Update on Evidence-Based Practices in Iowa’s Public Mental Health System

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The overall mission of the Iowa Consortium for Mental Health is to enhance mutually beneficial collaboration between Iowa's universities and its public mental health system.
Overview

- Why the push for EBP’s?
- What do we mean by EBP’s?
- EBP initiatives in Iowa
  - Magellan Reinvestment Funds
  - The legislative mandate to use MH block grant funds for EBP’s (2004)
- Progress since mandate (bumpy road)
- Workforce development issues

- “A wide variety of effective, community-based services, carefully refined through years of research, exist for even the most severe mental illnesses yet are not being translated into community settings.”

- “Numerous explanations for the gap between what is known from research and what is practiced beg for innovative strategies to bridge it.”

*From Ch 8: A vision for the future*
“Science to Service Gap”

  - e.g., PORT study


- Institute of Medicine’s “Crossing the Quality Chasm” series (2001, 2006)
Schizophrenia PORT Study

- PORT – Patient Outcomes Research Team
- Conducted through 1990’s in two phases
- Phase I: To develop recommendations for the treatment of persons with schizophrenia, based on a synthesis of the best scientific evidence.
- Phase II: Examine concordance with these in real world settings

PORT 1 Results: 30 Treatment Recommendations

- Somatic Treatments: 21
  - Pharmacotherapy: 18
  - ECT: 3
- Psychological Treatment: 2
- Family Treatment: 3
- Vocational Rehabilitation: 2
- Service Systems: (ACT) 2
PORT 2: Conformance Study

- Survey of a stratified random sample of 719 pts with schizophrenia in 2 states
  - Public, private, VA
  - Inpatient, outpatient
  - Drawn from multiple communities

- Looked at concurrence of practice with 12 PORT treatment recommendations

- Dichotomous ratings (conform vs. not)

PORT Conformance Study: Findings re: Acute Rx of Schizophrenia

- 62.4% receiving appropriate doses of antipsychotics during acute phase;
  - 15% on a lower dose
  - 22.5% on a higher dose
- 29.1% receiving appropriate doses of antipsychotics (300-600 CPZ equiv.) during maintenance phase
  - 39.1% on a lower dose
  - 31.9% on a higher dose
PORT Conformance Study: Unexpected Findings

- Urban patients more likely than rural to be out of range and to be on high doses
- Minority patients more likely to be on high doses
PORT Conformance Study:  
Use of other evidence-based interventions as indicated by evidence

<table>
<thead>
<tr>
<th>Intervention</th>
<th>% Inpt.</th>
<th>% Outpt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Therapy - (Psychoeduction Model)</td>
<td>31.6</td>
<td>9.6</td>
</tr>
<tr>
<td>Vocational Rehabilitation (Supported Employment)</td>
<td>30.4</td>
<td>22.5</td>
</tr>
<tr>
<td>Assertive Case Management or Assertive Community Treatment (ACT)</td>
<td>8.6</td>
<td>10.1</td>
</tr>
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</table>
PORT - Conclusions

- Real world practice is inconsistent with practice as recommended by scientific evidence and consensus
- “Best practices” are markedly underutilized
- Other strategies necessary to enhance implementation
  - The most commonly used dissemination strategies to change clinician behavior (i.e., CEU’s) don’t work
• 2001 – year long series

• Presented rationale for emphasis on EBP’s

• Formal literature reviews on evidence-based practices in mental health

• Introduced “National EBP project”
  • 6 “blessed” practices

• Development and evaluation of “Toolkits”
National EBP Project:
6 Selected Practices

- Assertive Community Treatment (ACT)
- Co-occurring Disorders: Integrated Dual Diagnosis Treatment (IDDT)
- Family Psycho-education
- Illness Management and Recovery (IMR)
- Medication Management Approaches in Psychiatry (MedMAP)
- Supported Employment
EBP Toolkits:
Multi-stakeholder guides to the steps toward full implementation of EBP’s

- Consensus-building
- Development of implementation plan
- Enacting the implementation
- Monitoring and evaluation
ICMH Evidence-Based Practices

Project 1: Goals

- Review the literature on EBP’s in mental health
- Describe selected EBP’s, according to multiple parameters
- Package results in a digestible form for dissemination to a variety of stakeholders
  - Including policy makers
# Table of Contents

