

Telehealth at UW Health ... and beyond

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Project Echo for Pediatric Care 2018-2020

The Current State of Telehealth

July 18, 2019

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Provided by the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP)

Intended Audience:

Pediatric emergency care professionals

Objectives:

As a result of this educational regularly scheduled series, learners will be able to:

1. Utilize new skills and guidelines determined to be safe for children when accessing pediatric trauma.
2. Identify proper tools and standardized practices in order to improve the diagnosis and treatment of pediatric patients.
3. Define roles and responsibilities of team members who triage pediatric emergencies in order to identify communication strategies that result in effective patient care.

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Benjamin Eithun, MSN, RN, Coordinator	No relevant financial relationships to disclose	No
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Thomas B. Brazelton, MD, MPH, Presenter	No relevant financial relationships to disclose	No

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Follow the instructions below, and contact us at projectecho@surgery.wisc.edu with any questions.

1. Create account with the UW Interprofessional Continuing Education Partnership

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2. During the live presentation, and in the follow-up email, you will be provided a code. Text that code to a number we provide you, using a cell phone associated with your account.

Text POSWAY to 608-260-7097

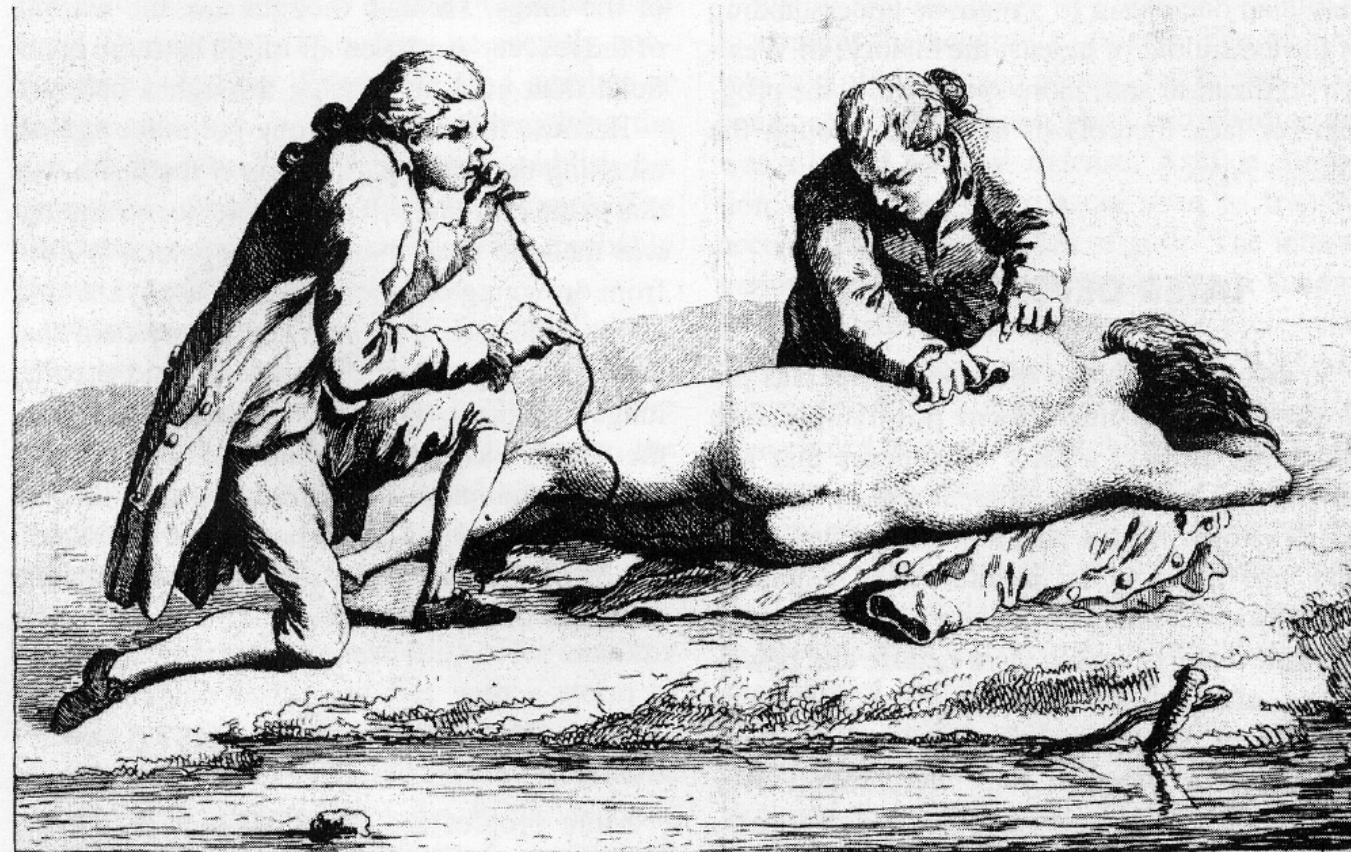
(save this number as **ECHO Credit**, it will never change)

