# Wisconsin Public Psychiatry Network Teleconference (WPPNT)

- This teleconference is brought to you by the Wisconsin Department of Health Services (DHS), Division of Care and Treatment Services, Bureau of Prevention Treatment and Recovery and the University of Wisconsin-Madison, Department of Psychiatry.
- Use of information contained in this presentation may require express authority from a third party.
- 2020, David Mays, Reproduced with permission.

#### **WPPNT Reminders**

- Call 877-820-7831 before 11:00 a.m.
- Enter passcode 107633#, when prompted.
- Questions may be asked, if time allows.
- To ask a question, press \*6 on your phone to un-mute yourself. \*6 to remote.
- Ask questions for the presenter, about their presentation.
- The link to the evaluation for today's presentation is on the WPPNT webpage, under todays date: <a href="https://www.dhs.wisconsin.gov/wppnt/2020.htm">https://www.dhs.wisconsin.gov/wppnt/2020.htm</a>.
   Complete the evaluation to receive the CEH.

# Ethics and Technology

David Mays, MD, PhD dvmays@wisc.edu

#### Disclosure

- Dr. Mays is not on any drug advisory boards, paid for doing drug research, or otherwise employed, funded, or consciously influenced by the pharmaceutical industry or any other corporate entity.
- No off label uses of medications will be discussed unless mentioned in the handout and by the presenter.
- No funny business.

#### The Electronic Health Record

- The electronic health record is a lifelong client record for current and future healthcare providers.
- It provides quick access for the range of healthcare professionals taking care of you.
- The downside is that the EHR is less secure and more easily available to a range of people, than the old paper chart locked in an office.
- Some people would prefer not to have an EHR.

#### The Bifurcated Chart

- Clinicians should think about having two records:
   the treatment record that will be shared in the
   electronic health record (demographics,
   assessment, diagnosis, treatment, treatment plan),
   and psychotherapy notes that will be private and
   can only be shared by consent of he client (what
   goes on in the session.)
- No electronic record seems to allow this.

#### Social Media Informed Consent

(Kolmes 2014, Zur 2014)

- At times, your provider(s) may seek information on the Internet about you for risk management or other clinical purposes. If this happens, you will be told about any Internet searches and have an opportunity to correct any incorrect information.
- We don't accept Facebook requests from clients. Please don't contact us via any social network sites.
- Please don't text or take messages during our sessions.
- We can use e-mail/texting to communicate with you about administrative details, such as prescription refills, appointment times, and cancellations, but we cannot do therapy. E-mail is not secure or confidential.

## Digital Natives- A Generalization

- Often more comfortable communicating online than in person
- See no reason for face-to-face meetings
- Can use the internet for almost constant socialization
- They place a high value on convenience
- Get bored with traditional ways of learning, e.g. paper and pencil homework

# E-mail/Texting and Your Practice

- What is your clinic policy?
- All policies should require that clients be informed of the risks involves in Internet communication.
   HIPAA requires that you take reasonable precautions to keep information confidential.
- E-mail, of course, is not to be used for emergencies.

# E-mail/Texting Policies

- E-mails should be answered within 2-3 days.
- Auto-reply should be used when the clinician is unavailable for longer than that.
- E-mails shouldn't be forwarded to third parties without consent.

# What is the Purpose of E-mail/Text?

- It is best used for administrative concerns: prescription refills, appointment changes, etc.
- These types of e-mails don't need to be saved, just as we don't save phone messages about appointments, etc.
- If you are doing "therapy" via e-mail, that is a different story. Here the lack of confidentiality and lack of "in person" observation of the client create serious concerns.

# When is E-mail Therapy?

- Clients writing asking for advice in an unfolding social situation.
- Clients "journaling" about feelings.
- Suicide threats
- Provider sending behavioral prompts, or coaching in "real time"
- Clients reflecting about insights of behavior.
  Provider offering suggestions.

### Boundary Issue

- If you give a client your e-mail address, there is an assumption that this address is available for use, 24 hours a day. Is this what you want? Is this good for client autonomy? Do you really want to *read* all this?
- Many therapists have been surprised by the anger in their clients when the therapist has not answered their e-mail immediately.