1. Introduction

2. Programs of Assertive Community Treatment (PACT)
   1. Overview of model - What is PACT?
   2. Needs of the population the model is designed to address
   3. Clarity of the construct
   4. Empirical support for effectiveness of this model
   5. Availability of the model nationally
   6. Mandated or recommended by governmental or other agencies
   7. Availability of the model in Iowa
   8. Barriers to PACT implementation in Iowa
   References

3. Supported Employment
   1. Overview of model - What is Supported Employment?
   2. Needs of the population the model is designed to address
## Results: Models with strong Evidence-Base

<table>
<thead>
<tr>
<th>Model</th>
<th>Evidence-Based</th>
<th>Use in US</th>
<th>Use in Iowa</th>
<th>Barriers in Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertive Community Treatment</td>
<td>++++</td>
<td>+++</td>
<td>+</td>
<td>Shortage and misdistribution of MH professionals, funding, training of staff, awareness, rurality</td>
</tr>
<tr>
<td>Supported Employment</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>Funding, oversight, family and patient concerns about loss of benefits</td>
</tr>
<tr>
<td>Family Psychoeducation</td>
<td>+++</td>
<td>++</td>
<td>+</td>
<td>Labor intensive, attitudinal, reimbursement</td>
</tr>
<tr>
<td>Integrated substance abuse &amp; MH services</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>Reimbursement, credentialing</td>
</tr>
<tr>
<td>Medication Treatment Algorithms</td>
<td>+++</td>
<td>++</td>
<td>+</td>
<td>Lack of centralized mental health authority, education, enforcement, funding</td>
</tr>
</tbody>
</table>
## Results: “Promising Practices”

<table>
<thead>
<tr>
<th>Model</th>
<th>Evidence-Based</th>
<th>Use in US</th>
<th>Use in Iowa</th>
<th>Barriers in Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td>School-based Clinical MH services</td>
<td>+++</td>
<td>+++</td>
<td>+</td>
<td>Funding, decentralized distributed governance, community buy-in</td>
</tr>
<tr>
<td>Elder Outreach Programs</td>
<td>+++</td>
<td>++</td>
<td>+</td>
<td>Funding, training issues, shortage and maldistribution of professionals</td>
</tr>
<tr>
<td>Early childhood Interventions</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Reimbursement, parental attitudes</td>
</tr>
<tr>
<td>Mental Health Courts</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>Judicial resistance to specialty courts, lack of large population centers within jurisdictions</td>
</tr>
</tbody>
</table>
ICMH EBP Project 1 (2002): Conclusions

- Several MH practices have a solid evidence base
- Most are targeted towards severely mentally ill adults
- These EBP’s are being under-utilized in Iowa.
- There are innovative practices going on throughout the state, which should be further studied re their evidence base
- Resources should be dedicated to enhancing implementation of these evidence-based and further evaluation of promising practices
ICMH Technical Assistance Center for Evidence-Based Practices

- Initially funded in 2003
  - via Medicaid dollars (Community reinvestment from MBC)
- 2 arms, focusing on 2 Toolkit EBPs for adults with serious mental illness:
  - Assertive Community Treatment (ACT TAC)
  - Illness Management and Recovery (IMR TAC)
ACT TAC: Mission

- Expand the implementation of ACT in Iowa
- Enhance long-term stability of ACT in Iowa
- Optimize quality of ACT in Iowa
ACT Technical Assistance Center

Scope of Work

- Increase awareness and understanding of ACT in Iowa.
- Assemble a statewide advisory board.
- Propose a sustainable funding model for ACT in Iowa.
- Conduct fidelity reviews of ACT teams.
- Develop ACT program standards.
- Assess and support the educational needs of ACT teams.
- Standardize and aggregate outcome measures for ACT teams.
- Develop interest in potential ACT sites.
- Bring up two new ACT teams (over a two year period)
ACT Technical Assistance Center
Fidelity Reviews

- Annual peer review using the DACTS
- “Reviewers” are volunteers from each team
- Educational process = auditing process
- Report shared with Magellan, DHS, Counties and advisory board
ACT Technical Assistance Center
Develop state standards

