Using Reflections to Evaluate the STFM Behavioral Science/Family Systems Educator Fellowship

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BACKGROUND AND OBJECTIVES: A group of family medicine educators identified a need and developed a 1-year fellowship for early career behavioral science educators. This occurred in response to a reduction in previous opportunities and resources. The program was designed to shape and mentor new behavioral science faculty teaching in family medicine departments and programs. Quantitative data analysis from pre- and post-fellowship survey data from years 1-4 confirmed fellowship objectives were met.

METHODS: The 1-year fellowship, developed by senior faculty in STFM features a blend of classroom style learning, mentored small-group interactions, reflective writing and a scholarly project requirement. As one aspect of program evaluation, reflective writings submitted by fellows and faculty were analyzed using qualitative methodology for themes related to curricular objectives.

RESULTS: From 2010-2013, 44 fellows completed the program. Authors analyzed reflective writings from 15 fellows and 6 small-group mentors. Four overarching themes emerged: emerging professional competence, evolving professional identity, connectedness, and generativity. An unexpected finding was that the fellowship mentors benefited in ways parallel to that of the fellows.

CONCLUSIONS: A qualitative analytical approach to examining the reflective writings of fellowship participants yielded confirmation that program goals were achieved. In addition, a commitment to “paying it forward” as ongoing and future leaders in family medicine education resulted for both fellows and faculty mentors.

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Family medicine is a discipline of integration and collaboration. While developing into a newly credentialed discipline, the Willard Report stated, “It is not clear at this time how best to incorporate the behavioral sciences in education for family practice...The proper roles of behavioral science and the behavioral scientist in the medical center and in the practice of medicine remain to be defined.”

Over the subsequent decades, family medicine faculty have worked diligently to clarify these questions. Additionally, all sectors of medicine, especially primary care, continue to transform care delivery through a greater focus on the integration of mental and behavioral health. There is an ongoing need to create robust and professional training opportunities that align with the priorities of an evolving health care system.

Given family medicine’s particular attention to these concerns in its early history, a requirement for accreditation of residency training programs included the presence of behavioral science faculty and delivery of curricular elements based in the behavioral sciences. To provide a scholarly forum for the exchange of ideas about teaching this aspect of care, the Society of Teachers of Family Medicine sponsored an annual meeting focused on “The Family in Family Medicine,” later known as STFM Conference on Families and Health (1981-2008). That incubator for the process and content of behavioral science in family medicine ran successfully for many years, creating and nurturing both family physician and behavioral science faculty and leaders in academic family medicine, and addressing integrated service delivery, innovation, and research.

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When the STFM Conference on Families and Health ended in 2008, many family medicine educators rallied to address that training and networking gap. Bridging the gap was deemed particularly necessary at a time of an aging faculty holding behavioral science educator positions within residencies (personal communication with the STFM Executive Director). In response, a small group of family medicine educators conceived and implemented the STFM-sponsored Behavioral Science/ Family Systems Educator Fellowship (BFEF). They submitted a request for funding to the STFM Foundation with a program evaluation plan including both quantitative and qualitative elements. Findings from the quantitative evaluation have been reported. Surveys of participants over years 1-4 of the fellowship consistently demonstrated success at achieving the fellowship goals of skill acquisition, mentoring, and professional network development. The purpose of this paper is to present a qualitative evaluation of the first 3 years of the BFEF, as represented in assigned reflection papers from the participating fellows and small-group mentors.

Methods
Participants
The sample included BFEF fellows from years 1 through 3. Family medicine residency faculty were eligible for the fellowship if they had: (1) responsibility for behavioral science education in a family medicine residency program; (2) less than 5 years' experience as a behavioral science educator; and (3) documented support by their program director. The BFEF Steering Committee selected fellows via a competitive application process, selecting 12 fellows in year 1 and increasing to 16 in years 2-3 due to demand.

The sample also included small-group mentors (SGMs). Mentors were experienced behavioral science educators paired with family physician educators who had demonstrated commitment to the behavioral science curriculum and practice. A pair of mentors was assigned to each group of four fellows. Most mentors had been regular attendees of the STFM Conference on Families and Health and/or were active members of STFM's groups on the Family in Family Medicine or Behavioral Science.

