HERC Studies Cost-Effectiveness of Telehealth

Telehealth, or telemedicine, is the use of telecommunications and information technology to provide health care when distance separates participants. It can link patients to providers and enable real-time visual consultations between providers in separate locations. Many studies have shown that telehealth can improve the quality of care, but its cost and cost-effectiveness have received relatively little attention. HERC staff are engaged in several projects to address this gap.

Economist Mark Smith is modeling the costs associated with prevention, diagnosis, and treatment of pressure ulcers among VA users with spinal cord injury (SCI). With funding from VA HSR&D, he and colleagues from the Palo Alto VA are analyzing common clinical scenarios involving pressure ulcers. Each scenario has multiple treatment options, one without telehealth (usual care) and one or more with telehealth. Probabilistic decision models will show the cost consequences of adopting telehealth practices relative to usual care.

Smith is also carrying out a cost-outcomes analysis for a recently completed telehealth study. The intervention assisted veterans in quitting smoking by providing telephone care in addition to routine clinical care. The results, reported in Archives of Internal Medicine (PMID 16534040), revealed that telephone support significantly improved 6-month abstinence rates. The economic analysis will determine the intervention cost and the cost per additional quit.

Economist Ciaran Phibbs is performing a cost-effectiveness analysis for Cooperative Studies Program (CSP) trial #481, also known as THINRS (http://clinicaltrials.gov/ct2/show/NCT00032591). Patients randomized to the intervention arm receive a device for weekly home monitoring of prothrombin time, while those in the usual-care arm are managed in an anticoagulation clinic. Phibbs is testing a hypothesis that the two arms will experience similar levels of health care use and cost.

Economist Todd Wagner is working with John McKellar of the VA Program Evaluation Resource Center to understand the costs associated with providing telephone follow-up for substance use treatment. Follow-up care for substance use disorders usually wanes with time.
This study is determining whether telephone follow-up is as effective as traditional follow-up, in respect to long-term SUD outcomes, particularly for veterans who live far from a VA facility.

These projects show both the variety of telehealth interventions being tested in VA and the range of economic analyses relevant to them. Each addresses a question of increasing importance to managers and clinicians: how and when to use telehealth methods. VA researchers will also benefit through the data collected on telehealth costs and outcomes.

Researchers with questions about how to analyze the cost or cost-effectiveness of VA telehealth initiatives can contact HERC at herc@va.gov or by calling 650-617-2630. HERC economists will also attend the QUERI National Meeting in December, 2008, and the HSR&D National Meeting in February, 2009.

Nicole Flores joined HERC as a Research Assistant in June, 2008. She earned a Bachelor of Arts in Public Health from UC Berkeley. Nicole has had internships with Kaiser Permanente, the Alcohol Policy Network, and the California State Assembly Committee on Health.

Economist Jean Yoon joins HERC in August, 2008. She earned a PhD in Health Services from UCLA with an emphasis in economics. Her research has focused on medication adherence, health disparities, and access to care. At HERC she will serve on Cooperative Studies trials and HSR&D-funded projects.

HERC Recommends Deeper Integration of Economics into QUERI

HERC economists Mark Smith and Paul Barnett have reviewed the role of economics in the HSR&D QUERI program. Their report, published in the open-access journal Implementation Science, reviews research in implementation studies outside and within VA and critiques of the use of economic research within QUERI.

QUERI locates or develops clinical best practices and implements them within the VA system. The program is organized through research centers that focus on specific conditions, such as substance use disorders or polytrauma/blast-related injuries.

QUERI leaders have recognized the importance of economic analysis since the program’s inception 10 years ago. Several centers employ economists, and all of them are engaged in economic analysis in some form. Still, Smith and Barnett found that economics appears to play an important role in QUERI implementation studies only after implementation has reached the stage of multi-site trials. The authors argue that the QUERI program would profit from using economic analysis in choosing best practices for implementation and implementation interventions to employ. They also recommend that QUERI economists perform research on costing methods in order to develop widely accepted international standards for implementation economics.

The article is available for free at http://www.implementationscience.com/content/3/1/20.

The 2007 HERC Average Cost Inpatient and Outpatient Datasets are now available on VA’s servers in Austin.

Upcoming HERC Cyber-seminar

September 17, 2008 - Chuan-Fen Liu, Ph.D.
VA Puget Sound Health Care System
2 PM EDT / 11 AM PDT

The schedule for upcoming cyberseminars along with information on the archives is available on our website:
www.herc.research.va.gov

There is no need to register for these seminars. Just log on to:
http://www.hsrdr.research.va.gov/for_researchers/cyber_seminars at the scheduled time and click on the seminar you would like to participate in.