Health System Change Through Health Services Research

By Kathryn Bienfang, Public Affairs Officer for Research, VISN 1

BOSTON - What makes a healthcare system great? Most would say research is the main driver of change and is how advances in medical practice become a part of treatment options available to patients. Researchers are some of the most collaborative members of the VA Healthcare System today and networking is essential to successfully implementing the best and most effective research findings into practice.

Last Thursday, over 150 clinical researchers, health care specialists, scholars, and members of the Veterans Health Administration workforce gathered at the West Roxbury VA Medical Center’s Barsamian Auditorium Thursday to network and to celebrate how health services research is driving advances in healthcare in New England and across the nation.

Accomplished researchers from varied areas of research presented their take on what makes research important and how to get research implemented into medical practice. Their advice and stories about historical research victories provided encouragement and inspiration to a workforce in an organization where things are not so predictable anymore.

How do you know if your research is good? What do you look for when looking at research design and how can you tell if your research will improve medical practice or if it will be as successfully implemented? Things we learned in the past are still useful today. Learning how to test a population for HIV paved the way for how we test populations today for Hepatitis C and other illnesses that have the potential to be wide spread.

The venue, organized by Dr. Mark Bauer, Professor of Psychiatry at Harvard Medical School and VA Boston Healthcare System, focused this year’s event on the power of health services research to change the healthcare system, featuring speakers from VA Boston’s Center for Healthcare Organization and Implementation Research (CHOIR; www.choir.research.va.gov).
“When we share research findings and when we see how our research impacts patient care, we can’t help but believe that it is one of the main drivers for changes in medical practice and in the healthcare system here in the VA and across the nation,” Bauer said.

One point was clear from the symposium presentations and that was that even the most effective treatments will languish on the shelf and not be put into practice without concerted efforts. Bauer said that the field of implementation science, an area of extensive expertise at CHOIR, focuses on “finishing the job of biomedical research by moving evidence-based interventions into practice.”

In his opening remarks, Dr. Terence M. Keane, ACOS for Research, VA Boston Healthcare System, made it clear that research is incredibly important in bringing about improvements and change in healthcare. “Research improves patient care and it is through research that new technology and treatment is introduced by a healthcare system,” Keane said.

Keane also said the VA is definitely a leader in implementing research into practice. “We see how important research is as evidenced in how it reaches veterans and improves their patient experiences and it has the power to translate to healthcare providers everywhere,” Keane said.

Researchers often want to know, how can they know if their research will actually improve healthcare? Dr. Stephen Soumerai, Professor of Population Medicine, Harvard Medical School, said research should be and is at the forefront of changing and improving healthcare. But, he said, your research alone is not the sole determinant. He demonstrated how stronger research designs debunked the exaggerated claims of efficacy of PfP in earlier studies using weak study designs, but published in leading journals. It is unfortunately a pattern that is repeated in health policy research leading to waste and unintended patient harm.

There are no single factors that determine performance in healthcare, said Soumerai. But, social factors of the patient really can govern performance, he added. Because the VA is an integrated healthcare system, it is able to be a leader in research allowing the VA system to
be comprised of teaching hospitals. Soumerai said this kind of healthcare system is a leader in improving healthcare because “it is able to adopt new technologies faster than other types of healthcare systems.”

In addition to having efficiency in research, it is important to look at whether the research will lead to effective results and improved health. Dr. Martin Charns, Professor of Health Policy and Management at the Boston University School of Public Health; Emeritus Director of CHOIR, said “we must look at why and how research is implemented into medical practice.”

Will the research be effective in improving care? Charns asked? “Having a great research project and putting it into practice are two different things. Research is a tough business. Often times, good evidence does not get put into practice.” Charns showed how the academic model doesn’t always play out in the real world the same way and then he pointed out the certain characteristics that we can look for to determine if research will likely be put into practice.

Charns talked about how hard it was in the 90s to get research into practice. “I worked for the VA back then and my colleague Dan Deykin was a sort of visionary and he studied Everett Rogers in order to learn how to implement research into practice best,” Charns said. “Rogers was trying to determine what was taking so long to diffuse the use of hybrid corn in Iowa. He learned that it is often about how motivated people are to adopt new methods.” Deykin took these lessons to heart and began the Quality Enhancement Research Initiative (QUERI), the VA research arm dedicated to implementation science.

