



University of Pittsburgh

**SCREENING, BRIEF INTERVENTION, AND  
REFERRAL TO TREATMENT (SBIRT)  
FOR INTERPROFESSIONAL GROUPS OF  
ANESTHESIA STUDENTS (InGAS):  
USE OF SIMULATION**

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# Acknowledgements

This project was supported by the Health Resources and Services Administration (HRSA) of the U. S. Department of Health and Human Services (DHHS) under grant D09HP25025-03. The information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, DHHS, or the U.S. Government.





# Project Team

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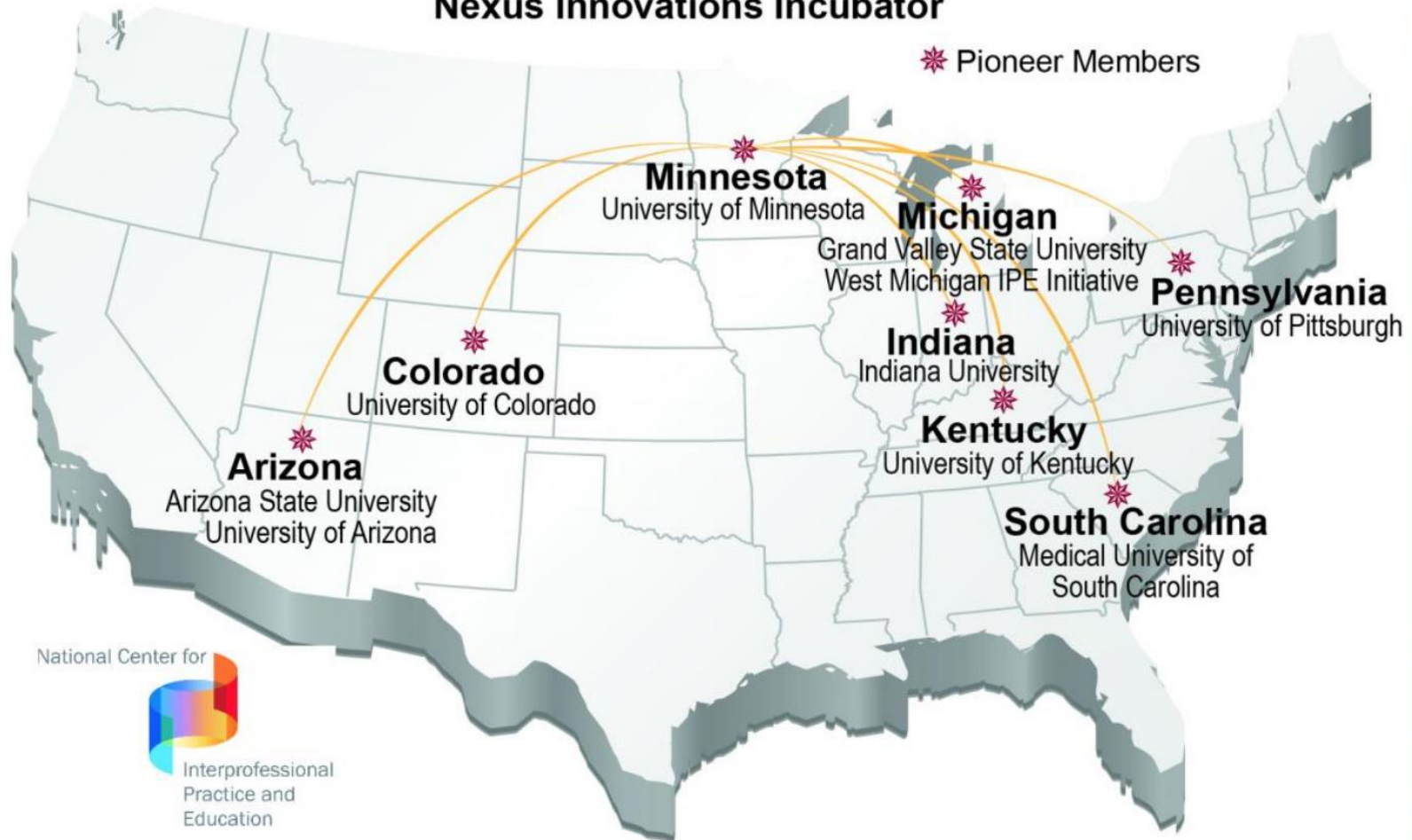
# Presentation Aim:

- Provide an overview of the educational and skill-building program
- Discuss outcomes on participants' attitudes related to confidence and competence for working with patients who use alcohol, tobacco, and other drugs



