

Telemedicine: Expanding Opportunities to Deliver Emergency Care

Judd E. Hollander, MD

Senior Vice President, Healthcare Delivery Innovation, TJU

Associate Dean for Strategic Health Initiatives, SKMC

Professor, Department of Emergency Medicine



@juddhollander

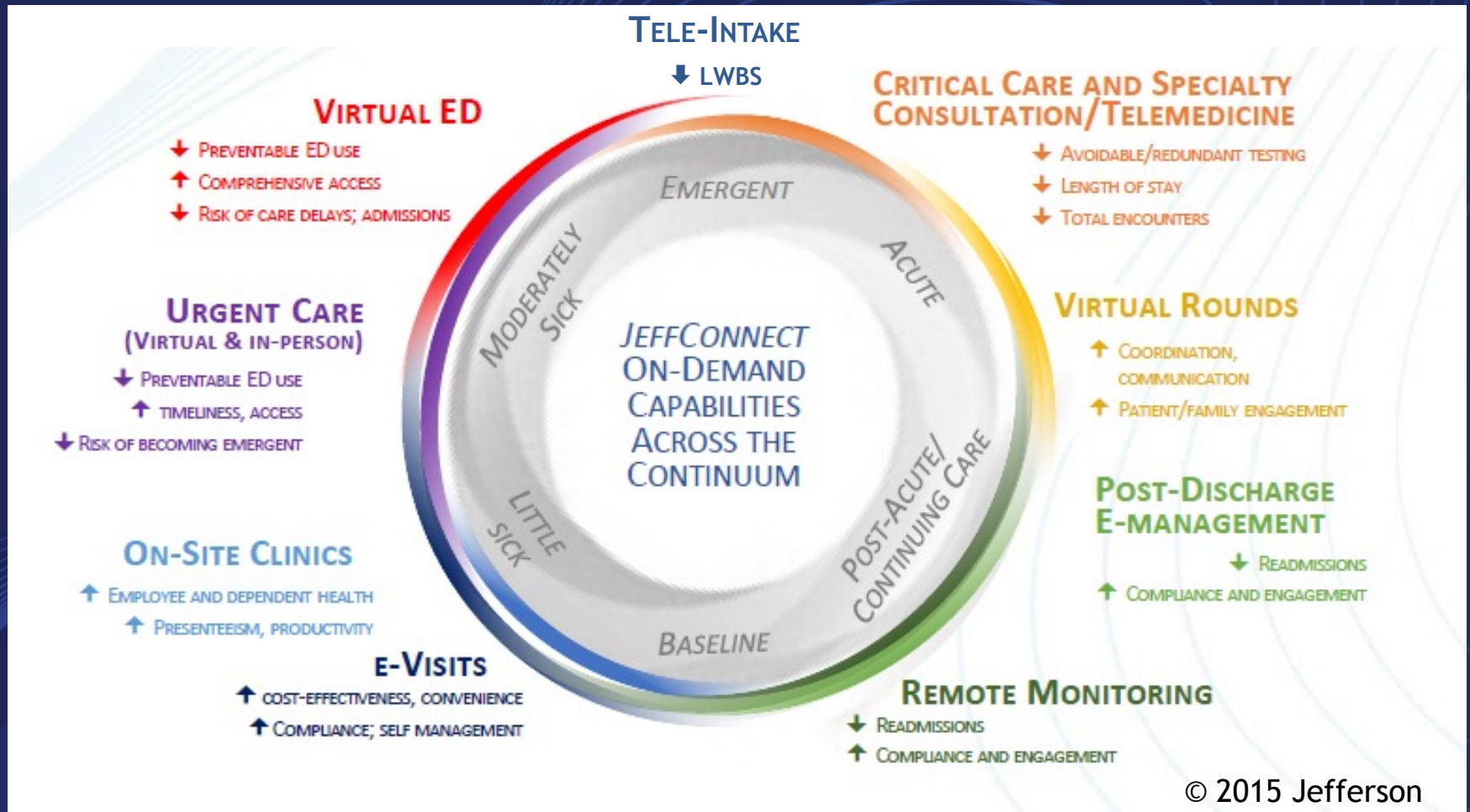
So pause and ask, what's our real value

- It is NOT just
 - We do critical care
 - We do trauma
 - We do ultrasound
- We the “availabilists”
 - 24/7/365
 - With and without insurance
 - We work when people want us
 - We work with people who want us

