Telehealth Innovation in the Era of COVID-19:

*Northwell Health and the House Calls Experience*

July 21, 2020

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Medical Director, Northwell Health House Calls and Clinical Call Center
Overview

1. Northwell Health Overview
2. Northwell’s Telehealth COVID-19 Response
3. Home-Based Primary Care
4. Workflows and Tips
5. Telehealth in Home-Based Primary Care Now and Next Steps
Northwell Health®

- 23 hospitals
- 750+ ambulatory facilities

- 5.5 million patient encounters
- 30% inpatient share of market

- 71,000+ employees
- 4,300+ employed physicians
- 13,600+ affiliated physicians

- 1,800 residents and fellows in 160 programs
- 4,000 researchers
- 2,500 clinical research studies conducted

Strategic partners
- Boca Raton Regional Hospital, FL
- CASAColumbia, NY
- Cold Spring Harbor Laboratory, NY
- Crouse Health, NY
- Epworth HealthCare, Richmond, Australia
- Karolinska Institute, Sweden
- Maimonides, NY
- Nassau University Medical Center, NY
- Rothman Orthopaedic Institute, PA
- Western Connecticut Health Network, CT
Northwell’s Telehealth Platform

Care anywhere, any place, any time

AmWell
PLATFORM
## AmWell Provider Additions by Week

*As of April 6th, 2020*

<table>
<thead>
<tr>
<th>Week</th>
<th>In Queue</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2 - 3/6</td>
<td>553</td>
<td></td>
</tr>
<tr>
<td>3/9 - 3/13</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>3/16 - 3/20</td>
<td>413</td>
<td></td>
</tr>
<tr>
<td>3/23 - 3/27</td>
<td></td>
<td>2,093</td>
</tr>
<tr>
<td>3/30 - 4/3</td>
<td></td>
<td>1,210</td>
</tr>
<tr>
<td>4/6 - 4/11</td>
<td></td>
<td>883</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5,393</td>
</tr>
</tbody>
</table>

*Total increase: +875%*
Northwell Health Daily Billed Telehealth Volume

January 1 – April 28, 2020
House Calls Overview

Northwell Health House Calls is a value-driven, home-based primary care program that delivers care to homebound older adults in Manhattan, Queens, Nassau and Suffolk counties in downstate New York.

Our mission is to serve the highest need patients to achieve better care and health at a lower cost

Services provided include:
- Intensive home-based primary care by Interdisciplinary Care Team
- Physicians, NPs, nurses, social workers, medical coordinators
- 7-days/24-hours response and real time alerts of ER and hospital utilization
- Longitudinal care through illness trajectory
- Transitional care visits

Program Eligibility:
- Homebound (Medicare criteria)
- Medical necessity: multiple chronic medical conditions in an advanced state
- Generally over 65 years old
House Calls Patient Population

Demographics
- Average Age: 86 years
- Gender: 70% Female, 30% Male

Attrition
- 27% annually (death and discharge)

Death at Home
- 70% of patients who died, died at home

Activities of Daily Living (ADL)
- 2/3 of patients have 5 - 6 ADL dependencies

Program Volume
- 2000 Unique Patients Annually

High rates of:
- Hypertension
- Dementia
- Diabetes
- CHF
- COPD

Over 90% with completed advanced care planning discussion
- 70% with DNR order
House Calls’ Clinical Delivery Model

