Health Services Research: Making Health & Health Care Better Today

Lisa Simpson, MB, BCh, MPH
March 12, 2018
Agenda

- Overview of Health Services Research
- Role in Continuum of Health Research
- Opportunities for Grantmakers
- Discussion
VISION
AcademyHealth envisions a future where individuals and communities are made healthier by the use of evidence in decision-making.

MISSION
Together with its members, AcademyHealth works to improve health and the performance of the health system by supporting the production and use of evidence to inform policy and practice.
AcademyHealth Works with its Members and Partners

• To build a diverse community for evidence producers & users
• To advance the science of health services & policy research production & use
• To move knowledge into action through synthesis, translation, dissemination & technical assistance
Leveraging ~4,000 Members & Organizations

AcademyHealth Interest Groups

- Advocacy
- Behavioral Health Services Research
- Child Health Services Research
- Disability Research
- Disparities
- Global Health and Health Care
- Health Economics
- Health Information Technology
- Health Workforce
- Interdisciplinary Research Group on Nursing Issues
- Long-Term Services and Supports
- Oral Health Systems Research
- Quality & Value
- State Health Research and Policy
- Surgical and Perioperative Care
- Translation & Communications
- Women & Gender Health
Health services research is the multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and ultimately our health and well-being.

Its research domains are individuals, families, organizations, institutions, communities, and populations.
HSR Definition

✓ What works?
✓ For whom?
✓ Under what circumstances?
✓ At what cost?
✓ And once we know what works,
✓ How do we implement, scale and spread?
HSR Informs Decisions

Clinical Decisionmakers
Patients, families, practitioners

Health Care Systems Decisionmakers
Health plans, hospitals, state programs, employers/schools

Public Policy Decisionmakers
State, Federal, Voluntary
AcademyHealth’s roles in the cycle of evidence production

AcademyHealth’s Translation and Dissemination Institute supports the art and science of how health services research makes its way into policy and practice.
Trends Affecting HSR

- Demand for:
  - timely, relevant research + maximizing rigor
  - consumer, patient, stakeholder engagement
- Emphasis on innovation, value & population health
- Expanding volume, variety, velocity, veracity & value of data
- New methods, changing workforce
- Continued pressure on federal funding
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The “3Ts” To Achieve High Quality Care

Can it work? Can it work?
Can it work?

Will it work? Will it work?
Will it work?

Is it working? Is it working?
Is it working?

Basic biomedical science

Clinical efficacy knowledge

Clinical effectiveness knowledge

Improved health care quality and value and population health

T1

T2

T3

Key T1 activity to test what care works

Key T2 activities to test who benefits from promising care

Key T3 activities to test how to deliver high-quality care reliably and in all settings

Clinical efficacy research

Outcomes research

Comparative effectiveness research

Health services research

Measurement and accountability of health care quality and cost

Implementation of interventions and health care system redesign

Scaling and spread of effective interventions

Research in above domains

The Challenge

- Consistent evidence of failure to translate research findings into clinical practice
  - 30-40% patients do not get treatments of proven effectiveness
  - 20–25% patients get care that is not needed or potentially harmful
- Suggests that implementation of research findings is fundamental challenge for healthcare systems to optimize care, outcomes and costs

Schuster, McGlynn, Brook (1998). *Milbank Memorial Quarterly*
Grol R (2001). *Med Care*
Patient Centered Medical Homes
For Whom and How Do They Work?

- ED Utilization reduced for chronically ill patients
- Reduction varies by type of illness
- Reduction concentrated in a subset of chronically ill patients
- Reductions may stem from better management than from greater access to primary care

Predictive models show that RN workload, expertise and clinical processes of care can be manipulated to mitigate HAPU prevalence.”
### Table 3. Examples of Effective Methods for Changing Physician Practice Patterns

<table>
<thead>
<tr>
<th>Method</th>
<th>Specific Approach</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing medical education</td>
<td>Academic detailing</td>
<td>Health professionals (e.g., pharmacists) meet one-on-one with physicians/surgeons in their work environment and provide education (e.g., information on new drug) or behavior change options (e.g., reduced prescribing).5</td>
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<tr>
<td>Outreach programs</td>
<td>Similar to academic detailing, trained health professionals provide education to a group of physicians in their work environment.5</td>
<td></td>
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<tr>
<td>Learning based on clinical practice</td>
<td>Educational programs (e.g., outreach) that are tailored specifically to the needs of a specific clinic (e.g., for type 2 diabetes patients).14</td>
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<tr>
<td>Workshop</td>
<td>Small-group learning that allows a learner to practice the new material, to interact with other learners, and participate in discussion.12</td>
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<tr>
<td>Patient-mediated intervention</td>
<td>Patient feedback</td>
<td>Patients provide feedback for the physician on their interview skills after their medical appointment.15</td>
</tr>
<tr>
<td>Local opinion leaders</td>
<td>N/A</td>
<td>Local experts and influential educators adopt specific guidelines, which allows colleagues to see the outcomes of those guidelines in practice, and presumably, later adopt the guidelines themselves.16</td>
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<tr>
<td>Multifaceted intervention</td>
<td>Combines multiple interventions based on guideline, budget, or specific practice needs.</td>
<td>Outreach program can be used to deliver educational material on clinical guidelines, combined with a reminder system to promote and prolong adherence.14</td>
</tr>
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</table>

