Parents have plenty to worry about when their children begin dating. Relationship abuse should be part of that concern, especially since a Centers for Disease Control and Prevention (CDC) survey noted that one in 10 adolescents report being hit or physically hurt on purpose by a boyfriend or girlfriend at least once in the previous year. Elizabeth Miller, MD, PhD, associate professor of pediatrics and chief, Division of Adolescent Medicine at Children’s Hospital of Pittsburgh of UPMC, is working to curb adolescent relationship abuse. She collaborated with the national nonprofit Futures Without Violence to create Coaching Boys into Men (CBIM), a program that trains coaches to talk to their athletes about the importance of nonviolent behaviors toward women and girls. The program combines discussions of personal responsibility, being a positive bystander (stopping disrespectful behaviors among peers), respectful relationships, and preventing technology-based bullying, and leverages the influence of athletic coaches as powerful messengers for violence prevention and male athletes as leaders in their communities.

In a CDC-funded study, Miller evaluated the long-term effectiveness of CBIM in 16 high schools and with the more than 2,000 athletes who participated in the study. Athletic coaches from eight of the 16 schools received training and delivered the program. The remaining eight schools did not participate in the CBIM program until after the evaluation was complete. Miller’s findings will help some parents worry less.

“At the end of the sports season, boys who participated in the program were significantly more likely to stop abusive behaviors among their peers. Now, one year later, we find that the rates of abuse perpetration actually increased among youths who didn’t participate, whereas perpetration did not increase among the male athletes whose coaches delivered the program,” she reports.
“IF STUDENTS DON’T ENGAGE IN RIGOROUS MATH AND SCIENCE COURSES IN HIGH SCHOOL, THEY WILL NOT BE ABLE TO ENTER THE PIPELINE TO GET INTO MEDICAL SCHOOL.”

CHENITS PETTIGREW JR., EdD

Adebola Giwa, MD, realized he wanted to become a physician one day in seventh grade. In science class, he was learning about the heart and quickly grasped its basic functioning, correctly answering every question his teacher posed to the class. Then, he had his “aha moment.”

“I remember thinking to myself, ‘I pretty much know everything to become a cardiologist, so I should be a doctor,’” he says, laughing. “I thought, ‘I’m set! What else is there to know?’”

Giwà’s road to becoming a physician was more arduous than he imagined as a seventh grader, but he worked diligently to get there. He attended the University of Notre Dame on an academic scholarship and earned his medical degree from the University of Pittsburgh in 2013, matching in pediatrics at one of his top choices, the University of Chicago.

But as people from different minority groups are gaining representation in medical school, African Americans are losing ground, with the number of African American men lagging the most, according to a recent Association of American Medical Colleges report on medical school diversity.

Pitt medical school’s 8 percent average for African American enrollment is higher than the national average of 7 percent, and Pitt administrators, med students, faculty members like Dwight E. Heron, MD, professor of radiation oncology and of otolaryngology, alumni, and community physicians are working to lead more African Americans into the medical...
In addition to numerous academic support and peer mentoring programs at the undergraduate and medical-school levels, Pitt offers programs to the local community. The Level I Summer Premedical Academic Enrichment Program helps underrepresented high school seniors and first-year college students strengthen academic skills and focus on medical careers. Students receive academic and personal support and the opportunity to interact regularly with physicians and medical students with similar backgrounds. Pittsburgh-area high school students can also find mentoring in Pitt’s Medical Explorer program, which includes meeting weekly for lectures, science discussion, job shadowing, mentoring from Pitt medical students, and laboratory experiences. The Gateway Medical Society Inc., affiliated with the National Medical Association, offers the Journey to Medicine program with in-kind support from UPMC and Pitt. African American men and their parents are interviewed and selected to be involved in an academic mentoring and nurturing program, which includes mathematical and research tutorials, hands-on medical exposure using Pitt’s WISER human simulation lab, CPR training and certification, a science experiment camp in the summer, vocabulary training, educational field trips, mentoring by physicians, and learning to create and deliver presentations.

“One of the program’s goals is to give students hands-on exposure to different fields of medicine. Many of these young boys don’t have members of their families who are involved in medicine,” says William Simmons, MD, visiting clinical associate professor of anesthesiology and president of Gateway Medical Society.

“I didn’t grow up in an affluent neighborhood,” says Giwa. “My parents always pushed me to do my best, to strive for excellence, but I didn’t see a lot of people who looked like me or who offered an example of what I could do with my life. What pushed me into mentorship was to give kids what I didn’t have. I go back to my neighborhood, and people say, ‘Look at him. This guy was on 29th Street, right there in the projects, and look at him now. He’s at one of the top medical schools. You can do that too.’”

Giwa admits, “There were times in college when I got discouraged or questioned getting into medicine, and then I would think about going home and telling people I wasn’t going to be a doctor. I have to do as well as I can to show people back there they can do it too. Because there are people watching—it’s not hypothetical. They’re going to ask what I’m doing.”