Geography 1
- Physician
- Care Manager
- Medical Coordinator

Geography 2
- Physician
- Care Manager
- Medical Coordinator

Geography 3
- Physician
- Care Manager
- Medical Coordinator

Clinical Call Center

Community Paramedicine Program

24 / 7 / 365
Historically Difficult to Reach Group via Telehealth

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Survey Results: Access to and Confidence in Using Technology by Type for AIM Enrollees and Caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIM Enrollees, N (%)</strong></td>
<td><strong>Caregivers, N (%)</strong></td>
</tr>
<tr>
<td><strong>Access to Technology</strong></td>
<td><strong>Yes</strong></td>
</tr>
<tr>
<td>Computer</td>
<td>109 (40.22)</td>
</tr>
<tr>
<td>Internet</td>
<td>107 (39.93)</td>
</tr>
<tr>
<td>Tablet</td>
<td>49 (18.70)</td>
</tr>
<tr>
<td>Cellphone</td>
<td>165 (58.10)</td>
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<tr>
<td>Medical alert device</td>
<td>97 (34.89)</td>
</tr>
<tr>
<td><strong>Confidence in Using Technology</strong></td>
<td><strong>Yes</strong></td>
</tr>
<tr>
<td>Computer</td>
<td>74 (36.10)</td>
</tr>
<tr>
<td>Internet</td>
<td>58 (29.90)</td>
</tr>
<tr>
<td>Tablet</td>
<td>44 (22.12)</td>
</tr>
<tr>
<td>Video chat</td>
<td>35 (17.76)</td>
</tr>
<tr>
<td>Medical alert device</td>
<td>106 (52.21)</td>
</tr>
</tbody>
</table>

Confidence in using technology ("yes") was defined as top 2 Likert-scale choices (strongly agree and agree), whereas lack of confidence ("no") was defined as bottom 2 Likert-scale choices (disagree and strongly disagree). AIM = Advanced Illness Management, survey period 2014-2016.
Weaving Telehealth into Practice

Community Paramedicine*
- Video added to program in 2014
- Urgent and Emergent evaluation 24/7/365 in home
- Remained in effect during COVID-19

Direct-to-Patient (2018)
- Social workers → patients/caregivers
- Results: Didn’t work as planned (“Not Yet Ready for Prime Time”)
- Lesson learned

Mobile Telemedicine Technician (MTT) (2019)
- Facilitated telehealth model
- For acute symptoms not requiring a community paramedic response
- New version post-COVID anticipated

COVID-19 response, Direct-to-Patient (2020)
- Telehealth experience allowed for ability to rapidly respond to changing world
- New iteration of direct-to-patient model

Facilitated Telehealth Model

Mobile Telemedicine Technician Program

✅ Two EMTs driving in private vehicles were scheduled one day a week (Monday) to complete 10 visits vs regular schedule of 5 home visits
  ✓ Facilitated telehealth model used to double daily visit capacity

✅ EMTs were supplied with
  ✓ Software-enabled tablets
  ✓ Mobile Wi-Fi capabilities
  ✓ Tools for assessment of patient vitals and physical examinations

✅ Physicians were located remotely in an office or at home

✅ Physicians used clinical judgment to select patients appropriate for visits with an emphasis on
  ✓ Unscheduled evaluation and treatment of acute conditions such as:
  ✓ Follow-up after a care plan change

✅ EMTs pulled back to EMS during COVID-19
  ✓ Restarting in August 2020
MTT Model: Expanding Provider Access

A Practical Guide to Expanding Home-Based Primary Care with Telehealth:
COVID-19: Telehealth in House Calls

- House Calls located in the first US epicenter of the COVID-19 outbreak

- Deployed Direct-to-Patient model in early March 2020 and shifted operational structure.

- House Calls providers were remote and used telehealth to connect with patients to prevent the transmission of COVID-19. Providers only entered homes for emergency issues.

- Able to consent over 500 patients (44%) in the practice for telehealth and conducted over 900 visits via telehealth from March to June 2020.

Having experience with telehealth in the practice allowed for rapid deployment
Telehealth Workflow – Direct-to-Patient

Pre-Visit

Admin reviews schedule → Call patient to schedule telehealth visit → Patient consent obtained and qualifies for telehealth visit → No → Admin documents “No Consent” → Schedule visit as phone call for appropriate provider

Yes → Admin documents “Verbal patient consent obtained” → Admin schedules telehealth visit for appropriate provider

During Visit

Provider reviews patient chart → Is visit a telehealth visit? → No → Provider calls patient

Yes → Verify verbal or written consent for telehealth is obtained and documented → Provider email or text link to telehealth video visit to invite patient or caregiver to telehealth video visit → Provider conducts assessment and documents encounter in EMR

Telehealth and Home-Based Primary Care Workflows: [https://www.westhealth.org/covid-19-resource-center/](https://www.westhealth.org/covid-19-resource-center/)
References


5. Telehealth and Home-Based Primary Care Workflows: https://www.westhealth.org/covid-19-resource-center/
Thank you!

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