

# A Telemental Health Pilot in an Urban Setting

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# Disclosures of potential conflicts

- No commercial or financial affiliations. No conflicts to disclose.

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- Baltimore County Public Schools
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  - Dr. Sarah Edwards, Division of Child and Adolescent Psychiatry Medical Director, Ambulatory Services
  - Dr. Nicole Gloff, Division of Child and Adolescent Psychiatry, Assistant Professor, Associate Director of Telepsychiatry
  - John Kornak, Former Technology Consultant

# Learning Objectives

- **Objective One:** Participants will be able to list 3 benefits of utilizing telemental health to provide psychiatry services in urban schools
- **Objective Two:** Participants will be able to list 3 strategies for building rapport when using tele mental health.
- **Objective Three:** Participants will be able to identify the first three steps when initiating telemental health in schools.

# University of Maryland School Mental Health Program (SMHP)



*Executive Director: Nancy Lever*  
*Senior Advisor: Sharon Stephan*  
*Program Director: Michael Green*  
*Associate Director: Jennifer Cox*  
*Assistant Director: Kelly Willis*

- Established 1989 in 4 schools
  - Currently in 25 schools
- Elementary through high school
- Mental health promotion, prevention, intervention
- Predominantly serving students in general education
- Low SES, highly stressed communities, violence exposure, substance abuse
- Licensed social workers, psychologists, counselors, psychiatrists, and graduate trainees

# What is Telemental Health?

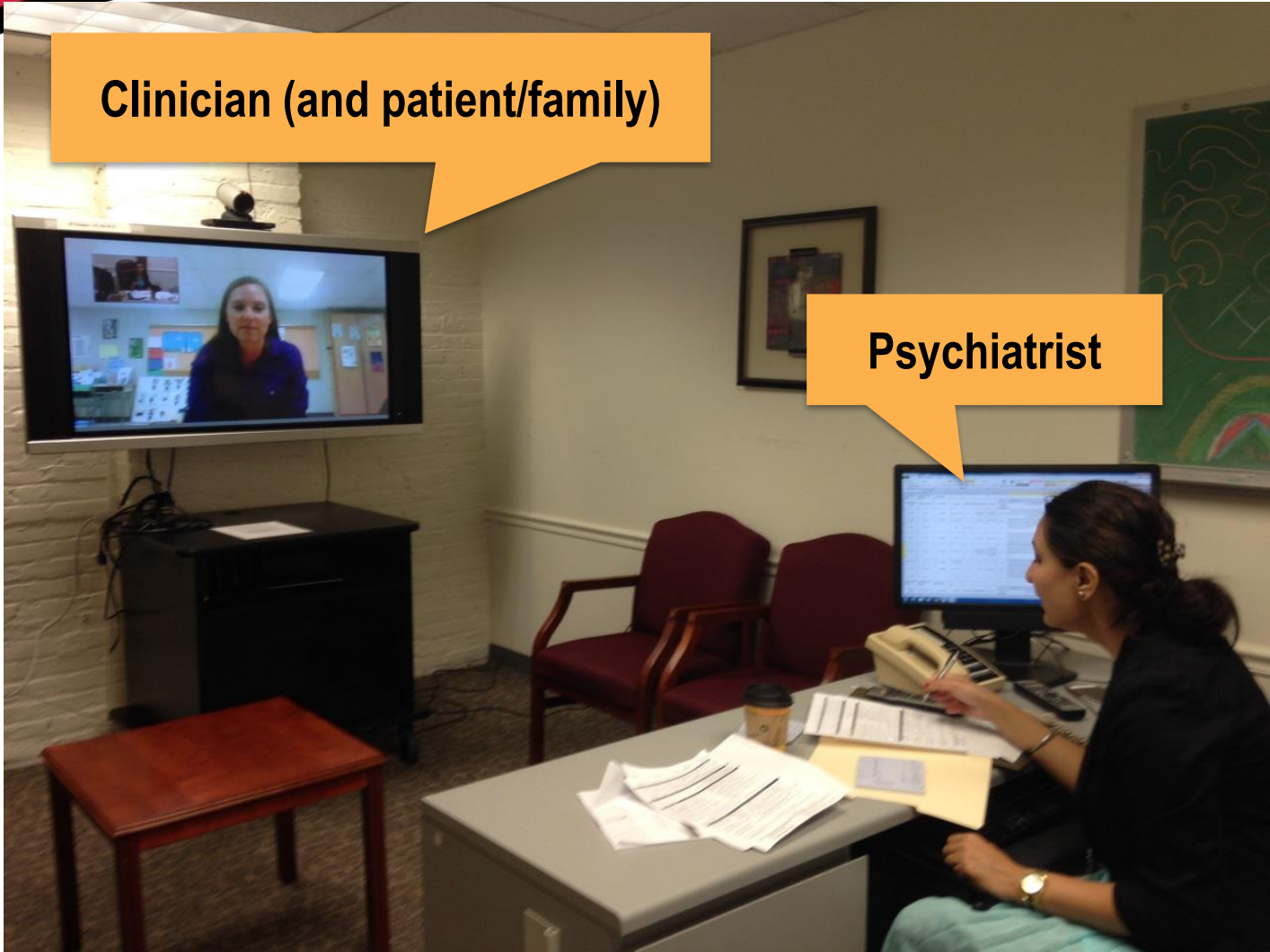
- The use of video teleconferencing to deliver mental healthcare or education at a distance
  - Interactions using live audio/video
  - i.e. a counselor and a student consulting with a psychiatrist in real time





**Clinician (and patient/family)**

**Psychiatrist**



# Why telemental health?

- Improves ***access to care***
  - Timely access to locally unavailable services
  - Spared burden/cost of transportation
  - Addresses workforce shortages
  - Increase access
- Convenience
- Cost
- Patients like it!
- Multidisciplinary team can be in multiple settings and come together at once
  - Collaboration better than in-person



*Exceptions: Safety concerns, patient refusal*



# **TELEPSYCHIATRY IN MARYLAND: AN EVOLUTION**



# History of Telepsychiatry in the Division of Child and Adolescent Psychiatry and the Department of Psychiatry 2000-2013



- 2000
  - Maryland Youth Practice Improvement Committee (MYPIC)
  - Learning collaborative in psychopharmacology among professionals at UMB/Hopkins and the State inpatient residential facilities utilizing Tele to integrate the case conferences
- 2008
  - The recruitment of Brian Grady
    - ~ 50% of his salary funded through MHA
  - HRSA grant with Mid-shore providers
    - ~ Service component
    - ~ Fused funding model

## HRSA (*continued*)

### State of the art technology

- ✓ Development of Operational manual for sites for both adult and child populations
- ✓ Development of state Medicaid standards for telepsychiatry

