EVALUATION OF TEAMSTEPPS® WITHIN A CARDIAC PROCEDURAL UNIT TO IMPROVE TEAMWORK AND PATIENT SAFETY

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DISCLOSURES

- Author: Dawn Mutchko, DNP, RN, APN-C, FNP-C
  - Systemwide Lead Advanced Practice Provider
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- No conflicts of interest to disclose

- No sponsorship or commercial support was given to the author

LEARNER OBJECTIVES

- Awareness of statistics related to communication/teamwork in patient safety

- Understand the implementation of this EBP project

- Discuss the outcomes of the project

- Appreciate the limitations, conclusions, and implications of the project

NATIONALLY IDENTIFIED ISSUE

- 16% of hospitalized patients experience adverse events (WHO, 2014)

- 79% of sentinel events related to communication (The Joint Commission, 2015)

- Medical malpractice claims

- Healthcare errors: 3rd leading cause of death in the U.S. (Makary & Daniel, 2016)

LOCALLY IDENTIFIED ISSUE

➢ Gap analysis

➢ Population recognized opportunity

➢ New leadership

➢ Core, closed unit staffing

➢ Internal and external stakeholders

PICOT

In

(P)   cardiac catheterization and electrophysiology staff,

(I)   education regarding communication and teamwork skills,

(C)   no formal training,

(O)   participant perceptions and knowledge regarding communication and teamwork

(T)   immediately, and at one and two months after the intervention?

AVAILABLE KNOWLEDGE

➢ Preventable deaths secondary to medical error (IOM 1999)

➢ Similarities between healthcare and military/aviation

  ➢ TeamSTEPPS® provides higher quality, safer patient care by optimizing medical teams and eliminating barriers to quality and safety (AHRQ, 2006)

➢ Successful EBP in other patient and unit types

WHY TEAMSTEPPS®?

