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Agenda

- I. Background
- II. Service Goals
- III. Benefits of Telemedicine
- IV. Clinical Services
- V. Service Offerings
- VI. Results
- VII. Q + A

Background

- What is telemedicine?
- Where is it used?
- Who uses it?
- When did it all begin?
- How does it work?
- What else should I know



What is telemedicine?

- “Telehealth” is the more **general** term and means the electronic transfer of medical information for the purpose of patient care. This includes clinical, educational and administrative uses and applications.
- “Telemedicine” is specifically the **use of these technologies to deliver patient care.**

Great Plains Telehealth Resource and Assistance Center

<http://www.gptrac.org/introduction/telehealth-and-telemedicine/services>

What is telemedicine?

- “Telemedicine”
 - Store and forward - asynchronous
 - Video conferencing – synchronous
 - Remote patient monitoring
 - Mobile Health - mHealth

Mid-Atlantic Telehealth Resource Center <https://www.matrc.org/what-is-telehealth>

Where is telemedicine used?

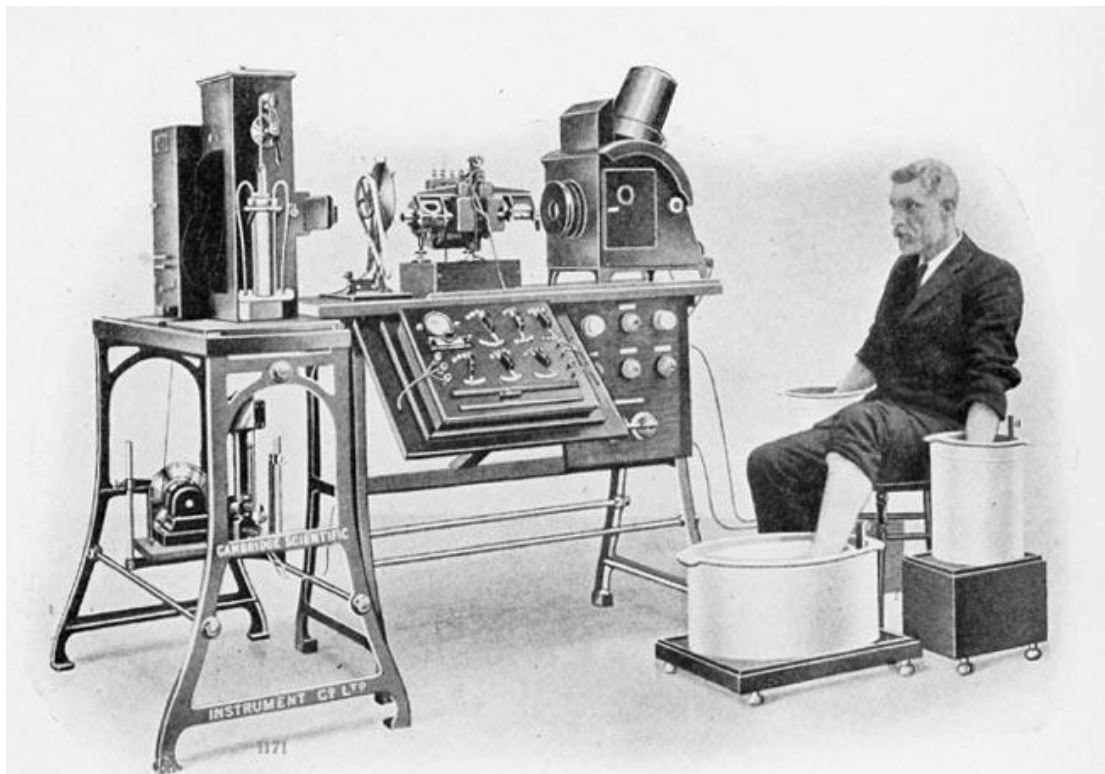
- Hospitals – ICU e.g. neuro for CVAs, radiology
- Schools – colleges e.g. shared practitioners
- Prisons – avoid ED transfers
- Stores – sore throats (Giant, Kroger's, etc.)
- Athletic events – orthopedists, cardiologists, etc.
- Home care – remote monitoring e.g. CHF
- Outpatient clinics – access specialists
- Private medical offices – follow up visits e.g. rural pediatric endocrinologist
- Assisted Living – changes of condition
- Skilled Nursing Facilities – all-call, change of condition, specialists
- Space station – monitoring and acute conditions (US for knee pain)

