



Robert Wood Johnson Foundation

Delivering Quality Addiction Treatment

September 13, 2006

Massachusetts Treatment Providers
Mass DPH/Brandeis University

Victor Capoccia, Ph.D.



What is Quality Treatment Like for the Customer?

1. ..immediate response,, dignity and respect
2. .. they will get better
3. ..build a relationship
4. ..follow through
5. ..involvement in treatment planning
6. Integrity
7. Competence, cultural competence



The Research: What Quality Means to the Customer

- Individual attention
- Responsive when attention is needed
- Listened to, heard
- Intervention that ‘fits’
- Get better
- “Getting what you need when you need it with the results that you expect”



What Does Quality Treatment Look Like to the Payer, Purchaser?

1. ..results/outcomes – arrest rates, employment
2. ..know that people completed – completion rates
3. ..access/how long
4. ..cost effective
5. ..program evaluation system
6. Individual treatment plans
7. Retention and continuation
8. Impact on the community/presence



The Research: What Quality Means to the Payer

- Reduce readmission to acute care
 - Might increase admission to aftercare
- Reduction in AMA
- Decrease in time to admission
- Decrease in no show
- Increase in continuation
- Patient re-engagement with family, work, community



Components of a Quality Agenda

IOM, RWJF, SAMHSA

- **Focus on customer**
- **Measurement: NQF, WSG**
- **Use what we know works: 5 categories**
- **Remove the barriers and redesign systems to deliver EBP**
- **Develop workforce**
- **Connect to larger health system**



Delivering Quality Treatment A Review

- **Customer experience**
- **Payer/purchaser experience**
- **National Guidelines**



The Challenge: What is Different in Your Agency Tomorrow?

- **5 Actions that are:**
 - **Simple actions**
 - **Easy for every employee to understand**
 - **Actionable by every (most) employee**
 - **Require minimal resources to implement**
 - **Have a basis in science**
- **Make a difference in quality**

Boston Public Health Commission

Women and Families Division

Staff Training on Access Retention Project/

Network for Improvement of Addiction Treatment

STAR Team:

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BPHC-STAR PROJECT

- Implemented at two women's treatment programs (outpatient and residential) within BPHC's substance abuse services
- Major Goals:
 1. Improve access to substance abuse treatment
 2. Increase retention in substance treatment

CHALLENGES RELATED TO CLIENT ACCESS AND RETENTION

■ ACCESS:

- Both programs received four times the number of calls compared to the number of women who showed for the initial assessment

■ RETENTION

- Failure to engage in treatment after the initial assessment
- Failure to show at outpatient appointments
- Failure to complete treatment

BPHC-STAR PROJECT

- Specific Aims:
 1. *Reduce waiting time* from contact to first post-assessment treatment session (or second clinical encounter).
 2. *Increase continuation* for clients who complete four clinical units of service or transfer to a new level of care
 3. *Reduce no-shows* in first four clinical units of service.
 4. *Increase admissions*

Sample Core Change

■ Core Change Project #1

- **Start:** 10/16/03 **End:** 07/30/04
- **Aim** = Reduce Waiting Time from 7.5 days to 2 days
- **Measure:** # of days from first request for service to admission.
(baseline at 7.5 days)

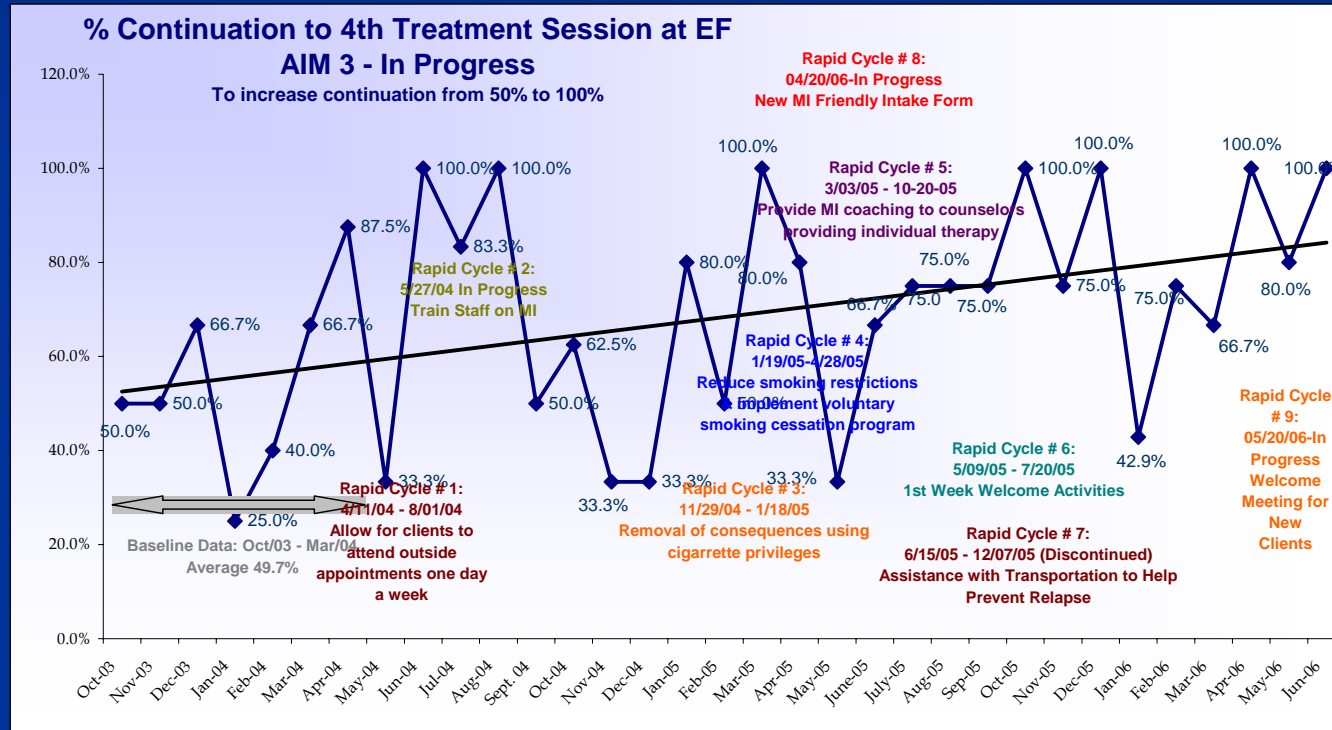
■ Submeasures:

