INTEGRATING NEW APPLICATIONS OF TELEPSYCHIATRY FROM INDIVIDUAL PRACTICE TO HEALTHCARE SYSTEMS

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AMERICAN COLLEGE OF PSYCHIATRISTS, ANNUAL MEETING 2018

DISCLOSURES

I am solely responsible for the content of this presentation. It does not represent an official position, policy, endorsement, or opinion of any of the organizations with which I am involved.

Conflict of Interest Disclosure: Dr. Shore is Chief Medical Officer of AccessCare Services which provides telehealth services and technologies.

OBJECTIVE AND FORMAT

- At the conclusion of this presentation participants will understand how different models of care delivered via telepsychiatry, in the form of live interactive video conferencing can be integrated into current practices and systems of care.
- Interactive and didactic

MODELS OF TELEPSYCHIATRY

OLD

- Videoconferencing

- Integration with other technologies
- In-home (non-supervised settings)
- Tele-teaming
- Asynchronous

OUTLINE

- Day 1
  - Introductions and Course Overview
  - Historical Evolution of Telepsychiatry and Evolving Models of Care
  - Case Examples
  - Discussion
- Day 2
  - Review of Key Issues for Telepsychiatry
  - Integration and Implementation
  - Discussion

Telehealth and Technology Roles

accesscare
Chief Medical Officer

ORH VHA Office of Rural Health
Native Domain Lead, VRHRC-SLC

Department of Psychiatry
Professor

CAIANH

Helen and Arthur E. Johnson Depression Center
UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS
Director of Telemedicine

ATA
Past Board Member and Chair TMH SIG

Cohen Veterans Network
Medical Director
Steven A. Cohen Military Family Clinic at the University of Colorado Anschutz Medical Campus
National Telehealth Consultant

AMERICAN PSYCHIATRIC ASSOCIATION
Chair APA Telepsychiary Committee

TATRC
Behavioral Health Portfolio Manager 2006-2013

HISTORICAL EVOLUTION OF TELEPSYCHIATRY AND EVOLVING MODELS OF CARE


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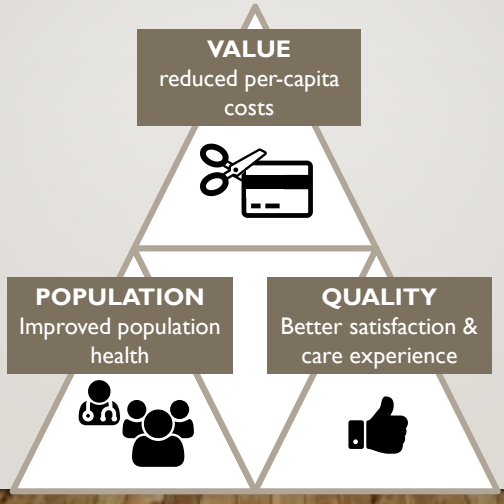
WHY TELEPSYCHIATRY?

- Originally geographically driven
- Isolation and Access
- Technically easier over time
- Convenience and Cost main drivers now
- Changing expectations – age/generational
- Shortage of psychiatrists (av age 56 nationwide)
- Reduced inpatient psych beds nationally -largest single acute psychiatric unit is LA County Jail – 4200 inmates with over 20% psychiatrically ill

TRIPLE AIM



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*Telepsych photos from UNMC Archives, Special Collections Department, McGoogan Library of Medicine, University of Nebraska Medical Center, Omaha, Nebraska

HISTORY OF TELEMENTAL HEALTH

•First psychiatric consults University of Nebraska – late 50's

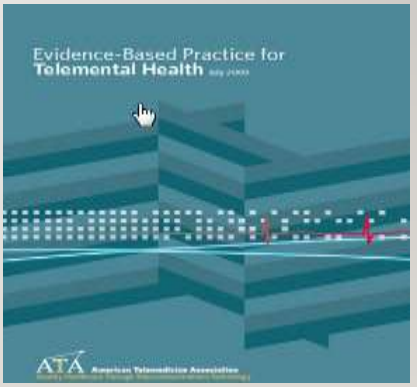
•Lot of interest in 60's/70's – NASA – Apollo Soyuz, disaster relief

•Reduction 80's, but then reinvigoration early 90's – large networks in the USA, Canada and Australia but still poor bandwidth and device based. All grants and project driven.

•2000 onwards – increasing move to fiber, away from ISDN lines, and more bandwidth. Increasing reimbursement and sustainable financial models, but still driven by academic institutions mainly delivering care to rural areas. Then web-based systems, cloud storage, and mobile from 2005 onwards – dramatically increased consults, and not just to rural regions, and since 2010 more commercial involvement and medical service companies.

Major milestones for telepsychiatry……

- Multiple research studies on satisfaction, reliability, and outcomes
- Need/Used: Rural, Military, VA, and Corrections and private companies
- Secure cloud based technologies – networks, software and mobile apps – synchronous and asynchronous
- Guidelines: Adults/Children – continuity of care/home
- ATA led to multiple clinical champions, knowledge sharing, business sustainability
- Gradual shift in age demographics – "digital natives" adopt easily



SEE PATIENTS ON THESE TELEHEALTH PLATFORMS

Not a comprehensive list. Accurate as of January 3, 2017.

