LEVERAGING TELEPSYCHIATRY IN PRIMARY CARE AND OTHER SETTINGS TO SUPPORT WOMEN’S MENTAL HEALTH AND WELLNESS

JAY H. SHORE, M.D., M.P.H.

16th ANNUAL WOMEN’S HEALTH SYMPOSIUM, CENTER FOR WOMEN’S HEALTH RESEARCH

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS, MARCH 3, 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.

The speaker has disclosed a financial relationship (Chief Medical Officer) with AccessCare and any conflicts of interest have been resolved.

Dr. Shore is Chief Medical Officer of AccessCare Services which provides telehealth services and technologies.
Telehealth and Technology Roles

Director of Telemedicine
Native Domain Lead, VRHRC-SLC

Chief Medical Officer

Past Board Member and Chair TMH SIG

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

Chair APA Telepsychiatry Committee

Behavioral Health Portfolio Manager 2006-2013
# Colorado Telepsychiatry Teams and Collaborators

<table>
<thead>
<tr>
<th>AccessCare and Colorado Access</th>
<th>Helen and Arthur E Johnson Depression Center</th>
<th>Department of Family Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Marshall Thomas</td>
<td>• Matthew Mishkind</td>
<td>• Frank DeGruy</td>
</tr>
<tr>
<td>• Alexis Giese</td>
<td>• Michael Jones</td>
<td>• Shandra Brown-Levy</td>
</tr>
<tr>
<td>• Bethany Himes</td>
<td>• Christopher Schneck</td>
<td>• Corey Lyons</td>
</tr>
<tr>
<td>• Rachel Dixon</td>
<td>• Jacqueline Calderone</td>
<td>• Venus Mann</td>
</tr>
<tr>
<td>• Maryann Waugh</td>
<td>• Amy Donahue</td>
<td></td>
</tr>
<tr>
<td>• Jenny Han Rementer</td>
<td>• Lynn Fenton</td>
<td></td>
</tr>
<tr>
<td>• Jennifer Rodriguez</td>
<td>• Rachel Griffin</td>
<td></td>
</tr>
<tr>
<td>• Danielle Peters</td>
<td>• Emily Reser</td>
<td></td>
</tr>
<tr>
<td>• George Roupas</td>
<td>• Brittany Pittman</td>
<td></td>
</tr>
<tr>
<td>• Robyn Diseati</td>
<td>• Alex Yannacone</td>
<td></td>
</tr>
<tr>
<td>• Lauren Hahn</td>
<td>• Azure Brame</td>
<td></td>
</tr>
<tr>
<td>• Kim Lambert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Jordan Gardner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Amy Peet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Centers for American Indian and Alaska Native Health

• Spero Manson
• Douglas Novins
• Cynthia Goss
OUTLINE

• Evolution of telepsychiatry in context of transforming health care system
• Leveraging telepsychiatry for women’s mental health
• Case example of telepsychiatry pre-natal integrated care program
Telepsych photos from UNMC Archives, Special Collections Department, McGoogan Library of Medicine, University of Nebraska Medical Center, Omaha, Nebraska
Models attempt to replicate current in-person care at a distance.

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

WEB-BASED VIDEO CONFERENCING
Do not require the patient to be in a clinically supervised setting.

Diagram inspired by Dr. Steve Chan Icons are open-source under SIL OFL 1.1 license. Font Awesome by Dave Gandy, http://fontawesome.io
Figure 1

Continuum of Physical and Behavioral Health Care Integration

Coordinated Care
- Screening
- Navigators

Co-located Care
- Co-location
- Health Homes

Integrated Care
- System-Level Integration
**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

---

**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.

Content by @StevenChanMD. Icons are open-source under SIL OFL 1.1 license. Font Awesome by Dave Gandy, [http://fontawesome.io](http://fontawesome.io)
“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
15% of Women with PPD  
20% of Women Screened  
60% Receive Treatment
**Themes: How Care is Accessed and Delivered**

