Evidence-Based Practices in Mental Health: Ready or Not, Here They Come

Session I: Introduction, Concepts and Overview

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Iowa Consortium for Mental Health

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Support and Partners

- Community Mental Health Block Grant
  - Feds – SAMHSA, CMHS
  - Iowa – DHS, Mental Health Planning Council

- University of Iowa College of Medicine
  - Department of Psychiatry
  - Clinical Outreach
  - Telemedicine Resource Center

- State Public Policy Group
Objectives

- Understand what is meant by the term “evidence based practice(s)”
- Review the main factors driving public mental health systems towards EBP’s
- Describe the concept of “model fidelity” and methods of its evaluation
- Recognize the limitations of the EBP approach in mental health
Objectives (2)

- Describe target populations for which EBP's have been established
- Discuss costs and resources associated with moving towards EBP's
- Discuss barriers to implementation and strategies to overcome them
- Describe steps toward implementation of EBP's
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”.

Medline Search Results

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

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*Last updated Feb (week 1), 2004
“Best Practice”: Selected Generic Definitions

- ... policies, principles, standards, guidelines, and procedures that contribute to the highest, most resource-effective performance of a discipline.

- ...a technique or methodology that, through experience and research, has proven to reliably lead to a desired result.
“Best Practices” – Selected business definitions

- A group of tasks that optimizes the efficiency (cost/risk) or effectiveness (service level) of the business discipline or process to which it contributes.

- It is a standard benchmark for world-class operations that is replicable, transferable and adaptable across industries.
“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: MedMAP toolkit
“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".

"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".

Evidence-Based Practices

Selected Definitions (1)

- 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
Evidence-Based Practices
Selected Definitions (2)

- 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

Clarity of Construct and Model Fidelity

- Can the treatment or intervention be replicated across sites and providers yielding similar outcomes?

- Can the model or intervention be taught?
  - Taught?
  - Manualized?
  - Reliably administered?
  - Can outcomes be identified and evaluated?

- Can fidelity to the model be evaluated?
“Fidelity”

- The degree to which the actual implementation of a practice is consistent with the intent of the model
- Must guard against “changing the sign on the door”
- Research on Assertive Community Treatment (ACT) shows that degree of fidelity to the original model is correlated with outcomes
- Much effort now in developing, evaluating and implementing methods to assess fidelity
Fidelity Evaluation

- Example: DACTS
- Identifies ~ 2 dozen core features of ACT
- Each is scored 1-5
- Process for evaluation is clearly defined
  - 1 and ½ days
  - Chart audits, interviews with staff, patients
Why the push for EBP’s?

- Many advances in understanding and treating mental illnesses over past few decades
- Limited evidence of improved outcomes
- “Science to service” gap

- “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*
Why the push for EBP's?

- Despite extensive evidence and agreement on effective mental health practices for persons with SMI, research shows that routine mental health programs do not provide EBP’s to the great majority of clients with these illnesses.

- This finding was a major conclusion of the surgeon general’s report.

- PORT study – the most extensive demonstration of the problem.

Source: Drake RE et al, Psychiatric Services, 52:179-82, 2001
PORT Study: Patient Outcomes Research Team

- **Sponsors and Partners**
  - NIMH and AHCPR (Agency for Health Care Policy and Research) 1992
  - Joint effort: Hopkins, University of Maryland

- **2 major components and goals**
  - PORT 1: To develop recommendations for the treatment of persons with schizophrenia, based on a synthesis of the best scientific evidence.
  - PORT 2: To quantify concurrence of actual practice with these recommendations

PORT 1: Generating Recommendations

- Literature review
- Strength of evidence evaluated for a variety of interventions (A – C)
- 30 level A recommendations generated
  - Strong evidence base
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 2 - Conformance Study: Sample Findings – Antipsychotic Dosing

- **Acute Phase:** 62.4% receiving appropriate doses
  - 15% on a lower dose (<300 CPZ equiv.)
  - 22.5% on a higher dose (>1000 CPZ equiv.)