Name	Service	Hiring
Doctors on Demand	Video visits	Physicians, psychologists
American Well	Telephone & video visits	Physicians
1DocWay	Psychiatry clinics, psychiatry hospitals, emergency psychiatry	Psychiatrists
MDLive Breakthrough	Video talk therapy	Licensed therapists
Talkspace	Text messaging therapy	LCSW, LMHC, LMFT, LPC, Psychologist, etc.
BetterHelp	Text messaging therapy	LCSW, LMFT, LPC, PsyD, or similar credentials
CloudVisit	Private practive video	Multiple providers

Courtesy Dr. Steve Chan

TRENDS TRANSFORMING US HEALTH CARE MARKET (DELOITTE 2016)

- **Technology** – social, mobile, analytics, cloud.
- **Demand for Value** – more quality, evidence and transparency with fewer dollars, new incentive payment models.
- **Growing health economy** – by 2030 20% aged over 65. Increased demand for care, especially chronic care.
- **Government as influencer**– American Recovery and Reinvestment Act's Health Information Technology for Economic and Clinical Health, Medicaid expansion, Affordable Care Act, FDA and FTC regulations

Trends transforming US health care market (Deloitte 2016)

DIGITAL NATIVES VS. DIGITAL IMMIGRANTS

DIGITAL IMMIGRANTS

- Use Internet for information second rather than first
- Print out email
- Share computer content in-person
- Learn slowly, step-by-step, one thing at a time

DIGITAL NATIVES

- Parallel processing & multitasking
- Prefer graphics & visuals
- Instant gratification & rewards
- Prefer to be networked
- Learn with information fast, presented in a random fashion

Based on Mark Prensky's "Digital Natives, Digital Immigrants." http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf . Accessed 12/30/2016.
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TECHNOLOGIES IN PSYCHIATRIC PRACTICE

BASE TECHNOLOGIES

- E-mail
- Electronic medical record (EMR)
- Videoconferencing
- Web-based apps
- Mobile phones, apps, & devices

EMERGENT TECHNOLOGIES

- Virtual reality treatments
- Social networking
- Artificial intelligence, machine learning, & cognitive computing
- Avatars
- Geospatial tracking

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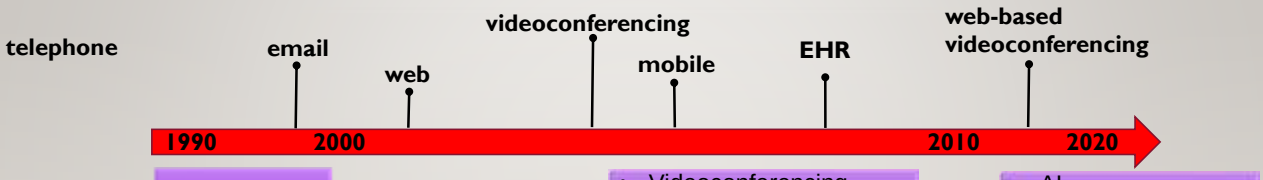
PSYCHIATRIC PRACTICE



- In-person
- Telephone

Models attempt to replicate current in-person care at a distance

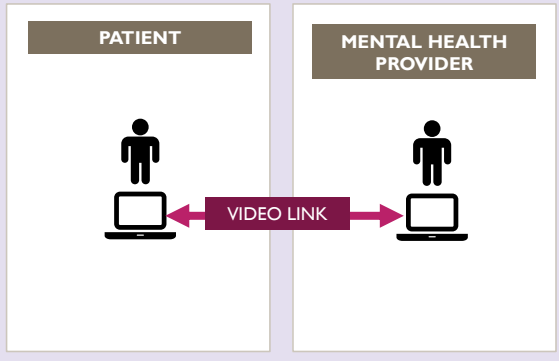
- Videoconferencing
- Email
- Mobile (text and phone)
- EHR (patient portals)
- Web
- Social Networking

- AI
- Robotic
- Metrics/data mining
- APPS
- Virtual Reality

Improved care through enhanced models across different modalities-24/7, mobile, asynchronous and coordinated.

"INDIRECT" VS "DIRECT"

DIRECT / REAL-TIME / SYNCHRONOUS CONSULTS
occur at the same time, at a distance.
These can occur with videoconferencing technology.



INDIRECT / STORE-AND-FORWARD /ASYNCHRONOUS CONSULTS
do not require the patient and the provider to be available at the same time. There are many types, such as this electronic consult:

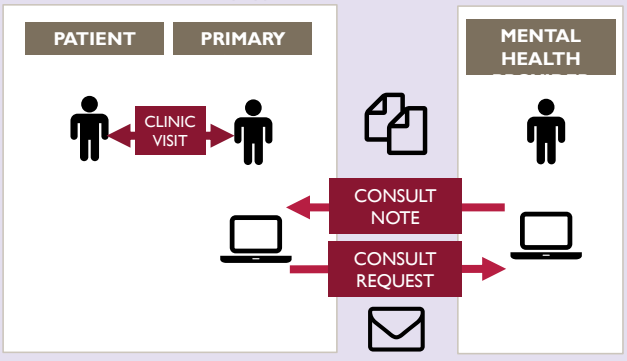
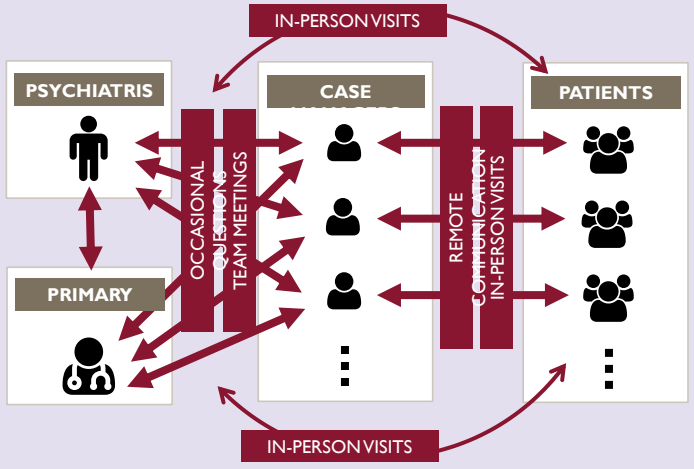


Diagram by Dr. Steve Chan Icons are open-source under SIL OFL 1.1 license. Font Awesome by Dave Gandy, http://fontawesome.io

POPULATION HEALTH and COLLABORATIVE CARE

Population management is a form of indirect (or asynchronous) care. A **psychiatrist** manages **case managers (or coordinators or navigators)** who interact with patients, gather collateral, process paperwork, and help patients navigate a complex health system.



REMOTE COMMUNICATION TECHNOLOGIES

Psychiatrists, primary care providers, case managers, and patients can interact at a distance using these HIPAA-compliant methods.

- Messaging apps
- Questionnaire apps
- Medication adherence apps
- Videoconferencing
- Video & audio messaging
- E-mail
- Post office mail
- Patient web portals
- Internet-delivered therapy
- Internet-delivered education
- Fax
- Telephone & voicemail

ATP SUMMARY

- Diagnostically reliable across differing language groups with translation – in primary care and nursing homes
- Not suggested for therapy
- Can be used for monitoring treatment progress
- Easier management/admin/scheduling
- Improved communication between patient and reporting provider
- Costs are less (Yellowlees et al, 2009-17)

