



# **Telepsychiatry Addressing the Mental Health Crisis**

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Telehealth



# Agenda

Impact of the pandemic on behavioral healthcare

Implications of telehealth on behavioral healthcare delivery

Design considerations to support telepsychiatry

Predictions on the future of telehealth use in behavioral healthcare

# Definitions

## **TELEHEALTH**

Electronic exchange of medical information from one site to another

## **TELEMENTAL HEALTH**

The provision of mental and behavioral health care at a distance

## **TELEMEDICINE**

The practice of medicine using technology to deliver care at a distance

## **TELEPSYCHIATRY**

The provision of psychiatry using technology to deliver care at a distance

# Behavioral Health

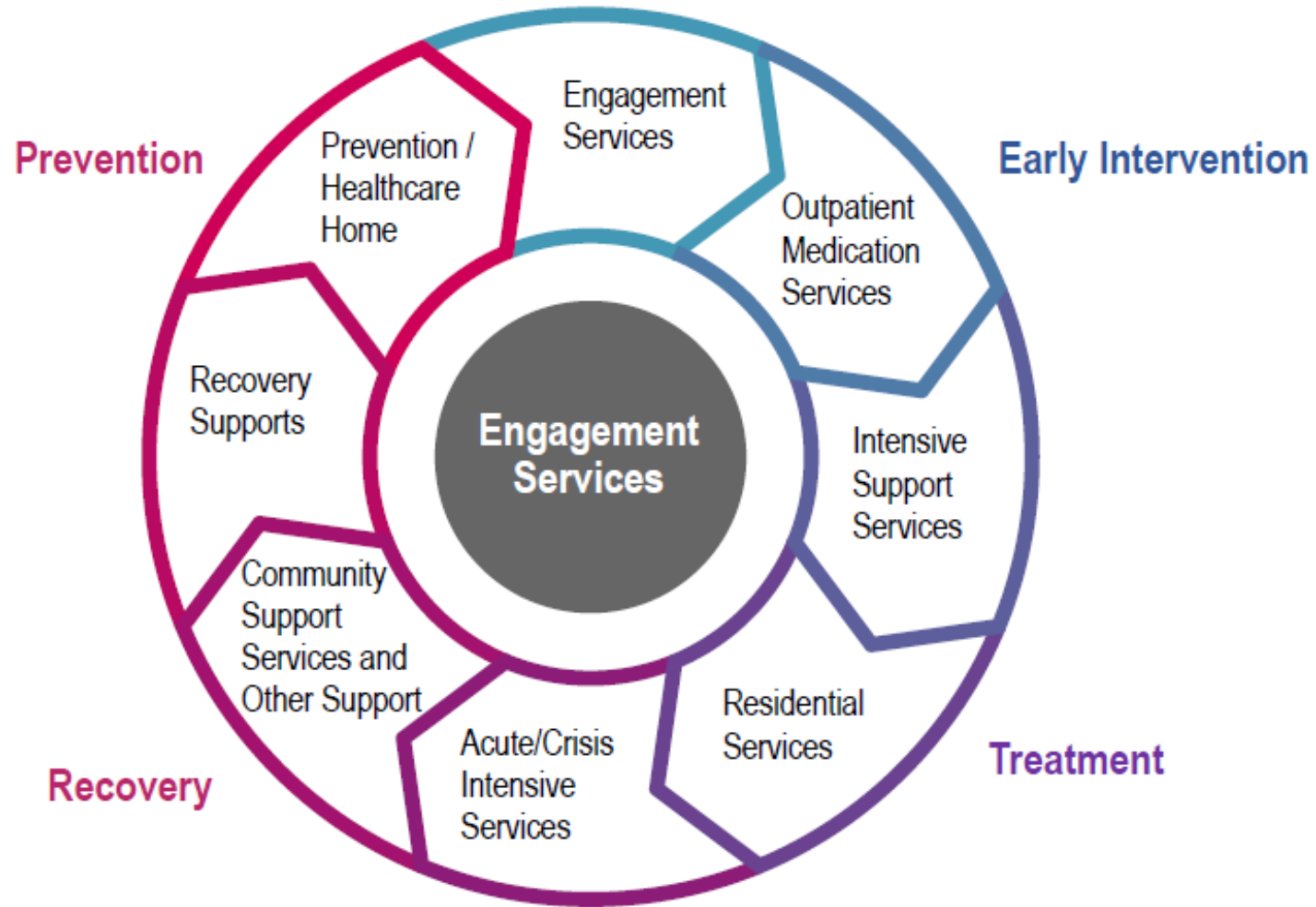
*According to The Joint Commission...*

Behavioral health is broad array of **care, treatment, or services** for individuals with...

- Mental health issues
- Foster care needs
- Addictive behaviors
- Chemical dependency issues
- Intellectual/developmental disabilities



# Behavioral Health Continuum of Care



# Behavioral Health Services

Services can be located in a variety of settings

- Community-based programs
- Outpatient facilities
- Residential day programs
- Emergency departments
- Crisis stabilization units
- Inpatient
- Forensic
- Correctional health