**Title 10 DEPARTMENT OF HEALTH AND MENTAL HYGIENE**

Subtitle 21 MENTAL HYGIENE REGULATIONS

Chapter 30 Telemental Health Services

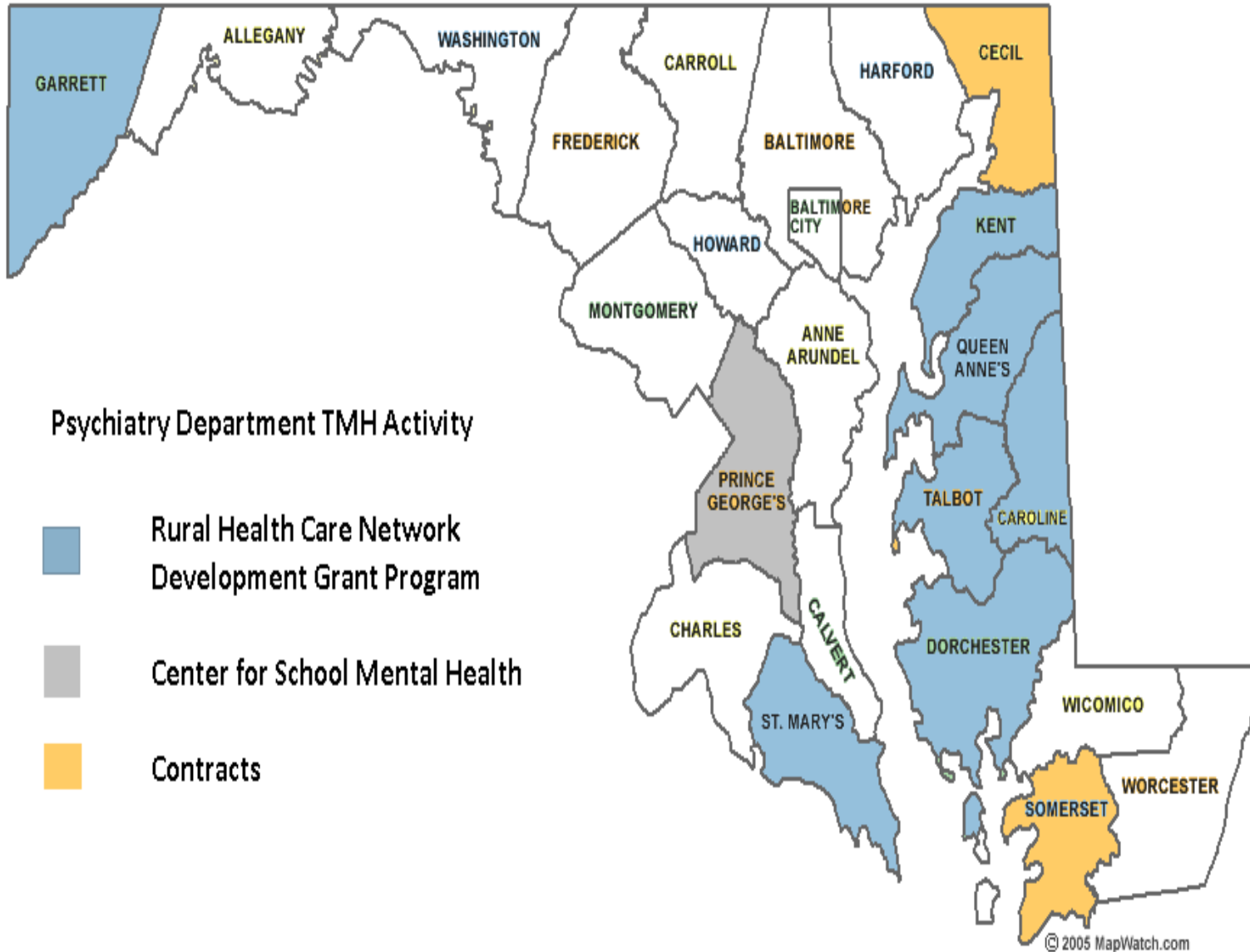
Authority: Health-General Article, § 10-901, Annotated  
Code of Maryland

# Evolution of Equipment

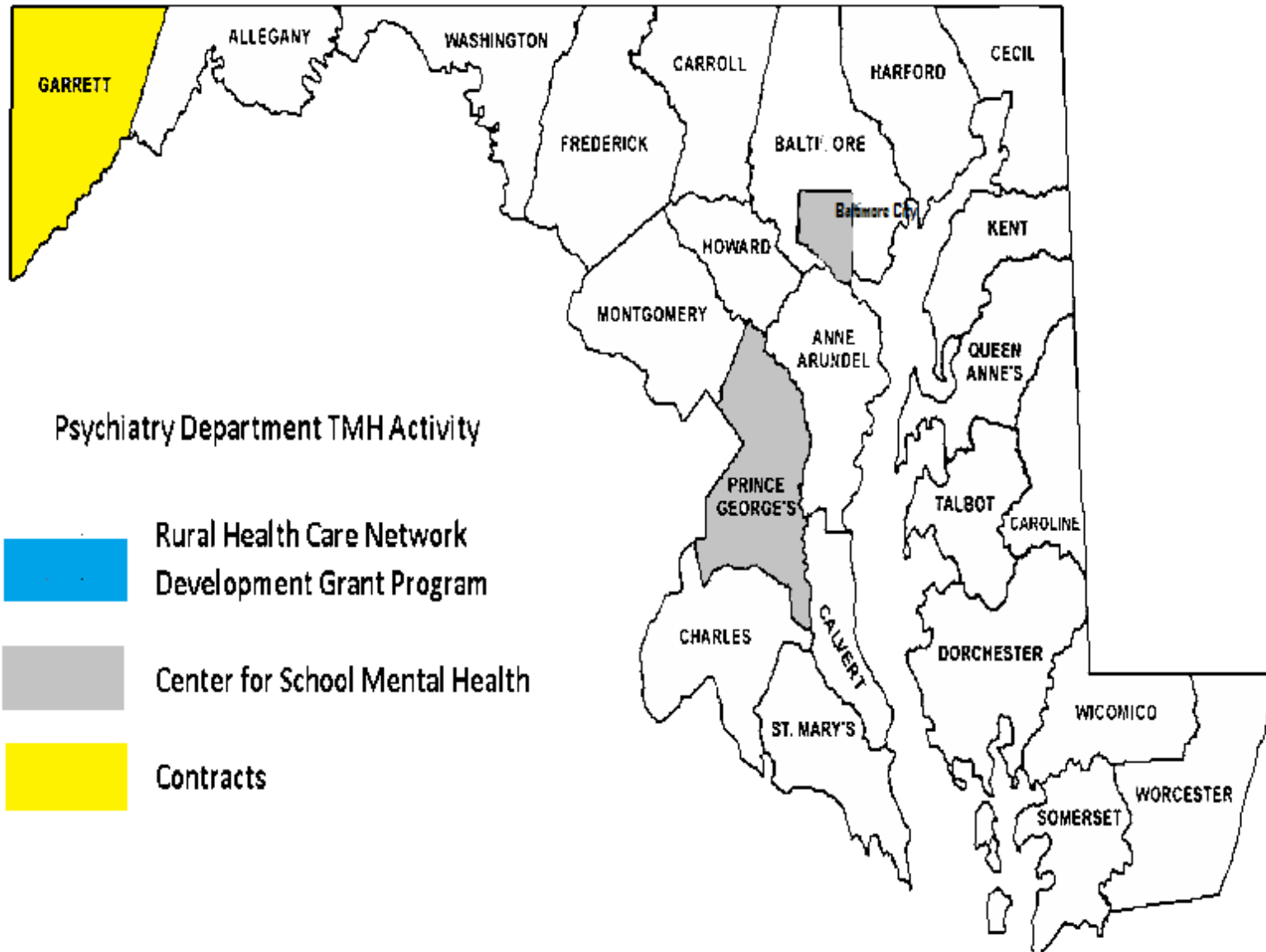
- Tandberg and Polycom units
- DSL Lines
- Webcam, MOVI and Jabber
- Big screen, desktop, laptop



