



A Virtual Care Journey: Expanding to an International Footprint

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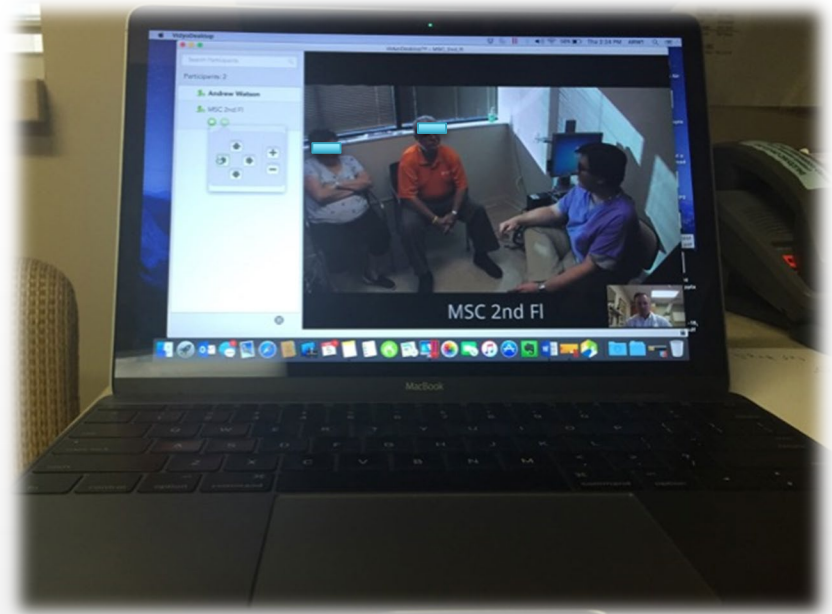
Senior Medical Director, UPMC Insurance Services Division

Senior Medical Advisor, UPMC Enterprises

Past-President, American Telemedicine Association



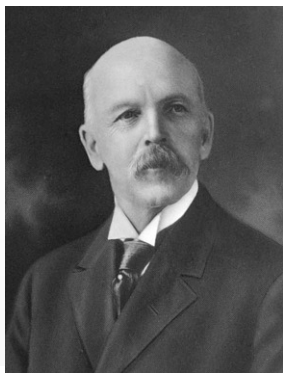
WG Watson, MD
World War 2 - 1943 – South Pacific



AR Watson MD
November 4, 2015 – Pittsburgh PA

Healthcare has come a long way

Family of Physicians



DR. WILLIAM W. MAYO, HOURS 1:30 TO 4 P. M. TELEPHONE NO 252.
DR. WILLIAM J. MAYO, HOURS 8 TO 9 A. M., 1:30 TO 4 P. M. TELEPHONE NO. 112.
DR. CHARLES H. MAYO, HOURS 8 TO 9:30 A. M., 1:30 TO 4 P. M. TELEPHONE 114.
DR. A. W. STINCHFIELD, HOURS 8 TO 9:30 A. M., 1:30 TO 4 P. M. TELEPHONE 115.
DR. C. GRAHAM, HOURS 11 A. M. TO 12 M., 7 TO 8 P. M. TELEPHONE 124.
SUNDAY HOURS 11 A. M. TO 1 P. M.
OFFICE CORNER ZUMBRO AND MAIN STREETS. TELEPHONE 211.

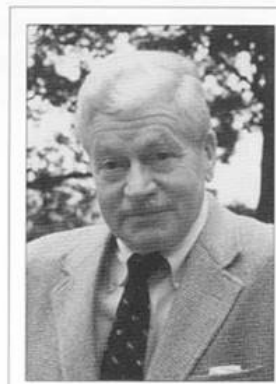
ROCHESTER, MINNESOTA.



Charles M. Watson



James R. Watson



William G. Watson

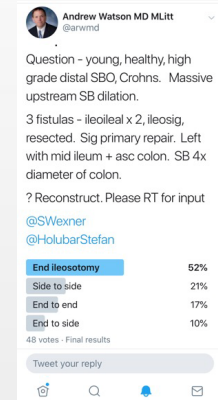


Charles G. Watson

The digital era - a new world order



!! My patient found a live donor on Facebook !!
(clinic Nov 2018)



Implications - The context of our landscape is crucial to understand how telemedicine is safe and effective.

