Connecting Physicians to Reduce Patient Inequality

As a PhD candidate in sociology, Russell Funk learned a great deal about racial disparities across the health of populations. Time and time again, social scientists had documented ways in which some people ended up with worse health outcomes than others: lack of access to insurance and healthcare providers isolated black and other minority communities. Poorer health information networks among friends, neighbors, and other peers seemed to keep these groups from seeing doctors for preventive care at the rates of their white counterparts. Hospitals and healthcare providers were less available in lower-income areas, which meant that the disproportionate incarceration of minority groups could lead to better healthcare inside the criminal justice system than in their home communities. It's a mess, in short, and the changes needed to correct the health gap seemed absurdly out of reach.

Now a strategic management professor at the Carlson School of Management, Funk and his colleagues began thinking about the supply-side of healthcare. What's a basic change that could make a big impact, they wondered. Picking up on his network studies training, Funk decided that, if patients' networks mattered for their healthcare outcomes, perhaps doctors' networks did the same. And that's how he came to co-author his new Medical Care article with colleagues from the University of Michigan, Harvard Medical School, and Dartmouth-Hitchcock Health System.

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"Over the past few years, I have been working with healthcare professionals to explore how theories and methods from network science might be used to better understand and potentially improve healthcare delivery," Funk says. With his colleagues, he isolated data on a group of cardiac patients to start the search. "Earlier studies led us to believe that physicians who serve primarily black patient populations may be more isolated from their professional colleagues, and this isolation may have an association with lower quality care,"

About

Exchange, a publication from the Medical Industry Leadership Institute, features dialogue on medical industry research and application. The content is a summary of research from both academia and the medical industry, followed by commentary on the importance of the research and its application. Topics highlighted in the *Exchange* span all sectors of the medical industry and include commentary from leaders in the field, as well as researchers from the University of Minnesota and other academic institutions.

he continues. "Our hope was that by studying physicians' social networks, it might be possible to design interventions that would reduce physician isolation and potentially help reduce disparities."

In the end, the team's hunch paid off. There was enormous variation in the size and scope of physicians' professional networks—even within the same hospital—as well as the strength of those connections, normally bolstered through repeated interactions and working together on individual cases.

The finding led the team to one very practical notion: healthcare systems should work to strengthen the ties among physicians. But of course, there are roadblocks. One unexpected hurdle, Funk reports, comes from the good intentions of the Affordable Care Act. More minority patients will have access to healthcare, often through new Accountable Care Organizations (ACOs): "ACOs may develop strategies to limit the extent to which patients seek care from outside providers. Although patients may benefit from receiving all their care within a single ACO, these strategies could also lead patients to become "trapped" in local care networks, potentially furthering physician isolation in black communities and exacerbating racial disparities. Such an end result would be at odds with the aims of many recent healthcare reforms," Funk explains.

For now, Funk and his team recommend that academics dig into why physicians' networks shrink (or fail to expand); healthcare managers work to increase the interconnectedness of their providers with an eye on providing the best possible care; and policymakers, who have sought to alleviate the problem for decades, seize upon this fairly low-cost, high-return intervention that could begin to close the racial health gap. ■

Medical Industry Leadership Institute
Carlson School of Management
University of Minnesota

321 Nineteenth Avenue South, Suite 2-212
Minneapolis, Minnesota 55455-9940

Exchange—A dialogue
on medical industry
research and application

Commentary

by Rahul Koranne, MD and Andrew Savitz

The importance of social determinants of health, the human dimension of the Triple Aim, and the importance of collaborative, community-based care are just some of the timely topics that Dr. Russell Funk and his colleagues highlight in their recent Medical Care article. The conclusion that physicians practicing in hospital service areas with a greater number of black residents experience greater isolation from other physicians as compared to physicians practicing in hospital service areas with fewer black residents provides opportunity to consider the additional element that makes up the Quadruple Aim: our human resources that deliver health services, physicians included.

Social determinants such as socio-economic factors, health behaviors, and physical environment impact 80 to 90 percent of the health of an individual and a community. Studies like Funk's are important for turning the health conversation away from a singular "medical care" focus. One important step that many health systems are taking, in partnership with community organizations, is to start collecting and analyzing race, ethnicity, and language data across populations in order to highlight hot spots and create innovative health paradigms.

Regarding provider connectedness and engagement, times certainly have changed. Just a few years ago, primary care physicians who admitted their patients to the hospital made early morning and late evening rounds, acting as the ultimate "care coordinator." Networking opportunities bloomed in the doctors' lounge, where primary attending physicians enjoyed a cup of coffee with their specialist colleagues, chatting about family life and challenging cases with pride. With the segregation of hospital and ambulatory practices and increasing super-specialization, the connections among clinician colleagues are harder to create and maintain. Dr. Funk's study is a reminder of yet another social determinant being studied by the World Health Organization through its Social Exclusion Knowledge Network, which has everything to do with how humans thrive in a socially connected environment.

Many other complex factors are driving healthcare professional burnout, which many studies show continues to worsen. Increasing computerization along with increasing measurement burdens and tasks pull healthcare professionals away from patient care, which is the reason why many of them answered their calling in the first place. Thankfully this critical issue is not hidden any more, prompting focused work on building workforce resiliency and attention to the health and well-being of our nurses, physicians, and the other members of the healthcare team.

Despite these challenges, we are full of hope for Minnesota's health system. Organizations across the continuum—hospitals, clinics, and health systems, social service and community-based organizations, government, schools, law enforcement, and many others—are continuing to visualize and flatten the horizontal value chain that our neighbors, our patients, and our own families flow through as we achieve and maintain health and well-being with tireless experimentation, scaling of best practice models, and courageous innovations. ■

Rahul Koranne, MD is the Chief Medical Officer of the Minnesota Hospital Association and Lecturer at the Carlson School where he teaches MILI 6992: Healthcare Innovations-Optimizing Quality and Cost. Andrew Savitz is completing his Bachelors of Science in Nutrition at UMN and is the President of the Minnesota Medical Leaders student organization