Primary care research: What is it and what does it have to do with me?

Perry Dickinson, MD
Department of Family Medicine
University of Colorado
What is primary care research?

- Covers a very wide range of topics and methods
- But there are themes in terms of topic areas and the methods that are used
- Lots of problems early on with developing a research base for primary care....
- But major growth and advances over the recent years
Major Topical Areas

• Primary care populations vs specialty populations – major early focus for primary care research
• Representative samples and generalizable results
• “Ecology of medical practice” - Kerr White’s boxes (repeated by Larry Green and others, published in NEJM)
  – Physical symptoms and utilization of the health care system per 1,000 people in the community per month
327 consider seeking medical care
217 visit a physician's office
(113 visit a primary care physician's office)
65 visit a complementary or alternative medical care provider
21 visit a hospital outpatient clinic
14 receive home health care
13 visit an emergency department
8 are hospitalized
<1 is hospitalized in an academic medical center
## Primary Care Pillars

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
</table>
| **First Contact**                | • Access to care  
• Use by people for each new problem                                     |
| **Continuous & Longitudinal**    | • Relationship between a clinician, team, or practice and their patients over time  
• Use by people over time regardless of the type of problem  
• Person-focused character of clinician/patient relationship |
| **Comprehensive**                | • Covers the broad range of most services  
• Recognition of situations where other services are needed                  |
| **Coordination**                 | • Help patients navigate confusing health system  
• Recognition of problems that require follow-up                              |
The Evidence: Primary Care Improves Population Health Outcomes

• Primary care improves quality.
• Primary care decreases costs.
• Primary care improves equity.
• Multiple outcomes are better in systems with stronger primary care.
• No study shows otherwise –
• However, individual outcomes with a particular condition may be better for that condition with specialty care.
Health Care Spending, Per Capita
Figure 1. There are large differences in life expectancy and health care spending across OECD countries 2008

1. Or latest year available.
Source: OECD Health Data 2010.
Probability of Survival to Age 50 in 21 High-Income Countries, 1980-2006

Males

Females
Problems in Clinical Performance

• 27% of patients with diagnosed hypertension are not adequately controlled
• 54% of patients with diabetes have blood sugars higher than acceptable range
• 14% of patients with heart disease have lipid levels in targeted range
• Half of smokers are counseled about smoking cessation by their physician
Questions Guiding Changes in the Health Care System

• How do we improve the quality of care?
• How can we improve the experience of health care for patients?
• How can practices implement change?
• How can we do a better job with chronic care, prevention, health promotion?
• How can we make sure that everyone gets appropriate health care?
Enhancements to Primary Care

- Health information systems
- Analysis of variations in care
  - With variations in models of care
  - with variations in type of payment
  - with focus on patients versus diseases
- Patient-centered medical home (PCMH)
- Team-based care
- Chronic care model
- Population health approaches

ALL REQUIRE EVALUATION
Integration of Care

• Primary care practices need to be able to provide better integrated care:
  • Mental health issues
  • Health behaviors
  • Patients’ life contexts
    – Family
    – Race, ethnicity, and culture
    – Social determinants of health
    – Other psychosocial issues
Other Areas

• Most people have more than one health condition – how do you best deal with patients with multiple chronic diseases?
• How to best handle common clinical problems
• And then – a bit of everything else
  – We are generalists, after all!
Practice-Based Research Networks

• Basic labs for primary care research
• Multiple practices that band together and agree to do selected research projects, to make sure that the PBRN projects are relevant to practice, and to suggest problems needing research
• Practices inform and guide the content of the research – makes sure the research is relevant
• Range from simple observational “card” studies to full randomized clinical trials interventions
• Multiple sites give more generalizable results
Engaging Patients and Communities

- Making sure that our research is relevant to our patients and communities
- Community-based participatory research
- Patient-centered outcomes research
- Patient advisory councils
New Approaches to Rapid Cycle Learning

- Period of change in the health care system – policy decisions, implementation aren’t waiting on formal trials
- Many demonstration projects, natural experiments
- Need rapid cycle evaluation & learning
- Requires new methods
- Combines research, evaluation, & QI tools
- Mixed qualitative & quantitative
Other Methodology Innovations

• Multi-method research - especially combining qualitative with quantitative
• Innovative use of information technology for data gathering
• Complexity science
Translating Research into Practice

• Dissemination of new information or interventions to practices
  – Many interventions proven effective have not yet made a major impact
  – Research findings very slow to make it into practice
  – Research findings don’t always agree – what is the right answer?

• Development and implementation of evidence based guidelines to improve care
HIKERS and BIKERS
Move to the side of the road when a vehicle approaches
Quality Improvement Networks

- Many PBRNs are increasingly moving toward shared quality improvement projects
- Goals of improving the quality of practice, learning what works and what doesn’t in translating research into practice
- Data from multiple practice doing same or very similar QI projects result in generalizable learning
- Benefits the practice and the discipline
- Gives practices much more reason to participate in a PBRN
Questions are guaranteed in life; Answers aren't.