

The Impact of Interprofessional Teams in a Nurse-Led Clinic

Denise Schentrup, DNP, MSN, ARNP-BC

Clinical Associate Professor

Karen Whalen, Pharm.D., BCPS, CDE, FAPhA

Clinical Professor

University of Florida Colleges of Nursing & Pharmacy

Learning Objectives



- Describe the development and implementation of an interprofessional nurse-led care team in a rural health center
- Discuss metrics to assess teamwork effectiveness in an interprofessional care team
- Review data on clinical outcomes, quality of care, and satisfaction with care

Background

- Team established around HRSA NEPQR grant-3 year award
- Goals
 - Establish nurse-led interprofessional team at existing rural health center
 - Provide interprofessional learning experiences
 - Increase access to quality care
 - Improve patient outcomes



Archer Family Health Care

- Nurse-led rural health clinic
- Established in January 2001
- Mission - to provide cost-effective quality health care to underserved in rural North Central Florida



Activities to Develop Care Team

- Core team
- New positions/hires
- Kick-off meeting
 - Team-building exercises
 - TeamSTEPPS® modules and concepts introduced to team
 - Baseline surveys of team members
 - Repeated every 6 months

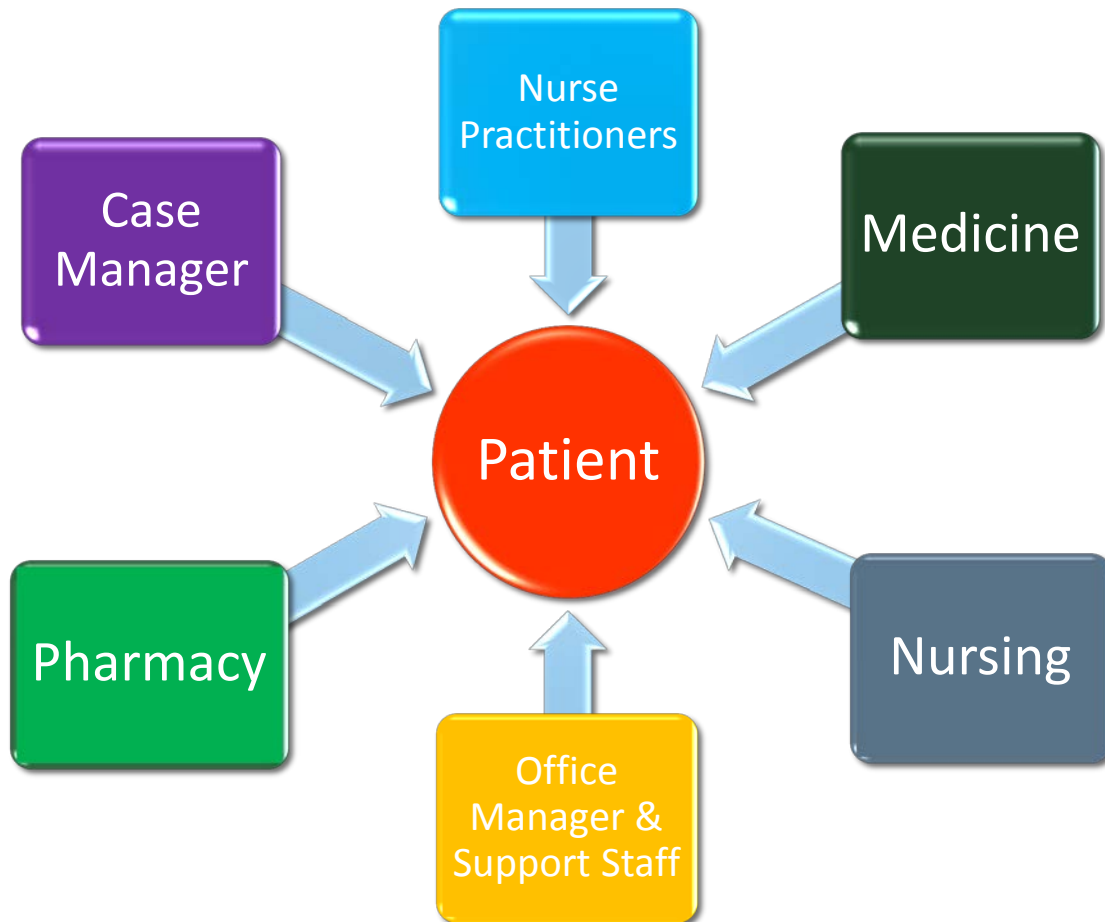


Activities to Develop Care Team

- Team retreat
- Reviewed survey results
- Established plan of action
- Created team goals
 - Communication
 - Dissemination of knowledge/increased visibility
 - Practice management and operations



AFHC Team Members



Student Participation



Students	Year 1	Year 2	Year 3	Total all years
BSN	7	6	6	19
APN	4	5	9	18
Pharmacy	4	11	7	22
Medicine	0	4	0	4

Development of Care Team Processes

- Identify patients who meet criteria for participation (goal enrollment = 60)
 - Focus on diabetes, depression and COPD
- Design format for case conferences
- Method of shared documentation



