Integration of a Novel Telehealth Program using Public Health Competencies in an Undergraduate Nursing Curriculum

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Use your phone/iPad Camera to scan the QR code

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Disclosures

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· No conflict of interest		
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Objectives

Identify the steps to develop and implement an undergraduate nursing telehealth program.

List the barriers and facilitators to creating an undergraduate nursing telehealth program.

List benefits of implementing an innovative telehealth program in the undergraduate nursing curriculum.

Describe the resources, support and infrastructure needed to support a telehealth program in the undergraduate nursing curriculum.

Why Telehealth & Why Now?

Primary Care Physicians per County

Urgency in Access to Care

0 Physicians
5 Physicians
20 Physicians
50 Physicians
100 Physicians
500 Physicians
4000 Physicians
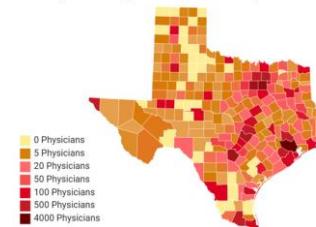
Map: Rolando Hernandez • Source: The Texas Department of Health Services

Variety of Models of Care

Trends & Momentum

Behavioral Health	Inpatient Care	Outpatient Care
Critical Care	Primary Care	Correctional Care
Long-term Care	Specialty Practice	All Ages

'Percentage of Telehealth Visits' by 'Year'
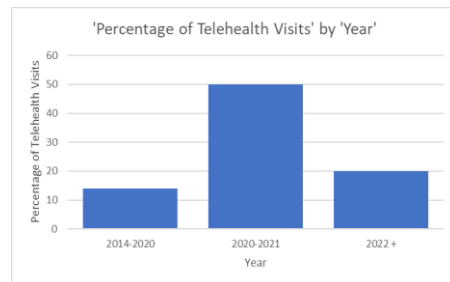
*Medicare Telehealth Visits: 2019- 840,000 vs 2020- **52,700,000***
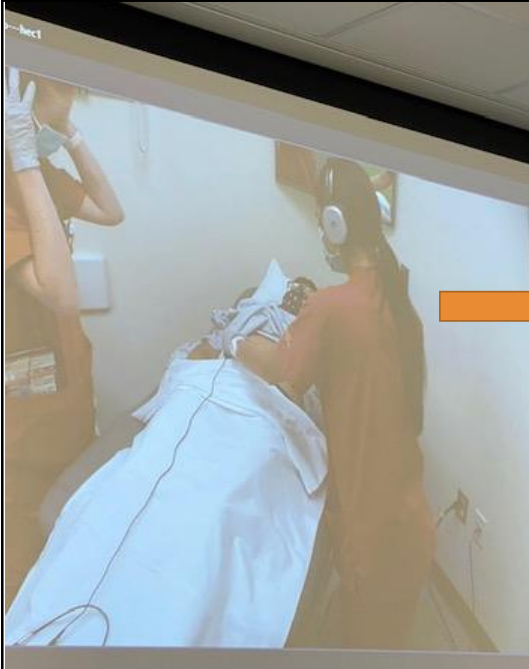
Challenges in Telehealth Usage

Rural sites lacking connectivity options

Lack of telehealth healthcare provider training

Lack of telehealth patient education

Hesitancy to recognize telehealth as equal care

Lack of telehealth equipment resources

Regulatory issues

Infrastructure- reimbursement, credentialling

Cost to set up telehealth program

Are we preparing nursing students for the future of telehealth?

Download a free copy of The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity

Academic settings have been slower to integrate telehealth programs

Research on telehealth education is limited

Nursing education is needed to prepare students for current trends in healthcare

Telehealth has not historically been a competency for nursing curriculum but is now in the New Essentials

Why it matters in academics: The use of technologies such as telehealth will be essential to addressing health equity gaps present in the US (*The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity)*

Background for THECB NIGP Grant– 2020-2022

Challenges faced through COVID for clinical placement opportunities and need for alternative options

Grant focus- supporting clinical learning through barriers presented during COVID-19

Enhance curriculum and program through telehealth and other virtual resources.