# E-mail/Texting

- If e-mail or texting is being used for treatment, then the following <u>must</u> be dealt with administratively:
  - How will you be billing for the time?
  - Expectation for your response time
  - Permanent storage of all e-mails is required
  - Higher degree of confidentiality
  - Limitations on what can be written about and in what kind of language. This is a permanent electronic health record, accessible to others.
  - Boundary issues what is therapy and what is not

# E-mail Consultation: Cut and Paste

- Frequently, consultation about therapy happens informally (common clients in families, clients wellknown in different departments, catching the psychiatrist in the hall, etc.) These informal consults are rarely documented and often involve "thinking out loud." Now we often use e-mail for the same purposes.
- If it is your intention to cut and paste the answers to these consultations in the client's chart, the person being consulted needs to know this. This is not "thinking out loud."

#### Cut and Paste

- Like verbal communication, e-mails are usually a combination of administrative details, feelings, and clutter. Cutting and pasting e-mails means that you will be including a lot of superfluous information. Do you want that in the chart?
- Be thinking about the difference between medical record information, psychotherapy notes, and chitchat.

# E-mail/Text: Summary

- Clearly define whether e-mail is for administrative purposes or for therapy.
- Follow appropriate security and storage guidelines depending on the purpose of the e-mail.
- Consider how having 24 hour/day e-mail contact might affect how the client views you.
- Don't "think out loud" via e-mail.

# A New Sense of Privacy

- The internet has totally changed our personal sense of privacy, entitlement to information about people we know, and probably the very boundaries of what we think of as our "self."
- For "digital natives", there has been no transition.
  For "digital immigrants", there is usually considerable difficulty grasping what has happened.
- Digital natives may also have a different view of "need to know" related to HIPAA.

# Our New Sense of Privacy

 Since we now expect, and accept, that we will be searched for online by prospective employers, loan officers, old lovers, former classmates, clinical supervisors and residency programs, and criminals trying to exploit us, is there a new boundary for therapy?

#### Consumers

- We should expect that all of our clients will "Google" us if they have the capability. Many will go beyond that to looking through social networking sites, use various search engines, pay for online firms to conduct both legal and illegal searches. Clients will know where we live, who our family members are, and if we have ever had any legal difficulties.
- You need to be aware of what you are putting online, and what others may be saying about you online.

# Should We Google Our Clients?

- Internet searches for forensic evaluations have become common practice.
- A survey (Kolmes 2014) of 227 mental health professionals found:
  - 48% intentionally found information online about current clients in a noncrisis situation. 81% of these were seeking general information.
  - 28% found information unintentionally
  - 8% searched for information about client safety in a crisis. 53% of these said the search was helpful.

# Trust Your Feelings?

- In the same study:
  - 90% believed that discovering client information had no significant effect on their role as a provider
  - 22% did not consider it a boundary crossing at all
  - 61% considered it a "slight" boundary crossing
  - 17% considered it a significant boundary crossing
  - Yet slightly less than half (48%) told their clients what they had done

# 2017 APA Meeting, San Diego

- A pilot survey of 82 physicians found that 40 attending physicians and 32 residents had Googled a patient. Reasons included:
- Curiosity
- Patient care (to see how a person interacts with the world, for example)
- To check out a story to see if it was delusional
- None of these MD's informed the person they had done the search.

# Everybody does it, but nobody talks about it.

Researchers

# Gathering Data: Emergencies

- There are different norms about privacy depending on whether or not there is an emergency.
- In emergencies, the courts have not placed any limits on how information can be gathered. You may call significant others, roommates, search online, call the police, visit a residence. In fact, it is possible that the court may ask why you didn't do such a search if the emergency called for it.
- However, keep in mind that the data found may be inaccurate.

## Non-Emergencies

- It is reasonable to suppose that most clients would feel surprised and frightened if they discovered their therapist was following them around spying on them. They might not feel that way about being searched for online, depending on their sense of privacy. But they might.
- The best approach in the context of therapy would be to either ask consent or simply inform clients that you may search out information about them.

#### Informed Consent

- Validates client autonomy: clients can consent or not consent, or decline treatment with a therapist that searches for online information
- Establishes trust: there is no hidden activity
- Respects the right to privacy
- If the cybercontact is accidental, the clinician can consider whether or not to disclose the encounter, depending on the circumstances (as in real life.)