- **Maintenance Phase:** 29.1% receiving appropriate doses
  - 39.1% on a lower dose (<300 CPZ equiv.)
  - 31.9% on a higher dose (>600 CPZ equiv.)
PORT 2 - Conformance Study: Sample Findings (2)

- 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
- No evidence behind either of these trends
## PORT 2 Study
### Sample Findings - Non-somatic Tx

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<th>Intervention</th>
<th>Inpt. (%)</th>
<th>Outpt. (%)</th>
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<td>Assertive Community Treatment</td>
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% of pts with SZ receiving Tx
PORT - Conclusions

- Real world practice is inconsistent with practice as recommended by academics
- “Evidence-based practices” are markedly underutilized
- Reasons for this need to be better understood
- Other strategies necessary to enhance implementation
National Evidence-Based Practices
Project: Sponsors

- SAMHSA – Center for Mental Health Services
- Robert Wood Johnson Foundation
- National Alliance for the Mentally Ill
- Several state and local mental health authorities
  - New Hampshire
  - Maryland
  - Ohio
  - Texas
  - North Carolina
National Evidence-Based Practices Project: Phases

- Identification/selection of EBP’s (~ ‘98) for adults with SMI
  - 6 practices selected

- Development of initial training and evaluation materials for each practice – resource kits v.1.0 (‘98 – 99’)
  - Including methods to evaluate fidelity

- Piloting of EBP resource kits in multiple states with fidelity and outcome evaluation (‘99 – 02’)

- Full development of “implementation resource kits” (‘01 – 02’)

National EBP Project: 6 Selected Practices

- Assertive Community Treatment
- Co-occurring Disorders: Integrated Treatment
- Family Psycho-education
- Illness Management and Recovery
- Medication Management Approaches in Psychiatry (MedMAP)
- Supported Employment
- 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
National EBP project: Phases (2)

- Demonstrate that resource kits can be used to facilitate the faithful implementation of EBP’s in routine mental health settings and that this results in improved client outcomes (‘03- ‘06)
  - Additional 7 state effectiveness study
- Broad dissemination of resource kits (? Date)
Material in Resource Kits

- **Stakeholder specific materials**
  - Consumers of mental health services
  - Family members and other supporters
  - Practitioners and clinical supervisors
  - Program leaders of mental health programs
  - Public mental health authorities

- **Recommended assessments and processes to evaluate**
  - Outcomes
  - Penetration
  - Fidelity
Concerns and Limitations

- Limited evidence base
  - Many MH interventions don’t lend themselves to case-control studies
  - Limited target populations studied to date
- Dogma
- Top down vs. Bottom-up Approach
Levels of Evidence:  
Example - PORT Criteria

- **Level A**: Good research-based evidence, with some expert opinion to support recommendation

- **Level B**: Fair research-based evidence, with substantial expert opinion to support recommendation

- **Level C**: Minimal research-based evidence, primarily based on expert opinion and significant clinical experience to support recommendation

  - Adapted from AHCPR Depression Guidelines
Target Population

- Most well studied EBP’s in mental health are targeted to adults with serious mental illnesses
- Generalizability to other populations and needs remains largely untested
  - ACT for other populations/needs, e.g. re-entry from prison for SMI offenders
  - Limited data for children’s MH issues
  - Limited data for elderly MH issues
- Many other practices and approaches that have not been tested
Potential EBP’s for kids

- Multi-Systemic Therapy
- Therapeutic Foster Care
Dangers of EBP’s

- Dogma – top down approach
- “Cookbook” approach
- Over-reliance on diagnostic categories
- Loss of individuality
  - Provider
  - Client
Evidence-Based Practices vs. Evidence-Based Practice

- Top-down vs. bottom up approach to EBP
- “Blessed” practices vs. a commitment to continually use outcome data to drive resource allocation, training, etc.
Bottom up approach to evidence-based practice

- Identifying desired outcomes and target population for a program or intervention
- Developing and implementing processes to assess and track those outcomes in a valid manner
- Developing and implementing feedback processes in which outcome evaluation can and do impact programs/interventions (meaningful QA)
- CMHC wide or specific to program
The Commission shall...

- “…review the quality and effectiveness of … services to individuals with SMI/SED and identify unmet needs and barriers”
- “…Identify innovative treatments, services and technologies that are demonstrably effective and can be widely replicated in different settings”
- “…Formulate policy options that could be implemented to integrate effective treatments”
New Freedom Commission
Sub-Committees

- Acute Care
- Children and Families
- Consumer Issues
- Co-Occurring Disorders
- Criminal Justice
- Cultural Competence
- Employment and Income
- Evidence Based Practices
- Housing and Homelessness
- Interface with General Medicine
- Medicaid and Medicare
- Medications
- Older Adults
- Rights and Engagement
- Rural Issues
- Suicide Prevention
CMHS (SAMHSA) and NIMH (NIH) should strengthen their collaboration in planning, fielding, and evaluating mental health service programs in evidence-based practices.

