Telehealth: Delivering on Interprofessional, Analytic and Patient Safety/Quality with Community-based Partnerships

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Conflict of Interest

All authors have no conflicts of interest to disclose.

LEARNING OBJECTIVES

1. Accurately organize academic versus practice educational content for the post-acute care industry needs.

2. Appropriately prioritize interprofessional learning activities for a complex patient care condition/case study.

3. Critically appraise telehealth policies to meet needs of patients in the post-acute phase of care delivery.
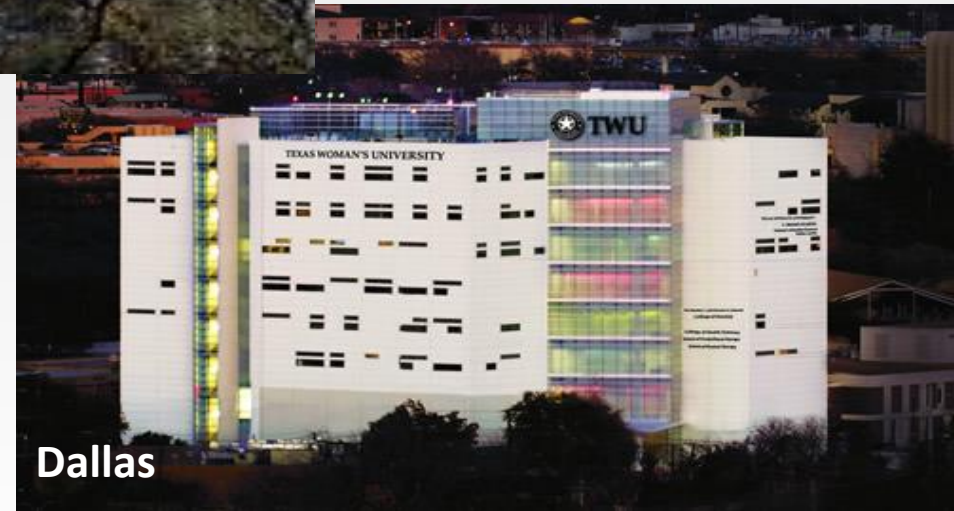
One University: Three Campuses

Denton

TWU
TEXAS WOMAN'S UNIVERSITY
DENTON   DALLAS   HOUSTON

Houston

Dallas

Problem Statement

Chronic Conditions and Population Health

- Texas is primarily comprised of counties

- Challenges for delivery of the same level of healthcare

- Telemedicine and telehealth would be ideal solutions

- Texas received an "F" rating for telemedicine " coverage and reimbursement"

- Private healthcare industry sector of Texas increasing trend in the use of telemedicine and telehealth

