Establishing a Healthy and Productive Academic Work Environment: Implementing TeamSTEPPS in a School of Nursing

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Northern Illinois University, School of Nursing

- Public university located 75 miles west of Chicago
- Total student enrollment: 17,169 (Fall 2018)
- Undergraduate: 12,788
- Graduate: 4,121

- **School of Nursing** – founded in 1959
- Bachelor of Science
- RN to BS
- Master of Science (FNP, Nurse Education)
- Post-Master's Certificate in Nurse Education
- Post-Master's DNP
- Doctor of Nursing Practice: BSN - DNP and Masters - DNP

Importance of Teamwork for Nursing Faculty

Impetus for Change

Transitional time at the NIU School of Nursing

Interim chair appointed

Retirements of seasoned faculty

Younger faculty coming on board

Strategic planning to commence

Needed to develop organizational readiness and a culture that supports innovation

Essential for people to be adaptive, entrepreneurial, and accepting of new ideas

Lay the foundation for innovation

Develop leadership skills such as communication, teamwork and collaboration

Provide team training for faculty/staff/instructors

Opportunity to adapt a well-known team training program for the academic population

From the Literature - Addressing Incivility

- Addressing faculty-to-faculty incivility must be a priority (Peters, 2014; Clark, Olender, Kenski, & Cardoni, 2013).

- Strategies to foster civility include
  - Improvement in communication and teamwork
  - Implementing policies and protocols
  - Fostering effective leadership
  - Dealing directly with conflict
  - Building relationships (American Nurses Association, 2015; Clark, 2013).

Current State

Situation—What is happening at the present time?

Background—What are the circumstances leading up to this situation?

Assessment—What is the problem?

Recommendation – What can I do to correct the problem?

Evidence-based Initiative

TeamSTEPPS
Team Strategies and Tools to Enhance Performance and Patient Safety

- Developed by the Department of Defense and the Agency for Healthcare Research and Quality

- Designed to improve efficiency, quality and safety in healthcare

- More than 30 years of research and evidence

- Team training programs have been shown to improve attitudes, increase knowledge, and improve behavioral skills

- Recognizable framework that can be adapted to a non-clinical environment
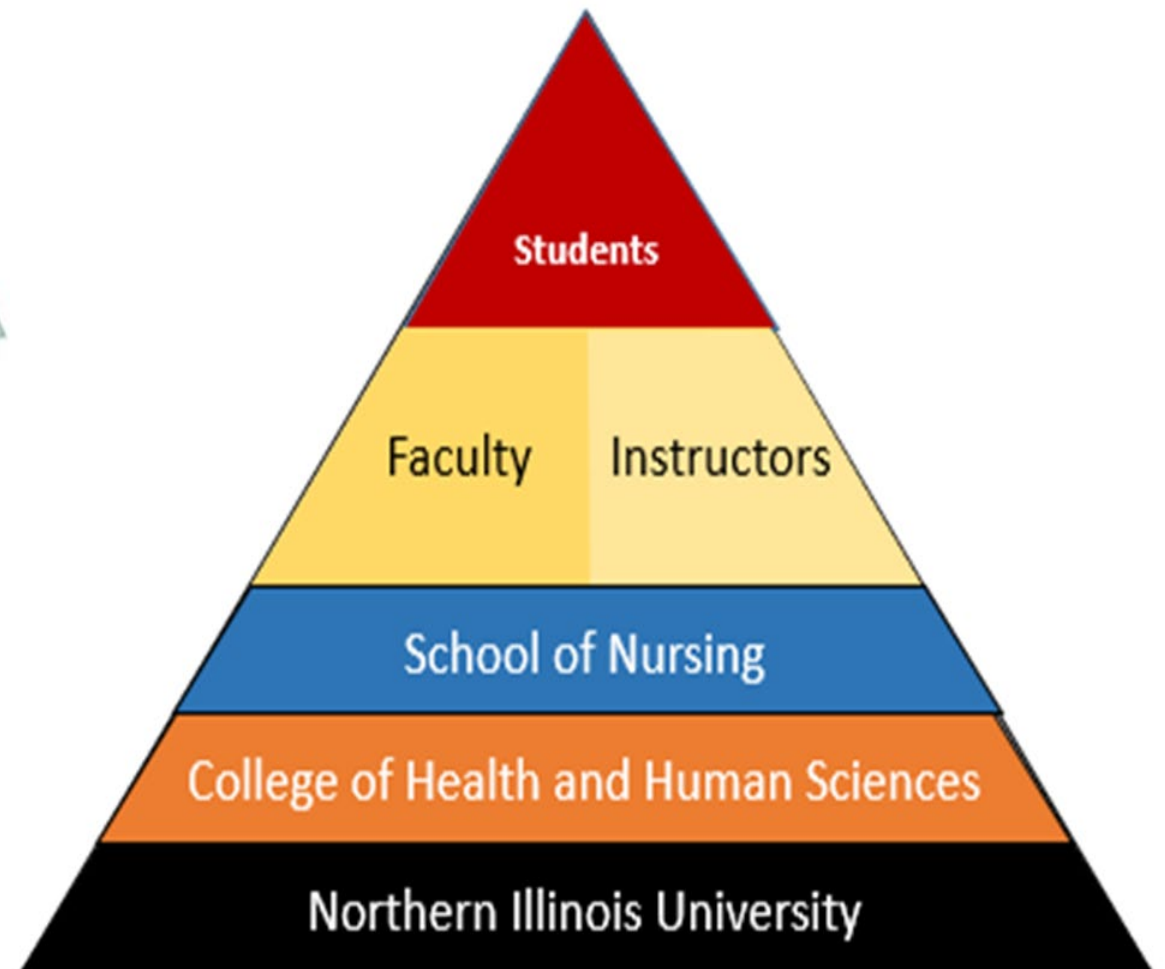