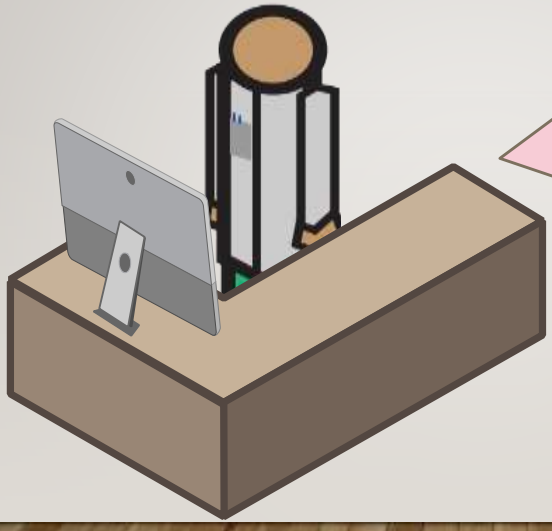
INSTANTANEOUS INTERPRETATION — ANY TIME, ANYWHERE

25

Telepsychiatry

Synchronous & asynchronous

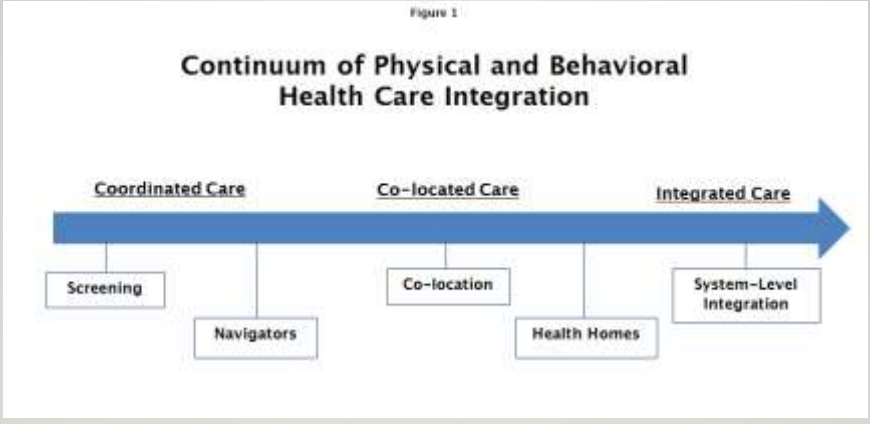
ADVANTAGES OF TELEPSYCHIATRY



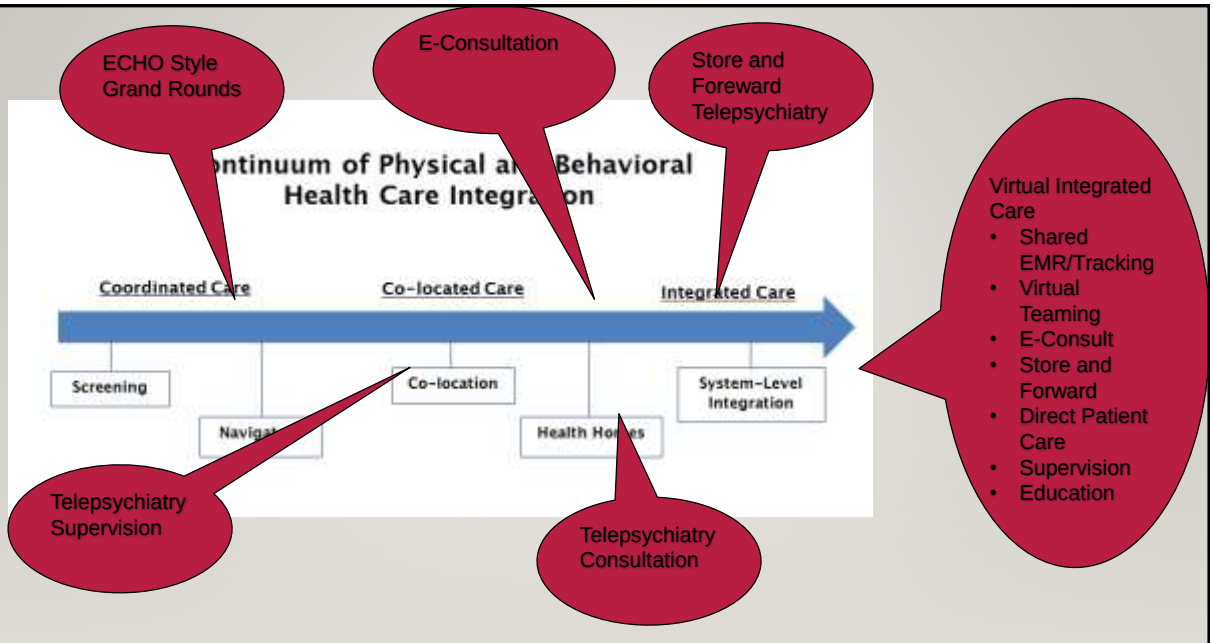
FOR THE PSYCHIATRIST

- Work from anywhere
- Flexibility of time
- Opportunities to work with different populations
- New models and configurations for care

Diagram and illustrations adopted from @StevenChanMD. .

