TELEHEALTH

IMPLEMENTATION BEST PRACTICES AND REAL WORLD USE IN RURAL HEALTH CARE

2019 MARYLAND RURAL HEALTH CONFERENCE: DRIVING RURAL COMMUNITIES TOWARDS EQUITY, PREVENTION, AND PERSONALIZED HEALTH CARE
Learning Objectives

- Explain the aims of telehealth
- Summarize best practices for telehealth implementation
- Illustrate use of telehealth in rural care delivery by MHCC telehealth grantees
Disclosure Statement

Nothing to disclose
About MHCC

- Advancing health information technology (health IT) statewide
- Provide timely and accurate information on availability, cost, and quality of health care services to policy makers, purchasers, providers, and the public
What Is Health IT?

- **Electronic Health Records (EHR):** An electronic version of a patient’s health record

- **Health Information Exchange (HIE):** The secure exchange of health information electronically between providers

- **Telehealth:** The delivery of health services using telecommunications and related technologies
Telehealth: A Promising and Practical Solution
Aims and Value Proposition

**Quality**

- Enable timely access to care and pertinent health information
- Expand access to specialists, especially in rural areas
- Improve clinical outcomes
- Engage patients in their care
- Improve disease management

**Cost**

- Reduce unnecessary ED utilization
- Prevent avoidable transfers
- Reduce travel costs
- Enable providers and staff to manage more patients in less time

**Satisfaction**

- Reduce travel time
- Facilitate flexibility for scheduling appointments
- Enable faster and more convenient care delivery
- Reduce rural provider isolation and burn out
Supports Care Delivery

**Telehealth Modalities**

- Remote patient monitoring
- Live video (synchronous)
- Mobile health (mhealth)
- Store-and-forward (asynchronous)
MHCC Telehealth Demonstration Projects
<table>
<thead>
<tr>
<th>NAME</th>
<th>AWARDED</th>
<th>PROJECTS</th>
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<tbody>
<tr>
<td>Atlantic General Hospital Corporation (AGH)</td>
<td>Oct - 2014</td>
<td>AGH used video consultations between the Emergency Department (ED) and Berlin Nursing and Rehabilitation Center (Worcester County) to reduce ED visits and hospital admission of patients residing in a long term care (LTC) facility</td>
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<td>University of Maryland Upper Chesapeake Health (UMUCH)</td>
<td>Oct - 2014</td>
<td>UMUCH provided remote patient examinations and consultations through use of electrocardiogram monitoring, sonograms, and multiple cameras between the hospital and the Bel Air facility of Lorien Health systems</td>
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<tr>
<td>Crisfield Clinic (Crisfield)</td>
<td>Jun - 2015</td>
<td>Crisfield provided mobile devices to middle and high school-aged patients to assist in managing chronic conditions (e.g., asthma) to improve clinical data indicators, reduce absenteeism, reduce ED visits, and improve patients’ perception of their health</td>
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<td>Union Hospital of Cecil County (Union)</td>
<td>Jun - 2015</td>
<td>Union provided chronic care patients with mobile tablets and peripheral devices to capture patients’ clinical data (e.g., blood pressure) and provided patient education to improve access to care, enable early provision of appropriate treatment, and reduce hospital encounters</td>
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<tr>
<td>Associated Black Charities (ABC)</td>
<td>Nov - 2015</td>
<td>ABC of Dorchester County utilized mobile tablets to facilitate primary care and behavioral health video consultations with a licensed nurse to improve patient self-management of chronic diseases (e.g., diabetes) and improve health outcomes</td>
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<tr>
<td>Union Hospital of Cecil County (Union)</td>
<td>Nov - 2015</td>
<td>Union used mobile tablets and peripheral devices to monitor the blood pressure, pulse, weight, and glucose levels of patient with chronic conditions to enhance data sharing with primary care and ED providers</td>
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<tr>
<td>University of Maryland Shore Regional Health (UMSRH)</td>
<td>Jan - 2017</td>
<td>UMSRH implemented telehealth at University of Maryland Shore Medical Center at Chestertown with patients at Shore Nursing and Rehabilitation Center to reduce hospital encounters via increased access to palliative care services, and to increase access to ED psychiatric services and inpatient psychiatric consultations</td>
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<td>University of Maryland Quality Care Network (UMQCN)</td>
<td>Apr - 2018</td>
<td>UMQCN is using telehealth to optimize medication reconciliation to improve health outcomes and the quality of primary care, and reduce in-patient and ED utilization for patients in rural Maryland with chronic obstructive pulmonary disease</td>
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<tr>
<td>Charles County Public Schools (CCPS)</td>
<td>Jan - 2019</td>
<td>CCPS is implementing teletherapy to expand access to Maryland-licensed speech language pathologists in schools to assist students in meeting their Individual Education Program goals</td>
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Lessons Learned
Selecting Program Objectives and Measures

