Overview

Producing leaders is seen as one of the hallmarks of successful MCH interdisciplinary programs. For these programs to achieve such success, it will be crucial that they have a shared understanding of leadership in this context: what contributes to leadership and how it develops, how leadership and its development can be measured, and how to provide effective, evaluative feedback that tracks the development of leadership.

The following analysis was prepared using the MCH Interdisciplinary Leadership Profiles provided by the MCHB. The overarching goal of this narrative analysis was to contribute to the process of developing the requisite shared understanding of leadership by approaching the task from the interdisciplinary program directors' point of view and understanding the ways in which they identified and described leadership. As a part of their Annual Progress Report, program directors wrote narrative information – leadership profiles – about exemplary faculty and former trainee leaders and also wrote narratives describing the state of leadership in their programs in 2003. These narratives provided a wealth of information and, in many instances, told wonderful stories about the activities of MCH program graduates and faculty. The task in this analysis was to take advantage of the richness inherent in these narratives, using a standard lens through which to view the information, with the goal of understanding the commonalities in the ways in which program directors identified and described leadership in action.

Leadership Narratives

In their 2003 reports, program directors were requested to provide the MCHB with information on exemplary faculty and former trainees (graduates) of their programs, as well as with information on general aspects of leadership in their programs. The request for the leadership profiles, or narratives, was open-ended. There were no checklists of activities from which to choose. The Progress Report Guidance provided brief instructions about what to include or not include in the profiles. As a result, the leadership narratives from 2003 varied widely in style and content, with each program director imposing his or her own sense of importance, style, and structure on the reports. At one extreme, several narratives consisted of single sentences, such as, "_____ was a member of the _____ Advisory Committee." At the other extreme, many narratives were several paragraphs in length, containing more than 500 words.

In some cases, a former trainee or faculty member's activities were sparely listed. In other cases, the narratives elaborated a richness of context that went beyond the mere listing of activities. For example, several narratives described the leadership activities in which a trainee engaged during training, such as founding an interest group, and then provided an update on activities since that time. In other narratives, a description of a trainee's research during training served as a springboard for later reporting that work as published research. In essence, this type of narrative tells a story. The variety of styles of narratives – from single sentences to stories – combined with the need for a standard lens through which to view the materials, meant that a number of decisions needed to be made about optimal ways to deal with the data. These decisions are described later in the methods section that follows.

Methods of Analysis

Basic Coding

Each MCH narrative was sorted by program type, program site, and whether the individual described was a former trainee or a current faculty member. Two researchers independently read each narrative.

Former trainee narratives were considered as a group, as were faculty narratives. On reading the narratives in each group, the researchers looked for words and phrases that described leadership activities and behaviors. In some cases the descriptor were nouns, describing a position such as Associate Professor, member, or director. In many other instances, the descriptors were action verbs, such as teaching, designing, developing, or presenting. In each instance, the researchers clustered the descriptors into categories that would be broad enough to contain a class of similar activities or behaviors but narrow enough to differentiate the class from another. For example, designations of faculty as Assistant Professor, Associate Professor, and Professor were clustered together as 'being on an academic track.' Similarly, descriptions of programs, projects, or curricula that were designed or developed by the individual were clustered as 'curriculum, project, or program development.' When both the former trainee and the faculty groups of narratives had been read and coded using this process, categories initially appearing in one group of narratives, but not the other, were collected together into a single set of uniform categories and then were applied to both sets of narratives. All of the narratives were then read and coded a second time. For example, the concept of 'collaboration' as a descriptor of leadership did not emerge in the first reading of the former trainee narratives. After this concept was identified in the faculty narratives, all the narratives were read again, looking for evidence of collaboration in both faculty and trainee reports. Similarly, the descriptor 'involved in advocacy' did not emerge in the first reading of the faculty narratives. Following its identification in the former trainee narratives, all narratives were read again, looking for evidence of involvement in advocacy.

Coding Decisions and Rules

In narrative coding, there are a number of important decisions to be made about how best to capture the richness of the information. An early question was about how to identify and conceptualize leadership in the context of the narratives. Program directors described leadership mainly in terms of behaviors and activities, many of which were based on evidence. Examples of such statements were, "He has authored or co-authored 11 articles in peer reviewed journals.," and, "_____received the _____ Professional Award last year." It was straightforward to categorize or code the first statement as 'participating in publication' and the second statement as 'receiving an award.' However, on occasion narratives contained statements such as, "_____has excelled in all areas of professional leadership." This type of statement was more problematic; it was subjective and, if not followed by one or more examples, contained no supporting evidence. The coding rule used was to code information based strictly on the evidence provided in the narratives. Thus, a subjective statement such as the above example was not categorized since it would violate this rule.