Agency for Healthcare Research and Quality, 2017a

TeamSTEPPS - Multi-Team System (MTS)
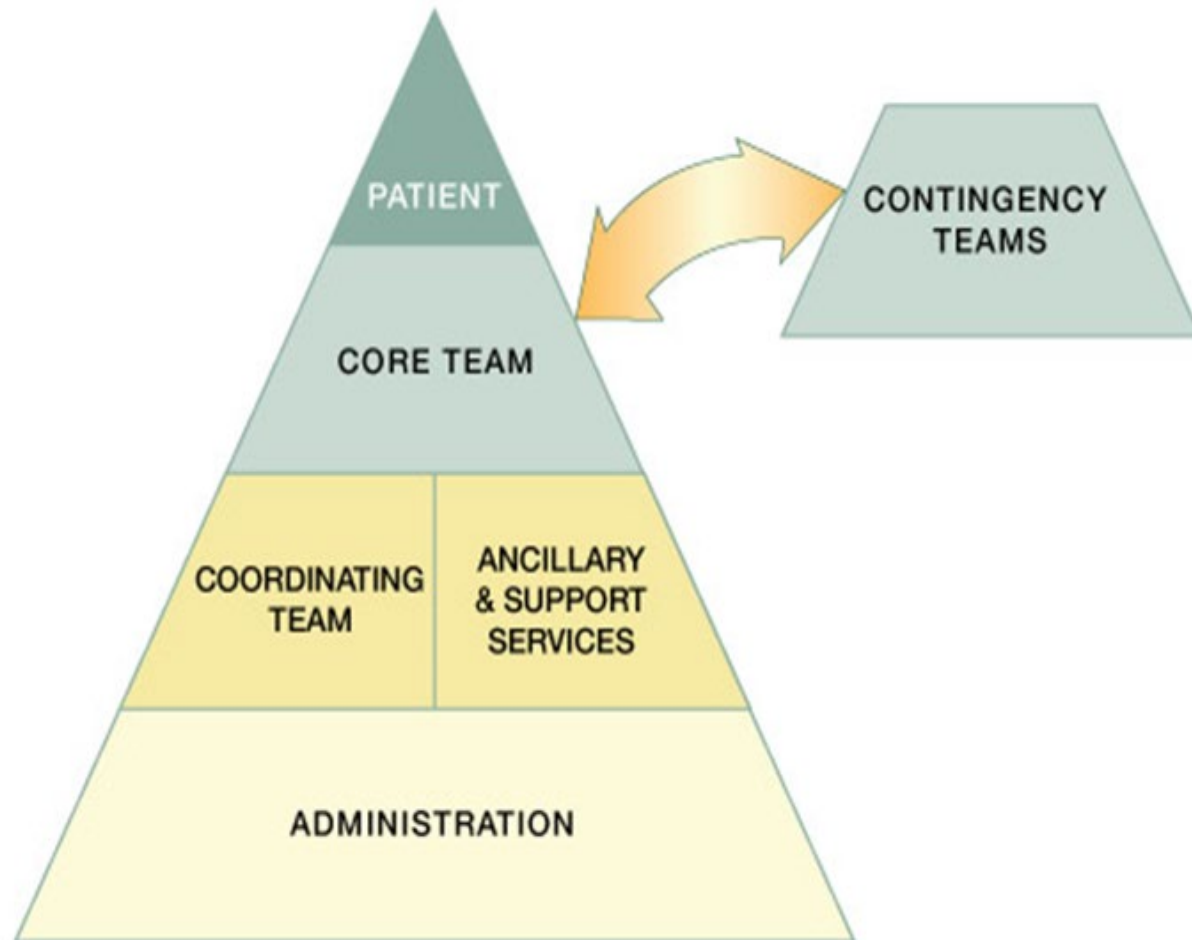
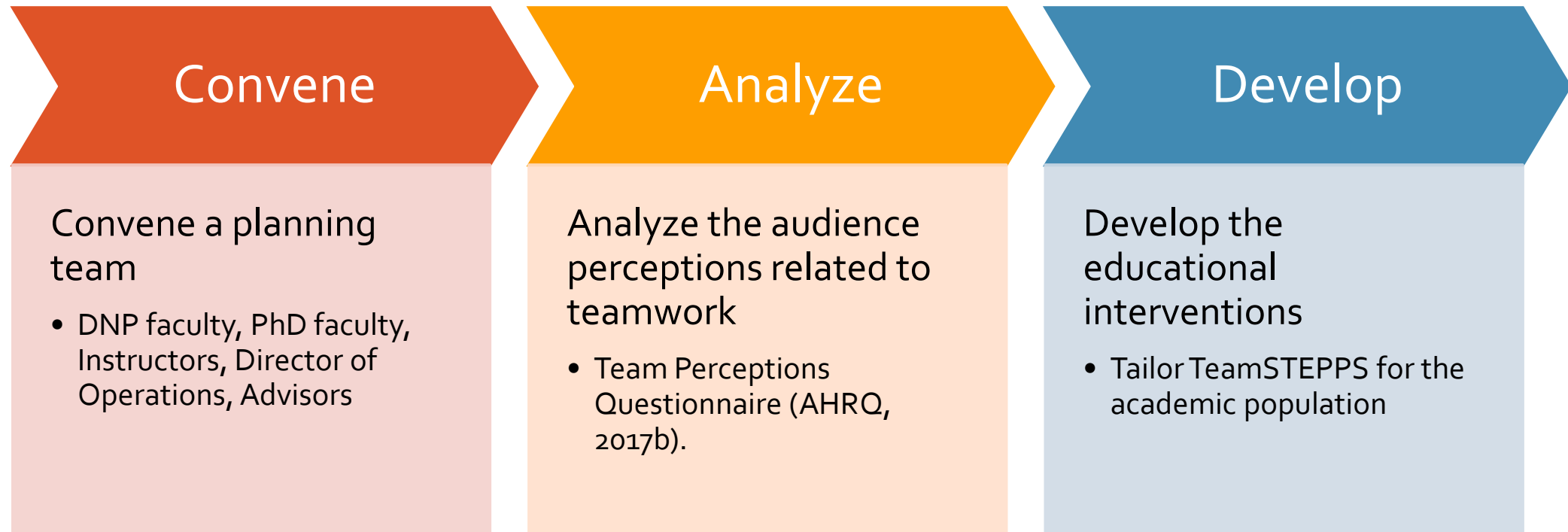Agency for Healthcare Research and Quality. (2017a).

Developed by Cooke, M. and Dosier, D., 2018

Phase 1 - PLAN Planning Oct 2017- Jan 2018	Phase 2 - DO Faculty education / coaching Jan - Oct 2018		Phase 3 - STUDY Evaluation Apr – Dec 2018	Phase 4 – ACT Dec 2018 – Feb 2019
• Analyze the audience knowledge/perceptions related to teamwork • Define the gap • Develop the learning objectives • Design the educational program	All SON faculty to attend a 6 hour training session on the topic areas of: - Team Structure - Leading Teams - Communication - Situation Monitoring - Mutual Support - Implementation in the academic environment Facilitated by TeamSTEPPS Master Trainers	Biweekly emails to reinforce concepts, share examples and provide resources Assist faculty in developing a "small test of change" Support faculty during implementation of "small tests of change"	Review results of T-TPQ T-TPQ 1 4/30/18 – 5/11/18 T-TPQ 2 8/20/18 – 8/31/18 T-TPQ 3 11/12/18 – 11/23/18 (changed to 2/2019)	Decide what actions should be taken based on results.

Project PDSA framework

Phase 1 – PLAN (Oct 17-Jan 18)

Convene

Convene a planning team

- DNP faculty, PhD faculty, Instructors, Director of Operations, Advisors

Analyze

Analyze the audience perceptions related to teamwork

- Team Perceptions Questionnaire (AHRQ, 2017b).