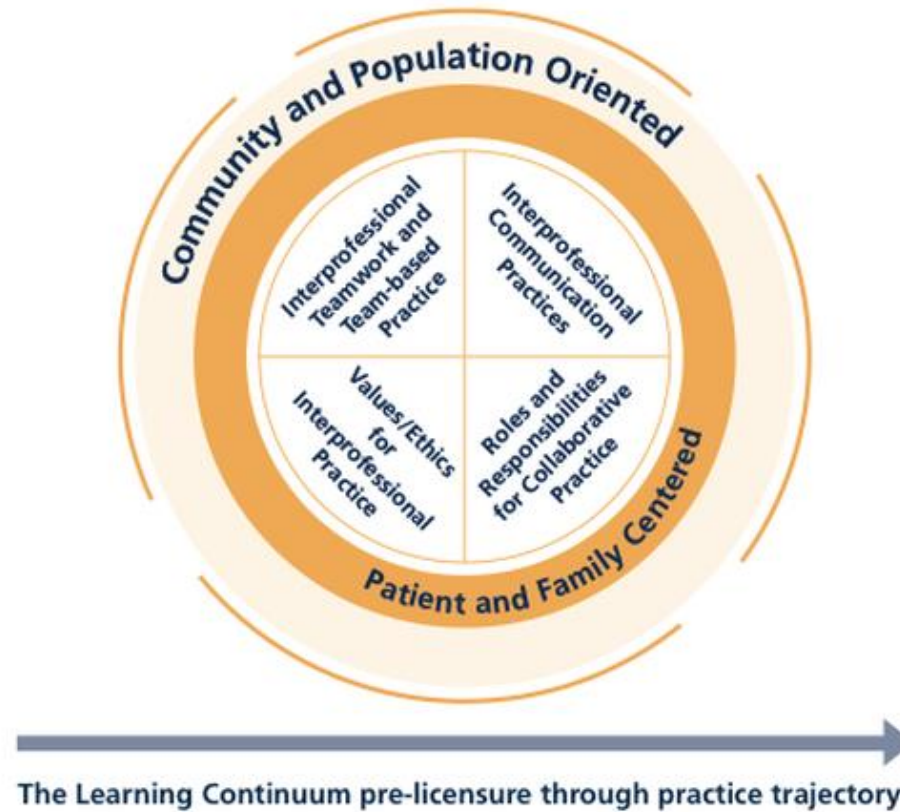


### National Center for Interprofessional Practice and Education Nexus Innovations Incubator





# Interprofessional Collaborative Practice Model



Source: Interprofessional Education Collaborative Expert Panel. (2011). Core competencies for Interprofessional collaborative practice: Report of an expert panel. Washington, D.C.: Interprofessional Education Collaborative



# Interprofessional Education: Interprofessional Collaborative Practice (IPCP)

- Based on the Institute of Medicine (IOM) recommendations
- The goal of this interprofessional learning is to prepare all health professions students for deliberately working together with the common goal of building a safer and better patient-centered and community or population oriented U.S. health care system
- The connection between SBIRT and IPCP → engaging in relationships for patient-centered care



# Worldwide Significance

- Alcohol and other drug misuse is an enormous public health burden
- Globally, harmful use of alcohol causes approximately 3.3 million deaths every year (about 6% of all deaths)
- About 5% of global burden of disease is attributable to alcohol consumption
- Causal relationship between alcohol consumption and more than 200 health conditions





# Significance in United States

- Over 23 million persons aged 12 or older needed treatment for an alcohol or other drug related problem in 2008, yet only 2.3% received treatment (SAMHSA, 2011).
- Negative social attitudes about the use of alcohol and illicit drugs make substance use one of the most complex public health issues (Healthy People 2020)
- 19 million people were in need of - but did not receive specialty treatment for alcohol or drug problems
  - Cost of excessive Drinking in U.S. was \$ 223.5 Billion
  - Cost of illicit Drug Use in U.S. was \$193 Billion



# Significance to Profession

- **Drug-Drug Interactions:** Risk of interactions between drugs dentists prescribe and the drugs or alcohol some patients consume
- **Number of prescriptions:** More than half (55.3%) of those who use prescription drugs for non-medical purposes get the drugs from a family member or friend
- **Significant link between oral health and substance use disorders**
  - heavy drinking is associated with 75% of esophageal cancers
  - heavy drinking is associated with 50% of mouth, larynx, and pharynx cancers
  - increased risk of cancer if the person who is drinking also smokes
  - methamphetamine epidemic and “meth mouth”



# Screening, Brief Intervention, and Referral to Treatment (SBIRT)

- Public health model designed to provide universal screening
- Secondary prevention: detecting risky or hazardous substance use before the onset of abuse or dependence
- Early intervention and treatment for individuals who have more severe problematic use



# SBI RT is recommended by:

- The US Preventive Services Task Force
  - as part of universal screening in all health visits
- Department of Veterans Affairs/Department of Defense
- The Joint Commission
- American College of Obstetricians and Gynecologists
- The American College of Surgeons Committee on Trauma Accreditation Standards
  - for Level I and Level II trauma centers



# Screening

Involves the use of validated screening instruments:

Alcohol and/or drug abuse screening tools

- Alcohol Use Disorders Identification Test (AUDIT)
  - 10 question screen that identifies hazardous drinking, harmful use and alcohol dependency
- The Drug Abuse Screening Test (DAST)
  - 10 question screen for drug use



# Early and Brief Intervention

- For those not ready to change:
  - May increase motivation
- For those ready to change:
  - Provides advice on appropriate goals and strategies
  - Provides support
- Outcome goals include:
  - Reduction or cessation of use (even temporary)
  - Harm reduction
  - Beginning to think about reduction
  - Agreeing to accept referral



# Referral to Treatment

- Only if patient is screened into a high risk user category
- Referral that patient is most likely to utilize



# Methods

- **University of Pittsburgh partnered with:**
  - Institute for Research, Education, and Training in Addictions (IRETA)
  - School of Nursing
  - School of Dentistry
- **Training**
  - 1.5 hours of didactic instruction
  - Online booster sessions
  - Simulation at The Peter Winter Institute for Simulation, Education, and Research (WISER)
  - Interprofessional case conferences





# Participants (n=296)

	SRNA Students	Dental Students/Residents	Dental Hygiene Students	TOTAL
Gender (% Female)	73%	42%	100%	65%
Race (%)				
White	88%	77%	94%	84%
Black	5%	2%	0%	3%
Asian	4%	20%	2%	10%
More than one race	2%	0.5%	2%	2%
Unknown	1%	0.5%	2%	1%
Mean Age (SD)	28.8 (5.0)	25.9 (3.4)	21.6 (2.7)	26.5 (2.7)



# Sim “Wars” Meets SBIRT Experience

## Scenario:

- Elderly Church Organist vs. Dodge
  - Level 1 Trauma Call to ED
- Patient: 75-year-old male unrestrained driver of an 88 Dodge failed to stop at traffic light; Pick-up truck into passenger side of Dodge at approximately 40 mph.
- Patient awake wants his eye glasses c/o some abdominal discomfort, questionable alcohol on breathe. Awake, breathing spontaneously with bilateral breathe sounds. BP 155/100, HR 90, RR 28.



