

IMPLEMENTATION SCIENCE IN THE PREVENTION RESEARCH CENTERS

What Is “Implementation Science” and Why is it Important?

Despite billions of dollars invested in research developing and testing health-related treatments, not all of these scientific findings are used in routine care. Implementation science is an important scientific discipline that bridges the gap from *research* to *practice*. Implementation science is the study of methods to promote the uptake of research findings and other evidence-based approaches into practice across local, regional or national health care and community settings. The overall aim of implementation science is improving the quality and impact of health services. In addition, implementation science improves the development of new treatments and practices by informing *how* they are designed in order to maximize their delivery by care settings and their reach to patients. Implementation science research focuses on “real world” settings and involves working with stakeholders like providers, health care systems, and communities.

What is “Health Promotion and Prevention Implementation Science” and How is it Different?

Health promotion and prevention research seeks to identify ways in which people and communities can avoid illness, disability and premature death. Many health promotion and prevention programs and practices are well-established and supported by scientific research. For example, there are a large number of effective programs that prevent diabetes and heart disease. However, health promotion and prevention programs and practices are often not widely available. The greatest challenge with respect to these proven programs and practice is understanding *how* to achieve their widespread uptake in communities and healthcare systems in a way that is affordable, effective, and sustainable. In many respects, “we know what to do but we don't know how to get it done”. Health Promotion and Prevention Implementation Science is a type of implementation science that addresses several unique challenges and opportunities to putting health promotion and prevention research to practice. These include the following:

- Health promotion and prevention focus on achieving *long-term* benefits, that is preventing a disease in the future, as opposed to immediate benefits and results that comes with treating an existing condition.
- The vast majority of healthcare financing is for delivering treatments individuals with diseases, not for health promotion and prevention programs and practices.
- Effective health promotion and prevention programs and practices often includes changing complex behaviors of both providers who deliver these services *and* patients or community members for whom they are trying to prevent disease.
- Health promotion and prevention practices often consist of *multiple components* as opposed to singular or one-time interventions, presenting additional challenges to effectively implementing them.
- All of these factors combined make the sustainability of health promotion and prevention programs and practices in care delivery settings challenging. However, using the tools of implementation science, they also represent important opportunities for improving health across the nation.

How do the CDC Prevention Research Centers Advance and Apply Implementation Science to Promote Health and Prevention Disease across America?

The Prevention Research Centers (PRCs) are leading the way in Health Promotion and Prevention Implementation Science. The Centers for Disease Control and Prevention funds a network of 26 PRCs across the country. The network is made up of researchers, providers, policy makers and community stakeholders who are dedicated to advancing and applying health promotion and prevention science to address the leading causes of death, disability and illness in the nation. The PRCs accomplish this by partnering with communities, public health departments, health care delivery systems, and providers to identify the most effective health promotion and prevention practices and to identify ways by which they can be delivered and sustained in settings where people receive their care. In doing so, the work of the PRCs transforms health care and public health delivery systems, broadly reaches individuals and communities and makes meaningful improvements to health in communities across the nation.