3. All done!! Log onto ICEP to view or print your credit letter.

1750s Tobacco Resuscitator Kit



The Dutch Method of Resuscitation



The “Fumigator”

Maatschappij tot Redding van Drenklingen, 1767, (the Society for the Rescue of Drowned Persons)

The past has caught up



Article from February 1925
cover of *Science & Invention*

Not “the future” anymore



The Jetsons, ABC, 1962

Today



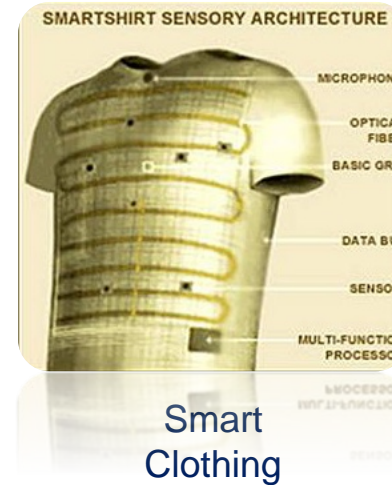
New technologies



Wearable Sensors



Point of Care Wound Assessment Device



Smart Clothing



Bringing the lab home



GPS tracking and communications



Motion Analysis and Action Detection Technologies

Health Care Reform/PPACA
Economic Downturn

Emerging Enabling Information
Communication Technologies

Need for more Access to Care

An Aging Population/Baby Boomers

Critical Shortage of Healthcare Providers

EHR Adoption/HIE

Meaningful Use

PCMH

ACOs

A Time for Telemedicine & HIT

THE
PERFECT STORM

Slide credit: Alverson, D. (2012, March 21). *Healthcare in a Perfect Storm*, Univ. of New Mexico Center for Telehealth and Cybermedicine Research & original book credit to Sebastian Junger

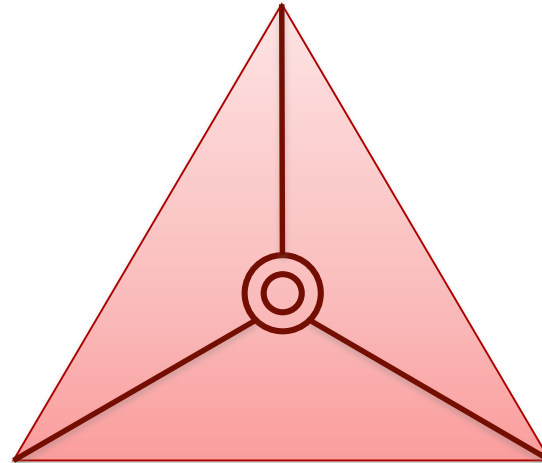
Telemedicine & Telehealth

- The convergence of (1) high tech, (2) medical care and (3) access for patients to the system
- Disruptive
- Innovative
- Immediate
- “www.” = “Wild Wild West”
 - Few laws, little regulation, lots of money & cowboys and a few land barons

Triple Aim & Telehealth

Population Health

- Chronic disease management
- Focus on patients that need attention
- Increase geographic reach



Experience of Care

- Reduce travel for patient
- Increase access & patient satisfaction
- Online interactions

