A geographic divide in pediatric care

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At Dartmouth, pediatrician Scott Shipman gets to have his cake (do sophisticated health-policy research) and eat it, too (live in a rural setting).

If your child gets sick and you live in a major city, you'd likely have no trouble finding a pediatrician or a family doctor with a wealth of experience caring for children. If you live in a rural area, however, you may not be so lucky.

Access: A recent study in the journal *Pediatrics* by Dartmouth pediatrician Scott Shipman, M.D., explored just how bad that disparity really is. By dividing the country into more than 6,000 primary-care service areas (PCSAs), Shipman and his colleagues were able to examine health-care access for children at a local level.

From 1996 to 2006, the number of pediatricians nationwide increased 51%, while the population of children increased only 9%, noted Shipman and his coauthors. The number of family physicians, who are also trained to treat children, grew by 35% during the same period.

Despite these numbers, "substantial inequity in geographic access" persisted, the researchers found. In 2006, almost 15 million children lived in PCSAs with fewer than 710 children for each physician trained in caring for kids. But another 15 million children lived in areas with over 4,400 children per physician. Worse still, almost 1 million children lived in areas with no physicians at all trained in caring for children. Underserved areas tended to be more rural and poorer than areas with a higher supply of pediatric and family physicians. About 65% of PCSAs with no physicians for children were rural, and 20% of the children in those areas lived in poverty.

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Churning: The Association of American Medical Colleges believes an increase in the total number of physicians across all fields will help solve this problem. But Shipman has found that in the pediatric and family physician workforce, "undirected growth" has resulted in "profound maldistribution of physician resources." In other words, churning out thousands of new doctors is not necessarily the answer, because doctors tend to settle in areas where there is already a relatively high supply. So where are all the new pediatric and family physicians going, and why aren't they heading straight for the most needy areas of the country?

"There will always be a proportion of [medical students] even with [a rural] background . . . who are drawn off by other pursuits that they can't do in rural areas," Shipman says. "They may have the best intentions, but life may make it very difficult for them to return to those areas." Barriers to rural practice, he notes, include some personal issues, such as poor school systems and a lack of job options for spouses.

Goal: But the problem of geographic maldistribution stems from other causes as well, including a lack of emphasis on training rural practitioners at many top-tier institutions.

"Medical training has, as its ultimate goal, to meet the needs of society" Shipman says. "Fortunately, there are [a few] schools that have a social justice focus, but we need more." He also feels that a stronger focus on admitting students from a rural background would help to increase the proportion of graduating M.D.'s that choose to return to needy rural locations.

In the meantime, a few initiatives are helping to lessen the severity of the maldistribution. Traveling clinics based at a regional hub can reduce travel time for patients and ensure that routine checkups can be performed at regular intervals. Telemedicine can get specialty care to underserved areas without making physicians or patients travel long distances. In addition, the National Health Service Corps offers loan repayment assistance in exchange for time spent practicing in underserved areas.

Shipman himself, who grew up in Nebraska and spent a great deal of time on his family's rural farm, has had to strike a compromise between his desire to practice in a rural, underserved area and his affinity for academic medicine and health policy, which he discovered during medical school.

He feels he has bridged the gap by settling at Dartmouth, where he can be involved in academic medicine and yet live a relatively rural life. Still, he realizes there's a dire need for pediatric care, even in nearby counties in New Hampshire and Vermont, many of which are a long drive from the high-supply areas right around DHMC.

Widespread: "Unless there is a strong call or a more widespread realization that this is a problem," Shipman concludes, "we won't solve it."

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