A related question considered was about how literal the researchers should be in approaching the task. Consider an example where a former trainee or faculty member was cited as holding an office in a professional organization. This was a common finding in the narratives. However, citing the individual as simply holding membership in the organization was far less common. A literal coding would code holding an office as 'leadership in an organization', but would not code it as 'membership in an organization.'. On the other hand, one could *infer* that it is unlikely that an individual would hold an office in an organization without being a member and, thus, one could infer membership in the organization and code the activity as such.. A problem with such an inference, however, is that it is difficult to make a coding rule that works well in all narratives. If it is reasonable to infer membership as a prerequisite to leadership, how far is it reasonable to go in making such inferences? Can it be inferred that an individual has published articles and served as a reviewer for a journal before becoming a journal editor? If so, should those activities be coded for an individual who is cited as editing a journal? Similarly, an academic career path is usually coupled with curriculum or project development, publications, presentations, or research funding. If a narrative describes a faculty member as being a Professor, can it be inferred that she or he has participated in some or all of the associated activities if the activities are not listed? Which ones? The decision rule the researchers used was to rely solely on the evidence provided, taking the information provided in the narratives literally. Thus, the program directors' notions of what should be included in the narratives provided the only source of information considered in the coding. We believe such a decision leads to the most stable and replicable findings

A third question was whether to code every instance of an activity or behavior mentioned in the narratives or once the activity or behavior was identified, to simply mark it as present in that narrative. For example, Consider the statement, "_____has received the _____ Award, the _____ Award, the _____Award and the _____ Award." One could code each award won, which would result in four mentions of the activity 'received an award' or one could code the activity as present, which would result in one mention of the activity 'received an award.' If the goal of the analysis were to examine the extent to which former trainees and faculty members exhibited leadership behaviors and activities, the first option, coding each award won, would capture the most information. Since, however, the goal of the analysis was to understand the ways in which program directors describe leadership, the latter option, coding the activity as present, was chosen as the more appropriate decision rule.

Limitations of the Data

This analysis is designed to uncover general patterns and themes. Given the nature of the data, there are a number of limitations and caveats that must be taken into account. First, the data provide only a one-year snapshot of MCH interdisciplinary programs. Thus, while themes within the data can be identified, there is no information available to examine whether or not these themes are representative of trends over time, or whether they constitute isolated instances.

Second, given the variety of both styles of narratives and also the number of faculty and trainees described, making comparisons across programs, at either the individual or program type level, would be inappropriate. The brief instructions provided in the Progress Report Guidance allowed program directors a great deal of leeway in deciding how to respond. The first decision program directors needed to make was who to describe. A single outstanding former trainee or faculty member? Two or three? All current trainees and faculty? All past trainees? Particularly in the faculty narratives, we cannot presume to know what criteria the program directors used in selecting the faculty member(s) to be described. Did the program directors identify faculty they thought exhibited the greatest leadership in 2003 or did they consider who might have displayed the most consistent leadership over time? Did the program directors describe their 'strongest' leaders or did they take the opportunity to use this report as a way of highlighting the activities of all faculty, perhaps on a rotating basis? Given that we cannot know the answers to these questions, care must be taken not to overgeneralize the findings from this analysis but to keep in mind the purpose and use for which it was conducted.