# Simulation “Wars” Student Data

## Turning Point

- Audience Response Data
- Teams rated on 1-5 scale
  - 1 = Novice
  - 2 = Minimally competent
  - 3 = Moderately competent
  - 4 = Highly competent
  - 5 = Expert



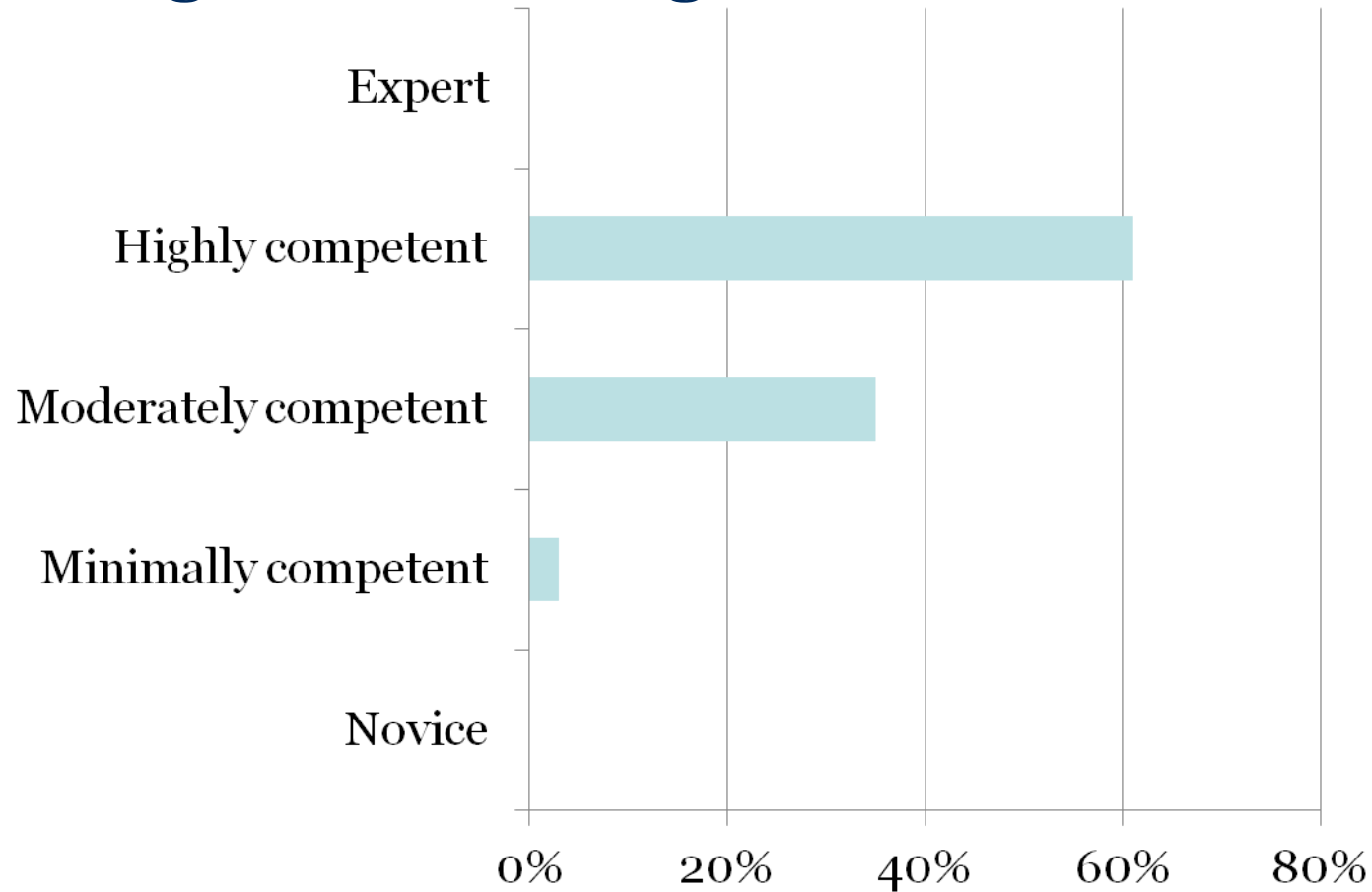
# Sim“Wars” Turning Point Data

Assessment Point	
1. Performance of primary survey	<input type="checkbox"/> Airway, Breathing, Circulation, Disability, Events
1. Performance of secondary survey	<input type="checkbox"/> Allergy, Meds, PMHx, Last meal, Events
1. Planning and Implementation	<input type="checkbox"/> The assignment of roles and goals worked for the team. <input type="checkbox"/> The team was able to make new plans as conditions changed. <input type="checkbox"/> Problems were identified and treated; actions were taken with consideration of other ongoing problems
1. Teamwork	<input type="checkbox"/> The team demonstrated situational awareness and monitoring, mutual support, everyone had an assigned role and was engaged <input type="checkbox"/> Decisions were made in a timely manner and were appropriate
1. Communication	<input type="checkbox"/> Closures of loops, SBAR, clarity, one at a time
1. Global score (includes safety skills)	<input type="checkbox"/> Overall Effectiveness of the Performance <input type="checkbox"/> Appropriate Safety skills were demonstrated, including: management of sharps, blood and body fluid precautions, patient safety interventions



