

# Sustaining a Nurse-Led Interprofessional Collaborative Practice Heart Failure Team: A Decade-Long Journey

Brittany Woody, Peterica Hall, Brittany Prewitt, Sonia Smith, Tanchaka Weatherly, Carla Turner, Hilary Bradford, Vera Bittner, Allison Diop, Takenya Hicks, Shana Nash, Monique Campbell, Maria Shirey, Connie White-Williams

## Introduction

Heart failure is a complex and chronic condition and is a leading cause of death among adults. The Heart Failure Transitional Care “Services (HRTSA) for Adults Clinic cares for patients with a diagnosis of heart failure who are underserved.

The HRTSA clinic is an interprofessional collaborative practice (IPCP) which is defined as the intentional collaboration of a team from multiple disciplines working in the same space with a shared vision to care for a population. HRTSA is a team-based model.



The clinic team works to achieve all of the Institute of Medicine's Quintuple Aims--one of the 5 is team well-being.

IPCP competencies include Values and Ethics, Roles and Responsibilities, Communication, and Teamwork.

## Purpose

The purpose of this study was

- 1) to describe the strategies implemented over a 10-year period to hardwire high team performance, and
- 2) to examine continued IPCP team functioning.

We hypothesize that teams with better alignment with IPCP competencies will have better team performance

## Strategies Used for Team Building

### Communication

- Daily Huddles
- Monthly Meetings
- Stoplight Reports
- Monthly One on Ones

### Engagement

- Team Education Days (Emotional Intelligence, Team Emotional Intelligence, DiSC profiles, Strength Finders)

### Education

- Journal Club
- TeamSTEPPS Communication Activities
- Interprofessional Collaborative Practice Teambuilding Exercises and Competencies

## Methods

### Survey of Organizational Attitudes in Primary Care (SOAP-C)

- Validated 21-item tool
- 4 subscales (Communication, Decision Making, Stress/Chaos, and History of Change)
- 5-point Likert scale (1= Not Aligned with IPCP, 5=Strongly aligned with IPCP)
- Complete Monthly

### Collaborative Practice Assessment Tool (CPAT)

- Validated 57-item survey
- Measures eight dimensions (Mission, Relationships, Leadership, Role, Communication, Community, Care Coordination, Decision-making and Conflict Management, Patient Involvement)
- 7-point Likert scale (Strongly Disagree=1 to Strongly Agree=7).
- Complete twice a year

**Design:** Data were collected prospectively over a 10-year period from 2015 to 2025

**Sample and Setting:** The HRTSA Clinic team completed surveys

**Instruments:** SOAP-C and CPAT

**Data Analyses:** Descriptive statistics, ANOVA and Post Hoc analysis were used to compare interprofessional collaboration characteristics over time

## Results

### SOAP-C Results

SOAP-C Scales	Yr 2018	Yr 2019	Yr 2020	Yr 2021	Yr 2022	Yr 2023	Yr 2024	F-value	p-value
	n=76	n=88	n=50	n=113	n=108	n=108	n=47		
	M (SD)								
Scale 1: Communication	2.8 (1.0)	3.3 (0.7)	3.6 (0.7)	3.9 (0.6)	4.0 (0.6)	3.9 (0.7)	3.7 (0.8)	30.25	<.001
Scale 2: Decision Making	3.2 (0.9)	3.6 (0.9)	3.9 (0.8)	4.1 (0.6)	4.1 (0.7)	4.1 (0.7)	4.0 (0.6)	16.65	<.001
Scale 3: Stress/Chaos	2.8 (0.9)	3.1 (0.7)	3.4 (0.6)	3.5 (0.6)	3.3 (0.7)	3.0 (0.9)	2.9 (0.8)	9.85	<.001
Scale 4: History of Change	2.8 (1.1)	3.1 (0.9)	3.4 (1.0)	3.9 (0.8)	3.6 (0.9)	3.6 (1.0)	3.5 (1.0)	11.43	<.001
Overall Scale	3.0 (0.9)	3.3 (0.7)	3.6 (0.6)	3.8 (0.5)	3.8 (0.6)	3.7 (0.7)	3.6 (0.6)	19.22	<.001

There were significant differences in all 4 domains of the SOAP-C scores (p<.001) among the groups

SOAP-C Scales	G1: 2018-2019	G2: Yr 2020-2022	G3: Yr 2023-2024	F-value	p-value
	n=164	n=271	n=155		
	M (SD)	M (SD)	M (SD)		
Scale 1: Communication	3.0 (0.9)	3.9 (0.6)	3.8 (0.8)	70.31	<.001
Scale 2: Decision Making	3.4 (0.9)	4.0 (0.7)	4.1 (0.7)	42.67	<.001
Scale 3: Stress/Chaos	3.0 (0.8)	3.4 (0.7)	3.0 (0.8)	22.84	<.001
Scale 4: History of Change	3.0 (1.0)	3.7 (0.9)	3.5 (1.0)	28.02	<.001
Overall Scale	3.2 (0.8)	3.8 (0.6)	3.7 (0.6)	47.92	<.001