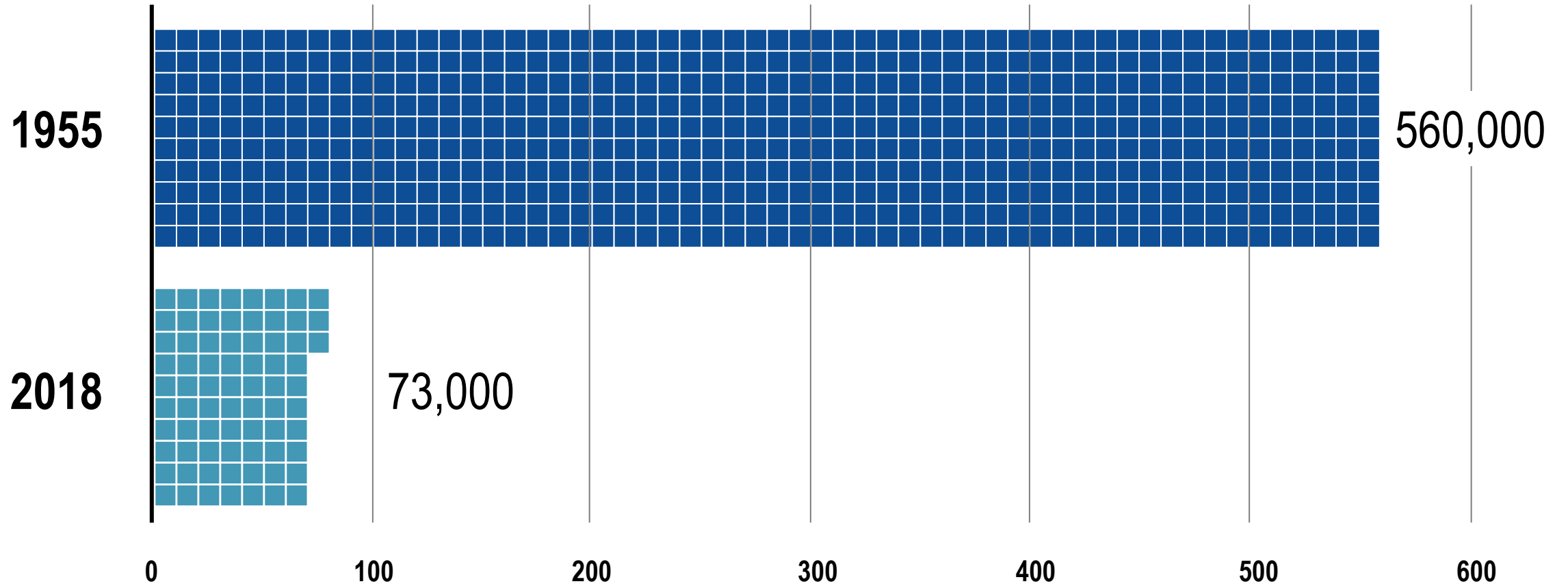




# **Current Mental Health Crisis**

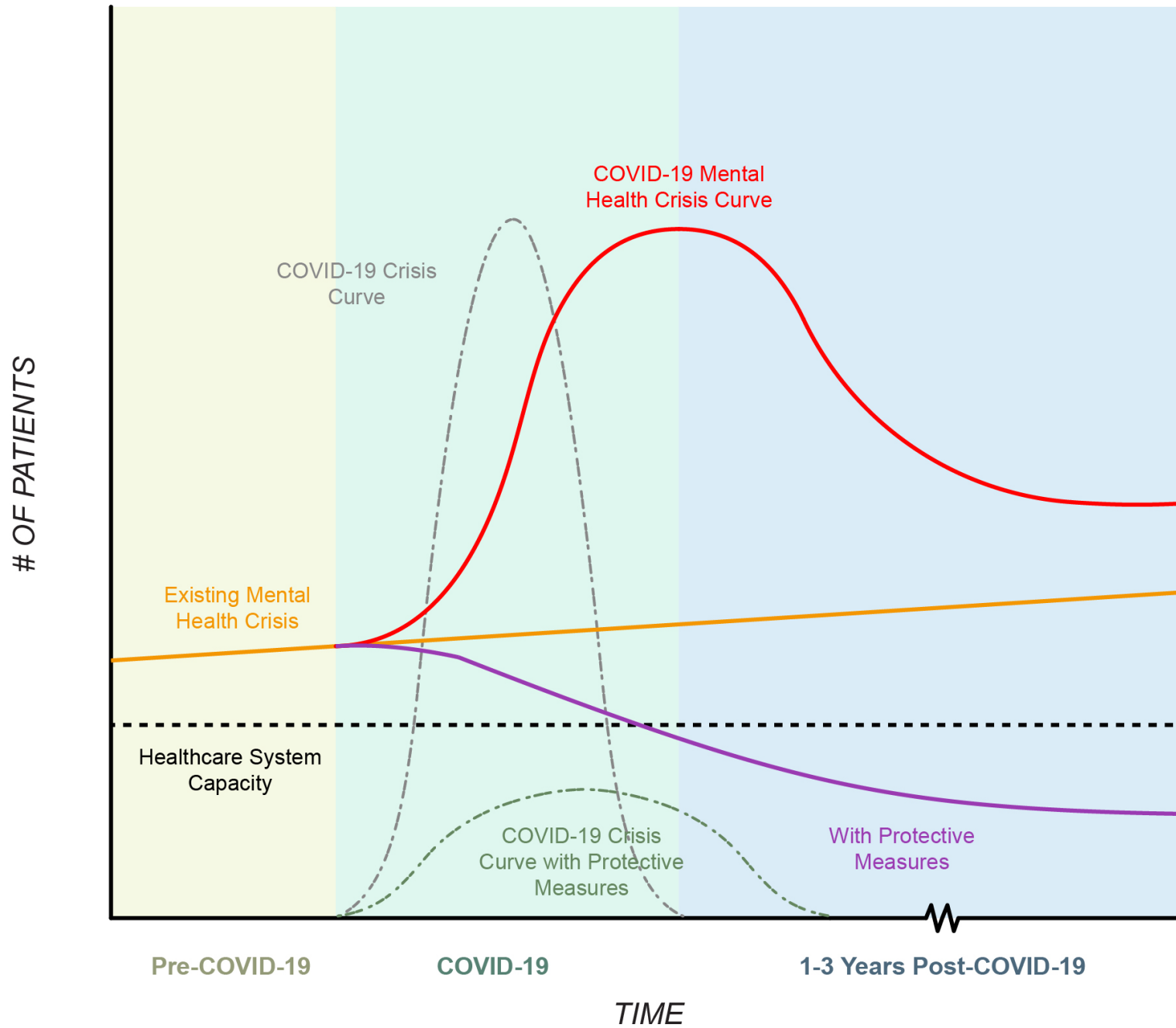


# Bed Shortage



## Psychiatric Beds in the US

*(in thousands)*



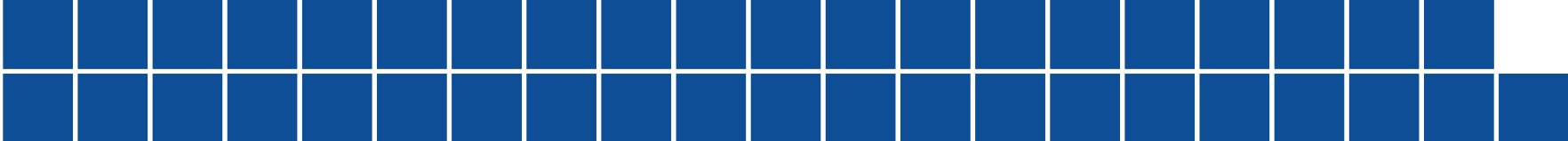
# Average Share of Adults Experiencing Anxiety Disorder and/or Depressive Disorder

Jan to Jun 2019  
(NHIS)



11.0%

Jan 2021  
(Household  
Pulse Survey)