Curriculum
Stated program goals were to improve fellows' understanding of the culture of family medicine, provide a behavioral science curricular toolbox (the Behavioral Science Basics Wiki on the STFM Resource Library), promote scholarship, and develop a supportive professional network. The fellowship provided peer and mentor support along with educational content and scholarly productivity. Fellows were assigned to small groups of four fellows and two mentors. The program included regular small-group conference calls and in-person required meetings at consecutive STFM Annual Spring Meetings and the Forum for Behavioral Science in Family Medicine. The curriculum included content and teaching methodology relevant to behavioral science education in family medicine, plus educational evaluation tools and many additional resources.

Fellows provided written reflections about their fellowship experiences at mid- and end-of-year with the instruction “reflect on how you are growing and developing professionally in your role as a behavioral science educator.” Reflection documents ranged in length from 4 to 18 pages. Small-group mentors were also asked to complete end-of-year reflections about “group process and observations of their fellows’ growth and development.” These reflections were submitted to the fellowship director at year’s end. Fellows presented required scholarly projects as posters at the STFM Spring Conference, marking the close of the fellowship year. The program was formally evaluated with a pre- and post-fellowship survey.

Data Analysis
IRB exempt status was granted by the Central Maine Medical Center Institutional Review Board for evaluation of the BFEF Program.

Investigators used an immersion/crystallization approach to analysis. The database of reflections included hundreds of pages; each individual submitted 4 to 18 pages. The analysis team decided to analyze a subset of reflections, about one quarter, with representation from each fellowship year. To start, three authors read a small sample of fellow reflection papers (about 10%), to identify salient and commonly occurring phrases relating to BFEF curricular goals. They met by telephone to share their ideas about themes emerging from the text and reached consensus about theme definitions and coding strategies. In this early stage, they identified four overarching themes: Emerging Professional Competence; Evolving Professional Identity; Connectedness; andGenerativity. Next, they coded the remaining reflections using these themes and definitions, while being open to additional themes that would emerge. Dr Taylor generated a sample of reflections (every fourth fellow reflection chosen for a total of 15), and every small-group mentor reflection submitted (for a total of six). These reflections were distributed, one third to each author/analyst, for systematic reading and sorting into the four identified themes. During subsequent telephone meetings, investigators identified subthemes within major themes. Each reader identified quotes from their set of reflections that illustrated the themes and subthemes, and placed them in a master table of quotes. One phone meeting was devoted to a review and discussion of all quotes in the master table, and coming to consensus about the assignment of themes and subthemes. Upon completion, a fourth reader audited the work to establish research confirmability and trustworthiness, confirming the authors’ assessment of key themes. This reader, like the investigators, was a behavioral science educator in...
family medicine, was not part of the analysis team, and was unfamiliar with the reflection papers prior to the review. This iterative process of identifying themes, coding text, redefining themes, and confirming theme assignment was crucial for creating a qualitative analysis that was valid and credible.7

Results
The 44 BFEF fellows and small-group mentors included in the data analysis represented geographic diversity, had a range of experience (0-5 years as faculty for fellows and 10-28 years as faculty for small-group mentors), and had diverse training backgrounds (Table 1). The reflection review team identified four overarching themes as fellowship-related benefits: emerging professional competence, evolving professional identity, connectedness, and generativity. In addition, subthemes emerged that articulated the components of value in each major identified theme. Mentor reflections suggested some interesting parallel processes to the experience of the fellows.

Professional Competence
In examining professional competence, several subthemes were identified: gaining new teaching strategies and tools, adopting new skills in scholarship, mentorship and leadership, and increasing one's professional confidence. Learning new strategies was valued.

“Completing a scholarly project has helped me learn a systematic process to use for any future projects.”

Fellows appreciated exposure to new time saving tools and resources.

“I now have some building blocks and concrete ideas about how better to do my job.”

“I now realize how many resources are available to me as a Behavioral Science educator—I don’t have to reinvent the wheel!”

They reflected that fellowship training had advanced their teaching, scholarly activity and curriculum skills.