Per Capita Cost

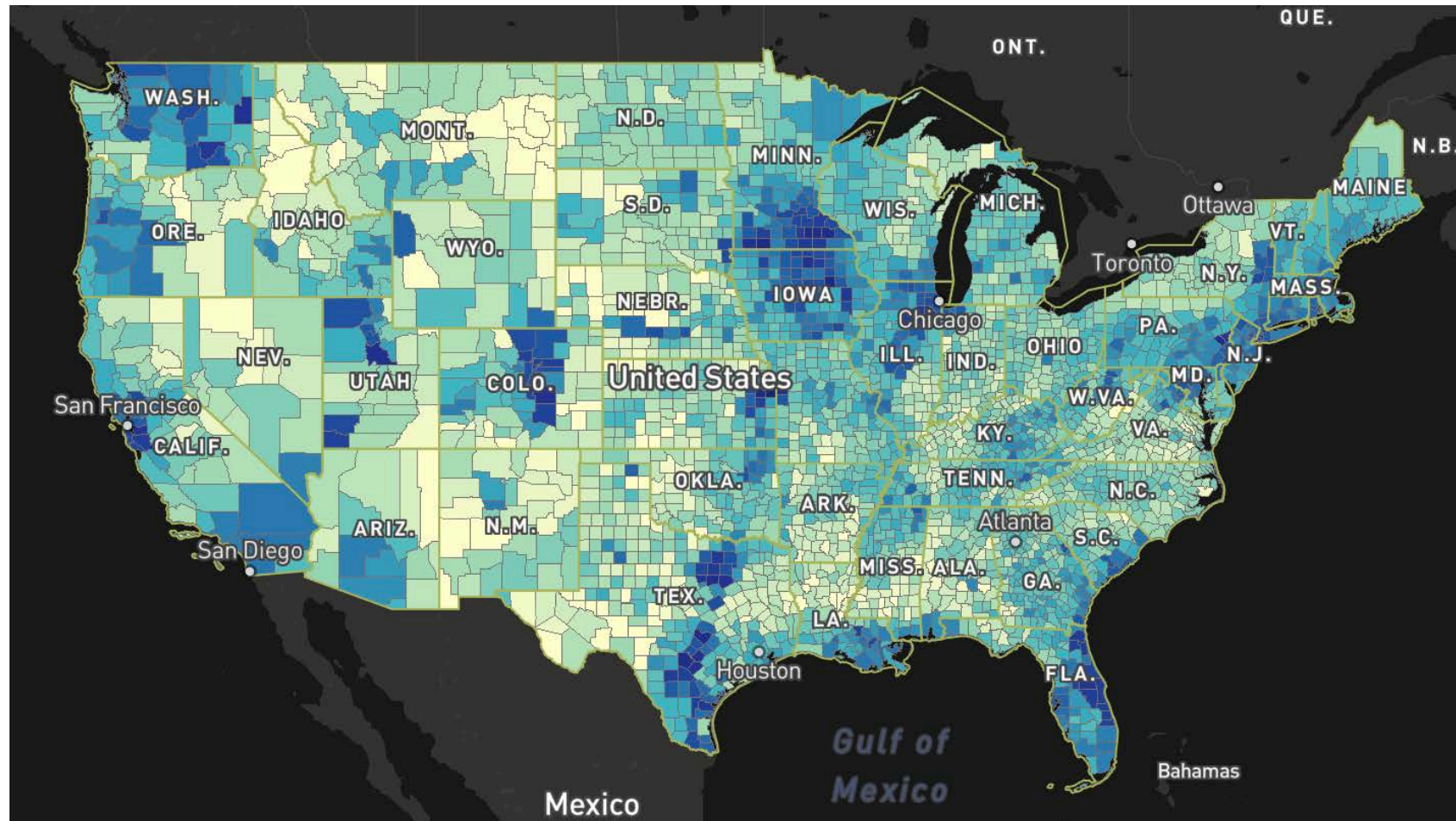
- Use scarce resources effectively
- Avoid unnecessary transfers
- Decrease readmissions

This should be easy...

**BEST
BUY**



... the infrastructure is there ...



... but what about:

- State licensure
- Insurance
- Credentialing
- Registration
- Scheduling
- Information exchange
- Documentation
- Order transmittal
- Results routing
- Billing
- Reimbursement
- Security
- IT Support



Squeeze to Juice Ratio Continuum



Squeeze
Juice



High

Low



UWH Telehealth: Current State Programmatic Review

Inpatient & ED	Ambulatory
eICU ¹ – UWH & Regional Presence	WI Dept. of Corrections Telemedicine Visits ¹
Telestroke ¹ – UWH & Regional Presence	On-Demand Urgent Care ¹
TAC Video Consults ¹	RNCC Scheduled Video Visits ¹
SAH NICU Teleconsults ¹	RN Health Advocate Scheduled Video Visits ¹
UWH Rehab Hospital Video Consults ¹	Teleophthalmology ²
	e-Visit: Urgent Care ²
	e-Visit: Rheumatology ²