- Reviewed standards from other states
- Developed draft of Iowa standards
- Draft reviewed by advisory board, external consultants (G. Bond-Indiana, E.Edgar-NAMI, Deb Allness)
- Disseminated draft standards to Iowa stakeholders
- Ready for administrative rules
ACT Technical Assistance Center

Education for ACT Teams

- Training seminars for ACT staff.
  - Dual diagnosis
  - Motivational interviewing
  - Supported employment
  - Cognitive behaviors therapy
  - Illness management and recovery
- Discretionary educational funds for each team.
ACT Technical Assistance Center

Outcome Measures

- Standardize outcome data
  - Hospitalizations
  - Housing stability
  - Substance abuse
  - Vocational status
  - Legal problems

- Quarterly reports for each team
  - Feedback to teams
  - Process improvement
ACT Technical Assistance Center
Outcome Measures example

Vocational Status of ACT Clients Across Programs July-Sept '04

Impact
Golden Circle
Abbe Center

0% 20% 40% 60% 80% 100%

Unemployed
Training/Vocational Program
Sheltered Workshop
Volunteer Job
Self/Family Employed
Competitive Employment
Retired
Number of ACT teams in Iowa

Start of ACT Technical Assistance Center
ACT TAC

Costs

- Year 1-2 ~ $200K/yr
- Year 3 ~ $100K/yr
- Costs largely in professional staff
ACT Technical Assistance Center
Core Group

- Michael Flaum, M.D. (ICMH)
- Nancy Williams, M.D. (IMPACT)
- Greg Couser, M.D. (Abbe Center, UIHC)
- Kathy Johnson, RN (Abbe Center)
- Scott Riesenbery, MSW (Abbe Center)
- Betsy Hradek, ARNP (IMPACT)
- Brenda Hollingsworth, MA (administrator ICMH)
Illness Management and Recovery TAC

- Illness management component and activities were fairly clear
- Recovery component and activities more controversial
- IMR to WMR (Wellness Management…)
- Established statewide advisory board
- Emphasis on WRAP, Peer Support, Standardized recovery assessments
The Mandate:

- Signed by Governor May 2004
- Effective July 2005
- Mandates 70% of Performance Partnership block grant funds to be distributed to CMHC’s (up from ~ 50%)
  - Half for adults with SMI
  - Half for children with SED
- Requirement to use 100% of these funds for “evidence-based practices”
Community Mental Health Block Grant (aka “Performance Partnership Block Grant”)

- A very small part of the overall mental health budget
  - Iowa: < $4 million/year
- From Feds – SAMSHA, CMHS
- Passed through via state’s Mental Health Authority
  - In our case, Department of Human Services
  - Overseen by Mental Health Planning Council
Funding sources for mental health programs in Iowa

Source: Torrey, 1996
Basic questions raised by legislation

- **What constitutes evidence based practice?**
  - Who gets to decide what is or is not EBP?
  - e.g., for children and adolescents?
  - Based on what?

- **How do we determine if the practice is actually being done?**
  - What prevents simply “changing the sign on the door”?
  - Resources to monitor fidelity?
Spring 2004

- DHS issues RFP to assist DHS, providers, other stakeholders in trying to operationalize this mandate

- DHS contracts with ICMH to enhance EBP Technical Assistance Center for these purposes, using block grant funds
Using the Mental Health Block Grant to Initiate Evidence-Based Practices

- Even though it represents a small portion of state mental health resources the block grant is a flexible source of financing for initiating and supporting evidence-based practices.

- The sub-committee recommends that state mental health directors be encouraged to continue to use these federal resources to implement evidence-based practices but that they be required to use the block grant to create an infrastructure, such as a center for implementing evidence-based practices in each state.