Develop

Develop the educational interventions

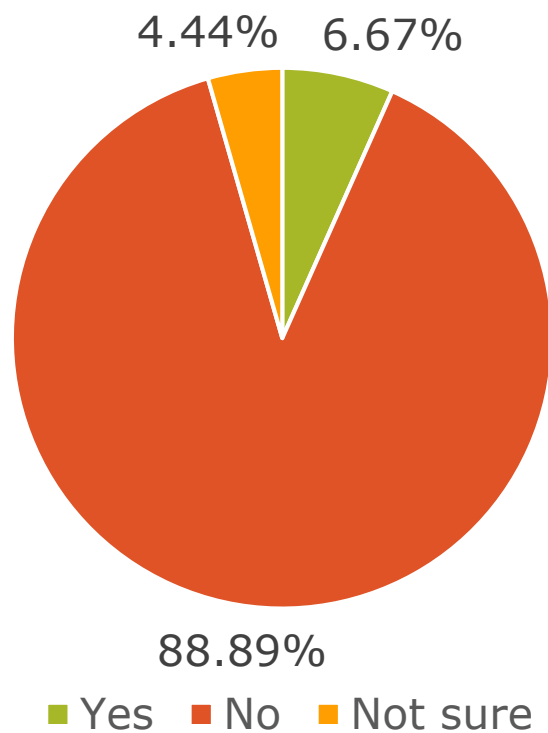- Tailor TeamSTEPPS for the academic population

What are we trying to accomplish?

- Intended outcomes
  - Create a more productive team
  - Foster a willingness to cooperate, coordinate, and communicate while remaining focused on a shared goal
  - Develop common understandings of the team environment and apply appropriate strategies
  - Anticipate other team members' needs

- Measurement criteria
  - 95% of SON faculty/instructors/staff will participate in an educational event
  - 95% of participants will Agree/Strongly Agree that the knowledge gained will positively impact their job
  - Perception of teamwork would increase after the educational event
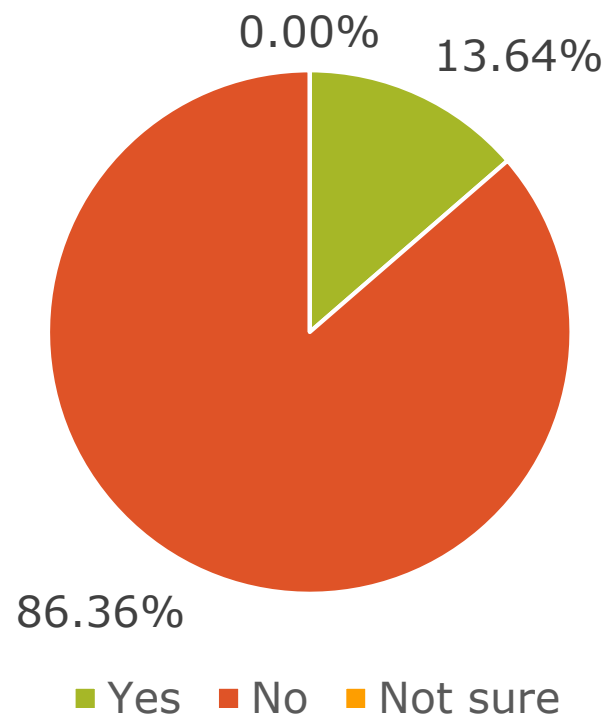
Team Perceptions Questionnaire - Baseline

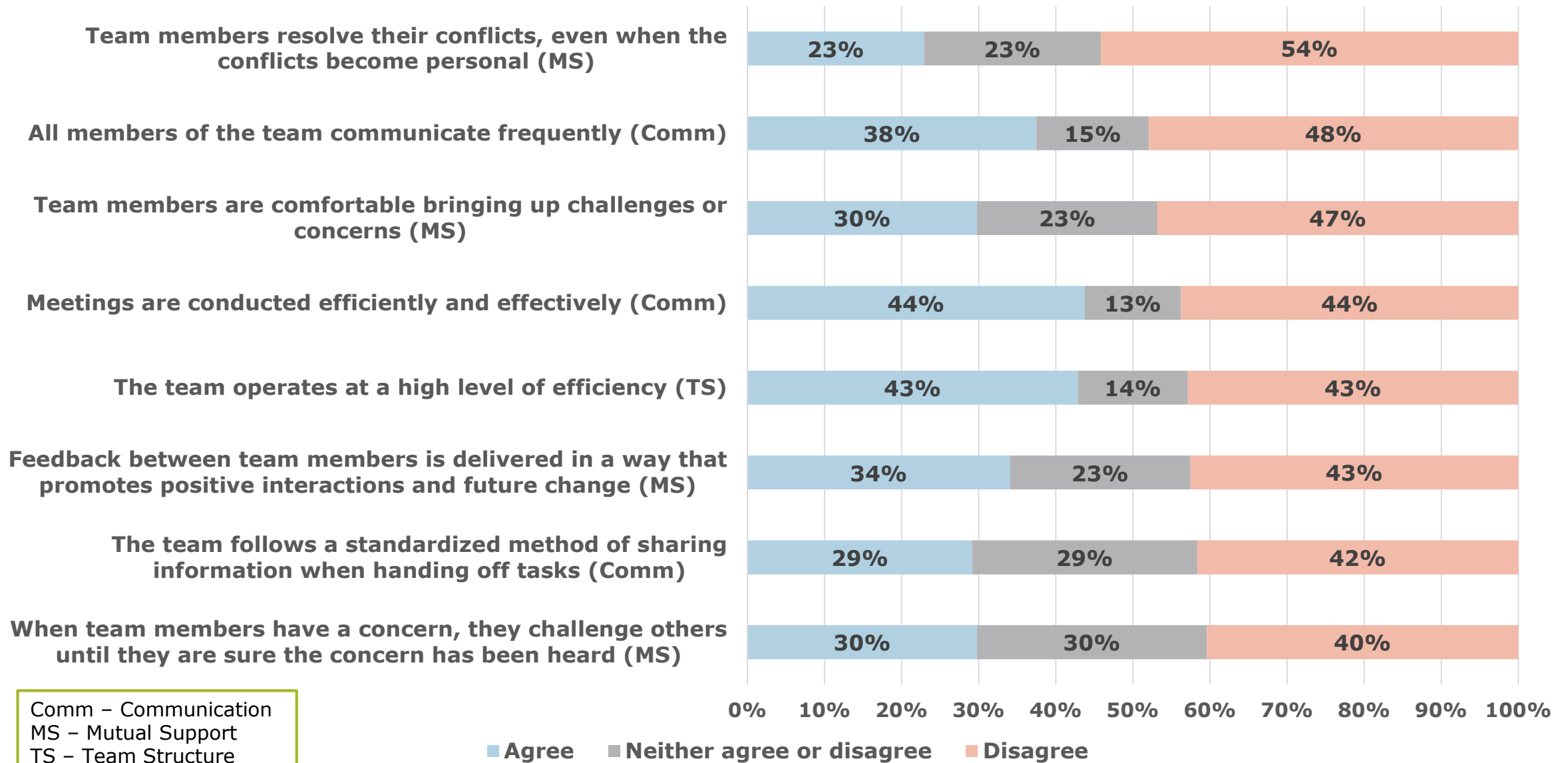| Statement	Agree	Neither agree or disagree	Disagree
Team members resolve their conflicts, even when the conflicts become personal (MS)	23%	23%	54%
All members of the team communicate frequently (Comm)	38%	15%	48%
Team members are comfortable bringing up challenges or concerns (MS)	30%	23%	47%
Meetings are conducted efficiently and effectively (Comm)	44%	13%	44%
The team operates at a high level of efficiency (TS)	43%	14%	43%
Feedback between team members is delivered in a way that promotes positive interactions and future change (MS)	34%	23%	43%
The team follows a standardized method of sharing information when handing off tasks (Comm)	29%	29%	42%
When team members have a concern, they challenge others until they are sure the concern has been heard (MS)	30%	30%	40%