- Evidence overwhelmingly demonstrates, improve the quality and cost of care delivered to remote sites.
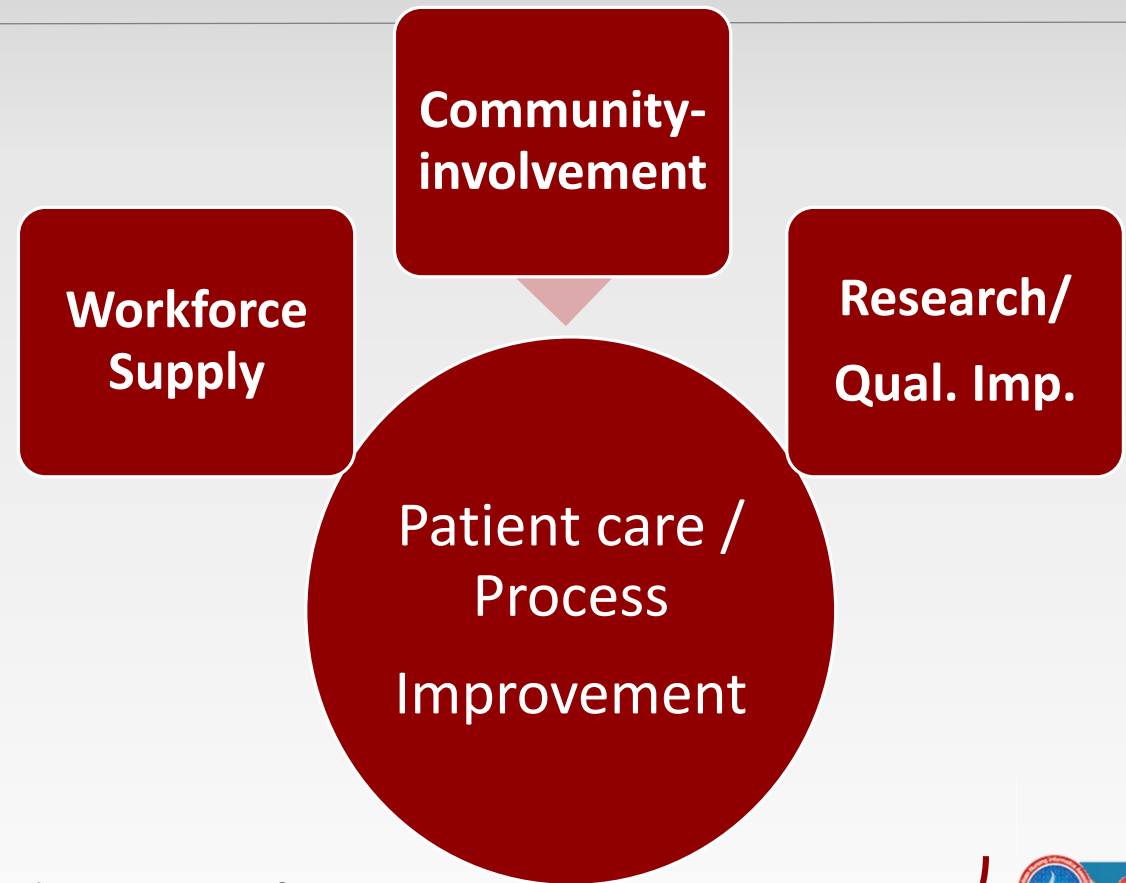
Interprofessional Collaboratives

- For academic education, the Institute of Medicine (IOM)

- Advocating for interprofessional education collaboratives

- Improve patient safety and quality (2000)

- TIGER global competencies

TWU INFORMATICS APPROACH

1. Public Policy/Regulations
2. Analytics
3. Information Technology
4. Teamwork / IPE Approach

Community-involvement

Workforce Supply

Research/ Qual. Imp.

Patient care / Process Improvement

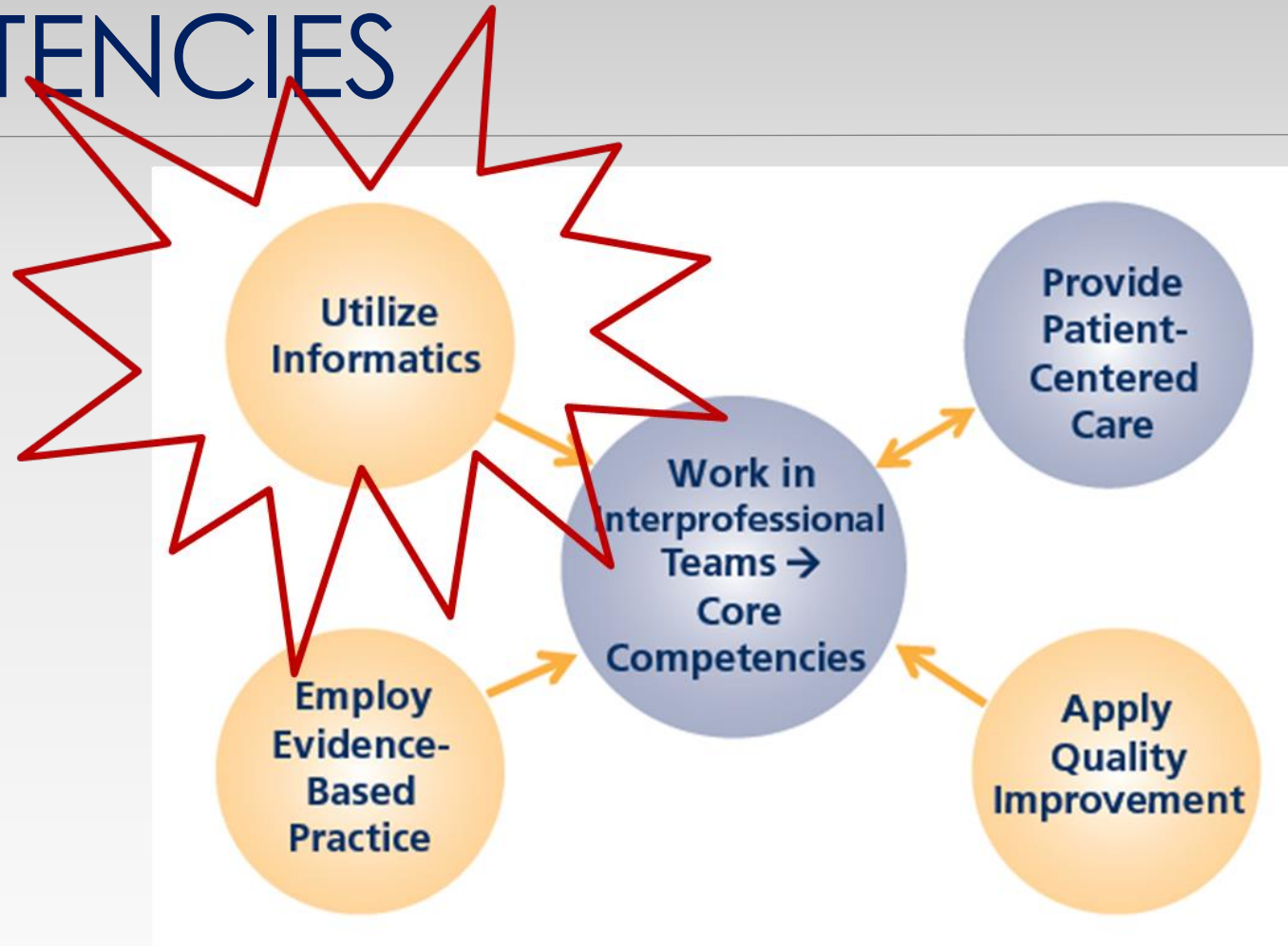Professional, Vendor and Industry Certifications