41.1%

## Current Statistics

**50%**

of adults with any mental illness  
receive mental health services

**33%**

of young adults ages 18-25  
experience mental illness

**12%**

experience serious  
thoughts of suicide

**1/3**

of facilities do not admit  
patients under 18 years old



# **Flattening the Curve**

# Flattening the Mental Health Curve

**DECREASE**  
New Cases



**INCREASE**  
Capacity to Treat

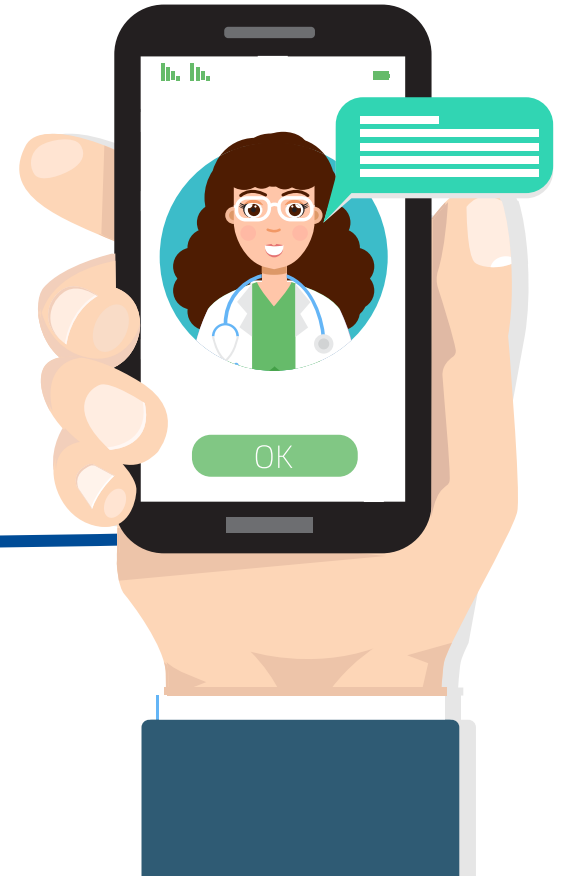


# Telehealth as Protective Measure

**DECREASE**  
New Cases



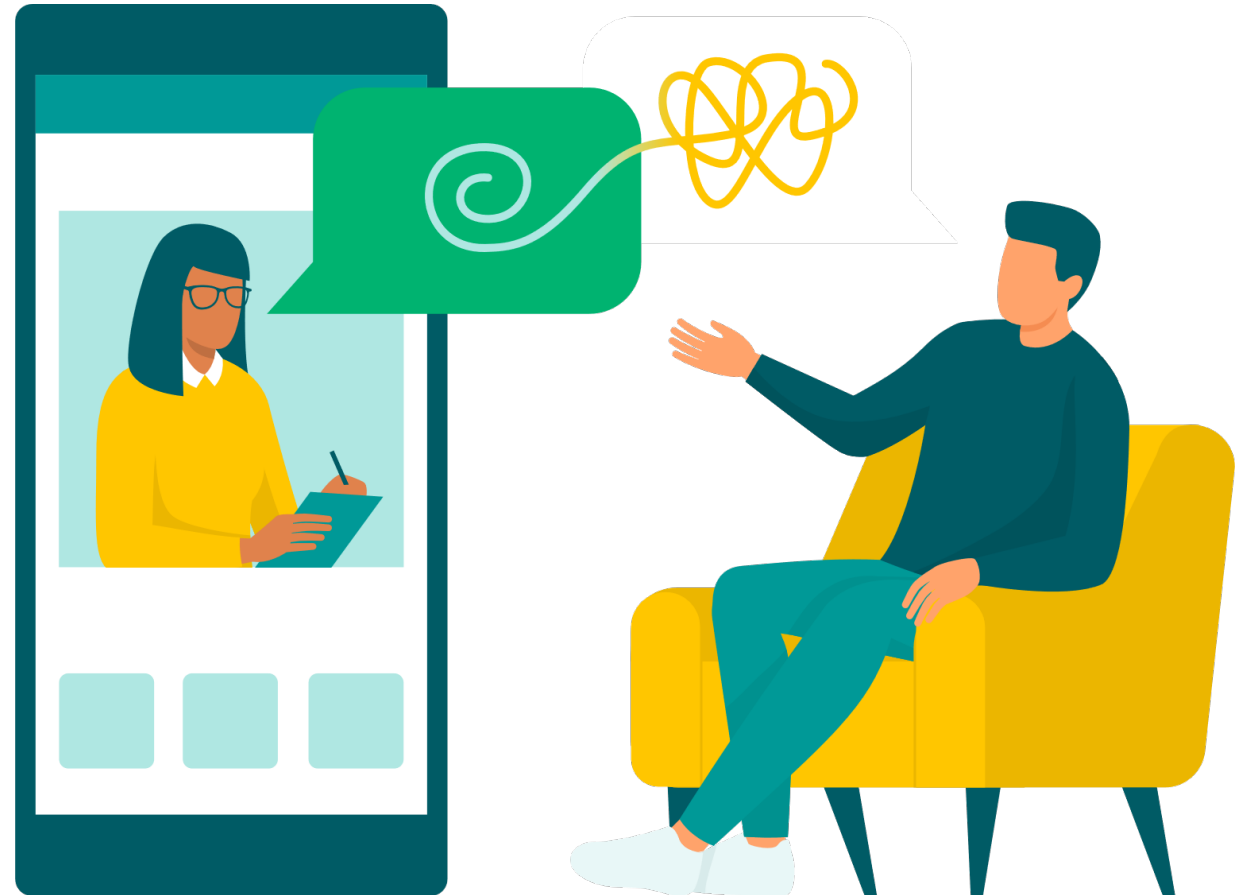
**INCREASE**  
Capacity to Treat



**Telehealth/Telepsychiatry**

# Telepsychiatry – Evidence for Effectiveness

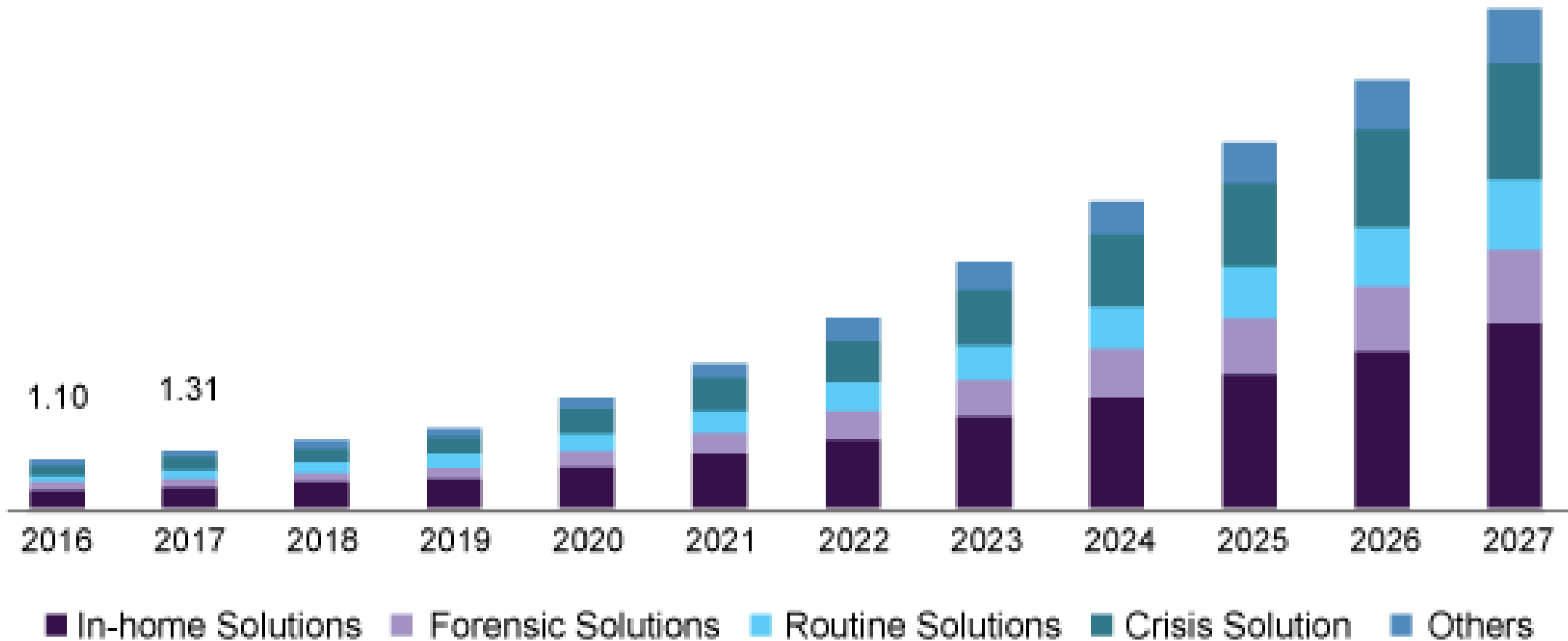
- Empirically studied for 20 years
- High rate of satisfaction
- In many cases equivalent to in-person care
- Integrated in care delivery
- Used in a variety of settings
  - private practice, outpatient clinics, hospitals, correctional facilities, schools, nursing homes, and military treatment facilities