Utilize standardized patients to strengthen virtual clinical learning experiences while emphasizing importance of population health competencies

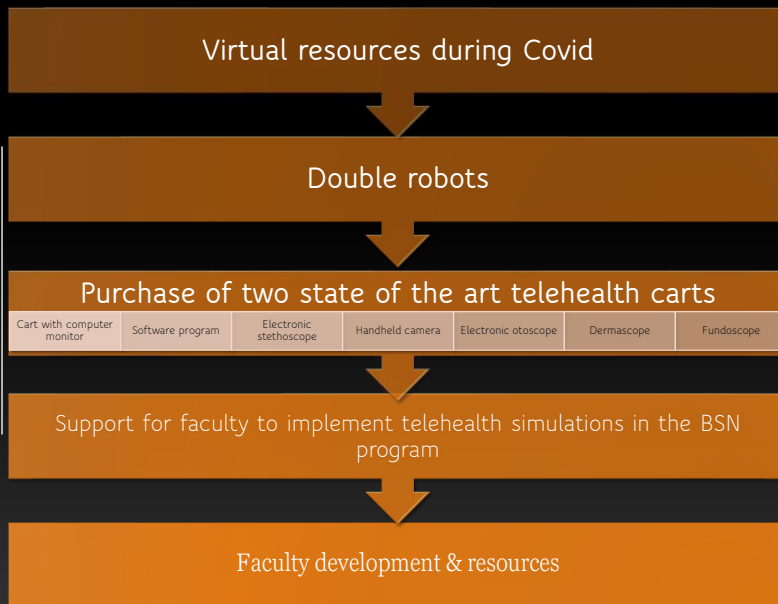Address access to health needs of underserved population through improved undergraduate training

Professional development for faculty

Prepare BSN students for the complex health system they will be entering

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Grant funding provided:

Virtual resources during Covid

Double robots

Purchase of two state of the art telehealth carts						
Cart with computer monitor	Software program	Electronic stethoscope	Handheld camera	Electronic otoscope	Dermascope	Fundoscope

Support for faculty to implement telehealth simulations in the BSN program

Faculty development & resources

Equipment:
Double Robots

PROS

On wheels

More autonomy for driver

Allows for face-to-face communication with patients and families

Easy for driver to use

CONS

Higher level of tech

More involvement for user orientation

No extensions (limits view)

No arms/hands

Battery life is about 4 hours

Scan here for Double Robot testimony >>>

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Equipment:
Telehealth Cart

PROS

- Extensions can be used for the most comprehensive physical exam in telehealth
- Multiple extensions

CONS

- Expensive
- Likely requires tech support
- Hardwired
- Limited mobility from one room to another

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Resources already in place

Health Education Center with resources for standardized patients

Telehealth support through telehealth patient program

Standardized Patient Center

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Telehealth Curriculum & Resource Development by Grant Team

Telehealth Faculty Guide

Telehealth Student & Faculty Toolkit

Telehealth Day- Schedule Template

Telehealth Door Sign Template

Telehealth Rubric

Telehealth Pre & Post Survey

Telehealth Cart Video Series

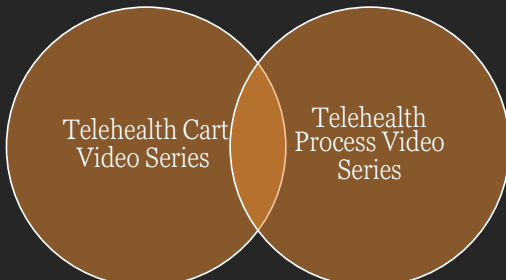Telehealth Process Video Series

Handheld Camera
Telehealth Cart Extension
Morgan Cangelosi, MSN, APRN, FNP-C, CCRN-K
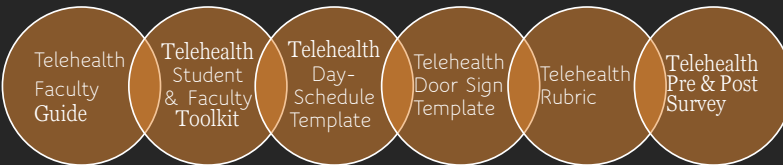
Electronic Stethoscope
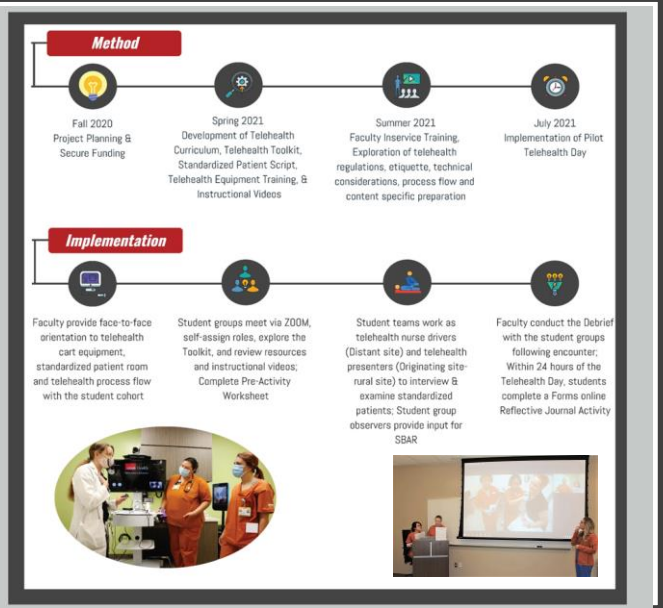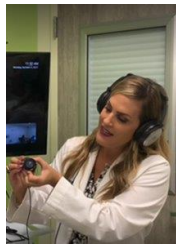Telehealth Cart Extension
Jacquelyn Svoboda, DNP, RN, WHNP-C

