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

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
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<tbody>
<tr>
<td>Death</td>
<td>Universal - focus on timing of the event</td>
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<tr>
<td>Disease</td>
<td>Measured as symptoms, signs, and/or laboratory tests</td>
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<tr>
<td>Disability</td>
<td>Diminishing of independent living and function</td>
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<tr>
<td>Discomfort</td>
<td>Symptoms affecting living: pain, nausea.</td>
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<tr>
<td>Dissatisfaction</td>
<td>Emotional discomfort with situation</td>
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<tr>
<td>(Destitution)</td>
<td>Financial effect resulting from health care payment</td>
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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 in rate of blindness
  • Therefore assess a process measure that directly impacts on the rate of diabetic retinopathy: dilated eye exam rates.
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.