How to Expand Your Telehealth Footprint
Our Telehealth Journey

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Weill Cornell Medicine
NYP Telehealth Strategy

1. Increase access
2. Improve outcomes
3. Reduce cost

Second Opinion  Express Care  Urgent Care  Specialty Consult  Mobile Stroke  Remote Patient Monitoring
Emergency Medicine
Telehealth Accomplishments

- Recipient of several national awards
- Numerous peer reviewed publications, abstracts and invitations for national presentations
- Consulted by over 50 healthcare systems nationally and globally
- Implemented new innovative care models
Key Stakeholders

- Nursing
- Operations
- Legal
- Marketing & Public Affairs
- Finance
- Compliance
- Information Technology
- Communications
- Strategy
- Development
- Registration

Weill Cornell Medicine
Main ED Service Lines

ED Express Care

Direct-to-Consumer

Tele-Provider in triage (MSE)

Tele-Pharmacy

Remote patient monitoring

- NP Follow UP
- Tele-Sitter
- Disaster telemedicine
Innovation Milestones - 2018

New York Presbyterian Telehealth Visits: >120,000

MSE: 16,712
Pharmacy Med Rec: 6,153
Express Care: 7,667
Direct to Consumer: 2,483
Tele-Sitter: 7,230

New York Presbyterian- Weill Cornell Emergency Department Telehealth Visits: >40,000
Emergency Medicine Telehealth Milestones

- Express Care
- Peds NYP OnDemand Urgent Care
- Tele MSE
- Virtual Patient Observation (Tele sitter)

2016:
- NYP OnDemand Urgent Care

2017:
- 1. NYP OnDemand Urgent Care for NYP Employees
- 2. Peds Tele MSE
- 3. Walgreens Kiosks
- 4. ZocDoc
- 5. Community TeleParamedicine

2018:
- Tele Med Rec

2019:

Weill Cornell Medicine
NewYork-Presbyterian

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Quality Assurance Example:
Express Care Service Line

- Low unplanned repeat ED visits within 72 hours
  - Telemedicine via the ED Express Care: 1%
  - Traditional ED Fast Track Visit: 3%
- Very low 72 hour return visit has required inpatient admission
- Left after being seen: 0.1%

- All patients receive follow up RN call
- Patient Navigator follow up care (in primary care/specialty):
  - WCMC – 18%
  - LMH – 22%
New Telemedicine Emergency Medicine Care Models
Telemedicine Kiosks across NYC

• NYP OnDemand Kiosks at Duane Reade enable on the go patients to check in with one of our physicians.

• We currently have 8 kiosks located in pharmacies in Manhattan, Queens and Brooklyn.
Disaster Telemedicine Programs

- One of the first uses of telemedicine in disaster response
- Peer-to-peer consults were provided to our NYP disaster response team in Puerto Rico
  - Those consulted included pediatric and adult endocrinology, infectious disease, pulmonology, ENT and psychiatry
Community Tele-Paramedicine

- An innovative model of population health delivery for high-risk patients combining home visits by specially-trained community paramedics supervised in real-time by emergency physicians via telemedicine.

**Successful Pilot Study:**
40 CTP home visits conducted among 15 heart failure patients at high risk for readmission over 6 months

- **49%** Interventions or Testing
- **47%** 1+ Medication Discrepancies
- **34%** Required Medication Adjustment
- **1 Readmission**
  (9/15 predicted to return)
Telehealth Learners

- Medical Doctors
- Pharmacists
- Residents
- Medical Students
- Physician Assistants
- Nurse Practitioners
- Paramedics
- Registered Nurses
- Other

AMA Encourages Telemedicine Training for Medical Students, Residents

From Bedside to Website: Future Doctors Learn How to Practice Remotely

Telemedicine is getting trendy, but doctors may not be keeping up

Medical students at Weill Cornell can now take a two-week telemedicine and digital health elective in which they learn to interview patients virtually, participate in telestroke and telepsychiatry visits, and understand the legal and regulatory issues around telemedicine.
Training and Education Curriculum

NYP-WCM Telemedicine Training Programs Offered:

- Resident Telemedicine Elective
- Medical Student Elective
- NewYork Presbyterian new telemedicine provider training
- National conference on virtual healthcare training
- Component of Medical Student Primary Care Clerkship
Thank you!