Types of Communication:

- ¹**Synchronous** – A real-time video interaction between a remote patient and a provider who is located at an office, clinic, or other qualifying location
- ²**Asynchronous** – An online interaction between a patient and a health care provider using a system that supports the secure exchange of health care information (i.e. ‘store and forward’ functionality)

Full list of programs with description included within the PDF document: UW Health Telehealth Current Services – April 2019

Inpatient and ED

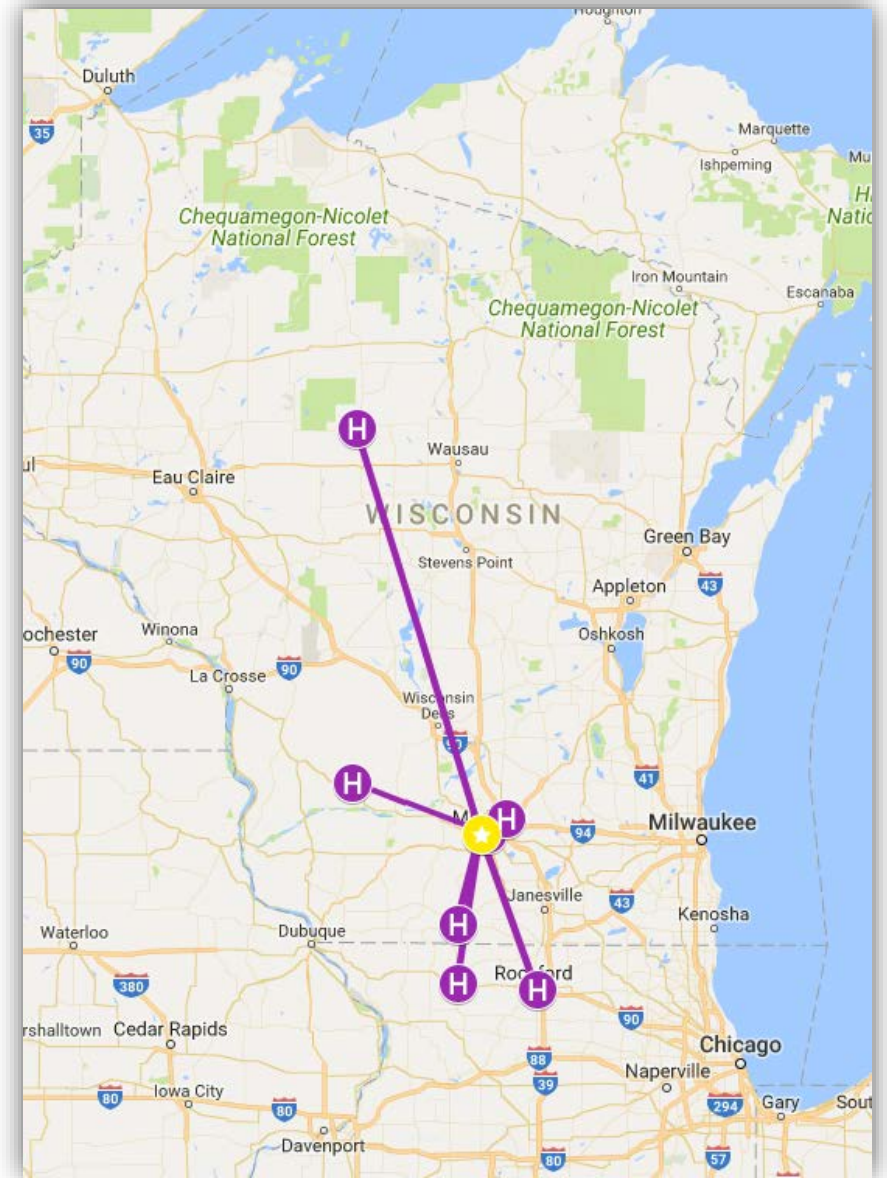
eICU

Current State

Purpose: Provide continuous, 24/7 observation and care to patients in regional and UWH inpatient units. eICU monitoring supports early identification of health complications (extubations, falls, etc.) and overall increases local hospital capacity to care for higher acuity patients (reduce transfers to University Hospital). Current sites include:

- FHN Memorial Hospital - Freeport
- Monroe Clinic Hospital
- Aspirus Medford Hospital
- The Richland Hospital - Richland Medical Center
- SwedishAmerican Medical Center - Rockford
- UW Health University Hospital – Neuro ICU (B4/4)
- UW Health University Hospital – TLC
- UW Health at the American Center

96 total beds monitored



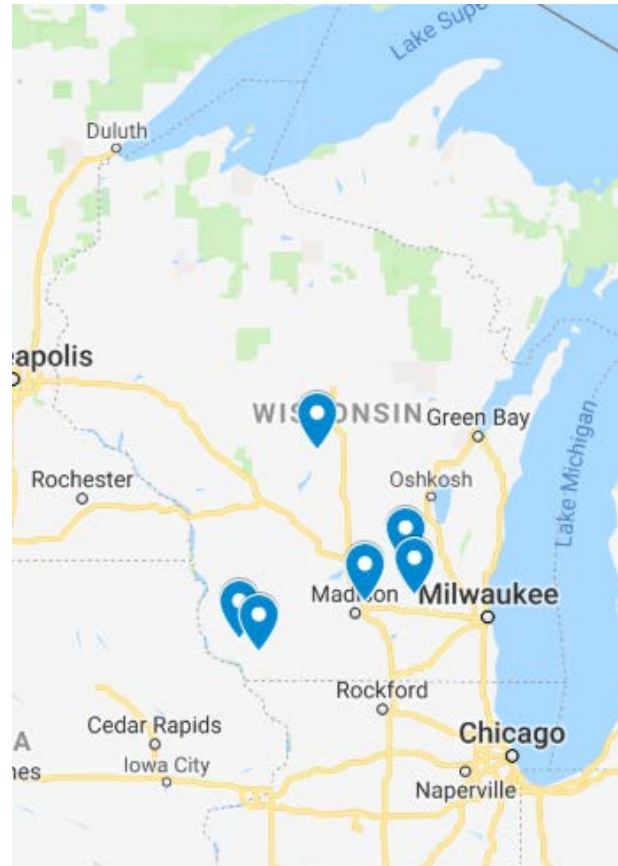
Telestroke Current State

Purpose: Provide expert stroke care to patients located at Emergency Departments throughout the region and TAC; support regional hospitals in caring for stroke patients and reduce patient transfers to UH and Meriter hospitals

Technology: American Well (Avizia) Telemedicine Cart

Program Data (Calendar Year 2018)

Total Telestroke Consults	530
% Patients Transferred to UWH or Meriter	36%



Current Sites:

- Aspirus Riverview- Wisconsin Rapids (4/1/2017)
- Beaver Dam Community Hospital (8/1/2011)
- Beloit Health System (9/15/2014)
- Grant Regional Health Center- Lancaster (8/13/2012)
- Southwest Health Center- Platteville (6/20/2013)
- UW Health at the American Center (8/1/2015)
- Watertown Regional Medical Center (3/1/2009)

TAC Video Consults

Current State

Purpose: Allow UW Health specialists to provide non-urgent consults to UW Health patients at TAC

Technology: American Well (Avizia) Telemedicine Cart

Specialties Available –

- Acute Care for Elders (ACE)
- Anesthesia Pain
- Clinical Nutrition
- Dermatology
- Endocrinology & Diabetes
- Gastroenterology
- Hepatology
- Infectious Disease
- Integrative Medicine
- Internal Medicine
- Learning Center
- Neurology Critical Care
- Neurosurgery
- Nursing – Coordinated Care
- Nursing – Patient Education
- Nursing – Transitional Care
- Pain Anesthesia
- Pediatric Critical Care
- Psychiatry
- Pulmonary/Medicine Critical Care
- Transplant Medicine

Program Volumes (Calendar Year)

2018	584
2017	369
2016	260

SAH NICU Teleconsults

Current State

Purpose: Utilize telemedicine to support the new Level 3 NICU operations at SAH Rockford and provide timely access to pediatric medical and surgical specialties

Technology: American Well (Avizia) Telemedicine Cart

Scope of Services

Urgent (24/7) & Non-Urgent (Scheduled)

