DMS Health Leadership Practicum (HeLP)

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Student Perspective

• Initial On Doc visit to preceptor…
  – “I’m so impressed!”

• After eight months at On Doc preceptor…
  – “This {the clinical care processes} can be done better.”
Agenda

• Description of the opportunity
  – IHI Health Professions Education Collaborative
  – DMS curriculum
• What has occurred at other schools?
• HeLP proposal and discussion
What is the IHI Health Professions Education Collaborative (HPEC)?

The HPEC is a collaborative of health profession education programs committed to the creation of exemplary learning and care models that promote the improvement of health care through both discipline-specific and interprofessional learning experiences.
IHI HPEC Membership by Profession Over Time

Number of Organizations

Mar-03 Oct-03 May-04 Oct-04 May-05 Oct-05 May-06 Oct-06

Medicine Observer Orgs Nursing Pharmacy Health Admin
IHI HPEC Goals and Objectives

1. Foster learning for health professional students about healthcare improvement.
2. Ensure faculty development about teaching healthcare improvement.
3. Speed change and reduce the cost of change in the development of healthcare professionals who use improvement.
4. Model improvement principles in our own work as educators.
## Learning about QI at DMS

<table>
<thead>
<tr>
<th>Yr</th>
<th>Course/Oportunity</th>
<th># DMS Students</th>
<th>Brief Description</th>
<th>Evaluation of PBLI/SBP Knowledge/Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>All</td>
<td>All</td>
<td>Course evaluations are competency based. Students complete evals and also take part in assessing the evaluations.</td>
<td>• PBLI and SBP domains are part of every evaluation in every course.</td>
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</table>
| 1<sup>st</sup>| On Doctoring      | 15             | Student ambassadors (2-3 from each small group) learn PBLI skills to reflect on DMEDS data and then spread these skills to their fellow group members. Students are encouraged to use PBLI skills and methods to improve their history-taking and PE skills. | • Progress reports from each small group  
• Improvement s in skills over time  
• OSCE scores |
<p>| 1/2| Orientation       | All            | Specific portions of orientation are dedicated to SBP and evaluation as well as introduction in PBLI. | none |</p>
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<tr>
<td>2nd</td>
<td>Problem-based learning groups</td>
<td>All</td>
<td>Several cases in year 2 have explicit health systems and/or patient safety issues as part of the case, but these issues are not the core of the case.</td>
<td>none</td>
</tr>
<tr>
<td>2nd</td>
<td>Clinical Pharmacology</td>
<td>All</td>
<td>Discussions of medication errors in lecture and small groups</td>
<td>none</td>
</tr>
<tr>
<td>3rd</td>
<td>Psychiatry clerkship at VA</td>
<td>~3</td>
<td>VA Quality Scholar Fellow, Lanier Summerall, provides opportunity for students to participate in QI project examining outpatient depression treatment.</td>
<td>none</td>
</tr>
<tr>
<td>3rd</td>
<td>Family Medicine clerkship</td>
<td>2-3</td>
<td>Joel Lazar has developed diabetes project for students to work on when at CHC.</td>
<td>developing</td>
</tr>
<tr>
<td>3rd</td>
<td>Integrated Clinical Experience</td>
<td>All</td>
<td>Sessions between third year clerkships. Several sessions dedicated to understanding variation in outcomes of care.</td>
<td></td>
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<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Clinical Pharmacology</td>
<td>All</td>
<td>Dave Nierenberg includes safe medication prescribing information.</td>
<td>none</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Health, Society, and Physician</td>
<td>All</td>
<td>Students spend one of the five weeks in HSP discussing QI, safety, and medical error.</td>
<td>Each student creates a poster assessing “putting evidence into practice.” Posters evaluated by faculty</td>
</tr>
<tr>
<td>Any</td>
<td>CLARION group</td>
<td>1</td>
<td>Working with 3 students from other professions, student spends 5 weeks performing root cause analysis on a mock case. Case is presented to interprofessional group here at Dartmouth and also at national case competition hosted by University of Minnesota. Finally, case is presented to nursing students and faculty at Colby-Sawyer College.</td>
<td>none</td>
</tr>
<tr>
<td>Any</td>
<td>Student initiated quality improvement group</td>
<td>4-6</td>
<td>Working with faculty mentor, interested students work through a QI project. In 2005, students conducted focus groups to determine career advising holes for year 1 and 2 students. This year, students are performing a survey to assess the use of online communities at DMS.</td>
<td>Standardized assessment form as part of multi-institutional evaluation effort</td>
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Teaching Improvement through On Doctoring & DMEDS