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Telemedicine:
An Administrator’s Virtual Viewpoint

Tim Sullivan, MHA, FACHE
Administrator, Department of Emergency Medicine
Thomas Jefferson University & Hospitals
Moving from Blockbuster to Netflix
Jefferson Telemedicine Programs

- **Clinical**
  - Direct to Consumer
    - On-Demand
    - Tele-Intake
    - Scheduled Care (including ED visit follow-up)
    - Virtual Rounds
    - Remote Second Opinion
  - Providers
    - Jefferson Neuroscience Network
    - Remote Consult
- **Academic**
  - Telehealth facilitator certificate program
  - Pipeline programs for pre-health undergrads (e.g. ICU Ambassadors)
  - Undergraduate (medical student) elective
  - Graduate medical education (resident) elective
  - Fellowship program
  - Institute for Digital Health
  - Continuing Medical Education
- **Research**
  - Significant opportunity for health services research
    - Outcomes, comparative effectiveness and cost
    - Patient and provider experience
On-Demand (Direct to Consumer) Care

https://hospitals.jefferson.edu/jeffconnect/jeffconnect-in-the-news/2017-award.html
On-Demand (Direct to Consumer) Care

- Access To Care (24/7/365 Jefferson providers)
  - 40% of visits new patients
  - 83% would have sought care elsewhere
- Financial Impact/Cost
  - Savings of approx $100 per encounter
- Experience
  - Net Promoter Score > 70
  - Time saved over one hour = 87%
  - *Already* recommended JeffConnect = 81%
- Effectiveness
  - Antibiotic stewardship for sinusitis equal or better than ED/UC
  - Health complaint addressed as hoped > 90%
  - 74% received no further care
Telehealth Growth
Tele-Intake

- Access To Care
  - Immediately after triage, note and orders written by physician
- Financial Impact/Cost
  - Reduced LWBS generates increased revenue
  - Providers can cover more than one hospital
- Experience
  - Patients
  - Providers
  - Executive leadership
- Effectiveness
  - Reduced LWBS
  - Improved door to provider times
  - Improved door to discharge
  - Improved door to admit times
Finances

• Purchased service model for EM provider time
  • Parity with EM clinical reimbursement rate, with exception of overnights
  • Reimbursement includes some but not all non-salary expenses
  • Medical Director stipend
• Revenue = $49/visit, paid by CC at time of service
• Requires entrepreneurial spirit: maximize other non-traditional revenue streams
• As of 1 Jan. 2019, Jefferson’s community of 35k+ employees have significant incentive to utilize TH before UC or ED
• Bottom line: ROI = extremely difficult to calculate. Organizational support is critical
Challenges & Lessons Learned

• Legal, regulatory and compliance issues
• Anticipate unanticipated expenses
  • State licenses
  • Administrative costs
• Have a ramp-up plan
  • Cross-coverage with Urgent Care, OBS, etc.
• Engage and leverage APPs
• Consider growth strategies
  • Marketing
  • Sales
• Provider adoption and engagement
  • Impact on burnout, wellness and longevity
• Alignment with and impact on provider performance metrics and incentives
Tele-EM as a Population Health Management Strategy: The Mass General Experience

David F. M. Brown, MD
Trustees Professor and Chair
Department of Emergency Medicine
Massachusetts General Hospital
Harvard Medical School

March 2019
Tele-EM as a PHM Strategy

• **Virtual Urgent Care**
  – Offered to patients with commercial coverage from our system’s health insurance company (All Ways Health Care) and to our system’s 75,000 employees (self-insured population as an insurance benefit)

• **Tele-EM to reduce in-network unnecessary transfers**
  – Mass General owns two rural island hospitals on Martha’s Vineyard and Nantucket with limited resources and high transfer rates of low acuity patients.
  – Value question: can Tele-EM huddles reduce the rate of unnecessary transfers?
Scope of Virtual Urgent Care Offerings and Goals

Goals

1. Improve Primary Care Capacity

2. Provide Low Cost ($40) alternative to in person UC (~$150) or ED care

3. Future goals – expand outside our patient population to attract new patients
Utilization/Activity to Date

- 241 visits over first 7.5 months of the program
- Volumes had been very gradually increasing for the AllWays Health Partners commercial accounts for the first 6.5 months.
- Volumes have increased dramatically since 1/1/19 with the addition of the Allways Health Partners Partners employee account going live.
86% of patients managed virtually

9% of visits/patients were referred to an alternate care site to be seen immediately

5% were treated and referred to an alternate care site to be seen within a specified period of time
Tele-EM to Reduce In-Network Transfers

• MGH owns a community hospital on Martha’s Vineyard (MVH) with limited resources.