Comm – Communication
MS – Mutual Support
TS – Team Structure

■ Agree   ■ Neither agree or disagree   ■ Disagree

Formalized the project – QI project

- Rationale
  - Realized that this was an opportunity to adapt an evidence-based team training program
  - Limited literature related to team training for nursing faculty

- Quality Improvement Project
  - Purpose - to assess the perception of teamwork in the areas of team structure, communication, leadership, situational monitoring and mutual support.
  - Educational intervention is an adaptation of the TeamSTEPPS curriculum that was developed by the Department of Defense and the Agency for Healthcare Research and Quality
  - Compare TPQ baseline data against data collected at 3 time points after an educational intervention

- The study proposed the following question:
  - Does TeamSTEPPS training improve faculty/staff/instructors perception of teamwork?

Phase 2 - DO
Faculty Education (Jan - Oct 2018)

- 6 hour training session on the topic areas of:
  - Team Structure
  - Leading Teams
  - Communication
  - Situation Monitoring
  - Mutual Support
- Biweekly emails to reinforce concepts, share examples and provide resources
- Implementation of the tools and concepts in the academic environment
  - Assist in developing a "small test of change"
  - Support during implementation of "small tests of change"
- Facilitated by TeamSTEPPS Master Trainers

Measures

Measure	Goal	Actual	Comments
SON faculty/instructors/staff will participate in an educational event	95%	60%	Faculty -17/19 = 89% Instructors – 16/43 = 37% Staff – 12/14 = 86% Dean – 1/1 = 100% Faculty advisor – 1/1 = 100% Total- 47/78 = 60%

Measures

Measure	Goal	Actual	Comments
Educational event participants will Agree/Strongly Agree that the knowledge gained will positively impact their job	95%	80.7%	The knowledge I've gained will positively impact my job. Strongly/Agree – 21 = 80.77% Neutral– 4 = 15.38% Disagree/Strongly Disagree – 1 = 3.85%

Reinforcement of Concepts

Bi-Weekly Emails

- Topical format
- Tips for Implementation
- Additional Resources
- Celebrating Accomplishments

As we learned, using the TeamSTEPPS tools can be very useful to create a common language, make meetings more meaningful and efficient and allow us to meet our goals. Every two weeks, the team will receive additional information on each of the concepts as well as examples on how to use the concept and other relevant resources. The concepts are organized as we do our college courses – 100 level, 200 level and 300 level.

This email will address one of the 100 level concepts – **SBAR Communication**

Level	Concept	Definition
100 Level	Brief	
	Call-Out	
	Check-Back	
	SBAR	A framework for team members to effectively communicate information to one another. Situation— State what is happening at the present time that has warranted the SBAR communication. Background— Explain circumstances leading up to this situation. Put the situation into context for the reader/listener. Assessment—What do you think the problem is? Recommendation – What would you do to correct the problem?

When to use SBAR

- In time sensitive or critical situations
- When dealing with system, organizational or student problems
- When you need clarity
- In verbal or written communication

Tips for Implementation

- Use a template as a guide to organize your thoughts
- Review examples of SBAR communication
- Ask a colleague to review your SBAR communication

Attachments

NIU School of Nursing Teamwork Concepts Structure
SBAR Template and Example

Additional Resources

AHA's Team Training Program offers the TeamSTEPPS® community monthly webinars at no cost. Click this link for more information: AHA Free monthly webinars

Great things are happening at the School of Nursing

Many of our colleagues have already taken the first steps to integrate some of the TeamSTEPPS concepts into their daily work. Jeanette used SBAR for email communication with colleagues, Kathi G. used SBAR to communicate with students on Blackboard, Stephanie shared a template for SBAR communication for emails and Jie used SBAR in her presentation at GFC in February. There are probably others that I have yet to hear about, so if you have a suggestion on how to use SBAR, please send me an email description and I will share it in my updates.

What's next?

Biweekly email- Using briefs will be the topic
March 2018 – Team Perceptions Questionnaire
March 2018 – Educational event evaluation
March 2018 GFC meeting – Share best practices for using TeamSTEPPS tools

Resources

SharePoint site

- Data reports
- Educational presentations
- Bi-weekly emails
- Reference card
- Other tools

Conducted "small test of change"

- Rationale from comments: *Items on our GFC agenda are not given sufficient time for discussion. Items are rushed. Items now get placed on Blackboard and many do not read and come to meetings prepared. Faculty need to hear history and the background so informed decisions can be made.*

- General Faculty Meeting - monthly
  - Standardized meeting agenda and minutes template
  - Added a debrief as a standing agenda item
  - Developed guidelines and timelines for submission of agenda items and materials
  - Created a SharePoint site to house meeting materials
  - Established the expectation that all participants are to review materials in advance of the meeting
  - Scheduled meeting using Outlook calendar

SBAR for communicating student issues

Situation: A student sent an email this morning explaining that she forgot to turn in her resume/cover letter assignment that was due on 9/28/17 at 10pm. She attached it to the email (see below) that was sent today at 11am.

Background: The due date was listed on the assignment description, course calendar, and weekly PowerPoint presentations in class. Also, the syllabus states that "All written assignments are due on the date specified on course materials. Written assignments are to be handed in via blackboard. Written assignments handed in after the designated class time will receive a 5% per day deduction thereafter. Written assignments will not be accepted if more than 3 days late."