**Passive Dissemination of PEMs is not effective**

Mostofian et al, AJMC, 2015
Effect of Financial Incentives to Physicians, Patients, or Both on Lipid Levels: A Randomized Clinical Trial

Number of Participants

<table>
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<th>Category</th>
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<tr>
<td>Physician Incentives</td>
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<tr>
<td>Patient Incentives</td>
<td>358</td>
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<tr>
<td>Shared Patient-physician Incentives</td>
<td>346</td>
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</table>

Mean LDL-C Levels by Quarter in Intervention and Control Groups

To convert low-density lipoprotein cholesterol (LDL-C) to mmol/L, multiply by 0.0259. Error bars indicate 95% CIs.
QI Interventions To Address Health Disparities

- 2013 AHRQ EPC report
- 1979 - 2011
- 4,278 abstracts → 19 included papers of 14 studies
- 11 RCTs
- 18 incorporated multiple components; 12 with patient education

“…QI has not been shown specifically to reduce known disparities in health care or health outcomes.”
Tracking the Toll of Dementia on Caregivers

Judith Kasper and colleagues, Health Affairs

- 5.8 million caregivers
- 532 hours of care
- 6 billion hours per year
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Research and Development Investment Ranking of Industrial Sectors Among US-Based Companies

Moses et al, JAMA, 2013

@DrSimpsonHSR
## Federal Funding for HSR, 2010-2017

<table>
<thead>
<tr>
<th></th>
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<td>Agency for Healthcare Research and Quality</td>
<td>$397</td>
<td>$384</td>
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<td>Patient-Centered Outcomes Research Fund</td>
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<td>$24</td>
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<td>CDC: National Centers for Health Statistics</td>
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<td>$168</td>
<td>$169</td>
<td>$168</td>
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<td>CDC: Public Health Research/PHSSR</td>
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<tr>
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<td>CDC: Prevention Research Centers</td>
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<td>CMS: Research, Demonstration &amp; Evaluation Projects</td>
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<td>Veterans Health Administration$</td>
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<td>PCORI</td>
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<td>TOTAL (PROGRAM LEVEL)</td>
<td>$1,912</td>
<td>$1,973</td>
<td>$1,958</td>
<td>$2,241</td>
<td>$2,536</td>
<td>$2,627</td>
<td>$2,904</td>
<td>$2,497$</td>
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</table>

1. Health services research dollars as reported by the NIH Research Portfolio Online Reporting Tool (RePORT).
2. This figure represents what we expect health services research would receive if it maintains its current proportion of the VHA’s Medical and Prosthetic Research portfolio (roughly 15.5 percent). In FY 2017, VHA’s Medical and Prosthetic Research portfolio received $675 million.
3. Data is not yet available.
4. Level does not include PCORI funding, which is not yet available.

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Improve the Relevance of Health Services Research

Lorem Ipsum has two main statistical methodologies are used in data analysis which summarizes data.
Focus Grantmaking in Gap Area

Rapid Evidence Review

What housing-related services and supports improve health outcomes among chronically homeless individuals?

Answer: Evidence suggests that permanent supportive housing (PSH) and case management can improve health outcomes among chronically homeless individuals, including improvements in self-reported mental health status, substance use, and overall well-being. These models can also reduce hospital admissions, length of stay in inpatient psychiatric units, and emergency room visits. However, most of the evidence identified in this review is not specific to Medicaid populations, and limitations such as small sample size, selection bias, and imprecise definitions of the models studied may limit generalizability.

What is chronic homelessness? According to the U.S. Department of Housing and Urban Development, a single adult or a parent in a homeless family is chronically homeless if he or she has a disabling condition and (1) has been continuously homeless for a year or more or, (2) has experienced a total of 12 months of homelessness during the previous three years.

Policy context
AcademyHealth undertook this review at the request of a Medicaid medical director in a state considering whether to pay for housing-related services through Medicaid. Although federal Medicaid funding cannot cover rent or mortgage payments, states can opt to pay for two other types of housing-related services: (1) case management to achieve and maintain housing stability; (2) collaborative efforts with other government agencies such as services for residents in public housing. This review looked for evidence about whether such services improve health outcomes for Medicaid populations.

Supporting evidence
There are two broad categories of evidence that evaluate housing-related services and supports eligible for Medicaid.
Measure the Impact of Funded Research

FIGURE 1  A Pyramid Approach to Measuring Policy Impact

Collado et al, Foundation Review, Vol 9 (4); 2017
Discussion

Lisa Simpson, MB, BCh, MPH, FAAP
President and CEO