Telemedicine is just a care delivery model

- The medicine is the same
- Telehealth is not about the technology, but rather about the work flows and operations
- The appropriate comparator is the alternative
 - Not an in-person visit
- You *are* doing a physical exam
- You might actually get more information than in an office visit
- Actionable information is more important than diagnostic accuracy

JeffConnect



Along Came COVID



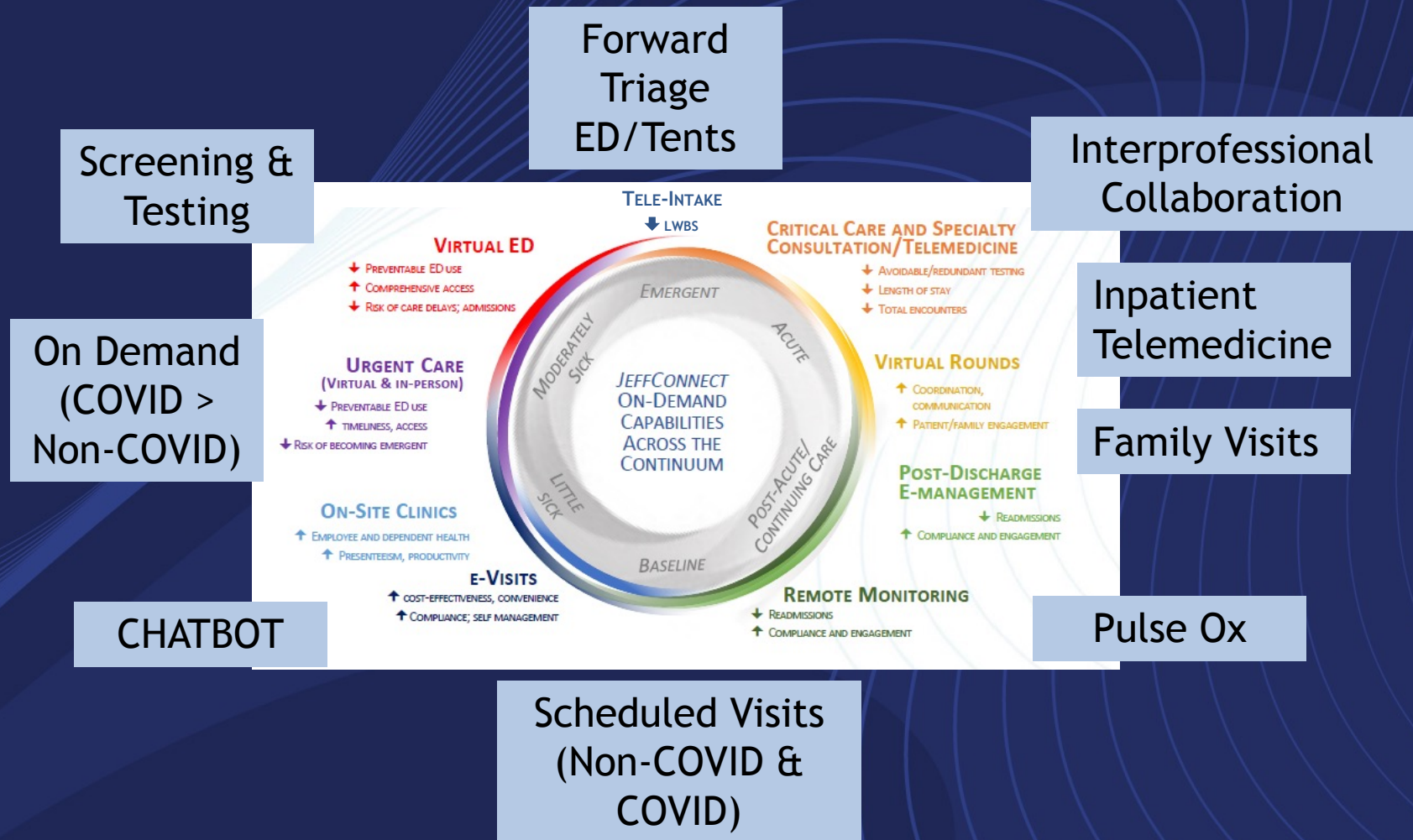
The NEW ENGLAND JOURNAL *of* MEDICINE

Perspective

Virtually Perfect? Telemedicine for Covid-19

Judd E. Hollander, M.D., and Brendan G. Carr, M.D.