Assessment: There were not any technical issues prohibiting the student from turning in the assignment as the other 70 students were able to submit. Also, the student did not send an email or communicate in any way that there were extenuating circumstances resulting in a late assignment.

Recommendation: Since I am unfamiliar with standard practices of the SON for accepting late assignments, I am seeking your guidance so that I am in alignment with other instructors. I am inclined to accept the assignment with the 5% per day deduction which would giver her a maximum grade of 80%. If standard practice is to give a 0 for the assignment, I can do that as well.

"Refresher" Presentation (Aug 2018)

- Overview of concepts

- Shared results of T-TPQ 1
  - Areas of Improvement
  - Areas of Opportunity

- Brainstorming of solutions

- Convened a work group to:
  - Assist in developing "small tests of change"
  - Discover ways to adapt tools/concepts to the academic environment
  - Develop framework for improving teamwork in the academic environment

Team Perceptions Questionnaire

Team Perceptions Questionnaire participation	TPQ Baseline (Nov 2017)	TPQ 1 (May 2018)	TPQ 2 (Sep 2018)	TPQ 3 (Feb 2019)
Faculty	14 (74%)	8 (42%)	10 (63%)	7 (41%)
Instructors	15 (35%)	10 (24%)	16 (42%)	21 (54%)
Staff	13 (93%)	10 (63%)	12 (73%)	6 (40%)
Did not indicate	7			
Total participating	49	28	38	34
Total eligible to participate	76	76	69	71
Percent participating	64.5%	36.8%	55.1%	47.9%

Diffusion of Innovation Curve
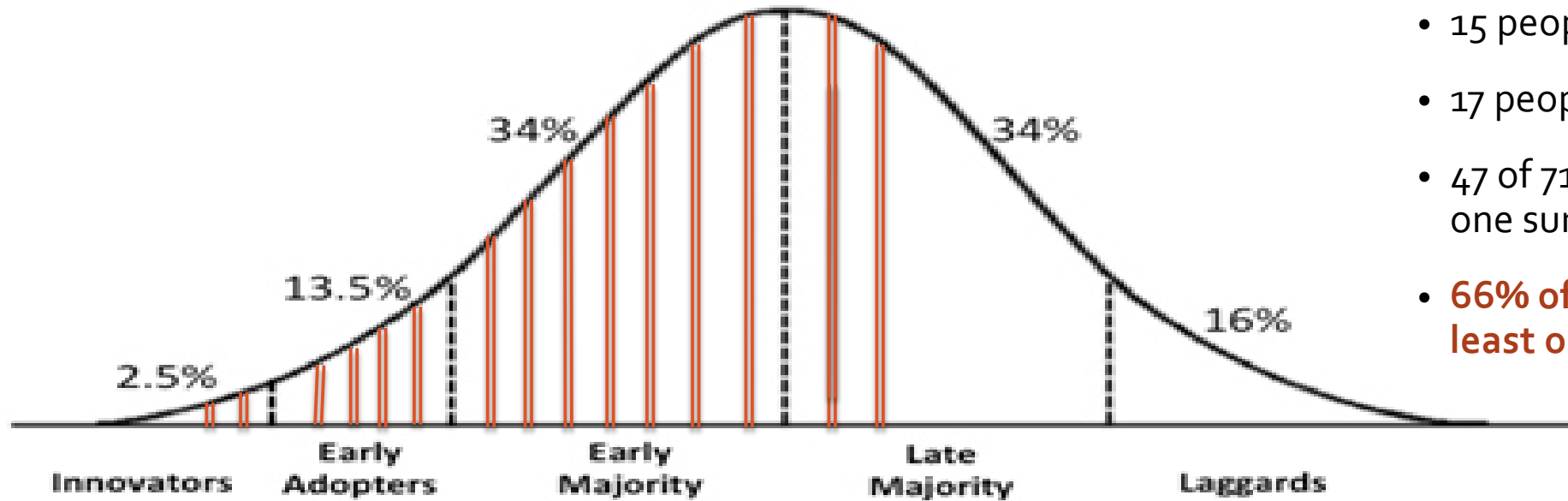
- 15 people completed 3 surveys
- 15 people completed 2 surveys
- 17 people completed 1 survey
- 47 of 71 people completed at least one survey
- **66% of people completed at least one survey**

2.5%

13.5%

34%

34%

16%

Innovators

Early Adopters

Early Majority

Late Majority

Laggards

Innovators	Early Adopters	Early Majority	Late Majority	Laggards
• Risk takers who have the desire to try new things even if they fail	• Selective about trying new things but will help reduce uncertainty for others	• Take their time before adopting a new idea but will to embrace it if they understand how it fits into their lives	• Adopt in reaction to peer pressure, emerging norms or necessity. Much of the uncertainty must be resolved before they adopt	• Are traditional and make decisions based on past experience. Reluctant to change

Results - Baseline to TPQ 3

- 34 of 34 areas showed improvement
- Greatest improvement in the domain of Mutual Support followed by Communication
- Most improved
  - MS - School of Nursing team members resolve their conflicts, even when the conflicts become personal.
  - Comm.- Meetings are conducted efficiently and effectively.

Most Improvement from Baseline
Tenured, tenure-track, clinical track faculty

Domain	Question
Mutual Support	School of Nursing team members resolve their conflicts, even when the conflicts become personal.
Communication	Meetings are conducted efficiently and effectively.
Mutual Support	Feedback between School of Nursing team members is delivered in a way that promotes positive interactions and future change.
Team Structure	School of Nursing team operates at high level of efficiency
Situation Monitoring	School of Nursing team members correct each other's mistakes to ensure that processes are followed properly.

Most Improvement from Baseline Instructors

Domain	Question
Leadership	My supervisor/manager provides opportunities to discuss our team's performance.
Leadership	My supervisor/manager ensures that team members are aware of any situations or changes that may affect our work.
Communication	The School of Nursing team follows a standardized method of sharing information when handing off tasks.
Leadership	My supervisor/manager considers team member input when making decisions.
Leadership	My supervisor/manager takes time to meet with team members to develop a plan for our work.

Most Improvement from Baseline
SPS/Civil Service

Domain	Question
Mutual Support	School of Nursing team members resolve their conflicts, even when the conflicts become personal.
Situation Monitoring	School of Nursing team members continuously scan the environment for important information.
Mutual Support	School of Nursing team members are comfortable bringing up challenges or concerns.
Mutual Support	When School of Nursing team members have a concern, they challenge others until they are sure the concern has been heard.
Communication	All members of the School of Nursing team communicate frequently.