Source: Draft Report of the Subcommittee on Evidence-Based Practices
November 26, 2002
Major Tasks of Enhanced TA center

- Statewide dissemination of EBP’s
- Survey of provider readiness for EBP’s
- Identify and engage resources / consultants
- Convene and coordinate multi-stakeholder group to establish process
  - Application, review, ongoing monitoring
- Development of outcomes reporting system
- Ongoing TA to providers and DHS on all of the above
# Statewide Educational Series on EBPs for Adults with Serious Mental Illness

August – October, 2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 26</td>
<td>Introduction, Concepts, &amp; Overview of Evidence Based Practices</td>
<td>567</td>
</tr>
<tr>
<td>September 2</td>
<td>Family Psycho-Education</td>
<td>495</td>
</tr>
<tr>
<td>September 9</td>
<td>Supported Employment</td>
<td>432</td>
</tr>
<tr>
<td>September 16</td>
<td>MEDMAP: Medication Approached in Psychiatry</td>
<td>399</td>
</tr>
<tr>
<td>September 23</td>
<td>Assertive Community Treatment (ACT)</td>
<td>313</td>
</tr>
<tr>
<td>September 30</td>
<td>Integrated Treatment of Co-occurring Disorders</td>
<td>375</td>
</tr>
<tr>
<td>October 7</td>
<td>Illness Management and Recovery</td>
<td>326</td>
</tr>
</tbody>
</table>

Average Attendance / Session: 415
Iowa Communications Network
Parts 1 and 2
Dissemination to, and consensus-building with stakeholders statewide
Evidence-Based Practices in Mental Health

“Ready or Not, Here They Come”
Cautionary note

- “As is true with any newly popularized term, the term ‘evidence-based’ has an almost intuitive ring of credibility to it…

- …But this ring may be hollow”.

Is “Evidence-Based” a Newly Popularized Term?

EBP = “Evidence-Based Practice (s)"
EBT = “Evidence-Based Treatment (s)"
EBM = “Evidence-Based Medicine”

<table>
<thead>
<tr>
<th>Years</th>
<th>EBP or EBT</th>
<th>EBM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to 1990</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1990 - 1994</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>1995 - 1999</td>
<td>328</td>
<td>3,521</td>
</tr>
<tr>
<td>2000 - 2005</td>
<td>1,331</td>
<td>13,989</td>
</tr>
</tbody>
</table>

Source: Medline Search (through Aug 2005)
EBP – Selected Definitions in Psychiatry / Mental Health

- Interventions for which there is consistent scientific evidence showing that they improve client outcomes.

Source: Drake RE et al, Psychiatric Services, 52:179-82, 2001
EBP – Selected Definitions in Psychiatry / Mental Health

- Intervention with a body of evidence:
  - rigorous research studies
  - specified target population
  - specified client outcomes

- Specific implementation criteria (e.g., treatment manual)

- A track record showing that the practice can be implemented in different settings

“Evidence-based medicine”
Selected definitions

- A set of strategies derived from developments in information technology and clinical epidemiology designed to assist the clinician in keeping up to date with the best available evidence.

  Source: Geddes, 2000

- Evidence-based medicine is a mixture of clinical research, expert consensus and practitioner experience.

  Source: SAMSHA’s MedMAP Resource Kit
Evidence-based medicine

Selected definitions (2)

- It recognizes that health care is individualized and ever changing and involves uncertainties and probabilities.

- Ultimately EBP is the formalization of the care process that the best clinicians have practiced for generations".

The Evidence Pyramid

Systematic Reviews and Meta-analyses

Randomized Controlled Double Blind Studies

Cohort Studies

Case Control Studies

Case Series

Case Reports

Ideas, Editorials, Opinions

Animal research

In vitro ('test tube') research
“First, do no harm”

- Concerns about EBP mandates as a means to justify funding restrictions?
  - Texas?
  - Oregon?

Hippocrates?
Overarching Values of Operations Group

- WE WANT A SYSTEM THAT LEARNS

- A system that:
  - doesn’t keep doing things that aren’t effective, out of inertia or ignorance
  - Incorporates recognized EBP’s
  - supports ongoing innovation and change
  - provides the best outcomes possible in the context of limited resources
  - information collected is information used
“Top-down” vs. “Bottom-up” Approaches to Evidence-Based Practice

- **Top down:**
  - Implementation of interventions that had been repeatedly shown to yield good outcomes in specific target populations
  - Resource kits
  - Model Fidelity

- **Bottom-up:**
  - Practicing in an “evidence-based manner”
In your opinion, is your mental health center or provider agency engaged in any of the following evidence-based practices for adults with mental illness recognized by SAMHSA?