<table>
<thead>
<tr>
<th>Patient Facing Technology</th>
<th>Build PCP Capacity to Treat Mild to Moderate Behavioral Conditions</th>
<th>Virtual Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apps and Web Services</td>
<td>Decision Supports</td>
<td>Telepsychiatry</td>
</tr>
<tr>
<td>Text Messaging and Apps</td>
<td>e-Consult</td>
<td></td>
</tr>
<tr>
<td>Digital Therapeutics</td>
<td>Project ECHO²</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remote Tele-Hub</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Virtual Visit</td>
<td></td>
</tr>
</tbody>
</table>

- **Self Management**
  - Self-help, fitness, affirmatives, prompts, relaxation, steps, personal exploration

- **Practice Extenders**
  - Remote monitoring, reminders, follow up assessments, reduce phone tag

- **Practice Extenders**
  - Variety of approaches including online therapies (like CBT) and coaching modules

- **Embedded In EHR**
  - Treatment pathways, clinical formulation, prescribing and treatment algorithms

- **Consultation Platform**
  - Primary care to specialist, all cases with consultation input, education

- **Telementoring and Education**
  - Didactics and case presentations, "hub" and "spokes", collaborative learning

- **Collaborative Care**
  - Curbsides, outreach and treatment, registry review, Child Access Projects

- **Direct Evaluation**
  - Evaluation by specialist, documentation, asynchronous model, teletherapy

Women’s Mental Health

- Mental Health Issues Impact Women and Men differently
  - Biological differences (Perinatal, premenstrual, perimenopause-related disorders)
  - Gender and Cultural role impacts

- Specific Disorder
  - Depression and Anxiety (Depression 2X higher Women > Men)
  - Addiction (Addiction 2X higher Men > Women)
  - Aging Women > Men (3:2 at 65, 5:2 at 85)
  - Trauma and Interpersonal Violence (20% of all Women)

US Census: [https://www.census.gov/population/socdemo/statbriefs/agebrief.html](https://www.census.gov/population/socdemo/statbriefs/agebrief.html)
LEVERAGING TELEPSYCHIATRY IN WOMEN’S MENTAL HEALTH

• **Increasing Access**
  • Rural, frontier and remote locations
  • Decreasing travel and other resource barriers to care (eg, time off of work)

• **Improving quality**
  • Enabling team-based care models
  • Enhancing multi-disciplinary care

• **Addressing Trauma and Violence**
  • Safety
  • Increased comfort, privacy and confidentiality
VIRTUAL INTEGRATED CARE PERINATAL INITIATIVE

[Logos of various organizations associated with the initiative]
PREGNANCY RELATED DEPRESSION

• Pregnancy-related depression during pregnancy and/or up to one year postpartum.
• It is the most common complication of pregnancy for mothers nationwide (8-19%).
• In Colorado 1 in 9 women who give birth experience depressive symptoms.
• Studies have documented even higher rates in low-income populations, with prevalence as high as 59%.
• High rates of unidentified and untreated maternal depression is a threat to a mother’s ability to provide responsive and nurturing parenting lead to negative life outcomes for mothers and children and potentially avoidable lifetime health and societal costs.

VISION FOR SERVICE DEVELOPMENT

• Screening and diagnosis in primary care settings is an effective way to increase identification of maternal depression.

• Screening will likely identify about 10 to 15% of pregnant mothers with depression care needs in identified Colorado sites.

• A patient/family centered approach will lead to high rates of patient engagement in available treatment.

• Integrated care options, like embedded in-person/virtual behavioral health professionals, have a high potential to reduce maternal depression symptoms.