Development of Care Team Processes

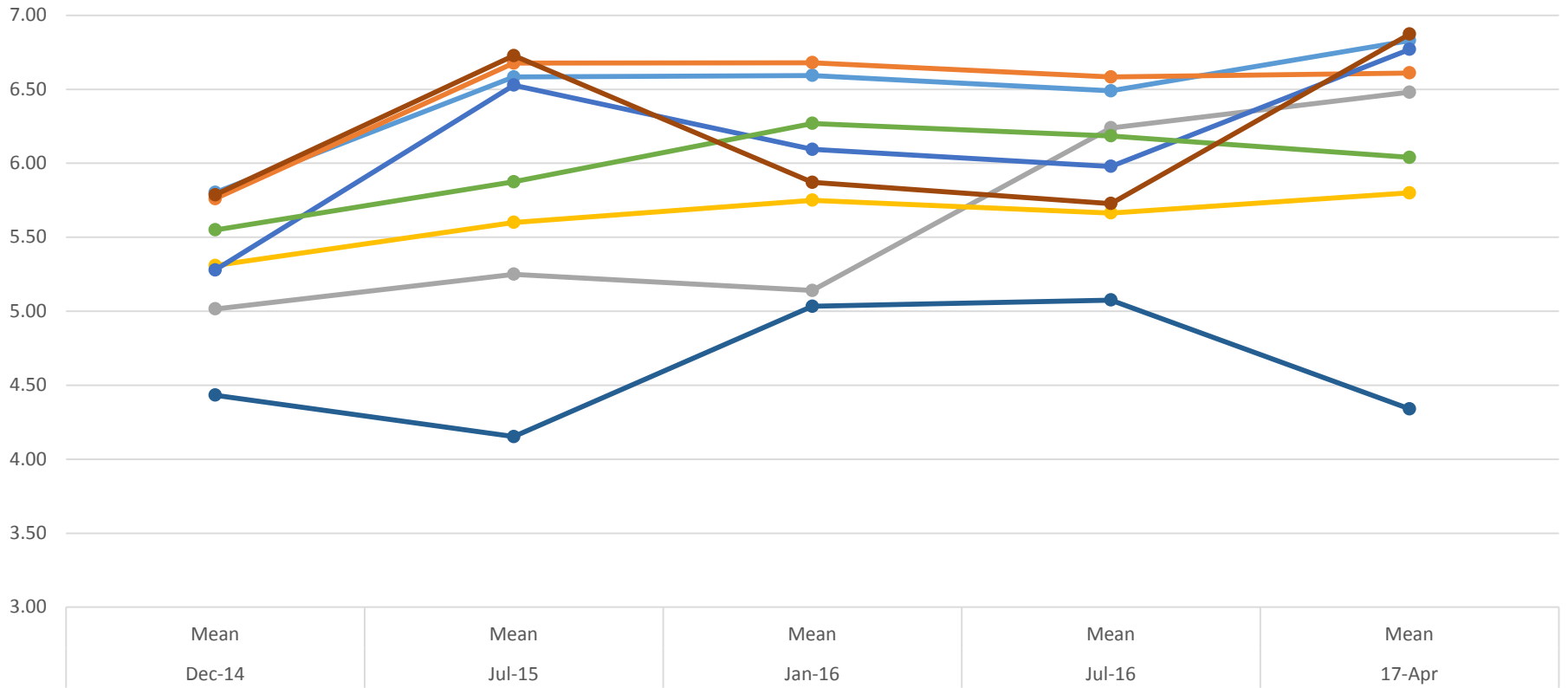


- Evaluation plan for participants
 - Clinical indicators
 - Diabetes – HbA1c
 - COPD – COPD Assessment Test (CAT)
 - Depression – PHQ-9
 - Hospitalizations, ER visits
 - Patient satisfaction and perception of health
 - Patient-Reported Outcomes Measurement Information System (PROMIS 29)