- Family Psychoeducation: 25.0%
- Supportive Employment: 25.0%
- Medication Algorithms: 4.2%
- Co-Occurring Disorder Tx: 16.7%
- Illness Mgmt. and Recovery: 25.0%
- No EBPs*: 29.2%
- No EBPs: 41.7%

N = 24
(55%)
Components of Practicing in an Evidence-Based Manner (1)

- **Who do you want to serve?**
  - The target population is clearly defined and methods are in place that allow for their identification

- **What do you want to change?**
  - Target symptoms/signs/behaviors are identified and methods are in place to assess them

- **What will you do to achieve this?**
  - The core components of the intervention are clearly defined
Components of Practicing in an Evidence-Based Manner (2)

- How will you know if it works?
  - Methods are in place that allow for an ongoing valid assessment of key outcomes

- How will you continue to improve the practice?
  - Processes are in place through which lessons learned from the outcomes can inform potential changes in the core components of the practice
The Evidence Based Practice Cycle

1. Specify Core Components of Practice
2. Quantify Priority Outcomes Regularly
3. Modify Core Components of Practice
4. Optimize Priority Outcomes
5. Review Outcomes Regularly
Program-Specific vs. Common Outcomes?
EBP Toolkit Outcomes

- Psych / Sub Abuse Hospitalization
- Homelessness / Living situation
- Employment / Educational status
- Substance Abuse Stage
- Criminal Justice involvement
National Outcome Measures (NOMs)

- Employment / Education
- Housing stability
- Crime / Criminal justice
- Social connectedness
- Decreased symptoms
- Perception of Care
- Access / Capacity
- Decreased hospitalization
- Cost effectiveness
- Use of EBP’s
“Recovery – Oriented” Outcomes

“...a decent job, a place called home and a date on Saturday night...”

Charles G. Curie
Goals of 1st year of statewide implementation

- Want to move people (nudge the system) towards practicing in an evidence-based manner
- Want to keep expectations realistic
- Keep application and evaluation process as simple as possible
- Want to enhance data infrastructure capacity
- Want some common measures of outcomes for adults with SMI and children with SED across provider sites
- Want to enhance ongoing learning
Web-based Outcomes Reporting

- Process is important
- Can you practice in an evidence-based manner today without meaningful use of internet?
Application and Review Process

- Developed an application to reflect core components of EBP
  - Suitable to top-down and bottom-up approaches
- Established Review process
  - Established criteria and rating methods (1-5)
  - 2 Rounds of reviews
Dissemination of process to applicants
Spring ‘05
Major Themes of Programs

**Adult Programs (38)**
- Recovery Oriented
- Integrated MH and SA treatment
- Other/Misc: Assessment and Outcomes

**Child Programs (37)**
- School Based
- Intensive Home and Community Based
- Other/Misc: Assessment and Outcomes
Interest Groups

- Organize TA in an efficient manner
- Identify shared TA needs
- Promote peer-to-peer interaction and learning
  - Delay burn-out due to isolation
- Promote ongoing learning through practical means
  - e.g., web-based, list serves, teleconferences, etc.
- Help process outcomes data meaningfully
Scope of Work - Year 2

- Ongoing Direct TA
  - Oversight and “fidelity”
- Interest Groups
- Ongoing maintenance, review and processing of outcome data
- Ongoing broad-based dissemination
- EBP’s for children and adolescents
## Statewide Educational Series on EBP’s for Children and Adolescents with Serious Emotional Disturbances
### August – September, 2005

<table>
<thead>
<tr>
<th>Date</th>
<th>Presentation</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 25</td>
<td>Introduction &amp; Overview of Evidence Based Practices for Children and Adolescents</td>
<td>542</td>
</tr>
<tr>
<td>Sep 1</td>
<td>The Role of Assessment in EBP’s for Children and Adolescents</td>
<td>503</td>
</tr>
<tr>
<td>Sep 8</td>
<td>The Evidence for School Based Mental Health Services</td>
<td>438</td>
</tr>
<tr>
<td>Sep 15</td>
<td>The Evidence for Home and Community Based Services for Children and Adolescents with SED</td>
<td>399</td>
</tr>
</tbody>
</table>

**Average Attendance / Session:** 470
Elimination of programs with potentially harmful effects

- Group therapy for conduct/disruptive disorders in children
- Majority of school-based programs using block grant funds were
  - Serving children with disruptive disorders
  - Serving them in group settings
  - Without parental involvement
Year 3 (current year)

