REFLECTION

The Gift of Empanelment in a "Clinic First" Residency

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ABSTRACT

Empanelment in a "clinic first" residency has helped me develop competency in medicine and understand the value of primary care. Taking care of a panel of patients longitudinally aligns with education research on how we best learn; we learn best when learning sessions are longitudinal, spaced in time and interleaved with diverse topics. By caring for patients longitudinally, I have developed competency and proficiency in providing comprehensive care to my patients. Empanelment has also allowed me, as a resident, to build relationships with my patients and realize the value of primary care. To build the primary care workforce of the future, I have no doubt every resident needs to have this type of rewarding experience in their clinics.

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INTRODUCTION

After 2 years of office visits, phone visits, and secure messages, I knew Mr Sinn well. His initial revelations about his life—that he has a wife and kids and worked as an advisor—belied his eccentricities. He also believed that he was a spiritual healer repaying his sins from a past life and had already resurrected many people in this life. Despite his skepticism of western medicine, now in his mid-40s, Mr Sinn had come to accept that he has diabetes, chronic hepatitis b, and gout. When I first met him, he had a hemoglobin A_{1C} of 11.0, far above his goal of 7.5 for his diabetes.

In a traditional family medicine residency, residents often rotate every month from 1 clinical service to another in "block" rotations to build skills in different disciplines—4 weeks each in an obstetrics service, a pediatrics inpatient service, a family medicine inpatient service, etc. This structure allows little time for residents to provide outpatient care in their outpatient clinics. During most of their block rotations, residents are often in clinic only 1 half-day a week and do not attend to their patients virtually at other times. To develop outpatient clinical skills, postgraduate year-2 (PGY-2) and year-3 (PGY-3) residents have clinic block rotations where they complete many of their clinic half-days in 1 month. A typical experience for a resident in their outpatient clinic looks like this: PGY-1 residents have about 50 half-day clinic sessions with 4 office visits per half day, PGY-2 residents have about 100 half-day clinic sessions with 6 office visits per half day, and PGY-3 residents have about 200 half-day clinic sessions with 8 office visits per half day. Residents' panel sizes also gradually increase as residency progresses and their time in clinic increases. A PGY-1 has an 80 to 110 patient panel, a PGY-2 has a 150 to 200 patient panel, and a PGY-3 has a 275 to 350 patient panel. Since residents are not in their clinics consistently during many block rotations and many new patients are empaneled to the resident as they progress in their last year of residency, there is limited opportunity for continuity and providing longitudinal care.

In comparison, our family medicine residency has a longitudinal curriculum with a "clinic first" philosophy. This philosophy grew from the reality that primary care visits far outnumber hospital admissions in the United

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States and with the burgeoning number of hospitalists, many primary care physicians focus on providing outpatient care with little time devoted to inpatient care. Our residency believed that providing excellent outpatient clinical care was the best way to actualize Barbara Starfield's 4 pillars of primary care—first-contact, continuity of care, comprehensive care, and coordination of care. With this belief, our residency built a clinic-first curriculum where the clinic would be prioritized and the primary learning site for residents.

Compared with a traditional curriculum, residents in our residency have about the same number of office visits every year. PGY-1 residents have 163 half-day clinic sessions with an average of 5 office visits per half day, PGY-2 residents have 111 half-day clinic sessions with 7 office visits per half day, and PGY-3 residents have 105 half-day clinic sessions with an average of 7.5 office visits per half day. In addition, there were no clinic block rotations and clinic half days were spread evenly throughout each year. Traditional 4-week block rotations of inpatient medicine and obstetrics were transformed to 1-week bursts of inpatient medicine and 3 to 4 day shifts of obstetrics to allow for more consistent presence in the clinic.[1] This structure allowed me, like the other residents, to be consistently present in clinic and be empaneled with approximately 400 patients that we cared for from the beginning of our residency. As a second-year resident, I had grown to know many of the patients on my panel well as I interacted with them at clinic and virtually. When I wasn't in clinic during my labor and delivery shifts and inpatient medicine weeks, I answered secure messages, responded to laboratory results, and delegated tasks to my care team virtually. In my electronic health record dashboard, I could see which of my patients had uncontrolled diabetes, uncontrolled hypertension, or were overdue for their cancer screenings. These were my patients, and I was responsible for their care.