- → Time it took to conduct phone intake (baseline 45 minutes)
- → % of calls returned within 24 hours (at walk-through it took 5 days to return the call)

■ Key Changes (Date of Change):

- 10/03--Return calls left on answering machine the same day and at least 85% of the time and all calls within 24 hours
- 12/03--Simplify intake process by reducing # of questions asked; combine phone screening and phone intake into one step; cross training staff to do phone intake
- 03/04--Make admissions decisions within 24 hours of intake

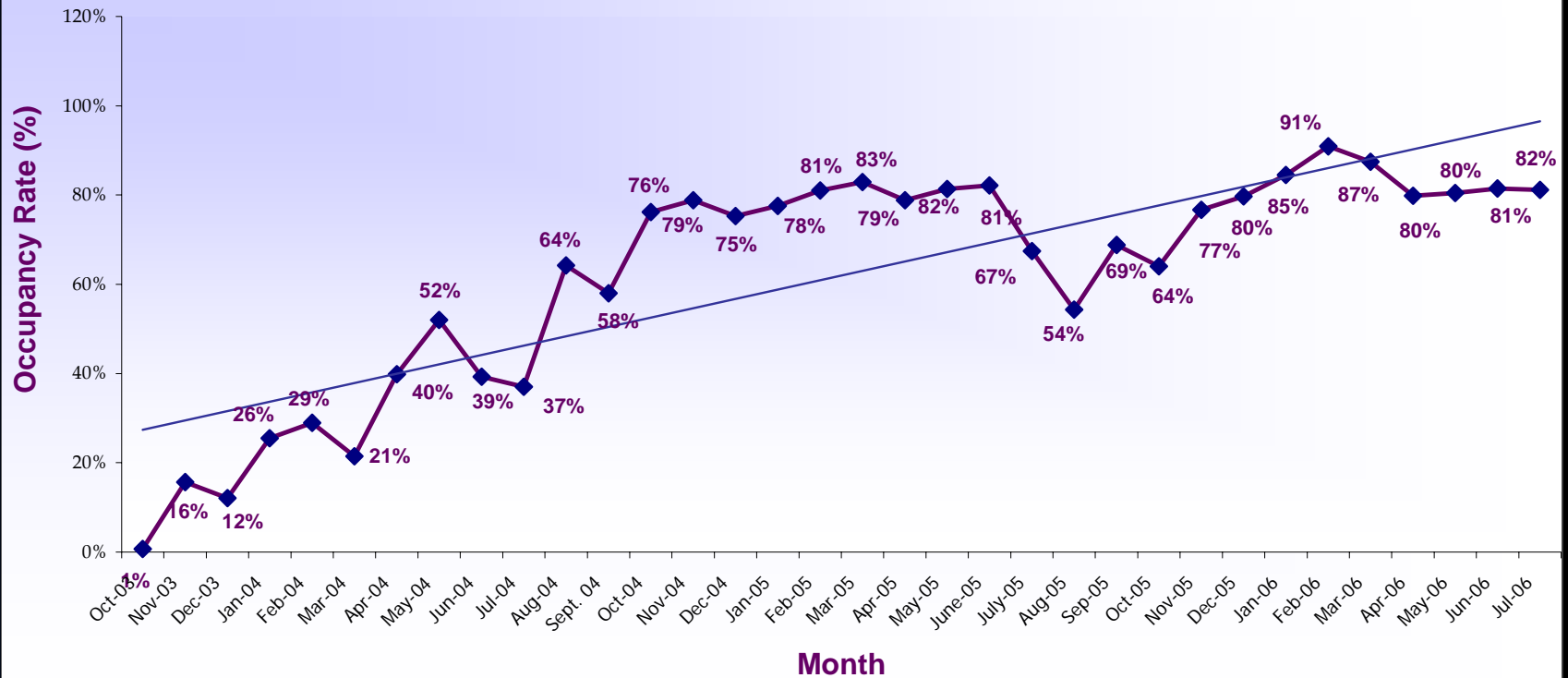
Percentage of Continuation to 4th Treatment Session at EF (Goal from 50% TO 100%)