- Cardiology
- General Surgery
- Neonatology
- Neurology

Non-Urgent (Scheduled) Only

- Gastroenterology
- Genetics
- Pulmonary
- Urology

***Anticipated Go Live week of April 15, 2019**

Technology

Inpatient & ED Telehealth

eICU – Hardwired inpatient rooms or telemedicine carts to support swing space



Patient Testimonial Video:

<https://youtu.be/7vF7RHeipdc>

Video Consults – American Well (Avizia) Telemedicine Cart with Vidyo video conferencing

- Built in Wifi
- FDA Class I Registered Medical Device
- Interoperable with telemedicine peripherals including examination camera and stethoscope

Used for Telestroke at all sites and Video Consults to TAC, SAH NICU & UWH Rehab Hospital



Ambulatory

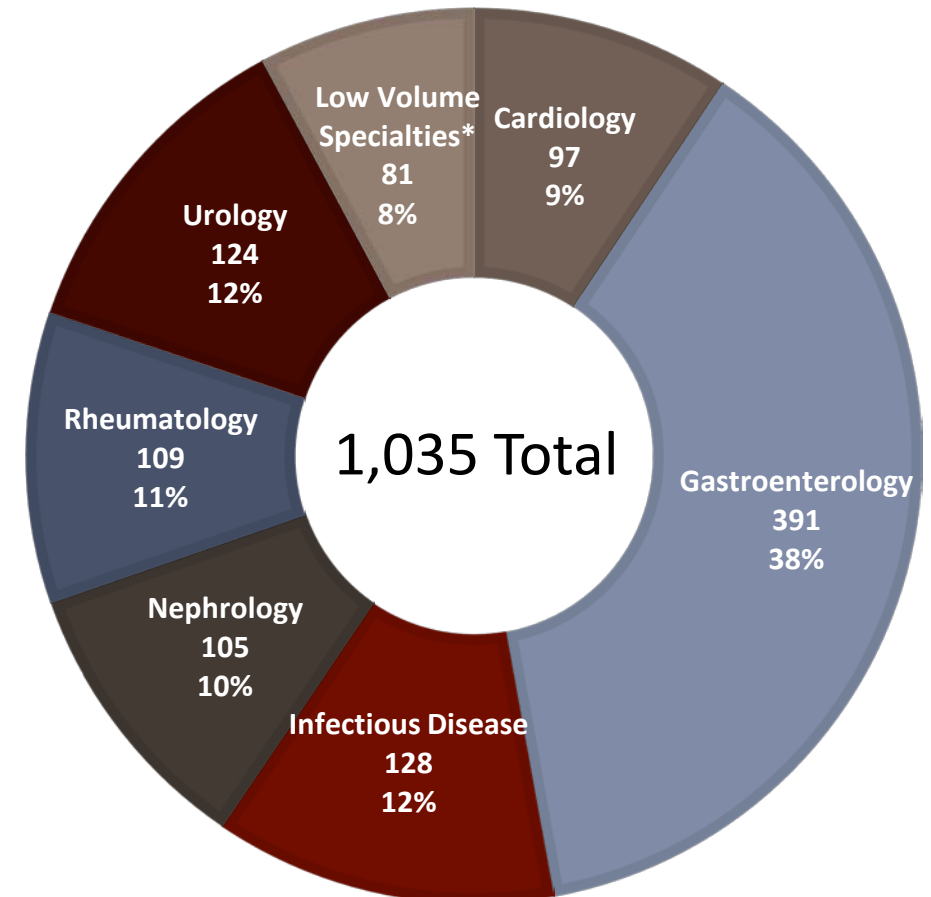
DOC Telemedicine Visits

Current State

Purpose: Reduce transportation of secure patients to UW Health facilities through use of video for outpatient care

Technology: American Well (Avizia) Telemedicine Cart or Polycom Video Conferencing equipment within DOC facilities

CY 2018 TELEMEDICINE VOLUME



**Low Volume Specialties includes: Allergy, Anesthesiology, Cardio Congenital, Endocrinology, Neurology, Pulmonary, and Rehab Medicine*

Urgent Care Video Visits

Current State

Purpose: Provide 24/7 urgent care to patients through video using their computer, tablet or smartphone devices

Technology: UW Health Care Anywhere and Health Link

CY 2018 Data



Care Anywhere
VIDEO VISIT

URGENT CARE 24/7

No appointment necessary
Never pay more than \$49

Use video visits for:

