MaineHealth
CARE AT HOME

Telehealth: A Tool For Consumer Engagement In Healthcare

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MaineHealth

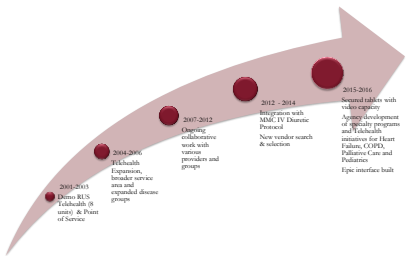
About Us

Building a Healthier Community

This past year, MaineHealth Care at Home brought care, healing and comfort to more than 22,000* children, adults and elders:

- 14,000 patients maintained independence and health with 135,000 home visits from registered nurses, rehabilitative therapists, social workers, home health aides and nutritionists.
- 1,800 newborns and mothers got a healthy start with home nursing visits offered, at no charge, through a state-funded Maternal and Children's Health Grant.
- 700 patients received end-of-life care and comfort with hospice services.
- 200 patients received hospice services in the supportive environment of the Susanna House.
- 3,200 people improved their health with foot care, screenings and tests at community clinics.
- 3,500 people were vaccinated as a step toward flu prevention.
- 180 people managed their health more successfully with Diabetes education & support services.
- 150 people received supportive home care and companion services through Help-At-Home.
- 1,000 people lived more safely with Philips Lifeline Emergency Response Services.

Strategies for Sustainability



Telehealth Demonstration Project 2001

- **Funded through RUS-USDA with CHF focus in rural areas**
- **Challenges**
  - Lack of clinician buy in
  - Lack of physician buy in
  - Small scale project
  - Not integrated into clinical practice
- **Successes**
  - 76.5% reduction in overall hospital admissions compared to CHF non-telehealth group
  - 80% of patients noted high satisfaction
  - Actual savings per visit - $21.21 realized by time, travel and mileage efficiencies

Telehealth Expansion 2003

- Secured second RUS-USDA Funds & foundation support for expansion to include CHF, COPD, Wound & Diabetes
- **Challenges:**
  - Partnership failure
  - Continued difficulties with clinical buy in
  - Management leadership changes due to agency merger
  - Third party reimbursement still pending
  - Only 10% admission rate from screened referral
- **Successes:**
  - Reduction in the cost per episode
  - High levels of patient satisfaction
  - Improved quality outcomes
  - Reduction in hospitalization rate

Telehealth Monitoring Program 2011- 2014

- **Challenges**
  - Meeting demand – constant wait list
  - Older equipment
  - Reimbursement barriers
  - Bosch takeover and sunset of equipment
  - Expedited vendor search
- **Successes**
  - Successful transition to new vendor
  - Secured clinical and physician buy-in
  - Established data collection and reporting
  - Consistent and significant reduction in hospitalization rates
  - Consistent high levels of patient satisfaction
  - Improvement in key quality scores

2014 - 2017 Telehealth Aims:

1) To expand access to care and improve quality measures for elders with at-risk chronic diseases by deploying enhanced telehealth technology
2) To expand access to care and improve quality measures for medically fragile children copying with the challenges of chronic disease or serious illness by introducing new pediatric telehealth modules and peripheral devices
3) To standardize protocols and integrate delivery of services on a system level
4) To improve coordination of care and communication with healthcare providers by securing an HL7 interface between EPIC and telehealth provider

The Technology

Hardware & Software

- HRS Telehealth Tablets
- Vidyo Virtual Care

Technology Highlights

- 4G tablet with pre-loaded HRS software is provided at discharge. Automatic Setup can be achieved through EHR Integration
- Patients use tablet to comply with treatment plan & remain engaged
- Data input to track activity, diet, weight & medication available for clinician & caregiver review
- Caregivers & clinicians receive alerts to intervene if patient is at increased risk for readmission

HRS

The Peripherals

HRS

- Provides real-time patient data post-discharge
- Algorithms highlight which patients are at an increased risk of readmission
- Platform leverages caregivers and family members in the formal discharge process
- Empowers patients to change the way they behave and view their medical condition

Video Education

- Population and patient level data
- Reports, alerts, team care collaboration
- Customizable to fit client needs

- Allows clinician to connect with multiple patients, view metrics, and assess risk level.
- Clinician can make changes for the patient regimen and contact patient through voice or video chat.
- Allows patient to connect with caregivers and family members for an extra level of engagement.
- Caregivers can track patient's daily activity status, overall progress, and chat/send photos to patient.