Telehealth Visit Process
What to expect during a telehealth clinical visit
Jacquelyn Svoboda, DNP, RN, WHNP-C
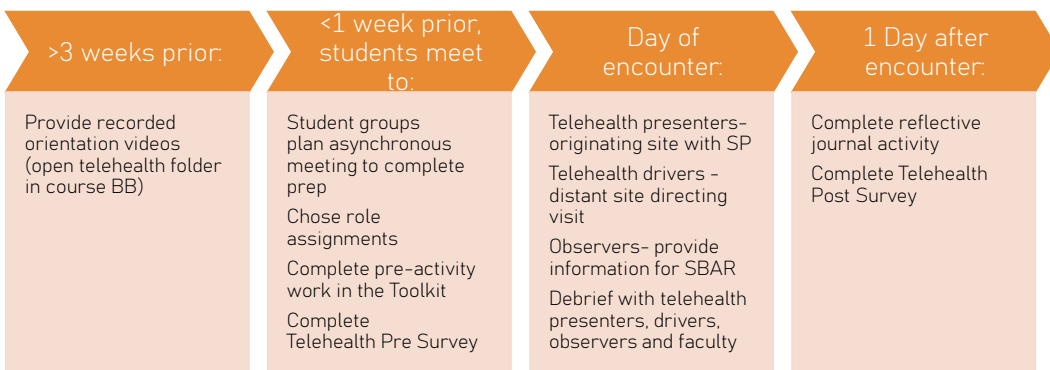Morgan Cangelosi, MSN, APRN, FNP-C, CCRN-K

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Process Flow, Timeline & Implementation

Method

Fall 2020	Spring 2021	Summer 2021	July 2021
Project Planning & Secure Funding	Development of Telehealth Curriculum, Telehealth Toolkit, Standardized Patient Script, Telehealth Equipment Training, & Instructional Videos	Faculty Inservice Training, Exploration of telehealth regulations, etiquette, technical considerations, process flow and content specific preparation	Implementation of Pilot Telehealth Day

Implementation

Faculty provide face-to-face orientation to telehealth cart equipment, standardized patient room and telehealth process flow with the student cohort

Student groups meet via ZOOM, self-assign roles, explore the Toolkit, and review resources and instructional videos; Complete Pre-Activity Worksheet

Student teams work as telehealth nurse drivers (Distant site) and telehealth presenters (Originating site-rural site) to interview & examine standardized patients; Student group observers provide input for SBAR

Faculty conduct the Debrief with the student groups following encounter; Within 24 hours of the Telehealth Day, students complete a Forms online Reflective Journal Activity

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Telehealth Day Implementation- Individual Courses

>3 weeks prior:	<1 week prior, students meet to:	Day of encounter:	1 Day after encounter:
Provide recorded orientation videos (open telehealth folder in course BB)	Student groups plan asynchronous meeting to complete prep Chose role assignments Complete pre-activity work in the Toolkit Complete Telehealth Pre Survey	Telehealth presenters- originating site with SP Telehealth drivers - distant site directing visit Observers- provide information for SBAR Debrief with telehealth presenters, drivers, observers and faculty	Complete reflective journal activity Complete Telehealth Post Survey

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Telehealth Day!