Harvard Review <https://hbr.org/2017/07/how-nasa-uses-telemedicine-to-care-for-astronauts-in-space>)

Who uses telemedicine?

- Acute illness (mild and severe)
- Chronic disease management
- Follow up (avoid long trips, easier for elders)
- Pre-op evaluations
- Scheduled exam (e.g. annual physical)
- Sports physicals
- Sports injuries

When did it all begin?



PHOTOGRAPH OF A COMPLETE ELECTROCARDIOGRAPH, SHOWING THE MANNER IN WHICH THE ELECTRODES ARE ATTACHED TO THE PATIENT, IN THIS CASE THE HANDS AND ONE FOOT BEING IMMERSED IN JARS OF SALT SOLUTION

When did it all begin?

1924 Radio News “The Radio Doctor – Maybe!”



- 1926 Experimental aerial medical services commenced in rural Australia in 1927 an injured miner was transported by air

When did it all begin?

- 1948 radiologic images sent 24 miles between Philadelphia and West Chester, PA
- 1959 Univ of Nebraska used two-way interactive television to transmit neurological exams across campus to medical students
- 1960s U.S. Indian Health Service, NASA, and the Lockheed Company—joined in sponsoring STARPAHC (Space Technology Applied to Rural Papago² Advanced Health Care), which tested satellite-based communications to provide medical services to astronauts and to residents of an isolated reservation.
- 1964 Norfolk State Hosp (112 miles away) speech therapy, neurological examinations, diagnosis of difficult psychiatric cases, case consultations, research seminars, and education and training.
- 1965 Ship-to-shore transmission of (ECGs) and x-rays

When did it all begin?

- Skilled Nursing Facilities
 - Boston Nursing Home Project 1979 Brandeis University
 - Zelickson and Homan 1997 described the use of “store and forward” video telemedicine (telemedicine involving the forwarding of stored videotaped patient interviews to clinicians at other locations) to effectively meet the dermatology needs of SNF
 - 2019 at least six providers, hundreds of facilities, thousands of patients/residents covered

Service Goals

- Transform the delivery of care in nursing homes through telemedicine solutions
- Enable nursing homes to practice advanced on-site care with easy-to-use, state-of-the-art technology
- Reduce potentially avoidable hospitalizations and optimize resident care in nursing homes

Benefits of Telemedicine

- Allow fragile nursing home patients to be treated in place
 - Improve resident/patient experience
- Efficiently treat and follow-up with nursing home patients
 - Improve clinical outcomes
- Save costs for at-risk providers
- Become preferred providers by efficiently providing additional services
 - Improve satisfaction for referral sources
- Reduce overall costs for healthcare system