# November 2010 Peak of HRSA



# Post HRSA



## School Mental Health and the use of Telebehavioral Health

- Prince George’s School Mental Health Initiative (9 schools)
  - Consultation Model
- Baltimore School Mental Health Initiative (17 schools)
  - Consultation and Collaborative Care Model
- Garrett County
  - Consultation, Collaborative and Direct Patient Care Model

# Operation and Funding Models That Have Supported the Department Tele Programs

- Tobacco dollars
- DHMH contracts
- HRSA grant
- Contracts with Health Department/Community Health Centers for services rendered  
*(Remote site buys physician time)*
- Limited fee for service





# Maryland Governor Approves Bill to Expand Coverage of Telemedicine Provided Services!

- ❖ Tele reimbursement comparable to in-person
- ❖ All areas (not just rural)
- ❖ Effective October 1, 2014

# The Maryland Health Care Commission (MHCC) Telemedicine Task Force

The Task Force develops recommendations to expand effective use of telemedicine to increase access to healthcare, reduce health disparities and create efficiencies in healthcare delivery.

- ❖ The Task Force divided into the following groups:
  - ❖ Technology Solutions and Standards Group
  - ❖ Financial and Business Model Group
  - ❖ Clinical Advisory Group

# Telemedicine Task Force


The Telemedicine Task Force Clinical Advisory Group is identifying innovative telehealth use cases where the use of telehealth can:

1. Have the greatest impact upon populations in need or at risk, high volume disease states, high societal value, and/or preventive care.

2. Be consistent with mandates of the Affordable Care Act (ACA), enhance population health management, support innovative payment models (e.g. Accountable Care Organizations (ACOs), Total Patient Revenue (TPR) hospitals, support the CMS waiver, pay-for-performance, and to reduce re-hospitalizations (reduce readmissions seven percent per year for the next five years)

3. Be implementable, testable, and cost effective.

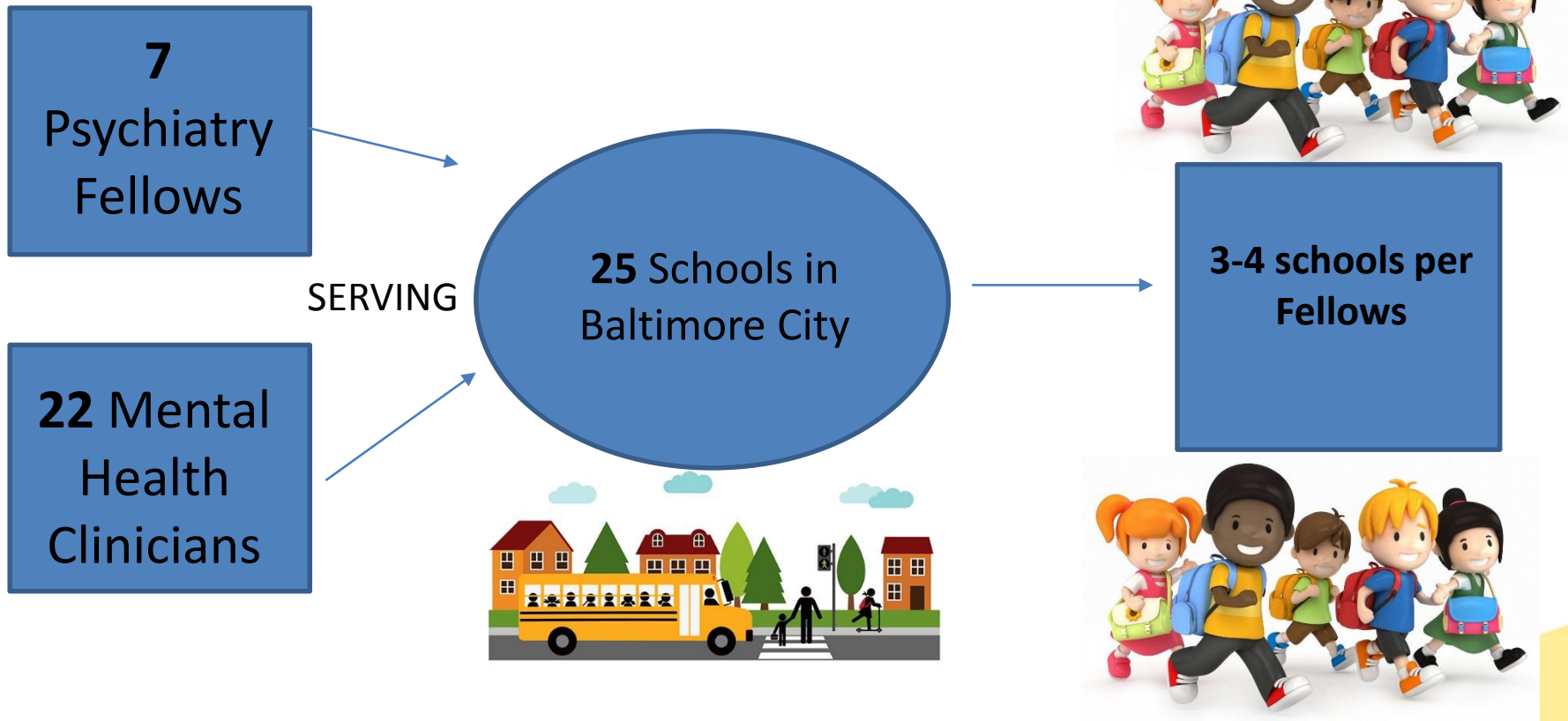
# Future Directions & Projects in the Works