# Clinically Justified?

- Client asks you to see her website.
- You hear about a self-destructive Facebook posting.
- You need to get in touch with the client and do not have an address.
- Your client's story of accomplishments seem delusional.
- You wonder if your client is litigious.

# Clinically Justified?

- Your client says her partner has full custody of the children, but is very vague when you ask why.
- You need more information about a custody battle that your client is engaged in and that you may need to testify in.
- Curious about what their house looks like, or boyfriend, or workplace, or parents, etc...

#### Before You Search Online

- Why do I want to conduct this search?
- Would my search advance or compromise the treatment?
- Should I obtain informed consent first?
- Should I share the results of the search with the client?
- Should I document the findings in the medical record?
- How do I monitor the effects of this search?

#### Where Are You?

- It would matter to me if my therapist was searching the internet at work with my chart, versus at home, lounging in the living room in front of the TV.
- Stay professional. Restrict your internet searches for work to the workplace.

# Telemedicine/ Telehealth

- Telemedicine is the practice of medicine over a distance, in which interventions, diagnostic, and treatment decisions and recommendations are based on data, documents, and interviews transmitted through telecommunication systems.
- Telehealth is a collection of means or methods for enhancing heath care, public health and health education delivery and support using telecommunications technologies.
- This includes a wide range of products and services used to enhance care, including video visits, remote monitoring, and electronic prescription fulfillment.

# Types of Telehealth

- Live Video Conferencing- this is the most well-known type, consisting of a patient and healthcare provider using live audiovisual two-way video conferencing session for care, similar to Skype or Facetime calls. This method is often used to treat common illnesses, assist with triage decisions regarding if a person needs to go to an emergency room and with psychotherapy sessions.
- Store-and-Forward (Asynchronous transfer)- this type involves the transmission of a patient's record or data to a healthcare provider using electronic communications system and treating the patient outside of real time. This method is widely used in rural areas where primary care providers send patient data to specialists at another location for consultation and analysis.

# Types of Telehealth

- Remote Patient Monitoring (RPM)- RPM is the collection and transmission of a patient's health and medical data in real time to a caregiver, nurse or physician in another location for monitoring purposes. RPM is already a highly effective method used in the senior living health industry to help monitor vital statistics and prevent negative health outcomes.
- Mobile Health (mHealth)- this type involves using any mobile communications device, including smartphones and tablets, along with hundreds of software applications to support healthcare.

#### The Goal

- The goal of telehealth is to improve health equity and access regardless of distance, disability, language, etc.
- It is hoped that it can achieve the triple aim of health care reform:
  - Improve the quality of patient experience
  - Improve the quality of outcomes
  - Save money

#### The Data

- A CDC 2013-15 survey found that 28% of US men and 17% of women do not have a personal health care provider. (31% of blacks, 47% of Hispanics, 30% of Asians, 36% of Native Americans.)
- 40% of millennials say they do not have a relationship with their primary care provider.

### The Data

- The American J of Managed Care (2015) found that the average doctor visit took 121 minutes 37 minutes of travel time, 64 minutes of wait time, and 20 minutes of doctor time.
- 2016 Commonwealth Fund study showed 51% of Americans struggle with trying to find health care after hours other than an ER.

## The Need in the Emergency Department

Psych Services online Feb 5, 2020 Freeman, Camargo et al.

- Psychiatric services have been increasingly difficult to access because of a shortage of mental health professionals and a decrease in hospital beds.
- Two nationally representative surveys(4,410 ED's) found 20% used telepsychiatry.

### **Emergency Departments**

- Most of these hospitals were in rural areas and telepsychiatry was the only psychiatric care available.
- Telepsychiatry was most commonly used in admission or discharge decision making.

### Associated Press 2018 Poll

- 90% of adults >40 years-old are comfortable with tele-health.
- Seniors are especially open to this health care model if it means they don't have to go through the ordeal of getting to the doctor's office.
- Unfortunately for seniors, Medicare is very restrictive in what it will pay for.

### The Data

- The number of telehealth users in 2019 was ~7 million.
- Experts believe telehealth will grow by almost 15 percent by 2020.
- Market value will hit \$36 billion by 2020, compared to just \$14 billion in 2013.
- Over 40 states have produced a total of 250 pieces of legislation related to telemedicine.
- More than half of all states (29) have passed laws mandating insurers to cover telemedicine services.

