Telemedicine in College Health: Pre-travel consultations

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Objectives

1. To identify potential uses for telemedicine services within a clinical system focused on college health
2. To understand how to implement a telemedicine program
3. To understand reimbursement for telemedicine services
Purpose

• Our purpose is to ensure that clinicians providing health care to college students are aware that telemedicine services can be utilized.
Overview
Terminology

• Telehealth—larger umbrella including telenursing, telepharmacy
• Telemedicine=delivery of medical care
Types of Telehealth

- Asynchronous=Store and Forward, e.g., E-care
- Synchronous=Interactive in real time
- Remote monitoring=data gathered from devices stored in EHR
- Case-based teleconferencing
- Mobile health—uses mobile devices
Examples of use by specialty

- Radiology—half of all telehealth
- Dermatology
- Mental Health
- Stroke
- Burns
- Pain management
- Trauma
- Preventive health services (exercise, nutrition, weight, tobacco)
- Diabetes
- Prison Health
- Community Health Services, e.g., Extension for Community Health Outcomes (ECHO) at UW
Why Telehealth

- Access
- Cost of care in dollars
- Cost of care in patient time and travel
- Cost of care in facilities
- Lost work time
- Coordination of care & health outcomes

- Low-value in office visits
- Technologies becoming less expensive
- High mobile phone use
- Potential for greater patient involvement in their own care (e.g. mobile apps)
Barriers

- Reimbursement
- Privileging
- Interstate licensure
- Provider-Patient relationship
- Access for low literacy and low income
- Language barriers
- Security and Privacy
- Liability coverage
- Standards of care equal
- Skill set same as for face to face?
- Efficiency (workflow, overbooking)
- Technical issues
- Perception of inferiority
Barriers-Reimbursement

- 19+ states have parity laws for commercial payors
- Some have parity laws for Medicaid
- Medicare reimbursement limited to underserved areas
- On balance better than for telephone and electronic portal (E-care) encounters
Washington State Telehealth Parity 2015

- Services delivered by store and forward and telemedicine covered if are covered as face-to-face encounters, medical necessary, and essential health benefit under ACA
- For “Store & Forward”, patient must be at “originating site”, ie. referring site
- For live “Telemedicine”, “originating site” requirement does not exist
- Applies to commercial payers and Medicaid managed care organizations
- Does not extend to providers licensed in other states
- Implementation planned in 2017-18
Barriers

- Established face-to-face care relationship—some states require
- Location of patient (clinic, hospital, home or work)
- Interstate licensure. California and New Mexico provide limited licensure
AHRQ Criteria for Equivalence

- Congruence of content
- Fidelity of experience
- Reliability of outcomes
Examples
COPD, Heart Failure, DM

- Whole System Demonstrator Study (N=3230)
- UK based in 179 primary care practices
- Outpatients with COPD, CHF, DM
- Randomized cluster design
- Intervention: remote home monitoring
- Results: Mortality reduced by 50%; hospitalizations and ED visits reduced by 20%; shorter hospital stay
Electronic Wellness Program for Student Health

- Controlled 24-week diet and physical activity program was delivered via email to 148 college students
- eHealth intervention consisted of A Lifestyle Intervention via Email (ALIVE)
- Decrease in saturated fat intake and an increase in observed fruit intake compared to a control group
- Amy L Schweitzer, PhD, RD, LD, 12 Jamisha T Ross, BS, 2 Catherine J Klein, PhD, 3 Kai Y Lei, PhD, 2 and Eleanor R Mackey, PhD 4 JMIR Res Protoc. 2016 Jan-Mar; 5(1): e29
Behavioral Activation and Therapeutic Exposure on PTSD

- Not inferior to usual care
- Reduces barriers to care and stigmatization
- Acierno R, Gros, DF, Depression and Anxiety 00:1-9, 2016
E Health: Medication reminding in College Students

- Adherence to Antidepressant Medications
- Randomized controlled trial. 57 college students
- Intervention: smart phone reminder app
- Result: Increased adherence to medications
E Health literacy among college students

- College student ability to locate, use, and evaluate eHealth information
- Many college students lack eHealth literacy skills
Comparison of Telemedicine Versus Traditional Practice in a University Health Center

- Planned study
- Arizona State U
- Randomize follow up after conventional encounter to telehealth versus face to face
- Outcomes: Equivalence of care based on record review, patient satisfaction.
- Allan Marcus, Clinical Trials.gov, 2013. markus@asu.edu
University of Washington Experience
Telemedicine services at UW Medicine
UW Medicine Virtual Clinic
Why use telemedicine services for travel?

• Telemedicine services were initiated in 2014 to improve patient access to pre-travel consultations
• Travel providers were providing travel consults by phone without compensation
• Pre-travel consultations scheduled for travelers up-to-date on vaccinations
• Increasing competition in community providing pre-travel consultations by phone (local pharmacies)
• Geographic barriers: UW Seattle, UW Tacoma, UW Bothell
UW Statistics

- UW (University of Washington): Over 45,000 students and 40,000 staff members
- UW is the largest public university in Washington and the West Coast
- The Department of Global Health has the largest staff
- UW students (graduate and undergraduate) can utilize their Student Activity Fee (SAF) for travel consultations as of 2016
UW Study Abroad Program
UW Study Abroad Statistics

• 132 faculty and 49 staff providing 87 UW international programs

• Number of UW students (citizens and permanent residents)= 2056

• Number of UW students (non-citizens)= 223
Hall Health Primary Care Center
Hall Health Primary Care Center

• Total Hall Health visits in fiscal year 2015: 72,917
  Visits by students: 50,548
  Visits by non-students: 22,369

• 48 Clinical Providers (Physicians, Nurse Practitioners, Mental Health Providers, Physical Therapists)

• Clinics: Primary care, family practice, mental health, sports medicine, travel, women’s health, physical therapy, pharmacy
UW Medicine Travel Clinic
at Hall Health Center

• Staffed by MDs and ARNPs certified as travel providers by the International Society of Travel Medicine (ISTM) since 1995
• On site pharmacy-providing prescription medications, OTC medications, insect protection, water purification, etc.
• Immunization Clinic on-site stocked with common and travel related immunizations: Japanese encephalitis (JEV), rabies, typhoid, yellow fever
• Pre and post travel consultations
• Total of 1634 patients seen in 2015
Why are travel consults perfect for telemedicine?

