

# Self-Study in Patient Safety and Quality Improvement To Enhance Student Experience in Interprofessional Case Competition

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## Objectives

The Interprofessional Student Advisory Team (IPSAT) at the University of New England (UNE) organized its 2<sup>nd</sup> interprofessional student case competition, modeled after the CLARION competition from the University of Minnesota. Completion of an online certificate in patient safety and quality improvement from the Institute for Healthcare Improvement (IHI) Open School was added as a pre-requisite to participation in the 2014 competition. Completion of this program was predicted to improve student preparedness, confidence and facilitate interprofessional teamwork during their case preparation.

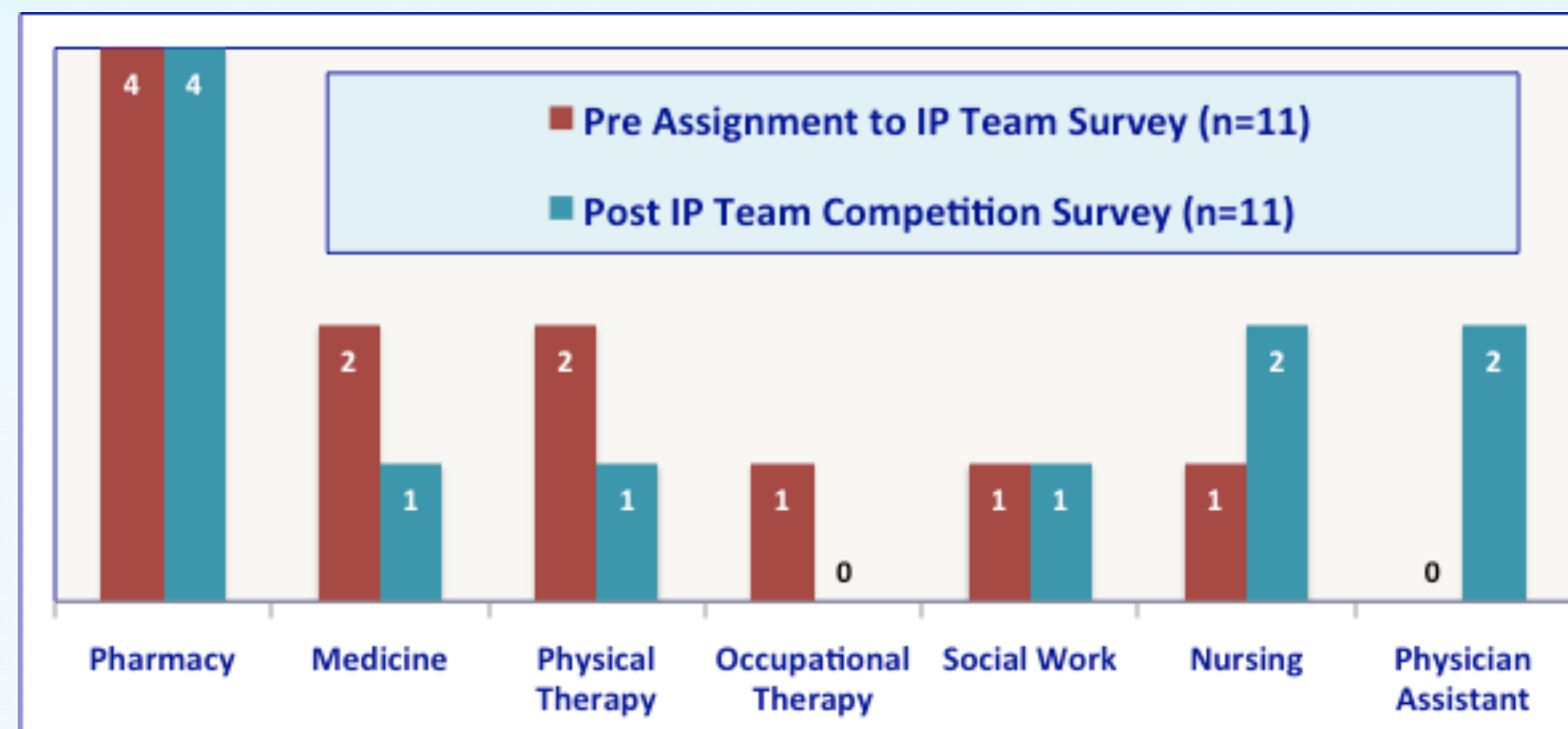
## Methods

Student recruitment for the 2014 IPSAT case competition occurred by email invitation to all health profession students and campus poster advertising. Interested students received links to IHI and directions for coursework completion. Twenty-four students completed the courses and were eligible to be assigned to an interprofessional team. IPSAT student leaders developed survey questions for these students to self-assess their confidence and knowledge before assignment to an interprofessional team and then again after the six week period of working with their respective teams. UNE IRB application was submitted and exemption status approval received. An electronic survey was prepared using REDcap® survey software.