Response to COVID



Metrics Now Aligned with NQF Measure Framework

Creating a Framework to Support Measure Development for Telehealth

FINAL REPORT
AUGUST 31, 2017



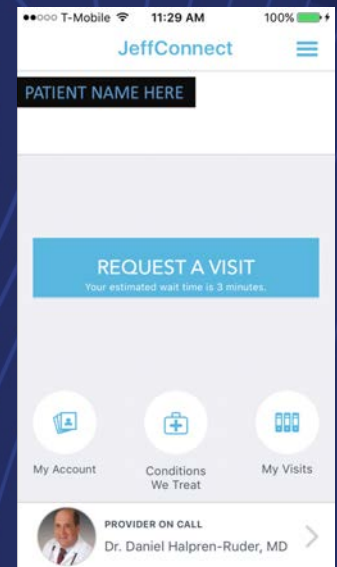
NATIONAL
QUALITY FORUM

**TABLE 2. DOMAINS AND SUBDOMAINS OF THE
TELEHEALTH MEASUREMENT FRAMEWORK**

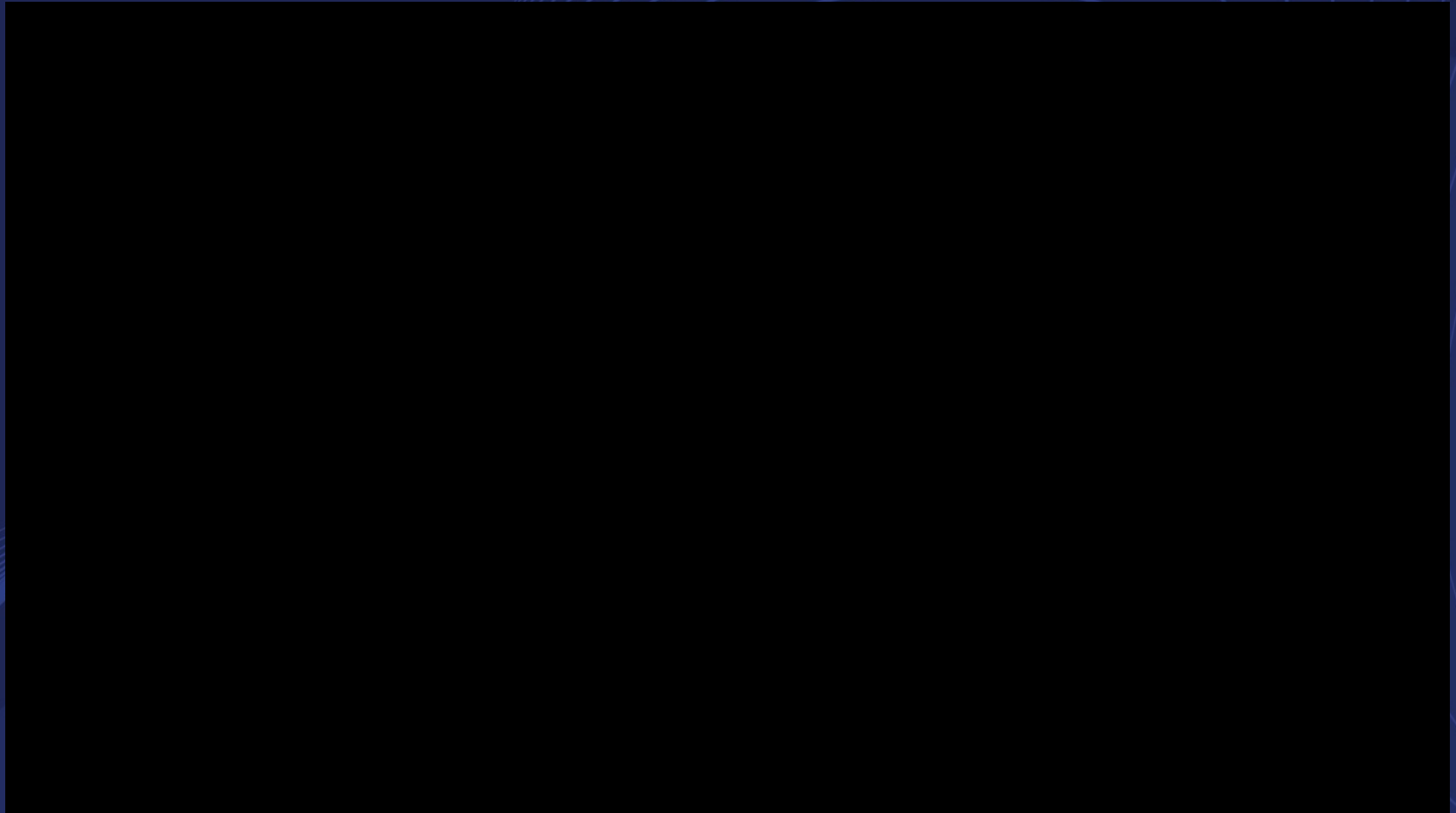
Domain	Subdomain(s)
Access to Care	<ul style="list-style-type: none"> • Access for patient, family, and/or caregiver • Access for care team • Access to information
Financial Impact/Cost	<ul style="list-style-type: none"> • Financial impact to patient, family, and/or caregiver • Financial impact to care team • Financial impact to health system or payer • Financial impact to society
Experience	<ul style="list-style-type: none"> • Patient, family, and/or caregiver experience • Care team member experience • Community experience
Effectiveness	<ul style="list-style-type: none"> • System effectiveness • Clinical effectiveness • Operational effectiveness • Technical effectiveness