• Coded as a preventative counseling code (99402, 03, 04)
• Consider equivalent to an in-person consultation
• Travel consults are a “cognitive service.” No physical examination in required.
• Prescriptions are sent to the patient’s pharmacy of choice. Examples: malaria prophylaxis, oral typhoid, antibiotics for traveler’s diarrhea
• If immunizations are needed, patients can present to the immunization clinic at their convenience (M-F, 8am-5pm)
Logistics

• Telemedicine consultations must be performed within Washington State.
• No specific consent for telemedicine services is required under Washington State law.
• Specs: tablet, laptop or desktop computer for consultation in a private setting. (IOS, Android and Samsung compatible). Patients must ensure that all other programs using the webcam and microphone are closed at time of telemedicine consult.
• Zoom program-quick download to computers or tablets (most with built in video camera). Utilized by UW Medicine-safe and secure.
• https://zoom.us/plan/healthcare
Zoom Program
Logistics (cont.)

- Two computer monitors
- Video Camera (Logitech or similar)
- Door with confidential message (*Telemedicine Session in progress. Do not disturb.*)
- Patient is scheduled as a pre-travel consultation with appropriate documentation on travel schedule
- Documentation in chart note: *This patient visit was performed in a telemedicine consultation (live video chat) through Zoom technology in a private clinical space in Washington State.*
Telemedicine session in progress.

Do not disturb.
Telemedicine Scheduling

• Patient must be up to date on health related waivers-Care agreement, Finance and Consent, Privacy/HIPAA and documentation of a UW Budget Letter.
• Criteria for a pre-travel telemedicine consultation includes-
  1. New or established patient
  2. Active UW staff or faculty member
  3. Travel services billed to a UW budget number
  4. Employee is active on Ecare and/or has an updated UW email
  5. Patient must have access to a PC/tablet which is IOS, Android or Samsung compatible and equipped with a webcam
Confirmation Letter/Email

Anne Terry, ARNP of the UW Medicine Travel Clinic at Hall Health Center is inviting you to a video conference scheduled for June 1st, 2016 at 12 pm.

Please click the link below to start your telemedicine travel appointment. Please make sure all programs that are using your webcam and microphone (skype, google hangouts, microsoft) have been closed. We encourage use of a tablet, laptop or desktop computer for your consultation in a private setting. (IOS, Android and Samsung compatible)

https://zoom.us/j/2066851072

If you have any questions during the time that you are connecting, please call Anne Terry, ARNP at 206-685-1072.

Sincerely,

UW Medicine Travel Clinic at Hall Health Center
Telemedicine Billing

- Billing: University budgets billed directly for services. This includes the office visit, immunizations and medications (if received at HH Pharmacy).
- Telemedicine preventative counseling visits are not currently covered. This is expected to change in 2018 according to new Medicare compensation for telemedicine services.
Dear UW faculty and staff members-

We are excited to let you know of some updated services provided at the Travel Clinic at Hall Health Center. In addition to in-person pre-travel consultations, we are now offering telemedicine travel consultations to all UW staff and faculty billing a UW budget number.

Telemedicine consults occur in the privacy of your home or office through a confidential, live video program with one of our travel health providers. This is a great time saver! Prescriptions are sent directly to the pharmacy of your choice. Immunizations recommended at the visit can then be obtained Monday through Friday at Hall Health without an additional appointment.

To qualify, for a pre-travel telemedicine consultation, you must:

- Have a UW budget number to which the services can be billed
- Be an active UW staff or faculty member

The process for conducting a telemedicine consultation is easy. It requires a PC or tablet that is IOS, Android or Samsung compatible and is equipped with a webcam. If you would like to schedule either a telemedicine or an in-person consult with one of our travel providers, please call 206-616-2495.

Sincerely,

Anne Terry, ARNP
Travel Clinic Manager

Bill Neighbor, MD
Chief of Clinical Services

travel@uw.edu
http://depts.washington.edu/hhpccweb/project/travel
Scheduling 206-616-2495
Office 206-616-2860
Summary

- A need exists for use of telemedicine services for student health
- Pre-travel consultations are very appropriate for telehealth
- Patient satisfaction is positive
- Telemedicine is growing
Future areas for improvement

• Insurance compensation for tele-health
• Marketing
• Expansion to other student health service needs (mental health, substance abuse counseling, dermatology)
The Future

• Our estimate is that 25% to 50% of all transactions in the healthcare industry will be electronically outsourced by 2020. Twenty-five percent of all patient encounters with healthcare professionals could be by mobile health, using smartphones or smart wrist watches.

• Weinstein RS, Lopez, AM, Telemedicine, Telehealth, and Mobie Health Applications that work: Opportunities and Barriers, The American Journal of Medicine, Vol 127, No 3, March 2014
Telehealth Organizations

- American Telemedicine Association
- Canadian Informatics Association
- American Medical Informatics Association (AMIA)