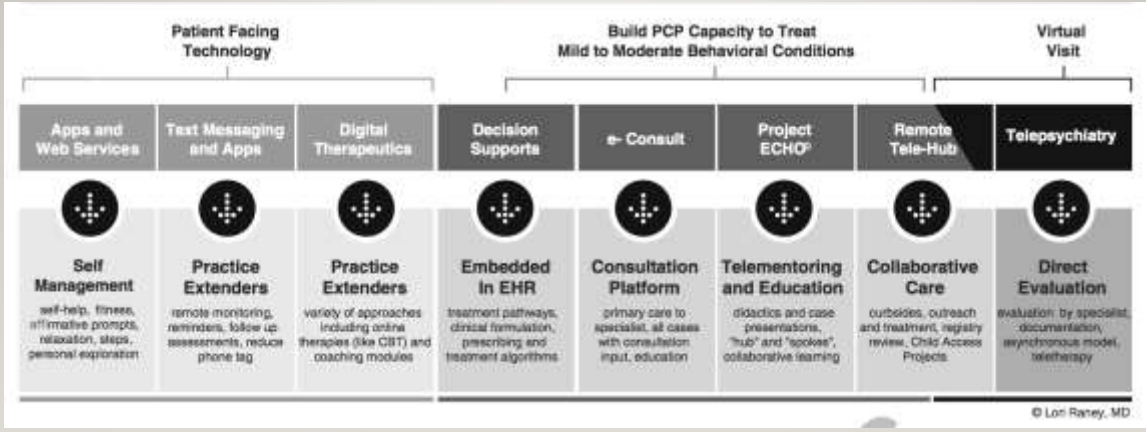


KAISER FAMILY FOUNDATION

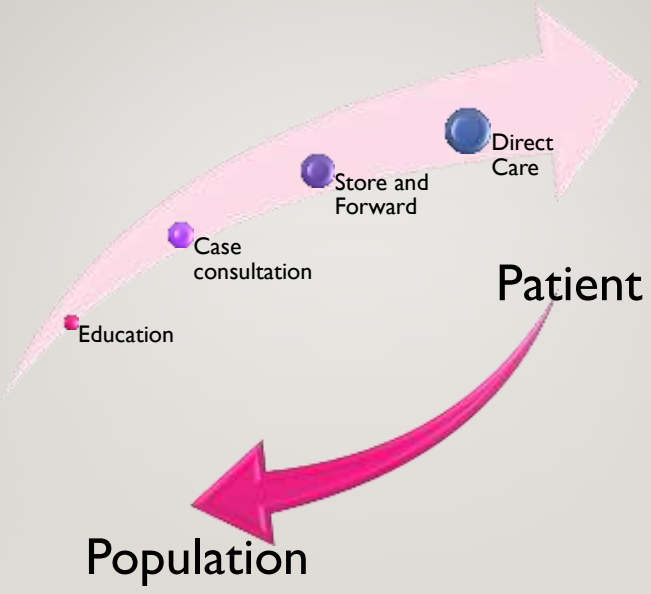


KAISER FAMILY FOUNDATION

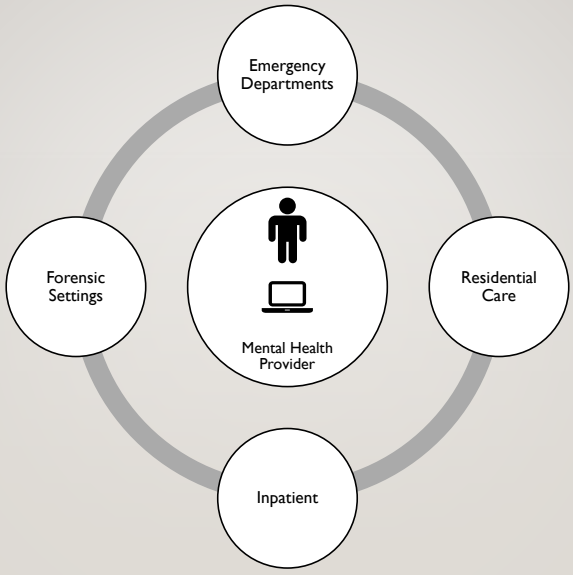
THEMES: HOW CARE IS ACCESSED AND DELIVERED



Raney L, Bergman D, Torous J, Hasselberg M. Digitally Driven Integrated Primary Care and Behavioral Health: How Technology Can Expand Access to Effective Treatment. Current Psychiatry Reports. 2017 Nov 1;19(11):86.



TELEPSYCHIATRY AND VIRTUAL TEAMING MODELS



AVAILABLE MODELS OF CARE PROVISION

DOC IN A BOX

1. Individualize work
2. Risk of isolation
3. Focused on Psychopharmacology
4. Aligned with current re-imbursement models

TELE-TEAMING

1. Team-Based
2. Part of larger network of relationships
3. Mental Health Team Leadership
   - Diagnosis and Assessment
   - Case Formulation and Treatment Planning
   - Supervision, Education
   - Therapy and Psychopharmacology
4. Aligned with emerging payment models

YELLOWLEES'S COROLLARY

"Computers do well what humans do badly and vice versa"

"Computers never forget and are excellent at scheduling, reminding, and remembering, but humans are still much, much better at data analysis and decision making."

"We need to make sure that we use computers ….for what they are best at, and that we do not forget or set aside the honed human skills in pattern recognition and data interpretation that are essential to the diagnostic process and that make psychiatrists such sensitive and broadly trained physicians.

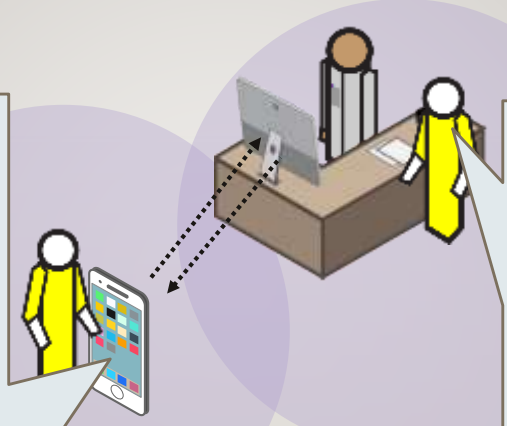
"…it is essential to redesign business processes before introducing or developing new software environments."

Yellowlees, P. Nafiz N. The Psychiatrist-Patient Relationship of the Future: Anytime, Anywhere? *Harvard Review of Psychiatry.* 2010, 18(20), pg 96-102

HYBRID CARE

VIRTUAL SPACE

- Advantage for those with avoidant behavior, PTSD, and anxiety
- Convenient & immediate
- Provider can observe patient in their environment
- Indirect & off-hours care opportunities
- Modalities include videoconferencing, e-mail, text messaging & telephony



PHYSICAL SPACE

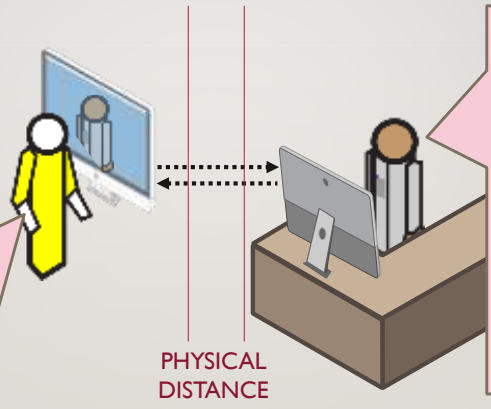
- Traditional in-person gold standard
- Immediacy & trust in interpersonal interaction
- Physical boundaries can be set for therapeutic frame
- Ample research and practice guidelines available for healthcare in the physical space

Diagram and illustrations by @StevenChanMD. Content based on Peter Yellowlees & Jay Shore.

ADVANTAGES OF VIRTUAL SPACE

FOR THE PATIENT

- Can see providers outside of the patient's community
- Can have highly intense, intimate and empathic relationships
- Can discuss embarrassing, stigmatizing, or awkward topics



FOR THE PROVIDER

- Can give more direct feedback to patients
- Can safely patients who are placed in dangerous settings — e.g. correctional institutions
- Can be an objective observer

Diagram and illustrations by @StevenChanMD. Content based on Peter Yellowlees & Jay Shore.