- Learn from the data we’ve gathered
  - Under-recognizing substance abuse
  - Low rates of competitive employment
  - Treating children mainly with disruptive disorders
- Greater emphasis on “top down” approaches???
Co-occurring Substance Abuse

- SA prevalence expected to be ≥50% among persons with SMI

Regier et al., 1990
Cuffel, 1996
Mueser, Bennett, & Kushner 1995
Drake et al, 2001
Prevalence of substance use disorders by primary diagnosis: National Data

Drake et al, 2004
Co-occurring Substance Abuse by Primary Diagnosis – Iowa Data

- Mood: 23%
- Psychotic: 15%
- Anxiety: 23%

Count of Diagnostic Substances:

- Mood: 1400
- Psychotic: 800
- Anxiety: 600
- Substance: 200
Substance Abuse Stage (%)

Diagram showing the percentage distribution of Substance Abuse Stages over different time periods from 2005 to 2006. The stages are color-coded and include:
- 7 Unknown
- 6 Remission
- 5 Maintenance
- 4 Action
- 3 Preparation
- 2 Contemplation
- 1 Pre-Contemplation
- 0 NA

Time periods are divided as follows:
- 2005 Jul.1-Sep.30
- 2005 Oct.1-Dec.31
- 2006 Apr.1-Jun.30
- 2006 Jan.1-Mar.31
- 2006 Jul.1-Sep.30
- 2006 Oct.1-Dec.31

The chart provides a visual representation of how the population is distributed across these stages over the specified time periods.
% Competitively Employed

% NONE  73%  79%  74%  75%  76%  71%
Pick a target population
- Disruptive disorders
  - Younger
  - Older
- Depressive Disorders

Pick a modality
# Plan for year 3 children’s programs (as of 1/07)

<table>
<thead>
<tr>
<th>Target Population</th>
<th>Treatment Modality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disruptive Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Ages 3 – 8</td>
<td>• Parent Child interaction Tx</td>
</tr>
<tr>
<td>Ages 9 - 17</td>
<td>• Multi-systemic Therapy</td>
</tr>
<tr>
<td></td>
<td>• Functional Family Therapy</td>
</tr>
<tr>
<td><strong>Depressive Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Adolescents</td>
<td>• Cognitive Behavioral Therapy</td>
</tr>
<tr>
<td></td>
<td>• Interpersonal Therapy</td>
</tr>
</tbody>
</table>
# Evidence-Based Child and Adolescent Psychosocial Interventions

This tool has been developed to guide teams (inclusive of youth, family, educators, and mental health practitioners) in developing appropriate plans using psychosocial interventions. Teams should use this information to prioritize promising options. For specific details about these interventions and their applications (e.g., age setting, gender) see the most recent Evidence Based Services Committee Biennial Report (http://www.hawaii.gov/health/mental-health/comh/index.html).