Findings

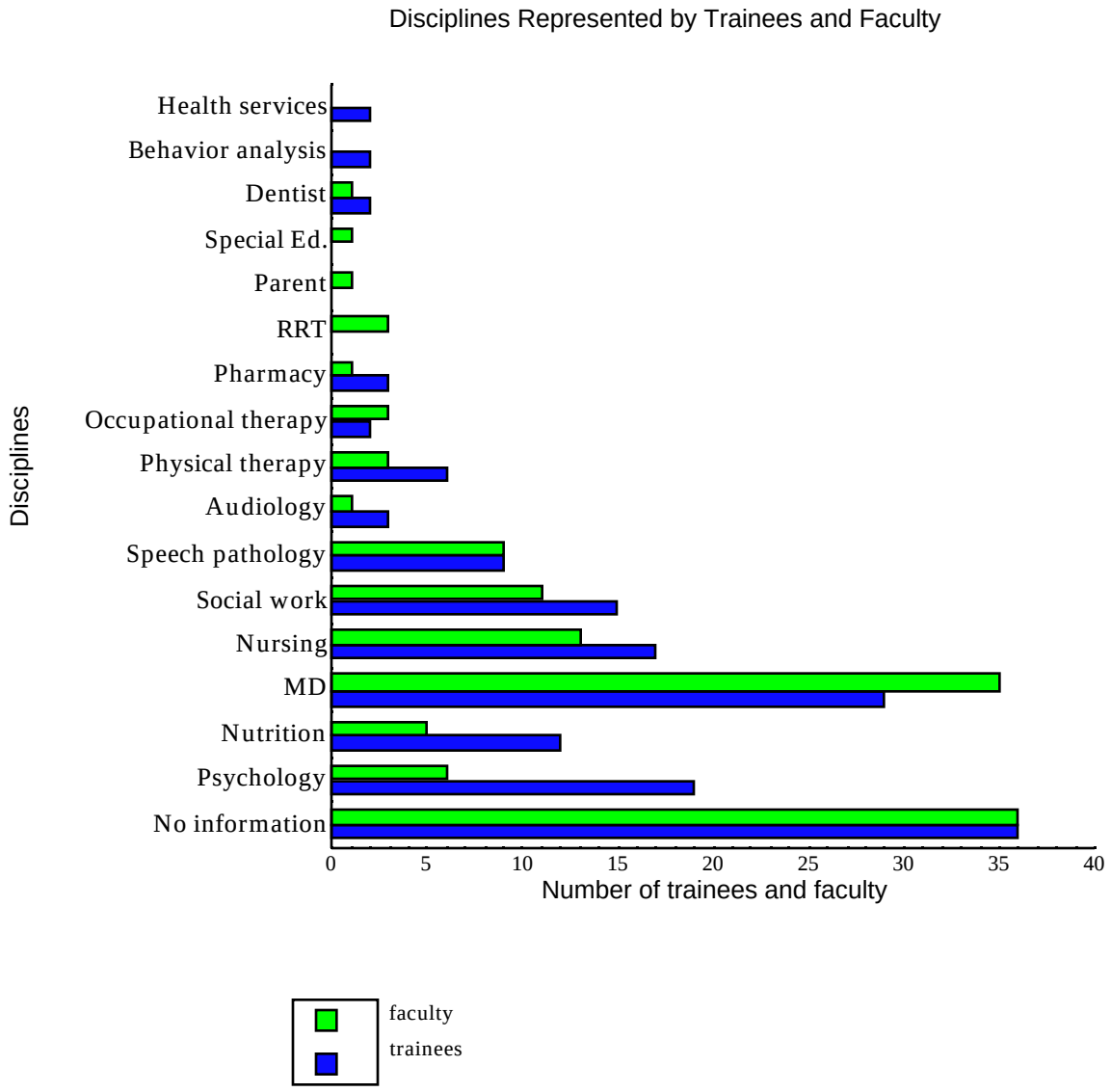
The 2003 report contained narrative information about 129 faculty and 157 trainees from 55 interdisciplinary programs.