# Sim “Wars” Turning Point Data (n=36)

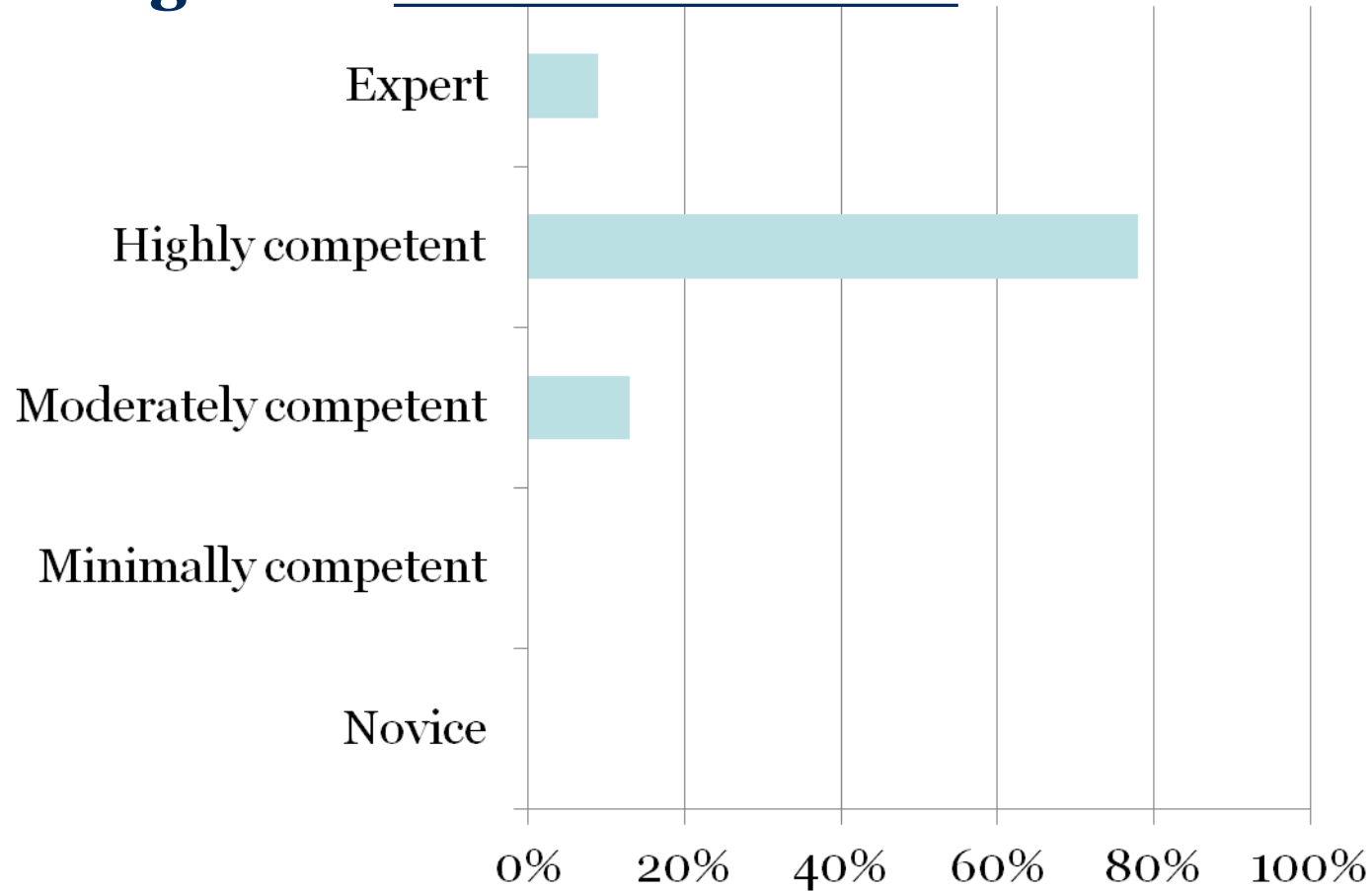
## Turning Point Planning Score for Student Team:





# Sim “Wars” Turning Point Data (n=36)

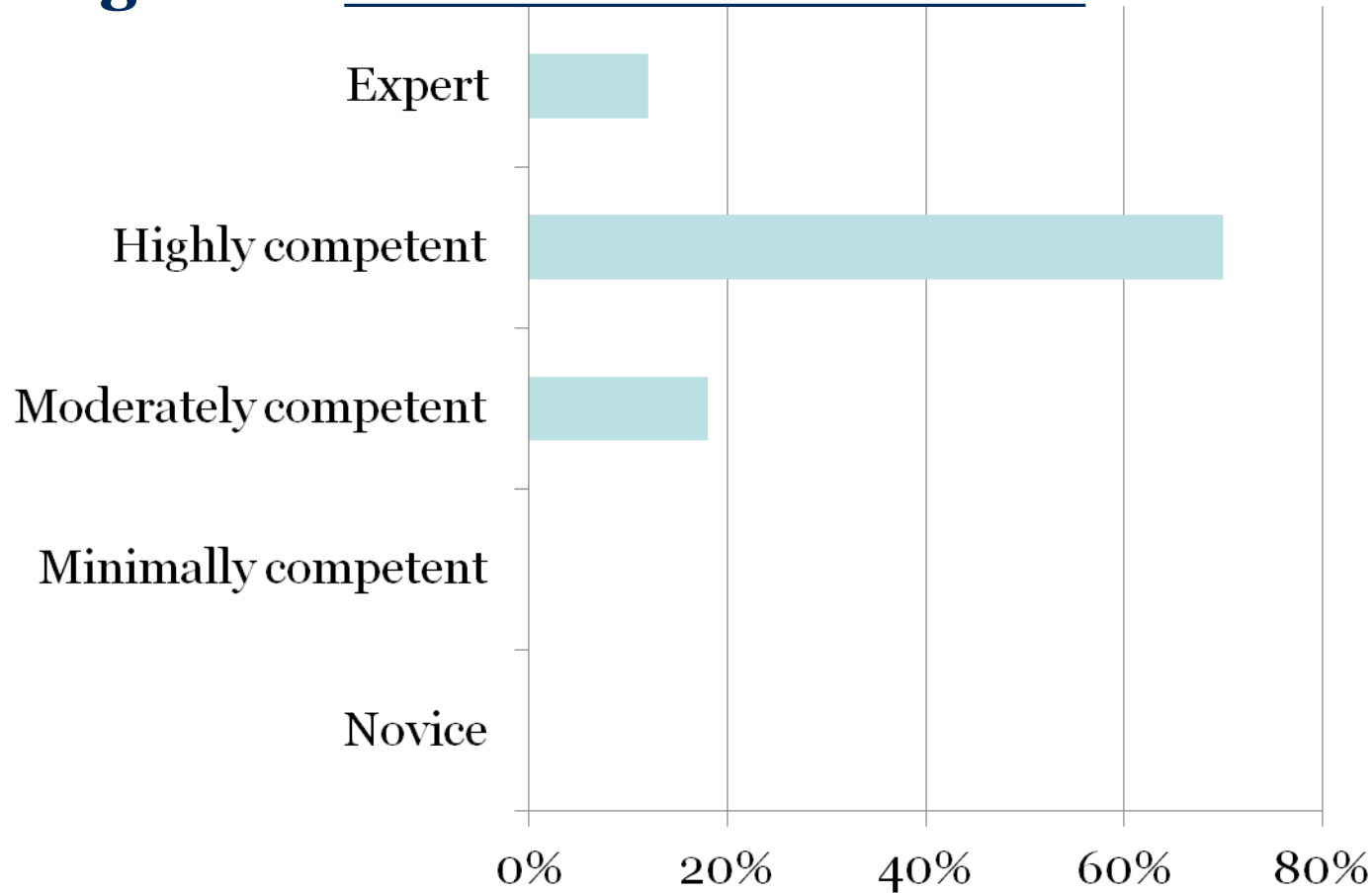
## Turning Point Teamwork Score for Student Team





