Translating Value Improvement into Educational Reform Across the Continuum

WGEA/WGSA/WOSR Western Regional Meeting
Feb 26, 2017
Learning objectives:

1) Define “value” in healthcare and explain why it is important to medical professionals and training

2) Identify stakeholders and describe why educational and institutional alignment is vital

3) Describe educational reform efforts at the University of Utah to integrate training in value at the GME and UME levels

4) Discuss experiences at other institutions at integrating value into medical education, including barriers to success and strategies to overcome them
Ryan Murphy, MD
UUHC GME Value Fellow
Clinical Instructor
Division of General Internal Medicine
ryan.murphy@hsc.utah.edu
Brigitte Smith, MD
Director of Value Education in General Surgery
Assistant Professor
Department of Surgery
brigitte.smith@hsc.utah.edu
Roxanne Bartel, MD
UUHC Director of Mental Health Integration
Associate Professor
Department of Psychiatry
roxanne.bartel@hsc.utah.edu
We have no relevant financial disclosures or affiliation with any of the products or literature discussed in this presentation.
Hello
My name is
?
Porter’s Definition

Value = \frac{Outcomes}{Cost}

- Outcomes defined by and around the patient
- Outcomes measured by outputs not inputs
- Costs involve total costs in full cycle of care

$V = \frac{Q + S}{\$}$

- **V** (Value)
- **Q** (Quality)
- **S** (Service)
- **$\$** (Cost)
VALUE-BASED PROGRAMS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MIPPA</td>
<td>ACA</td>
<td>PAMA</td>
<td>MACRA</td>
<td>ESRD-QIP</td>
<td>HAC</td>
<td>VM</td>
</tr>
<tr>
<td>HRRP</td>
<td>HVB</td>
<td>APMs</td>
<td>SNF-VBP</td>
<td>MIPS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“Demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.”
There are many ways to change a system...
Our GME team:

To train residents and fellows to deliver exceptional value in patient care.

GME Value Committee

To be an academic leader in graduate medical education in delivering value in health care.

Program faculty:
- Anesthesia
- Emergency Medicine
- Family and Preventive Medicine
- Internal Medicine
- Neurology
- Pediatrics
- Radiology
- PM&R
- Psychiatry
- Surgery

Chief Resident in Quality & Safety Housestaff (6)

Patient Safety Nurse Coordinator
Director, GME Strategy and Workforce Planning
Senior value engineer
Medical director, value engineering
Assistant Dean of GME/DIO
Associate Dean of GME
Chief Medical Quality Officer
Our strategy:

Make value a priority
Share a common understanding

“Think globally, act locally.”

Align efforts Create opportunities
Safety event reports submitted by:
- Residents: 1% 2%
- Faculty:
- 97% Other

Health system RCAs:
- 45% with residents
- 55% without residents

Wide variation in house staff understanding of patient safety concepts and terminology.
Who doesn’t love keeping patients safe?

Healthcare system operational goal

Meets numerous accreditation requirements

Capitalize on local momentum
Our process:

- Value Methodology
  - Lean
  - 6S
  - PDSA
- Project Definition
- Baseline Analysis
- Investigation
- Improvement Design
- Improvement Implement
- Monitoring
Where we are now:

Project vision:
To train our residents in safety science through active engagement in reporting and management of patient safety events
Receive RL event reports

- Meet SSE criteria?
  - yes
    - Refer case to PERT; notify FC; attend RCA
  - no
    - yes: RSO investigate?
      - yes: Investigate
      - no: Coordinate with FM for investigation
    - no: Coordinate with FM for investigation

- RSO investigate?
  - yes
    - Investigate
  - no: Review events weekly with RSO + FMs

- Review events weekly with RSO + FMs
  - Lead monthly M&M/RCA with FC + FMs
    - Coordinate with Patient Safety re: SSEs
    - Review any SSEs, trends, on hospital and program level
    - Lead monthly M&M/RCA with FC + FMs
    - Review resident participation with FC monthly

- Attend monthly program M&M/RCA

- Participate in any investigation; work with RSO if wants to participate actively; attend RCA for SSE
- Coordinate with FM for investigation
- Refer case to PERT; notify FC; attend RCA
- Attend monthly program M&M/RCA

- Receive "Reporter Follow-Up Summary"
- Review cases weekly with FC + FM
  - Select case for M&M
  - Review RL Event Process
  - Coordinate with FM for investigation
- Meet SSE criteria?
  - yes
    - yes: Complete assignments
    - no: Meaningful effort
    - prn: Corrective actions prn
- Review resident participation with RSO monthly
- Participate in any investigation; work with RSO if wants to participate actively; attend RCA for SSE
- Coordinate with FM for investigation
- Refer case to PERT; notify FC; attend RCA