Team Strategies and Tools to Enhance Performance and Patient Safety

- ➢Optimizing team performance
- ➢Effective communication and teamwork
- ➢4 core skills
- ➢Medical error reduction
- ➢Transition individual to team care
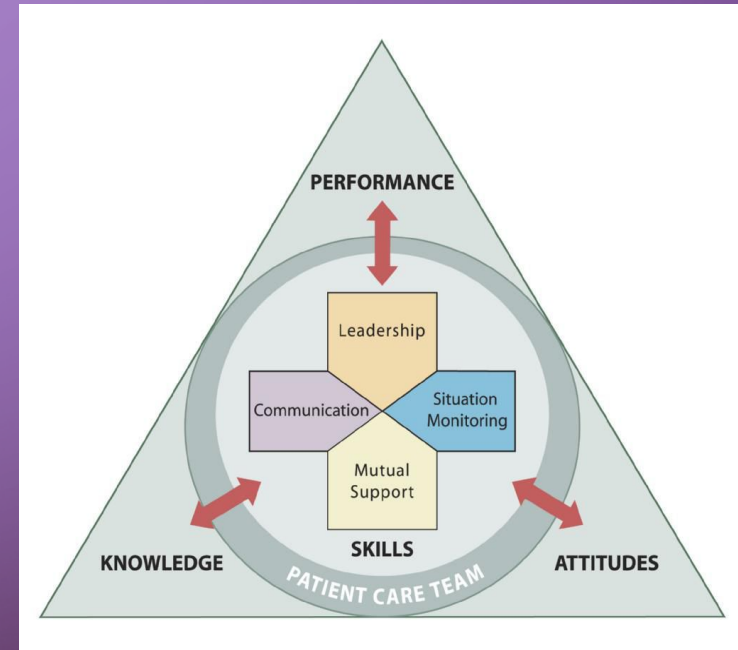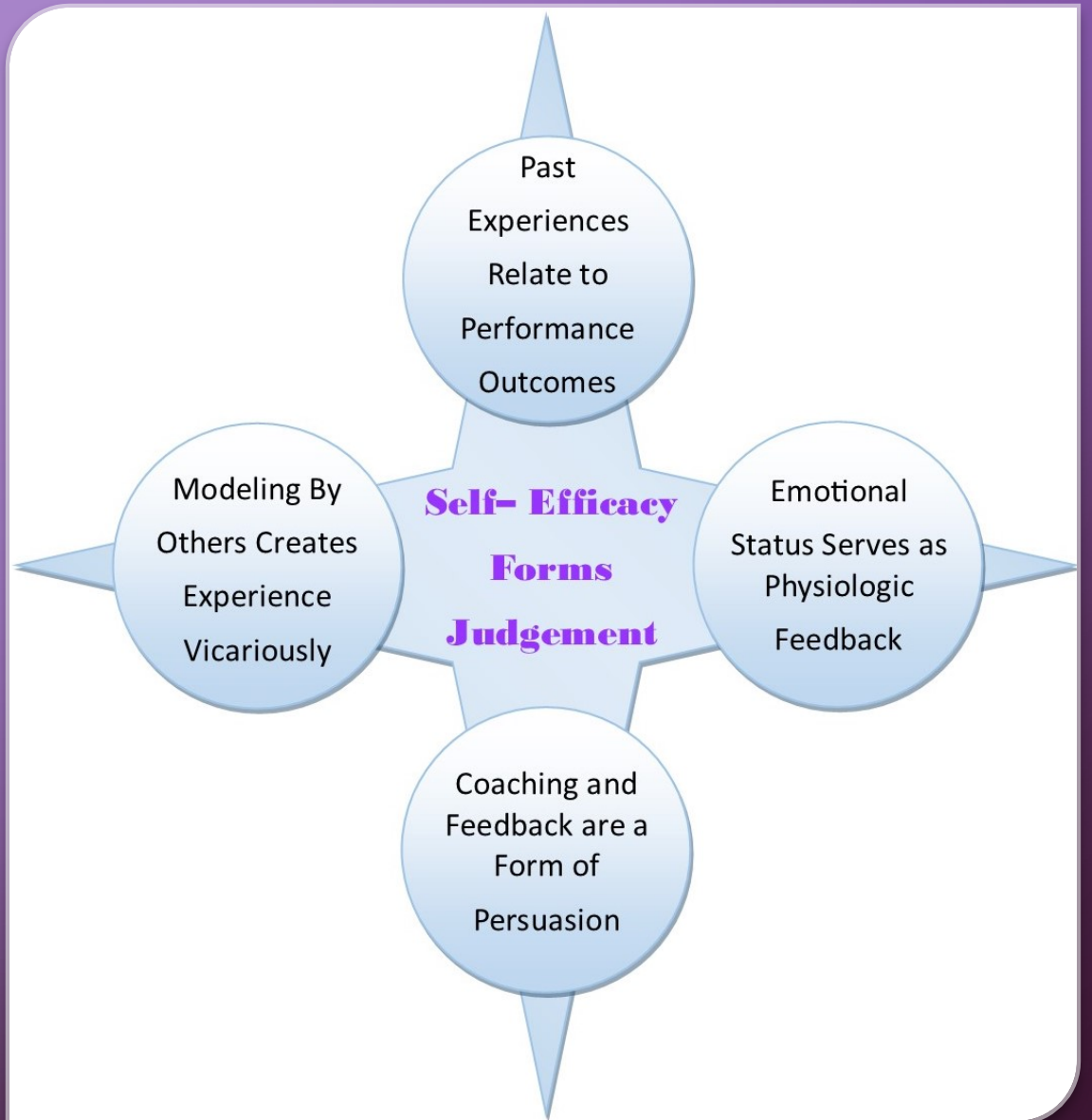
PROJECT AIMS

IMPROVE TEAMWORK AND COMMUNICATION

NO SIMILAR STUDY SETTINGS

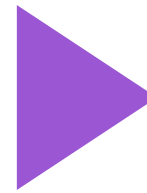INTERPROFESSIONAL COLLABORATION WITH FREQUENT HANDOFFS

RATIONALE

➢Bandura's Social Cognitive Theory

➢Addresses behavioral and cognitive learning (2000)

ETHICAL CONSIDERATIONS

HSRC approval obtained from Wilmington University

▶

Geisinger's IRB declared exempt

SETTING & CONTEXT

Cardiac Catheterization and Rhythm Center: 5 labs, 15 bays, busiest STEMI center in NJ (State of New Jersey, 2018)

FT & PT non-provider cardiac procedural unit staff

Eligible staff: 21 RNs, 8 RTs, 3 PCAs, 3 support staff

Introduce and invite

INTERVENTION

TeamSTEPPS® Trainer Curriculum

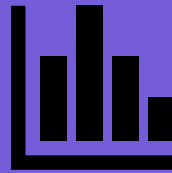TeamSTEPPS® Essentials Course

3-hour education program

TeamSTEPPS® Teamwork Perceptions Questionnaire (T-TPQ)

Population and individual observation and support.

