## Population Health *Matters*

## **Jefferson School of Population Health Forum**

Formerly Health Policy Forum

## Implementing Decision Support Tools to Enhance Care for Older Adults

Kathyrn H. Bowles, PhD, RN, FAAN

Professor and Raltson House Endowed Term Chair in Gerontological Nursing Director of the Center for Integrative Science in Aging University of Pennsylvania School of Nursing

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The fall 2012 season of the Jefferson School of Population Health Forum opened with an enlightening presentation about care for older adults. Dr. Kathyrn Bowles of the University of Pennsylvania discussed innovative methods for improving discharge planning decision support tools and the current state of research in this area. Dr. Bowles dedicates much of her time to examining decision support that is guided by information technology to improve care for older adults. She is committed to improving systems that will enhance transitions of care.

Dr. Bowles began her presentation by describing the barriers to effective discharge planning. For example, lack of protocol can be exacerbated by shortened lengths of stay, inconsistent assessments, and varying levels of expertise and risk tolerance.

Additionally, there is a lack of post-acute referrals, increased costs, and poor discharge outcomes. Sometimes over-referral is also a problem. Many issues contribute to these barriers, such as discharge planners (DP) who are overwhelmed; varying models as to which patients are assessed or screened by a DP; and lack of evidence-based support tools for discharge planning.

Dr. Bowles and her colleagues have been very involved with a National Institutes of Health (NIH) study that focused

on a new discharge decision support system known as D<sup>2</sup>S<sup>2</sup>.<sup>1</sup> This system is designed to assist in identifying patients who should be referred for post-acute care and avoid missing those who need care. This should also help decrease the problem of over-referral.

Using real case studies of hospitalized older adults, two versions of the tool were developed: one for cognitively intact patients; and the other for cognitively impaired patients to be used by the caregiver or proxy. The tool takes 5 minutes to complete and can be administered any time prior to discharge, but preferably within 24 to 48 hours of admission. The tool consists of questions surrounding walking ability, self-rated health, length of stay, age in years, number of co-morbid conditions, and depression.

The study analyzed care without decision support and care with decision support. The control phase (without support) included self-developed assessment forms. Referral decision was not structured and was made by individuals. In the experimental phase with decision support, discharge planners and staff nurses were educated about the D<sup>2</sup>S<sup>2</sup> and workflow was analyzed to determine the best way to share decision support with clinicians.

Dr. Bowles explained the summary of the findings, which in general focused on the notion that supplying decision support for post-acute care (PAC) referral decision making is associated with better DC plans. Between the two phases there was a 6% decline in readmissions by 30 days and 9% by 60 days. Dr. Bowles stated that timely sharing of the tools is critical to deliver the decision support at the right time to the right person. Clinicians reported that the tools were valuable in guiding or confirming their discharge decision making and identifying high-risk patients early in the hospital stay.

In conclusion, providing decision support with the D²S² revealed the helpfulness in identifying patients likely to have readmissions and an impact on time to readmissions. Dr. Bowles describes the implementation process as complex, involving careful adherence to established steps; an information system inventory and workflow analysis; and evaluations. Future plans are underway to license the D²S², and develop smart capabilities and dashboard reporting. ■

To listen to Forum podcasts and view slides visit: http://jefferson.edu/hpforum

## PEFEDENCES

1. D<sup>2</sup>S<sup>2</sup> Discharge decision support system platform. 2012. http://www.rightcaresolutions.com/#!solutions/ch6q. Accessed October 4, 2012.