- **WHY:** Identification of S.M.A.R.T. objectives prior to implementation provides direction to help organize and reach program goals.

- **HOW:** Must be specific to the organization and patient population, measurable, and achievable.
  - Include objectives on clinical outcomes, improved workflows, communications, care coordination, and patient/provider satisfaction.

- **TIP:** Collect baseline data twelve months prior to program implementation to measure the impact of telehealth in achieving program objectives.
Ongoing Program Evaluation

**WHY:** Monitoring progress towards goals helps identify areas where protocols and processes need to be implemented or adjusted

**HOW:** Incorporate data collection into an existing workflow to support evaluation of the program

**TIP:** Develop measures that utilize data already being collected through your EHR or available through the State-Designated HIE
Technology Selection

- **WHY:** Selecting technology that is targeted to meet the needs of the patients and providers is crucial to program success.

- **HOW:** Assess technology against criteria that align with program goals and needs.
  - Consider availability of technical support and ability to integrate with the practice’s EHR.

- **TIP:** Develop a list of “must-haves” and “nice-to-haves” based on a review of similar programs and end-users of the technology.
Staff Training

■ **WHY:** Providing staff opportunities to test and use the telehealth equipment increases comfort, skills, and utilization

■ **HOW:** Incorporate training into staff huddles
  ■ Use online training videos
  ■ Provide refresher training to foster continued engagement with telehealth and maintain skills

■ **TIP:** Leverage telehealth champions to assist with training, increase engagement, and offer guidance on using the technology
Patient Acceptance

- **WHY:** Educating patients and caregivers increases acceptance and willingness to use telehealth

- **HOW:** Provide demonstrations of a telehealth visit at the point of care
  - Include patient caregivers

- **TIP:** *Allow patients and caregivers to interact with the technology during an office visit*
Patient Readiness

**WHY:** Identifying which patients are good candidates helps target those that can most benefit from a telehealth intervention

**HOW:** Develop enrollment criteria that takes into consideration both clinical and social determinants of health

**TIP:** Use a screening tool to identify candidates for a telehealth program
Patient Training

- **WHY:** Training through simulations tailored to patient needs creates comfort and understanding of telehealth and how to use the technology.

- **HOW:** Provide ongoing education and technical support to patients to ensure continued engagement and use of the technology in their home.

- **TIP:** *Have on-demand resources available through the patient portal or other application to help patients understand the benefits of telehealth and how to use the technology.*
Internet Connectivity

- **WHY:** Identifying potential connectivity issues prior to a telehealth encounter allows time to implement alternative strategies

- **HOW:** Assess connectivity within intended program environment prior to deployment
  - Suggest alternative connectivity options when needed

- **TIP:** Advise patients to connect to WiFi instead of a mobile network when conducting a video call
Telehealth Readiness Assessment (TRA) Tool
Why Use the TRA Tool?

- Assess your readiness to offer telehealth services, and identify and prioritize areas for improvement.