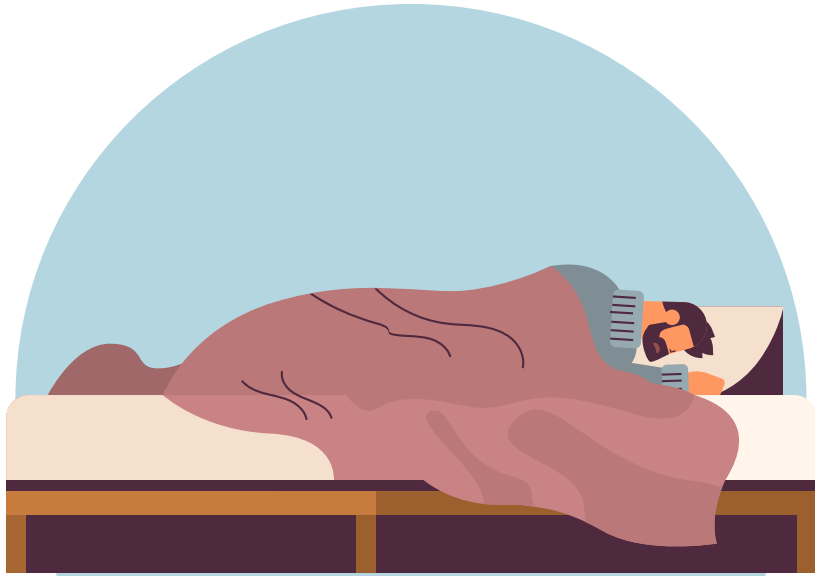


# Telepsychiatry Usages

## U.S. Telepsychiatry Market Size, by Product, 2016–2017 (USD Billion)



# Implications of Mass Adoption



**Lack of beds**



**Earlier treatment –  
Less Need for Beds**

# Implications of Mass Adoption



**Overcrowded EDs with  
Psychiatric patients**

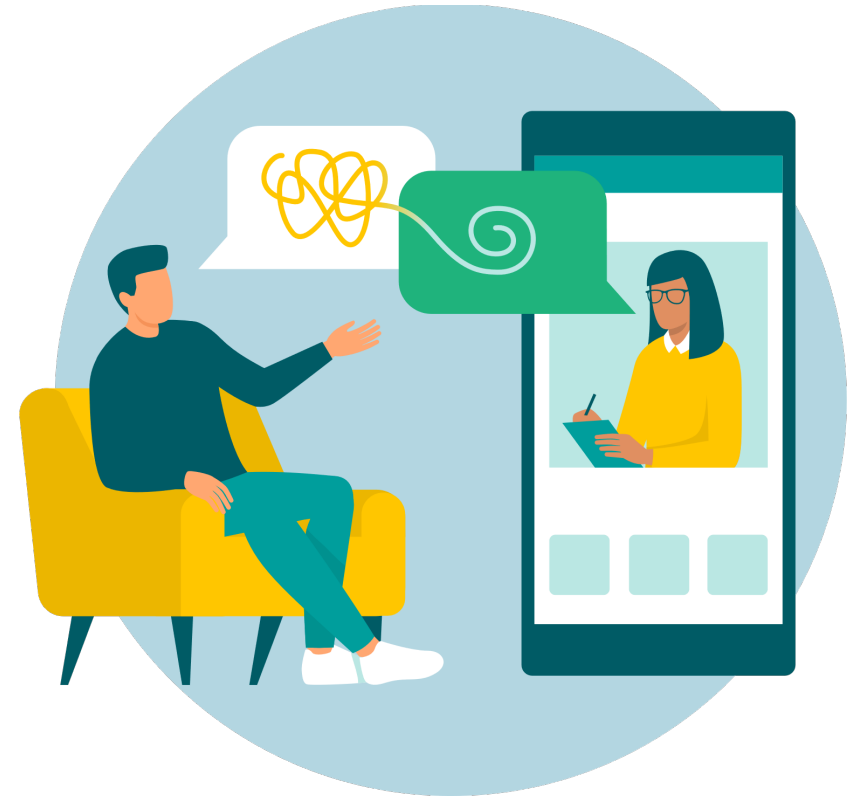


**Reduce the need emergency  
room trips & wait times**

# Implications of Mass Adoption



**Limited/lack of access  
to providers**

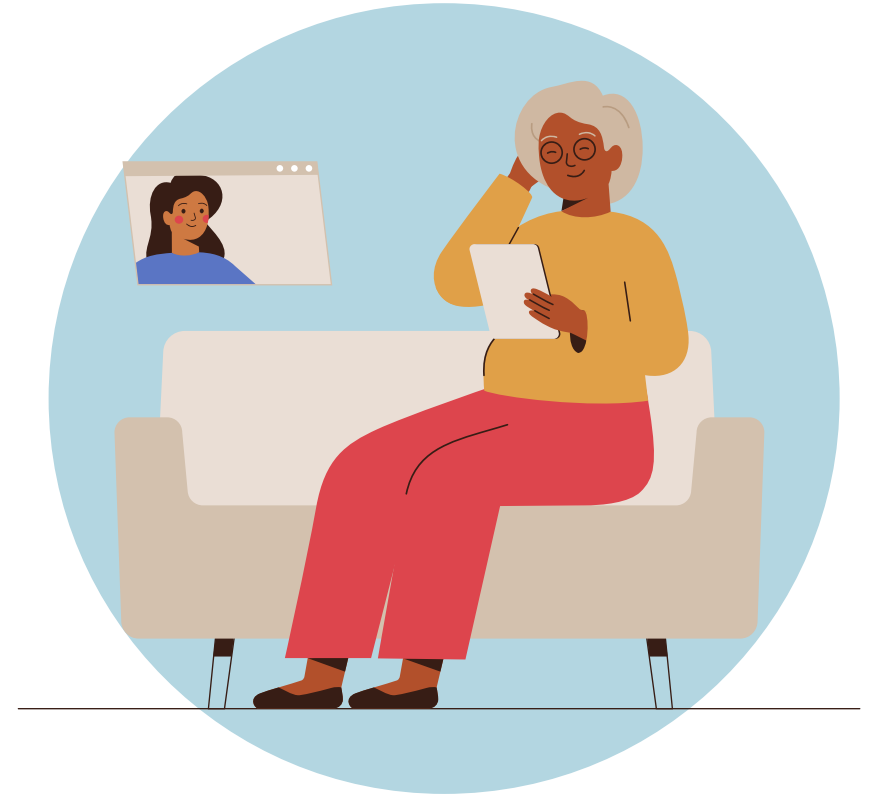


**Wider access  
to care**

# Implications of Mass Adoption



**Sigma keeping people  
out of treatment**



**Reduce the barrier of stigma –  
Access to care from anywhere  
(anonymous)**

# Implications of Mass Adoption



**Most mental health disorders diagnosed in primary care**



**Telepsychiatry to aid in Primary Care integration**

# Where Does Telehealth Work Best?



**Outpatient**  
(Less Acute )

**VS.**



**Inpatient**  
(More Acute )

# Where does telehealth work best?



## RURAL

(Worst mental health outcomes  
Lack of access to care)

**VS.**



## URBAN

(Increase rates of mental illness  
More access to care)



# Where does telehealth work best?



**RURAL**

(lack of adequate internet infrastructure)

**VS.**



**URBAN**

(lack of resources to pay for internet access or technology)

