Applying Dartmouth Atlas research to residency decisions

Choosing a residency program is a major milestone on the way to becoming a doctor. Fourth-year medical students decide which programs to apply to based in part on their preferred specialty and the location and reputation of the residency program. But according to recent Geisel graduate Anita Arora, M.D. ('12), and current Geisel student Alicia True ('15), many fourth-years are overlooking an important factor: patterns of patient care.

Arora and True examined the approach to patient care taken at 23 top academic medical centers—the type of places with residency programs often considered desirable by graduating medical students. In a recently published report (titled “What kind of physician will you be?”) they uncovered many differences in how these hospitals treat patients and explored the implications of these variations for the training of new doctors.

Using Medicare data, Arora and True compared the 23 hospitals in three broad areas: the intensity of end-of-life care of chronically ill patients, rates of elective surgical procedures, and measures of the quality of patient care. They found variations in every area. For instance, at Cedars-Sinai Medical Center in Los Angeles, chronically ill patients saw doctors about 73 times, on average, in their last six months of life. But at Scott and White Memorial Hospital in Temple, Tex., similar patients made about 20 visits to the doctor in the last six months of life. Likewise, chronically ill patients at New York-Presbyterian Hospital spent an average of 20 days in the hospital during their last six months of life, compared to about 10 hospital days in the last six months of life for such patients at the Mayo Clinic’s St. Mary’s Hospital in Rochester, Minn.

These differences in treatment indicate a more aggressive approach among the hospitals with greater numbers of doctor visits and longer hospital stays. As previous research by the Dartmouth Atlas Project has shown, more aggressive treatment increases the cost of care but does not necessarily result in better outcomes. Plus, most patients say they prefer less aggressive patterns of care.

In their report, Arora and True call the patterns they uncovered “the hidden curriculum that can affect a lifetime of practice.” and contend that physicians who train at hospitals that provide more efficient care will be better prepared to serve as leaders. “Understanding these patterns of care is particularly important for tomorrow’s doctors in order to practice successfully in the new environment created by health-care reform,” they conclude.

The report made a splash in the media when it appeared. “Learning how to use health-care resources wisely, provide high-quality care, and incorporate patient preferences into a care plan is just as important as learning to work up a patient,” True told NPR.

Having an opportunity to become involved in health-policy research is one reason True decided to attend Geisel. “I first learned about the Dartmouth Atlas while enrolled in a post-baccalaureate premedical program,” she says. “I was intrigued, and part of my decision to come to Geisel was so that I could learn more about this research.”

Arora became involved when she took a class taught by John Wennberg, M.D., the founder of the Dartmouth Atlas, and his colleague Shannon Brownlee, a journalist who has often written about the problem of overtreatment in American medicine. Arora wanted to work on a project that focused on a topic applicable to medical students, and “exploring how variation in care impacts residency training seemed like a perfect choice.” Arora and True met when Arora was looking for a younger student to hand off the project to and True expressed her interest. “We hit it off immediately,” says True.

The findings had an immediate effect on Arora: she used them in making her own residency choices. “I carefully examined my favorite programs in terms of how they cared for patients at the end of life and adjusted my rank list so that I would hopefully end up in a place that provided efficient, high-quality care and respected patient preferences,” she says. She was delighted to match at her first choice, internal medicine at Yale-New Haven Hospital.

The project has also influenced True. “Working on this paper has opened my eyes to the variation in care in our country and the opportunity to use this information to try to identify best practices and areas for improvement,” she says. “I hope to continue to study and get involved with these areas going forward in my career.”

Nancy Fontaine

An analysis of Medicare data found extensive variation among top residency programs in the aggressiveness of care provided to chronically ill patients at the end of life. Above, each dot represents the average number of physician visits in the last six months of life for such patients at a different medical center. In the chart, 23 selected residency programs are highlighted in red.