MEASURES & ANALYSIS

DATA AND DEMOGRAPHIC COLLECTION

REPEATED MEASURES ANOVA
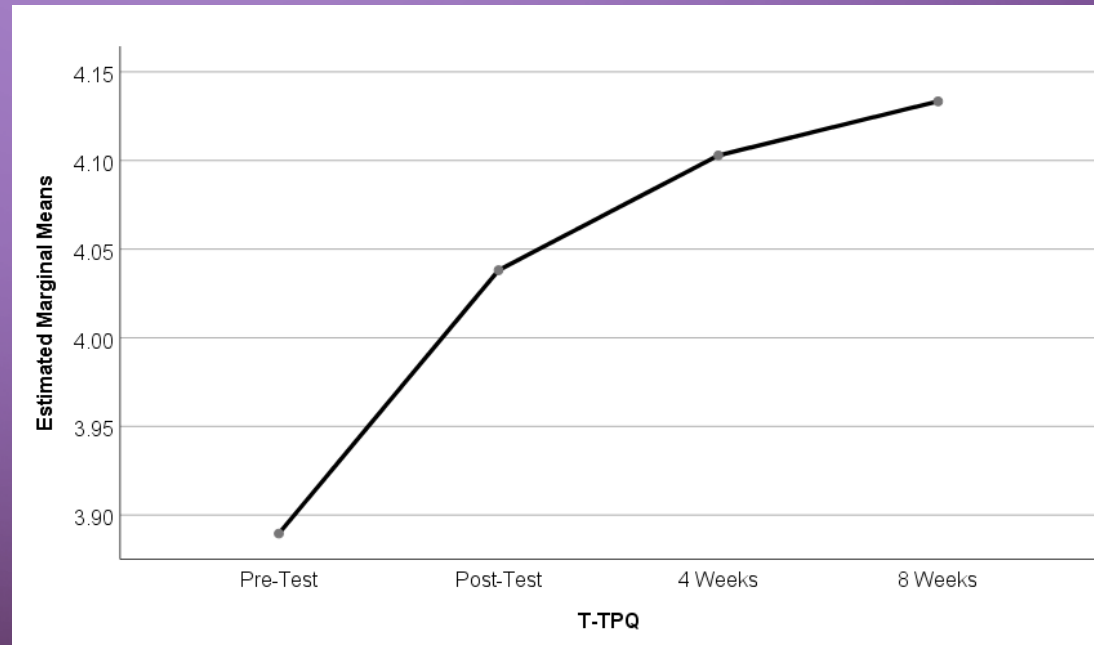
SPSS WINDOWS VERSION 25.0

SUMMARY

- Mature, stable, experienced

- 50% participation

- Interactive and customized training

- Encouraged, engaged, empowered

- Group progression

OUTCOMES

	SD	ND
Pre-Test	0.924	0.525
Post-Test	0.868	0.525
4 Weeks	0.870	0.525
8 Weeks	0.827	0.525

➢ Week 4 challenges

➢ 50% prior training

➢ Effective

➢ Sustainable

The within-subject group means for the T-TPQ.