Charns explained it was from Rogers’ work that we learned that not only do we need to look at the evidence and know that the research can be implemented effectively with the desired result achieved, but “we need to consider people’s motivation!” Knowing that this was a critical factor has helped the VA move forward in becoming a leader in getting research into practice. “We are really good at this today,” Charns said. “I’m still a strong advocate for research programs and there is proof that this is what makes a healthcare system strong.”
Dr. Kate Iverson, Associate Professor of Psychiatry, BUSM, presented her research on how to improve screening and intervention for intimate partner violence (IPV) for women in VHA. According to Dr. Iverson, Women Veterans experience high rates of partner violence that are strongly impacting their physical and mental health. She explained that the first step is identification and that this is not always easy because women do not tend to spontaneously disclose IPV to their doctor. This kind of abuse usually is identified through careful and sensitive screening. She has worked with various stakeholders to validate a screening tool, which VA now recommends for our screening efforts. “Identification requires interventions,” Iverson said. “One of the things we developed is a brochure to guide clinical intervention. The medical practitioners use this brochure to talk about IPV, its impact on health, and resources within and outside of VA for help. This brochure is highly utilized and was disseminated nationally.” The screening and brochures are becoming a best practice for health providers. “VISN 1 has served as a national model for early adoption of screening and intervention,” Iverson said.

Dr. Allen Gifford, Professor of Health Policy and Management; Co-Director of HIV/Hepatitis QUERI—as well as incoming director of CHOIR Boston—shared some important lessons he learned when putting an AIDS testing program in place. He said that helped greatly when developing other testing and treatment designs like how we are diagnosing and treating Hepatitis C today.

“Now, we are looking at how we can improve adherence to treatment by people with AIDS,” Gifford said. “We are seeing that it isn’t a fair treatment system in that of the people getting treatment for AIDS, a large percentage of people from minority groups are not getting the same health care as others.” Gifford said this didn’t make sense financially either because when you total up actual cost and to cost of local implementers of care, the latter ends up being more expensive than a centralized approach.

Gifford said that when implementing research into practice the most important this is to work with those who are working in VA policy and operations. “This is essential,” said Gifford. “Unless you do that, you aren’t going anywhere.”
Another way to look at how research is being implemented successfully is to look at trends. Dr. Amy Rosen, Professor of Surgery, Boston University School of Medicine, presented on the topic of trends in the Purchase of Surgical Care in the Community by the Veterans Health Administration.

Rosen said “in a study to determine if surgical care increased in the community due to the Choice Act, there was evidence to suggest an increasing trend in surgical care provided in the community over the study time period (FY14-FY16).” She added that “however, the VA remained the primary provider of surgical care during the study time period.”

In fact, she said, there were increases in community care varied by type of surgery, with increasing trends for cardiovascular surgeries, digestive surgeries, eye/ocular surgeries and male genital surgeries. Data like this is useful in determining where care is most needed in a community and helps keep a healthcare system robustly prepared to manage the needs of its population.

On the forefront of Veteran-related research today is providing care that will improve the lives of those who have borne the battle. Dr. Terri K. Pogoda, core investigator at CHOIR and Research Assistant Professor, Department of Health Law, Policy & Management, Boston University School of Public Health presented her research on unemployment and the vocational rehabilitation interests and needs of Iraq and Afghanistan war Veterans with traumatic brain injury (TBI).

In a longitudinal study of more than 2,000 Veterans, her research found that unemployment at the time of an initial TBI evaluation was strongly associated with unemployment nearly 3 years later in a follow-up survey. Diagnoses of moderate/severe TBI, posttraumatic stress disorder (PTSD), and substance use disorder were also related to unemployment at the time of survey. In another survey of Iraq and Afghanistan war Veterans with TBI, Dr. Pogoda and her collaborator Dr. Kathleen Carlson, an epidemiologist and health services researcher at the Portland VA Medical Center, found that 45% reported current unemployment, and that among those who were employed, about half reported that they were currently looking for a different job.
After reading a description of supported employment, an evidence-based vocational rehabilitation program that is primarily targeted to those with severe mental illness, 42% of Veterans with TBI reported interest in being offered supported employment services. A survey of Veterans Health Administration supported employment supervisors and vocational rehabilitation specialists indicated that they believed Veterans with TBI could benefit from the supported employment program.

Based on these survey results from Veterans and providers, Dr. Pogoda and colleagues are currently working on a VA Health Services Research & Development study that will implement supported employment for Veterans with TBI at 12 VA Medical Centers nationwide.

Following the presentations, attendees received lunch at the West Roxbury Elks Lodge in a research networking event that included a display of super-sized posters for over 300 projects highlighting the incredible breadth and strength of the research program at VA Boston, ranging from basic science and clinical pathophysiology to implementation science across mental health, medicine, surgery, and other disciplines.

Event coordinator Dr. Bauer noted that the afternoon poster session set a new record for presentations, with 115. “The poster session in particular provided a unique opportunity for investigators from these diverse areas to cross-pollinate ideas and continue interdisciplinary conversations,” Bauer said.