The Web Portal

The Program Model

Telehealth Delivery of Care Model

- **Telehealth Assistant**
  - Coordinates installation and teaching with a goal of patient engagement
  - Reviews equipment use, services, contact procedures, and monitoring protocols
  - Re-visit patients for additional education and/or equipment retrieval
- **Telehealth Nurse**
  - Monitors bio-metrics daily (BP, Pulse, Pulse ox, weight, temperature, glucose)
  - Reviews customized survey responses
  - Documents patient updates and follow-up recommendations
  - Initiates video visit as needed for assessment
  - Collaborates with care team for needed interventions

Telehealth Delivery of Care Model

- Referrals received from system healthcare providers
- Population Focus: Congestive Heart Failure, Chronic Obstructive Pulmonary Disease, Cardiac Surgery, and Diabetes
- Pilot Project Pediatrics and Hospice
- MHCAH Telehealth Team reviews medical record and assesses for Telehealth admission
- Home Diuretic and COPD Protocols

Benefits

- Ease of Use
- Fully Automated Technology
- Patient Education
- Improved Clinical Outcomes
- Increased Patient Satisfaction
- Reduced Readmission Penalties

Strategies for Collaboration with Providers

- Partner with select providers
- Promote your agency
- Create custom materials
- Collaborate with all members of the health care team
- Educate others about what you do
- Create a referral communication system

Strategies for Enhanced Patient Engagement

- **Dignity and Respect**
  - Patient and family knowledge, values, beliefs and cultural backgrounds are incorporated into the planning and delivery of care.
- **Information Sharing**
  - Patients and families receive timely, complete and accurate information in order to effectively participate in care and decision-making.
- **Participation**
  - Patients and families are encouraged and supported in participating in care and decision-making at the level they choose.
- **Collaboration**
  - Patients and families collaborate in policy and program development, implementation and evaluation; in professional education, as well as in the delivery of care.

IOM. Partnering with Patients and Families to Design a Patient- and Family-Centered Health Care System: A Roadmap for the Future.

Strategies for Enhanced Sustainability

- Lead advocacy efforts within local health system for contract negotiation with private payers
- Incorporate monitoring reimbursement in payment system for private and state payers
- Develop business plan for private pay options
- Integrate health system protocols and practice guides in telehealth practice
- Develop and diligently monitor resource utilization
- Advocate for uniform platform across providers
- Identify system opportunities for grant awards

The Results

Our Results: October 2016 – March 2017

- Served 571 Patients (CHF, COPD, Diabetes, Cancer, Cardiac)
- Patient Adherence: 71% - 88.7%
- Improved Clinical Outcomes
- Increased Patient Satisfaction Average (top 4)
  - 4.00 - 4.08 % - would recommend tablet to family/friends
  - 3.78 – 3.88 % - tablet is easy to use and positive experience
  - 3.73 - 3.83% - tablet increases satisfaction with healthcare provider
- Reduced Hospital Readmission
  - 30-day 0.7% - 1.0%
  - ED visits 0.0% - 2.6%

Who Can Benefit?

- Cardiac
  - Heart Failure
  - AF
- Pulmonary
  - COPD
  - Asthma
- Palliative Care
  - Symptom Management
  - Caregiver Support
- Pediatric
  - Newborn/Mom Support
  - Acute Illness for infants and children
- Medication Management

MHCAH Telehealth is keeping patients where they want to be…

…HOME

THANK YOU

Questions?