

## **Supplemental Digital Appendix 1**

### **Case-Based Application of Conceptual Framework for Translating Evidence Into Practice, Policy and Public Health Improvements**

To illustrate the practical aspects of our conceptual framework, we describe here how it could be applied to the goal of improving Chlamydia screening rates in young women. Relevant competencies are identified by number; refer to Table 1 for a complete description of each competency.

#### **The “practice”**

Stakeholders—including health officials, professional societies, and insurers—have enacted a variety of strategies to improve screening using performance-based approaches, including annual performance measurement and reporting by health plans. However, through 2010, the average Chlamydia screening rate reported nationally by health plans remained less than 50% for commercial health plans.<sup>1</sup>

#### **Applying the design principles and conceptual framework**

The first step in developing an intervention strategy is to identify which behavior(s) should be prioritized in order to increase Chlamydia screening rates for young women—ideally among the population in which we propose to improve screening rates (competencies 3, 4). Using a combination of qualitative and quantitative approaches, we examine how much of the “performance gap” is due to organizational, provider, individual, and community factors. Colleagues from operations research, public health, adolescent medicine, and medical anthropology help us frame the problem (and potential interventions) from different perspectives (competencies 1–4). We use social cognitive theory to identify key behaviors to consider at the provider and patient levels (competency 3). We use mixed method approaches to estimate the relative contribution of system, provider, and patient factors to low screening rates (competencies 8, 9), and their propensity to change in response to specific interventions (competencies 3, 4, 7). Through a collaborative process involving the project team, stakeholders, the

health care delivery system, and representative patients, we decide upon a project/intervention plan that is feasible and operable (competencies 1, 2, 5–7).

We use certain skills and methods to identify and engage with stakeholder organizations (competency 5). For example, to initiate a community-engaged program, we could informally interview community leaders to identify stakeholder groups as well as the potential barriers and facilitators within the community to developing an intervention, set up an advisory board composed of stakeholder organizations, and hold a community meeting to discuss the public health data and reasoning for developing such an intervention.

We would then present the findings from our formative research to stakeholder representatives (competencies 5, 6), which would lead to a decision to pursue a marketing and social networking campaign to influence the social norms and expectations of sexually active young women (competency 7). The primary goal could be to motivate young women to request that their health care provider screen their urine for Chlamydia. Outcomes would include women's intention to request screening, as well as screening rates from health care delivery systems located in the intervention community.

## Reference

1. National Committee for Quality Assurance. The State of Health Care Quality. 2011. <http://www.ncqa.org/tabid/836/Default.aspx>. Accessed November 22, 2011.