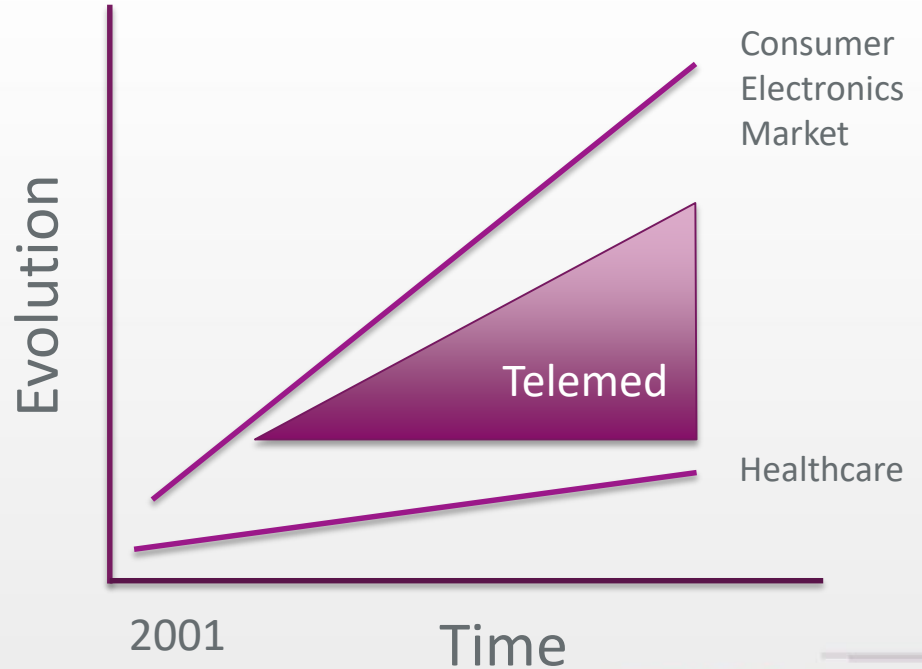
Harness consumer electronics - and the gap



Are..

- Wirelessly Connecting
- Training
- Speech enabling
- Video linking
- Analyzing

OUR VERY PATIENTS



Surgery telemedicine menu of services

Updated
May
2024

New
Patients

- Total telemedicine pathway (TTP) or video – new ptx
- eConsults – asynchronous 2nd opinions (B-B)
- Tele-triage (routing of urgent, on-demand, same day)
- 2nd opinions – asynchronous written reports (B-C)

Intra-op
Inpatient

- Intra-op surgical telementoring
- In-patient tele-rounding

Post-op
Long-term

- Post-op video visits
- Tele-monitoring of patients (pre and post op)
- Long-term follow-up clinics

Total Telemedicine Pathway (TTP)

Mission & Vision

Mission

New surgical patient access and clearance is conducted entirely with telemedicine.

Vision

Empowering surgeons to expand their reach and access to new patients, from any location, using a telemedicine pathway for access and clearance.

Why Should Surgeons Leverage TTP?

➤ Agile and efficient way to expand surgical referral **networks** and revenue without travel, including out of state*

➤ **Patients** are more familiar with telemedicine. We must recognize this and evolve towards new surgical patients