Four Colleges for Interprofessional Approach to Teaching

- Library/Information Studies
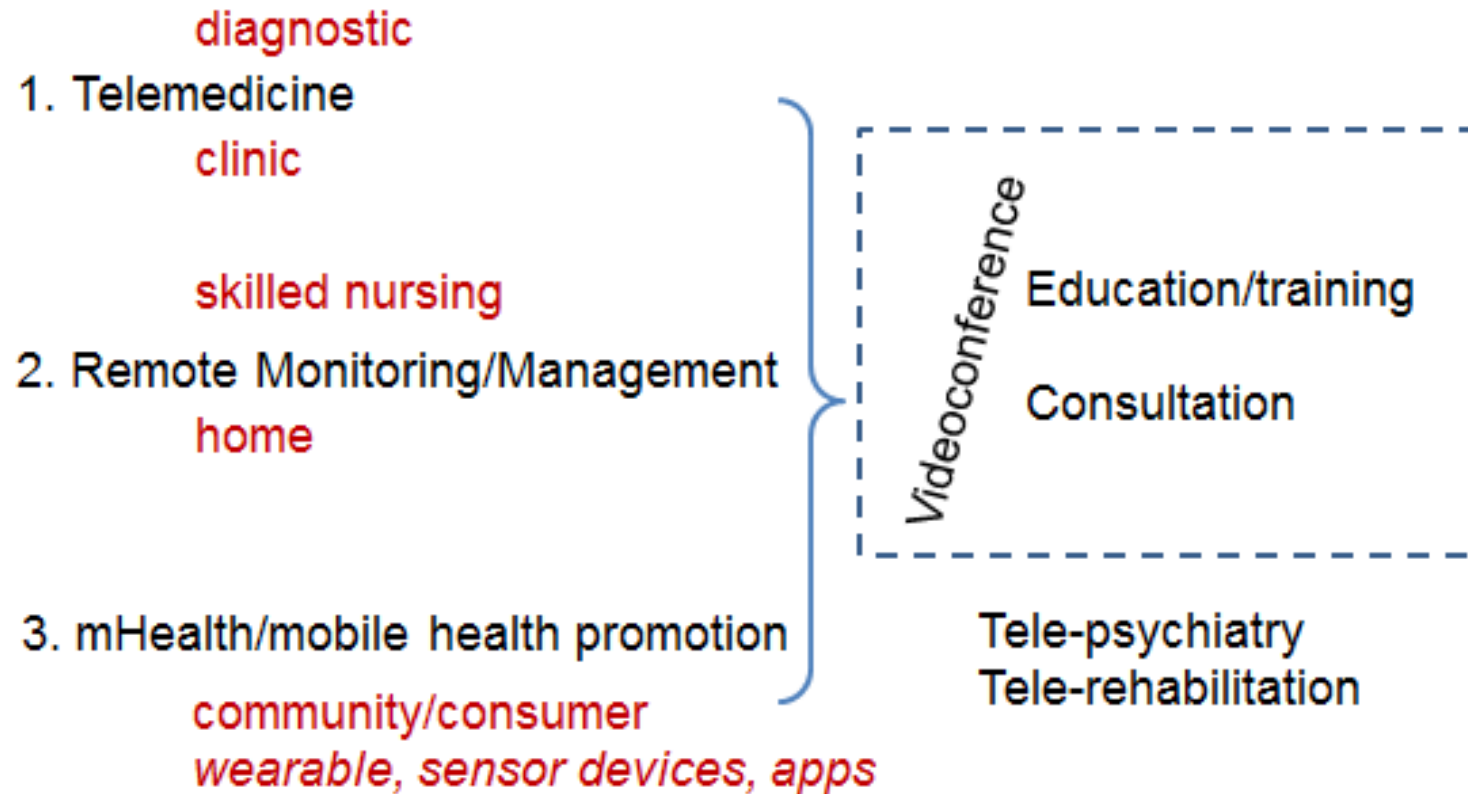- Nursing/Clinical
- Computer Science
- Health Studies

