, 1989; Chen & Rossi, 1983; Weiss, 1997). If it is not, there is little likelihood of meeting the objectives (Weiss, 1997). The failure to link content to the underlying rationale has been termed an activity trap (Renger & Titcomb, 2002; Spath, 2003). Activity traps are well-intended activities that appear to address particular problems but on closer inspection do not address any of the conditions (e.g., barriers, risk factors, antecedent conditions, behavioral factors, or environmental factors) that underlie the problems (Renger & Titcomb, 2002). Activity traps become apparent in the logic-modeling process when the relationship between proposed activities and the underlying conditions of a problem are established. The BHPr did not engage in this linking exercise. Instead, legislated activities remained unchanged. Thus, it is likely that many of the legislated activities will not relate to changing immediate conditions that are essential to producing long-term changes.

The problem of activity traps can be illustrated using a common legislated activity in the health professions domain: rural rotations. The rationale for rural rotations is that health professions students will choose to practice in rural areas because they have had an opportunity to experience this environment. There is some evidence (Lynch et al., 2001) that rotations can be effective. However, the problem is that the known research regarding the reasons why students choose not to practice in rural areas has not been integrated into the legislative language directing these programs. Factors such as employment opportunities for spouses, the quality of schools for children, autonomy, and so forth, are all key factors in the decision whether to practice in a rural setting (Azer et al., 2001; Xu & Veloski, 1998). Despite the availability of such research evidence, it is absent in the BHPr documentation and does not shape the activities. As such, the majority of rotations remain focused on simply providing clinical skills. Across all programs, there is a dearth of structured activities (after clinical hours) specifically designed to shape the perceptions of working in rural settings and ultimately the decision of where to establish a practice. As a result, rural rotations continue to be an activity trap because essentially no activities are included to address the underlying reasons why students choose not to establish practices in rural areas.

It is reasonable to assume that the logic-modeling process may have revealed that some of the original assumptions underpinning the current legislation were either lacking or invalid. Therefore, to include these new assumptions may have required amending funding legislation, a potentially daunting task. However, many of the current legislated activities could be transitioned to focus interventions without significant rewrites to legislation. For example, including structured activities, such as visits by the chamber of commerce, meetings with the local school principal and teachers, and so forth, could be included as part of the rural rotation experience to address issues known to affect a student's decision to practice in a rural setting. The key to this transition requires that the underlying issues be made explicit (see Steps 1 and 2 above), so that grantees are forced to provide plans to address these conditions and measures to evaluate change in these targeted conditions are collected.

Step 5: Define Outcomes

As discussed above, defining immediate, intermediate, and long-term outcomes is relatively simple with the ATM approach, because they are derived directly from the underlying

rationale. Prioritized conditions at the beginning of a sequence are the immediate outcomes, those in the middle are the intermediate outcomes, and those at the end are the long-term outcomes. It is important to note that through the logic-modeling process, each tier of outcomes is easy to define, and there is assurance that they are in fact related to one another.

With regard to BPHr, the process of defining the three tiers of performance measures (i.e., program specific, Core, and national) occurred independently. One consequence of developing these different levels of outcome measures independently is that there is no logical connection between them. There exists no underlying rationale that states changing immediate conditions will influence the change of long-term conditions. Therefore, changes observed at one level may not necessarily result in changes at another level.

The lack of an underlying program rationale limits the ability to clearly define the immediate, intermediate, and long-term outcomes. Therefore, in the absence of clearly defined outcomes, it is easier to stray from the difficult task of identifying measures appropriate for assessing change in immediate, intermediate, and long-term outcomes and opt to gather data that are relatively easy (i.e., available) to collect. This may also help explain OMB's (2004a) conclusion that the BHPr is ineffective. That is, in completing the PART report, the OMB relies on annual data provided by HRSA. HRSA requests this information from its respective offices, in this case the BHPr, which in turn requires program recipients to collect and report to them quarterly and annually. The data relate primarily to describing the nature of the program and its participants and can be characterized as oversight and compliance (Mark et al., 2000). Examples of oversight and compliance data include the ethnicity, gender, and economic status of participants, as well as the number of events sponsored. To draw conclusions about a program's effectiveness, as is done in the OMB report, data are needed that evaluate changes to targeted antecedent conditions. This is defined as an evaluation of merit and worth, or impact (Mark et al., 2000). Merit and worth evaluations signal the effectiveness of a program in making a difference in the lives of the participants as a result of program participation. The problem is that OMB draws conclusions about the impact a program has on the lives of participants and society from oversight and compliance data. Simply put, it is impossible to judge the difference programs made in the lives of participants from data that simply describe the nature of the program and its participants.

Step 6: Create a Logic Model Summary Table

BHPr staff members were assigned to develop a logic model for each of the 42 programs and were not asked systematically link the necessary elements (e.g., activities; immediate, intermediate, and long-term outcomes) found in most logic models together. Staff members essentially completed their assigned task by placing legislative language in a logic model summary table. Herein lies a major problem, in that although the BHPr had a logic model summary table for each program, these did not reflect the outcome of a process of systematically identifying the conditions that are associated with the problem of interest, linking intervention activities to these underlying conditions, and identifying outcomes that are related to these conditions, so the components of the logic models were typically not rationally and meaningfully linked together.

Summary

Although the BHPr developed several logic models, this article shows that the agency did not use the logic-modeling process to its best advantage and failed to observe best practices in creating these models. If logic models were to form the basis for rescuing these programs

from elimination, it seems to me that the approach to logic modeling taken by BHPr provides an unlikely source of salvation for these programs. It is my hope that this article will motivate those who are in control of the BHPr programs to redo the logic-modeling process to a better end. Logic modeling can be a valuable tool, if done well.

From an evaluation perspective, the results of this analysis raise several important questions for our field. One question relates to the limits and conditions under which evaluators should engage in capacity building. In the current context, the agency simply did not have the resources and time to develop the capacity necessary to complete a quality logic-modeling approach. In this instance, when the agency faced these constraints, it chose to assign staff members with little or no evaluation expertise the task of completing logic models. Despite their best intentions, these staff members did not posses the experience or expertise to conduct a quality evaluation, making the likelihood of achieving better program results even more remote. Because capacity building was not an option, the agency might have considered hiring an external evaluator. The dilemma of course is that the agency did not have the resources to hire an external evaluator either. This example yet again points to the importance of integrating evaluation in the planning process.

Another question that is raised from this work is the extent to which evaluation methodology should be mainstreamed. For a trained evaluator, logic modeling is a relatively simple and useful tool. When all the steps are followed, logic modeling can be completed efficiently and at minimal cost. However, if steps are not followed correctly or are bypassed all together, the result is more costly and often of lower quality. Publications such as those by the United Way of America (1996) and the Kellogg Foundation (2001) attempt to simplify the logic-modeling methodology so that agencies with minimal resources and expertise can still benefit from the process. However, an argument can be made that the context of each agency is unique and presents challenges that may require adaptation of the process. Adaptation requires a deeper understanding of the purposes of evaluation and methods. Perhaps in some instances, as illustrated in this article, it is not in the best interest of agencies to follow mainstream publications. To quote an old adage, a little knowledge is a dangerous thing. Other fields, such as psychology, are careful in not allowing the public at large access to their methodologies and assessment tools. For example, only licensed psychologists can administer the Minnesota Multiphasic Personality Inventory and other inventories. Perhaps the field of evaluation should more closely examine the extent to which it freely provides its assessment methods to the public. Perhaps the field should exert more control over the application and delivery of its methodologies to improve the likelihood of producing quality evaluations. Failing to do so could undermine the credibility and integrity of the field.

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