Improving Quality & Safety for Diverse Populations: An Innovative Interprofessional Curriculum

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Improving Quality & Safety for Diverse Populations: An Innovative Interprofessional Curriculum

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Acknowledgements

- Project advisory board
  - HMS & MGH IHP faculty
  - MGH Interpreter Services
- MGH IHP faculty & staff
- DSC senior leadership & project staff
- Josiah Macy Jr. Foundation
Overview

- Background on Safety and Patients with Limited English Proficiency (LEP)
- Goals of Interprofessional Curriculum
- Curriculum Development & Design
- Pilot Testing
- Evaluation
- Next Steps
Over 55 Million U.S. residents speak a language other than English at home

- 20% of U.S. population
- Up from 14% in 1990 and 18% in 2000
- 1/2 have difficulty speaking English

Source: United States Census Bureau 2007 American Community Survey
Safety for Patients with LEP

- Adverse events affect patients with LEP more frequently and severely than English speaking patients.
- Patients with LEP are more likely to experience medical errors due to communication problems.
- Patients with LEP are more likely to suffer physical harm when errors occur (49.1% vs. 29.5%).

Need for a Training Curriculum

- Formalized training for health professions students to care for linguistically diverse populations is not consistent.

- At Harvard Medical School, 80% of medical students reported feeling inadequately prepared to care for patients with LEP.

- Health professions students will benefit from training on how to provide team-based care for patients with limited English proficiency.
Interprofessional Curriculum
Learning Goals

- Understand the evidence for disparities and high rate of medical errors, particularly for patients with LEP
- Work effectively with interpreters and other care team members to ensure safe, high quality care for patients with LEP
- Explore how systems of care can be improved to ensure quality and safety for patients with LEP in a team environment
Steps for Curriculum Development

Step 1: Seek Input
Conduct focus groups with HMS and IHP faculty & students. Analyze data for key themes to inform curriculum development.

Step 2: Design Curriculum
Develop curriculum content (background, case studies, videos). Design e-learning program.

Step 3: Conduct Usability Testing
Test e-learning program with students & solicit feedback from project advisory group. Design classroom sessions & online group assignments.

Step 4: Refine for Pilot Testing
Revise & finalize curriculum for pilot testing.
Curriculum Map

Module 1 Learning Goal: Understand the evidence for disparities and high rate of medical errors, particularly for patients with limited English proficiency (LEP).

E-learning Module 1 (20-30 min) → Class Session 1 (90 min) → Online Group Assignment 1 (60 min)

Module 2 Learning Goal: Work effectively with interpreters and other care team members to ensure safe, high quality care for patients with limited English proficiency.

E-learning Module 2 (20-30 min) → Class Session 2 (90 min) → Online Group Assignment 2 (60 min)

Module 3 Learning Goal: Explore the ways that systems of care can be improved to ensure quality and safety for patients with limited English proficiency in a team environment.

E-learning Module 3 (20-30 min) → Class Session 3 (90 min) → Online Group Assignment 3 (60 min)
E-learning Program

Providing Safe and Effective Care for Patients with Limited English Proficiency

Module 1: The Evidence for Disparities and the High Rate of Medical Errors for Patients with Limited English Proficiency

Please take a moment to make sure that your sound has been turned on for this module.

Click Here to Begin the Module

This interactive e-learning program was made possible by a grant from the Macy Foundation and was created by the Disparities Solutions Center at Massachusetts General Hospital (MGH) in collaboration with the MGH Institute of Health Professions.
E-learning Program

Ensuring Effective Team Communication

- Conduct Team Briefings
- Empower Team Members to Speak Up
- Advocate to Ensure Patient Safety

References:
1. The Agency for Healthcare Research and Quality’s TeamSTEPPS® Enhancing Safety for Patients With Limited English Proficiency Module
2. Photos stills taken from TeamSTEPPS® Limited English Proficiency Safety Videos

Click on each of the boxes for more information.
You will need this information in order to complete the next exercise.
A 36 year-old Salvadoran woman presents to the emergency department (ED) with dysuria (burning with urination). She is found to have a fever and some flank tenderness. The nurse practitioner (NP) in the ED speaks very little Spanish. A professional (in-person) interpreter will be available in 50 minutes. The hospital has no telephonic interpreter service but one of the receptionists speaks fluent Spanish. What actions should she take?

(A) Wait for a professional interpreter before continuing with her care  
(B) Ask the receptionist to interpret until the professional interpreter arrives  
(C) Proceed with care using her own Spanish skills  
(D) Ask the patient whether she would prefer to call a bilingual family member

Click for Quiz Feedback
Classes & Online Assignments

- Classroom sessions build on content delivered in the e-learning program and create an interprofessional learning environment for to explore issues related to patient safety and care for patients with LEP.