- Cough
- Runny nose
- Sore throat
- Eye infection
- Rash
- Fever
- Headache
- Allergies

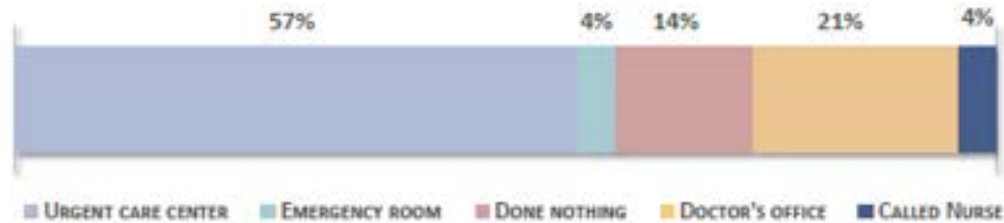
- Painful or difficult urination
- Nausea
- Vomiting
- Diarrhea
- Sprain
- Joint pain

uwhealthcareanywhere.org

Care Alternative Options: Distribution of Patient Responses - CY 2018

"If you had not used online care today, where would you have gone instead?"

Survey Response Rate: 69%



RN Health Advocate Scheduled Video Visits

Current State

Purpose: Provide increased access to RN Health Advocate for patients served through the Employer Services program using scheduled video visits instead of drop-in office hours at various facilities

Technology: UW Health Care Anywhere and Health Link; MyChart self scheduling is enabled

Eligibility: Services are available to employees at participating organizations who have Quartz insurance coverage and a UWH PCP

Participating Organizations:

- Deforest School District
- Oregon School District
- Middleton Cross Plains School District (go live 5/1/19)



RNCC Scheduled Video Visits

Current State

Purpose: Provide RN Care Coordinators (RNCC) the opportunity to connect to their assigned patients using video. Key benefits identified by the RNCCs include but are not limited to:

- Eliminate transportation barriers for patients and informal caregivers
- Observe and assess the patient's home environment
- Visualize patient concerns such as wound or mobility
- Complete medication reconciliation

Technology: UW Health Care Anywhere and Health Link; MyChart self scheduling is enabled for patients once the initial video visit is completed

Sites Currently Live	Wave 3 – April 30
Arboretum	20 S. Park
Cross Plains	Beaver Dam
East	Cottage Grove
Fort Atkinson	Deforest Windsor
Mount Horeb	Fitchburg
Northeast	Portage
Odana Atrium	Stoughton
Oregon	Sun Prairie
Verona	Union Corners
West	University Station
West Towne	
Wingra	
Yahara	

Teleophthalmology

Current State

Purpose: Offer same-day access diabetic retinopathy screening to UWH Primary Care patients with a diagnosis of Type 1 or Type 2 diabetes and without severe diabetic retinopathy (with and without macular edema)

- Service began August 2018 and is available to patients with PCPs at East & Yahara Primary Care

Technology: Retinal Cameras in Radiology departments co-located with East & Yahara Primary Care Clinics

Lifetime Program Data (8/28/18 – 3/31/19)	
Total Patients Screened	140
% Patients with Identified Diabetic Retinopathy	18.71%
% Patients Recommended for Follow-up with Ophthalmology (8/28/18 – 3/31/19)	
Urgent (1-2 months)	4%
Non-Urgent (4-6 months)	12%

Urgent Care e-Visits

Current State

Purpose: Avoid unnecessary urgent care visits and provide an asynchronous, convenient option for patients to receive care

Technology: Patients submit condition-specific e-Visit questionnaires through MyChart

Patient must meet the following eligibility criteria:

- Be at least 18 years old
- Have Quartz insurance coverage
- Must have a UWH PCP and been seen within the last 3 years

e-Visits available for:

- Low Back Pain
- Red Eye
- Cough
- Sinus Infection
- Diarrhea
- Painful/Frequent Urination
- Vaginal Discharge

UWH Telehealth Roadmap

UW Health Care Anywhere: Roadmap



1. Urgent Care On-Demand

- 24/7 service launched September 2017



2. Scheduled Visits – Care Coordination

- Connect to our medically-homed patients to provide chronic care management
- Use video visits to improve outcomes and reduce cost of care
- Launch use cases 2018 and beyond