- **Evolution of telepsychiatry in other programs**
    - EIP, Addictions, DJS, Psychiatric Emergency Services, Primary Care/Medical homes
  - **Expanding use of innovative HIPAA compliant technologies**
    - Cost effective
  - **Continue evaluation of programs**
    - Clinical and cost effectiveness, patient outcomes
  - **Program sustainability**
    - Diversification of funding sources
- 

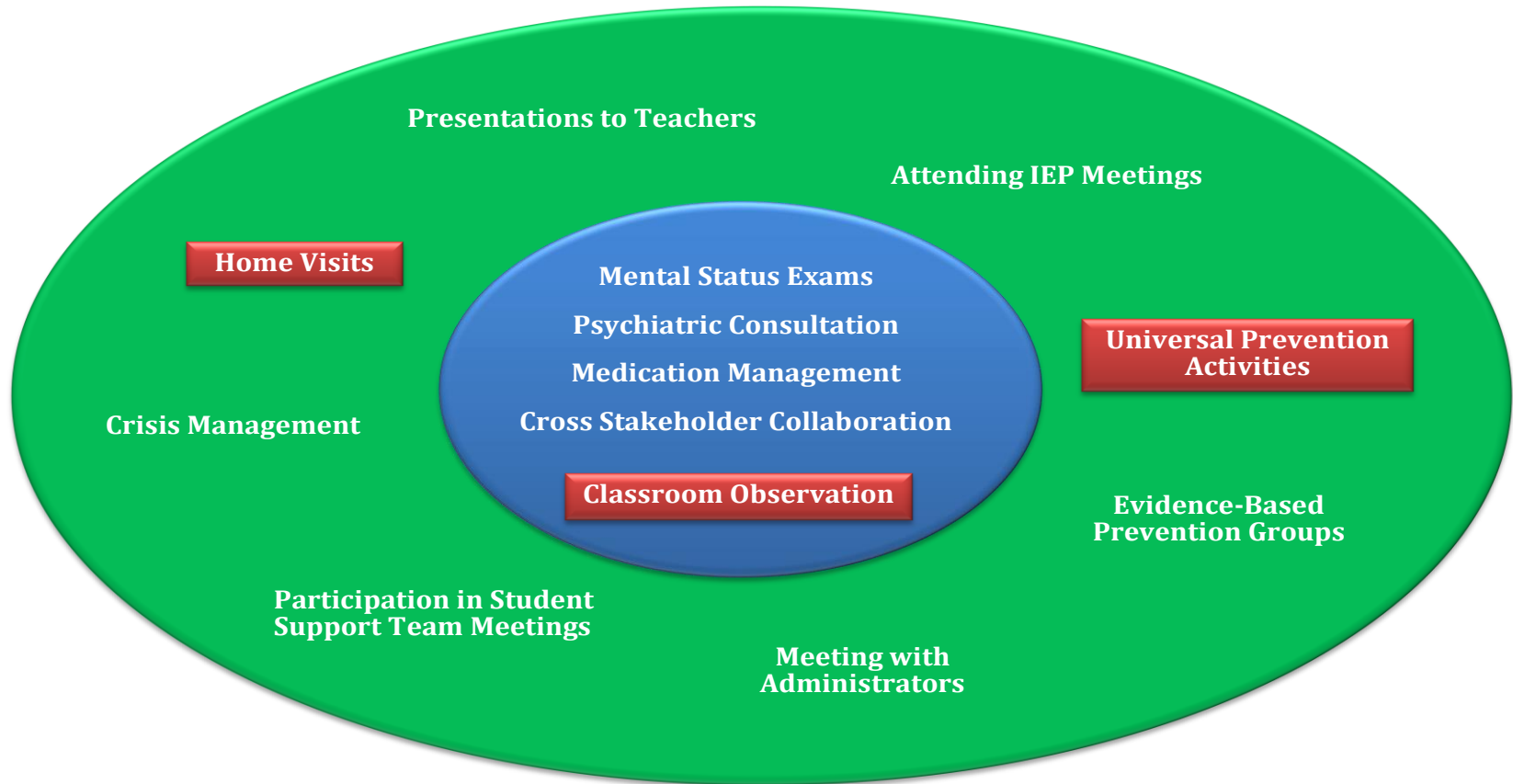


# **OUR UNIVERSITY OF MARYLAND, SCHOOL MENTAL HEALTH TELEMENTAL HEALTH PROGRAM**

# Schools and Students Served



# Psychiatry Roles



Primary Responsibilities



Additional Experiences during Rotation



Can only be Performed On-Site (Not Telepsychiatry)

# Training Process

- Professional development
  - Experiencing the school expectations and culture
    - At least one in-person visit
  - Greater appreciation and understanding of structures, policies, opportunities, and challenges for schools and school-based professionals.
  - Increased understanding of school-family-community collaboration
- Impact
  - 26% of the 31 CAP graduates over the past 5 years remain affiliated with SMH
  - 20% continue to work in TMH



# 3-Armed Program Model



## Traditional Model

- All psychiatry sessions occur in-person in the school setting
- Fellows typically visited each of their assigned school sites at least 2x a month



## Telepsychiatry Only Model

- All psychiatry sessions occur using telemental health only
- Fellows used Video TeleConferencing (VTC) equipment to communicate with clinicians, patients and families
- Fellows had one in-person visit to the school to observe the physical location and culture of the school site and to meet the principal/administrator of the school



## Blended Model

- Fellows conducted sessions both in-person and via tele based upon a predetermined schedule