- Implementation of telehealth requires a shift in how you operate and deliver care from face-to-face to virtual encounters with patients.
TRA Tool Domains

- **Core Readiness** – Extent to which a practice has considered the need, benefits, and challenges associated with implementation

- **Financial Considerations** – Expectations around initial costs, sustainability, liability, insurance, and reimbursement

- **Operations** – Impact on operations and the practice’s ability and willingness to make appropriate changes

- **Staff Engagement** – Practice team interest and engagement

- **Patient Readiness** – Patient readiness and interest

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<table>
<thead>
<tr>
<th>Domains</th>
<th>Concepts</th>
<th>Concept Weights</th>
<th>Total Domain Weight</th>
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<tbody>
<tr>
<td>1. Core Readiness</td>
<td>Need for Telehealth</td>
<td>10%</td>
<td>20%</td>
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<tr>
<td></td>
<td>Organizational Leadership Buy-In</td>
<td>10%</td>
<td></td>
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<tr>
<td>2. Financial Considerations</td>
<td></td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>3. Operations</td>
<td>Telehealth Roles</td>
<td>5%</td>
<td>40%</td>
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<tr>
<td></td>
<td>Scheduling and Workflows</td>
<td>10%</td>
<td></td>
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<tr>
<td></td>
<td>Operational Requirements</td>
<td>5%</td>
<td></td>
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<tr>
<td></td>
<td>Assessment Approach</td>
<td>5%</td>
<td></td>
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<tr>
<td></td>
<td>Technology</td>
<td>10%</td>
<td></td>
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<tr>
<td></td>
<td>Physical Space</td>
<td>5%</td>
<td></td>
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<tr>
<td>4. Staff Engagement</td>
<td>Education and Awareness</td>
<td>7.55%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Innovators/Champions</td>
<td>7.5%</td>
<td></td>
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<tr>
<td>5. Patient Readiness</td>
<td>Patient Engagement</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Health Literacy</td>
<td>5%</td>
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**Understanding Your Score**

- **Not Applicable (N/A):** Score cannot be calculated because items are not applicable.
- **≤ 50%: Low** – The practice is in the beginning stages and/or has not considered many of the aspects related to the concept or domain and would benefit from reviewing the associated Supporting Guidance document(s) and taking appropriate action.
- **> 50% and ≤ 75%: Medium** – The practice has considered some aspects related to the concept or domain and should review the associated Supporting Guidance document(s) to identify areas for improvement.
- **> 75%: High** – The practice has considered many aspects related to the concept or domain. The Supporting Guidance is available as a resource for areas in which the scoring is lower.
Contact:

Justine Springer
410-764-3574
Justine.Springer@Maryland.gov

Visit MHCC Telehealth website for more information:

mhcc.maryland.gov/mhcc/pages/hit/hit_telemedicine/hit_telemedicine.aspx
Telehealth Implementation And Best Practices And Real World Use In Health Care

James Trumble, MD | Vice President Of Clinical Integration
Rachel Blades | Population Health Data Analyst And Telehealth Program Coordinator
Agenda

About Peninsula Regional Health System
Challenges of Rural Area
Governance and Structure of Telehealth
  Steering Committee
  Operations work group
Projects and Sustainability
  Behavioral Health
  Specialty Support with Endocrinology
  Remote Patient Monitoring

Next Steps
We are PRHS
Population Health Time Line

July 2013
Executive Leadership for Population Health

Sep 2014
Community Health Workers

July 2015
Employee Health Care Coordination

Jan 2015
Transforming Clinical Practice Initiative CMS Grant

July 2015
Peninsula Regional Clinically Integrated Network, LLC

Jan 2016
Advanced Health Collaborative (AHC) II/Medicare Advantage

July 2016
ED Case Manager - Right Time, Right Place

Nov 2016
Lightbeam ACO Analytics

Jan 2017
EPIC - Electronic Health Record with analytical and process improvement capabilities

Fall 2017
Executive Leadership for Clinical Integration

2018
Telehealth evaluation and planning

2019
HSCRC Grant

Chronic Disease Continuum of Care Pathways for CHF, COPD, Diabetes

SWIFT Program

CMS Care Redesign HCIP/ECIP

Total Cost of Care Strategic Plan

July 2016
Employee Health Care Coordination

Sep 2014
Community Health Workers

July 2015
Executive Leadership for Population Health

Jan 2015
Transforming Clinical Practice Initiative CMS Grant

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Peninsula Regional Clinically Integrated Network, LLC

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2019
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Chronic Disease Continuum of Care Pathways for CHF, COPD, Diabetes

SWIFT Program

CMS Care Redesign HCIP/ECIP

Total Cost of Care Strategic Plan
Peninsula Regional Medical Center (PRMC) in Salisbury, Maryland, a subsidiary of the Peninsula Regional Health System, offers the widest array of specialty and subspecialty services on the Delmarva Peninsula. We are the largest and most experienced health care provider in the region and it’s our mission to improve the health of our community.