They are encouraged to collaborate with other federal agencies, state and local gov’ts, as well as private organizations.

The process must involve all stakeholders, including consumers and families, in an effort to improve the relevance and generalizability of the research and other efforts to advance knowledge.
The failure of most mental health service financing mechanisms to pay adequately for evidence-based practices is one of the most important reasons for problems with implementation.

It is essential to reduce financial barriers to providing evidence-based practices.

The sub-committee suggests a range of strategies and tactics to assure financing:
Recommended Strategies to Finance EBP’s in MH

- Modify Medicaid and Medicare
  - Assure EBP’s are covered
  - Rates should be set to provide incentives to providers

- Using the Mental Health Services Block Grant to Initiate Evidence-Based Practices

Source: Draft Report of the Subcommittee on Evidence-Based Practices
November 26, 2002
EBP Subcommittee Report*: Using the Mental Health Block Grant to Support 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.”

*Source: Draft Report of the Subcommittee on Evidence-Based Practices November 26, 2002
Community Mental Health Block Grant

- A very small part of the overall mental health budget
  - Iowa ~ $4 million
- From Feds – SAMSHA, CMHS
- Passed through via state’s Mental Health Authority
  - In our case DHS
  - Overseen by Mental Health Planning Council
  - Advisory to DHS
Community Mental Health Block Grant

- Federal mandate - Funds to be used for
  - Adults with SMI (half)
  - Children with SED (other half)

- Iowa traditionally has distributed
  - ~50% to CMHC’s on a population basis
  - ~50% for special programs
    - Continuous, e.g., NAMI,
    - Yearly special projects – RFP’s
EBP Subcommittee Report*: Specific Recommendations

“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
EBP’s in Iowa’s Block Grant

- The MHA and the MHPC are committed to furthering evidence-based practices.

- The intent is to use increasing proportions of block grant funds over the next several years as incentives for providers to enhance their capacity to provide these services.

- This will be a gradual process, involving staff training and development, methods to evaluate model fidelity, methods to evaluate appropriateness for these services and methods to evaluate outcomes.

*Iowa Mental Health Block Grant, 2003*
New Iowa Legislation: SF 2288

- Signed by Governor May 2004, effective 2005
- 70% of 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 these funds for either
  - Emergency services
  - Evidence-based practices
Questions raised by legislation

- What constitutes evidence based practice?
  - Who gets to decide what is or is not an EBP?
  - Based on what?

- How do we determine if the practice is actually being done?
  - What prevents simply changing the sign on the door?
  - How is fidelity to the model evaluated?

- Can monies be used for infrastructural support?
Factors that can enhance implementation of EBP’s

- Creating financial incentives and penalties
- Using administrative rules and regulations
- Providing clinicians with ongoing supervision and feedback
- Increasing consumer demand for service
Factors that promote change in the behavior of health care providers

- **Disseminating strategies**
  - Educational events, written materials

- **Enabling methods**
  - Practice guidelines, decision support

- **Reinforcing strategies**
  - Practice feedback mechanisms
The steps toward full implementation

- Consensus Building
- Development of implementation plan
- Enacting the implementation
- Monitoring and evaluation
Consensus building

- Build support for change
  - Identify key stakeholders
  - Provide information to all stakeholders
  - Develop consensus regarding a vision for the practice at your agency
  - Convey a vision and commitment to stakeholders
Resources needed to move towards EBP’s

- More resources dedicated to QA and outcome evaluation
  - Hardware, software, person hours
- As we don’t have “more resources”, must shift resources to do so
  - What can be eliminated/changed?
- QA processes and documentation requirements
Readiness for EBP’s?

- Research
  - Clinical
  - Services
- Administrative
  - Data infrastructure
  - Financing
  - Credentialing
- Clinical
- Educational
  - CME’s
  - Trainees
Key Web Resources

- **www.icamentalhealth.org**
  - Iowa consortium for Mental Health Website – lots of stuff on EBP’s

- **www.mentalhealthpractices.org**
  - Website for the National EBP project

- **www.mentalhealth.samhsa.gov/cmhs/communtysupport/toolkits/**
  - SAMHSA website where resource kits should eventually be made available