

**Evidence-Based Mental Health Practice:
What does it look like in Iowa?**

Michael Flaum, MD
Director, Iowa Consortium for Mental Health
Department of Psychiatry
University of Iowa Carver College of Medicine

March 29, 2006

Iowa Consortium for Mental Health

- Established 1994
- Mental Health Block Grant \$
- Public – Academic liaison
- University resources to assist in informing state / county public mental health policy

www.icmentalhealth.org

*16th Annual NRI Meeting
Feb 12, 2006*

**Responding to a Mandate for
Evidence-Based Practices at the
State and Street Levels:
The Iowa Experience**

Michael Flaum, MD
Director, Iowa Consortium for Mental Health
Department of Psychiatry
University of Iowa Carver College of Medicine

James D. Overland
Bureau Chief, Bureau of Community Services
Division of Behavioral, Developmental and Protective Services
Department of Human Services, State of Iowa

*13th Annual NRI Meeting
Feb 13, 2003*

**A Method to Evaluate and
Disseminate the Utilization and
Applicability of Evidence-Based
Practices within a State**

Michael Flaum MD
Director, Iowa Consortium for Mental Health
University of Iowa College of Medicine Department
of Psychiatry

**“First steps when you are starting
from nowhere”**

- **Setting the stage for moving towards EBP**
 - Understanding reasons for the EBP push
 - Understanding what is meant by EBP
 - Getting a sense of EBP in Iowa’s MH system

**Why the Push for
“Evidence-Based Practice”?**

- Consensus regarding “science to service gap”
 - Surgeon General’s Report (1999)
 - ♦ PORT Study
 - President’s New Freedom Commission (2001-03)
 - Institute of Medicine’s “Crossing the Quality Chasm” (2001, 2005)

Why the Push for "Evidence-Based Practice" (cont)?

- Variability in services across geographic locations
- "Go to Midas, get a muffler" effect
- Limited resources need to be directed towards those practices that yield the best outcomes

PORT Study: Patient Outcomes Research Team

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

Source: Lehman et al: *Schizophrenia Bulletin*,
24:11-20, 1998

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 patients 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)

Source: Lehman et al: *Schizophrenia Bulletin*,
24:11-20, 1998

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

% of pts with SZ receiving Tx

Intervention	Inpt. (%)	Outpt. (%)
Family Psycho-education	31.6	9.6
Vocational Rehabilitation	30.4	22.5
Assertive Community Treatment	8.6	10.1

PORT - Conclusions

- Real world practice is inconsistent with practice as informed by research
- “Evidence-based practices” are markedly underutilized
- Reasons for this need to be better understood
- Other strategies necessary to enhance implementation

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

Source: Bond G, et al, 2001

January 2001

PSYCHIATRIC SERVICES
A Journal of the American Psychiatric Association

2001
Dedicated to
Evidence-Based
Practice

- 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 for Adults with SMI

National Evidence-Based Practices Project: Earlier 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

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
- Revision of existing resource kits (06-08?)
- Production of other resource kits

Material in Resource Kits

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Stakeholder specific materials <ul style="list-style-type: none"> ▪ Consumers of mental health services ▪ Family members and other supporters ▪ Practitioners and clinical supervisors ▪ Program leaders of mental health programs ▪ Public mental health authorities | <ul style="list-style-type: none"> • Recommended assessments and processes to evaluate <ul style="list-style-type: none"> ▪ Outcomes ▪ Penetration ▪ Fidelity |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Results of Initial Iowa Assessment: Models with strong Evidence-Base

Results: "Promising Practices"

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
- A forum for ongoing dialogue and debate about how to best utilize scarce resources is necessary

ICMH Technical Assistance Center for Evidence-Based Practices

- Initially funded in 2003
 - via Medicaid dollars (Community reinvestment Medicaid managed care MH/SA carve-out)
- Major focus:
 - Assertive Community Treatment
 - Illness Management and Recovery

The steps toward full implementation

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

The Mandate: Iowa Legislation - SF 2288 (2004)

- 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 these funds for "evidence-based practices"

Basic questions raised by legislation

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

"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

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

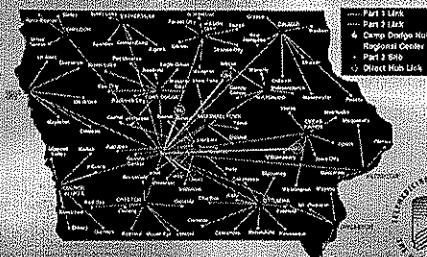
- Statewide dissemination of EBP's
- Survey of provider readiness for EBP's
- Identify and engage resources / consultants
- Convene and coordinate multi-stakeholder group to establish process
 - Application, review, ongoing monitoring
- Development of outcomes reporting system
- Ongoing TA to providers and DHS on all of the above