At 266 licensed hospital beds, PRMC has been meeting the healthcare needs of Delmarva Peninsula residents since 1897.

PRMC offers a full range of services, including neurosurgery, cardiothoracic surgery, joint replacement, emergency/trauma care, wound care and comprehensive cancer care, and provides community health services through a network of family medicine and specialty care offices across Delmarva, health pavilions in Millsboro, DE, in Ocean Pines, MD and with its Wagner Wellness Van.
A Remote Trauma Center…

- Primary Adult Resource Center
- Level I Trauma Center
- Level II Trauma Centers
- Level III Trauma Centers
Emergency | Trauma Services

Region’s designated trauma center treating 1,400 cases annually. Over 90K ER visits.

58 Treatment Bays (4 Trauma Bays)
Family Medicine Practices (5 Locations)
- Peninsula Regional Family Medicine Laurel*
- Peninsula Regional Family Medicine Millsboro* (Delmarva Health Pavilion Millsboro)
- Peninsula Regional Family Medicine Ocean Pines* (Delmarva Health Pavilion Ocean Pines)
- Peninsula Regional Family Medicine Salisbury*
- Peninsula Regional Family Medicine Snow Hill*

Specialty Practices
- Peninsula Regional CV Surgical
- Peninsula Regional Endocrinology Salisbury*
- Peninsula Regional Endocrinology Berlin*
- Peninsula Regional Gastroenterology Medicine
- Peninsula Regional Neurosurgery*
- Peninsula Regional Neurology*
- Peninsula Regional Pain Management
- Peninsula Regional Pulmonary & Critical Care
- Peninsula Regional Gastroenterology Berlin*
- Peninsula Regional Oncology Salisbury
- Peninsula Regional Oncology Ocean Pines
- Peninsula Surgery Center
- Peninsula Breast Center

Health Pavilions
- Ocean Pines
- Millsboro

Joint Ventures
- American HomePatient
- Delmarva Surgery Center LLC
- Peninsula Home Care
- Peninsula Home Care - Nanticoke
- Peninsula Imaging, LLC
- Your Doc's In
- Salisbury Rehabilitation and Nursing Center
- CoreLife

*Lab services available
Our Service Area

Red
Primary Service Area
180,778
Medicare Lives
34,518

Yellow
Secondary Service Area
291,931
Medicare Lives
73,567

Our Level of Service
Critical Access
Community
Tertiary Care
Academic
The Challenges of a Rural Area
We have a lack of Primary and Specialty care on the Eastern Shore, causing patients to drive two or more hours one way -or- wait for months to see a provider.

Infrastructure is not set up for high speed internet.

Somerset County has a very high death rate for Diabetes, for example, with a value of 25.2 deaths per 100,000 population, higher than both the Maryland State and U.S. values.
Governance and Structure of PRHS Telehealth
Governance & Structure

**Executive Sponsor:** the member of the executive team primarily responsible for the success of the telehealth program, providing overall accountability and leadership on behalf of the organization’s Chief Executive; providing resources and removing barriers.

**Steering Team:** in addition to representatives responsible for telehealth support, a cross-representation of various leaders across the organization most likely to be involved in launching telehealth services, providing tactical leadership, assisting in securing resources and removing barriers.

**Support Team:** this team combines the responsibilities of leading and managing the launch and implementation of new telehealth services, supporting ongoing/existing services, operational and technical support for all telehealth services. and aiding the telehealth steering team to provide accountability.