# Sim “Wars” Turning Point Data (n=36)

## Turning Point Communication Score for Student Team



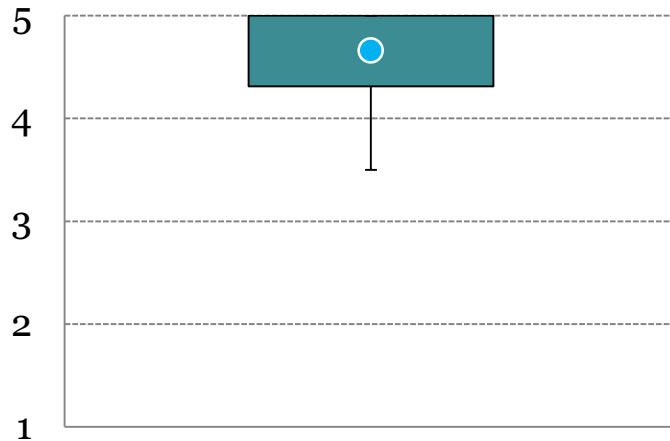




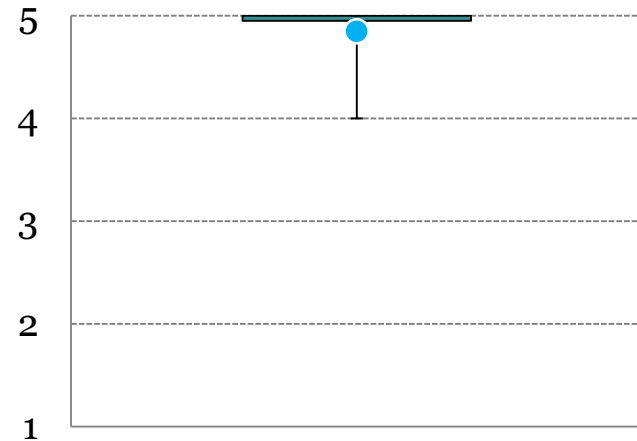


