

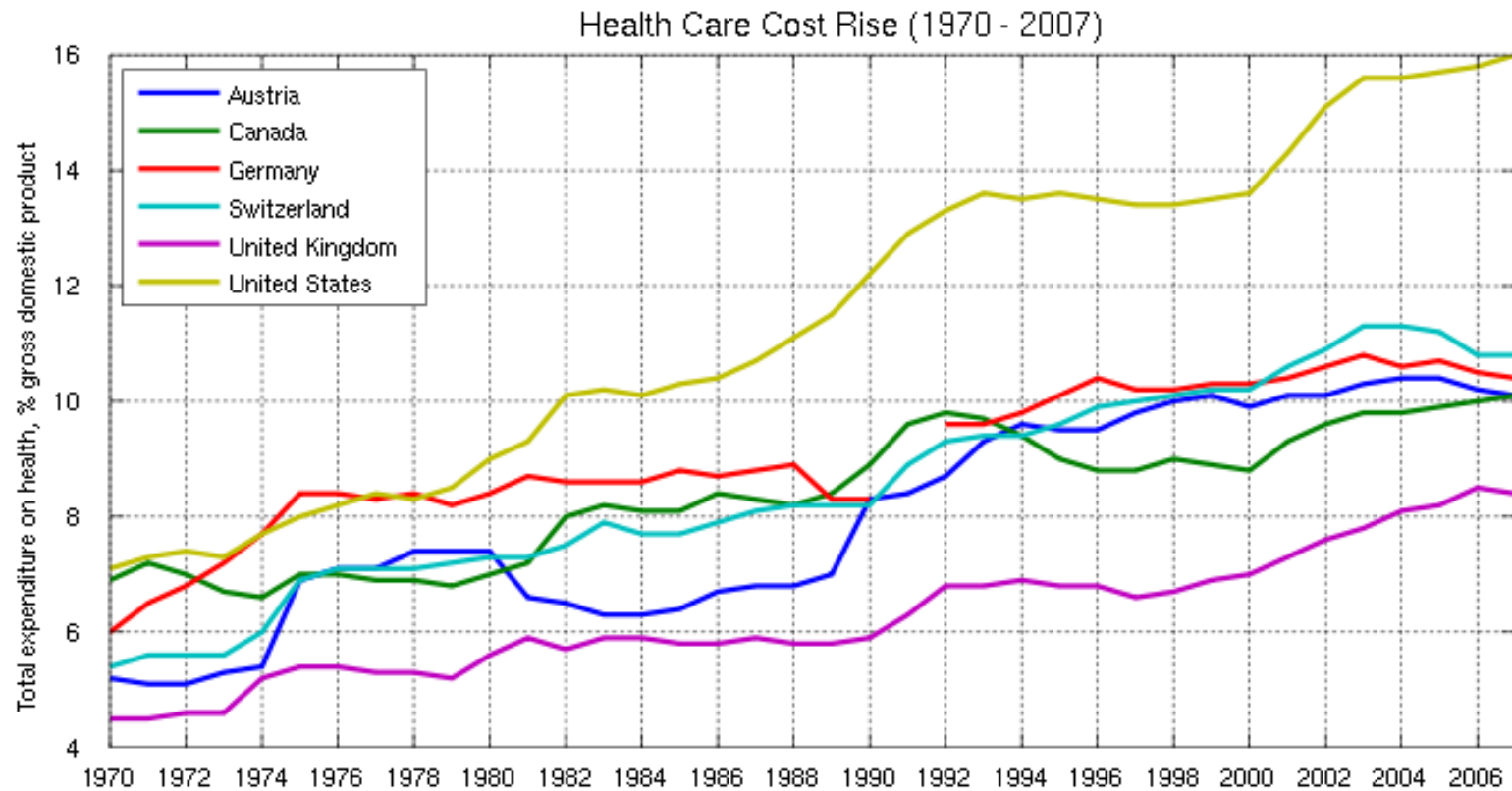
Behavioral Intervention Research: From Efficacy to Implementation