DAY 2

KEY ISSUES (ADMINISTRATIVE, CLINICAL)

MODELS OF TELEPSYCHIATRY

OLD

- Videoconferencing

- Integration with other technologies
- In-home (non-supervised settings)
- Tele-teaming
- Asynchronous

ADMINISTRATIVE AND REGULATORY ISSUES IN TELEPSYCHIATRY

- Regulatory
  - Malpractice
  - Licensure
  - Standard of Care
  - Ryan Haight/Prescribing
- Administrative
  - Protocols and procedures
  - Workflow
  - Economic models (Billing and re-imbursement)

REGULATORY - MALPRACTICE

- When providing clinical care, psychiatrists are required to have malpractice insurance.
  - This remains true when practicing using telepsychiatry.
  - Considerations regarding malpractice coverage for telepsychiatry vs. traditional care:
    - Some malpractice providers cover telepsychiatry as part of standard coverage. Other carriers have additional policies and may require additional coverage for when providing telepsychiatry services.
    - Prior to engaging in the provision of telepsychiatric care, the psychiatrist should check if the specific telepsychiatry services that they will be engaged in are covered by their existing malpractice carrier.

https://www.psychiatry.org/psychiatrists/practice/telepsychiatry/telepsychiatry-malpractice-issues

REGULATORY - LICENSURE

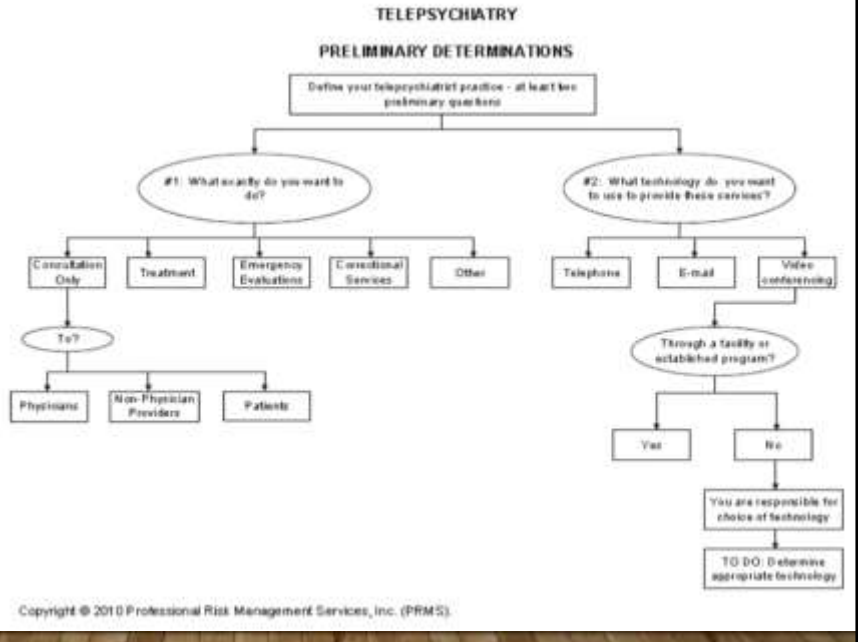
- Psychiatrists must be licensed (at minimum) in the state in which the patient resides to provide clinical services.
- When providing care over live interactive VTC, state licensing and medical regulatory organizations consider care to be rendered where the patient is physically located during the session.
  - Psychiatrists performing telepsychiatry services therefore need to hold state licenses where their patients are located, regardless of where the psychiatrist is located.
- Many states have additional conditions for providing telepsychiatry services, which may include documentation and in-person examination requirements.
- Physicians need to be familiar with and conform to the standards of care specified by the state license in which they practice.

REGULATORY - LICENSURE

- There are exceptions and variations to state licensing requirements,
  - Some states offering special telemedicine licenses;
  - Special considerations for physician to physician consultations; and psychiatrists practicing in federal health care systems such the US Department of Veteran's Affairs and the Indian Health System.
- In Federal systems, physicians may be able to hold a single state license to be credentialed in a federal systems and practice across multiple states.
- Licensure and billing are obviously separate considerations.

REGULATORY

- Standard of Care



REGULATORY

- Standard of Care
  - Using telemedicine does not alter the standard of care to which the physician will be held – it is the same standard of care that would apply if the patient was in the physician's office of facility.

http://prms.classroom24-7.com/account/course/9#!Telepsychiatry+and+the+Standard+of+Care

REGULATORY - RYAN HAIGHT/PRESCRIBING

- Background
- Intention of act
  - Letter of the law
  - Telemedicine exception
- Real world experience
- Status of the act and words to the wise

ADMINISTRATIVE

- Protocols and procedures
- Workflow
- Economic models (Billing and re-imbursement)

ADMINISTRATIVE - PROTOCOLS AND PROCEDURES

- Practice Guidelines For Video-Based Online Mental Health Services (May 2013), American Telemedicine Association
- Practice Guidelines for Videoconferencing-Based Telemental Health (October 2009) American Telemedicine Association
- Evidence-Based Practice for Telemental Health (July 2009), American Telemedicine Association
- Practice Parameter for Telepsychiatry With Children and Adolescents (December 2008), American Academy of Child and Adolescent Psychiatry
- Krupinski EA, Bernard J. Standards and Guidelines in Telemedicine and Telehealth. Healthcare 2014,2,74-93.

