TELEMEDICINE: The Basics

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“Medical information exchanged from one site to another via electronic communications in support of healthcare.”
TYPES OF “TELEMEDICINE”

1. Real-time interactive consultation

2. Store and Forward

3. Remote monitoring

4. Case-based teleconferencing
TelePsychiatry

Contracted services with the Makah Nation and with PeaceIsland Hospital

TelePain

Grant-funded research project

TeleBurns

Newly initiated
No funding
No current billing
**TeleRadiology**
- 130 rural sites
- 8,000 studies/month
- Standard reimbursement

**TeleStroke**
- 8 rural hospitals
- Contractual agreements

**TeleDermatology**
- Triage program for CHCs
- Contractual agreement with CHPW (pilot)
Case-based Consultation and Continuing Medical Education (CME)

* weekly * multiple community sites * interdisciplinary team of specialists *

**Project ECHO Hepatitis C:**
1860 case consultations (Jan 2010)

**UW TelePain* Management:**
315 case consultations (Mar 2011)

**Project ECHO HIV/AIDS:**
132 case consultations (Jan 2012)

**Project ECHO MS:**
Sept 2014
Mental Health

MHIP - Mental Health Integration Program (2008)
55,000+ total patients in Washington
14,500+ provider consultations
200+ training and workforce development

Now adding to telepsychiatry component
Psychiatrist - Local Provider
Psychiatrist - Patient
Remote home monitoring in high-risk heart failure patients

Google Glass for medical student and resident training and for HMC ED Burns consultations

CellScope Oto collaboration & ENT
UPCOMING LAUNCHES

✓ Maternal-Fetal Medicine in Yakima, Arlington, and Bellingham
✓ Travel Medicine at Hall Health
✓ Concussion/TBI
✓ Project ECHO for ESLD
✓ Diabetes Care
✓ Vascular Surgery
WE DID IT! Thanks to a small army who got all of this together, my deepest appreciation to everyone involved.

I think Joseph started to cry at the end of the session when he found that the non-invasive breathing was going to work for him. He didn’t sleep last night worrying about everything from if the van would start (we have -10 below temperature here without the wind chill factor) to worrying that the doctor would say it’s a “no-go” on the external ventilation!

I want to thank the doctors for their patience and thorough explanations of everything. Thank you to everyone involved, from a mother’s heart. I probably will never meet most of you, but please know my eternal gratitude.

Happy Holidays to each of you for giving the gift of breathing to my son.
RECENT INNOVATIONS

BiliCam – Jim Stout, Shwetek Patel
mPOWEr – Heather Evans, Bill Lober
Gut Guru – Jasmine Zia
FUTURE TRENDS: NEW PLATFORMS

Apple Health Kit

Diagnostics
Fitness
Lab Results
Me
Medications
Nutrition
Sleep
Vitals

Dashboard

Calories Burned
467cal

Today

May 5 12 19 26
June 2

Sleep
Daily Avg: 7h 29m

Last Night

May 5 12 19 26
June 2

Heart Rate
Min: 53 Max: 125

68bpm

Today

May 5 12 19 26
June 2

Samsung SimBand and SAMI
Reimbursement Models

- Contractual Agreements
  - Each contract unique to players involved
- Membership
  - Pay set monthly fee and get 24/7 access
  - “Full-meal deal” vs “Ala Carte”
- Direct Access Models
  - Pay $35-80 up front for encounter
  - E.g., TeleUrgent Care with TelaDoc, MDLive, etc.
- Fee For Service (FFS)
  - Medicare, Medicaid (WA), many commercial payors
CHALLENGES

✓ Fee For Service Model
  • CMS requirements:
    • interactive vtc
    • patient in rural location*
    • patient in health care facility
    • limited CPT codes
    • specific eligible provider types
    • new remote monitoring for chronic care payment
    • does not pay for store-and-forward (except HI & AK)
  • Small facility fee for referring site (patient location): $24.63
Technology

• Exponential growth and development
• Selection, purchase, and standardization
Provider and/or Patient Perception

- Comfort/ease with technology
- Appropriate tech support available?
- Increased workload*
  - Only facility fee payment at referring site
  - No facility fee at consulting site to support admin and tech requirements
BENEFITS OF TELEMEDICINE

• “Right person, right place, right time”
  - Earlier consultation, diagnosis, & treatment with appropriate clinician
  - Improved quality of care, more efficient care, better continuity of care
  - Brings care to the patient…reducing travel cost, lost work time, and maintains family/community support
  - In-person referral only when appropriate
• Strengthen our state system of healthcare
  - Diffusion of best practices and innovation
  - Promotes evidence-based medicine
  - Supports rural providers, strengthen the provider community
  - Decreases professional isolation
  - Decrease wait-time for specialists for appropriate referrals
• Economically sustainable (CMS data)
• Patient Demand
To improve the health of the public

To achieve the “triple aim”:
- Improving the patient experience of care (including quality and satisfaction);
- Improving the health of populations;
- Reducing the per capita cost of health care
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