Leadership Reports by Program Type

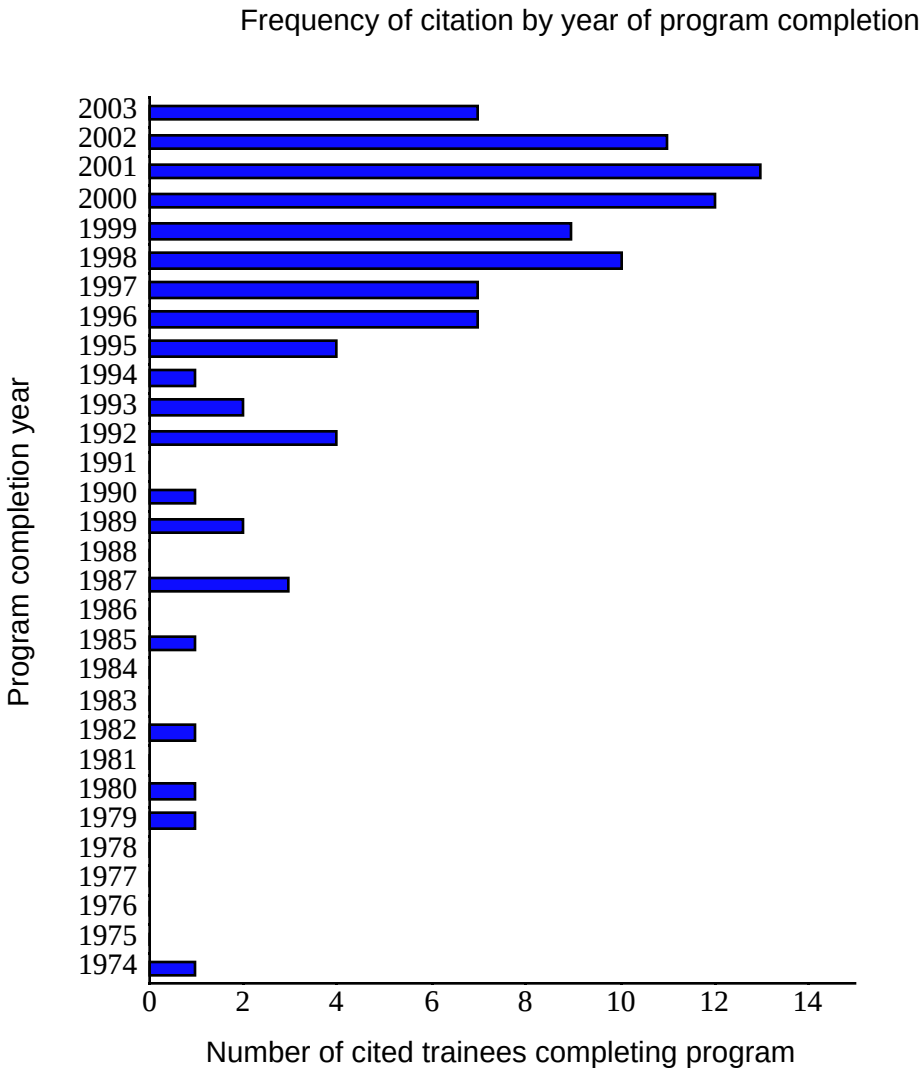
Program type	# programs describing trainees	# trainees for whom there was narrative information	# programs describing faculty	# faculty for whom there was narrative information
LEAH	5	10	6	14
LEND	32	95	31	58
PPC	6	24	7	36
PH	12	28	11	21
Total	55	157	55	129

In most instances, program directors provided information about one to three individuals. In addition, some program directors included an update on the activities of numerous trainees from the past, and some included all current trainees or program staff.