### The Data

• Kaiser Permanente is considered the leader in telehealth. In 2015, virtual patient visits outnumbered in-person visits for the first time across its seven region US network.

### Apps, Devices

- There's an app for that: direct to consumer apps include AMWELL, FIRST OPINION, MDLIVE.
- There are now more than 10,000 mental health apps. More than 50% of the world's population live in an area where there is less than one psychiatrist per 100,000 people, so is this a good thing?

## Mental Health Apps

- There are symptom trackers (people can enter data about their subjective experiences during the day), sensors (can track how much you sleep or where they have traveled), interventional (coaching, support), and therapy providing (primarily CBT.)
- People can develop their own app-based recovery plan.

## Apps for Mental Health Treatment

- Clients can learn cognitive behavioral skills, relaxation exercises, social cue recognition, emotion regulation, mindfulness skills, etc.
- In general, these apps are affordable, accessible, engaging, and non-stigmatizing, according to their developers.
- They can also allow unprecedented access of care-providers to the daily life of the user. The data may be more accurate. (Some studies show people are more willing to admit suicidal feelings to an app than a real person.)

## Data Mining

 A recently published study showed that it was possible to predict which new mothers would develop post-partum depression by monitoring their Twitter feeds. Google and Microsoft are developing ways to diagnose people by way of their internet interactions.

## Computational Psychiatry

 Computational psychiatry uses data analysis, machine learning, and artificial intelligence to analyze factors behind extreme and unusual behaviors. It is possible to mine data from longstanding observations and link it to mathematical theories of cognition.

# Some Examples of Computational Psychiatry

- Amazon's Mechanical Turk: Volunteers (paid) take part in various behavioral studies.
- Computational computer programs can analyze text word-use patterns to learn to identify people with psychosis or depression.

## Computational Psychiatry

 Cyberball: a game that involves three players passing a ball back and forth via computer. The game can be manipulated by researchers so that one participant feels left out. (Clients with borderline personality often feel left out even when they receive the ball their share of the times or more.)

# Next Generation Mental Health Apps

- Mindstrong Health monitors the way a person types, taps, and scrolls while using any other app.
   The data is analyzed using machine learning.
- The original data base came from 150 people who underwent neuropsych testing and then allowed the company to analyze their behavior on their phones. Machine learning then correlated various factors with their neuropsych characteristics.

## Mindstrong Health

- For instance, memory problems can be correlated with speed of typing and scrolling down contact lists, as well as the number of errors you make.
- Thousands of people are now using the app and the company has 5 years of clinical data to use in making its associations. They are measuring cognition and emotion.

### Facebook and Others

- After a livestream suicide, Facebook instituted "proactive detection" – using artificial intelligence to flag certain words or phrases in online posts that could indicate suicidality.
- The Univ of Michigan also has a study to see if Mindstrong can predict depression and suicidality.
- The Univ of Chicago is developing similar software to try to predict bipolar episodes.

#### The Cost

- Companies provide these free apps because they want the data about the user and the groups that the user is part of.
- There are significant privacy and legal issues. The data that the app gathers would likely be subpoenaed in a court case, for instance. We don't know what the liability is for a clinician who recommends an app for a patient, but then does not follow the data.

## Privacy and Data Sharing With Mental Health Apps (Torous J. JAMA Network Open April 2019)

- Only 13 of 36 popular mental health apps allow users to opt out of data sharing.
- 33 of 36 transmitted user data to 3<sup>rd</sup> parties (Google, Facebook.)

## Abilify Digestible Tracking Device

- Each tablet contains a sensor that communicates with a patch worn by the patient and with a medical software application. The patch records and time stamps information and collects other patient metrics, like rest and activity patterns. The information can be transmitted to a patient's mobile phone. Patients and caregivers can view information using a secure web portal.
- Intrusive? Secure? Cost?

## Research: Pretty Much All Good News (so far)

- Tele-psychiatry's evidence base is substantial. Well studied settings include outpatient clinics, primary care, emergency rooms, jails.
- It is comparable to in-person care in terms of engagement, quality of care, validity and reliability of assessment and clinical outcomes.
- The evidence base is very strong for children, adolescents, and adults regarding assessment, diagnosis and treatment.
- Preliminary studies in geriatrics and cross-cultural effectiveness is positive.
- Satisfaction ratings for clinicians and for clients are outstanding.