COMING SOON

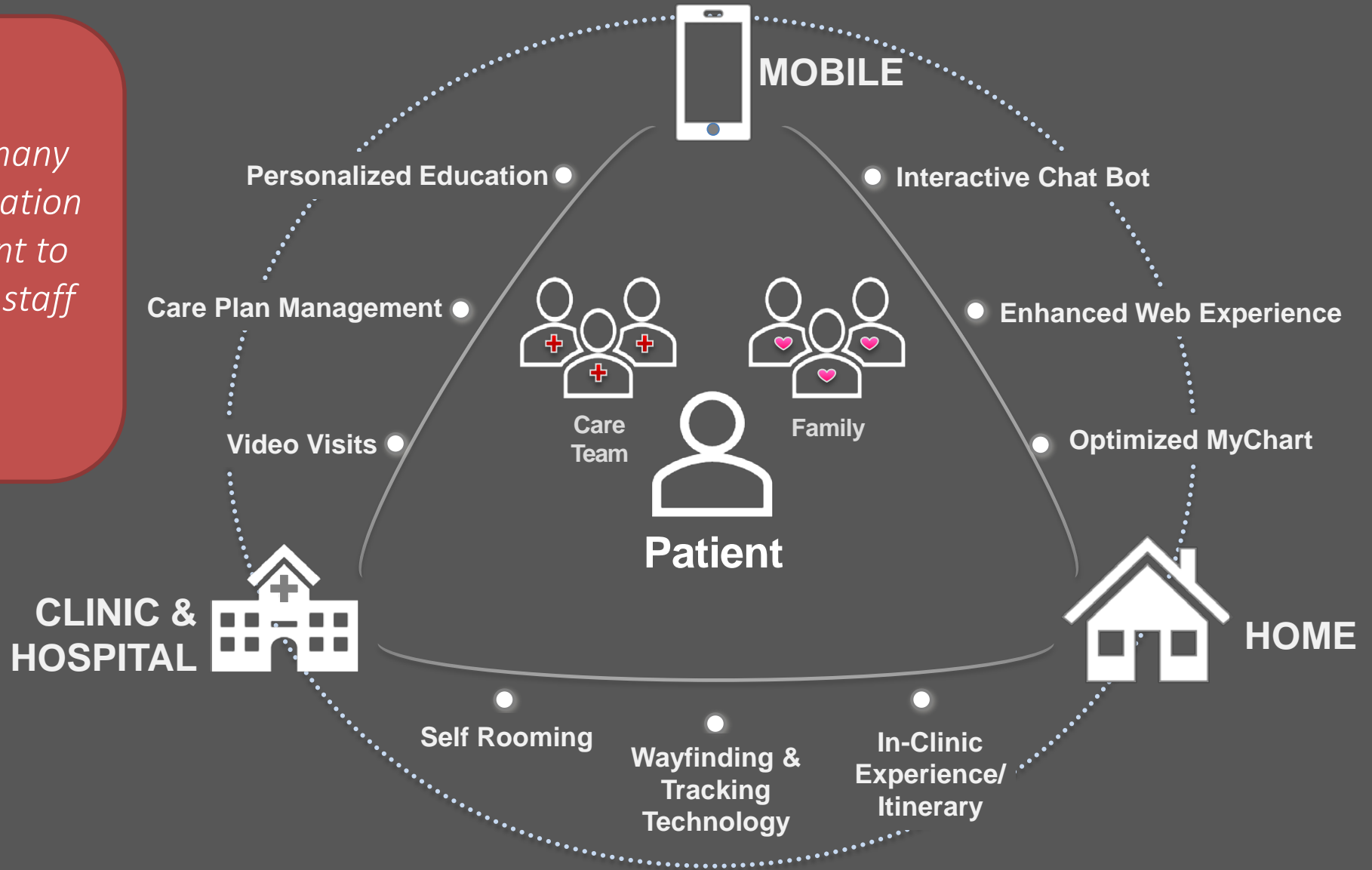
3. Scheduled Visits – Primary & Specialty Care

- Offer additional access and enhance patient entry point
- Expand regional presence and reduce drive time for patients and providers
- Launch use cases 2019 and beyond

What else to consider for the future?

A Patient-Centric Digital Ecosystem

In addition to video visits, many technologies under consideration for East Campus are relevant to our Primary Care clinicians, staff and patients





References

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- <http://www.telehealthresourcecenter.org/>
- The Advisory Board Service Line Strategy
Advisor: 2018 Telehealth Industry Trends