# Lack of Access to Behavioral Healthcare

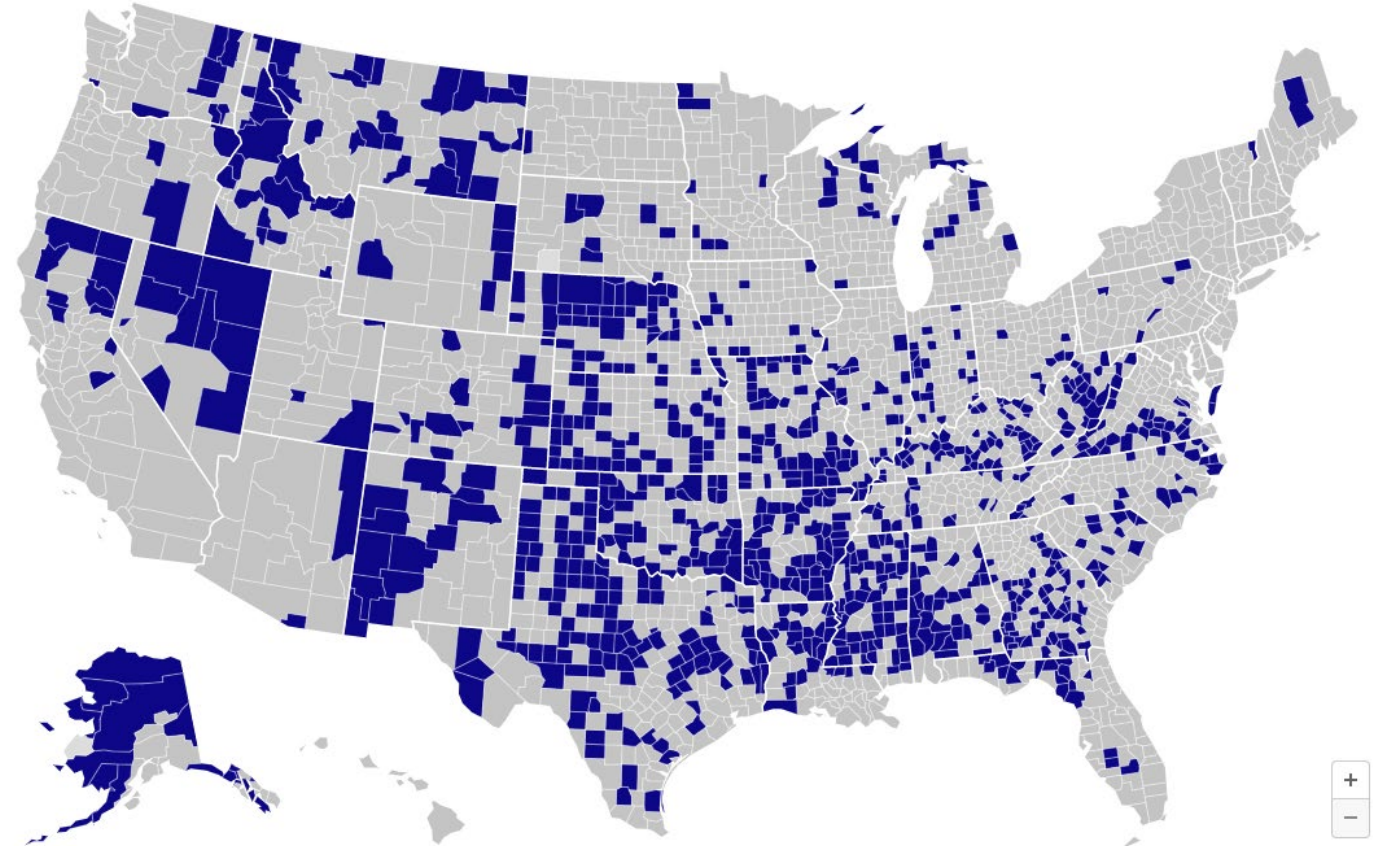
## 21.3 million Americans

*(6.5% of the population) are lacking access to high-speed internet*

## 162 million Americans

*not using broadband speed  
(means they can't access telehealth)*

*What are some ways that people can get access to telehealth and behavioral healthcare if they don't have internet access, technology or are homeless?*



Percentage of people using the internet at 25Mbps or above per county.

■ < 15% ■ ≥ 15%

Map: The Verge. The database does not include broadband rates for Oglala Lakota County, South Dakota, or Kusilvak Census Area, Alaska, because of a coding irregularity. • Source: Microsoft • [Get the data](#)