Clinical Services

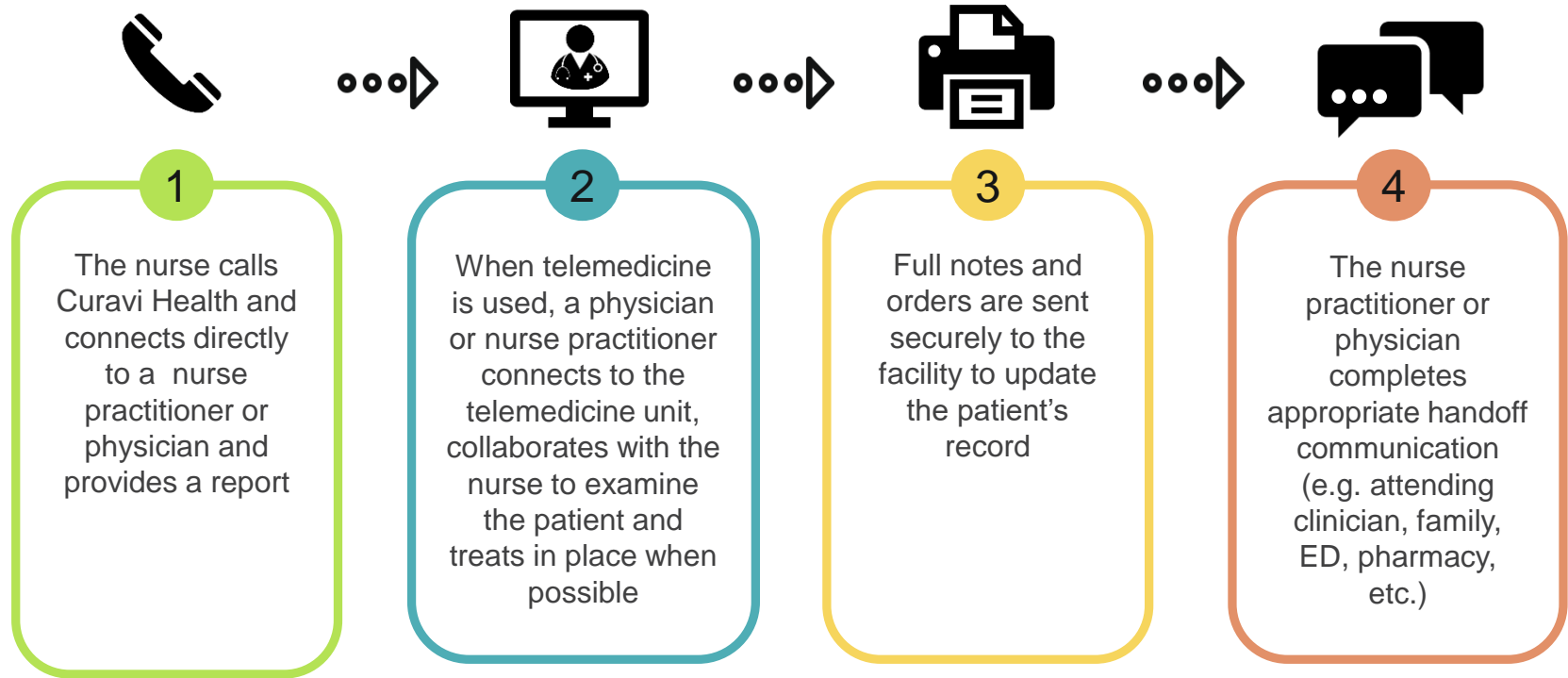
- Direct access to a nurse practitioner and/or physician from 6 PM to 6 AM, Monday through Thursday and from 6 PM on Friday to 6 AM on Monday
- 24-hour coverage during major holidays
- Collaboration with attending clinicians
- Ongoing clinical support from our dedicated Clinical Services Division



Clinical Service - Coverage Hours

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
6:00 AM	Not Covered						
7:00 AM							
8:00 AM							
9:00 AM							
10:00 AM							
11:00 AM							
12:00 PM							
1:00 PM							
2:00 PM							
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4:00 AM							
5:00 AM							

Clinical Services - How it Works



Wide Range of Offerings

Capability	Curavi's Current Offerings
• “All calls” capability	✓
• Change of condition	✓
• Bring Your Own Provider	✓
• Geri-psychiatry	✓
• EKG	✓
• Specialty	✓
• Advanced Care Planning (in pilot)	✓
• Curavi On-The-Go (in pilot)	✓
• PCC Integration (in pilot)	✓

The CuraviCart

State-of-the-art and simple-to-use with all the tools needed for utilization, including:

- Pan/tilt/zoom camera
- Wound/derm camera
- Bluetooth stethoscope
- 12-lead EKG system



All-Calls Model

Curavi can be the after-hours provider for clinical needs – **“No Call is Too Small”**

Call Curavi For:

Admission orders verification

Therapy consultation requests (PT, OT, Speech)

Diagnostic studies (e.g. radiology, laboratory tests): ordered, reviewed and/or responded to


Family Concern(s) such as code status determination

Medication: New Starts/Refills/Clarification

Non-Medication nursing treatments

Death confirmation (not completion of death certification)


EKG – ~1-hour Cardiologist Final Read




WELCOME

To the Curavi Cart for UPMC Senior Communities


Curavi Hours
Mo-Su Open 24 Hours



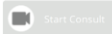
Steve Menke
On Call




Silver Acres Providers Hours
Mo-Th Closed
Fr Open 24 Hours
Sa-Su Closed



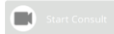
Your Provider
Unavailable
Service will resume
Fri 8/11 12:00 AM



Quality Care Hours
Mo-We Closed
Th Open 24 Hours
Fr-Su Closed




Your Provider
Unavailable
Service will resume
Thu 8/10 12:00 AM




see more

Specialty Consult



Curavi Support 1 888-SCURAVI | [Submit system report](#) | [Enter Training Mode](#)

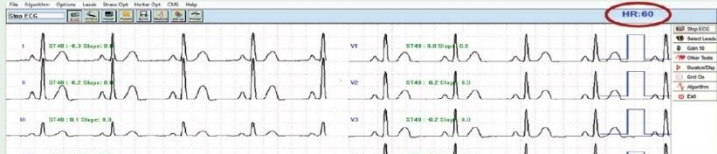
 EKG

Consult ID#: 10938


Prepare for software

READ THE FOLLOWING INSTRUCTIONS BEFORE STARTING THE EKG:

1. After you press the start button, the EKG software will automatically open
2. Check that it's receiving data and a heart rate is present



3. Once satisfied, press the "SAVE" button



In PA and OH, median 1 hour EKG final read from a cardiologist between 8 am – midnight 7 days a week

Advance Care Planning (ACP)

- ACP is a fundamental approach to assessing care plan goals, providing care matched to resident's preferences, and can significantly reduce PAHs
- Integrated MIDEO™ (My Informed Decision on VidEO) from Institute on HealthCare Directives into CuraviCare
- ACP conversations are carried out via the CuraviCart and facilitated by either facility staff or a Curavi tele-presenter
- Visits are conducted following each admission/re-admission
- Payment for this approach is derived from the Medicare Physician Fee Schedule (PFS) and uses CPT E&M codes 99497 and 99498 (time-based visits)



The Next Generation: Curavi Cart Capabilities “On-The-Go”



Patient /
Resident



Any setting
(home, etc.)

CuraviOTG - Mobile Point of Service Care

Critical Features

- Wi-Fi or cellular connectivity
- Diagnostic instruments for evaluation and management of various clinical situations
 - Bluetooth stethoscope
 - Exam camera
 - Thermometer
 - Pulse Oximeter
 - Blood pressure monitor
 - Glucometer
 - Otoscope
 - 6 channel/4-lead EKG
 - Battery lasting 9 hours



Pilot/prototype version. We anticipate updates in engineering, design and software

Results

- Over 24,000 Episodes
- Approximately **96%** of telemedicine consults **are treated in place***
- Approximately **40%** of telemedicine consult **directly avoid a hospitalization***
- Saving: **transportation costs**, **readmission costs**, **reimbursement**, **loss of revenue**, **staff time**
- Over 7,600 avoided hospitalizations

➤ **\$30M+ in revenue retention for Skilled Nursing Facilities**

*Historical Curavi only. Based on physician attestation that consults resulted in avoided admission

Q & A



Thank you!

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