SBIRT: Effective Interventions for Alcohol-Related Health Problems

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"We're seeing that simple screening can reduce healthcare costs and build happier families and healthier communities," says Rich Brown, who directs the Wisconsin Initiative to Promote Healthy Lifestyles, a screening and assistance program for alcohol and drug abuse coordinated by the Department of Family Medicine at the University of Wisconsin-Madison. The 5-year project is funded by a \$12.6 million grant from the federal Substance Abuse and Mental Health Services Administration and administered by the Wisconsin Department of Health Services.

This innovative program aims to address problem drinking, which the state has identified as a major public health issue. Between 2002 and 2006, alcohol abuse rates among Wisconsin residents ages 12 and older ranged from 9% to 11%, compared with the national rate of 8%. In addition, Wisconsin's per capita driving-under-the-influence arrests are 1.5 times those of the United States as a whole, and the state's rate of drinking and driving is the highest in the nation. According to a 2008 needs assessment project report by the Wisconsin Department of Health and Family Services (now the Wisconsin Department of Health Services), the state's healthcare, social services, and criminal justice systems incur more than \$2.6 billion in costs each year from alcohol-related injuries, hospitalizations, arrests, treatments, and deaths.

Since March 2007, WIPHL has administered screening, brief intervention, and referral to treatment (SBIRT) through 21 participating primary care settings across the state. The brief screening consists of four questions asked of each patient once a year during a routine healthcare visit. People who score positive and are at risk for alcohol abuse see an on-site health educator who has received WIPHL training. Patients' responses to a lengthier set of questions the Alcohol, Smoking and Substance Involvement Screening Test indicate their levels of risk or problems. Most patients receive an intervention of about 20 minutes and, perhaps, a follow-up visit or phone contact. Interventions are based on motivational interviewing techniques and are conducted on site by trained WIPHL health educators.

Studies have shown SBIRT to be one of the most effective interventions for alcohol-related health problems. According to the National Commission on Prevention Priorities, alcohol SBIRT services are ranked fourth among clinical preventive services for cost-effectiveness and clinically preventable burden, which is defined as "the disease, injury and premature death that would be prevented if the service were delivered to all people in the target population".

"Evaluations are showing that SBIRT is making an impact on patient drinking," says Brown. For many patients, this early and brief intervention, which includes one to three follow-up consultations, is enough to help them significantly decrease or stop their alcohol and drug use.

Primary care providers at the Wisconsin SBIRT sites are also pleased with the project. Adds Brown, "They're already challenged to address three clinical problems in the 15 minutes they spend with a patient, and the response to having a trained health educator on site to conduct the screening has been very positive."

To date, WIPHL clinics have screened 60,000 patients and conducted 10,000 brief interventions. More clinics will be added in coming years, and the effort includes a focus on changing public policy and standards of care so that services continue to be delivered on a permanent basis.

SBIRT both improves people's lives and helps lower societal costs. A 2002 Wisconsin study showed that the state saves nearly \$1,000 in healthcare and criminal justice costs for every patient who receives screening and brief intervention services. This study counted reductions in motor vehicle accident and injury, and medical, and legal event costs as benefits of the program.

Less widely recognized but just as significant is the toll that substance abuse problems take in the workplace. Absenteeism and "presenteeism" coming to work hung over or under the influence pose substantial costs to an employer, given that such workers are at high risk for low productivity, workplace injuries, worker's compensation claims, and potentially lifelong payouts.

A recent study by researchers Andrew Quanbeck, Katharine Lang, and Kohei Enami at the University of Wisconsin-Madison showed that employers have a lot to gain by making sure that their insurance companies and healthcare providers offer SBIRT. The analysis quantified how employers benefit by requiring insurers to adopt the SBIRT program. The researchers calculated the likely costs of problem drinking for a representative Wisconsin firm that does not currently provide SBIRT services. They then constructed a cost-benefit model in which the firm would fund SBIRT for its employees through a group health insurance plan. The authors estimated the net present value of SBIRT adoption by comparing costs due to problem drinking both with and without SBIRT.

When absenteeism, presenteeism, and healthcare costs were explicitly considered from the employer's perspective, the net present value for the representative firm was \$1,464 per employee. Benefits of the reduction in motor vehicle accidents are shared between society and employers. Societal net present value, with the exclusion of quality of life values, was estimated to be \$3,405 per employee. "While absenteeism and presenteeism costs are difficult to estimate empirically, we used the best estimates available from the literature," noted Quanbeck et al. "Notably, SBIRT is cost-beneficial from the employer's perspective if healthcare costs alone are considered. There appears to be a business case for employers to fund SBIRT services, since the costs are minimal and many of the benefits accrue directly to the employer," the researchers said.

"This study helps show that SBIRT is cost-beneficial from both societal and employer perspectives," says Brown. "It makes economic sense for employers to make sure that SBIRT is a benefit covered in the group health insurance plans they offer," he concludes.

Maureen Fitzgerald is an editor for NIATx, based at the national program office on the University of Wisconsin-Madison campus. She writes frequently on the NIATx model of process improvement and its successful application in behavioral health settings.