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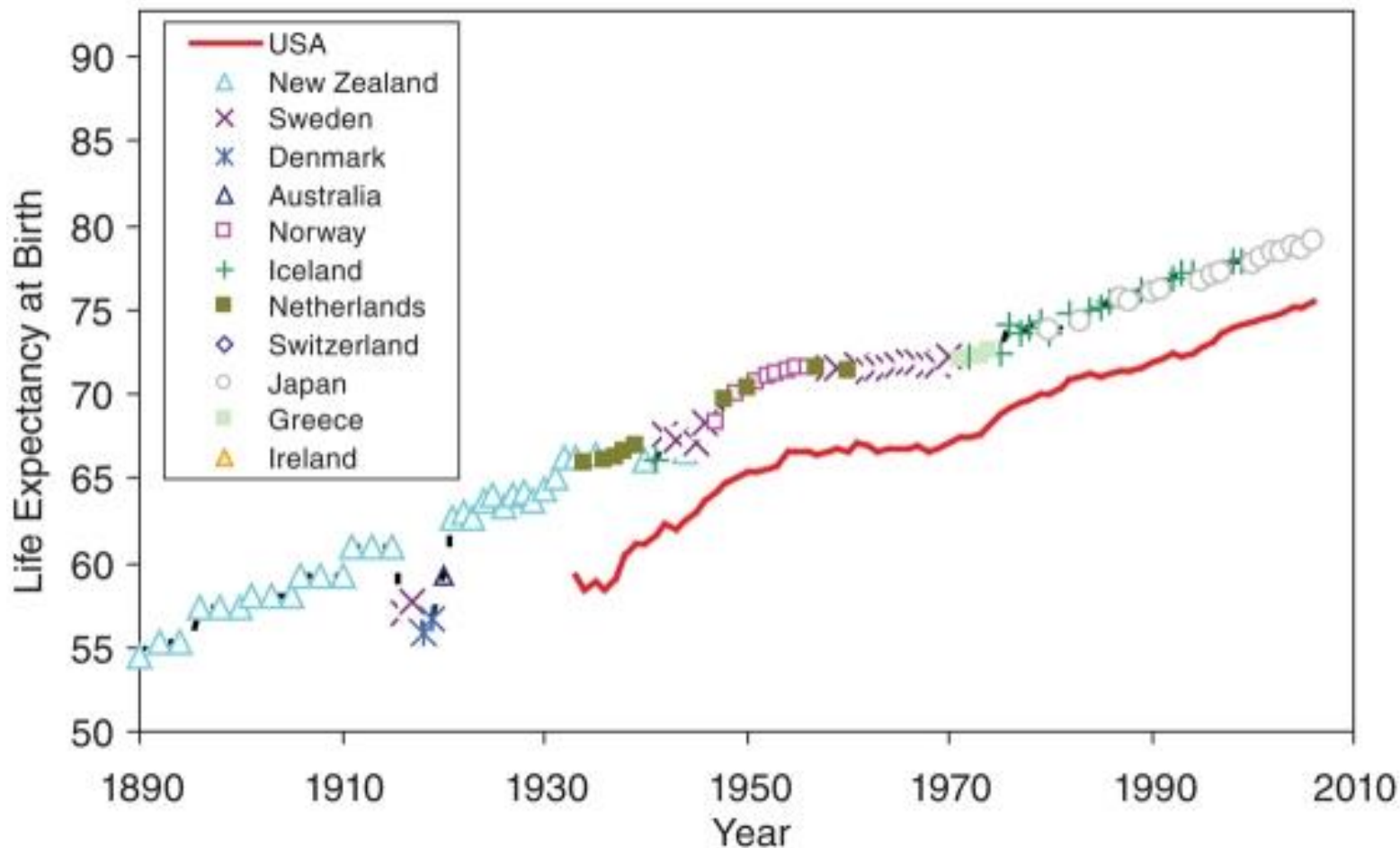
Current Health Care Situation in the US

- Underperforming health care system
- Balkanized and silo approaches to care, lack of integration of care
- Expensive, unsustainable cost, increasingly inaccessible
- Inequitable, significant health disparities

Health Care Costs are Rising



Life Expectancy in the US and Other Industrialized Nations



Ideally we would have

- An integrated health care system
- Cost-effective
- Personalized care
- **Rapid translation from research to care**

Moving Research to Practice

**“it takes 17 years, on average,
...for 14 % of research
...to translate into practice”**



Why do we need to know more about translation to practice?