<table>
<thead>
<tr>
<th>Problem Area</th>
<th>Level 1 - BEST SUPPORT</th>
<th>Level 2 - GOOD SUPPORT</th>
<th>Level 3 - MODERATE SUPPORT</th>
<th>Level 4 - MINIMAL SUPPORT</th>
<th>Level 5 - KNOWN RISKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxious or Avoidant Behaviors</td>
<td>Cognitive Behavior Therapy (CBT); Exposure</td>
<td>CBT with Parents; Group CBT; CBT for Child and Parent; Educational Support; Modeling</td>
<td>None</td>
<td>Eye Movement Desensitization and Reprocessing (EMDR), Play Therapy, Individual (Supportive) Therapy; Group (Supportive) Therapy</td>
<td>None</td>
</tr>
<tr>
<td>Attention and Hyperactivity Behaviors</td>
<td>Behavior Therapy; Parent Training</td>
<td>None</td>
<td>None</td>
<td>Biofeedback; Play Therapy, Individual or Group (Supportive) Therapy, Social Skills Training; &quot;Parents are Teacher,&quot; Parent Effectiveness Training, Self-Control Training</td>
<td>None</td>
</tr>
<tr>
<td>Autistic Spectrum Disorders</td>
<td>None</td>
<td>None</td>
<td>Applied Behavior Analysis; Functional Communication Training; Caregiver Psychoeducation Program</td>
<td>Auditory Integration Training; Play Therapy, Individual or Group (Supportive) Therapy</td>
<td>None</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>None</td>
<td>Interpersonal and social rhythm therapy*</td>
<td>Family psychoeducational interventions*</td>
<td>All other psychosocial therapies</td>
<td>None</td>
</tr>
<tr>
<td>Depressive or Withdrawn Behaviors</td>
<td>CBT; CBT **</td>
<td>CBT with Parents; Interpersonal Therapy; Relaxation</td>
<td>None</td>
<td>Behavioral Problem Solving, Family Therapy, Self-Control Training, Self-Modeling, and Individual (Supportive) Therapy</td>
<td>None</td>
</tr>
<tr>
<td>Disruptive and Oppositional Behaviors</td>
<td>Parent Training</td>
<td>Anger Coping Therapy; Assertiveness Training; CBT; Problem Solving Skills Training, Rational Emotive Therapy, AC-SIT, PATHS and FAST Track Programs</td>
<td>Social Relations Training; Project Achieve</td>
<td>Client-Centered Therapy, Communication Skills, Goal Setting, Human Relations Therapy, Relationship Therapy, Relaxation, Stress Inoculation, Supportive Attention</td>
<td>Group Therapy</td>
</tr>
<tr>
<td>Eating Disorders</td>
<td>CBT* (bulimia only)</td>
<td>Family Therapy (anorexia only)</td>
<td>None</td>
<td>Individual (Supportive) Therapy</td>
<td>Some Group Therapy</td>
</tr>
<tr>
<td>Juvenile Sex Offenders</td>
<td>None</td>
<td>Multisystemic Therapy**</td>
<td>None</td>
<td>Individual or Group (Supportive) Therapy</td>
<td>Group Therapy**</td>
</tr>
<tr>
<td>Delinquency and Willful Misconduct Behavior</td>
<td>None</td>
<td>MST; Functional Family Therapy; Multidimensional Treatment Foster Care</td>
<td>None</td>
<td>Individual Therapy, Juvenile Justice System</td>
<td>Group Therapy</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>None</td>
<td>None</td>
<td>Behavioral Family Management*; Family-Based Intervention*; Personal Therapy*; Social Interventions*</td>
<td>Supportive Family Management*; Applied Family Management*</td>
<td>None</td>
</tr>
<tr>
<td>Substance Use</td>
<td>CBT</td>
<td>Behavior Therapy; Purdue Brief Family Therapy; Functional Family Therapy; Family Systems Therapy</td>
<td>None</td>
<td>Individual or Group (Supportive) Therapy, Interactional Therapy, Family Drug Education, Conjoint Family Therapy</td>
<td>Group Therapy</td>
</tr>
</tbody>
</table>

* Based on findings with adults only; ** if delinquency and willful misconduct are present. $ Also consider medication alone or combined treatment for hyperactivity, or combined treatment for depression or hyperactivity, academics (reading), and family interaction.

To 07 to May 07 - If this is not the most current version, please check the CMHD web site for updates.
Pedagogy vs. Andragogy

- **Padagogy** – “child leading”
- **Andragogy** – “adult leading”
- What works in teaching adults?
- Evidence-based approaches to teaching evidence-based practices
Evidence-Based Approaches to Adult Learning (Androgogy)

- **Motivation:** Adults need to be involved in the planning and evaluation of their instruction.
- **Orientation:** Adult learning is problem-centered rather than content-oriented.
- **Readiness:** Adults are most interested in learning subjects that have immediate relevance to their job or personal life.
- **Experience (including mistakes):** Provides the basis for learning activities for adults.
“Until now, we have believed that the best way to transmit knowledge from its source to its use in patient care is to first load the knowledge into human minds… and then expect those minds, at great expense, to apply the knowledge to those who need it.

However, there are enormous ‘voltage drops’ along the transmission line for medical knowledge”.

Lawrence Weed, 1997
“Evidence-based medicine”

Selected definitions

- "Evidence-based medicine involves evaluating rigorously the effectiveness of healthcare interventions, disseminating the results of evaluation and using those findings to influence clinical practice.

- It can be a complex task, in which the production of evidence, its dissemination to the right audiences, and the implementation of change can all present problems".