#### Research

- Dozens of clinical scales have been rated as reliable and valid comparing in person and telemedicine.
- Psychotic patients do not get more paranoid. It may be preferable for children with autistic disorders. Adults with disabling anxiety and PTSD may prefer this modality, especially coupled with telephone and e-mail options. It may facilitate cultural and language matching between therapist and client.

## Internet-Based Therapy Research

Am J Psych (March 2018)

- Thase et al. conducted a study comparing CBT on a computer, with some therapist presence with CBT in an office setting. The subjects where 154 medication-free patients with major depression at 2 university clinics.
- Computer based CBT performed as well as office-based.
- Compared with other studies, the presence of therapeutic support is very important for efficacy (up to 5 hours for a 16 hour therapy.)
- Internet based therapy makes sense only for patients who are not psychotic, have some insight into their illness, and have sufficient intelligence and literacy to participate.

### mHealth vs. Clinic-Based Care

*Psychiatry Online* 5/25/18

 mHealth is a system that uses mobile phones to deliver interventions to improve access to psychiatric care. A 3-month randomized controlled trial of a smart-phone delivered intervention vs. a clinic-based intervention was conducted.
 Participants who were in the smart-phone group were more likely to commence treatment and remain engaged than in the clinic group.

## CBT for Binge Eating via Smartphone (Am J Psych Feb 2020)

- This 52 week study compared 114 clients with binge eating diagnosis who were treated with guided self-help CBT + smartphone coaching with a control group of 111 clients who received standard care.
- The tele-treatment group achieved higher rates of remission (56.7%) than the treatment as usual group (30%.)

# American Medical Association Policy 2016

- Fundamental ethical responsibilities remain the same. In addition, physicians engaging in telemedicine must disclose any financial or other interests in particular telemedicine services. And they need to pay scrupulous attention to privacy and confidentiality.
- Providers need to inform clients about limitations of the service and encourage patients who have a primary care physician to involve them in the consultation.
- A valid physician-patient relationship can be established by:
  - A face to face exam over the internet connection
  - Consultation with another physician who has a relationship with the patient

### **AMA** Policies

- The provider must be licensed in the state where the patient receives services.
- Hospital privileges may be reciprocal.
- Patients should be able to choose their doctor.
- Care should be coordinated with a physician who sees the patient.

## Legal Issues

- 22 states have adopted the Interstate Medical Licensure Compact (requires unrestricted medical license, board certification, absence of criminal history and disciplinary actions) Includes Wisconsin.
- Medicare reimburses only when patient is in an underserved area, but provides parity.

## Legal Issues

- The public programs of 48 states now reimburse for telehealth services to some degree.
- Most professional organizations have information on their websites.

### Ethical Issues

- Privacy and confidentiality
  - Patients need to know who is responding to and sharing their personal information. They need to know who is in the room.
- One size does not fit all and care equity
  - Patients differ in their acceptance and comfort with different modalities. They differ in their access to different media gateways. Care equity is an important consideration.
- Maintaining the provider-patient relationship
  - Trust and empathy are essential components of the relationship. Every effort should be made to have tele-health as a supplement to live visits with a provider who already has a relationship with the client

### Ethical Issues

- Informed consent
  - The provider needs to introduce him/herself, identify location, organization, and certification. Everyone at both sites should be introduced. Risks, benefits, and alternatives to the tele-session should be discussed. There should be time for the client's questions.
- Managing boundaries
  - Practicing from a home setting, into a home setting, at unusual times could present challenges. There needs to be thoughtful, ethical reflection about this new modality.

## Using Ad Tracking in Mental Health

• In order to reach individuals who might be experiencing early psychotic symptoms, a research group in NYC worked with Google AdWords to link 2,000 selected search terms to strategically placed page advertisements for 14 weeks. The ads appeared 191,313 times, were clicked on 4,350 times. Many users sought out additional information about psychosis and some contacted a local treatment program. (*Psych Serv* online, July 17, 2017)

### Protecting Our Patients

- This is the world that our patients is entering when they use a mental health app, or are invited to a community of people who "have an illness" like they do.
- What responsibilities do we have as providers and case managers to protect our clients from invasion of privacy and predators?

- The Daily podcast February 10, 2020
- "The end of privacy as we know it."
- Clearview AI