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 = 80%
- Effectiveness
 - Antibiotic stewardship for sinusitis equal or better than ED/UC
 - Health complaint addressed as hoped > 90%
 - 74% received no further care (2/3rd sent to ED admit or procedure)



Tele-triage (ED Intake)



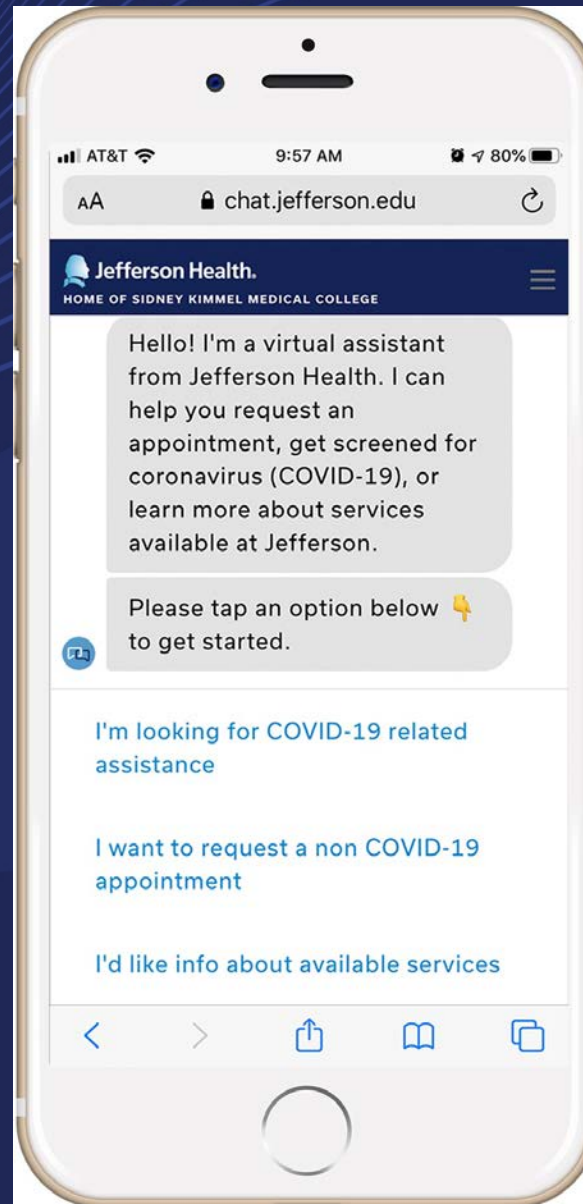
Tele-triage (ED Intake)

- 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



Chatbot

- Information
- Right size care
- Make appointment or escalate to on-demand telemedicine visit



Inpatient or ED Telemedicine Visit

- Web dashboard
- Log in
- Identity campus, room
- Identify patient device
- Click call
- Have call
- Leave meeting at end

START AN INPATIENT TELEHEALTH VISIT WITH A PATIENT OVER ZOOM

Provider Instructions

Jefferson Health providers can use Zoom video conferencing software on their Jefferson-issued or personal device to conduct telehealth visits remotely with patients. You can also use a Rover device to conduct inpatient telehealth visits.

