

# E-Health for Kids: Product Applications for Children with Serious Emotional Disturbance and their Families

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# Presentation Goals

- Demographics of target consumer population
- Barriers to Access
- Schools
- Current E-Health product features: Strengths and Weaknesses
- E-Health Costs and Scalability
- Telemedicine
- Recommendations for Action

# Demographics of Consumer Population

- About 20% of US children and adolescents (15 million) ages 9 to 17 have diagnosable psychiatric disorders (MECA, 1996; Surgeon General, 1999)
- About 9 to 13% of US children and adolescents age 9 to 17 meet definition of serious emotional disturbance; 5 to 9% meet definition of extreme functional impairment (Center for Mental Health Services, 1998)

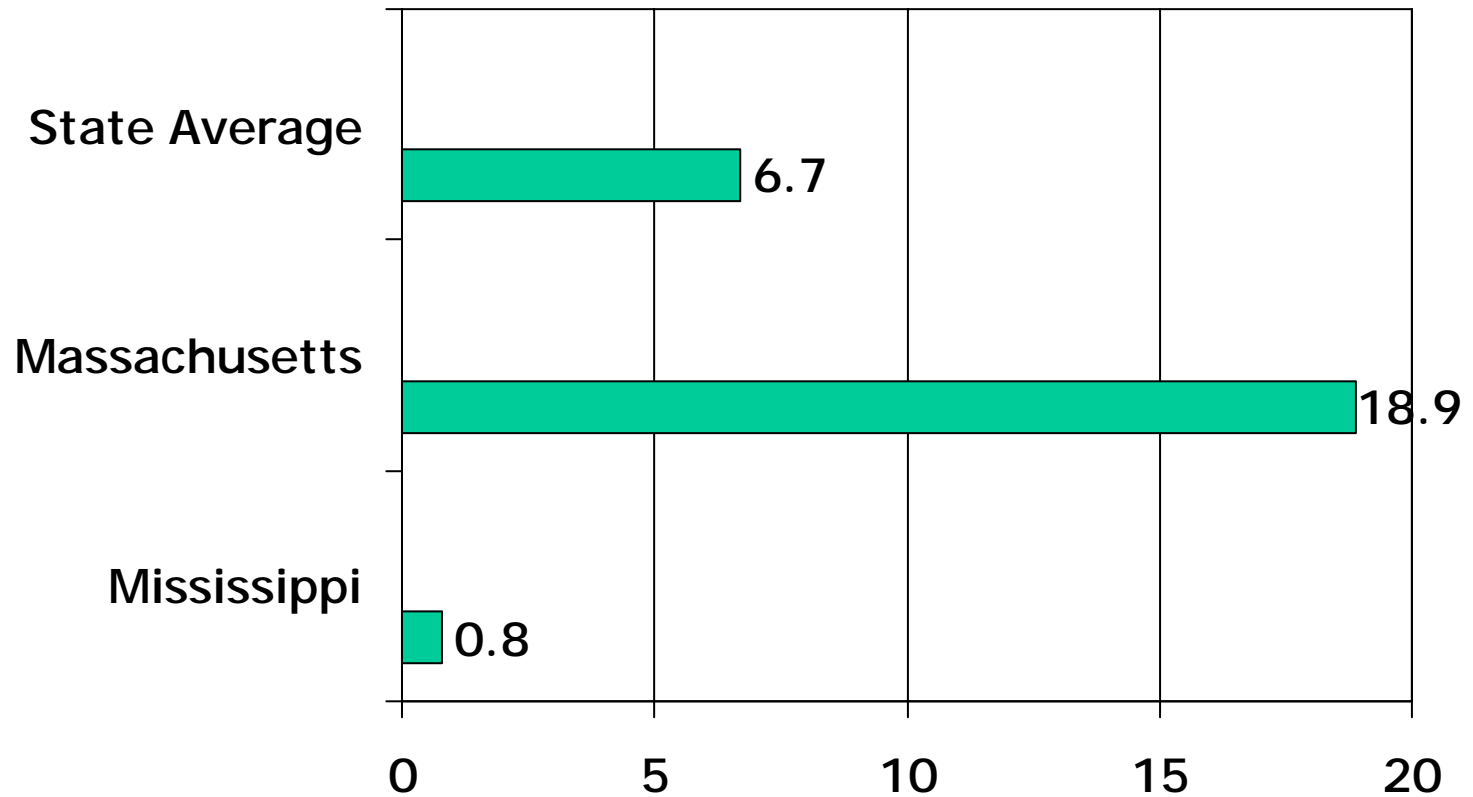
# Demographics of Consumer Population

- About 20% of children with SED receive mental health services (Surgeon General 1999); of these, a small fraction receive evaluation and treatment by child and adolescent psychiatrists (AACAP)
- By 2020, childhood neuro-psychiatric disorders will rise to become one of the five most common causes of childhood morbidity, mortality, and disability (World Health Organization)

# Demand for Psychiatric Services

- Council on Graduate Medical Education estimated that the nation would need 30,000 child & adolescent psychiatrists by 2000, based on demographic data. In 2000, there were about 6,300 practising in the US (US Bureau of Health Professions)
- Child psychiatric services are unequally distributed. Children in rural areas and areas of low socio-economic status have especially reduced access
- The demand for services of child and adolescent psychiatry is projected to increase by 100% by 2020 (US Bureau of Health Professions, DHHS, 2000)

# Child & Adolescent Psychiatrists per 100,000 youth, 1999



# Government Response

“The burden of suffering by children with mental health needs and their families has created a health crisis in this country.”