INTERPROFESSIONAL EDUCATION COMPETENCIES

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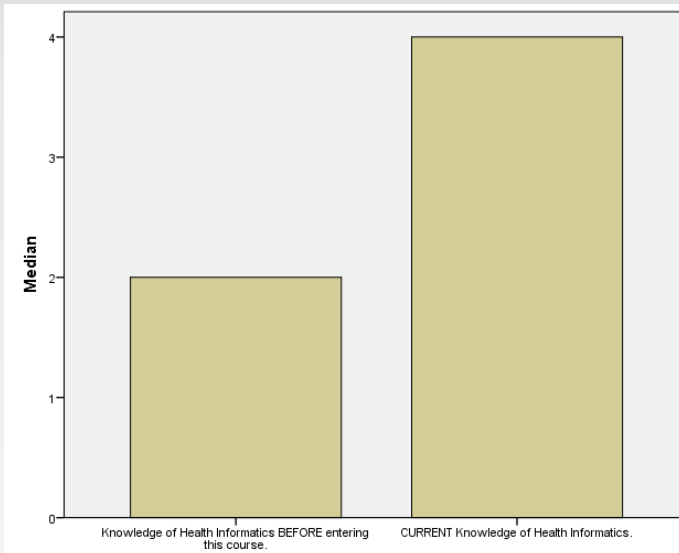
Telehealth Framework

