CAN INTERPROFESSIONAL STUDENT TEAMS IMPACT PATIENT OUTCOMES? YES THEY CAN!

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Objectives

1. Identify the reasons for creating an interprofessional practice program for pre-licensure health professions students.

2. Describe patient outcomes that are realized from student interprofessional education and practice programs.
IPE is when 2 or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes\(^1\).

IPP occurs when multiple healthcare workers from different professional backgrounds provide comprehensive health services by working with patients, their families, caregivers and communities to deliver the highest quality of care across settings\(^2\).

\(^1\)WHO Report, 2010
\(^2\)Framework for Action on Interprofessional Practice & Collaboration, WHO 2010
Tools & Goals

- http://www.hiteqcenter.org/About/TheTripleAim/TabId/126/ArtMID/739/ArticleID/15/TRIPLE-or-Quadruple-AIM.aspx
IUSON faculty work with IUH Transitional Care Nurse Manager (TCNM) who sees patients high risk for readmission or negative event.

TCNM screens patients, makes first visit, and gets consent.

TCNM refers patients to IUSON who assigns student teams (2-3 students/team).

Student teams complete Transitional Care Report Tool.

Student teams complete home visit with faculty supervising by iPad Facetime.

Student teams negotiate visit with patient.
IPE Teams (Pre-licensed)
– 1-2 Senior Nursing; 1, 2nd year Medical

2014-2015
– 35 Teams; unsupervised
  • Fall, Spring

2015-2016
– 32 Teams; unsupervised in Fall only

2016-2017
– 36 Teams; supervised Fall and Spring

2017-2016
– Fall: 29 Team Mixed; Spring 36 Teams
Care Provided/Goal of Visit

- Basic assessment
- Medication reconciliation
- Discharge plan of care gap analysis
- Plan for follow up provider appointments
- Create problem priority list
### Student Evaluation

- **IUTCR**
  - Indiana University Team Clinical Performance Rubric; (Feather, Carr, Garletts, Reising, 2017, *JIC*)
- **Derived from IUSIR**
  - (Reising, Carr, Tieman, Feather, Ozdogan, 2015, *NEP*)
- **6 measures, novice-to expert, IPEC**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Novice (1)</th>
<th>Competent (3)</th>
<th>Expert (5)</th>
<th>Team Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team support of Participant</td>
<td>Moments of silence frequent at meetings.</td>
<td>Team interaction varies with unclear organization for participant's needs.</td>
<td>Team connects with participant and encourages rapport.</td>
<td></td>
</tr>
<tr>
<td>Team roles and responsibilities with Participant</td>
<td>Random conversations occur without established end goals.</td>
<td>Variance of roles with occasional ambiguity in roles and goals for the participant.</td>
<td>Clear perceptions of each person’s role within the team at all times.</td>
<td></td>
</tr>
<tr>
<td>Inter-Professional Communication with Participant</td>
<td>Negative silence is present on numerous occasions.</td>
<td>Some variance in communication level, not consistent with participant.</td>
<td>Litious and communications consistently as a team. Discuss, debate, disclose and respect demonstrated.</td>
<td></td>
</tr>
<tr>
<td>Conflict Assessment with Participant</td>
<td>Confusion dominates team interactions with participant.</td>
<td>Goals are unclear at times, and environment varies. Participant unsure they are part of the team.</td>
<td>Positive goal definitions apparent for all team members. Established honest and safe environment for all team members.</td>
<td></td>
</tr>
<tr>
<td>Team Function with Participant</td>
<td>Lack of collaboration is evident by silence and disagreement displayed by team members.</td>
<td>Varied or unclear expectations for all team members. Interaction confusing to participant.</td>
<td>Proper introductions and role identification.Established environment of respect and collaboration at all times. Challenges/concerns addressed proactively and solutions discussed.</td>
<td></td>
</tr>
<tr>
<td>Collaborative Leadership among Team Members with Participant</td>
<td>Random conversations occur and dominate meetings without direction. Lack of teamwork, goal setting and collaborative decision-making.</td>
<td>Varied or unclear planning and decision making at times. Equal participation does not occur among all team members. Minimal teamwork, evaluation of goals and collaborative decision-making.</td>
<td>Planning and decisions occur through conversations that establish equal participant for all team members (including participant). Continuous quality improvement of teamwork for all, goals frequently reevaluated, collaborative decisions occur.</td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
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</tbody>
</table>
Patient Results-Capacity

Navigator Added Capacity

Combined
- Number of Unique Patients: 51
- Number of Visits: 130

Year 2
- Number of Unique Patients: 26
- Number of Visits: 66

Year 1
- Number of Unique Patients: 25
- Number of Visits: 64

Number of Unique Patients  Number of Visits

0  20  40  60  80  100  120  140
## Patient Results - Readmissions

### 30 Day and All Readmission Data

<table>
<thead>
<tr>
<th></th>
<th>Pre-Navigator Visits</th>
<th>During Navigator Visits</th>
<th>Post-Navigator Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with 30 day readmission</td>
<td>27.45% (14/51 patients)</td>
<td>1.96% (1/51 patients)</td>
<td>11.76% (6/51 patients)</td>
</tr>
<tr>
<td>Patients with any readmission</td>
<td>60.78% (31/51 patients)</td>
<td></td>
<td>31.37% (16/51 patients)</td>
</tr>
</tbody>
</table>
Intangible Results—"Bill"

Background

- PMH - DM I, epilepsy, Bipolar, GAD, PUD, prostate CA, Hypothyroid, Hyperlipidemia, CHF, NSTEMI x2 with stents and angioplasty
- Self Administration of Medication
- Social Support System
- Housing/Food

First 2 visits – Normal Glucose
Next 2 visits – Hypoglycemia (59, 36)
Final Visit – Adjustments made
Show Me the $$$

ROI Calculated as Cost Avoidance

2 Year Data
Of 51 unique patients:
• 50 did NOT have a 30-day readmission during visits
• 44 did NOT have 30-day readmission after visits

Conservative estimate:
$10,000 per 30-day readmission

$40,000 investment for 0.2 FTE

Cost Avoidance
\[(44 \times \$10,000) - \$40,000\] =
$400,000
Challenges

Scheduling

WHO’S UP FOR SOME LEADERSHIP?
Changes/Improvements

Safety
  – FaceTime w/iPads

Transitional Care Report
  – Turned in within 1 hour

Navigator Home Visit Reflection
  – Focus area
    • Team Collaboration
    • Areas of improvement
    • Obtain KSAs
Expansion & Modification

- ED Discharge Phone Calls spring 2017
- Changing Medicine Curriculum
  - Nursing students only fall 2017
  - Change from 2\textsuperscript{nd} to 1\textsuperscript{st} year medical students starting spring 2018
- Integrating with IU system core IPE curriculum
Innovative Clinical Strategy

Develops academic/practice partnerships
- Students gain more insight
Pre-licensed health professional students
- Expanding services/positive impact

*Learn the value of the healthcare team*
Questions

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