**Management and Operations:** the secret to sustainable organizational change of telehealth lies in creating true ownership in the clinical teams that are responsible for delivering the care “at a distance”. Thus the management and operations of telehealth services lies within each team that schedules and sees patients that monitor patients’ physiologic data, or otherwise enabling patients to receive care at a distance.
Projects and Sustainability
In the Spring of 2018, Provider, who resides about an hour’s drive away from Salisbury, indicated that due to family reasons, he would no longer be available to see patients in the Salisbury Outpatient Clinic location the two days a week (Monday and Tuesday).

This news coincided with the launch of Peninsula’s Telehealth Program and it was decided to use this opportunity to evaluate the feasibility of using Telemedicine to provide psychiatric care to the Adolescent Behavioral Health Unit.

Our First “Proof of Concept”
Tele-Psychiatry

Clinical Case
Continued access to care, as well as continuity to care.

Business Case
Recruitment cost to replace the doctor, loss of revenue/locum tenens expenses, as well as unmanaged psychiatric health may lead to harm or avoidable utilization of ED or inpatient hospitalization.

Strategic Case
Access to psychiatric care and continuity of care contribute to lower utilization of more expensive care
In the Summer of 2018, Provider, based out of Salisbury Endo office began receiving requests for appointments in our Berlin Endo office. Patients could no longer make the 40 minute drive to Salisbury, or wanted to see this provider specifically. Provider began splitting schedule between the two offices. Quickly learning its inefficiency.

The Provider now utilizes telemedicine to provide services to the Berlins patients via the Salisbury Office, which has dramatically reduced inefficiency and physician burnout.

“Proof of Concept”

Tele-Endocrinology

Clinical Case
Continued access to care, as well as continuity to care.

Business Case
Recruitment cost to replace the doctor, loss of revenue/locum tenens expenses, as well as unmanaged psychiatric health may lead to harm or avoidable utilization of ED or inpatient hospitalization.

Strategic Case
Access to psychiatric care and continuity of care contribute to lower utilization of more expensive care
During the Winter of 2019, PRHS began to provide the residents of Smith Island, MD with Telemedicine services.

The program has a combination of medical assistants residing on the island and a PRHS nurse practitioner, located at the PRMC Bridge Clinic in Salisbury, who sees patients via Telemedicine.

During the Winter/Spring 2020, we plan to expand specialty services, such as Endocrinology to the island.

“Proof of Concept”

Smith Island Telemedicine

Clinical Case
Provide medical services to a remote and isolated population who otherwise have no direct access to health care.

Business Case
Avoiding readmissions, ED visits or future admissions will reduce hospital spending and improve the hospital’s profitability.

Strategic Case
Reducing readmissions, ED visits, Reducing potential future admissions through more educated & engaged patients, Improved self-management of disease.
Remote Patient Monitoring

During the Summer of 2019, PRHS began offering Remote Patient Monitoring to our Medicare population within the Peninsula Regional Clinically Integrated Network.

It is a 90 day intervention focused on improved self-management of disease, readmission reduction, early identification of changes in health status and increased patient/caregiver engagement.

Currently, Patients must have an active diagnosis of CHF, COPD, Respiratory Failure, soon expanding diagnoses to include Diabetes.

“Proof of Concept”

Remote Patient Monitoring

Clinical Case

Offers the ability through the analysis of trends to detect the onset of disease or decompensation earlier to allow for intervention, such as medication changes or lower cost primary care visits.

Business Case

Avoiding readmissions, ED visits or future admissions will reduce hospital spending and improve the hospital’s profitability. Provides potential eligibility for Track 2 of the Maryland Primary Care Model.

Strategic Case

Reducing readmissions, ED visits, Reducing potential future admissions through more educated & engaged patients.
Next Steps for 2020 and Beyond
Next Steps

- Wagner Wellness Program
- Expansion of Remote Patient Monitoring
- Neurology Consults
- Psychiatry Outpatient Clinic
Thank you!

James Trumble, MD | Vice President Of Clinical Integration
Rachel Blades | Population Health Data Analyst And Telehealth Program Coordinator