diagnostic

1. Telemedicine

clinic

skilled nursing

2. Remote Monitoring/Management

home

Videoconference
- Education/training
- Consultation

Tele-psychiatry
Tele-rehabilitation

3. mHealth/mobile health promotion

community/consumer
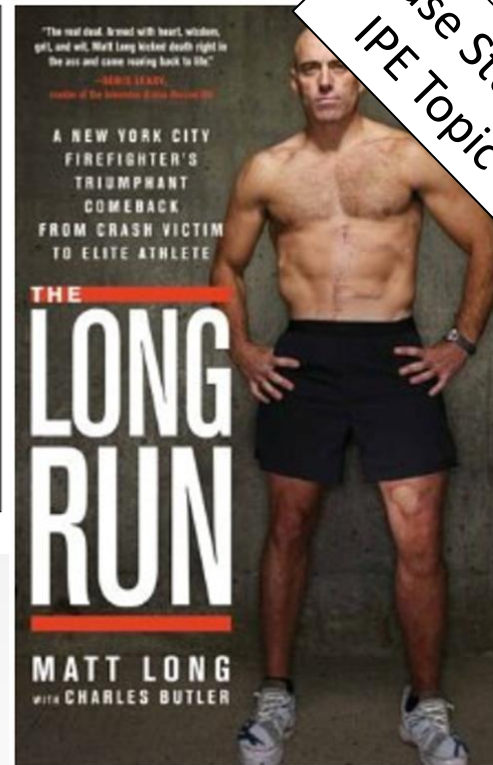*wearable, sensor devices, apps*
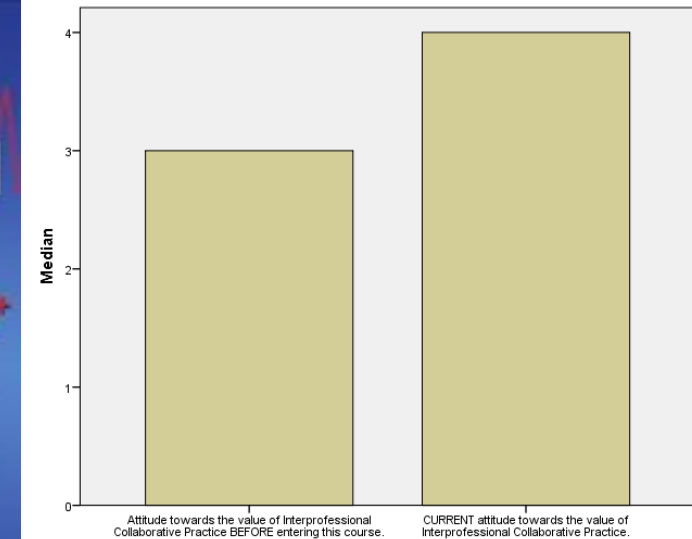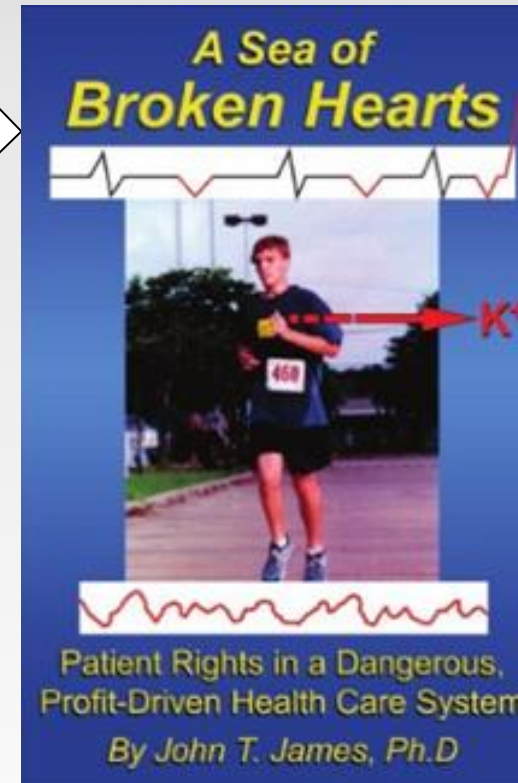
Source: Mari Tietze, PhD, RN-BC, FHIMSS TWU