# Overview of Students Served

Completed intake Attitudes  
Questionnaire: **N = 119**

Average age of students  
served: **10.08 years old**

**39% Female, 61% Male**

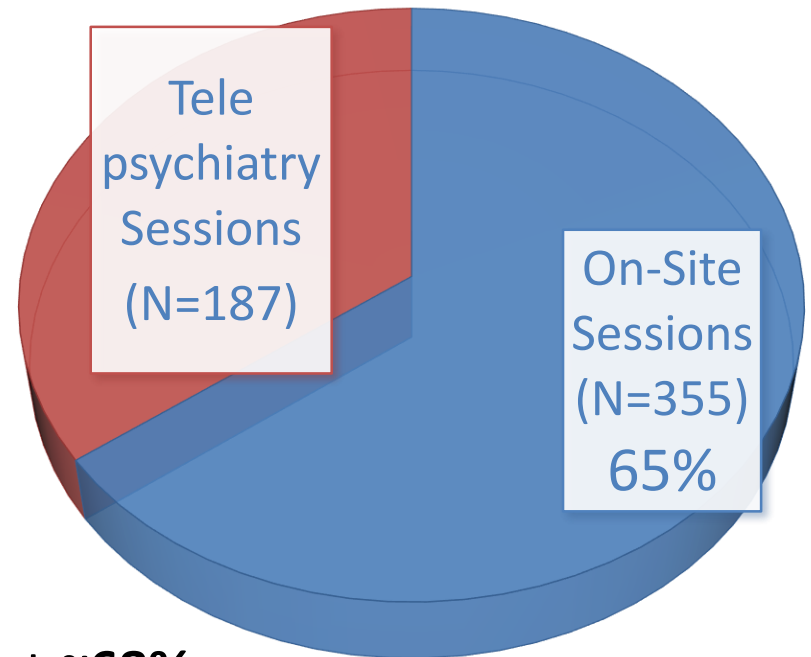
Presenting Problem	
Depression	21%
Anxiety	18%
Disruptive Behavior	21%
ADHD	50%
Trauma	5%
ODD	4%
Conduct	1%
Other (ex: Adjustment D/O, SA)	11%



# Productivity: Sessions Provided

## Session Foci\*:

- Diagnostic evaluation ~5%
- Establish/help with case conceptualization ~5%
- Initial medical evaluation ~24%
- Ongoing medication management ~68%
- Patient education ~1%
- Case review/check-in with patient ~4%



\* Note: 1 session could include more than one session focus, so totals may not sum to 100%

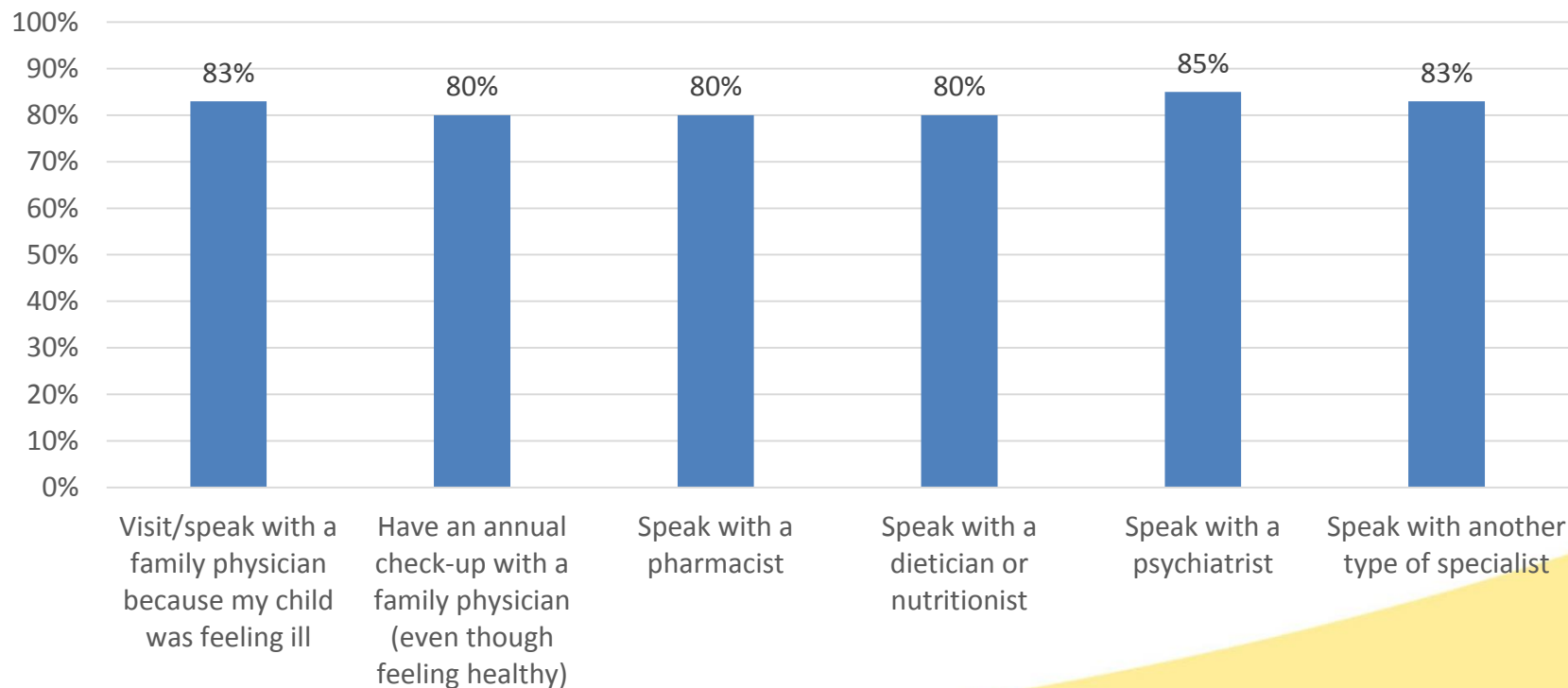
# Evaluation Procedures

- **Productivity outcomes**
  - Schools and students served
  - # of sessions conducted in-person and via tele and session focus
- **Parent/caregiver attitudes about telehealth**
  - Collected from all parents/caregivers at the beginning of the 2015-16 school year (prior to receiving psychiatry services)
- **Satisfaction with services**
  - Parent/caregiver, student, clinician and fellow satisfaction questionnaires completed
  - All completed in reference to 1 session per day (session randomly selected)

# How do caregivers feel about telehealth, generally?

I would feel comfortable and have confidence using “telehealth” if I needed to...

