

PATHWAYS TO PROGRESS: Ounces of prevention

Health initiative aims to reduce preventable hospitalization numbers

Kenneth L. Stewart and Mimi Baugh

Thursday, March 6, 2014

Remember those billboards last summer urging us to “Drink lots of Water”? At first glance it looked like an ad by the “Culligan Man” until you noticed the Partnership for Better Health moniker. Digging deeper into all the things PBH is doing reveals the big surprise. PBH is actually a fascinating public health experiment.

The whole thing started in 2011 when the Texas Legislature took an unusual move by appropriating \$2 million for a Department of State Health Services initiative to reduce something called potentially preventable hospitalizations, or PPHs, among adult Texans.

The initiative focused on eight medical conditions with hospitalizations considered “potentially preventable” if individuals access and cooperate with less expensive outpatient health care services for prevention. DSHS estimates that hospital admissions for eight PPH conditions resulted in hospital charges amounting to \$8.1 billion in 2012.

The program invited Texas counties with extremely high rates of hospitalization for PPH conditions to apply for funding beginning in 2012 for community-coordinated action plans to reduce hospitalizations. Tom Green County gained support to take action on reducing hospitalizations for three targeted conditions: bacterial pneumonia, urinary tract infection, and chronic obstructive pulmonary disease or older adult asthma.

The local Partnership for Better Health emerged, and its actions reflect an exemplary community coalition reaching far beyond putting up billboards.

There are six anchor institutions at the core of the Partnership including the Area Agency on Aging, ASU’s Caregiver Research Institute, Baptist Retirement Community, San Angelo Community Medical Center, Shannon Medical Center and the Tom Green County Treasurer’s Office.

By sharing resources, and working with additional community-based organizations during its first year of operations in 2012, the Partnership delivered smoking cessation services to more than 1,800 residents (about 1,600 had been diagnosed with COPD) and provided more than 17,000 vaccinations to local individuals at high-risk of influenza or bacterial pneumonia.

In addition, the Partnership organized public education opportunities promoting important preventive practices and provided intensive prevention education to more than 500 high-risk individuals and another 500 health care providers.

Experiments in public health like this one are frustrating when it takes a long time to learn the impact. The results cannot be fully known at this time.

Still, DSHS opened a preliminary window into understanding the effect with a recent release of 2012 hospital admissions data for the targeted PPH conditions. The 2012 numbers are the first to coincide with PBH actions in the community as described above.

On the surface, they are not particularly impressive when compared to admissions for the prior 2011 year. For example, DSHS records show 281 adults from Tom Green County admitted for bacterial pneumonia in 2011. The number increased to 293 for 2012. Similarly, the number of admissions for urinary tract infections went up from 156 to 176.

Of the three targeted conditions for Tom Green County, only COPD-OAA admissions declined. These fell from 277 in 2011 to 246 in 2012.

Concentrating only on the raw numbers is misleading, however, because it does not take into account the size of the underlying population. In addition, subgroups of various sizes within the population differ in terms of initial risk of hospitalization for the conditions in question. Older people and former smokers, for example, have higher-risk for COPD-OAA admission to a hospital.

A more valid and insightful comparison focuses on so-called risk-adjusted rates, which control for differences in population sizes and subgroups with various levels of risk. Viewed in this lens, Tom Green County numbers look more promising. While the raw number of admissions for UTI increased between 2011 and 2012, for instance, the risk-adjusted rate remained flat.

More impressive is an 8 percent decline in the risk-adjusted rate of admissions for bacterial pneumonia. This rate decreased from 366 admissions per 100,000 adult residents in 2011 to 336 per 100,000 in 2012, even as the raw number of hospital admissions for bacterial pneumonia increased.

Risk-adjusted admissions for COPD-OAA dropped more dramatically by more than 14 percent from 546 per 100,000 adult residents in 2011 to 467 per 100,000 in 2012.

Of course, the timely coincidence between these year-to-year decreases and the actions launched by the PBH does not prove reduced risk-adjusted admission rates were caused by the vaccines, services and education mobilized by the coalition. Our health care system is far too complex for that sort of simple cause-and-effect relationship to work neatly.

Indeed, a very large bundle of health care reform policies have created pressures and incentives for a number of years urging hospitals to change their operations. Some demands originate from Washington, others from Austin.

Local hospitals have been busy implementing their own reforms, regardless of the politics, and changes they are enacting provide additional feasible reasons for reduction in the risk-adjusted rates of PPH admissions.

San Angelo hospitals, for instance, have taken steps to strengthen patient education as it occurs both inside and outside the hospital. They improved reconciliation of medications as patients move in or out and around hospital departments. They worked to improve management of all the moving parts that can enter into patient cases from within the hospital, from doctors' offices and clinics, or from patient households and families.

In combination with PBH coalition actions, these kinds of changes, which are ongoing in local hospitals, may form a better explanation of the dropping rates of hospital admission for conditions such as bacterial pneumonia or COPD-OAA.

Sorting out the causes of decreased admission rates will come in time as more analysis unfolds. For now, it is important to grasp the significance of falling rates for the targeted conditions in Tom Green County. Continuing the trend can only reward the community toward the key goals of achieving better health and lower costs.

In Tom Green County, the average patient age for 2012 was 65, and more than 60 percent resided in San Angelo's 76901 and 76903 ZIP code areas. Higher-risk, frequent users of health care services are most likely to experience potentially preventable hospitalizations.

Moreover, it is no surprise that Medicare and Medicaid are the payment sources for more than 75 percent of the cases since most preventable hospitalizations involve seniors living in the city's low-to-moderate income neighborhoods. Total hospital charges tied to Tom Green County admissions for the three targeted conditions (bacterial pneumonia, UTI and COPD-OAA) in 2012 were \$20.9 million.

The PBH story is a remarkable pathway to progress on health care reform for San Angelo and Tom Green County. Drink lots of water and get on board!

Kenneth L. Stewart is director of Community Development Initiatives at the ASU Center for Community Wellness, Engagement, and Development. Contact him at kenneth.stewart@angelo.edu. Mimi Baugh is director of the CareGiver Research Institute at the ASU Center for Community Wellness, Engagement, and Development. Contact her at mimi.baugh@angelo.edu.



© 2014 Scripps Newspaper Group — Online