Case Studies to Prioritize Learning

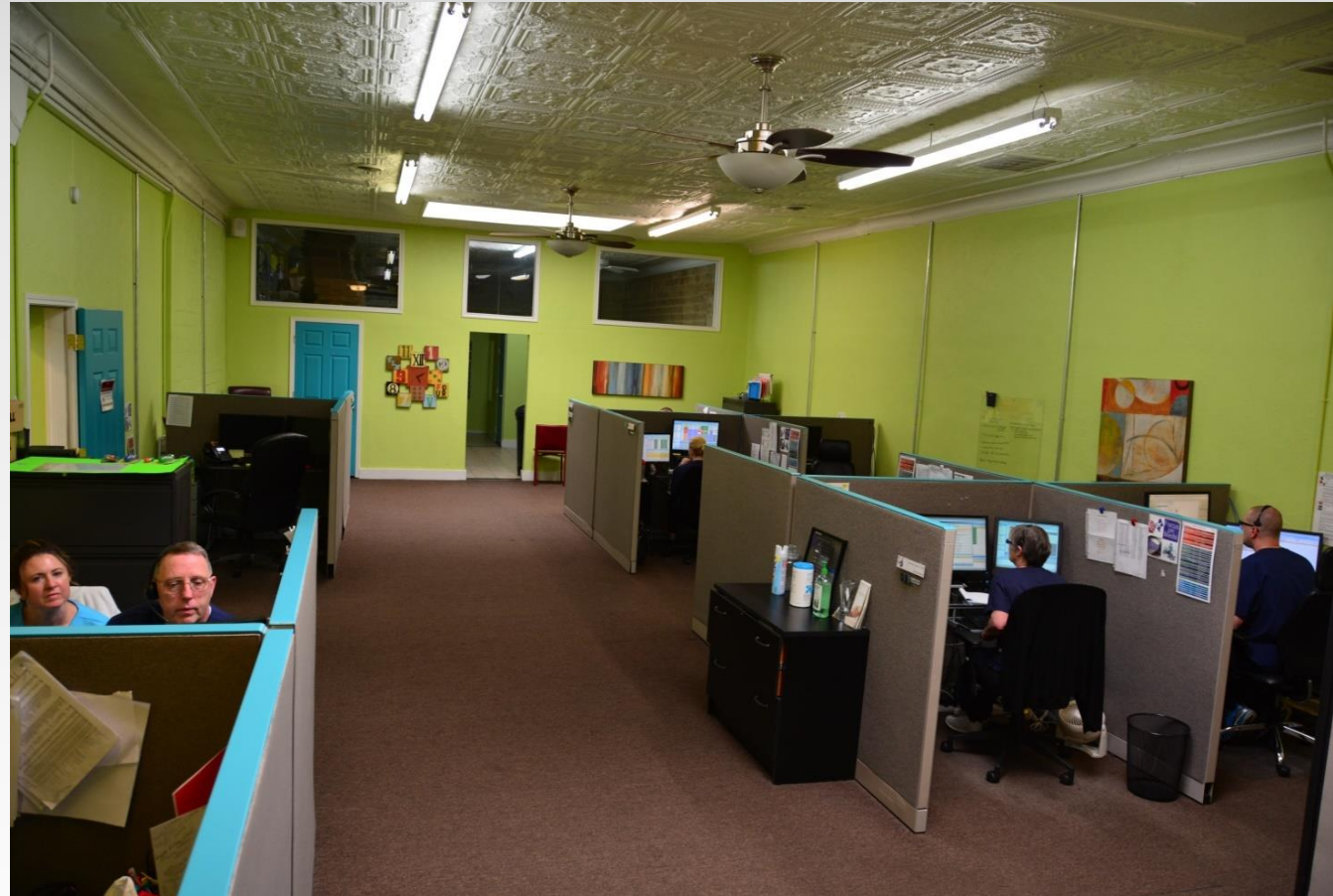Health Informatics Knowledge

Case Study
IPE Topic

Interprofessional Attitude

COMMUNITY-BASED PARTNERSHIPS/STUDENT EXPERIENCES

Health Care as well as *Information Technology* organizations are our partners