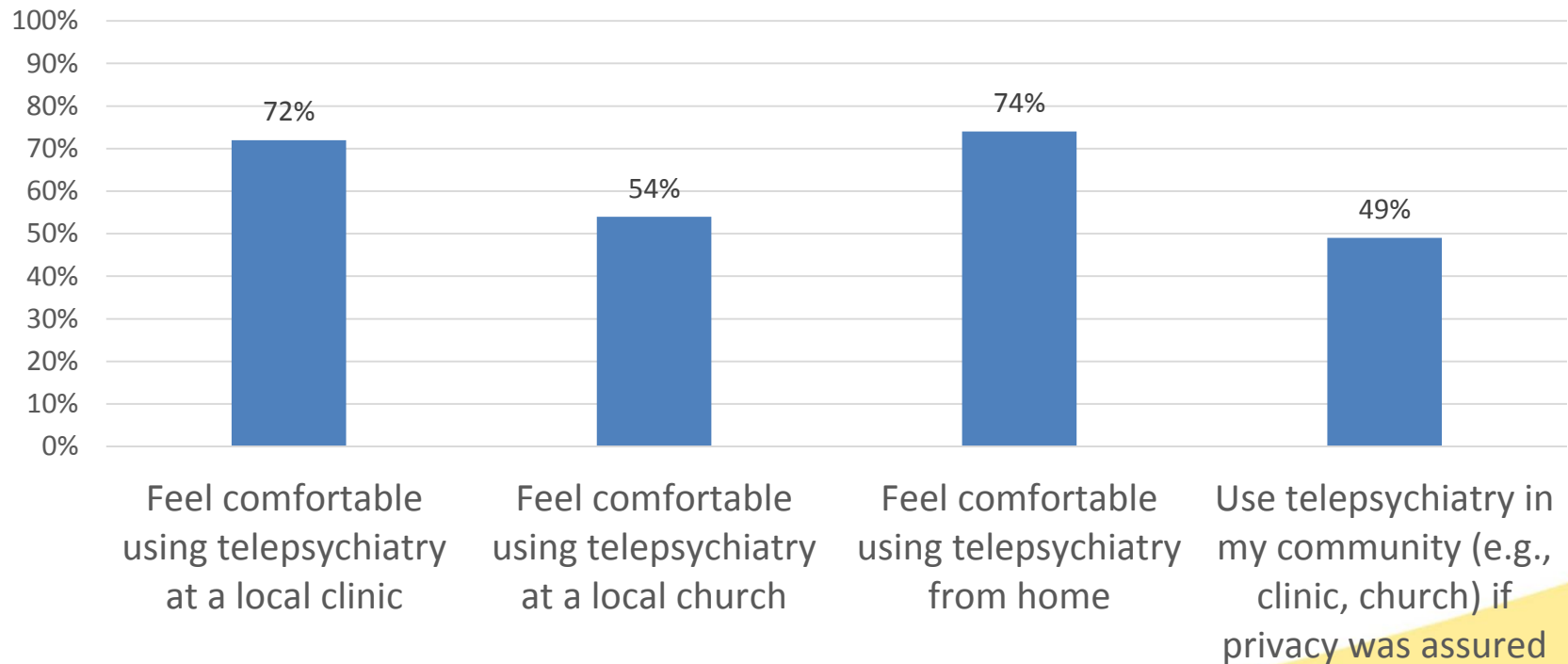
■ Agree/Strongly Agree



# How do caregivers feel about *telemental* health, specifically?

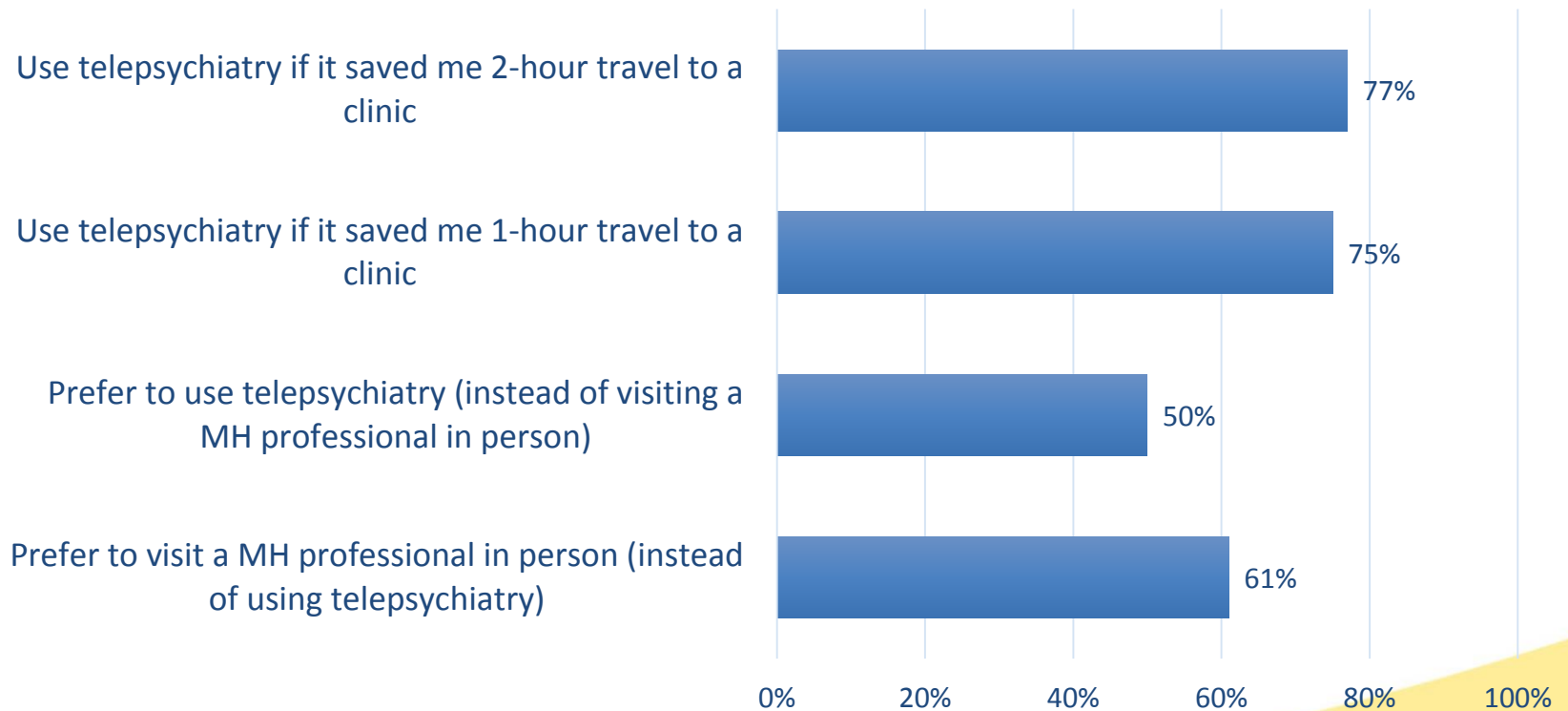
If my child were experiencing any of these problems, I would...

