Changing Student Attitudes Toward Interprofessional Learning and Collaboration: Partnering with Healthcare Mentors in the Academic Setting

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Recommended interdisciplinary team training to increase patient safety and improve the quality of Healthcare

IOM, 1999

All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team emphasizing evidence-based practice, quality improvement approaches and informatics.

IOM 2001
Once in practice, healthcare professionals are asked to work in interdisciplinary teams, often to support those with chronic conditions, yet they are not educated together or trained in team-based skills. IOM, 2003

Interprofessional education is a necessary step in preparing a “collaborative practice-ready” health workforce that is better prepared to respond to local health needs.

A collaborative practice-ready health worker is someone who has learned how to work in an interprofessional team and is competent to do so. WHO, 2010
How can they work together if they don’t learn together?
Healthcare Mentor Project

Healthcare Mentors

- Individuals with one or more chronic health conditions
- Share their time with students
- Help students understand how to provide effective care
- Participation helps to make learning more authentic
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Participants

• 6 Core Faculty
• 3 Healthcare Mentors – Multiple Sclerosis
• Disciplines Participating
  Clinical Psychology      Physical Therapy
  Nursing               Social Work
• Maximum number of students = 24
<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to IPL &amp; IPC</td>
<td>30 Minutes</td>
<td>Discipline-specific introduction to the importance of IPC and purpose of IPL</td>
</tr>
<tr>
<td>Issues in the Management of MS</td>
<td>60-90 Minutes</td>
<td>Discipline-specific discussion about the issues in the management of MS &amp; planning for the examination.</td>
</tr>
<tr>
<td>Interprofessional Examination</td>
<td>60-90 Minutes</td>
<td>Students are paired to conduct the examination as an interprofessional team.</td>
</tr>
<tr>
<td>Interprofessional Team Meeting</td>
<td>30 Minutes</td>
<td>Discipline-specific planning for the interprofessional team meeting.</td>
</tr>
</tbody>
</table>
# Healthcare Mentors Project

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>15 Minutes</td>
<td>Introduce the expectations for the day.</td>
</tr>
<tr>
<td><strong>Interprofessional Team Meeting</strong></td>
<td>60 Minutes</td>
<td>Develop an interprofessional plan of care for the Healthcare mentors based on the examination findings.</td>
</tr>
<tr>
<td><strong>Dinner</strong></td>
<td>30 Minutes</td>
<td>Interprofessional – Informal meeting time. Students, Mentors &amp; Faculty.</td>
</tr>
<tr>
<td><strong>Planning for the Meeting with HCM</strong></td>
<td>30 Minutes</td>
<td>Faculty and mentor-specific interprofessional teams plan what and how to share information with the HCM.</td>
</tr>
<tr>
<td><strong>Information Sharing with the HCM</strong></td>
<td>30 Minutes</td>
<td>Share the teams recommendations for care or services with the HCM and receive feedback.</td>
</tr>
<tr>
<td><strong>Group Debriefing</strong></td>
<td>30 Minutes</td>
<td>Healthcare mentors, students and faculty meet to share their experiences and impressions of the learning experience.</td>
</tr>
</tbody>
</table>
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Learning Objectives

The Learning Continuum pre-licensure through practice trajectory

IPEC, 2011
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Learning Assessment

• The study was approved by the Widener University IRB

• Mixed Methods Approach

• Quantitative: Pre and Post-IPL
  • Interprofessional Education Perception Scale (IEPS)
  • Readiness for Interprofessional Learning Scale (RIPLS)
  • Attitudes Toward Healthcare Teams Scale (ATHCTS)

• Qualitative: Post-IPL
  • Discipline-specific Focus Groups

• Artifacts
  • Plans of care completed by each group
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Learning Assessment

• Two Groups
  • Intervention: completed the 6 hour IPL experience
  • Control group: no formal exposure to IPL

• Data Analysis
  • Quantitative
    • Group x Time repeated measures ANOVA
    • p<.05

  • Qualitative
    • Interview data was transcribed verbatim
    • Constant comparative approach to code for key themes
Healthcare Mentors Project