Empanelment allowed me to not only provide comprehensive care to my patients but also to develop competency and proficiency in managing their acute and chronic illnesses because longitudinal care of patients aligned with education research on how we best learn. Multiple studies have shown that we learn best when we use retrieval-based learning sessions that are spaced in time (a1…a2…a3) rather than closely timed (a1a2a3) and topics are interleaved (a1b1c1b2c2a2) rather than grouped by type (a1a2a3b1b2b3).[2-4] Interleaving is a concept in education where the learner mixes practice of several related skills together rather than practicing 1 skill repeatedly until mastery before learning another skill. For example, when learning tennis, interleaved practice involves alternating practice between forehands, backhands, and volleys rather than focusing on mastering forehands before practicing backhands.[5] In our longitudinal curriculum, I was providing care to a panel of patients spaced in time and interleaved with other clinical responsibilities.

While I took care of Mr Sinn, I also had inpatient medicine in 1-week bursts every 6 weeks interleaved throughout residency. Caring for acutely ill patients in the hospital with diseases such as hyperosmolar hyperglycemic state, hepatocellular cancer, and end stage renal disease allowed me to learn the acute complications as well as the sequela of all of Mr Sinn's chronic diseases. Thus, every month that I had an encounter with Mr Sinn, I actively recalled the diagnosis, treatment, and management of his diseases with a vivid memory of what I had seen in the hospital. By having repeated conversations spaced in time and interleaved with my other responsibilities, I learned all the evidenced-based recommendations for his chronic diseases and realized the importance of delivering this care to him to prevent the outcomes that I had witnessed in the hospital.

Building relationships with my panel of patients also helped me understand the true value of primary care. For over a year, I worked to build trust with Mr Sinn to better understand his perspective. I learned about his fears and his hopes. I learned why he ignored his diabetes—which seemed more amorphous, hard to understand without visible symptoms, and unlike the acute pain episodes of gout. It was only after an emergency department visit due to an unexpected episode of severe dizziness that Mr Sinn became concerned about his diabetes. He wanted to be healthier for his children. At this moment of crisis, I was there for him. He listened to my recommendations. Shortly after, he agreed to start insulin for his diabetes.

With Mr Sinn, I learned about relationships in primary care. Caring for Mr Sinn required creating a nonjudgmental relationship where I could prioritize, integrate, and personalize care recommendations for him.[6] I learned when to wait, when to explore ambivalence, when to encourage, and when to reinforce. I learned when to focus on medical care for his diabetes, hepatitis B, and gout and when to create space for him to share about his life. Compared with the transactional and episodic care that I was part of in medical school in block rotations, I realized the benefits of relationship-based care over years—especially in primary care. Mr Sinn was an exemplary case. In residency, I have built and sustained relationships with numerous other patients in my 400-patient panel: a writer, aged 59 years, with restless leg syndrome and chronic hip pain who invites me to his poetry nights; a custodian, aged 70 years, with metabolic syndrome

and 40-pack per year history who successfully quit smoking; a female, aged 90 years, with obsessive-compulsive personality disorder who brings a folder of all the after-visit summaries that she's ever received to every visit, etc. In a traditional residency, many residents likely have some opportunities to build relationships with their patients, but with a longitudinal curriculum in a clinic first residency, relationships are the cornerstone of our learning. To build the primary care workforce of the future, I have no doubt every resident needs to have this type of rewarding experience in their clinics.

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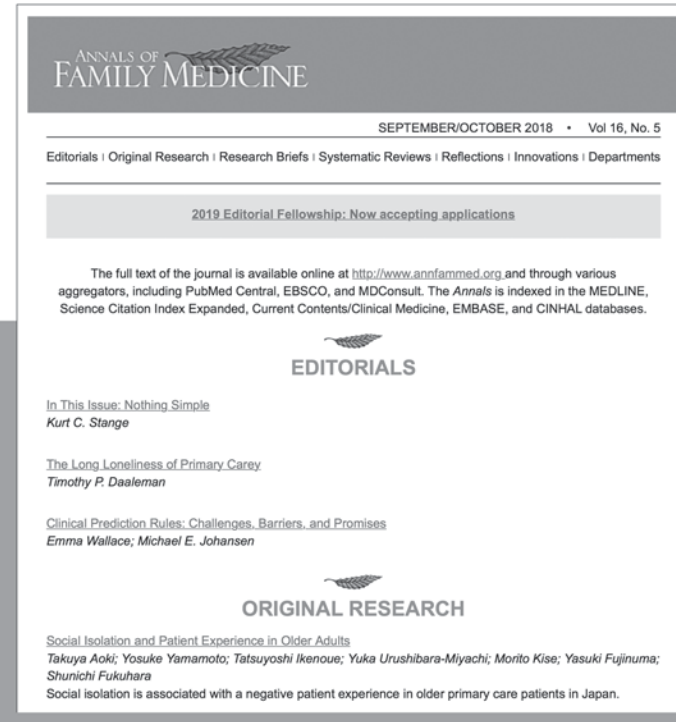
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