Least Improvement from Baseline
Tenured, tenure-track, clinical track faculty

Domain	Question
Team Structure	The skills of staff/faculty/instructors overlap sufficiently so that work can be shared when necessary.
Team Structure	School of Nursing team members are held accountable for their actions.
Mutual Support	School of Nursing team members request assistance from fellow staff when they feel overwhelmed.
Leadership	My supervisor/manager takes time to meet with team members to develop a plan for our work.
Team Structure	Staff/faculty/instructors can meet deadlines.

Least Improvement from Baseline Instructors

Domain	Question
Situation Monitoring	School of Nursing team members continuously scan the environment for important information.
Team Structure	Staff/faculty/instructors have clearly articulated goals.
Communication	The School of Nursing team seeks information from all available resources.
Team Structure	School of Nursing team members understand their roles and responsibilities.
Team Structure	Staff/faculty/instructors can meet deadlines.

Least Improvement from Baseline
SPS/Civil Service

Domain	Question
Team Structure	Staff/faculty/instructors have clearly articulated goals.
Team Structure	School of Nursing team members share information that enables timely decision making.
Leadership	My supervisor/manager models appropriate team behavior.
Leadership	My supervisor/manager considers team member input when making decisions.
Leadership	My supervisor/manager resolves conflicts successfully.

Concept / Tool Implementation

SBAR(R)	Brief	Handoff	Debrief
Huddle	Feedback	CUS	

Use of Tools

Most Likely to Implement

	Huddle	Brief	Debrief	SBAR	Call-Out	CUS	Check-Back	Handoff	Task Assistance	Feedback
TTPQ1	14.84%	10.94%	13.28%	14.06%	7.03%	4.69%	8.59%	1.56%	12.50%	12.50%
TTPQ2	13.89%	13.19%	13.19%	13.89%	2.08%	4.86%	8.33%	6.25%	11.11%	13.19%
TTPQ3	12.82%	10.26%	14.74%	12.18%	3.21%	5.77%	10.90%	7.69%	10.26%	12.18%

TTPQ1   TTPQ2   TTPQ3
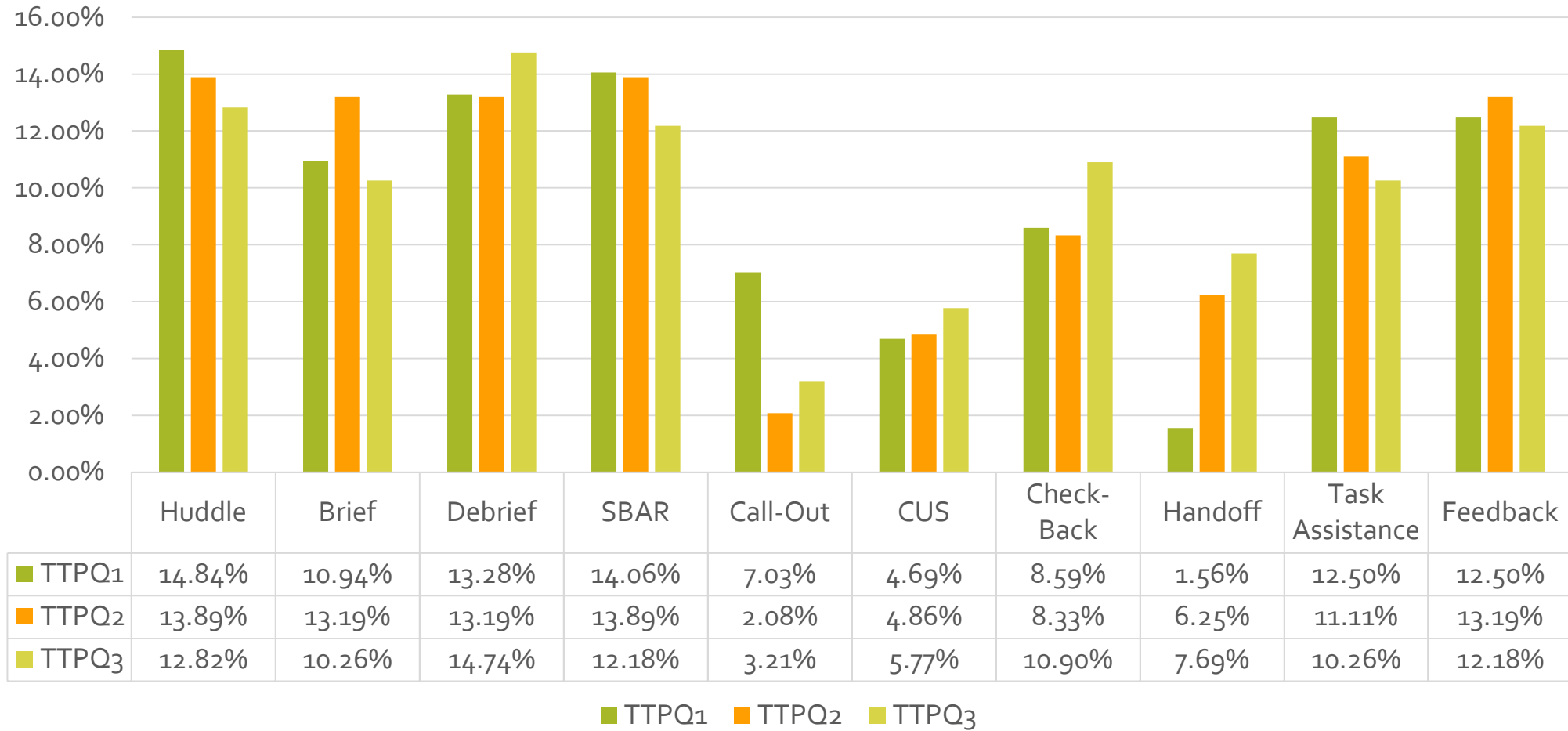
Use of Tools

Which TeamSTEPPS tools have you used in the last 4 weeks

	Huddle	Brief	Debrief	SBAR	Call-Out	CUS	Check-Back	Handoff	Task Assistance	Feedback
■ TTPQ1	15.56%	11.11%	14.44%	15.56%	2.22%	4.44%	7.78%	2.22%	13.33%	13.33%
■ TTPQ2	16.67%	12.96%	14.81%	11.11%	3.70%	0.93%	12.96%	4.63%	11.11%	11.11%
■ TTPQ3	14.43%	11.34%	18.56%	10.31%	1.03%	2.06%	12.37%	7.22%	11.34%	11.34%