- Sessions include:
  - Case-based scenarios & role plays with interpreters
  - Small and large group discussions
  - Video cases and reflective questions

- Group assignments completed via online discussion boards.
Pilot Testing the Curriculum

- July 2013: Pilot tested with interprofessional group
  - 8 HMS students, rising 3\textsuperscript{rd} & 4\textsuperscript{th} year
  - 8 MGH IHP advanced practice nursing students, rising 2\textsuperscript{nd} & 3\textsuperscript{rd} year

- Advisory group observed pilot testing and provided feedback on curriculum overall
  - Three HMS faculty
  - Three IHP faculty
  - Director of MGH Interpreter Services
Student Demographics

N=16 (8 medical & 8 nursing students)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>56%</td>
</tr>
<tr>
<td>Asian</td>
<td>38%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>6%</td>
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<tr>
<td>Other</td>
<td>--</td>
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<tr>
<td>Hispanic or Latino</td>
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</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Female</td>
<td>75%</td>
</tr>
<tr>
<td>Male</td>
<td>25%</td>
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</tbody>
</table>
Students with Prior Experience Working with Patients with LEP and Interpreters

Experience Working with Patients with LEP and Interpreters

- Patients with LEP
- Patients with LEP and Interpreters
- Patients with LEP but Not Interpreters
- No Experience with Either

Percentage of Students

Level of Experience

Bar chart showing the percentage of students with prior experience working with patients with LEP and interpreters.
Lessons on Curriculum Roll-out

- Recruitment and key messages to students
- Logistics
- Design
Curriculum Evaluation

◆ Students
  - End-of-course evaluation survey
  - Pre-Post Test (knowledge, attitudes, skills)
  - Two interprofessional student focus groups

◆ Advisory Group
  - End-of-course evaluation survey
  - One interprofessional focus group
## Evaluation Survey Results

### Average Overall Course Ratings

1-5 Likert Scale, with 1 being the least positive and 5 being the most positive response

<table>
<thead>
<tr>
<th></th>
<th>Faculty (N=7)</th>
<th>Students (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Learning Experience</td>
<td>4.5</td>
<td>4.3</td>
</tr>
<tr>
<td>E-Learning Modules</td>
<td>4.3</td>
<td>4.0</td>
</tr>
<tr>
<td>Classroom Sessions</td>
<td>4.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Online Assignments</td>
<td>4.4</td>
<td>3.2</td>
</tr>
</tbody>
</table>
## Evaluation Survey Results

### Student Ratings: Course Effectiveness & Relevance

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course provides useful information on providing safe care for patients with LEP</td>
<td>100%</td>
</tr>
<tr>
<td>It was helpful to learn in an interprofessional environment</td>
<td>93%</td>
</tr>
<tr>
<td>I would recommend this course to other medical/nursing students</td>
<td>93%</td>
</tr>
<tr>
<td>This should be a required course for all medical/nursing students</td>
<td>87%</td>
</tr>
</tbody>
</table>

% of students who Agree or Strongly Agree

| Students (N=16) |
Pre-Post Test Results

- **Attitudes:** At least a 19% change in the desired direction on six out of twelve 5-point Likert scale questions.

- **Knowledge:** At least a 19% improvement on four out of twelve multiple-choice, case-based questions. Pre-test scores for knowledge-related questions were high, resulting in a ceiling effect.

- **Skills:** At least a 48% change in the desired direction on all four 5-point Likert scale questions.
Pre-Post Test Results: Skills Domain

Skills Domain

- Working with medical interpreters to conduct an effective clinical interview
- Identifying deficiencies in systems of care
- Assessing when a qualified medical interpreter is needed
- Advocating for sufficient access to medical interpreters for patients with LEP

% Agree or Strongly Agree
I loved the online modules, and…I learned a lot by having such a diverse group of people present: seasoned faculty, med students, professional interpreters, nursing students, etc. The discussions were excellent, and I learned so much by hearing the case studies and trying to communicate myself through interpreters. – Student
Interprofessional Education

I think team-based interprofessional learning is a powerful venue for the topic and will be helpful to these medical and nursing students as they mature and look back on the experience. – Faculty advisor
Changing Systems of Care

I think [making systems-level changes] will be easier once we have longevity in a particular setting and we sort of have the respect of our colleagues to enact some of those changes or get more into leadership roles. But I think I’m aware enough now to sort of know how we can introduce systems changes, like flagging patients. – Student
Curriculum Revisions

- Increased classroom sessions to 2 hours
- Online assignments more focused and linked to classroom activities
- Discussion of nursing and medical students’ roles & education, as well as interpreters’ schedule
- Simplified simulation activity with guidance for conducting patient interview
- Skill-building for students to advocate for
  - Safer care for patients with LEP in their clinical settings
  - Improving systems of care for patients with LEP
Conclusions

- Safe and effective care for patients with LEP is an excellent topic for interprofessional education
- Interprofessional students value interacting with each other in person
- Including interpreters at these early stages as part of the care team is essential and very effective
- Our interprofessional project team mirrored many of the strengths and challenges of IPE
Conclusions

- Students need structured practice in the basics of working effectively with interpreters.
- Our students were already experienced and interested in language barriers. Need to reach students who are not yet “bought-in”.
- Students have a role to play in improving quality and safety for patients with LEP, but practicing health care providers must also be engaged. Curriculum can be adapted for practicing physicians and nurses.
Next Steps

- Exploring opportunities for integrating the program into the HMS and MGH IHP curricula
- Planning to offer e-learning for nurses and physicians at MGH
- Disseminating curriculum and facilitator’s guide nationally
- Implementing Gold Foundation Professorship to explore the “hidden curriculum” with this pilot student group
Please help us improve our web seminars by completing a brief evaluation of today’s event.

Take the Survey!
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Thank you for your participation!

www.MGHDisparitiesSolutions.org