• DMEDS ambassadors (years 1 and 2)
  – 2-3 students from each On Doc small group
  – Attend lunchtime sessions to learn how to assess and analyze DMEDS data
  – Focus on using basic improvement methods to improve their own history and PE skills

• Ambassadors then lead this in their groups
  – All students in year 1 created individual aims for improvement of skills
AAMC Medical School Outcomes Project (MSOP) Report

1. Understand the components of quality care.
2. Identify the gap between local care and best care.
3. Work to close the gap between 1. & 2.
The "Gap"

CAP-Timing of Antibiotics (4 hrs)
% Patients receiving antibiotics w/in 4 hrs of arrival

DHMC 64
UHC Peers 55

Percent

Oct-Dec 02  Jan-Mar 03  Apr-Jun 03  Jul-Sep 03  Oct-Dec 03
The “Gap”

CAP-Timing of Antibiotics (4 hrs)
% Patients receiving antibiotics w/in 4 hrs of arrival

- DHMC
- UHC peers

DHMC 64
UHC Peers 55
PBLI as a 1st Year Medical Student

1. Understand the components of good medical education for developing history taking and physical exam skills.

2. Identify the gap between current skills and goals using DMEDS.

3. Work to close the gap between 1. & 2.
Clinical Skills: Patient Interview

# of Encounters

- HPI
- HPI/med Hx/ROS
- Health Maintenance
- Family Hx.
- Past Med Hx.
- ROS
- Occupational Hx.
- Social Hx.
- Sexual Hx.
- Family Issues

Personal learning gap
Learning about QI at DMS

• Many opportunities, some in each year
• No coordination across years
• No attention to core content
• Little evaluation of knowledge and skills along the way
• No recognizable thread by the students

How do we build on our current efforts without being redundant?
What is occurring at other medical schools?

• University of Minnesota
  – Since 2003, Physician and Society, year 2, Intro to Clinical Med
  – Improvement projects as part of course

• University of Tennessee-Memphis
  – Year 3 QI and patient safety clerkship
  – 3 weeks, interdisciplinary

• University of Missouri-Columbia
  – Year 2 and 3 interdisciplinary patient safety curriculum

• University of Illinois-Chicago
  – FIPSE grant to develop patient safety teaching modules
DMS Health Leadership Practicum

Using a combination of didactic and experiential learning, second year student groups will measure, analyze, and recommend changes to improve the health for a group of patients in our community.
HeLP Goals and Objectives

1. Demonstrate leadership skills required of physicians to improve the health and healthcare of patients
2. Understand and apply the principles of improvement science
3. Identify gaps between local and best practice
4. Use measurement to understand the variation of performance
5. Identify the interdependent components that come together to meet the healthcare needs of individuals and communities
6. Use the skills needed to work effectively in groups and value of the perspectives and responsibilities of others
HeLP Methods

• Setting
  – Year 2
  – Estimate 24-30 hours of curriculum time
    • 6-8 hours didactic, 18-22 hours project work

• Faculty
  – Course director
  – DHMC, VA faculty with QI experience
  – VA quality scholar fellows
  – LPMR residents
HeLP Evaluation

• Student Evaluation
  – Written examination of knowledge and skills
  – Poster presentation
  – Pass/fail

• Course Evaluation
  – Student and poster evaluation
  – Clinical outcomes of patients
  – Satisfaction of students, faculty, sites
  – Costs (monetary and time)
Questions? Comments?