■ Agree/Strongly Agree

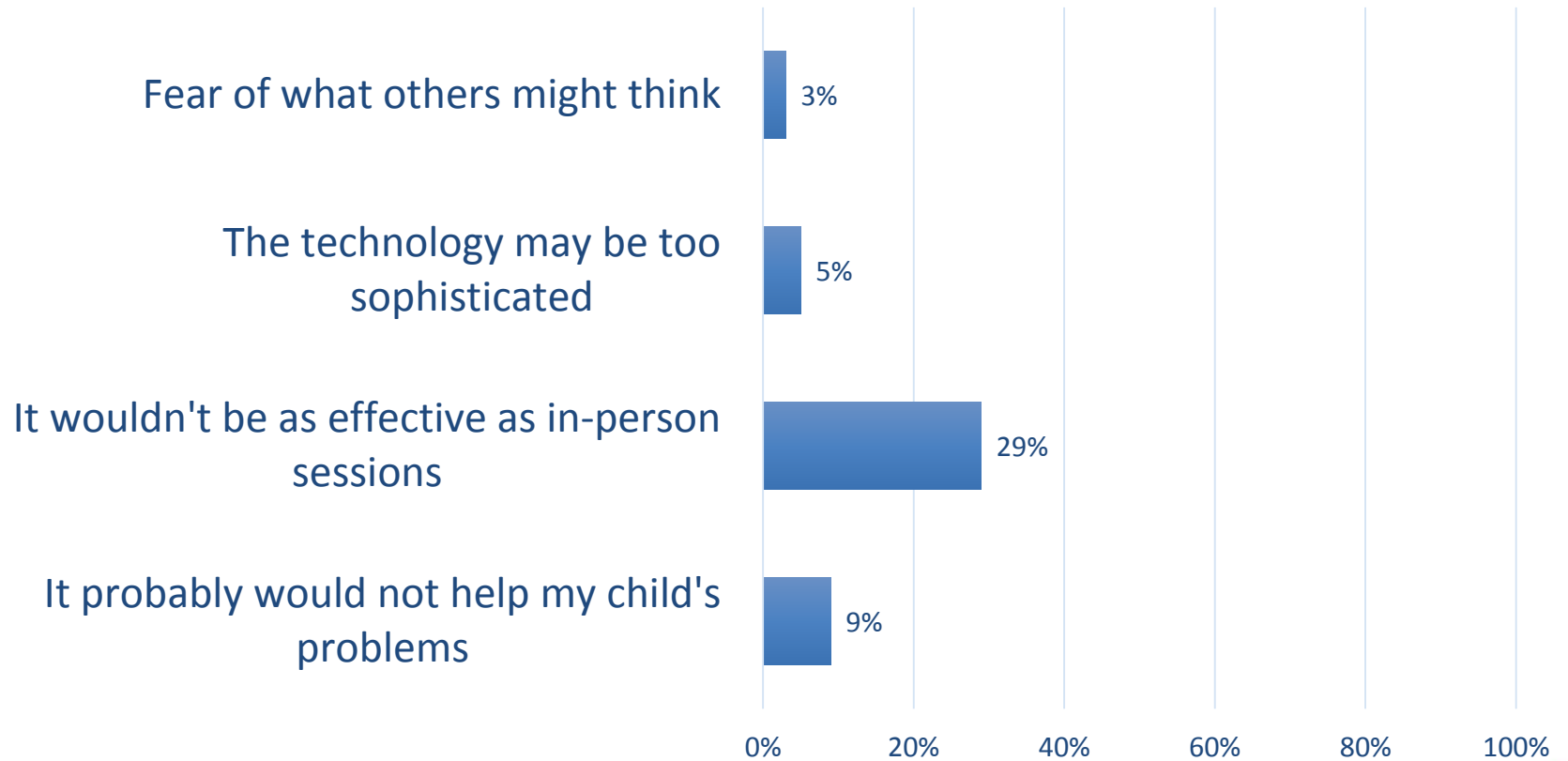


## If my child were experiencing any of these problems, I would...

■ Agree/Strongly Agree



## Percentage of Caregivers whom Endorsed Each Concern About Telemental Health





# Satisfaction with Services: Students

Scale: 1 = Not at All 4 = A Lot	Telepsychiatry Sessions (N = 66)	In-Person Sessions (N = 143)
I could see the doctor on the screen really well	3.68 (.71)	-
I could hear the doctor on the screen really well	3.52 (0.81)	-
I was worried about anyone else hearing me	1.52 (.95)	1.42 (.94)
It was easy to talk with the doctor	3.61 (.84)	3.74 (.63)
I could talk about my problems easily	3.50 (.81)	3.38 (1.01)
I understood what the doctor wants me to do	3.67 (.64)	3.70 (.71)
I feel OK about the doctor's advice	3.68 (.71)	3.80 (.54)
I think my friends and other kids would like the doctor	3.12 (1.05)	3.33 (1.05)
I am willing to go back to this doctor	3.58 (.84)	3.75 (.64)



Students report being approximately equally satisfied across telepsych and in-person sessions, with high satisfaction overall.

# Parents/Caregivers Satisfaction

Scale: 1 = Strongly Disagree 5 = Strongly Agree	Telepsychiatry Sessions (N = 33)	In-Person Sessions (N = 92)
I could talk comfortably with the psychiatrist	4.73 (.10)	4.75 (.09)
I feel confident that my child's information was not overheard by others outside the room	4.85 (.06)	4.80 (.08)
I could understand the psychiatrists recommendations	4.84 (.07)	4.78 (.08)
I felt the psychiatrist was comfortable with seeing my child	4.84 (.07)	4.77 (.09)
My child will receive the help that he/she needs because of our visit with the psychiatrist	4.67 (.10)	4.78 (.08)
I would be willing to have my child see a (tele)psychiatrist again in the future	4.70 (.09)	4.79 (.08)
Overall I am very satisfied with the quality of services provided by the psychiatrist	4.70 (.11)	4.77 (.08)
My concerns were addressed today	4.70 (.11)	4.78 (.08)



Parents report being approximately equally satisfied across telepsych and in-person sessions, with high satisfaction overall.

# Telepsychiatry Specific Questions: Parents

Overall, parents report that:

- They could see and hear the telepsychiatrist well
- Telepsychiatry helped them to see a psychiatrist sooner
- Telepsychiatry was as good as in-person visits

On average, they are unsure/undecided about whether or not their child would have received psychiatry services without telepsychiatry.