Learning Outcomes
<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Healthcare Mentors (n=19)</th>
<th>Control (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psy</td>
<td>PT</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female (n)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Male (n)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Highest Degree Earned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Degree (n)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associates (n)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors (n)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Masters (n)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (yrs)</td>
<td>27.9</td>
<td>27.6</td>
</tr>
<tr>
<td>SD</td>
<td>3.6</td>
<td>4.4</td>
</tr>
<tr>
<td>IPC Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (n)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>No (n)</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Discipline-specific Problems</td>
<td>Rationale</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1. Lack of social support, small network of friends, her close friends are not geographically close</td>
<td>Feels isolation from people may contribute to symptoms</td>
<td></td>
</tr>
<tr>
<td>2. Not part of a support group</td>
<td>Lack of coping strategies</td>
<td></td>
</tr>
<tr>
<td>3. Chronic insomnia/depression</td>
<td>Connection between depression and sleep</td>
<td></td>
</tr>
<tr>
<td>4. Possible decreased acceptance of MS</td>
<td>Patient interested in organized religion to experience the community</td>
<td></td>
</tr>
<tr>
<td>Discipline-specific Problems</td>
<td>Rationale</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>1. Fall History with Current Medication (Coumadin)</td>
<td>Given patient’s history of falls and current medication, she is at risk for potential hemorrhaging and/or internal bleeding (2^\circ) Coumadin.</td>
<td></td>
</tr>
<tr>
<td>2. History of Pulmonary Embolisms</td>
<td>Patient also had instances of blood in stool and requires education about appropriate dietary options. A diary is recommended to follow quality of bowel movements; this can be presented to and discussed with her doctor.</td>
<td></td>
</tr>
<tr>
<td>3. Poor Nutritional Awareness and History of Diverticulitis</td>
<td>The patient is currently able to manage medications and nursing is not recommended at this time.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>However, consultation with doctor is necessary to discuss pain medication as well as to provide education pertaining to signs and symptoms regarding changes in medical status.</td>
<td></td>
</tr>
<tr>
<td>Area of Concern</td>
<td>Discipline-Specific Care Recommendation</td>
<td>Rationale</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>--------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Decreased Independence and Safety of ADL’s</td>
<td>Clinical Psychology</td>
<td>Explore issues with not using AD</td>
</tr>
<tr>
<td></td>
<td>Understanding of safety awareness and limitations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home safety/modifications</td>
<td>Maximize safety in the home</td>
</tr>
<tr>
<td></td>
<td>Falls Risk-Game Plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical Therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Balance, Mobility</td>
<td>Increase independence, maintain functional mobility</td>
</tr>
<tr>
<td></td>
<td>Strength-Maintenance Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Utilize and understand support system</td>
<td>Acceptance of assistance from others</td>
</tr>
</tbody>
</table>
Interdisciplinary Education Perception Scale

- Competency & Autonomy: 83.6 (HCM), 78.5 (Control), 81.6 (HCM), 74.4 (Control)
- Need for Cooperation: 64.7 (HCM), 63.1 (Control), 63.7 (HCM), 59.3 (Control)
- Perceptions of Cooperation: 76.8 (HCM), 75.2 (Control), 74.8 (HCM), 68.6 (Control)
- Understanding Others' Values: 48.8 (HCM), 51.3 (Control), 50.1 (HCM), 48.4 (Control)

Significance levels:
- p < .001 for Competency & Autonomy
- p = .003 for Need for Cooperation and Understanding Others' Values
Readiness for Interprofessional Learning Scale

Teamwork & Collaboration
- Control Pre: 37.6
- Control Post: 39.5
- HCM Pre: 40.9
- HCM Post: 43.4

Professional Identity
- Control Pre: 25.3
- Control Post: 27.7
- HCM Pre: 31.3
- HCM Post: 32.9

Roles & Responsibilities
- Control Pre: 12.0
- Control Post: 12.2
- HCM Pre: 10.3
- HCM Post: 11.3
Attitudes Toward Healthcare Teams Scale

- Quality of Care: Control 42.9, Control 42.5, HCM 44.77, HCM [VALUE]
  - Quality of Care: p=.025

- Team Efficiency: Control 15.7, Control 16.8, HCM 16.7, HCM 19.1
  - Team Efficiency: p=.003

- Shared Leadership: Control 14.7, Control 14.7, HCM 15.3, HCM 15.7
  - Shared Leadership: p=.048
Qualitative Findings – Discipline Specific Focus Groups

- Incorporating Ideas
- Communicating
- Respecting Others

Putting it All Together
Patient-centered Care
I think it allows you to kind of have a more holistic approach to treating a patient because you’re considering what other disciplines might be looking for, what their goals might be, and you kind of end up with a more functional outlook.

Informant #2 Physical Therapy
I thought that the project was not only good for me in terms of learning how to work together with different disciplines but also to get to know my own role within [a team]...

...I know it changed me a lot in terms of feeling a lot more confident in my role and what I am supposed to be looking for and what will help the other disciplines the most.

I definitely think that in the future if I would work in a place and had more of a role within the team, I’d be more aware of what I should be looking for and what would be helpful.

Informant #3 Clinical Psychology
I think it made me at least think in a different way, psychologically, as well, as how to treat someone, because I had more information about their physical well-being from the PT and the nurses than I would have had on my own. I wouldn’t have thought to ask some of the questions that they did of the participants.

Informant #2 Clinical Psychology
Being confident. That you should be able to sit in a meeting and be confident and express what you feel is good on the behalf of the client. So when you get out there, you have the confidence [that] can come across, professionalism that what you’re saying makes sense and that you are sticking to your guns.

Informant #3 Social Work
I want to say that if this can catch on as a trend in every nursing school with PT, social work, everyone who works on the case of a patient, that this could really be a huge benefit to getting patients out of the hospital faster and taking charge of their own health hopefully, and that would be cool.

Informant #3 Nursing
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Conclusions

- A 6 hour IPL experience was effective in changing student attitudes toward IPC and IPL.

- Students were positive about the learning experience.

- Healthcare Mentors appreciated the opportunity to work with the students and the information shared.

- Curriculum and learning experiences require revision to include activities that help the students understanding the roles and responsibilities of other disciplines.
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Creating a Successful IPE Experience

• Authentic

• Creates positive attitudes toward other professionals and for working in teams.

• Develops skills in working with others.

• Promotes behaviors that are supportive of others.

• Provides knowledge about the potential contribution of other professions.
Contact Information

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