

Reflective Essay

Parachute packing. That was my father's first job when he joined the Air Force. Book binding. That was my mother's first job. These jobs weren't glamorous, but for each they helped shape their lives. And mine. For Dad, the Air Force was his way out of working the trade that killed his father- coal mining. For mom, a refugee during much of World War II, it was one of few opportunities for an uneducated woman to find employment and pursue her love of reading and learning. Parachute packers are invisible, but no pilot would ever fly without a properly packed parachute. Similarly, nobody ever thinks about the construction of a book until the pages start to fall out. What does this have to do with my academic career? Having grown up in a family that placed an emphasis on supporting others and on learning, I couldn't help but be inquisitive, to think of others, but also to be practical.

After medical school, I had no interest in academics. My role models were mean, self-centered and did little to facilitate learning except through intimidation. The last thing I ever desired was to be anything like *those* faculty members. When I came to MSU for residency, I was fortunate enough to have two mentors, [REDACTED] who showed me an entirely different model of medical education and how to pursue my curiosity. MSU and my mentors built on the foundation laid by my parents.

After residency, I spent 4 years in a small coal-mining region in Appalachia. Here, I saw great need and learned many lessons about caring for people; practical lessons that I carry with me more than 20 years later. I left Appalachia for two big reasons. First, I missed the learner-centered environment at MSU and the opportunity to interact with learners and scholars. Second, Appalachia was difficult for my spouse. While I was intellectually and emotionally challenged and psychologically fulfilled caring for the needy but appreciative patients, my wife had to live in a community that de-emphasized education.

My goals as an academic family physician have been to facilitate learning, aid the pursuit of curiosity and expect the pursuit of excellence among learners and colleagues. In pragmatic ways. My teaching reflects this. My approach in the classroom has been to identify the key concepts I am trying to impart, develop their real-world application, and then instruct in a way that will both inform and facilitate lifelong learning. When I work with practicing clinicians and residents, my focus is very pragmatic, with students, more conceptual.

Similarly, my scholarly focus has been to take a pragmatic approach to answering real world questions faced by students, educators, clinicians and patients. After joining the faculty at MSU, I went back to school and obtained a masters degree in clinical research design. This provided me with the intellectual basis to temper my pragmatism. Hence, my interest in evidence-based medicine evolved. To many, evidence-based medicine appears to be an academic exercise filled with arcane rules. For me, it has been a tool to rigorously assess those things that we think to be true and incorporate the patients' values into that assessment. For example, several years ago recommendations were made that women at low risk did not need cervical cancer screening, a Pap smear, more than every 3 years. This recommendation generated a series of questions that several colleagues and I pursued:

- What do women think about this? What are their worries? What do they know about cervical cancer and Pap smears? (We found that women had some misconceptions and worried about being denied care by extending the timing - [REDACTED] Periodic Abstinence from Pap (PAP) Smear Study: Women's perceptions of PAP screening [REDACTED] 2003; 1: 203-208.)
- If woman gets a Pap smear every 3 years, will she forget to have her breast exams and mammograms or get her blood pressure checked? We found a strong link between Pap smears and the receipt of other preventive services (data presented 2004 in Mainz, Germany at the International Conference on Behavioral Research, "The Feasibility of Risk-Based Cervical Cancer Screening." [REDACTED])
- Can we identify women at low risk of developing cervical cancer? Since most of this risk is related to sexual behaviors, do physicians ask and if asked, will women tell? (We found that this type of risk-based screening was feasible but most women had at least one identified risk factor - [REDACTED] The feasibility of risk-based cervical cancer screening. *Preventive Medicine* 2007; 45:125-29).

Pursuing this line of thinking and research provided me with invaluable experience in understanding the scope and complexity of answering real world questions. It also linked me with incredibly gifted collaborators, each of whom brought unique perspectives to the project, making the project more valuable than my original conceptualization.

Applying evidence-based medicine in education has been a marvelous challenge. Working with other faculty, I participated in the development of an information management theme for the CHM undergraduate curriculum. This group developed a set of objectives and competencies and then reviewed the existing curriculum to determine what is already taught and how successfully. In some instances, we recommended major course revisions, in others, we suggested minor adjustments. For example, we worked with the Epidemiology Department on a course that students hated and was not clinically focused. The course was revised into two courses, one for first year students that focused on key concepts and one for second year students that focused on application of concepts around clinically relevant topics. Since then, the Epidemiology "course" has become one that students actually appreciate *and* see its value!

A natural extension of my interest in EBM is the critical importance of being able to access high quality information into patient care processes. Information technology is a natural vehicle for this, yet presents several challenges. In 2003, I had the privilege of serving as the AAFP Senior Scholar in Residence at the Agency for Healthcare Research and Quality. During my 6 months at AHRQ, I participated in many activities, including determining how to allocate \$50 million specifically targeted for health information technology (HIT). I participated in the planning and implementation of expert panel meetings, the development of three specific funding proposals and a recommendation for the development of a HIT resource center to facilitate the planning and implementation of HIT. The three funding proposals included: a matching program for activities related to planning HIT implementation; a program of matching funds for institutions that have completed a planning process and are prepared to

implement HIT; and funds for the evaluation of HIT implementation. I learned a great deal about the interface between real world needs and public policy.

It is because of my pragmatic approach to evidence-based medicine and integrating information into patient care processes that I have been able to work with multiple groups to evaluate and improve programs. I was asked by [REDACTED] to help the Sparrow Physicians' Health Network develop programs to improve the quality of care provided by its members. I also served as chair of the MSU HealthTeam's Quality Council for 3 years. During that time, we were able to obtain funding to develop innovative programs, such as group visits for patients with diabetes and free generic samples to promote generic prescribing. I also participated in a healthcare task force for the University Committee on Faculty Affairs to evaluate the MSU health plans. This year, the task force made recommendations that are projected to save MSU at least \$5 million. Finally, I have served as a consultant to the American Academy of Family Physicians Council on Continuing Professional Development to help make educational programs and their evaluation more rigorous.

Although I am now recognized as a national figure in evidence-based medicine and as an educator, I have found the greatest satisfaction in knowing that I have done my best in all my endeavors. I have found that my network of colleagues have enriched my meager efforts at advancing rigorous thinking, even about mundane every day questions. Like parachute packers and bookbinders, I have tried to be essential, not flashy, to pursue knowledge (or learning), and to make the work of others better.