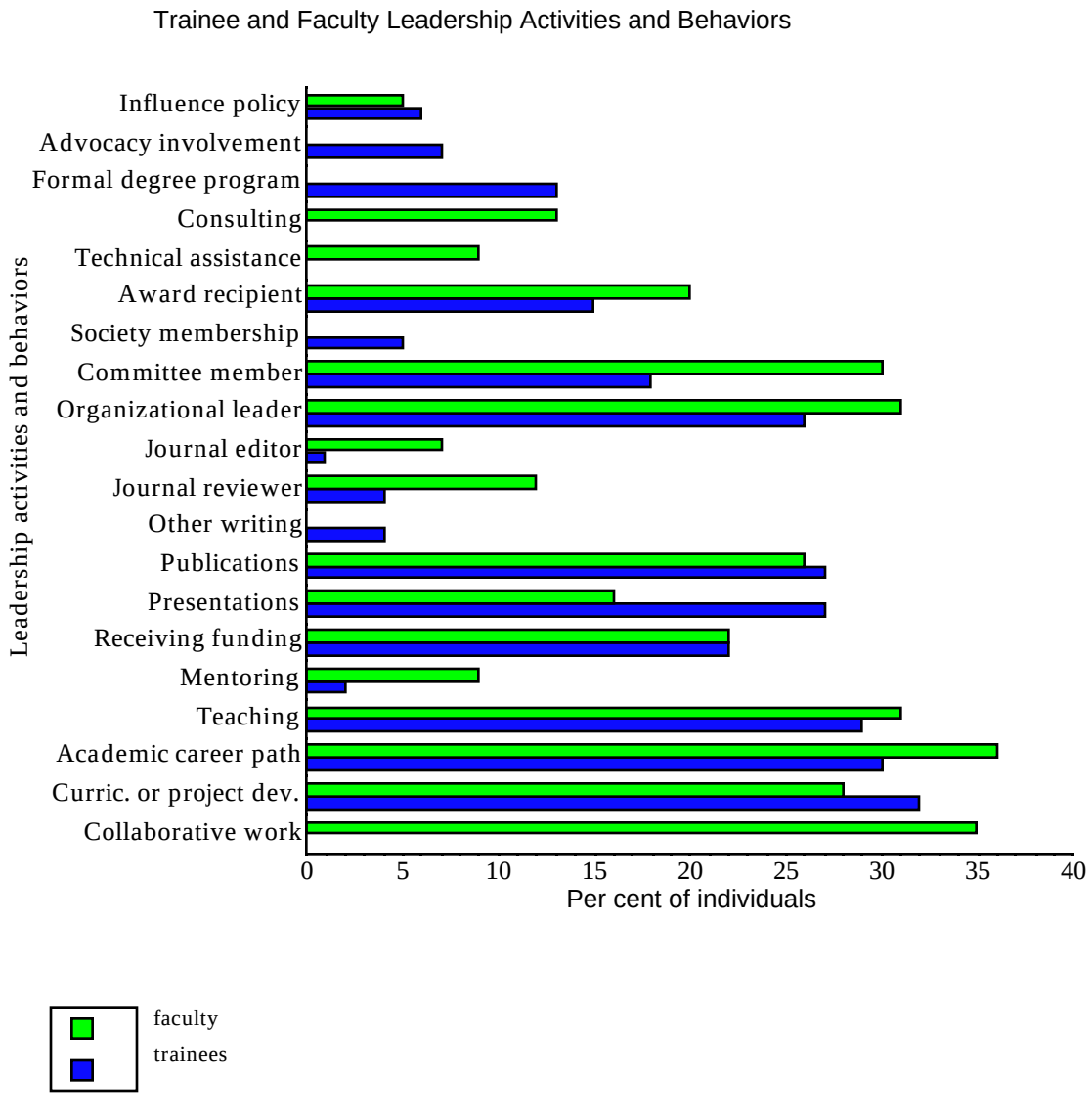
As shown in the figure below, of the 93 faculty for whom there was discipline information, 14 disciplines were represented, and of the 121 trainees for whom discipline information was available, 13 disciplines were represented.



The length of time since trainees had completed their interdisciplinary programs varied widely, from trainees currently in the program to one who had graduated in 1974. Of the 98 trainees for whom a completion date was available, 76 (78%) graduated between 1996 and 2003, as shown in the figure below.



The descriptors that program directors used to describe leadership in trainees and faculty covered a wide variety of behaviors and activities. Many activities and behaviors described were objective, easily verifiable entities, such as "the (Endowed) Professor of Child Health at the _____ Medical Center" and "Director of the _____ Center." Other descriptors were more subjective, such as those mentioning being involved in advocacy. For example, consider a more subjective statement, such as, "_____has become active in advocating for students with disabilities and school social work programs." Although program directors did not always do so, such a statement could be made much more objective if it were followed by the example, "While attending a conference in (state) _____ she met with Congressmen _____ to discuss school social work services and proposed legislation to ……"



Relationships between the behaviors and activities described by program directors and the MCH Performance Measures

Not surprisingly, many of the activities and behaviors used by program directors as exemplars of leadership also appear in the MCH Performance Measures. The four areas defined in the Performance Measures: (1) academics, (2) clinical, (3) public health/public policy, and (4) advocacy, appear in varying degrees through the narratives. While many of the descriptors used in the narratives exactly match the language of the Performance Measures, other activities and behaviors that were described can be mapped to those headings.

> *(1) "Academics - i.e. faculty member teaching-mentoring in MCH related field; and/or conducting MCH related research; and/or providing consultation or technical assistance in MCH; and/or publishing and presenting in key MCH areas; and/or success in procuring grants and other funding in MCH."*

The activities described in the narratives as teaching, mentoring, conducting research, providing consultation or technical assistance, publishing and presenting, and applying for and receiving funding match, almost exactly, the examples provided in the Performance Measures. This area of leadership was one of the most well represented in both sets of narratives. While this is to be expected in the faculty narratives, it is not as obvious that these activities would be as well represented in the trainee narratives. One reason for this finding is that it is likely that many trainees are preparing for academic careers.