Results

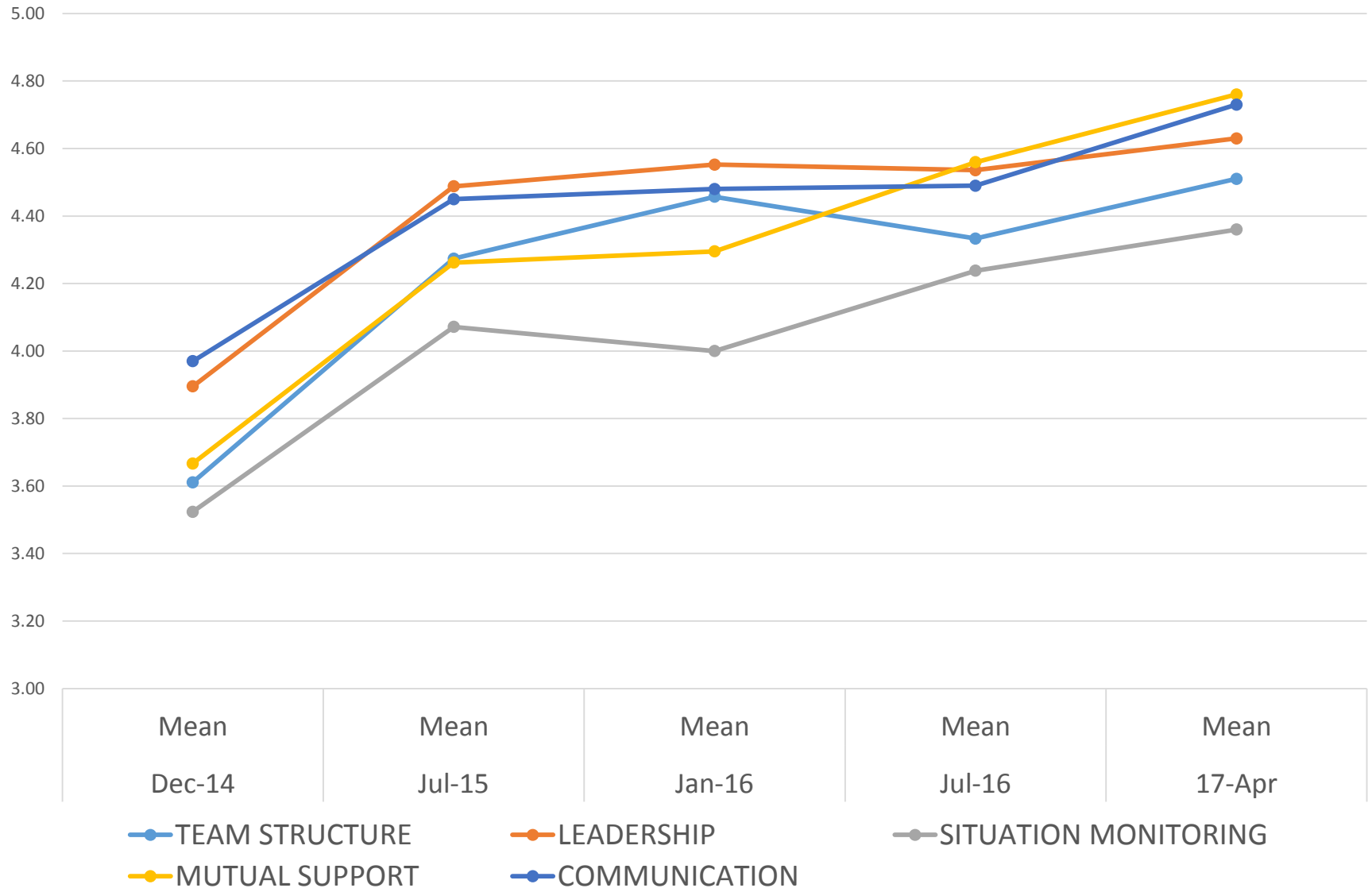


Collaborative Practice Assessment Tool



- MISSION, MEANINGFUL PURPOSE, GOALS
- TEAM LEADERSHIP
- COMMUNICATION AND INFORMATION EXCHANGE
- DECISION-MAKING AND CONFLICT MANAGEMENT