LIMITATIONS

➢ Small convenience sample in one community hospital

➢ Providers excluded

➢ Volunteer and survey bias

➢ Non-reimbursed post-shift time commitment

➢ Summer season, staffing challenges
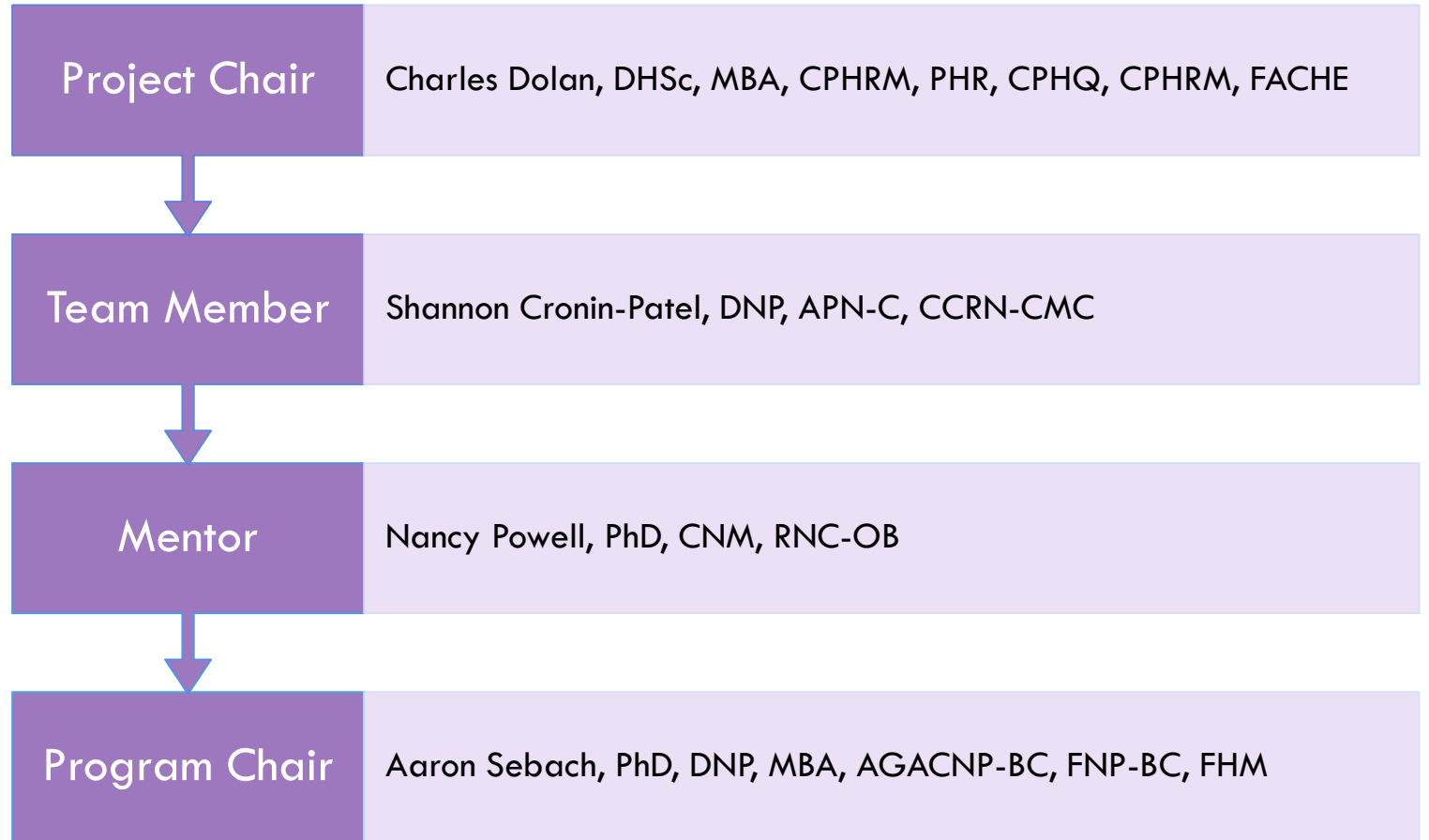
CONCLUSIONS & IMPLICATIONS

➢Provider to staff communication/teamwork

➢Provider to patient communication

➢Improved safety/outcomes

➢Provider/staff satisfaction

➢Patient satisfaction

➢DISSEMINATION

THANK YOU TO MY PROJECT TEAM

&

QUESTIONS?

Project Chair	Charles Dolan, DHSc, MBA, CPHRM, PHR, CPHQ, CPHRM, FACHE
Team Member	Shannon Cronin-Patel, DNP, APN-C, CCRN-CMC
Mentor	Nancy Powell, PhD, CNM, RNC-OB
Program Chair	Aaron Sebach, PhD, DNP, MBA, AGACNP-BC, FNP-BC, FHM

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