“During this past year, I have really learned how to mentor about encouraging and supporting research and bringing an idea to fruition.”

Both fellows and their mentors experienced advancement in leadership skills.

“A final takeaway I have from the fellowship is seeing myself as a potential leader within my program as well as my department.” (Fellow)

“I have been able to now use leadership skills gained in my work as an SGM to contribute more in faculty meetings and faculty-resident meetings.” (Mentor)

Small-group mentors reported feeling more competent in the areas of mentoring and project management skills.

“Serving in the role of SGM has been a professional lifesaver for me. I was not feeling very valued in my own department. I now realize that I have been very good at training psychologists as well as helping psychologists collaborate effectively with physicians in their departments and residencies. The BFEF provided a structure for me to deliver what I do well and feel good about it.”

Table 1. Characteristics of BFEF Fellows

<table>
<thead>
<tr>
<th></th>
<th>Fellows N=44</th>
<th>Small Group Mentors N=19*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>29 (66%)</td>
<td>11 (61%)</td>
</tr>
<tr>
<td>Male</td>
<td>15 (34%)</td>
<td>8 (39%)</td>
</tr>
<tr>
<td>Mean # Months/Years of Faculty Experience (Range in Months/Years)</td>
<td>27.8 mo (0-65 mo)</td>
<td>14.3 yrs (8-28 yrs)</td>
</tr>
<tr>
<td>University</td>
<td>20 (45%)</td>
<td>14 (72%)</td>
</tr>
<tr>
<td>Community</td>
<td>22 (50%)</td>
<td>5 (28%)</td>
</tr>
<tr>
<td>Military</td>
<td>2 (5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Psychologist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical/counseling</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>Educational</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Plus LMFT**</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>LMFT **</td>
<td>2 (5%)</td>
<td>-</td>
</tr>
<tr>
<td>LPCC***</td>
<td>2 (5%)</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>8 (18%)</td>
<td>2 (11%)</td>
</tr>
<tr>
<td>Family physician</td>
<td>8 (18%)</td>
<td>9 (47%)</td>
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* Two year 1 SGMs continued in year 2 for continuity, 1 year 2 SGM did the same in year 3.

** LMFT = “Licensed Marriage and Family Therapist”

*** LPCC = “Licensed Professional Counselor”
Evolution of Professional Self
This theme reflected fellows’ evolving professional identity as educators in family medicine. They reported increased confidence in their roles.

“I usually feel kind of powerless in my merit review meetings with our department chair and program director. Yesterday, I was able to feel more empowered and take control of the process by outlining my major past year accomplishments, the goals I had for the coming year and what I would need from them to be successful.”

They also identified the importance of taking time to reflect professionally.

“I now feel like I have a special place in my residency program, a place I must nurture and develop and own with enthusiasm.”

Fellows acknowledged the importance of squarely facing challenging feelings and reactions.

“This has been a year of challenge for me. I want to make several promises to myself in the coming year–set smaller goals and achieve them. I have proved to myself that I can do whatever I want to do.”

At the end, each fellow voiced a clearer idea of what their job entailed and that through the connections made in the fellowship, STFM, and the Forum they knew “where to go when they needed to learn something or garner support.” (Mentor)

Fellows were reminded of the value of self-awareness to provide a compass for their professional direction.

“I learned that sometimes I must say yes, even with ambivalence at play, and trust myself and the process to yield destined outcomes. It is through taking risks that stretch us that one may discover hidden riches.”

Both fellows and small-group mentors expressed an increased sense of the value of their offerings in home academic settings as well as connection to a wider family medicine community of educators. A fellow’s reflection sums up this sentiment:

“The solid relationships with fellow fellows and [small-group] mentors… have led me to more concrete discussions with my program director and being seen as a leader in our faculty development work.”

Connectedness
Consistent with the BFEF goal of developing a supportive professional network, fellows’ reflections demonstrated a new sense of connectedness in the family medicine educator community. Several expressed appreciation for mentoring by those more experienced.

“As good luck would have it, I was assigned and have created lasting relationships with mentors who are not only supportive, but extremely talented and inspirational people.”