- ◆ **Evidence-based practices are not reaching patients with complex problems and vulnerable populations**
- ◆ **Effective interventions are not generally tested in real-world settings with staff found in public health and clinical situations**
- ◆ **Too often, our research questions do not address issues important to practitioners, policy makers, and patients and their families**
- ◆ **Many evidence-based treatments not feasible in most real-world settings**

Questions Addressed by D&I Research

- How to achieve widely accepted and adopted efficacious interventions in a variety of real-world settings
- Potentially modify interventions to be consistently accepted and implemented by individuals with varying training and expertise
- Enhance feasibility, provider and patient adherence, and community uptake while producing reliable effects at reasonable cost
- Determine how to reach large numbers of people in real-world settings, especially those who can most benefit

Design Strategies Used in D&I Research

Strike a balance between rigor and relevance in study designs, methods and outcomes

- RCTs
- Simulations, modeling, dynamic systems science models
- Natural experiments (implementation of new policy)
- Use of EHRs, registries, large health care systems
- Pragmatic trials
- Adaptive designs
- Factorial designs (SMART, fractional factorials)
- Cluster randomized designs
- Community Based Participatory Research approaches (CBPR)*
- Patient-centered care approaches
- and others....

*Guidelines and Categories for Classifying Participatory Research Projects in Health:
<http://lgreen.net/guidelines.html>

Design Considerations in D&I research

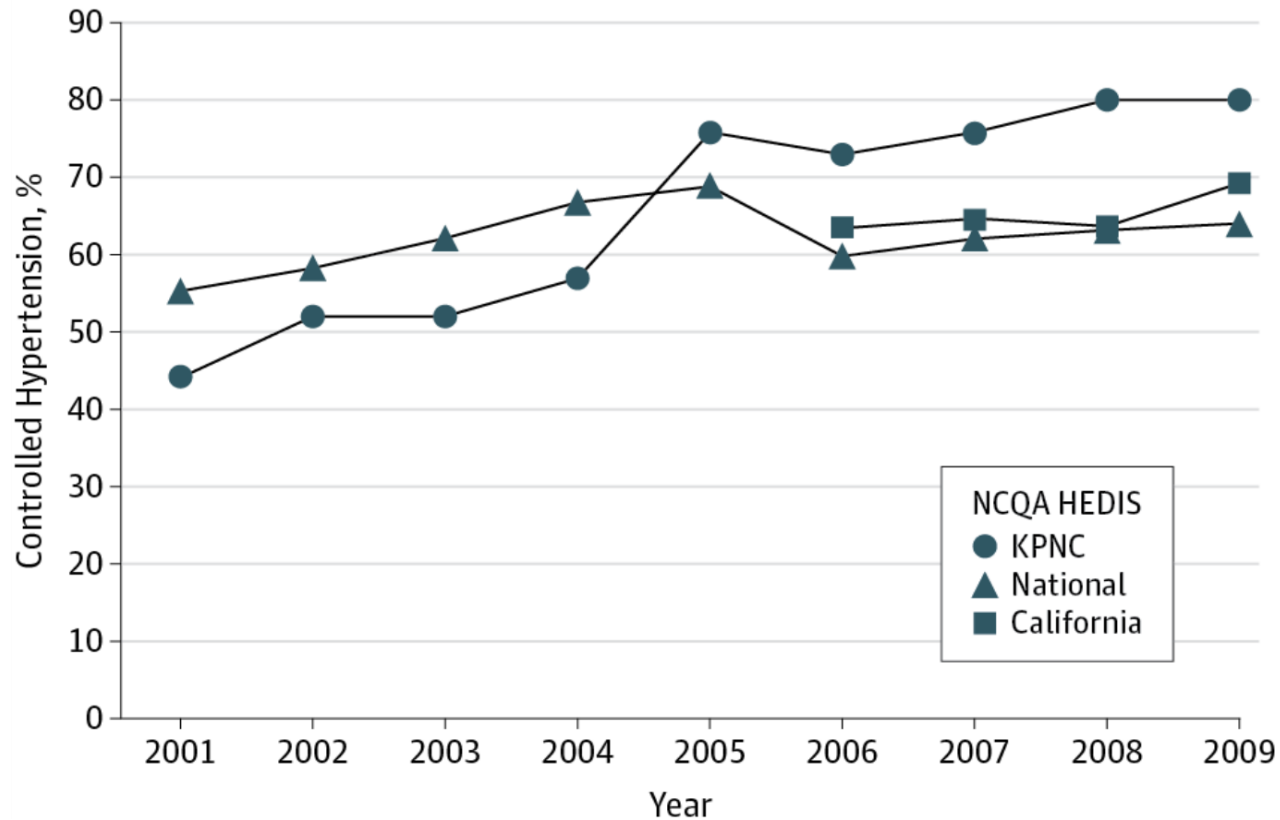
- Consider where the state of your science falls on the research continuum
- Utilize team science approaches, multidisciplinary, integrated care

Snapshot: Hypertension Control in an Integrated Health Care Delivery System

- Utilized an integrated health care delivery system, allowing access to data and an on-going dissemination practice
- The Kaiser system-wide hypertension registry provided large numbers of eligible patients; study exempt from IRB review
- Large scale, multifaceted program developed from effective, primary care-based strategies published in 72 previous clinical trials.