# Sim “Wars” Competency Data (n=36)

- SBIRT Competence



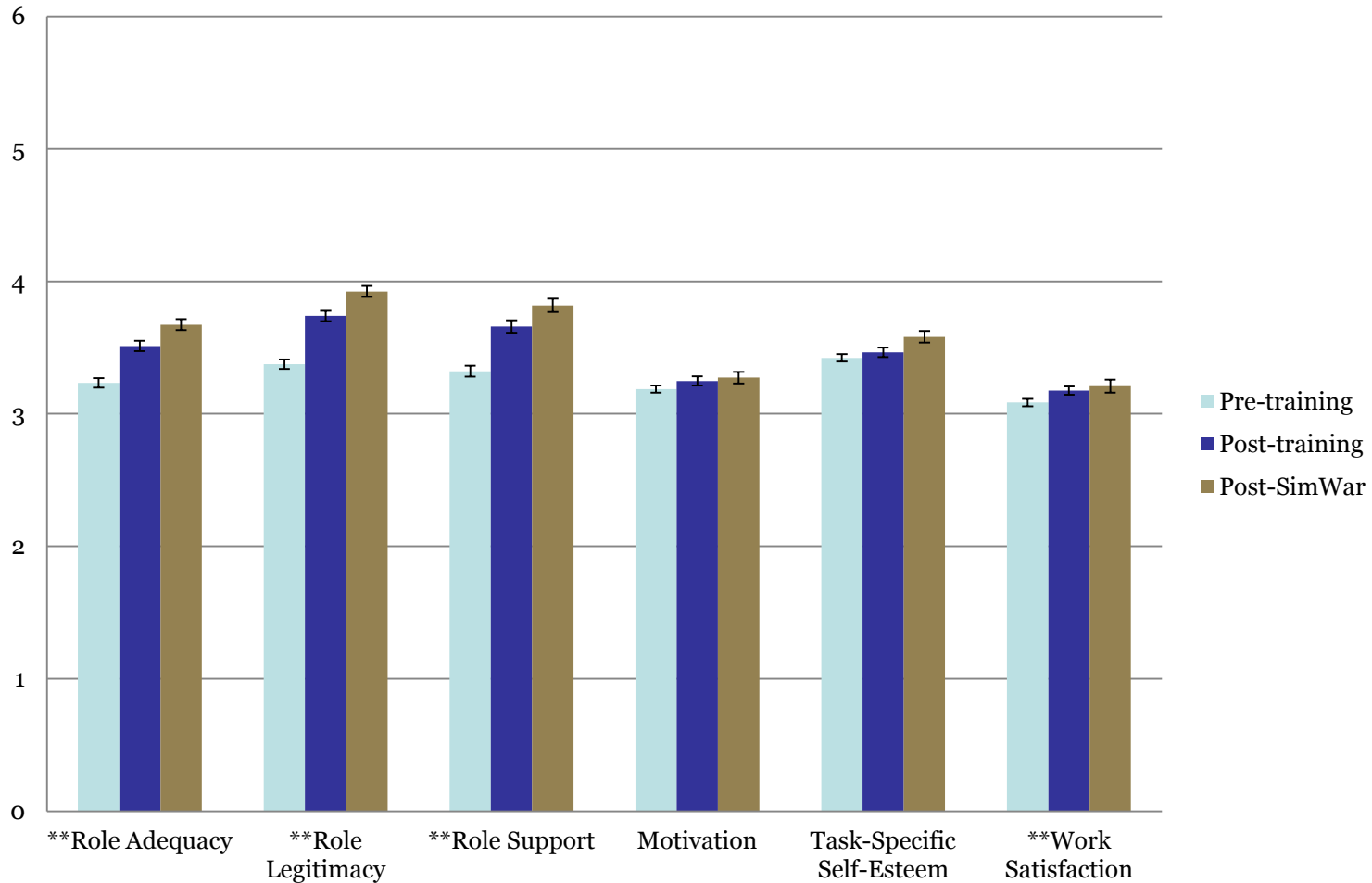
- IPCP Competence







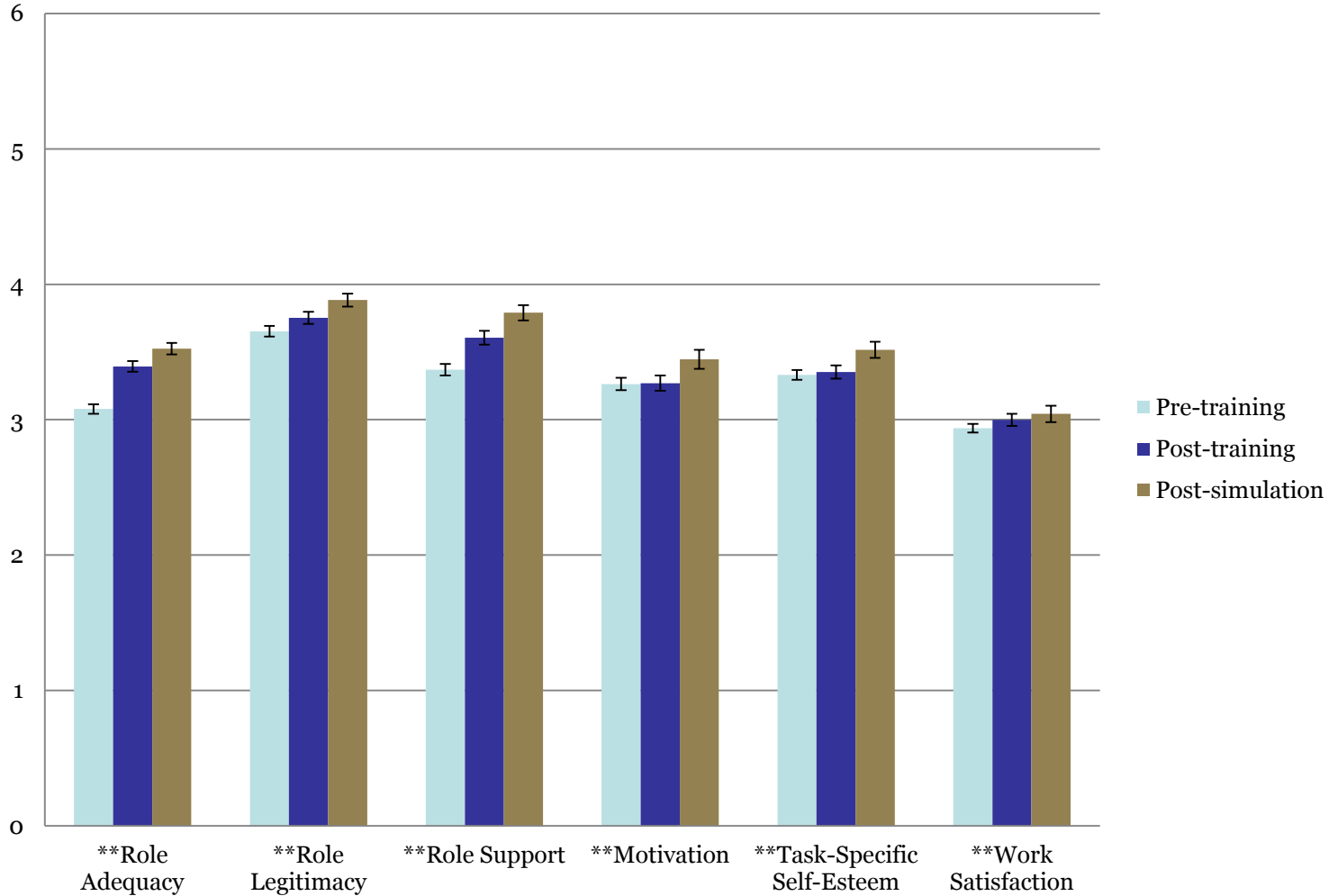
# AAPPQ Results (n=252)







