Value-Added Student Roles that Align Education and Health System Needs

#psusync #changemeded

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Session Objectives:

1. Describe the ongoing transition from a two-pillar to three-pillar education model focused upon basic, clinical, and Healthcare Delivery Science.

2. Define “value-added medical education” and discuss its’ implications.

3. Conceptualize a new research agenda for “value-added” medical education.

4. Describe one educational model in Healthcare Delivery Science with the use of student patient navigators.
Objective 1:

1. Describe the ongoing transition from a two-pillar to three-pillar education model focused upon basic, clinical, and Healthcare Delivery Science.
Describe US Healthcare:

- Expensive
- Inefficient
- Confusing
- Low-quality
- Wasteful
- Siloed
- Costly
- Rushed
- Chaotic
- Not-patient-centered
- Uncoordinated
- Burnt-out-providers
- Insurance-driven
- GDP18
- Complicated
- Physician-centric
- Hurried
The 12-Second Pit Stop
A New Triad

Basic Science

Clinical Science

Healthcare Delivery Science

Lucey. Medical education: part of the problem and part of the solution. JAMA IM 2013
What are the Healthcare Delivery Sciences?

- Population Health
- Informatics
- Transitions
- Policy
- Quality Improvement
- High-Value Care
- Patient Safety
- Teamwork
- “Other”
Objective 2:

1. Describe the ongoing transition from a two-pillar to three-pillar education model focused upon basic, clinical, and Healthcare Delivery Science.

2. Define “value-added medical education” and discuss its’ implications.
Are medical students an asset or liability to the health system?

Shea et al. Compensation to a dept. of medicine for the teaching of medical students. NEJM, 96.
Jones et al. On the cost of educating a medical student. Academic Medicine, 97.
“Medical student roles that are experiential and authentic, and have the potential to:

1. Have a positive impact on outcomes related to patients, populations, costs of care, or other processes within the healthcare system, and,

2. Enhance student knowledge, attitudes, and skills in the Clinical or Healthcare Delivery Sciences.
The Current Medical Education Model: The Mini Physician Model

CHASM

Physician
Patient Navigator
Physician Assistant
Social Worker
Nutritionist
Patient Physical Therapist
Care Coordinator
Nurse
Physician Assistant

Authentic Care Delivery Models

Penn State College of Medicine
The Current Medical Education Model: The Mini Physician Model

CHASM

Observerships
Student-Run Free Clinics
Service Learning

Authentic Care Delivery Models

Physician
Patient Navigator
Physician Assistant
Social Worker
Nutritionist
Patient
Physical Therapist
Care Coordinator
Nurse
Physician Assistant

Patient

Penn State Hershey College of Medicine
Getting Students on Teams: The “Ball Bearing” Model

**TASKS**
- Monitoring progress with care plans
- Facilitating access to services
- Patient education
- Patient assessments
- Performing medication reconciliation
- Partnering with patients for health coaching
- Facilitating communication
- Improving clinical processes

**Teams:**
- Patient Navigator
- Physical Therapist
- Physician
- Nutritionist
- Social Worker
- Nurse
- Care Coordinator
- Student Patient Navigator

**College of Medicine:**
PENNSTATE HERSHEY 1855
Objective 3:

1. Describe the ongoing transition from a two-pillar to three-pillar education model focused upon basic, clinical, and Healthcare Delivery Science.

2. Define “value-added medical education” and discuss its’ implications.

3. Conceptualize a new research agenda for “value-added” medical education.
From Traditional to Value-Added

• **Traditional evaluation**
  – Long-term outcomes/impact of education evaluated distally or not at all

• **Educationally sensitive patient outcomes**
  – Connecting medical education with patient outcomes is critical

• **Value-added medical education evaluation**
  – Evaluating patient outcomes *while* learner is engaged in educational program
Value-Added Medical Education

Learner/Educational Value + Patient/Healthcare Value = Value-Added Medical Education

Value-Added Medical Education:
• Value to Patient or Healthcare through Learner’s work
• Value to Learner while they work
It’s Not Just about Learner Outcomes...

<table>
<thead>
<tr>
<th>Type</th>
<th>Benefit</th>
<th>Cost</th>
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<tbody>
<tr>
<td><strong>Educational System</strong></td>
<td>• Improved learner knowledge, skills, abilities</td>
<td>• Additional faculty/staff time to direct program</td>
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<tr>
<td>• Learners</td>
<td>• Enhanced learner professional identity formation</td>
<td>• Competing demands of curriculum</td>
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<tr>
<td>• Medical Educators</td>
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<td>• Competing demands of board examinations</td>
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<tr>
<td>• Medical School Curriculum</td>
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<td><strong>Health Care System</strong></td>
<td>• Improved patient care experience</td>
<td>• Reduced productivity of clinical educator</td>
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<tr>
<td>• Patients</td>
<td>• Improved patient outcomes</td>
<td>• Discomfort/dissatisfaction of pt with program</td>
</tr>
<tr>
<td>• Clinical or Community Site</td>
<td>• Enhanced services offered</td>
<td>• Additional resources needed</td>
</tr>
<tr>
<td>• Clinical educator</td>
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Objective 4:

1. Describe the ongoing transition from a two-pillar to three-pillar education model focused upon basic, clinical, and Healthcare Delivery Science.

2. Define “value-added medical education” and discuss its’ implications.

3. Conceptualize a new research agenda for “value-added” medical education.

4. Describe one educational model in Healthcare Delivery Science with the use of student patient navigators.
Penn State’s Systems Navigation Curriculum

Patient Navigator Roles

Experiential Component (system-based)

Fosters relevance and motivation

Conceptual Component (classroom-based)

Prepares students for practice

Science of Health Systems Course

# Science of Health Systems Course

<table>
<thead>
<tr>
<th>Module #1</th>
<th>Patient Navigation</th>
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<td>14hrs</td>
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<tr>
<td>Module #2</td>
<td>Health Systems</td>
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<td>Module #3</td>
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<td>Performance and Quality Improvement</td>
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<td>Module #7</td>
<td>Leadership and Change Agency</td>
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<td>Teamwork and Leadership</td>
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[Image: Penn State College of Medicine logo]
Clinical Sites for Patient Navigation: South-Central Pennsylvania

- 36 Clinical Sites
- 6+ health systems
- 144 medical students
# Patient Navigator Sites and Examples

## Inpatient Setting
- Acute Rehab Hospital Transitions Program
- Emergency Department
- Internal Medicine Discharge Program
- Psychiatric Hospital Discharge Program
- Skilled Nursing Transitions Program
- Surgical-Oncology Transitions Program

## Outpatient Setting
- Breast Cancer Program
- Heart Failure Clinic
- HIV Clinic
- Inflammatory Bowel Disease (IBD) Clinic
- Internal Medicine Clinic
- Family Practice Outreach Program
- High-Risk Outreach Clinic
- Patient-Centered Medical Home
- Spine Clinic
- Surgical Weight Loss Program
- DOH Tuberculosis Clinic
- Palliative Care Program

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**Psychiatric Hospital Discharge Program**

Students work with recently discharged patients to assess their care plan, identify barriers, and provide emotional support.

**High-Risk Outreach Clinic**

Students are linked with high-risk patients to make home visits and identify/resolve barriers to care (e.g. transportation, insurance).

**Patient-Centered Medical Home**

Students partner with patients and monitor their progress through home visits, attending appointments and follow-up phone calls.
The Silo of Medical Education
Acknowledgements

AMA Accelerating Change in Medical Education

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Thank you for your attention!
Any questions?

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