Many described the value of feeling increased connection to the national community of family medicine behavioral science educators. One fellow reflected that:

“Sometimes, even though I work with some incredible people, being the lone behavioral science person in a sea of physicians can be a bit isolating. The connections I have made through the fellowship have increased my sense of being in community with other people who work in behavioral science, as well as a field as a whole.”

Participants specifically identified a stronger connection with STFM as a professional home, as evidenced by a mentor’s “great rejoicing to be able to connect to a deep ‘root system’ in family medicine and in STFM.”

Generativity
References to professionally “paying it forward” were prolific. Both fellows and mentors described a deepened commitment to their sense of professional citizenship by enriching the academic settings in which they worked and their professional organizational involvement, including the fellowship.

“I reflected quite a bit on the social and networking benefits of the fellowship, and cannot say enough about how important this has been. I hope to stay involved in the fellowship to continue to nurture these conversations.” (Fellow)
“My parents took me to dinner last night. Mom asked, ‘So who decides to become a mentor? What’s in it for them?’ I knew the answer reflexively, as I have thought about that question a lot this year. But, to speak it out loud was a weighty proposition. ‘First, I don’t think they do it for themselves. There is a lot of sacrifice to it without much in terms of personal accolades. These are people who are already so accomplished; they don’t have anything left to prove. My mentors have told us, and I believe them, that they are doing this as a commitment to train the next generation of leaders in behavioral science in family medicine. They want to shape us into leaders.” (Fellow)

Discussion

Through a process of analyzing reflections using a qualitative method, investigators found concrete evidence for fellows’ gain as a result of participating in the BFEF. The four overarching themes included: improved professional competence, evolution of professional self as a family medicine educator, connectedness to one’s program as well as a larger community of mentors and colleagues, and generativity, or an expressed desire to “pay it forward” to other behavioral science educators in family medicine. These themes strongly aligned with the goals originally identified by the fellowship development team.

This program evaluation broadens the scope of fellowship goals to consider when designing and evaluating a professional development program. Others have reported positive outcomes such as faculty retention and enhanced research skills. A systematic literature review regarding career choice in academic medicine demonstrated that the primary value of fellowships is to enhance research skills leading to more confidence in seeking a tenure track academic medicine position. These outcomes may be less relevant to teachers in community-based residency programs. Our qualitative analysis identified additional outcomes to consider: improvements in competence, professional identity, connectedness, and generativity.

An unexpected result for this study was the benefit derived by the small-group mentors, who were chosen because of their seasoned faculty status and a contributory history in the behavioral science discipline within family medicine. In spite of being identified leaders, they too derived a striking parallel process of benefit, like the fellows they were coaching and mentoring. In spite of their experience, many initially felt unqualified to serve as a mentor. Like the fellows, the mentors became more connected to their work and expressed a desire to continue strong involvement in the discipline of family medicine.

Reflections were designed primarily for program evaluation and quality improvement and not for research purposes. One limitation may be that fellows could have felt a need to review their experiences in a positive light. Asking about the burden or disadvantages of the program would have revealed additional information about their experiences. Another methodological concern may be fellows’ biased responses to the reflection assignments. They knew BFEF leaders would read their reflections and may have recorded their thoughts in a socially desirable direction. Yet, these reflections are aligned with fellows’ anonymous quantitative responses to the end-of-fellowship survey, which also documented several benefits of BFEF participation.

The BFEF continues to thrive, having just recruited its seventh class of fellows. Future evaluations should systematically examine the impact of the BFEF on scholarly productivity, leadership roles, and career advancements. Professional success in the early BFEF fellows is already evident, including recruitment to leadership positions within their academic institutions, academic promotion, publications, and blog posts. In addition, the curriculum has evolved, responding to ongoing evaluation. Many substantive improvements in the structure and expectations of fellows have occurred since year 3 ended. We encourage all academic fellowship leaders to expand program goals and objectives to include improvements in professional competence, identity, and connectedness, in addition to the usual goals of scholarship. Program evaluation would be enhanced with a longitudinal evaluation component to track scholarly performance and leadership advancement over time.

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References