The nursing staff will use your department's preferred communication method (email, phone, TigerConnect message, etc.) to alert you when a patient is ready to be seen.

You will enter a virtual waiting room before the patient brings you into the telehealth visit. To bypass the waiting room, log in to your Jefferson Zoom account before the telehealth visit begins.

Step 1. Navigate to <http://jeffersonhealth.org/iphth>.

Step 2. On the **Jefferson Identity Provider** screen:

- In the **Username** field, enter your Campus Key.
- In the **Password** field, enter your Password.
- Click **Login**.

Step 3. Select your campus. A list of available iPad devices display.

Step 4. Under **Zoom Room iPads**, select the relevant iPad.

Step 5. On the **iPad Info** screen, click **Call on Zoom**. You are now in the Zoom meeting.

Step 6. When the meeting ends, tap **Leave Meeting** in the upper-left corner.

Interprofessional Collaboration

- *“Assessment and management services conducted through telephone, internet, or electronic health record consultations furnished when a patient’s treating physician or other qualified healthcare professional requests the opinion and/or treatment advice of a consulting physician or qualified healthcare professional with specific specialty expertise to assist with the diagnosis and/or management of the patient’s problem without the need for the patient’s face-to-face contact with the consulting physician or qualified healthcare professional.”*

Scheduled Appointments

- Access To Care
 - Over 1400 providers trained
 - > 400 providers regularly engaged
 - Decreased cancellation rate
- Financial impact
 - Increased visit turn over
 - Staffing efficiencies
- Experience
 - Net promoter score = 59
 - 85% reported time savings > 1 hour
 - 86% said they were better able to receive care when/where needed
 - *Already* recommended JeffConnect = 43%
- Effectiveness
 - Same level of care as inperson visit = 83%

Scheduled Appointments

JMIR MEDICAL INFORMATICS

Powell et al

Original Paper

Patient and Health System Experience With Implementation of an Enterprise-Wide Telehealth Scheduled Video Visit Program: Mixed-Methods Study

The Use of Telehealth by Medical and Other Health Professional Students at a College Counseling Center

Deanna Nobleza, James Hagenbaugh, Shawn Blue, Anna Stepchin, Michael Vergare & Charles A. Pohl

Rhea E. Powell

Integrating Telehealth Emergency Department Follow-up Visits into Residency Training

Dimitrios Papanagnou¹, Danica Stone², Shruti Chandra¹, Phillip Watts¹, Anna Marie Chang¹, Judd E. Hollander¹

Telehealth provides a comprehensive approach to the surgical patient[☆]

Kulvir Nandra^{*}, George Koenig, Andrea DelMastro, Elizabeth A. Mishler, Judd E. Hollander, Charles J. Yeo

Telehealth Technology:
Patient Experience of Care

Conclusions: PAT utilizing telemedicine reduced overall patient time in the PAT and improved patient satisfaction without increasing the operative case cancellation rate.

Virtual Rounds

- Access To Care
 - Improves access to families at a distance
- Financial Impact/Cost
 - No direct financial benefit
 - ? Downstream benefits
- Experience
 - Patient experience outstanding
 - Provider experience variable
- Effectiveness
 - No outcomes data available



Neurosurgery Network

- Access To Care
 - > 30 hospitals w 12 minute response time
- Financial Impact/Cost
 - Varied based upon what being measured
- Experience
 - > 80% left in community (was only 56%)
 - Provider education experience
- Effectiveness
 - Increased rate of expert consultation
 - Increased rate of tPA administration (55% increased)
 - Better functional outcomes at 3 and 6 months