# Clinician & Fellow Satisfaction

- Across all satisfaction domains, fellows and clinicians reported high levels of satisfaction
- Fellows and clinicians were approximately equally satisfied with tele and in-person sessions
- Clinicians did report somewhat lower satisfaction in tele sessions in terms of “The ease of using video teleconferencing equipment”
- The following concerns were echoed in focus groups:
  - Paperwork inefficiencies
  - Video equipment problems
  - Difficulty with scheduling
  - Inappropriateness of tele with certain clients



# Challenges to TMH in Schools

- Significant practice change for providers
  - Finding private and secure spaces in overcrowded schools
  - Providing continuity of care over breaks
  - Appt times should be respectful of “core” classes
  - Unique considerations for patients and families with special needs
- Not all patients are suitable for telepsychiatry services
  - Knowing when to properly refer/utilize other resources
- Technology
  - lack of infrastructure in schools
  - Working with other systems- the schools
- Family/Patient Apprehension with Tele
- Working out schedules/in-person needs/prescriptions

# Ryan Haight Act

## **NOTE RE: CONTROLLED SUBSTANCES**

- Prior to prescribing a controlled substance via TMH, the provider must have conducted an “in person medical evaluation” at least once in the past 24 months.
- » See H.R. 6353: Ryan Haight Online Pharmacy Consumer Protection Act of 2008

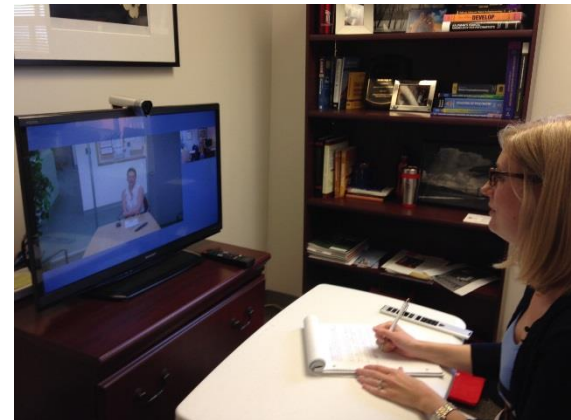
**What does this mean for the SMHP Tele program?**

<https://www.dea.gov/pubs/pressrel/pr041309.html>

<https://www.govtrack.us/congress/bills/110/hr6353/text>

# What have we learned?

- Increased access to care
  - Reaching patients in rural *and* urban communities
- Collaboration and integration with other disciplines
  - Therapists, PCPs, school administrators, etc.
- Decreased travel time
- Greater comfort with technology over time
- Increased efficiency
  - 8 patients, 3 sites, 3 hours



# Additional Uses of Technology

- **ACANO**
  - Video teleconferencing solution which allows several members to join a 'call' from anywhere
  - Use at inter- and intra- departmental meetings, professional development trainings, school meetings, group consultation, crisis intervention
  - HIPAA compliant – may be used for clinical care





# Setting up TMH Program: Training Manual

1. Equipment
  1. Access to internet
  2. HIPAA compliant
2. Training
  1. Development of Policies and procedures
  2. Psychiatrists and clinicians
3. Legal
  1. Consents
  2. Applicable Laws

# **TIPS FOR TELEPSYCHIATRY**

# TMH Considerations in Schools: School Policies and Structures

- Consider the school calendar and how to provide continuity of care during breaks (e.g., vacations)
  - Consider offering appointments during non-school hours
- Appointment times should be respectful of “core” classes
- Psychiatrists should know existing supports to properly refer/utilize resources

# Confidentiality and Privacy

- Important issue in TMH
  - Transmission of video/audio data
  - Audio/visual privacy at patient and provider site
- Technology
  - Systems and data storage must be in compliance with HIPAA



# Physical Location

- *The physical space affects the clinical encounter, although the relation to outcomes is not known.*
  - Rooms that ensure privacy, visual and auditory
  - Rooms that are of appropriate size and set-up to:
    - Observe patient during the session including activity in the room
    - Minimize over-stimulation (e.g., not conference or exam rooms)
  - Rooms with adequate and consistent lighting, preferably natural or emanating on same plane as psychiatrist's screen view
  - Rooms that minimize environmental distractions (e.g., noise, distracting backgrounds)
  - Rooms with soft surfaces to minimize auditory feedback (e.g., echo)
    - Give feedback to clinician at originating site on the above and make modifications as needed



# Therapeutic Space

- *Establishing a “therapeutic space” can optimize the clinical experience, although the relation to outcomes is unknown.*
  - Determine all persons in the patient room (e.g., family or staff at patient site)
  - Inform and show patients of any persons in the psychiatrist’s room (i.e. supervisors and medical students)
  - Have all persons on camera, or if not possible, then scan the camera around the room to ascertain attendees
  - Have a few age-appropriate toys available with which the patient may demonstrate developmental tasks
  - Avoid excessive, distracting or noisy toys (e.g., legos, lots of pieces, wind-ups)
  - Avoid electronics for at least part of the session
  - Establish eye contact by alternating gaze between screen and camera
  - Keep your image on the screen to monitor your body language and affect

# Technical Failures

- *Technical problems are inevitable...*
  - Know in advance the technical support system and how to contact that system if a disruption occurs
  - Have a back-up plan at both the provider and patient sites for technical failures that is always available and independent of the internet connection. For example having a cell phone or land line telephone that is not affected by disruptions in internet connectivity
  - Share information regarding technical failure and back-up plan with the patient prior to start of treatment

# Clinical Experience

- *Technical factors to consider include:*
  - Length of the session should be sufficient to obtain vital signs, laboratory reports, or school information, establish rapport, conduct an optimal interview and examination with child and parent
    - Anticipate possible delays in coordinating care at the patient site, and allow for technical problems.
  - Usually, telepsychiatry sessions are scheduled for the same duration as in-person sessions. Longer sessions may be indicated.
  - The presence of a coordinator at the patient site may help to determine length.



# Clinical Experience

- *Clinical factors to consider include:*
  - Eye contact may need to be queried
  - Telepsychiatrist must maintain eye contact with both the child and the parent as best as possible, alternating gaze between the **camera** and the monitor

# Building Rapport

- Rapport may require greater animation by the telepsychiatrist and work on the part of the clinician
  - Be 110% of yourself
  - Virtual high fives
  - Giving a tour of your office
  - Sharing art work
  - Dancing/Singing
  - Singing
- Use clinicians as a resource for background about the patient
  - such as outside interests/recent events that may assist in rapport building
- Provide summary of patient/family concerns- prepare the session!

# Media Training

[www.today.com](http://www.today.com)



What do you notice?

# Informed Consent

- *It is generally accepted that the provision of care through telepsychiatry requires informed consent. Informed consent for telepsychiatry:*
  - Is obtained in addition to consent for treatment and/or embedded in standard consent
  - Is obtained at the start of services
  - Is conducted with the patient and guardian in real-time.
  - Is compliant with local, regional and national laws regarding verbal or written consent
  - Is documented in the medical record at both the patient and provider sites
  - Addresses the privacy and confidentiality issues specific to telepsychiatry
  - Includes a protocol for contact between sessions

# Care in Schools

- Protect the patient's privacy and confidentiality:
  - Consider location of the treatment space within the school
  - Consider the location of any patient information at the school
    - Educate staff at the site about protected health information
  - Maintain a shadow file at the distant (provider) site, if no EMR
  - If patient information must be kept at school, consider the clinician's office
- Determine how the patient is to receive prescriptions, particularly controlled substances
- Consider how to address care during summer or if school is closed

# Questions?



# Contact Information

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# Thank you!