Hypertension Case Study - Go et al

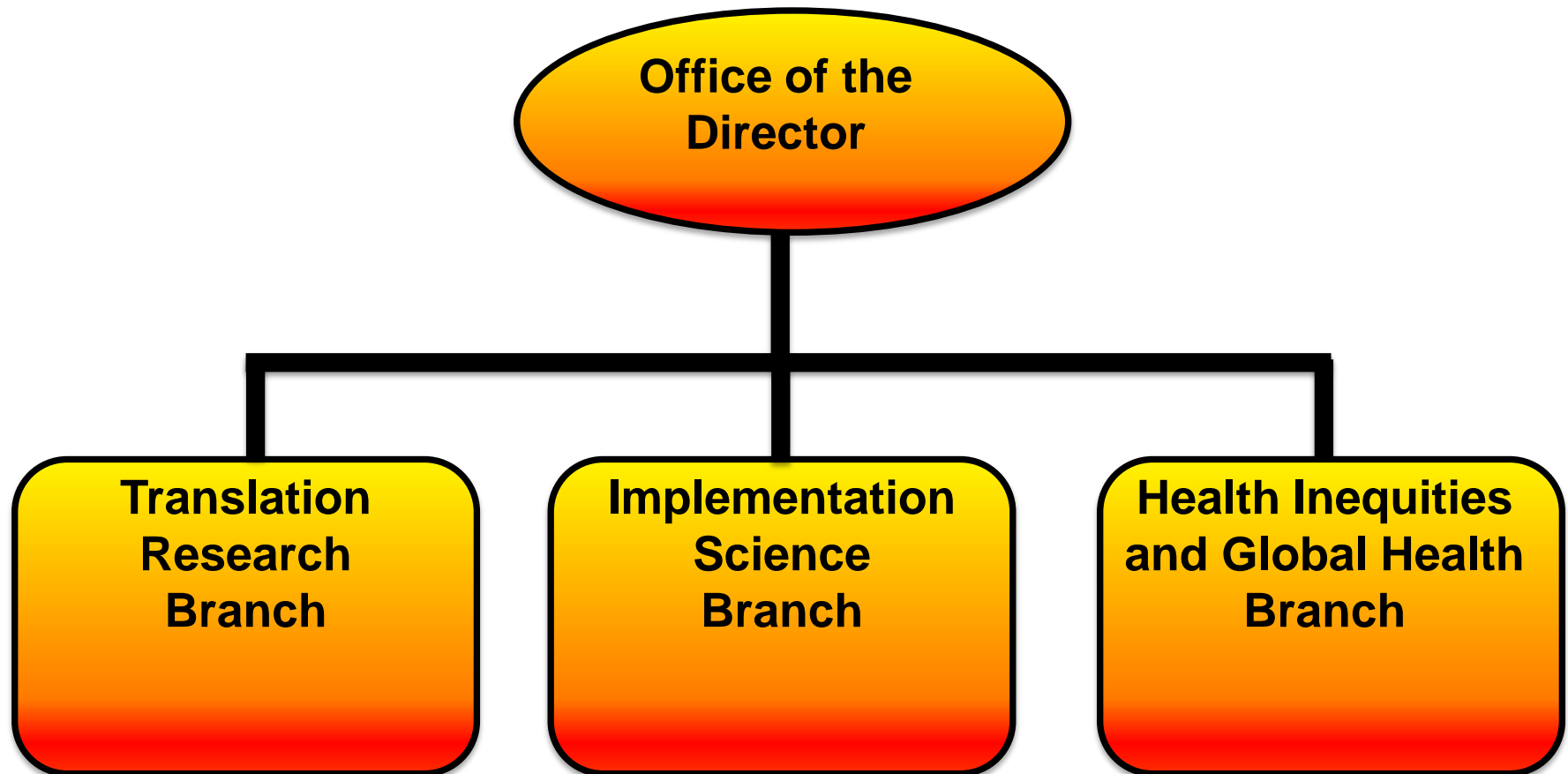
Hypertension Control, JAMA, 2013



CTRIS Announcement, January 23, 2014

*CTRIS will serve as a strategic focal point for **implementation science**, **translation research**, and a **research agenda** that addresses both **domestic and global health inequities**, and **research training** for a workforce to achieve these goals.*

Center for Translation Research and Implementation Science





National Heart, Lung,
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