Remote Patient Monitoring (RPM) opened a team in March 2020 to develop and deploy telehealth initiatives to support vulnerable populations in skilled nursing and long-term care (LTC) settings.

Our team’s goals were to:
- Provide a specialist telemedicine consult service to facilitate treatment in place
- Collaborate with Licensed Independent Practitioners (LIPs) in the care of high-risk, high-need facility-bound patients at risk for acute care utilization
- Deploy a rapid response to LTC facilities with active COVID outbreak to support care in place, achieve goal concordant care and improve care coordination
- Provide a forum for shared learning and support in the context of COVID through Project ECHO series
- Capture ongoing feedback for continued improvement

The University of Virginia Health System assembled a team in March 2020 to develop and deploy telehealth initiatives to support vulnerable populations in skilled nursing and long-term care (LTC) settings.
Overview of Key Initiatives & Features

Our efforts encompassed the following initiatives to support care in place for patients residing in long-term care facilities.

Facility Telemedicine Consult Service (FTCS)
- LIP-driven process identifying patients for telemedicine consult
- Facility nurse serves as tele-presenter with UVA provider
- Geriatrics and pulmonology scope; discussions on expanding to additional specialties underway

COVID Outbreak Rapid Response
- Daily virtual rounds with facility LIP(s) to review vital signs and progression of COVID positive patients
- Identification of patients requiring telemedicine consult
- Supports treatment in place and care coordination

Project ECHO Tele-mentoring
- Virtual meeting series with LTC Administrators and Directors of Nursing to facilitate shared learning on a range of topics, including COVID-19 preparedness, best practices in infection control, proper PPE donning and doffing

BEST PRACTICE INSIGHTS: A rapid response and agility are key - pivot quickly to develop a response that aligns with patient needs

Our Approach

- While rapidly developing our implementation infrastructure, our community experienced a COVID outbreak at a local facility
- We quickly deployed a patient- and facility-centered response to support care in place that leveraged telehealth and virtual rounds to improve clinical outcomes
### Our Approach
Overview of Implementation Efforts

#### MAJOR FUNCTIONS

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<th>Function</th>
<th>Key Activities</th>
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<tr>
<td>Identification of Priority Facilities</td>
<td>Considered existing relationships, telemedicine receptiveness, prior telemedicine initiatives</td>
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<td>Facility Outreach &amp; Introductions</td>
<td>Ensured mutually agreed upon terms to launch and sustain telemedicine in caring for patients across facility</td>
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<tr>
<td>Deliver Contract for Engagement with UVA Health</td>
<td>Provided overview of scope, clinical protocol, training plan and go-live contingencies</td>
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<tr>
<td>Logistical Planning with LTC Facility</td>
<td>Contactless delivery and remote testing to support rapid configuration and technology readiness</td>
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<tr>
<td>Technology Delivery, Testing &amp; Configuration</td>
<td>Educated small group of nursing users who in turn train designated staff. Critical to create LIP awareness in parallel</td>
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<tr>
<td>Super User Training</td>
<td>Facility LIPs engaged and knowledgeable about consult service and nursing staff trained to begin utilizing service</td>
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<td>Go-Live of Telemedicine Consult Service</td>
<td>Leveraged team and community connections and relationships built through Project ECHO series</td>
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<td>Ongoing Evaluation &amp; Check-In</td>
<td>Conducted outreach to facilities for feedback on opportunities and barriers</td>
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### KEYS ACTIVITIES

- Considered existing relationships, telemedicine receptiveness, prior telemedicine initiatives
- Ensured mutually agreed upon terms to launch and sustain telemedicine in caring for patients across facility
- Provided overview of scope, clinical protocol, training plan and go-live contingencies
- Contactless delivery and remote testing to support rapid configuration and technology readiness
- Educated small group of nursing users who in turn train designated staff. Critical to create LIP awareness in parallel
- Facility LIPs engaged and knowledgeable about consult service and nursing staff trained to begin utilizing service
- Leveraged team and community connections and relationships built through Project ECHO series
- Conducted outreach to facilities for feedback on opportunities and barriers
Our hospital-based interprofessional team members met regularly to:

1) Identify priority partner facilities and develop an outreach strategy
2) Discuss progress of existing initiatives
3) Brainstorm new opportunities for facility engagement and collaboration

We collaborated with the following ad-hoc team members:

- Access/registration staff to support workflow development and perform intake functions
- Legal and regulatory/compliance staff for contract development and resolving questions around required documentation and consent

**BEST PRACTICE INSIGHTS:**

- Identify highly engaged clinician champions
- Nurse liaison is a unique role that bridges relationship with facilities and educates staff
Key factors our team prioritized in choosing a telehealth device were:

- Capability to auscultate heart, lung and bowel sounds
- High-definition camera to visualize the skin and wounds, outer and middle ear
- Rapid configuration and deployment capability
- High mobility, ease of use and increased accessibility compared to a traditional telemedicine cart

Consider the Following When Choosing a Device Platform

- Does this device allow patient evaluation in any part of the facility?
- What are the device's limitations when conducting an assessment?
- What web browsers does the device software support?
- Does the device run on WiFi or Bluetooth?
- What infection control practices are required to safely use the device between patients?
- What is the process for testing and configuration?
- How long does it take to deploy the device?

BEST PRACTICE INSIGHTS:

- Identify a back-up device or process in the face of technical issues such as low bandwidth
  - Case example: We encountered significant bandwidth challenges at one facility and transitioned to a cell-enabled iPad. We also chose a central clinic space for consults in place of patient rooms
Go–Live Planning

We coordinated a kick-off meeting with partner sites to provide an overview of required contingencies ahead of go-live and together developed a plan for each of the following:

**Staff Training and Education**
- Small group of superusers educated virtually on clinical workflow and technology

**Technology Testing & Configuration**
- Technology delivered to site
- Contactless testing of Wifi connectivity
- Identification of potential weak zones

**LIP Awareness**
- Communication to LIPs in the form of email, fax and webinars to answer questions

**BEST PRACTICE INSIGHTS:**
Include the Director of Nursing, Administrator and Medical Director if available in the kick-off meeting to ensure understanding of process, technology and next steps is aligned
Our team’s RN liaison served as the connecting force between multiple community resources and helped facilities navigate questions related to supplemental staffing and PPE availability.
• A rapid response and agility are key - pivot quickly to develop a response that aligns with patient needs

• Identify highly engaged clinician champions

• Nurse liaison is a unique role that supports relationship building with facilities. Our team's nurse liaison educated staff and served as a connecting force between multiple community resources to help facilities navigate outbreak challenges

• Limiting the initial scope to a small group of providers allowed for rapid workflow development, deployment and rapid cycle improvements

• The contracting process can be time consuming – work with your organization's legal team to understand what type of agreement is required and what's feasible under the public health emergency

• Identify a back-up device or process in the face of technical issues such as low bandwidth

• Due to the potential for limited staffing at the long-term care facility, develop a process for how clinical documentation will be shared in advance of telemedicine consults or virtual rounds

• Facility and provider engagement are critical success factors to initial adoption and ongoing utilization

• Check in with partner facilities periodically to gather feedback and adjust approach to meet evolving needs

SUPPLEMENTAL LINKS

Rapid Telehealth-Centered Response to COVID-19 Outbreaks in Postacute and Long-Term Care Facilities
Harris D. et al

COVID-19 Collaborative Model for an Academic Hospital and Long-Term Care Facilities
Archbald-Pannone, L.R. et al
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