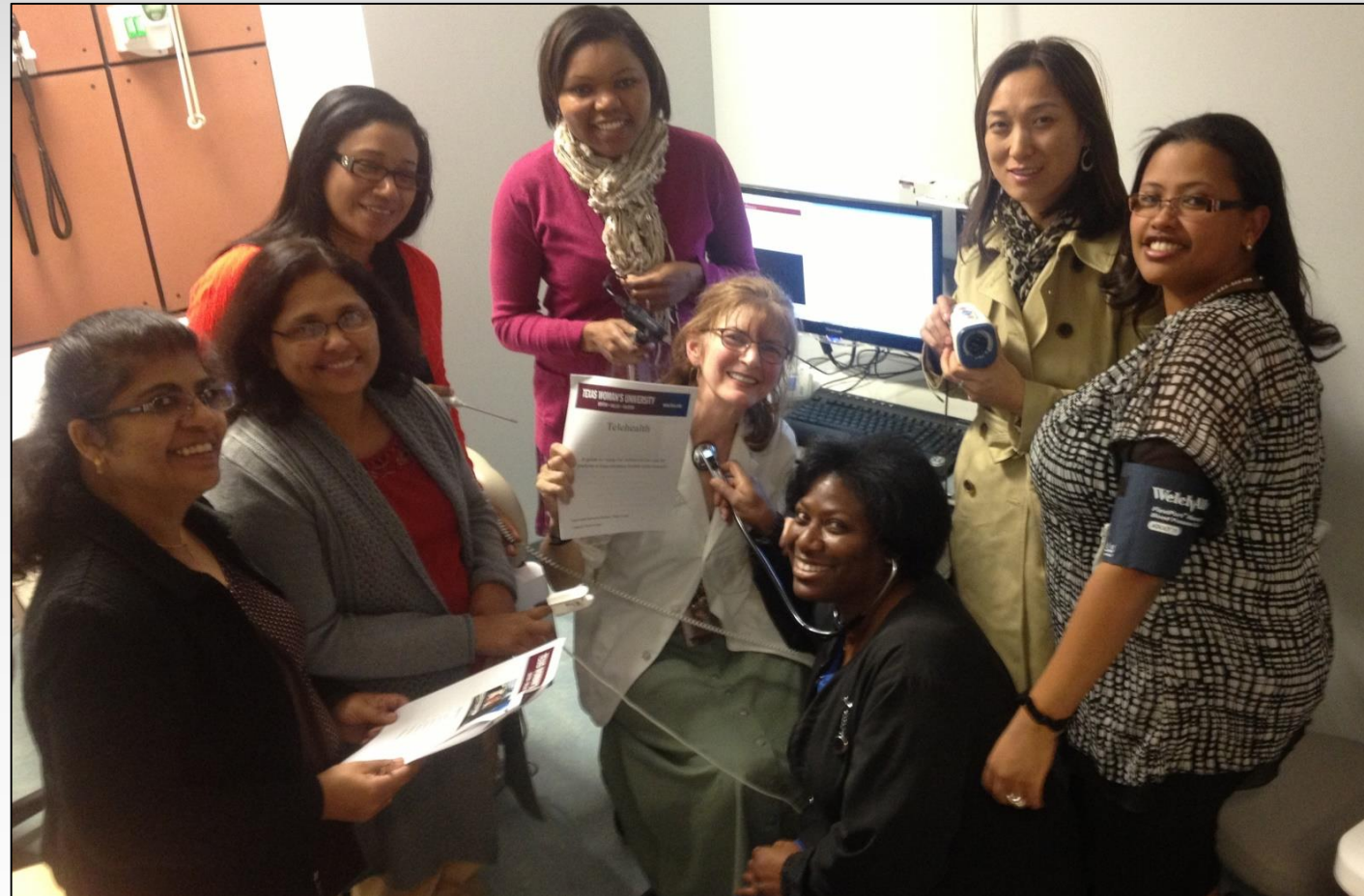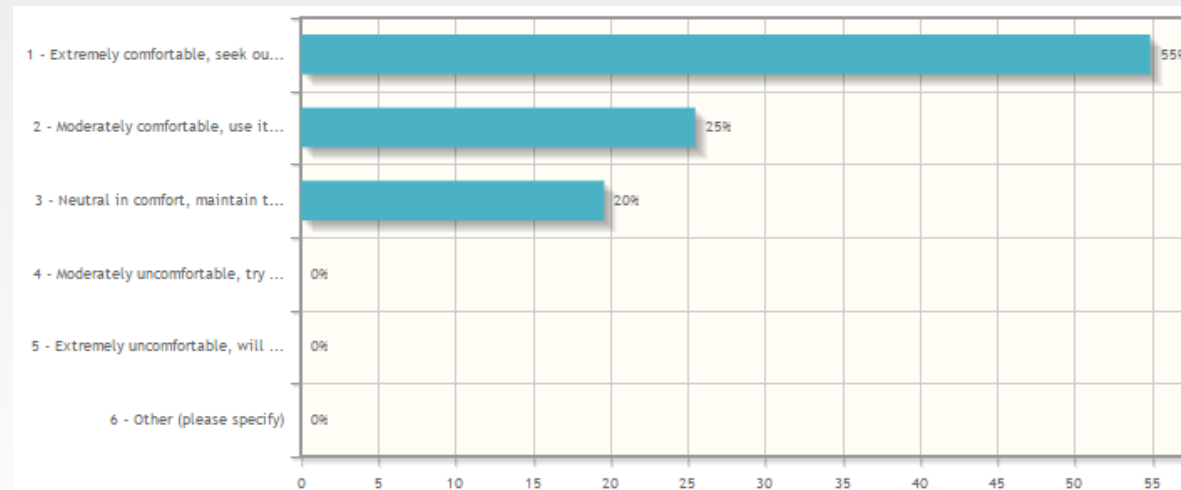Case Managers and team at work, CareCycle Solutions, LLC Dallas, Texas
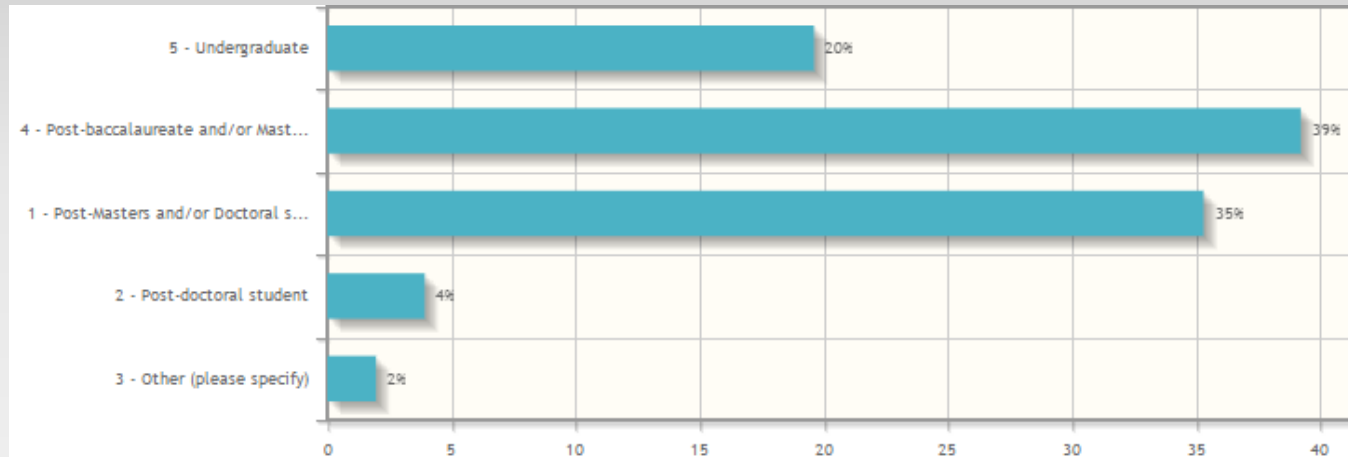
INTERPROFESSIONAL PRACTICE/STUDENT EXPERIENCE