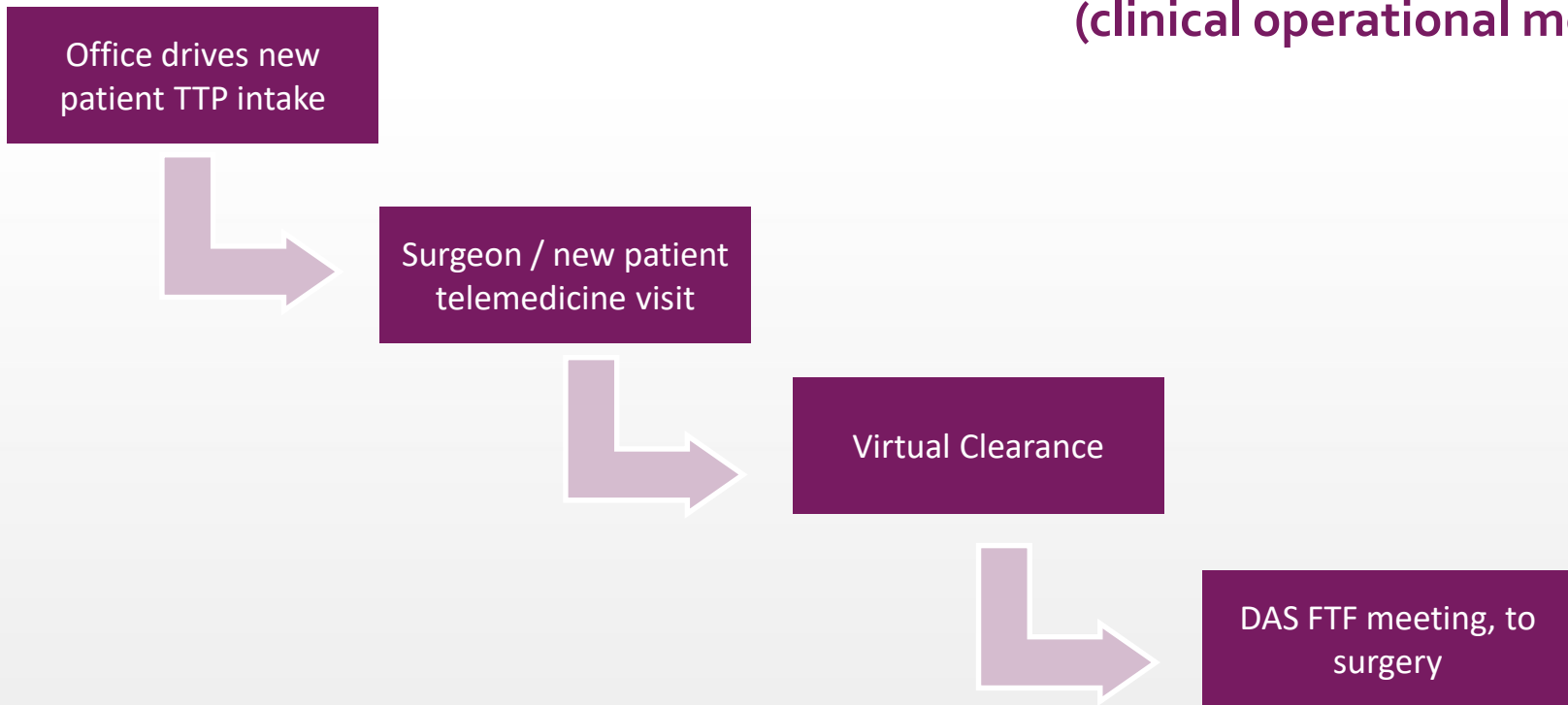
➤ Virtual **competition** is inevitable, we need to play defense (WVU, CCF)

➤ Physicians and patients do not always wish to **travel** to clinics.

➤ **Telemedicine** is expanding in both of clinical experience and technical capabilities

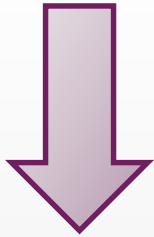
* We need licenses in states we plan to target

TTP Pathway (clinical operational model)



Center for Perioperative Care

The Center for Perioperative Care (CPC) is dedicated to improving the coordination of perioperative care for all surgical patients and improving clinical outcomes in both outpatient and inpatient settings

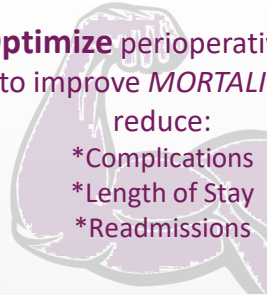


Reduction of same day surgical delays and cancellations

Optimize perioperative risk to improve *MORTALITY* &

reduce:

- *Complications
- *Length of Stay
- *Readmissions



Facilitate shared decision making based on **risk model**



Improves communications between various patient care teams

Global coordination of all Anesthesiology Services

including consents for Cardiac, Acute Pain, Chronic Pain, Critical Care, Difficult Airway, Neuro, Echo, & more



Improves adherence to Anesthesia Preoperative Testing Guidelines for appropriate care and cost avoidance

We are here to serve you and your patients, whenever you need us

UPMC LIFE CHANGING MEDICINE

Stakeholder Benefits



➤ Surgeon

- Increased case volumes / revenue
- Increase division geographical reach
- Decreased travel to expand geography
- Improved satisfaction

➤ Anesthesia

- Expand high-value CPC care
- Increased efficiency
- Increased patient care planning
- Ability for E&M billing

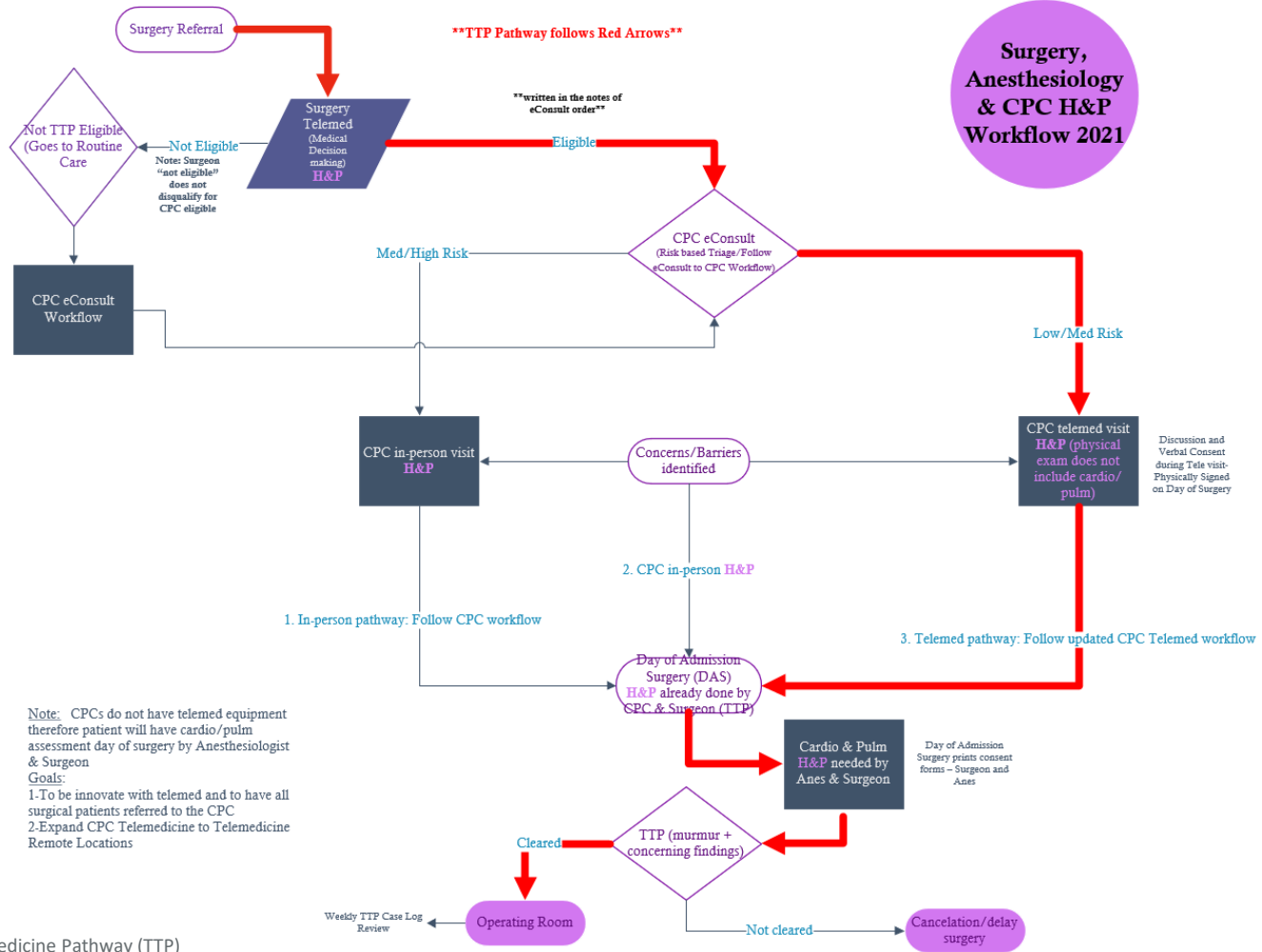
➤ Patient

- Rapid access
- Decreased cost of travel and stress of travel
- Decreased travel time, PTO, child care
- Increased satisfaction

➤ UPMC as a whole

- Offense - Increase HSD procedural revenue
- Defense – Stay ahead of virtual competition
- IDFS – Procedural centers of excellence
- Innovation in procedural care

Surgery, Anesthesiology & CPC H&P Workflow 2021



Note: CPCs do not have telemed equipment therefore patient will have cardio/pulm assessment day of surgery by Anesthesiologist & Surgeon

Goals:

- To be innovative with telemed and to have all surgical patients referred to the CPC
- Expand CPC Telemedicine to Telemedicine Remote Locations

Total Telemedicine Pathway (TTP)

TTP dashboard



View Current Selections ▾

TTP SmartPhrase Use

Patients with TTP SmartPhrase by Surgeon Office

237

TTP Patients with at least one Surgery

198

TTP Patients with a Scheduled CPC Appointment

