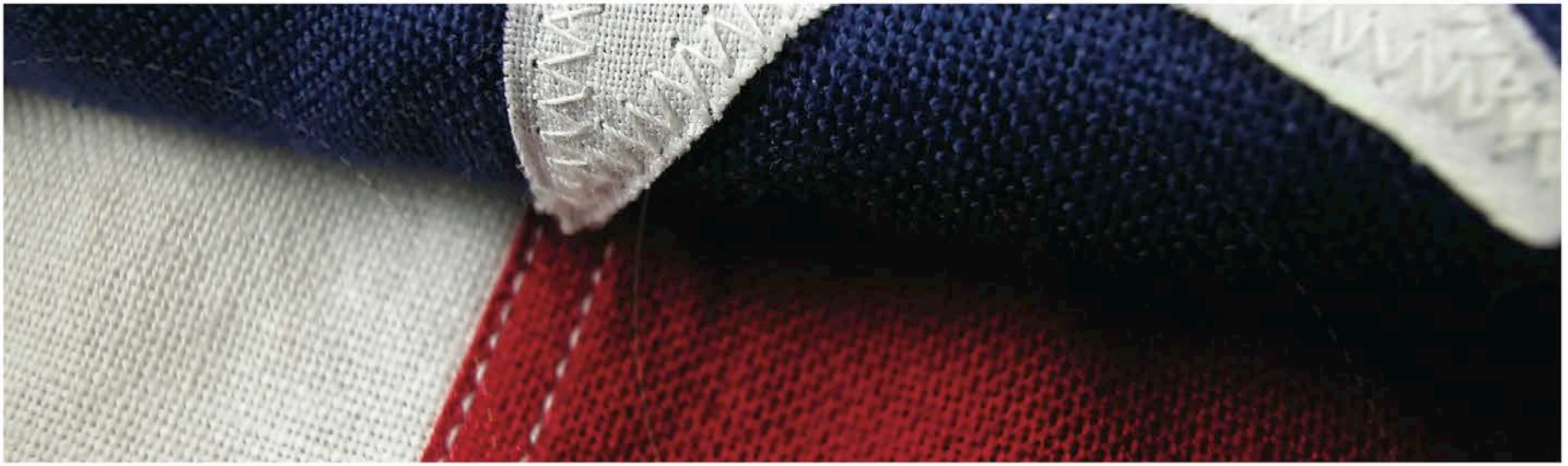

Health Services Research – Applications and Challenges Across the Healthcare system

UCSD Applied Pharmacoeconomics and Outcomes Research Forum March 7, 2016

VA HEALTH CARE Defining EXCELLENCE in the 21st Century

Schedule for Today

- Anthony P Morreale, Pharm.D., MBA, BCPS – Moderator & Brief Overview of forum topic (10 minutes)
- Heather Ourth, Pharm.D., BCPS, CGP - Integrated Healthcare Systems Perspective – Pharmacy Interventions
- Katie Derry , Pharm.D – Medical Center perspective – total cost of care in surgery (20 minutes)
- Andrea De Coro, Pharm.D – IPA Medical Group Perspective – pushing metrics (20 minutes)
- Panel Discussion (20 Minutes)
- Reception (45 minutes)

Presentation Content

- Example how HSR applied in your organization.
- Challenges you had to overcome or are trying to overcome – some examples include:
    - Resources needed to do this type of evaluations
    - Include expertise for research
    - Infrastructure for evaluations
    - Even when you have the resources and infrastructure - it is not as easy to answer questions within the system as would think
- What could help other systems like yours – or help you?
    - Your pearls do you have for all - what you have learned that can help others (like your system or all)?
    - What could help you – what do you need to do this better – how can others help you?