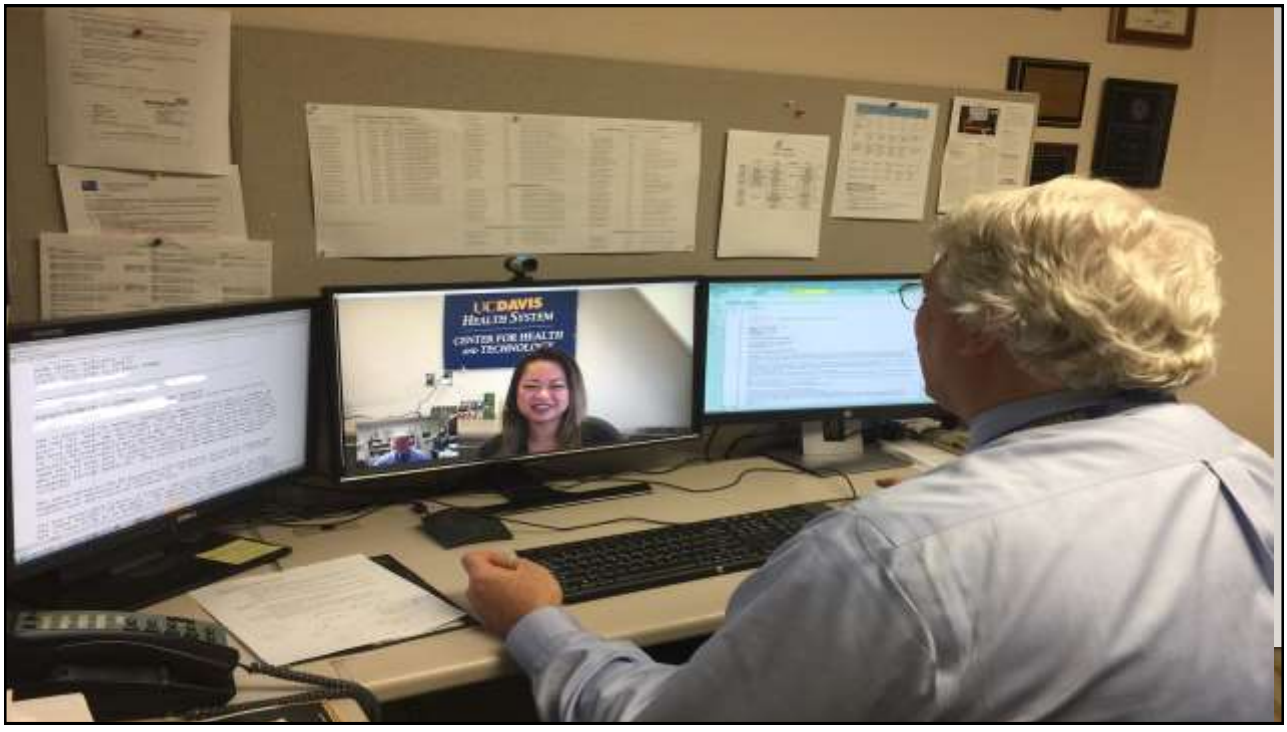
ADMINISTRATIVE - WORKFLOW

- Evolving
  - Clinical vs. non-clinical settings
- Modifications to treatment as usual
- Adjunctive technologies and personnel
  - Secure Communications with scheduling
  - Electronic prescribing/EPCS
  - Use of telefacilitators?

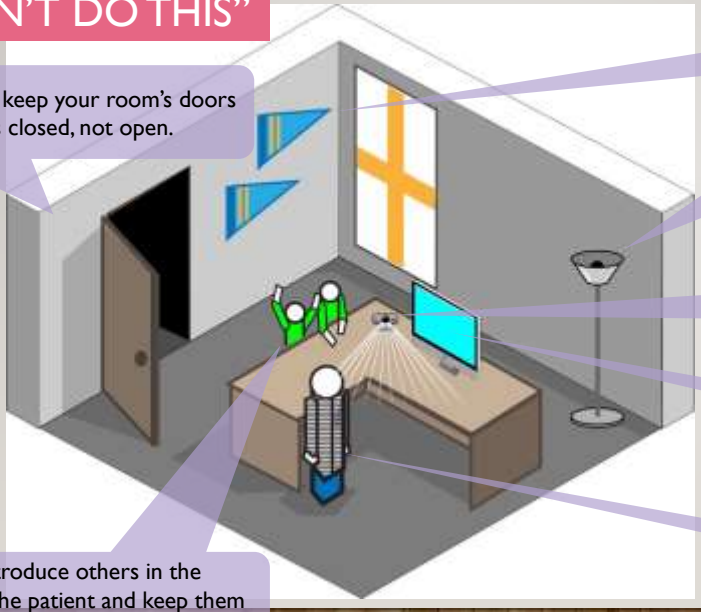
ADMINISTRATIVE ECONOMIC MODELS (BILLING AND RE-IMBURSEMENT)

- Fee for service
- Contract
- Retainer
- Impact of DTC service delivery.

ADAPTING CLINICAL PROCESS FOR TELEPSYCHIATRY



"DON'T DO THIS"



For privacy, keep your room's doors or windows closed, not open.