# Telehealth Kiosks



**Access to telehealth**



**Standalone and can be located anywhere (public access)**



**Best used for outpatient & less acute patients**

# Telepsychiatry



**Patient**



**Provider**

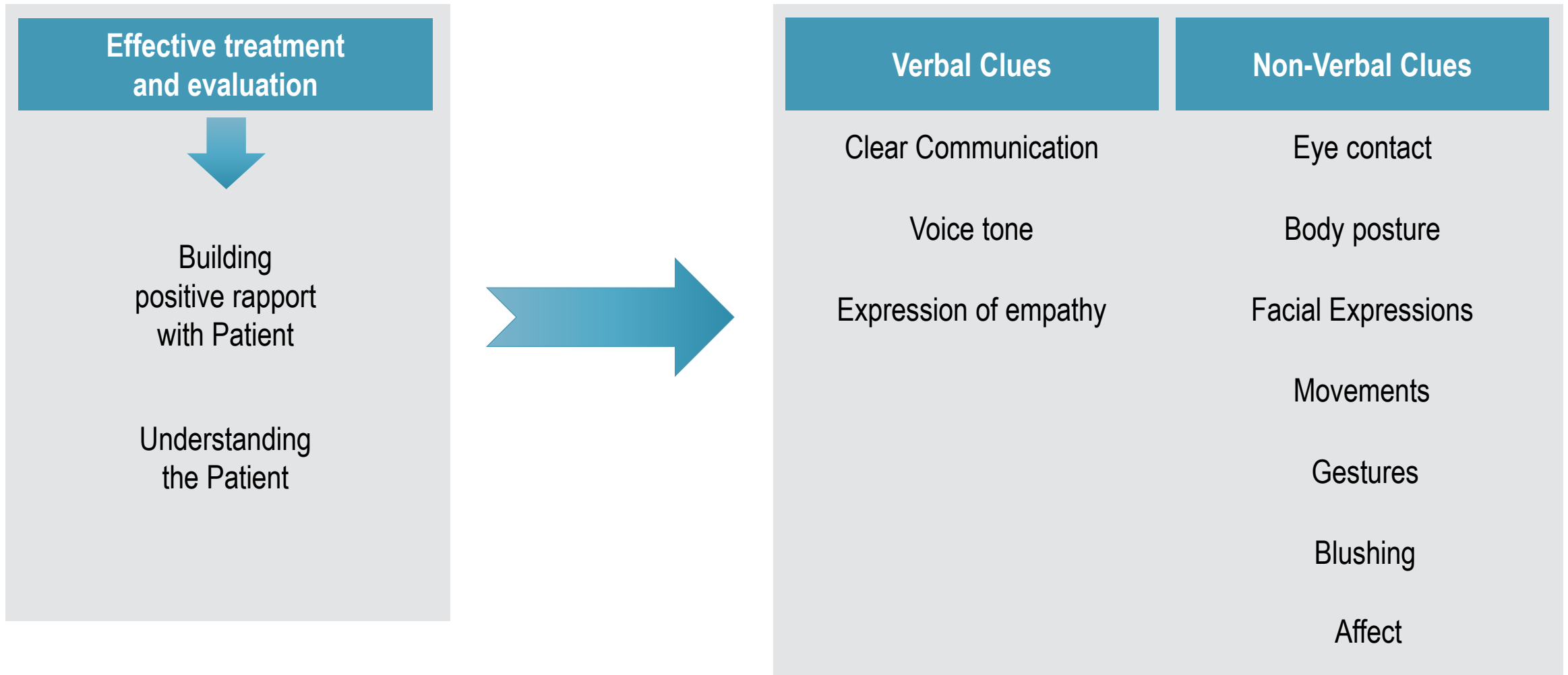


**Provider**

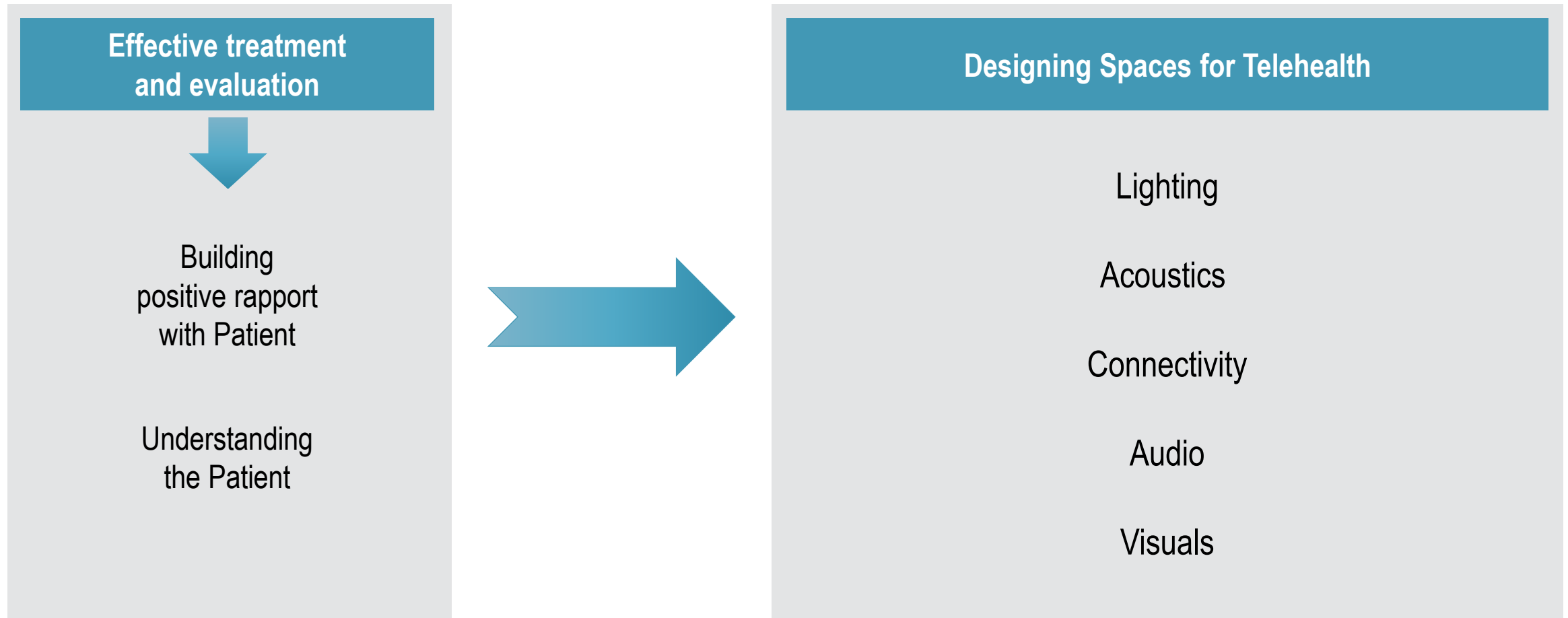


**Provider**

# Designing for Telepsychiatry



# Designing for Telepsychiatry



\*When used for outpatient care, where the patient is in their home, the only the space where the psychiatric provider is located can be regulated by best practices  