• Perinatal integrated care processes built with in-person behavioral health support will pave the way for less costly, and equally effective virtual care processes.
CLINIC SITES

- Saint Joseph Hospital
  - Sister Joanna Bruner Family Medicine Center is a primary care medical home within Colorado’s Accountable Care program
  - Seton Women’s Clinic specializes in women’s health

- The project clinics are located in an urban area, majority of patients are low-income. 54% have Medicaid benefits, 23% are uninsured (predominantly undocumented) and only 11% have a commercial payer source.

- Both clinics are home to residency programs and have 10 attending and 26 resident physicians (Bruner) and six attending and 20 resident physicians (Seton).

- Bruner had prior integrated care services.
**UNIVERSAL SCREENING**

- Medical Assistant (MA) screens (Edinburgh or PHQ-2) at every visit, PHQ-9 as for elevated PHQ-2.
- Screening electronically on clinic tablets, (results immediately available). Patients referred to the BHC:
  1) Automatically - Based on an elevated score following her OB/GYN visit.
  2) The MA or OB/GYN physician may refer patients for other psychosocial concerns.

**VIRTUALLY EMBEDDED FULL-TIME LICENSED BEHAVIORAL HEALTH CLINICIAN (BHC)**

- Oversee depression screening for perinatal patients, Follow up on positive depression screens
- Offer brief intervention and treatment if needed,
- Support coordination of psychiatric consultation for the primary care physicians through an AccessCare Services (ACS) psychiatrist via virtual platform, and refers to ongoing behavioral health and social services.

**PSYCHIATRIC SERVICES VIA COLLABORATIVE CARE MODEL:**

- ACS-employed psychiatric virtually available for eight hours of consultation per month.
- The psychiatrist consults with the care team via the BHC to make diagnostic and medication recommendations for the care team.
- The OB/GYN/FAMILY MEDICINE provider retains prescriptive responsibility, and through the consultative model, improves her/his own ability to manage the physical and behavioral health of current and future patients.
INITIAL OUTCOMES

**Table 1. Patient Service Utilization**

<table>
<thead>
<tr>
<th></th>
<th>Bruner</th>
<th>Seton</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Perinatal Patients</td>
<td>548</td>
<td>547</td>
<td>1,095</td>
</tr>
<tr>
<td>Total Perinatal Encounters</td>
<td>809</td>
<td>972</td>
<td>1,781</td>
</tr>
<tr>
<td>Total Depression Screening</td>
<td>748</td>
<td>707</td>
<td>1,455</td>
</tr>
<tr>
<td>Patient referrals to BHC (elevated screen and/or psychosocial concerns)</td>
<td>41</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td>Referral from BHC to additional psychosocial services</td>
<td>21</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Psychiatry Consultations</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**Figure 2. Behavior Health Diagnosis**

- Mood Disorder: 44%
- Adjustment Disorder: 15%
- Anxiety: 31%
- Substance Use: 5%
- OCD: 2%
- Personality Disorder: 3%

**Figure 3. Race/Ethnicity**

- Black/African American: 21%
- Hispanic/Latino: 11%
- Unspecified/Declined to Answer: 57%
- White/Caucasian: 11%

**Figure 4. Payer Source**

- Medicaid/Uninsured: 26%
- Commercial Insurance: 74%
The Rule of 15 for PPD

15% of Women with PPD  20% of Women Screened  60% Receive Treatment
NEXT STEPS AT JOHNSON DEPRESSION CENTER AND ACCESSCARE

- Continuation and Expansion of pre-natal VICCI model.
- Hearst Foundation Grant at Johnson Depression Center to develop formal Women’s Mental Health Program
- Exploration of substance use disorder and domestic violence support services
CONTACT INFORMATION

Jay H. Shore, MD, MPH | Professor
Department of Psychiatry and Family Medicine, School of Medicine
Centers for American Indian and Alaska Native Health, Colorado School of Public Health
University of Colorado Anschutz Medical Campus
Mail Stop F800 | 13055 East 17th Avenue, | Aurora, Colorado 80045
303.724.1465 | fax 303.724.1474 | jay.shore@ucdenver.edu