> *2) "Clinical – i.e. development of guidelines for specific MCH conditions; and/or participation as officer or chairperson of committees on State, National, or local clinical organizations, task forces, community boards, etc.; and/or clinical preceptor for MCH trainees; and/or research, publication, and key presentations on MCH clinical issues; and/or serves in a clinical leadership position as director, team leader, chairperson, etc."*

The activities described in the narratives that match the Clinical Performance Measures include: development of guidelines, leadership in an organization, participation on an advisory board, and serving as a Director or Chair within one's institution. The activity described as membership in a committee might also be included in this category. As previously discussed, it could be inferred that membership in a committee is normally a prerequisite to leadership within an organization. Thus, this activity, cited numerous times by program directors, would be included in the same cluster of activities and map to the same Performance Measure as leadership in an organization.

> *3) "Public Health/Public Policy – i.e. leadership position in local, State, or National public health organizations, government entity; and/or conducts strategic planning; participates in program evaluation and public policy development; and/or success in procuring grant and other funding; and/or influencing MCH legislation; and/or publication, presentations in key MCH issues."*

The activities described in the narratives that map to the Public Health/Public Policy Performance Measures include leadership in an organization, participation on an advisory board, applying for and receiving funding, publications and presentations, and influencing policy. Depending on the sphere of influence, these activities may overlap with Performance Measures in each of the other areas.

> *4) "Advocacy – i.e. through efforts at the community, State, Regional, and National levels influencing positive change in MCH through creative promotion, support and activities – both private and public. For example, developing a city-wide SIDS awareness and prevention program through community churches."*

The activity described in the narratives that maps to the Advocacy Performance Measure is involvement in advocacy. It was particularly difficult to assign descriptors to this category on the basis of evidence alone. A number of program directors used the term 'advocacy' without supporting examples or evidence; hence those statements were not categorized.

The descriptions of leadership written by program directors focused heavily on accomplishments that could be grouped in the Academic and the Clinical Performance Measures. One reason for this may be that since the program directors were academics and clinicians themselves, they were more familiar and comfortable with the language involved in these two areas. Another reason may be that counting papers, presentations, grants, and involvement in courses was a relatively straightforward and objective task, while evaluating participation in policy development or the impact of advocacy was much more subjective, long-term, and difficult to ascertain.

Some characterizations of leadership in the narratives did not fit neatly into any of the Performance Measure areas. The activities designated as 'receiving an award' and 'other writing' could fit into any of the four areas, depending on the nature of the award or writing. Another activity that defied easy categorization was that of continuing education in a formal degree program. While it could be argued that such activity shows a commitment to lifelong learning (a competency increasingly considered important across the spectrum of health care education), given the purpose of the current analysis, it could more convincingly be argued that such activity alone does not constitute evidence of leadership, but rises to that level when and if the individual involved uses his or her education to make a difference.

The most interesting activity cited by program directors that did not map directly to any of the Performance Measure areas was that of collaboration. Depending on one's preferred definition of leadership, this ability varies in importance. While Cronin (1980) has defined leadership simply as, "the capacity to make things happen that would otherwise not happen," other definitions of leadership involve the notion of "an influence relationship among leaders and followers" (Rost, 1991). Thus, the ability to work collaboratively may be a valuable asset in the interdisciplinary context of MCH leadership.

Differences in the activities of faculty and trainees

Given that, obviously, all faculty are faculty and also that some former trainees are now faculty, it is appropriate to ask whether or not differences exist between the activities described in the group of faculty narratives and the activities described in the group of former trainee narratives. This question can be approached in a variety of ways. One way is numerical. That is, are faculty described as engaging in more or fewer leadership activities than former trainees?

The mean number of activities engaged in by faculty was 3.9 (with a range of from 0 to 14) , while the mean number of activities engaged in by former trainees was 3.0 (with a range of from 0 to 10). Thus, simply considering counts of activities and behaviors as present or not, faculty were described as having engaged in more leadership activities, on average, than were former trainees.

One reason for this difference could be that leadership may develop and emerge over time, so that the length of time that faculty have engaged in MCH-related work compared to that of former trainees could be a factor. Given the fact, previously noted, that 78% of trainees cited graduated from their interdisciplinary program between 1996 and 2003, the vast majority of them have had only a few years in which to put their MCH training to work.