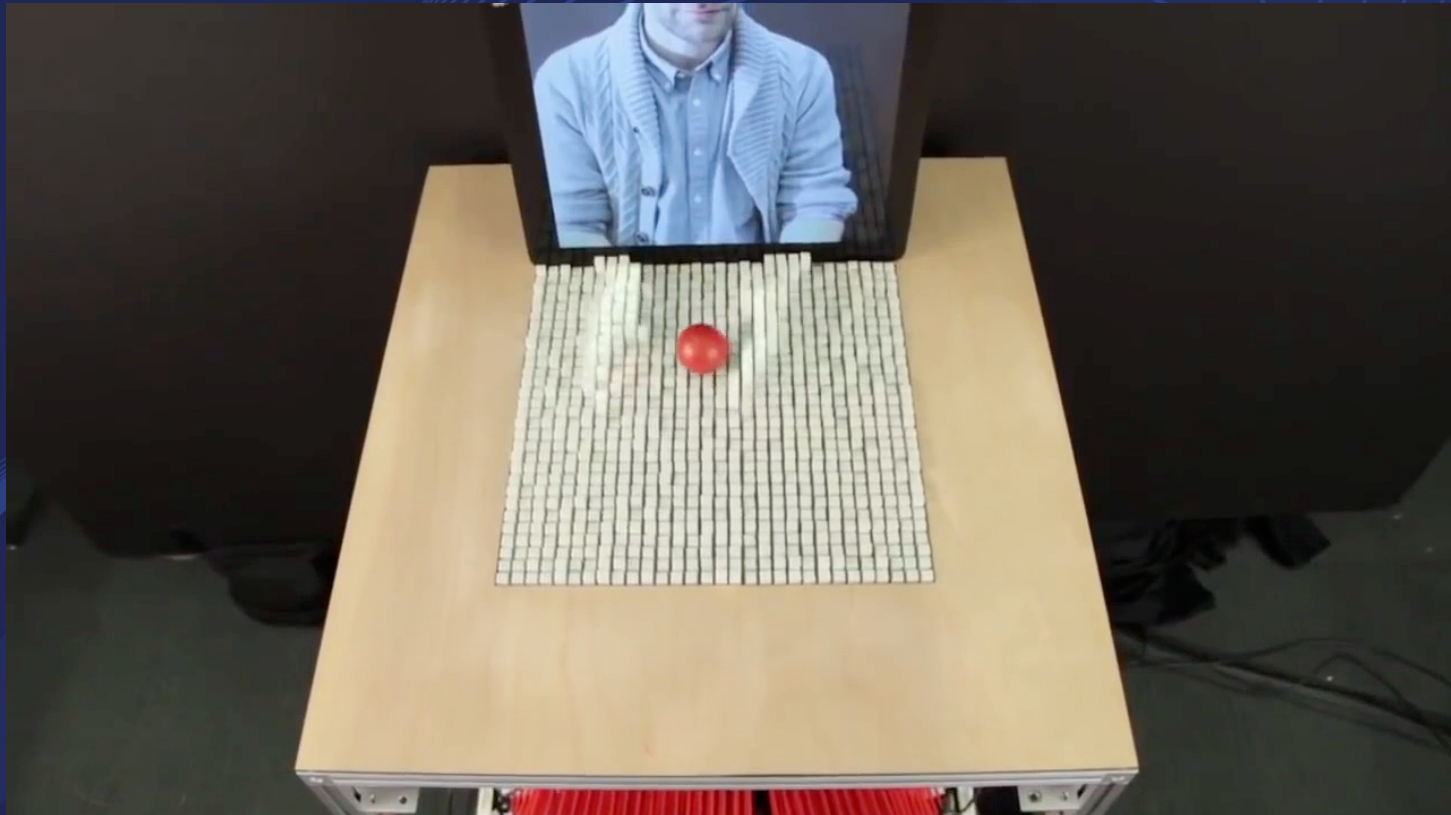


Mobile Stroke Unit

- CT scan
- Telemedicine
- Neurovascular specialists



Imagine examining the patient...



Avatar Provider



Metrics: More than Adoption



Innovations in Care Delivery

COMMENTARY

Maturation from Adoption-Based to Quality-Based Telehealth Metrics

Judd Hollander, MD, Aaron Neinstein, MD

Vol. No. | September 9, 2020

DOI: 10.1056/CAT.20.0408

Telemedicine & Level Setting

- Telehealth is not about the technology, but rather about the work flows and operations
- Telemedicine is a care delivery model
- The medicine is the same
- The appropriate comparator is the alternative
 - Not an in-person visit
- You *are* doing a physical exam
- You might actually get more information than in an office visit
 - It is about actionable information (not diagnostic accuracy)

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NEJM **Catalyst** | Innovations in Care Delivery