One of those people watching Giwa might be another sharp-witted seventh-grader, poised to have his or her own “aha moment.”
READ ALL ABOUT IT: A FINE COLLABORATION

Take a city, a university, a community organization, and a newspaper: Each has needs that can be served by the other. City residents want reliable information about health care issues that affect them. The University of Pittsburgh’s Clinical and Translational Science Institute (CTSI) needs to effectively communicate what health research is being conducted here and how participating in that research can benefit local residents. The Urban League of Greater Pittsburgh, an organization committed to empowering African Americans, wants to eliminate health disparities. The New Pittsburgh Courier, one of the nation’s oldest and most prestigious black newspapers, is read throughout the city. Bring them together and a unique, successful collaboration is born.

Each month, these partners work together to create a spread that runs in the Courier. Each spread focuses on a specific health disparity and provides health information, community resources, and relevant research findings. Recent topics include infant mortality, heart disease, mental health, and asthma, among others. Because it’s important to have volunteers from diverse backgrounds in clinical studies so that research findings can apply to all populations, the articles encourage participation in research, describing what volunteers can expect and presenting information about specific studies needing volunteers.

The information is reaching its intended audience. The newspaper’s circulation is more than 10,000, and the first year’s segments received almost 50,000 hits online. The second year’s segments are on track to be viewed by even more people.

Along with providing helpful information to the community, the partnership itself has been successful. Funded by a community-based participatory research (CBPR) pilot award from the National Center for Advancing Translational Sciences, the project is managed by Elizabeth Miller, MD, PhD, codirector of CTSI’s Community PARTners (Partnering to Assist Research and Translation) Core, associate professor of pediatrics, and chief of adolescent medicine at Children’s Hospital of Pittsburgh of UPMC. Of the partnership, she says, “This collaboration has been fantastic. We have mutual ownership, flexibility, and communication; and each partner is getting something it values. It really defines what CBPR is all about.”
People who want to have more of a say in their health care may be getting more opportunities to have their voices heard. As funding for basic science research is dwindling, funding for research that can be translated quickly into better health care practices is increasing. And researchers need patient input to help improve the quality of care and lower costs. Patient-centered outcomes research addresses problems prevalent in the community and, in turn, improves health care for everyone. Federal health care reform legislation (specifically, the Affordable Care Act of 2010) established the Patient-Centered Outcomes Research Institute (PCORI) and will allow for an estimated $3.5 billion in federal funding through 2019. PCORI is authorized by the U.S. Congress to use comparative effectiveness research (CER) to speed the best prevention, treatment, and information to patients and their families.

In the first cycle of awards, PCORI gave two grants to University of Pittsburgh researchers out of only 25 projects funded across the country. James Schuster, MD, MBA, chief medical officer for Community Care Behavioral Health (a nonprofit behavioral health managed care organization and part of UPMC) and adjunct associate professor of psychiatry, received $1.7 million to examine two promising ways to promote the health, wellness, and recovery of adults with serious mental illness. Nearly 3,000 Medicaid-enrolled adults will be invited to participate because they are at risk for chronic medical conditions and receive care at local community mental health centers. (Charles F. Reynolds III, MD, UPMC Professor of Geriatric Psychiatry, is also a principal investigator on this grant.)

“While there are proven strategies that can prevent and manage significant medical conditions that are common among adults with serious mental illness, providers need a better understanding of how to shape and deliver these interventions so that they can effectively support the outcomes that matter most to patients,” says Schuster.

Michael Schneider, PhD, assistant professor of physical therapy in the School of Health and Rehabilitation Sciences, also received a PCORI award to study senior citizens’ involvement in community exercise programs to evaluate nonsurgical treatment methods for patients with lumbar spinal stenosis. Schneider’s study will randomly assign seniors who have pinched nerves in their lower backs to either standard medical care, such as oral or injected medications; individualized manual therapy, such as traction and exercise guided by physical therapists and chiropractors; or exercise in a group setting at two senior centers in Pittsburgh. Medicare rates show that lumbar surgery for spinal stenosis has increased dramatically in the last decade, according to Schneider. These surgical procedures are associated with significant health care costs, risks, complications, and rehospitalization rates.

“Evidence is lacking for the effectiveness of the various nonsurgical treatments offered to patients with this condition,” he says. “We aim to bridge this knowledge gap with a project that will compare interventions and help us develop clinical practice guidelines to choose the best treatment for individual patients based on their particular circumstances.”

In the second cycle of awards announced in mid-2013, two more Pitt researchers received funding. Rachel Berger, MD, MPH, associate professor of pediatrics, School of Medicine, and director of child abuse research at Pitt’s Safar Center for Resuscitation Research, received funding for her project “Using the Electronic Medical Record to Improve Outcomes and Decrease Disparities in Screening for Physical Abuse.”

Lakshmanan Krishnamurti, MD, associate professor of pediatrics, School of Medicine, received an award for his project “Comparative Effectiveness of a Decision Aid for Therapeutic Options in Sickle Cell Disease.”

The Comparative Effectiveness Resource Core (CERC) was established at the University of Pittsburgh’s Clinical and Translational Science Institute to offer training in CER methodology, provide guidance on promoting stakeholder involvement, assist researchers in obtaining external funding, and foster collaborations between researchers and established CER/PCORI methodologists.

CERC director Sally C. Morton, PhD, professor and chair of biostatistics, Graduate School of Public Health, serves as a statistical methodology expert to PCORI’s methodology committee. She describes comparative effectiveness research as “all about asking patients to be part of research” and “taking the results of research and getting them into practice.”