 Institute for Healthcare Improvement **Open School Basic Certificate**

Topics	Courses
<b>Improvement Capability</b>	<ul style="list-style-type: none"> <li>Fundamentals of Improvement</li> <li>The Model for Improvement: Your Engine for Change</li> <li>Measuring Improvement</li> <li>The Life Cycle of a Quality Improvement Project</li> <li>The Human Side of Quality Improvement</li> <li>Mastering PDSA Cycles and Run Charts</li> </ul>
<b>Patient Safety</b>	<ul style="list-style-type: none"> <li>Introduction to Patient Safety</li> <li>Fundamentals of Patient Safety</li> <li>Human Factors and Safety</li> <li>Teamwork and Communication</li> <li>Root Cause and Systems Analysis</li> <li>Communicating with Patients after Adverse Events</li> <li>Introduction to the Culture of Safety</li> </ul>
<b>Leadership</b>	<ul style="list-style-type: none"> <li>Becoming a Leader in Health Care</li> </ul>
<b>Person- and Family-Centered Care</b>	<ul style="list-style-type: none"> <li>Dignity and Respect</li> </ul>
<b>Quality, Cost and Value</b>	<ul style="list-style-type: none"> <li>Achieving Breakthrough Quality, Access and Affordability</li> </ul>

## Survey Participation by Program



## Results

Interprofessional Roles and Responsibilities <small>5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree</small>	Pre Assignment to IP Team	Post IP Team Competition	p-value
I am <b>CONFIDENT</b> in my understanding of the roles and responsibilities of health professional students and practitioners.....			
.....in my own health profession	4.45	4.91	.02
.....in health professions other than my own	3.36	4.36	.02

Interprofessional Communication <small>5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree</small>	Pre Assignment to IP Team	Post IP Team Competition	p-value
I am <b>CONFIDENT</b> in my communication abilities with health professional students and practitioners.....			
.....in my own health profession	4.55	4.64	.68
.....in health professions other than my own	4.09	4.55	.18

IHI Open School Basic Certificate Courses <small>5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree</small>	Pre Assignment to IP Team	Post IP Team Competition	p-value
The IHI Open School Basic Certificate Courses increased my <b>KNOWLEDGE</b> in the following areas:			
<i>Improvement Capabilities</i>	4.00	4.18	.58
<i>Patient Safety</i>	3.64	4.20	.18
<i>Leadership</i>	3.64	4.00	.43
<i>Person- and Family-Centered Care</i>	3.64	3.82	.62
<i>Quality, Cost and Value</i>	4.00	4.27	.26

## Results

IHI Open School Basic Certificate Courses <small>5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree</small>	Pre Assignment to IP Team	Post IP Team Competition	p-value
The IHI Open School Basic Certificate Courses increased my <b>CONFIDENCE</b> in the following areas:			
<i>Improvement Capabilities</i>	3.73	4.27	.09
<i>Patient Safety</i>	3.55	4.18	.09
<i>Leadership</i>	3.45	4.18	.07
<i>Person- and Family-Centered Care</i>	3.73	4.00	.33
<i>Quality, Cost and Value</i>	4.00	4.27	.26

Reasons Students Enrolled in Case Competition <small>5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree</small>	Pre Assignment to IP Team	Post IP Team Competition	p-value
I enrolled in the 2014 IPSAT Case Competition in order to....:			
▪ <i>Build relationships with students from other health profession programs</i>	4.27	4.91	.06
▪ <i>Advocate for healthcare quality improvement</i>	4.55	4.82	.19
▪ <i>Learn skills to communicate in interprofessional practice settings</i>	4.36	4.55	.54
▪ <i>Be a contributing team member in an interprofessional team</i>	4.73	4.82	.63

Prerequisite IHI Course Completion <small>5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree</small>	Pre Assignment to IP Team	Post IP Team Competition	p-value
Completion of the IHI Open School Basic Certificate courses....			
▪ <i>Represents good value for the time spent and the knowledge gained</i>	4.00	4.18	.69
▪ <i>Provided confidence that my teammates are better prepared to work interprofessionally</i>	3.82	4.55	.07
▪ <i>Prepared me to readily contribute to my assigned interprofessional student team</i>	3.91	4.40	.20

## Conclusions

Survey results indicate an increase in student confidence and preparedness for interprofessional teamwork during the 2014 UNE IPSAT case competition. Survey research was limited by a small number of completed surveys, a delay in IRB approval and unfamiliarity with the IRB suggested survey software. IPSAT student leaders at UNE will continue to require completion of the IHI Open School Basic Certificate as a prerequisite for enrollment in future IPSAT case competitions.