→ practitioners to understand the limitations of virtual assessments in this environment

# Wide Variety of Modalities

- Computers
- Smart Phones
- Tablets
- Video conferencing



**Space Impacts:** location, size, flooring, lighting, power, data and conduit pathways



# Planning for a Private & Quiet Telehealth Space

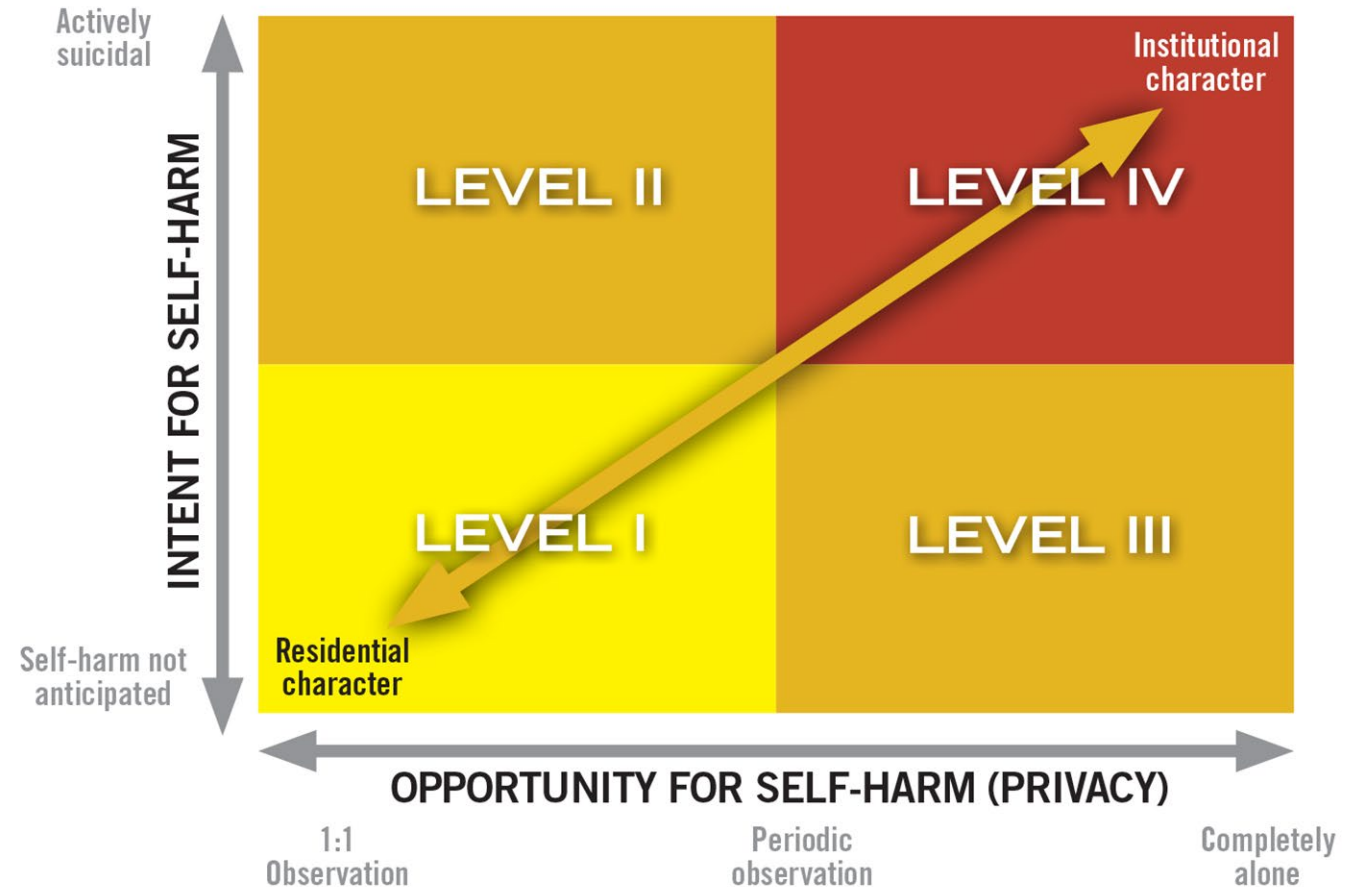
- Speech and visual privacy
- Away from
  - Busy corridors
  - Stairwells
  - HVAC systems
  - Waiting rooms
  - Restrooms
  - Sources of external noise