--David Satcher, MD, PhD, US Surgeon General, Jan. 01

“Children are engaged in a process of development. What does it mean if a child is unable to attend in school, spends years sad, anxious and unable to learn? Can children regain lost ground if untreated for two, five, or eight years?”

-- Steve E. Hyman, MD, Director NIMH, Sept. 00

# Barriers to E-health Access For Parents

- Finding a computer connected to the Internet in a non-threatening setting
- Time to learn how to find relevant information
- Frustration with choosing credible and usable sites from the vast number found in each search
- Stigma of finding information at “Mental Health Sites”

# Barriers to E-health Access For Children

- Symptoms restrict ability
  - behaviors, developmental delays, cognitive limitations
- Untrained professionals in the child's life
  - Access for a diverse learner looks different than access for a typical student. (i.e., more one to one direct instruction)
- Stigma
  - Students don't want to be different

# Schools

- Schools use educational links that are directed toward children
- Such links are much different than the mental health industry links directed toward parents, service providers, researchers and policymakers.
- Educational web-sites often do not accommodate diverse learners.

# Current E-Health Products: Strengths

- Almost 100 million Americans look for health information on the Internet
- 70% of them say that information "influences their treatment decisions" (Washington Post, 5/23).
- Information available free or at very low cost
- Excellent resources available to download 24/7
- Most sites allow anonymous registration

# Current E-Health Products: Strengths

- Educational/diagnostic information
  - Federal sites
  - Diagnoses
  - Clinical Trials
  - Research
- Professional Referrals
  - Listings by profession
  - Contact information by state or region

# Current E-Health Products: Strengths

- Medication for Children & Adolescents
  - Comprehensive listing on 'neutral' sites
  - Detailed dosage, titration information on pharmaceutical sites
  - Professional associations and advocacy organizations
- Resources
  - State and local listings
  - Local advocacy groups
  - Federal resources (free or low-cost)

# Current E-Health Products: Weaknesses

- Medical information on Internet ‘generally accurate’ ... but incomplete and hard to understand (JAMA report, May 2001)
- E-Health info is “inefficient, incomplete and incomprehensible” (CA Healthcare Foundation Chief Information Officer, 5/01)
- Sites require registration - client confidentiality
- On-line mental health assessments - pros & cons

# Current E-Health Products: Weaknesses

- Timeliness - Information as good as the last update
- Reading level
- Content relevance
- Lack of technological support
- Few sites with information specific to children; most aimed at parents or professionals

# E-Health Costs: “The Basics”

- Human resources key to even simple, basic site
  - Web developer consistently involved
  - Content relevant, updated, credible
  - Monitor chat room and other interactive features
- No special software needed - Word, Notepad, etc.
- Access to Internet - free or low-cost (\$10/mth.)
- Access to Web-hosting service - free (no frills) or modest cost (approx. \$50/mth. for expanded access)
- Registration of domain name (\$50/yr.)

# E-Health Costs: E-Therapy

- Costs of E-Therapy higher
- Need qualified, credentialed staff
- Secure e-mail to guarantee confidentiality
- Upgraded equipment to store and process info
- Legal implications

# E-Health Scalability

- Start-up costs of initial site are greatest expense
- Incremental costs of adding parallel sites are minimal
- Again, human resources are key:
  - maintaining multiple sites
  - accessibility of info
  - accuracy of info

# Telemedicine

“ ..... the use of electronic information and communications technologies to provide and support healthcare when distance separates the participants.”

-- Institute of Medicine, *“Telemedicine, a Guide to Assessing Telecommunications in Healthcare.”*

# Telemedicine

- Applications
  - Specialty consultations
  - Continuing Education
  - Student/Resident Education
  - Information Systems
- Mental Health ranks first in clinical specialties using telemedicine in U.S.
- Barriers

# Recommendations for Action

- Make the Internet available and accessible to parents in medical settings (doctors' offices, clinics, hospitals, pharmacies, etc.)
- Webify local medical settings (doctors' offices, clinics, hospitals, pharmacies, etc.)
- Train parents:
  - how to search for local information (services and providers in their community)
  - characteristics of credible sites for education and best practices

# Recommendations for Action

- Internet access in schools
- Train Educators about diverse learners and accommodations necessary to use the Internet
- Decrease stigma by including Mental Health education in all elementary and secondary Science and Health curriculums
- Tap into existing medical/educational sites for children