ARTICLE

The Transition from Reimagining to Recreating Health Care Is Now

Judd E. Hollander, MD, Frank D. Sites, MHA, BSN, RN

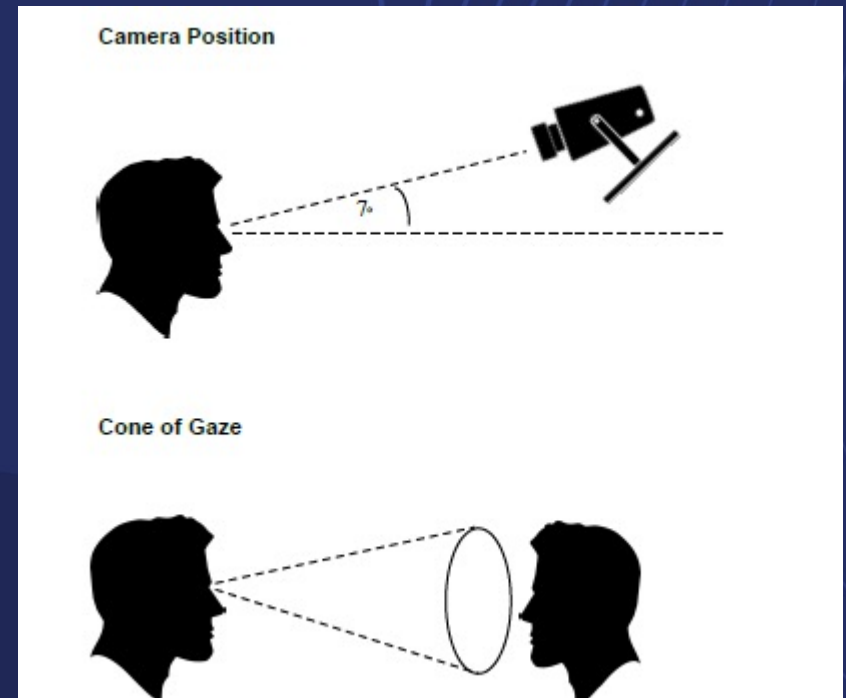
Vol. No. | April 8, 2020

DOI: 10.1056/CAT.20.0093



You can examine the patient...but can they see you

- Webside manner
 - Eye contact
 - Webcam positioning
 - EHR positioning
 - Your line of site
 - Lighting
 - Illuminate your face
 - Background
 - Overall environment



You can examine the patient...but can they see you



The Glare



Angel of death



LED Frontal lighting



Ceiling fan



Not so bad

You can examine the patient...

- 95% is in the history (which you get over phone alone)
- Families & caregivers can help
- Patients can do a lot on their own
- You can enough most of the time
 - Asthma
 - Heart disease
 - CHF
 - Afib
 - Abdominal pain
 - Back pain
 - Sprain/strains
- Inter-rater reliability of the physical exam is how good?

But the exam is not exactly the same



JeffConnect Training Programs

- Provider training
 - Mandatory and optional modules
- Telehealth facilitator program
- Pre-health professional fellowship programs
 - PACU Ambassador & Virtual Rounds
- Medical student elective
- Resident elective
- Fellowship programs for providers and telehealth facilitators
- CME including Physical Exam Modules
- Center for Digital Health & Data Science
- Telehealth Boot Camp
 - “Personalized” or institutionally tailored programs
- Consulting Services
- National Center for Telehealth Education and Research (NCTER)

NEJM
Catalyst

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www.jefferson.edu/NCTER



Jefferson™
HEALTH IS ALL WE DO



AMERICAN BOARD OF
TELEHEALTH

- Is a ***non-profit educational organization*** offering rigorous accredited telehealth training for health professionals and administrators across the continuum
- Is funded through the generosity of the ***Helmsley Charitable Trust***

Our Products

- **CORE:** This course is a comprehensive curriculum of the Clinical, Operational, Regulatory, and Ethics side of telehealth enabling the learner to develop knowledge of telehealth concepts for successful implementation and delivery across a broad spectrum of services.

- **TeleBehavioral Health:** This course addresses special populations such as children and older adults, as well as cultural competency. Content is adaptive to disciplines within the behavioral health care team and includes both acute and ambulatory perspectives.

- **TelePrimary Care:** This course engages the primary care professional in a focused curriculum that gives best practices via highly regarded experts in the field. Content is adaptive to the primary care discipline and focuses on the ambulatory care perspective.

Mission Statement

Accelerate excellence in telehealth through education and leadership

Vision Statement

A world equipped for the power of telehealth



Jefferson™
HEALTH IS ALL WE DO

The Most Important Innovation is Cooperation

So pause and ask, what's our real value

- We the “availabilists”
 - 24/7/365
 - With and without insurance
 - We work when people want us
 - We work with people who want us
- It is NOT
 - We do critical care
 - We do trauma
 - We do ultrasound
- Either we own it or someone else will