SOAP-C Scales	G1 vs G2	G1 vs G3	G2 vs G3
Scale 1: Communication	<.001	<.001	.551
Scale 2: Decision Making	<.001	<.001	.490
Scale 3: Stress/Chaos	<.001	.522	<.001
Scale 4: History of Change	<.001	<.001	.172
Overall Scale	<.001	<.001	.066

Post hoc analyses of the SOAP-C survey also showed significant differences between the earlier groups (2018-2022) and the later groups (2022-2024). No differences among the later groups (2023-2024) indicate alignment with IPCP competencies.

### CPAT Results

CPAT Scales	Group 1	Group 2	Group 3	Group 4	F-value	p-value
	4 assmts n=28	4 assmts n=30	3 assmts n=36	3 assmts n=23		
	2018-2019	2020-2021	2022-2023 (Jan)	2023(July)-2024		
	M (SD)	M (SD)	M (SD)	M (SD)		
Scale 1: Mission, Meaningful Purpose, and Goals	5.4 (1.3)	6.1 (1.2)	6.7 (0.4)	6.6 (0.5)	10.63	<.001
Scale 2: General Relationships	4.6 (1.6)	5.9 (0.9)	6.1 (0.7)	6.1 (0.8)	13.93	<.001
Scale 3: General Role Responsibilities and Autonomy	4.3 (1.1)	5.4 (0.7)	5.6 (0.6)	5.7 (0.6)	20.19	<.001
Scale 4: Communication and Information Exchange	5.1 (1.5)	6.2 (0.9)	6.5 (0.5)	6.5 (0.7)	13.86	<.001
Scale 5: Community Linkages and Coordination of Care	5.8 (1.1)	6.1 (0.8)	6.4 (0.8)	6.4 (0.8)	3.06	.031
Scale 6: Decision-making and Conflict Management	3.6 (1.2)	4.7 (1.0)	4.7 (0.8)	4.7 (1.4)	6.47	<.001
Scale 7: Patient Involvement	6.3 (0.7)	6.6 (0.7)	6.7 (0.4)	6.8 (0.5)	3.44	.019

There were significant differences in all 7 domains of the CPAT scores (p-value range .031 to <.001)

CPAT Scales	G1 vs G2	G1 vs G3	G1 vs G4	G2 vs G3	G2 vs G4	G3 vs G4
Scale 1: Mission, Meaningful Purpose, and Goals	.010	<.001	<.001	.013	.054	.747
Scale 2: General Relationships	<.001	<.001	<.001	.437	.604	.856
Scale 3: General Role Responsibilities and Autonomy	<.001	<.001	<.001	.177	.074	.539
Scale 4: Communication and Information Exchange	<.001	<.001	<.001	.152	.242	.909
Scale 5: Community Linkages and Coordination of Care	.198	.007	.019	.159	.239	.932
Scale 6: Decision-making and Conflict Management	<.001	<.001	<.001	.992	.892	.896
Scale 7: Patient Involvement	.121	.005	.009	.214	.224	.913

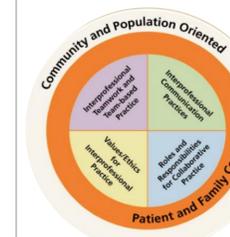
Post hoc analyses showed significant differences between the earlier groups (2018-2022) vs. the later groups (2022-2024). No differences among the later groups (2023-2024) indicate improvement in IPCP alignment in later years.

## Discussion

### What do these results mean?

- In earlier years, team members were still working on hard wiring IPCP competencies such as working together, communicating clearly, and defining roles and responsibilities.
- In later years, after purposeful activities to build the team, there was better alignment with IPCP competencies.

The team genuinely cared about and trusted each other, worked collaboratively, were able to find solutions to problems through effective communication, had a shared mental model, and demonstrated highly productive results.



### Patient Comments:

“The staff is exceptional !! I'm better because they are the best!”  
 “I would like to say that from the time you come in to the time you leave, everyone is extremely polite as well as professional. Each staff member treats me with a smile on their face and love in their hearts.”

## Conclusions

- As teams work together on IPCP competencies, they can become more aligned with values, teamwork, communication and roles. It took about 7 years to achieve high alignment.
- IPCP is an effective care delivery model in the care of heart failure patients and can be sustained and improved over a 10-year period.
- Through engaged leadership, and the use of thoughtful, intentional, and consistent team building activities to strengthen IPCP competencies, teams can be high performing.

## References

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