The median number of leadership activities in which the trainees graduating in each year were described as having been engaged was used to examine more closely the relationship between time-since-training and the number of activities in which former trainees have engaged. The median number of activities for those trainees graduating in 1996 or later was 3. This large group of former trainees (78% of those described for whom a completion date was available) completed their interdisciplinary training over the past seven years. The median number of activities for those trainees graduating prior to 1996 was also 3. Thus, in this one-year data snapshot, there was no apparent relationship between time-since-training and the number of activities in which former trainees engaged. Given that previous work has indicated a tendency for the number of leadership activities in which trainees engage to increase over the time-since-training, this current finding may be an artifact.

It should be noted that MCH interdisciplinary training may occur at any point in an individual's career. While many trainees were described as beginning professionals, others were described as having had many years of experience. At one extreme, one narrative cited a recent trainee who had been in practice as a community physician for 30 years. It should also be noted that in instances where trainees had had significant years of professional experience prior to their MCH training, it was not always clear whether the accomplishments cited occurred before, during, or after their interdisciplinary training. Such ambiguity introduces another factor, that of confounding pre MCH training accomplishments with post MCH accomplishments.

Another way to approach the question of differences between faculty and trainees is to consider the types of activities and behaviors in which the two groups engaged.

For faculty, the most commonly listed leadership activities (engaged in by 20% or more of faculty cited) were: being a director or chair, being on an academic career track, collaborative work, conducting research, teaching, leadership in an organization, being a member of a committee, curriculum or project development, publications, applying for and receiving funding, and receiving an award.

For former trainees, as a group, the most commonly-listed activities were: curriculum or project development, being on an academic career path, research, teaching, publications, giving presentations or talks, leadership in an organization, being a director or chair, and applying for and receiving funding.

The activities listed for these two groups were quite similar. However, when recent graduates – those having completed training in the past three years (2000-2002) – were considered as a group, the most commonly cited activities were curriculum or project development, publishing, applying for and receiving funding, giving talks, being on an academic career path, and teaching. Given that many of these individuals are on an academic career path, the activities they were described as engaging in are exactly those that are required for promotion and tenure. Thus, it is logical that other activities commonly cited for trainees as a group, such as leadership in an organization and being a director or chair, may be more likely to occur at a later point in their careers.

Summary

The task in this analysis was to take advantage of the richness of the leadership profile narratives, with the goal of understanding the commonalities in the ways in which program directors identified and described leadership in action. A number of coding decision rules were formulated to standardize the procedure so that data could be reliably extracted from the narratives.

Many of the findings were not surprising. Many of the ways in which program directors described exemplary former trainee and faculty leadership matched the MCH Performance Measures quite closely. Given that program directors are very familiar with the language of the Performance Measures, it was not unexpected that they would use the same language in their narrative descriptions. An exception to this, however, was the identification by program directors of collaborative work as a leadership activity. This type of activity was the most commonly cited descriptor of leadership in faculty. Since LEAH, LEND, PPC, and PH programs all emphasize interdisciplinary practice, these descriptions of collaborative work on the part of faculty provide evidence that faculty are 'practicing what they preach' and modeling such behavior.

Another finding was that while descriptors matching the Academic and Clinical Performance Measures were common, those matching to the Public Health/Public Policy and Advocacy Measures were much rarer. A number of factors may contribute to this lack. One is the somewhat subjective, long-term nature of activities that 'make a difference.' Another may be the fact that program directors are heavily involved in the academic and clinical realms and may be less familiar with policy and advocacy activities. In any case, if development of leaders in these two areas is desired, finding ways to describe the skills, abilities, and activities involved in more behavioral terms would be a worthwhile goal.

Next steps

The next step in the current phase of this project is to blend the information obtained from these narratives with that obtained from the focus groups of LEAH, LEND, and PPC program directors, training directors, and trainees who have been considering the question, "If you believe that your program is successful at producing leaders, how do you know?"

The eventual goal of this process is to trace the development of leadership retroactively from the types of descriptions program directors provided of faculty and former trainee leaders to the skills, abilities, characteristics, and behaviors indicative of future leadership that exist and can be observed in current trainees. The next proposed phase of the project will be to build on these observations by identifying and developing ways to measure leadership that can be used to provide programs with effective, evaluative feedback that can track and, hence, improve the development of leadership.