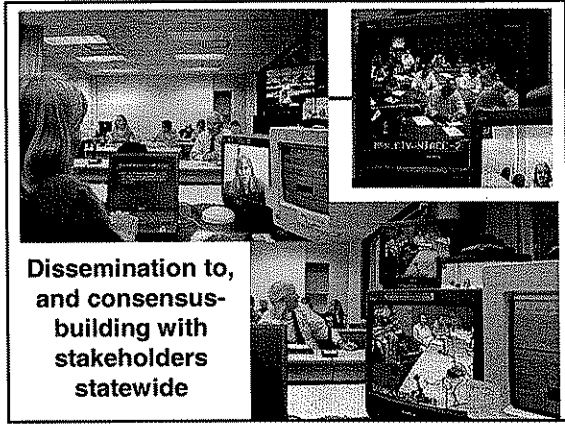
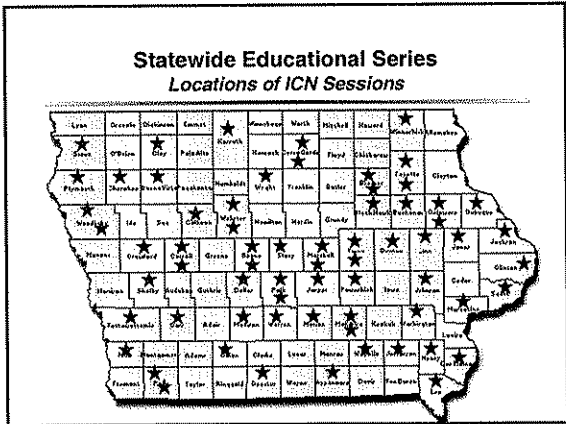
Statewide Educational Series on EBP's for Adults with Serious Mental Illness August - October, 2004

Date	Presentation	Attendance
August 26	Introduction, Concepts, & Overview of Evidence Based Practices	567
September 2	Family Psycho-Education	495
September 9	Supported Employment	432
September 16	MEDMAP: Medication Approached in Psychiatry	399
September 23	Assertive Community Treatment (ACT)	313
September 30	Integrated Treatment of Co-occurring Disorders	375
October 7	Illness Management and Recovery	326
Average Attendance / Session:		415

Iowa Communications Network

Part 1 and 2





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”.

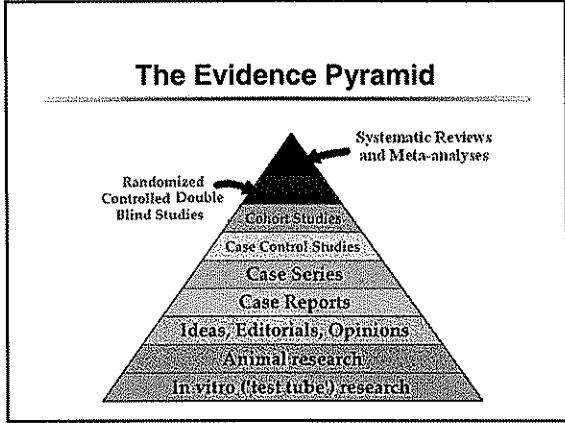
Hoagwood K et al: Evidence-Based Practice in Child and Adolescent Mental Health Services. *Psychiatr Serv* 52:1179-1189, 2001

Is “Evidence-Based” a Newly Popularized Term? Medline Search Results

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

Years	EBP or EBT	EBM
Prior to 1990	0	0
1990 - 1994	8	2
1995 - 1999	328	3,521
2000 - 2005*	1,331	13,989

*Last updated August (week 1), 2005



“First, do no harm”

EBP mandates as a means to justify limiting funding?

Hippocrates?

“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)

- “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”.

Source: Appleby J, Walsh K and Ham C (1995). Acting on the Evidence (NAHAT Research Paper No. 17). Birmingham

Overarching Values of Operations Group

- WE WANT A SYSTEM THAT LEARNS
- A system that:
 - doesn't keep doing things that aren't working out of inertia
 - Incorporates recognized EBP's
 - supports 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”

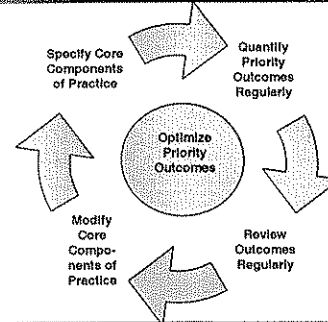
Components of Practicing in an Evidence-Based Manner (1)

- 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



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 | • Perception of Care |
| • Housing stability | • Access / Capacity |
| • Crime / Criminal justice | • Decreased hospitalization |
| • Social connectedness | • Cost effectiveness |
| • Decreased symptoms | • Use of EBP's |

“Recovery – Oriented” Outcomes

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

Charles G. Curie

Major Themes of Programs

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Adult Programs (38)</u> | <u>Child Programs (37)</u> |
| <ul style="list-style-type: none"> • Recovery Oriented • Integrated MH and SA treatment • Other/Misc: Assessment and Outcomes | <ul style="list-style-type: none"> • 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 as we Enter Year 2

- Ongoing Direct TA
 - Oversight and fidelity
- Interest Groups
- Ongoing maintenance, review and processing of outcome data
- Ongoing broad-based dissemination
- Ongoing movement towards EBP

Statewide Educational Series on EBP's for Children and Adolescents with Serious Emotional Disturbances August – September, 2005

<u>Date</u>	<u>Presentation</u>	<u>Attendance</u>
August 25	Introduction & Overview of Evidence Based Mental Health Practices for Children and Adolescents	542
September 1	The Role of Assessment in EBP's for Children and Adolescents	503
September 8	The Evidence for School Based Mental Health Services	438
September 15	The Evidence for Home and Community Based Services for Children and Adolescents with SED	399
	Average Attendance / Session:	470

Web-based Outcomes Reporting

- Process is important
- Can you practice in an evidence-based manner in 2006 without meaningful use of internet?

Learning to Fish

“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