■ TTPQ1   ■ TTPQ2   ■ TTPQ3
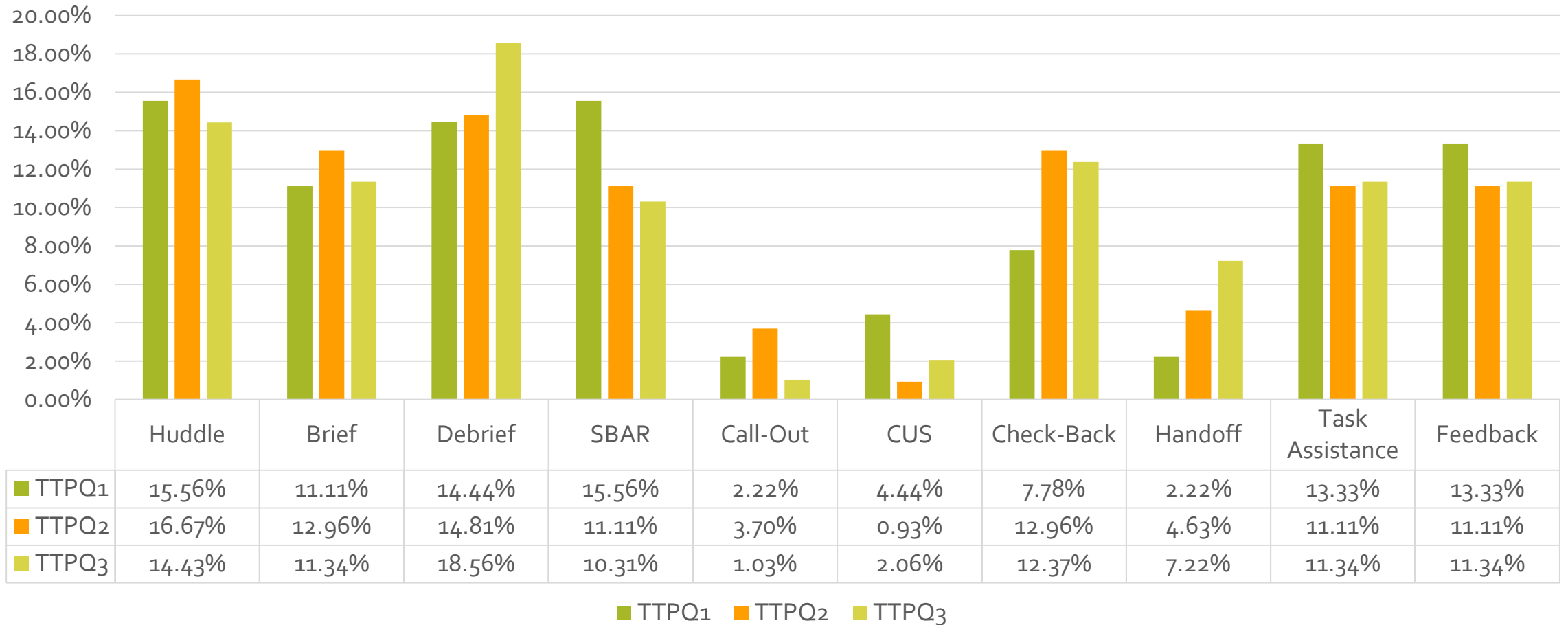
What people WERE saying

- Unfortunately, there are many that create roadblocks to improvement and feel that only their voice should be heard. There is such a divide between the senior faculty and the instructors/newer faculty that progress is being inhibited.

- Too much time is spent delineating roles and not optimizing the use of resources, strengths and expertise.

- There are a few people who look at everything negatively which then infects the team as a whole.

- The nursing faculty are at the top and the rest of the staff and instructors are second class citizens compared to certain members of the faculty. What is needed is that we respect one another's position and contributions here at the SON. We all need to recognize that we are all important and have important contributions.

- The term "faculty" is used differently by people in the organization, making discussions harder than they need to be. We should all be operating with the same lingo.

- The school of nursing functions as independent people rather than as an interdependent system.

- There should be better communication among different committees. There are some who do not listen, stonewall, or refuse to collaborate with other committees to investigate a problem. I am not sure why, but it degenerates into squabbling and poor team dynamics, hobbling our program. Even within committees, there are times when it is not worth it to speak, because nobody would listen. Nursing is very dynamic.

What people are NOW saying

- I believe roles and functions are more defined now compared to before. There's also more accountability. More cooperation also.

- All committee reports are well prepared for GFC meeting. Outside the school committee, representatives are well prepared too and their reports reflect what NIU policies are changing and how they will affect the SON.

- It is refreshing to see that people are speaking up about issues and not just allowing the senior faculty to have an opinion. I applaud all of those who diligently and professionally pushed for allowing instructors to participate on committees. That was a great accomplishment and one that will benefit the SON.

- I had a project that I knew I need the teams help on and I had several members step up. I was very supported.

QI is a continuous process

- Many have adopted the TeamSTEPPS communication tools, but there is still a contingent of faculty who have actively refused to engage and openly criticize and belittle the processes claiming it is not applicable to a SoN. This attitude impedes the work and discounts the efforts. However, the majority of faculty, instructors, and staff seem to report that there has been improved communications across the SoN.

- There are more team members that wish to be collaborative, but still a select few who feel they are either above the work or say they are too busy. The people who are collaborative are able to have substantive discussions and really hear other points of view. This results in really good work.

Fostering Mutual Support in Faculty as a Means to Address Conflict
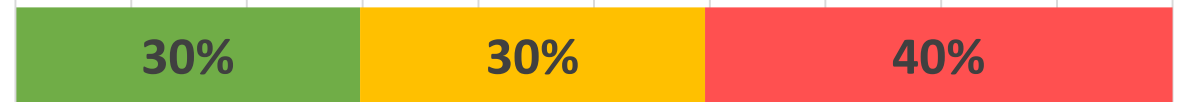
Improvement in Mutual Support

School of Nursing team members resolve their conflicts, even when the conflicts become personal. (TPQB)
- 23% Agree
- 23% Neither agree nor disagree
- 54% Disagree

TPQ3
- 53% Agree
- 23% Neither agree nor disagree
- 24% Disagree

When School of Nursing team members have a concern, they challenge others until they are sure the concern has been heard. (TPQB)
- 30% Agree
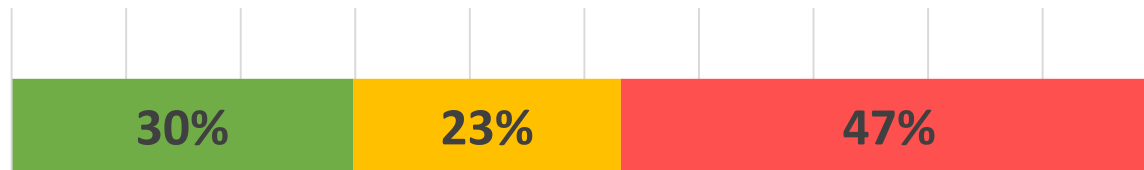- 30% Neither agree nor disagree
- 40% Disagree

TPQ3
- 59% Agree
- 29% Neither agree nor disagree
- 12% Disagree

Legend: ■ Agree ■ Neither agree nor disagree ■ Disagree

Improvement in Mutual Support

School of Nursing team members are comfortable bringing up challenges or concerns. (TPQB)
- 30% Agree
- 23% Neither agree nor disagree
- 47% Disagree