Scheduled CPC Appointments

Number of Scheduled: 4

Number of Telemedicine: 2
(200.0% of scheduled)

TTP SmartPhrase Detail

Epic MRN	EMPI	Patient Name	TTP S#	Date
842944708	2821113	ADAMIAK, MEGAN	08/18/	
842115674	1910401	ALLEN GREEN, QUAYMIA...	11/01/	
742258843	22744...	ALSAMARRAIE, HENIN A	08/10/	
741952078	15719...	ALTMAN, LORI	02/15/	

Scheduled CPC Appointments	TTP SmartPhrase ...	TTP Dropouts
4	237	2

	Miles	Drive Time (hours)	Savings	CO2 Emissions
Average Patient Savings per Encounter (round trip)	281.1	5.1	\$167	112 kg
Total Patient Telehealth Savings (sum of Encounters)	125,374	2,279.5	\$74,482	50,150 kg

TTP SmartPhrase Usage by Provider

Provider Name	Count	% of Total
UNKNOWN	138	55.4%
YIP, LINWAH	41	16.5%
MOROCCO, BRITTANY G	31	12.4%
WATSON, ANDREW	22	8.8%
HARAN, CARRIE E	8	3.2%
RAMONELL, KIMBERLY M	7	2.8%
WHELAN, SEAN P	1	0.4%
WHITE, HANNAH N	1	0.4%

TTP SmartPhrase Usage by Department | TTP SmartPhrase Use by Date | TTP SmartPhrase Usage by Provider

Epic Activity after TTP

CPC Visits	Total Visits	PCP Visits
Total CPC Visits after TTP	Total Visits after TTP	Total PCP Visits after TTP
166	616	61
Total CPC Telemed Visits after TTP	Total Telemed Visits after TTP	Total Telemed PCP Visits after TTP
156	446	7
Total CPC Face-to-face Visits after TTP	Total Face-to-face Visits after TTP	Total Face-to-face PCP Visits after TTP
10	170	54

Surgical Activity after TTP

First Surgery

Primary Procedure	Count
COLECTOMY LAPAROSCOPIC	31
RESECTION LIVER	13
CHOLECYSTECTOMY ROBOTIC ASSISTED	11
CHOLECYSTECTOMY LAPAROSCOPIC	9
INSERTION PERITONEAL DIALYSIS CATHETER L...	9
RESECTION LIVER LAPAROSCOPIC	8
BYPASS GASTRIC ROUX EN Y LAPAROSCOPIC	7
CHOLECYSTECTOMY	7
THYROIDECTOMY TOTAL	7
LAPAROSCOPY	5
LOBECTOMY THYROID ISTHUSECTOMY	5