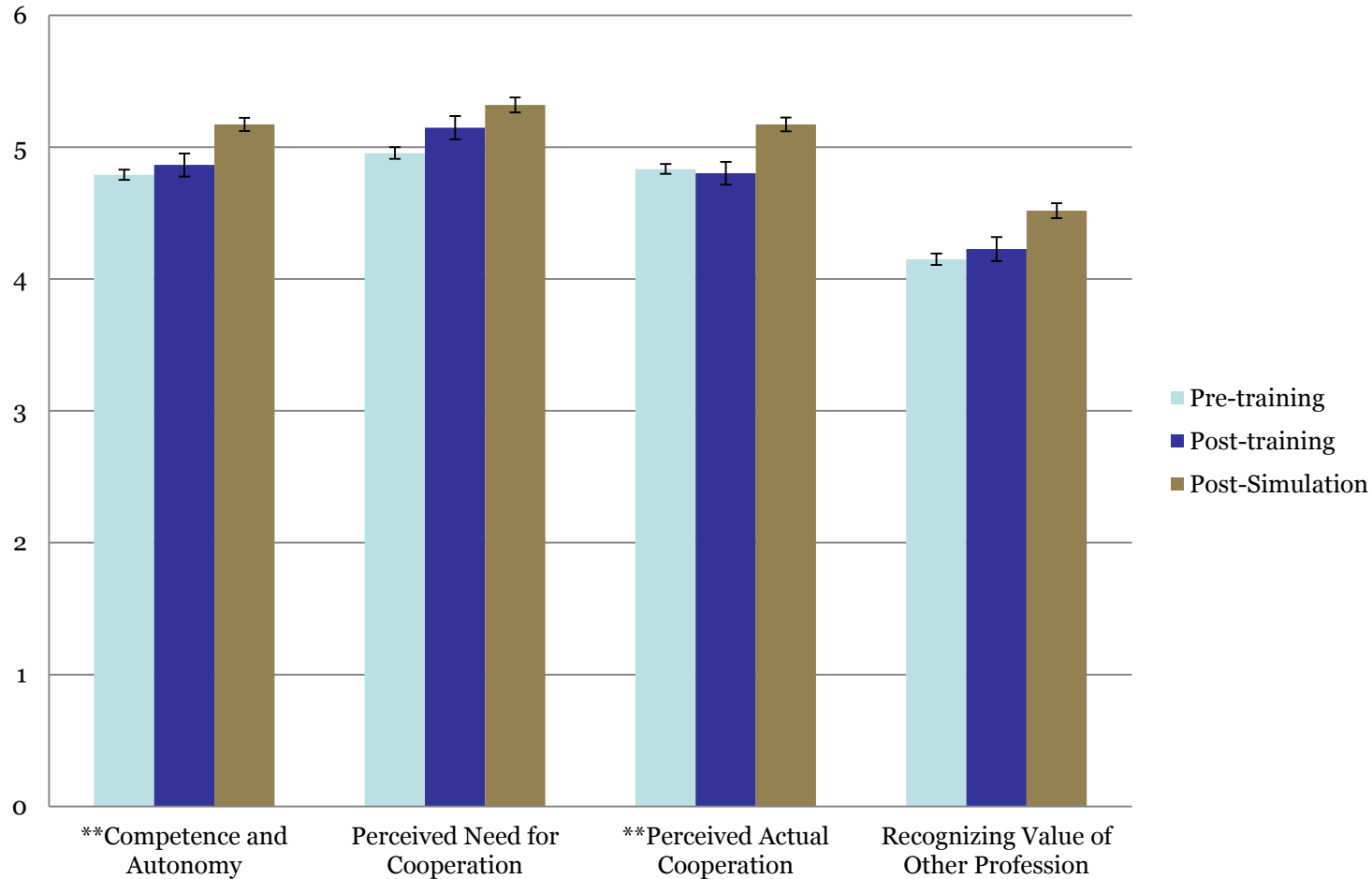
# DDPPQ Results (n=252)







# IEPS Results (n=118)





# Readiness for Interprofessional Learning Scale

- Attitudes to Interprofessional Learning (IPL)
- **Teamwork and Collaboration** (Belief that shared learning is beneficial) Example: “Shared learning before qualification would help health care professionals become better team workers.” “I would welcome the opportunity to work on small-group projects with other health care professionals.”
- **Emphasis on Professional Identity** Example: (reverse score) “There is little overlap between my role and that of other health care professionals.”
- **Patient Centeredness** Example: “Thinking about the patient as a person is important in getting treatment right.”

Instrument Number:

Shade circles like this: ●    
 Not like this: ○

Please use **BLACK** Pen Only!

Study ID:

**SBIRT - InGAS Questionnaire: Readiness for Interprofessional Learning Scale**  
 Attitudes to Interprofessional Learning (IPL)

Participant ID:

Date:  /  /

(month) (day) (year)

(1) Pre-Training  
 (2) Post-Training/Booster  
 (3) Post-Simulation  
 (4) Post-IP Case Conference

For the purposes of this questionnaire, "Interprofessional Learning" is defined as two or more professional groups learning with, from, and about each other at the same learning events, with a view to improving collaboration and the quality of care.

Please respond to the following questions by filling in one circle for each question to indicate the extent to which you agree or disagree with that statement.