- GENERAL RELATIONSHIPS
- GENERAL ROLE RESPONSIBILITIES, AUTONOMY
- COMMUNITY LINKAGES
- PATIENT INVOLVEMENT

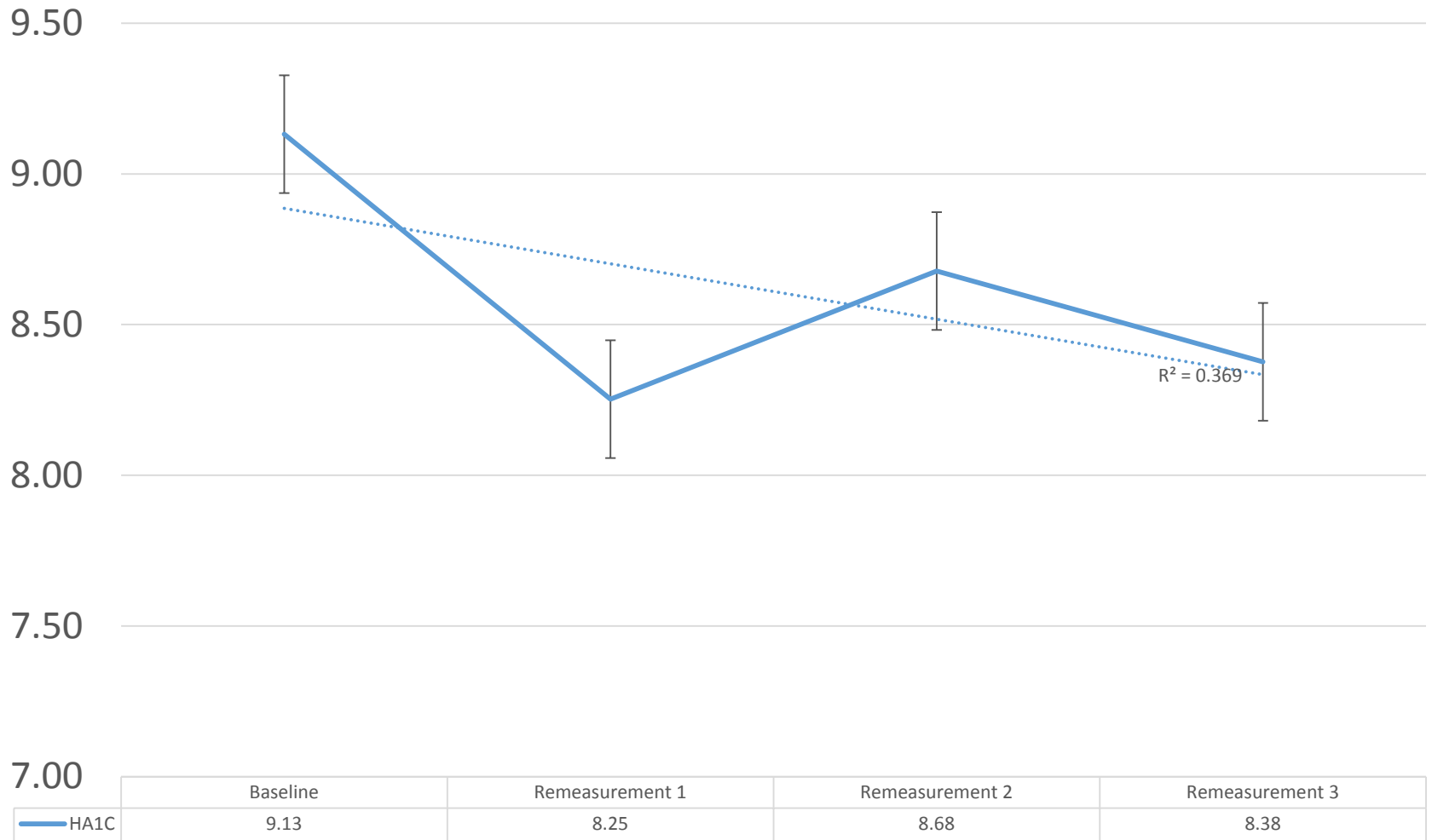
TeamSTEPPS® Team Perceptions Questionnaire