First Surgery	Second Surgery	Third Surgery
<p>First Surgery Risk</p> <p>174</p> <p>15 Intermediate</p> <p>9 High</p> <p>Low Intermediate High</p>	<p>Second Surgery Risk</p> <p>47</p> <p>5 High</p> <p>4 Intermediate</p> <p>Low High Intermediate</p>	<p>Third Surgery Risk</p> <p>14</p> <p>1 High</p> <p>Low High</p>

First Surgeon	Count	Second Surgeon	Count	Third Surgeon	Count
WATSON, ANDREW R	50	COURCOULAS, ANITA P	5	TOUSSI, AMR	2
TOHME, SAMER T.	4	TOHME, SAMER T.	4	TEVAR, AMIT D	1
GELLER, DAVID A	37	WATSON, ANDREW R	4	MEDICH, DAVID S	1
YIP, LINWAH	18	TESSLER, ROBERT A	3	RABINOVITZ, MORDEC...	1
TEVAR, AMIT D.	6	TOHME, SAMER T.	2	KALIN, MAHMOUD	1

Tele-round

The screenshot displays a Zoom tele-round interface. At the top, the browser address bar shows the URL <https://portal.video.upmc.com/join...>. The conference title is "Colorectal_Rounding" and it has 2 participants. The "Speaking" indicator shows "Tele_MUH10NSURGERY".

The left sidebar contains navigation options: Meetings, Contacts, Rooms, Dial out, and Call. The main area shows the conference details:

- Conference: Colorectal_Rounding
- Participants (2):
 - Andrew Watson (Moderator)
 - Tele_MUH10NSURGERY

The main video feed shows a person in a hospital room, with their face obscured by a white circle. The room contains medical equipment, including an IV stand and a monitor. The bottom control bar includes buttons for Speaker, Microphone, Camera, More, and Chat.

Digital Health Isn't Perfect

PHYSICAL EXAMINATION

VITALS: Blood pressure 94/68, height (!) 5" (12.7 cm), weight 125 mg By Mouth, mass index is 3,532.26 kg/m².

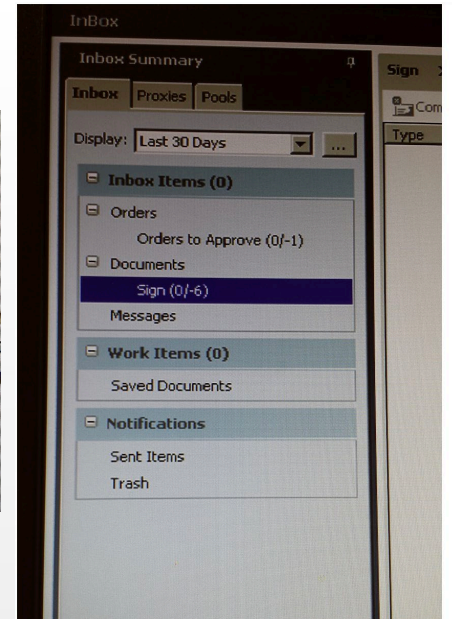
He misses his perianal abscesses, and the patient has no signs of deep soft tissue infection, and return over the next Monday if possible. He is to return with pain, multiple dental caries

ASSESSMENT

This is a 27-year-old man with complicated Crohn's disease who now has mid small bowel disease after having difficult perianal disease that was managed surgically 4 years ago.

PLAN

I had an extensive discussion with the patient as well as the _____ scrotum using telemedicine today. The plan is to perform exploratory laparoscopy, possible laparotomy next week. We will



Telemedicine patient selfie



Warren Buffett

- **“Only when the tide goes out do you discover who’s been swimming naked”**
- We are ready for digital / tele. It is here to stay (as we all know), especially with consumer electronics.
- Far beyond here to stay, telemedicine will revolutionize healthcare. What will your cell phone look like in 3 years?

Thank you

- @ARWMD
- Watsar@upmc.edu



Pittsburgh, PA