TPQ3
- 73% Agree
- 6% Neither agree nor disagree
- 21% Disagree

Feedback between School of Nursing team members is delivered in a way that promotes positive interactions and future change. (TPQB)
- 34% Agree
- 23% Neither agree nor disagree
- 43% Disagree

TPQ3
- 59% Agree
- 23% Neither agree nor disagree
- 18% Disagree
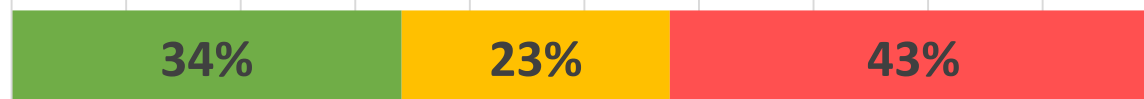
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

■ Agree   ■ Neither agree nor disagree   ■ Disagree

Next Steps

- Further develop tools to support teamwork training
  - NIU SON Teamwork Workgroup

- Assess the perception of teamwork on a larger scale

- Pilot test the tools to understand the application

- Evaluate the effectiveness of the teamwork training and delivery methodology

How did we compare?

Surveyed schools of nursing in the Midwest

Emails sent	4062
Emails undelivered	402
Emails delivered	3660
Total responses	597
Incomplete responses	124
Complete responses	**473**

Email distribution by state	Sent
Illinois	39.03%
Indiana	20.13%
Michigan	25.42%
Wisconsin	15.42%

Top 5 for Midwest Schools of Nursing

Domain	Question
Communication	The School of Nursing team uses a shared vocabulary when communicating with each other.
Team Structure	Staff/faculty/instructors can meet deadlines.
Team Structure	School of Nursing team members understand their roles and responsibilities.
Leadership	My supervisor/manager considers team member input when making decisions.
Team Structure	School of Nursing team members share information that enables timely decision making.

Baseline Domain Comparison
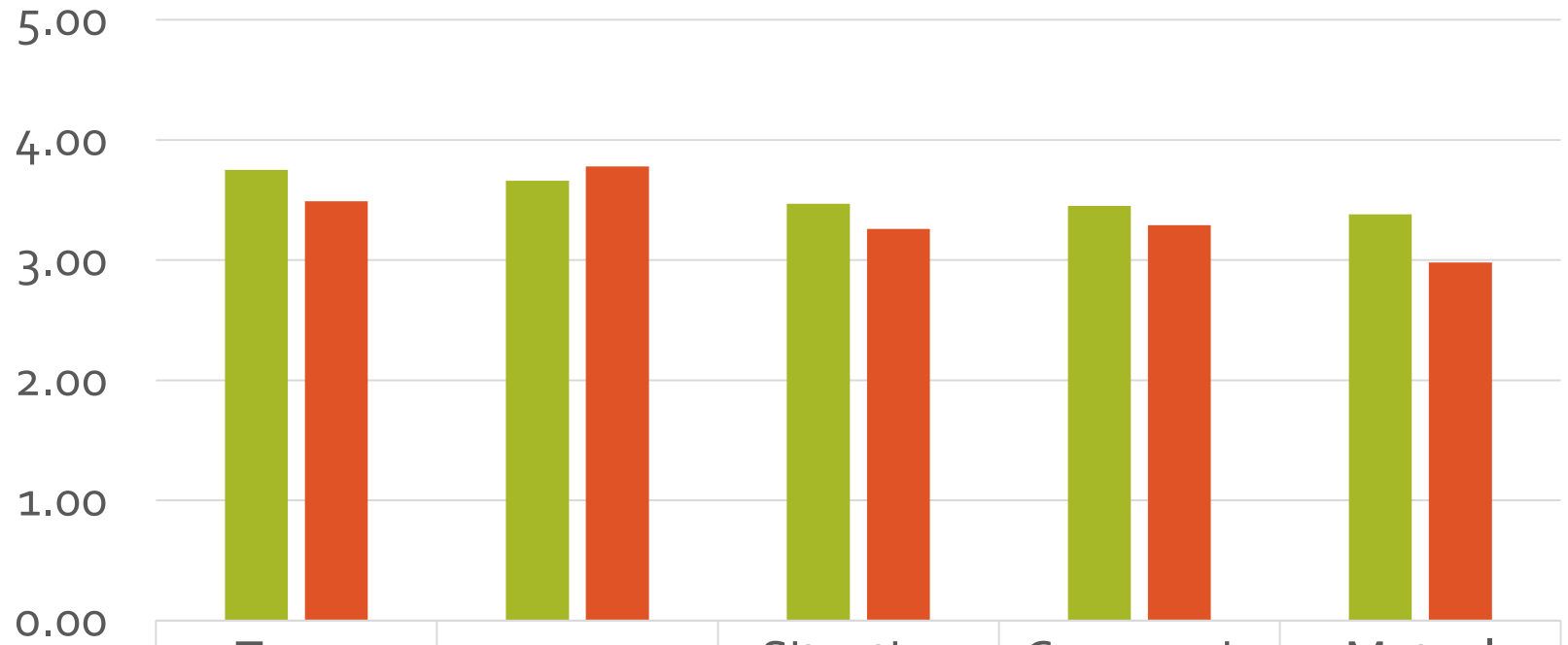
	Team Structure	Leadership	Situation Monitoring	Communication	Mutual Support
■ Midwest SON (n=462)	3.75	3.66	3.47	3.45	3.38
■ NIU SON (n=49)	3.49	3.78	3.26	3.29	2.98

■ Midwest SON (n=462)   ■ NIU SON (n=49)

Laying the Groundwork for Innovation

- Foster a willingness to cooperate, coordinate, and communicate while remaining focused on a shared goal
- Much of the literature focuses on perceptions of teamwork of the direct care providers
  - Limited literature related to team training for nursing faculty
  - Facilitate a "common language" among those who prepare clinicians.
- Literature has recommended team training as an intervention for faculty to faculty incivility
- Model teamwork to the students
- Unintended benefits
  - Improve retention
  - Decrease turnover
  - Increase satisfaction

Implications

- Results suggest improvement in key domains related to civility as well as those affiliated with faculty retention and resource management.

- Teamwork training is an effective strategy to improve communication, collaboration and conflict resolution, and thereby combat faculty-to-faculty incivility in schools of nursing (American Nurses Association, 2015; Clark, 2013).

- In the clinical setting where TeamSTEPPS® is typically used, quality control is imperative to safety. Although the measures in an academic setting differ, we view "high stakes" as that of an environment that functions to its highest level of teamwork potential in order to provide the best educational experience for students.

Reference slide

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