Clinical Outcome Results

- Interprofessional care team (n = 60)
 - Diabetes - 50
 - Depression - 16
 - COPD - 11
- Diabetes
 - Mean baseline HbA1c = 8.92%
 - 53.33% (24 of 45) participants experienced a one point or more reduction in HbA1C
 - 51% were able to maintain a HBA1c of 7% or less

Average HbA1C > 365 days Participation



Clinical Outcome Results

- Depression
 - 46% (n=23) had mild, moderate or severe depression as defined by the PHQ-9
 - 50% experienced a reduction in the severity of their depression as self-reported by PHQ-9
 - 35% (n=8) had a reduction in depressive symptoms significant enough to change category of symptom severity
- COPD
 - Small sample size (n=9)
 - 6 patients had more than one CAT assessment
 - 50% reported a two or more point reduction in COPD symptoms during their participation in the program

PROMIS-29 Outcomes

Goal	% of Respondents Achieving Outcome
Anxiety	33.33% (6/18)
Depression	27.77% (5/18)
Fatigue	33.33% (6/18)
Pain Interference	44.44% (8/18)
Physical Function	27.77% (5/18)
Sleep Disturbance	22.22% (4/18)
Ability to Participate in Social Activities	38.88% (7/18)

Utilization of Health Care Services

- ED visits
 - Prior: 7 individuals accounted for 11 ED visits
 - After: 8 individuals accounted for 8 ED visits
- Hospitalizations
 - Prior: 16 individuals accounted for 26 hospitalizations
 - After: 20 individuals accounted for 36 hospitalizations
 - 2 participants accounted for 13 hospitalizations-high utilizers
- Prevalence of preventive interventions documented
 - Prior: 25 of 60 (42%)
 - After: 56 of 60 (93%)

Summary



- Standardized evaluation of team competencies is a useful tool to identify strengths and weaknesses and guide development of activities to enhance functioning of a nurse-led care team
- Clinical outcomes data indicate a positive impact of team care
- Impact on utilization difficult to quantify but may be affected indirectly by improving outcomes and providing preventive services

Acknowledgments

- Erik Black, Ph.D.
Assistant Professor of Pediatrics and Educational Technology
UF College of Medicine
- Amy Blue, Ph.D.
Associate Vice President for Interprofessional Education
Clinical Professor
UF College of Public Health and Health Professions

Acknowledgement

- This project is supported by funds from Health Resources and Services Administration (HRSA) under UD7HP26901-01-01 for Nurse Education, Practice, Quality, And Retention - Interprofessional Collaborative Practice. 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 official endorsement be inferred by HRSA or the US Government.

Questions