Don't place political, religious, or even sports items in background.

Keep the room well-lit, so the patient can't see you.

The webcam should be placed above the computer screen, not below or to the side.

Don't sit too far or too close to the camera. Your head should take 2/3rd of the screen.

Always introduce others in the room to the patient and keep them in line of sight.

Wear solid colors, not stripes or other patterns.

Diagram and illustrations by @StevenChanMD. Content based on Peter Yellowlees & Jay Shore.

ADAPTING PERSONAL STYLE TO VIDEO CONFERENCING

- 110%, increase in animation
- Awareness of how one maybe coming across on the other end (body language space and perception).
  - Slight increase in use of body language
  - Gaze
- Increase small talk
  - Asking about local setting (activities, current events, weather, home environment)
  - Slight increase in appropriate self-disclosure (bridge virtual gap)
- Increased inquiry on patient status and active listening

SPACE/TIME CONTINUUM ISSUES: CULTURE AND ENVIRONMENT

- Space-time continuum issues
- Environmental contexts
  - Eg. Rural
    - Firearms
    - Boundaries
    - Community events and timing

MANAGING HYBRID PATIENT-PROVIDER RELATIONSHIPS

- Hybrid relationship = managed across range of settings in-person, telehealth and technologies (eg. Videoconferencing, email, phone)
- Clear education and boundaries with patient of how and when to communicate and over which technologies
- Attention to rapport, trust and comfort of patient with each communication
- Checking in on how patient is doing with regards to communication relationship
- Checking and clarifying for miscommunication and misunderstandings

HOW IN-HOME TELEHEALTH DIFFERS FROM IN-CLINIC

- Environmental scan in home
  - Appropriateness (safety and confidentiality during session)
  - Information on patient (organization, style, function, lifestyle)
- Active Management of image and environment with patient
- Awareness of any safety issues or concerns

TELE-TEAMING IN TECHNOLOGY

- **Team communication**
  - Ground rules for communication (mediums, timing and setting)
  - In-person visits/team bonding
  - Importance of over communication > under communication especially in beginning of services
  - Definitions of roles and specifically at interface on patient communication/contact
- **Team Building**
  - Recognition that Team building and communication is responsibility of all team members
  - Seeking clarifications across team
  - Shared cultural and processes
  - Tolerance of difference in perspectives and backgrounds

STAYING SANE WITH TECHNOLOGIES

Set clear boundaries with patients.	• Tell patients how and when they can contact you. • Discourage long e-mails, messages. • Use secure e-mail or EMR-tethered messaging systems
No more playing "phone tag."	• Set phone appointments at specific times • Use e-mail or messaging instead of wasting hours attempting to call someone multiple times
No writing letters or notes after hours.	• Use templates & copy-paste functions judiciously • Write patient-requested letters during office visits • Speed up data input with voice recognition, dictation systems, or typing fast
Use mobile tech to work wherever & whenever	• Select smartphone-compatible cloud-enabled EMR, messaging, and storage systems • Reduces costs and enables you to work remotely.

Content based on Peter Yellowlees & Jay Shore.

Table. **Online Physician Activities: Benefits, Pitfalls, and Recommended Safeguards**

Activity	Potential Benefits	Potential Pitfalls	Recommended Safeguards
Communications with patients using e-mail, text, and instant messaging	Greater accessibility Immediate answers to nonurgent issues	Confidentiality concerns Replacement of face-to-face or telephone interaction Ambiguity or misinterpretation of digital interactions	Establish guidelines for types of issues appropriate for digital communication Reserve digital communication only for patients who maintain face-to-face follow-up
Use of social media sites to gather information about patients	Observe and counsel patients on risk-taking or health-averse behaviors Intervene in an emergency	Sensitivity to source of information Threaten trust in patient–physician relationship	Consider intent of search and application of findings Consider implications for ongoing care
Use of online educational resources and related information with patients	Encourage patient empowerment through self-education Supplement resource-poor environments	Non–peer-reviewed materials may provide inaccurate information Scam "patient" sites that misrepresent therapies and outcomes	Vet information to ensure accuracy of content Refer patients only to reputable sites and sources
Physician-produced blogs, microblogs, and physician posting of comments by others	Advocacy and public health enhancement Introduction of physician "voice" into such conversations	Negative online content, such as "venting" or ranting, that disparages patients and colleagues	"Pause before posting" Consider the content and the message it sends about a physician as an individual and the profession
Physician posting of physician personal information on public social media sites	Networking and communications	Blurring of professional and personal boundaries Impact on representation of the individual and the profession	Maintain separate personas, personal and professional, for online social behavior Scrutinize material available for public consumption
Physician use of digital venues (e.g., text and Web) for communicating with colleagues about patient care	Ease of communication with colleagues	Confidentiality concerns Unsecured networks and accessibility of protected health information	Implement health information technology solutions for secure messaging and information sharing Follow institutional practice and policy for remote and mobile access of protected health information

Farnan JM, Snyder Sulmasy L, Worster BK, Chaudhry HJ, Rhyne JA, Arora VM, et al. Online Medical Professionalism: Patient and Public Relationships: Policy Statement From the American College of Physicians and the Federation of State Medical Boards. Ann Intern Med. 2013;158:620–627.