Defining Health Services Research (HSR)

- There is no real consensus to the definition of Health Services research.
- NIH has an entire list of possible definitions: http://www.nlm.nih.gov/nichsr/ihcm/01whatis/whatis07.html
- The IOM suggests definitions and identifies HSR studies as such if:
  - It deals with some features, processes or effects of personal health services
  - At least one of its features is related to a conceptual framework other than that of contemporary applied biomedical science

The Science of Health Services Research

- It lacks a widely adopted standard definition or conceptual structure, in part because of its markedly ***multidisciplinary*** nature;
- It is conducted in many ***different settings*** (e.g., academia, government, clinical health care settings);
- It has ***diverse purposes*** (e.g., empirical data collection, development of research instruments and methodologies, policy and operational decision making);
- It focuses on several different geographic levels (e.g., international, national, state, county) and on broad populations as well as specific population subgroups;
- it uses a particularly ***disparate set of theories, concepts, statistics, and devices and instruments derived from various disciplines***; and it uses a wide range of time frames for data collection and analysis (e.g., historical, most current, future trends).

(IOM, 1991:6)

Health Services Research Uses

Measures Structure

- Accreditation
- Certification

Measures Process

- Technical excellence and availability
- Access
- Utilization

Measures **Outcomes**

- Patient satisfaction
- Mortality
- Morbidity

Health Outcome Domains

Death	• Universal- focus on timing of the event
Disease	• Measured as symptoms, signs, and/or laboratory tests
Disability	• Diminishing of independent living and function
Discomfort	• Symptoms affecting living: pain, nausea.
Dissatisfaction	• Emotional discomfort with situation
(Destitution)	• Financial effect resulting from health care payment

Categories of Outcomes in HSR

Generic Health Outcomes

- Patient Satisfaction
- General Health Status
- Functional Status
- General Quality of Life

Disease Specific Indicators

- Laboratory or other diagnostic test results
- Prevention measures (mammography use. retinal exams for diabetics, immunization rates)
- Symptoms
- Severity or stage of disease
- Progression of Disease
- Remission of Disease
- Recurrence of disease or symptoms

Categories of Outcomes in HSR

Utilization (Process)

- Hospitalization rates
- Readmission rates
- Rates of Hormonal use for breast cancer
- Rates of Bone Scan among women with breast cancer (node positive versus node negative)

Cost (Direct and Indirect)

- Total Costs
- Costs to insurers
- Costs to consumer

Categories of Outcomes

Good Outcomes

- Increased survival
- Fewer Adverse events
- Reduced Costs of care WITHOUT an increase in bad outcomes!

Bad Outcomes

- Death
- Amputation
- Rehospitalization
- Reduced Costs of care WITH an increase in bad outcomes
- Unexplained Increased Costs of care

What to Measure?
Depends on Disease/Condition.

- The lag time does not always permit direct measure of outcome:
    - E.g.: intervention in diabetics to reduce diabetic retinopathy and blindness
    - Cannot wait the years required to measure the change **outcome**: rate of blindness
    - Therefore assess a **process** measure that directly impacts on the rate of diabetic retinopathy: dilated eye exam rates.

Outcomes as Measures: Advantages

- **When the scientific basis for accepted practice is in doubt, using outcomes discourages dogmatism and maintains more flexible approach to management**
- **May help develop less costly and yet equally effective management strategies**
- **May reflect contributions of all practitioners to the care of the patient**
    - **Inclusive, integrative**
- **May reflect patients' contribution to care**
    - **potential influence of patient-practitioner relationship**
- **Client satisfaction as an outcome reflects this relationship**

Outcomes as Measures: Disadvantages

- **Even expert practitioners often unable to specify outcomes of optimal care**
    - **Magnitude, timing, duration**
- **How much of observed effect of health status due to health care factors (controllable) vs patient factors (uncontrollable)?**
    - **How to attribute outcomes to specific aspects of care?**
- **Timeliness may preclude use as a real time monitor**
    - **May be unethical to wait for a pattern of adverse outcomes**
- **Outcomes for outcomes sake without regard for means to outcome**
    - **May overlook redundant, overly expensive care.**