Faculty & SP Preparations	5 min prior to encounter - Faculty and SP - connect on any issues; student group signs in	5 min
Student Preparations & Review Door Sign	Encounter starts	5 min
Encounter Begins	Interview	15 min
PE	Physical Exam	10 min
Post-Enc 1	Student Prep	5 min
Post-Enc 1	Oral Present & Debrief	25 min

Student Nurse Telehealth Presenter #1 & #2
Simulated Location: Rural Risk Clinic- Originating Site
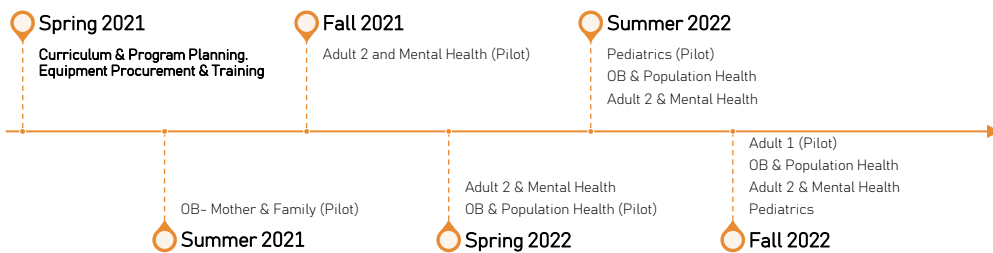Actual Location: HEC Small Clinic room 4th floor room

Student Nurse Driver #1 & #2
Simulated Location: High Risk Clinic- Distant Site
Actual Location: HEC LARGE Debrief 4th floor room

Telehealth Planning & Implementation Timeline in BSN Clinical Courses

Telehealth Program Implementation for BSN Clinical Courses:

vSimulated clinical and standardized patient telehealth encounters for individual and group assessments:

Spring 2021
Curriculum & Program Planning. Equipment Procurement & Training

Fall 2021
Adult 2 and Mental Health (Pilot)

Summer 2022
Pediatrics (Pilot)
OB & Population Health
Adult 2 & Mental Health

Summer 2021
OB- Mother & Family (Pilot)

Spring 2022
Adult 2 & Mental Health
OB & Population Health (Pilot)

Fall 2022
Adult 1 (Pilot)
OB & Population Health
Adult 2 & Mental Health
Pediatrics
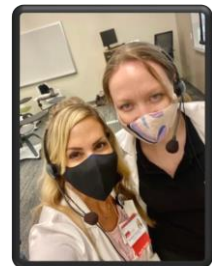
Telehealth Event in Action

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Survey Feedback

v To date, 634 students have completed this activity

v 4.28 rating for effectiveness in learning on a 1-5 Likert Scale

v 12% increase in confidence with telehealth and communication skills

v Learned assessment and interviewing skills specific to telehealth

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Student Survey Feedback

"As a kinesthetic learner, I enjoyed this activity. I also liked using these forms for pre-activity and post-activity worksheets. Also, I appreciate the time and energy the OB team, telehealth grant team, and standardized patient put in. Your work to offer this opportunity means a lot."

"I loved this activity. I was only an observer, but I never felt as though I was not involved. I gathered necessary data for my team and was able to test my ability to provide a detailed and relevant SBAR report to faculty, something we rarely can practice in lab or clinical settings. I thought it was an excellent learning opportunity, specifically for learning how to properly obtain patient data and conduct detailed/thorough interviews!"

Challenges we have faced & Lessons Learned

Scheduling
- Large cohorts (94-140 students)
- In-demand space used by multiple programs
- Need time to develop cases and for standardized patients to prepare

Requires:
- Comprehensive planning, collaboration, and ongoing evaluation.
- Faculty development and training prior to engaging with students

Future Goals

Ongoing participation from all BSN clinical courses

Edit Toolkit so orientation builds each semesters to expand students' experience with telehealth

Include graduate learners

Diversify experiences through IPE

Next Steps:
UTMB SON Announces Post Baccalaureate Rural Certificate Program (RTCP)

utmb Health
School of Nursing

Rural Telehealth Certificate

Benefits

- Expand your marketable skills in healthcare
- Become a leader in telehealth practice application
- Establish a personalized telehealth toolkit for your practice
- Real-world career applications
- Access up-to-date telehealth resources
- Credits applicable to a future graduate degree

What We Offer

- Online courses, providing scheduling flexibility for full-time healthcare workers
- Highly-experienced faculty
- Small class sizes
- Hands-on experience with state-of-the-art telehealth equipment

WHY WAIT? ENROLL TODAY!

Requirements

- Bachelors in health sciences
- GPA 2.75 - last 60 hours of coursework
- Currently working in healthcare environment

Help pioneer the future of telehealth services!

son.studentaffairs@utmb.edu (409) 772-8271
https://nursing.utmb.edu

QUESTIONS & THANK YOU

"The value of an idea lies in the using of it." Thomas Edison

FINAL CHECK IN

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