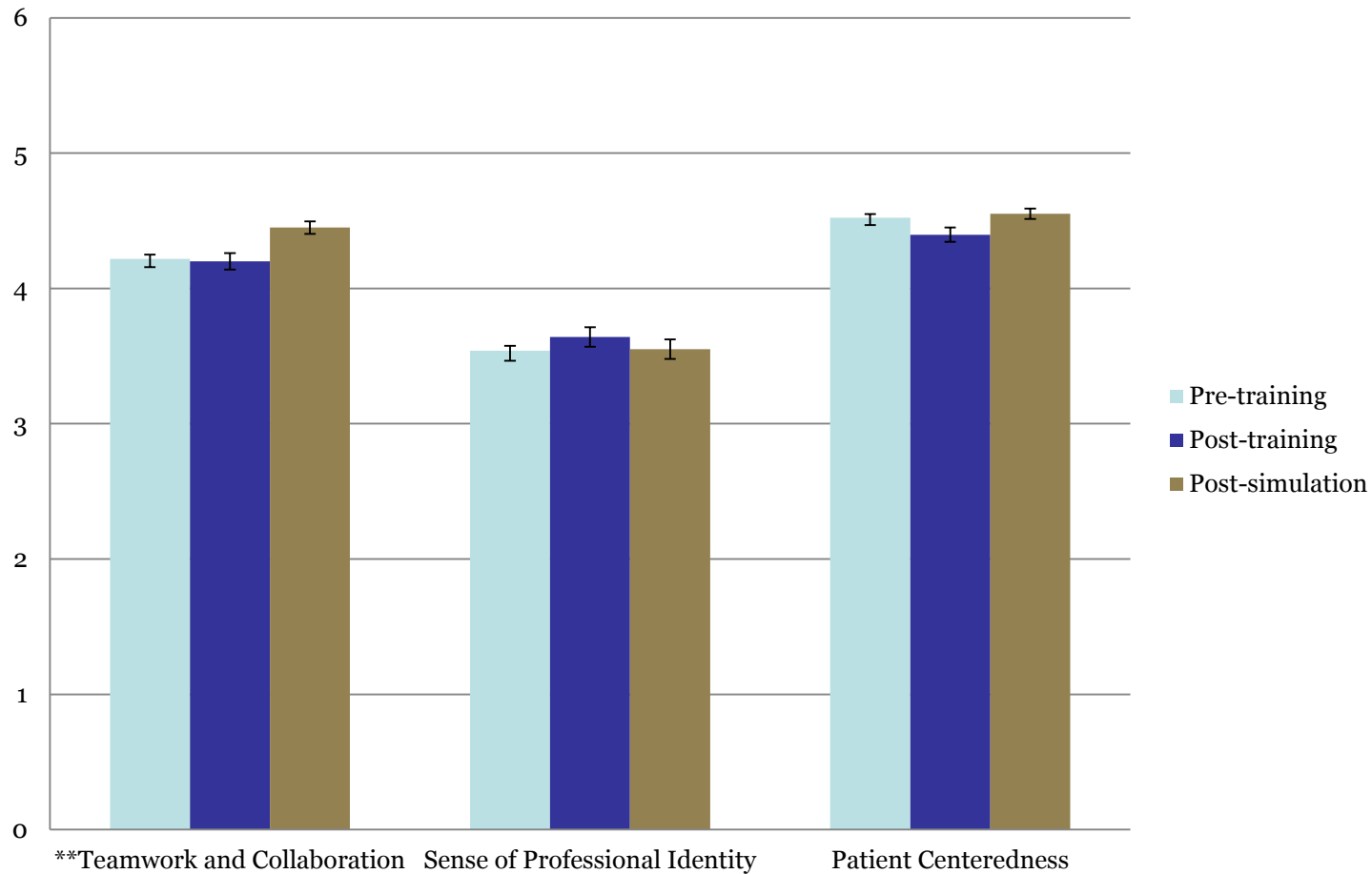
"Teamwork and Collaboration"

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Learning with other health care professionals will help me be a more effective member of a health care team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. For small group learning to work, health care professionals need to trust and respect each other.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Team-working skills are essential for all health care professionals to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





# IPLS Results (n=122)





# Results Summary

- **AAPPQ subscales that significantly increased:**
  - Role Adequacy
  - Role Legitimacy
  - Role Support
  - Work Satisfaction
- **DDPPQ subscales that significantly increased:**
  - ALL
- **IEPS subscales that significantly increased:**
  - Competency and Autonomy
  - Perceived Actual Cooperation
- **IPLS subscales that significantly increased:**
  - Teamwork and Collaboration



# Quotes from Key Informant Interviews

- **I wish I had this training when I was a staff nurse**
- **Give us more examples of things we should say**
- **We like the role plays**
- **I would not have known what to do had this happened to me in practice; it was nice to play out the options**
- **Dental students were not aware that dentists are the number one prescribers of prescription opioids**



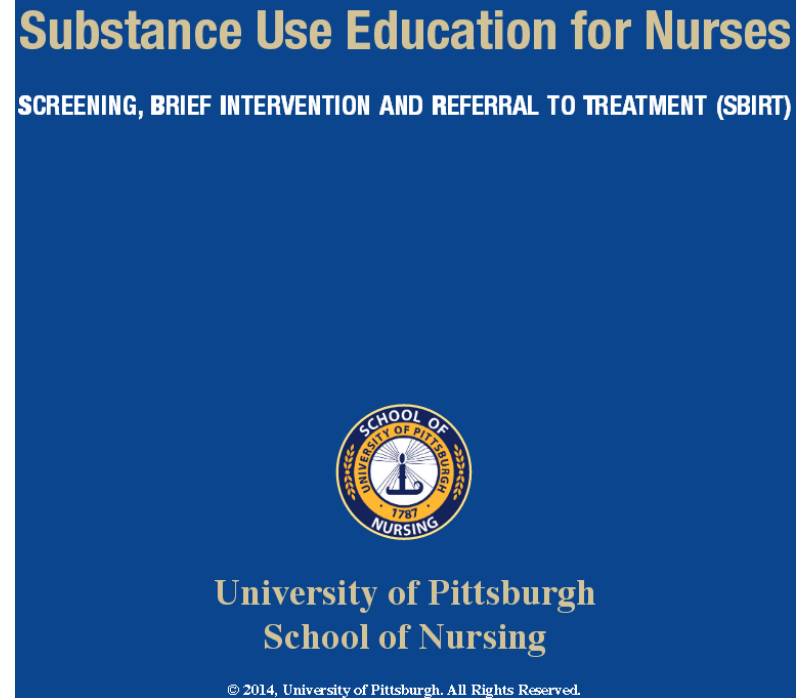
# Conclusions

- Students exposure to interprofessional training involving SBIRT was associated with positive changes of knowledge in both:
  - Perceptions of working with patients who have drug and alcohol misuse, abuse, and dependency
  - Interprofessional collaborative practice competencies
- Interprofessional education will improve patient outcomes and will provide more congruent and effective care



# Screening Manual for Nurses

- Trainer's Manual
- Ring of Knowledge Cards
- Handouts
  - Small Group Scenarios
  - Role Play Scenarios
- PowerPoints
  - Initial Training
  - Review/Refresher Training





# Screening Manual for Nurses

- Developed by the University of Pittsburgh School of Nursing
- **Free Download:**  
[http://www.nursing.pitt.edu/academics/ce/SBIRT\\_teaching\\_resources.jsp](http://www.nursing.pitt.edu/academics/ce/SBIRT_teaching_resources.jsp)



# Questions?



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