• Prior state: high seasonal volume of transfers from MVH to MGH
  – 20% discharged from MGH ED
  – 20% placed in MGH ED Observation
  – 60% admitted to MGH

• Some transfers may be avoidable
  – Concern for subsequent deterioration
  – Concern for need for specialty consult

• MVH would like to retain these patients and MGH would like to facilitate
  – Good for patients and families
  – Good for MVH bottom line
  – Reduces pressure on MGH ED capacity
  – Reduces pressure on MGH inpatient capacity
MVH-MGH Tele-EM Pilot

• Guidance and collaboration regarding transfers via virtual consults between MGH EM and MVH clinicians
  – Scope and nature of the consult may serve different functions depending on the patient’s clinical condition and medical severity

• Goals
  – Facilitate transfers when clinically necessary
  – Keep appropriate patients at MVH
  – Guarantee acceptance in transfer of TeleEM patients who subsequently deteriorate

• Timeline: 12-month pilot Sept 2017 - Sept 2018
  – Extended through FY19
Tele-EM Technologies Utilized

Clinical Data Review
- EPIC for order entry
- EPIC for access to documentation

Communications
- Telephone to initiate consult and for basic consultations
- Videoconference (leveraging Tele-Neurology cart and workflow) for advanced consults

Clinical Documentation
- EPIC for consult documentation under the existing encounter
MVH-MGH Tele-Emergency Medicine

Results of First Year (FY18)

- Tele-EM patients: 125
  - Average age: 59 years
  - Age range: 1 to 103 years
  - 50% female
- MVH EM providers who requested consults: 21
- MGH Tele-EM Physicians who provided consults: 28
- Adverse events due to Tele-EM: 0
- Average time from consult initiation to recommendation provided: 14’
- Rare specialty consult involvement

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125 Tele-EM patients

Tele-EM Physician Recommendation

- Green: admit to MVH
- Blue: transfer to Mass General
- Yellow: discharge from MVH

37 Tele-EM patients
- 8% (3) Transfer to MGH
- 11% (4) Admit to MVH
- 19% (7) Discharge from MVH ED
- 59% (22) Initial Outcome Following Consult

83 Tele-EM patients
- 4% (3) Admit to MVH Inpatient
- 1% (1) Discharge from MVH ED
- 1% (1) AMA
- 94% (78) Initial Outcome Following Consult

5 Tele-EM patients
- 100% (5) Discharge from MVH ED
Subsequent Transfers of patients initially admitted to MVH Inpatient

Of Patients Initially Admitted to MVH, Subsequent Transfer?

- 32% (27) No
- 68% (58) Yes
Tele-EM Consultation Impact

• MVH Impact
  • 68% of all Tele-EM patients remained at MVH for at least some of their inpatient care
  • 56% of all Tele-EM patients avoided transfer altogether
  • Total transfers dropped by ~33%
    • from 936 (FY17) to 617 (FY18)

• Mass General Impact
  • Capture rate of transfers increased from 21% (FY17) to 36% (FY18)
  • Case mix and acuity of transfers markedly increased

• MGH Tele-EM 2.0
  • 2019: launch same program at Nantucket Cottage Hospital
  • 2020: direct secondary care transfers from Island hospitals to a network community hospital with more resources
Tele-EM reflections

• Overall Tele-EM Value Proposition
  • Access to a physician with a broad skill set and an understanding of the healthcare system is valuable
  • Can be used as a PHM strategy within an integrated healthcare system

• Tele-EM challenges (some of them)
  • Faculty resistance
  • Funding
  • Technology
  • Scope creep