- Receive RL reports
  - yes: RSO investigate?
    - yes: Investigate
    - no: Coordinate with FM for investigation
  - no: Coordinate with FM for investigation

- Review relevant events weekly with RSO and FC
- Attend relevant monthly M&M/RCA

- Monitor events daily
  - Meet SSE criteria?
    - yes
      - yes: Complete assignments
      - no: Meaningful effort
    - prn: Corrective actions prn
- Review resident participation with RSO monthly
- Participate in any investigation; work with RSO if wants to participate actively; attend RCA for SSE
- Coordinate with FM for investigation
- Refer case to PERT; notify FC; attend RCA

PERT = Patient Event Response Team
SSE = "Serious Safety Event"
**UME Education Transformation**

**Moving From:**
- Paternalistic, Traditional, regimented culture
- Isolated, independent, faculty-driven
- Average Training towards traditional standards in medical education

**Moving To:**
- Culture: Inspiring, collegial, transformational culture
- Enablers: Exceptional engagement of departments, faculty, students and residents in education mission
- Innovation: Education which integrates the excellence of UUHS
Innovation
Understanding our strengths and generating ideas on strategic initiatives in medical student education

Key Efforts:
• VDO / Value / System
• Genomics / Precision Medicine
• Population Health
• Health / Wellness
• Others? (e.g. Entrepreneurship)

Education which integrates the excellence of UUHS

Enablers
Culture
Innovation
Deliberative Curriculum Inquiry

1. Consider the whole, not simply the parts
2. Ground the curriculum in theory / evidence
3. Use deliberaative and leadership curriculum design processes to achieve input, buy-in and political support

– Consider existing curriculum and local circumstances
– Develop knowledge about effective processes of curriculum design
– Become informed about current thinking about the nature of professional practice
– Consider perspectives from the national arena
– Consider the informal and hidden curriculum in the institution

Bordage & Harris, 2011
5 Content Domains

1. Value & “The Utah Way”
2. Quality
3. Service
4. Cost
5. Safety

\[
V \quad = \quad \frac{Q + S}{\$}
\]
Value Driven Healthcare
3 Core Learning Goals

1. Students will demonstrate appropriate use of value improvement *language* and terminology in each of the 5 content domains (Value, Quality, Service, Cost, and Safety).

2. Students will *apply* basic value improvement principles to solve health systems problems.

3. Students will describe the *"Utah Way"* of excellence in health systems improvement.
Key Component Elements
An embedded certificate program

<table>
<thead>
<tr>
<th></th>
<th>MS1</th>
<th>MS2</th>
<th>MS3</th>
<th>MS4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Seminars</td>
<td>Seminars</td>
<td>Self-Directed (elective)</td>
<td>Self-Directed (elective)</td>
</tr>
<tr>
<td>Experience</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Capstone</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Mentoring</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>Assessment</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Process

- **Form Groups**
- **Identify Content**
- **Complete Initial Proposal Doc**

- **Develop Content Depth**
- **Curricular Integration Plan**
- **Recruit Core Faculty**

- **Develop MS1 Curriculum**
- **Develop Pilots for MS2-MS4**
- **Recruit Core Faculty & Students**

---

**July**

- MS4 Pilot
- MS3 Pilot
- MS2 Pilot
- MS1 Operation

2017 – 2018

**Dec**

- MS4 Pilot
- MS3 Pilot
- MS2 Operation
- MS1 Operation

2018 – 2019

**Mar**

- MS4 Pilot
- MS3 Operation
- MS2 Operation
- MS1 Operation

2019 – 2020

**Aug**

- MS4 Operation
- MS3 Operation
- MS2 Operation
- MS1 Operation

2020 – 2021
- Make value a priority
- Share a common understanding
- Align efforts
- Create opportunities
- Think globally, act locally
- It takes a village
Program faculty:
Anesthesia
Emergency Medicine
Family and Preventive Medicine
Internal Medicine
Neurology
Pediatrics
Radiology
PM&R
Psychiatry
Surgery

Chief Resident in Quality & Safety
Housestaff (6)

Patient Safety Nurse Coordinator
Director, GME Strategy and Workforce Planning
Senior value engineer
Medical director, value engineering
Assistant Dean of GME/DIO
Associate Dean of GME
Chief Medical Quality Officer
Comments?

What are you doing at your institutions? What has been successful?

What challenges have you encountered? Are there successful strategies to overcome these barriers?