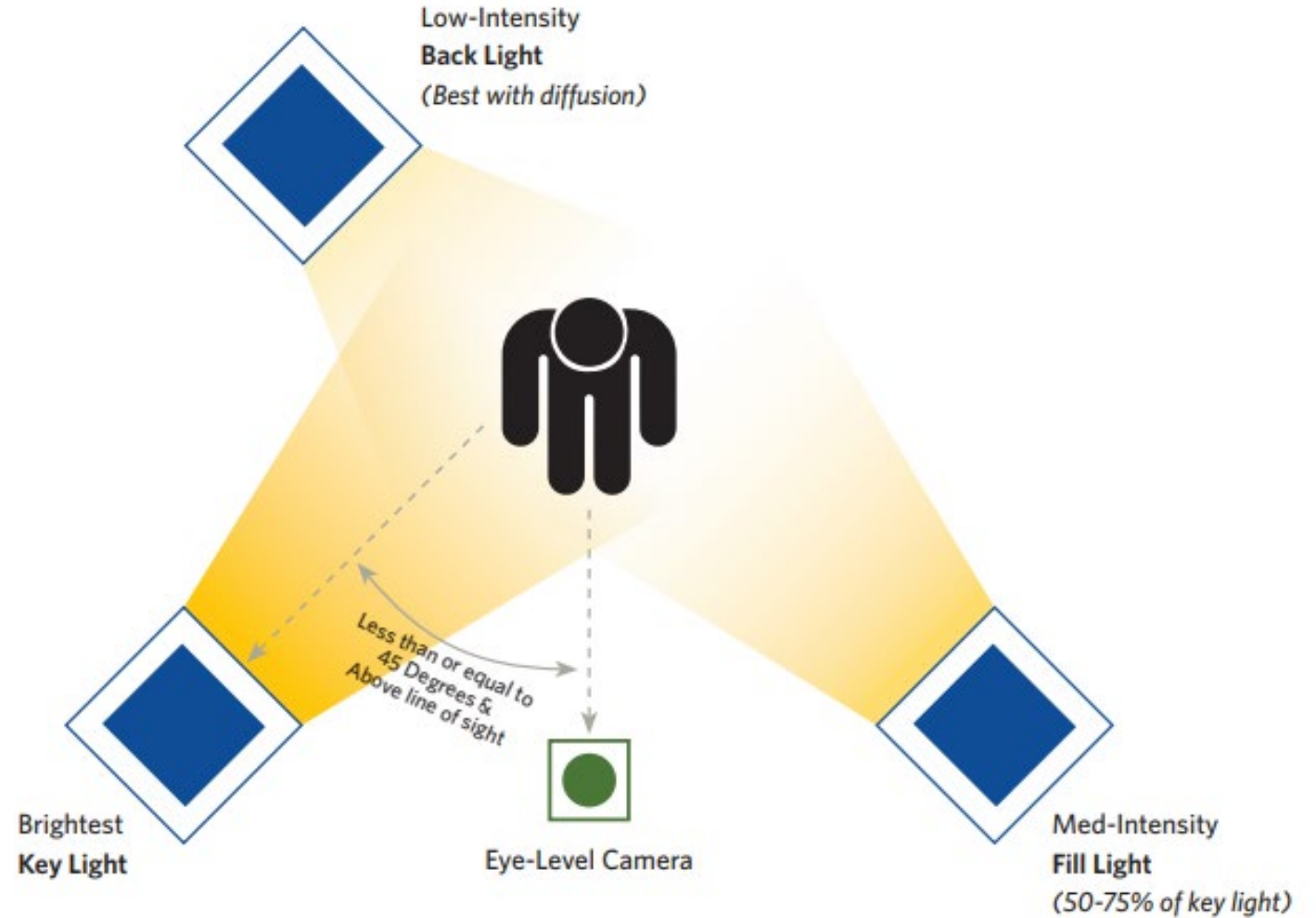
# Safety First

- Staff only? Patient usage?
- Risk Assessment
- Durable, tamper-resistant, with ligature-resistant finishes, fixtures and equipment



# Lighting

- Fluorescent overhead lighting not adequate
- Diffuse lighting
- Direct and indirect lighting
- Control for glare
- Avoiding having back to window



# Interior Surfaces and Backgrounds

- Matte finish or 40% reflective  
(help in room illumination)
- Light gray or pale blue paint for walls
- Avoid distracting backgrounds





# Camera & Microphone Placement

- Simulating face to face interaction
  - Eye level
  - Few ft away from patient or provider
- Clear Speech
  - Ceiling mounted
  - Table mounted
  - Headset

# Facility Infrastructure

- Uninterruptible Power Supply (UPS) connected to critical power
- Good connectivity = network connections need to be wired
- Network must have high availability
- The American Telemedicine Association (ATA):
  - minimum of 384 kilobits per second (kbps) bidirectional with high-definition video teleconferencing typically requiring between 768 kbps and 1024 kbps



# Designing for Telepsychiatry

- Quiet telehealth space
- Right space and location
- Minimizing audio disruptions
- Avoiding distracting backgrounds
- Diffuse and direct lighting
- Selecting the right microphone
- Placing camera at eye level
- Having the right infrastructure to support telehealth
- Safety First





# Implementation

# What We Are Seeing in the Field

- Flexible rooms
- Rise in telehealth rooms
- Infrastructure to support telehealth in all exam rooms
- Dedicated telecrisis offices
- Telemedicine at patient's bedside



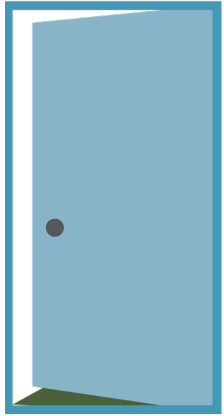




## What We Are Seeing in the Field

- Investing in telemedicine
- Preference for in-person care
- Most of the impact is on the operational side
- More conversation around telehealth

# Ongoing Challenges



**Access**



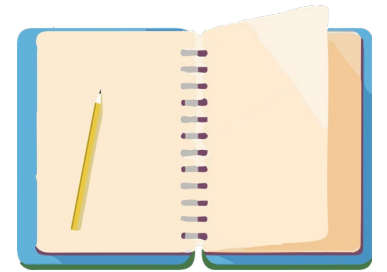
**Perception**



**Acceptance**



**Stigma**



**Research**



**The Future is Bright**