PT, OT, Nutrition, Nursing, HCA, MHSM, MBA, Computer Science, etc.

Undergrad
Masters
Doctoral

Pre-Course Survey to Assess Student s

Partnerships in Post-Acute Care

ACADEMICS

Other disciplines/roles

Mutual contributions

Group learning activities

Guest lecture

PRACTICE

Care delivery

Consultation

Patient/family engagement

Preceptor/internship/shadow

RED-YELLOW-GREEN "PREDICTIVE ANALYSIS"

CareCycle Solutions a partner remote monitoring services

Warehouse of data

These partnerships are to share in the research activities where data sets from warehouses and from the back-end of the electronic health record system can be realized.

RESEARCH AND QUALITY IMPROVEMENT

Collaborative research among community, faculty and students

Three collaborative studies were conducted on telehealth practice from 2014 - 2016

At the doctoral level, one study builds on another each semester from one student to the next, yielding deep and detailed analyses, much needed in post-acute care telehealth.

Data collection, Methods and Results

Predictive analysis for risk of readmission (n=1,500):
- Smoking
- Shortness of breath
- Depression
- Anxiety
- Obesity

Telehealth monitoring "pays off financially"

Interprofessional Education and Collaboration Domains/Outcomes

In summary, given the industry's need to justify telehealth and telemedicine, we employed a heavy focus on data analytics, the post-acute care industry and community-based academic partnerships in course curriculum

1. Team-work

6. Ethical Practice

2. Roles

Inter-professional Approach for Program

5. Patient Needs

3. Commu-nication

4. Self-Reflection

Source: Health Professionals Network Nursing and Midwifery Office. (2010). *Framework for action on interprofessional education & collaborative practice.* (no. WHO/HRH/HPN/10.3). Geneva, Switzerland: World Health Organization. Retrieved from http://www.who.int/hrh/nursing_midwiefery/en/ (p. 26).

PRESENTER CONTACT INFORMATION

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QUESTIONS & DISCUSSION