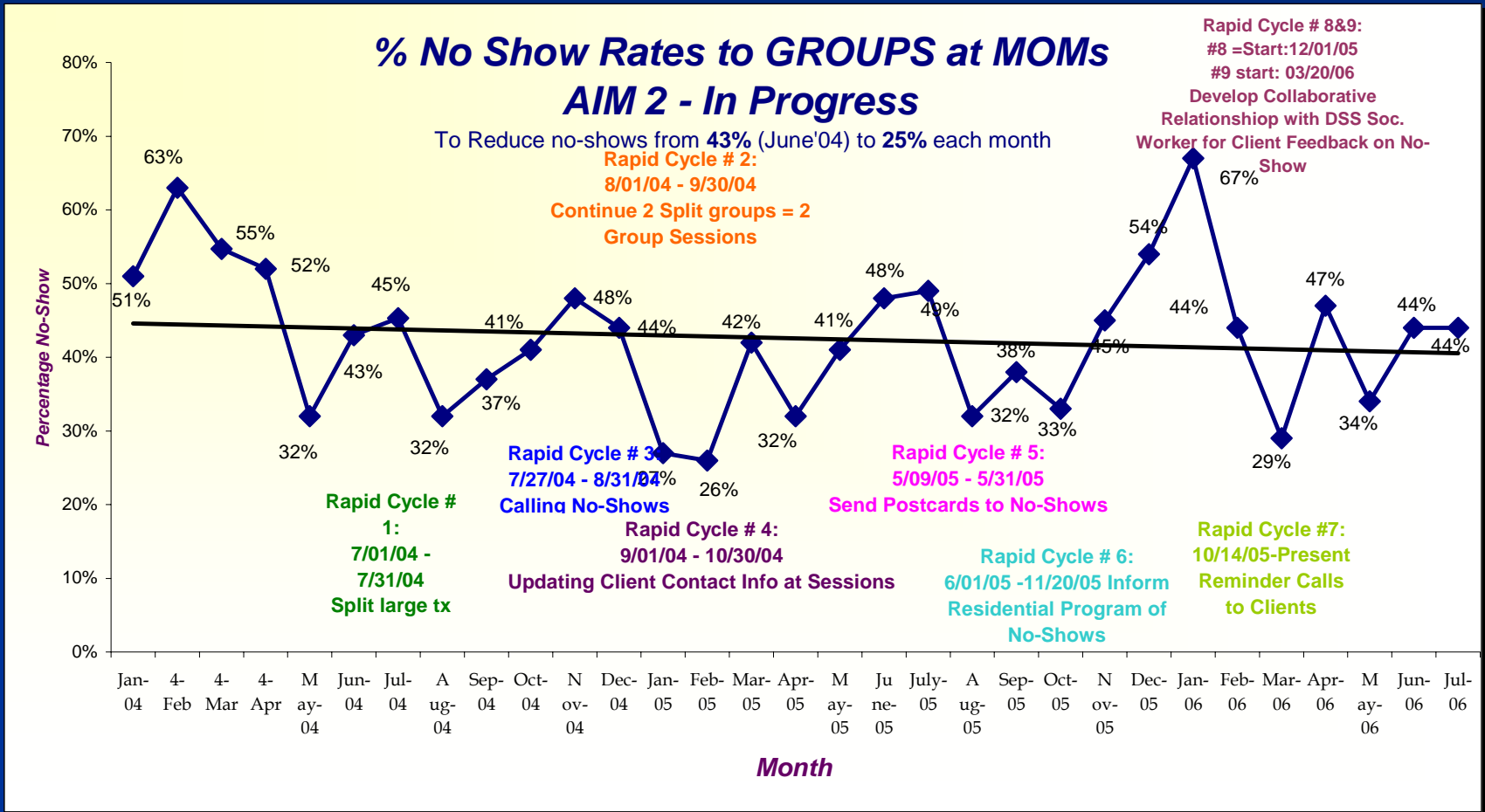
Entre Familia Occupancy Rate

EF Occupancy Rate

* Capacity changed: Before June/05 = 23 beds; Starting June/2005 = 20



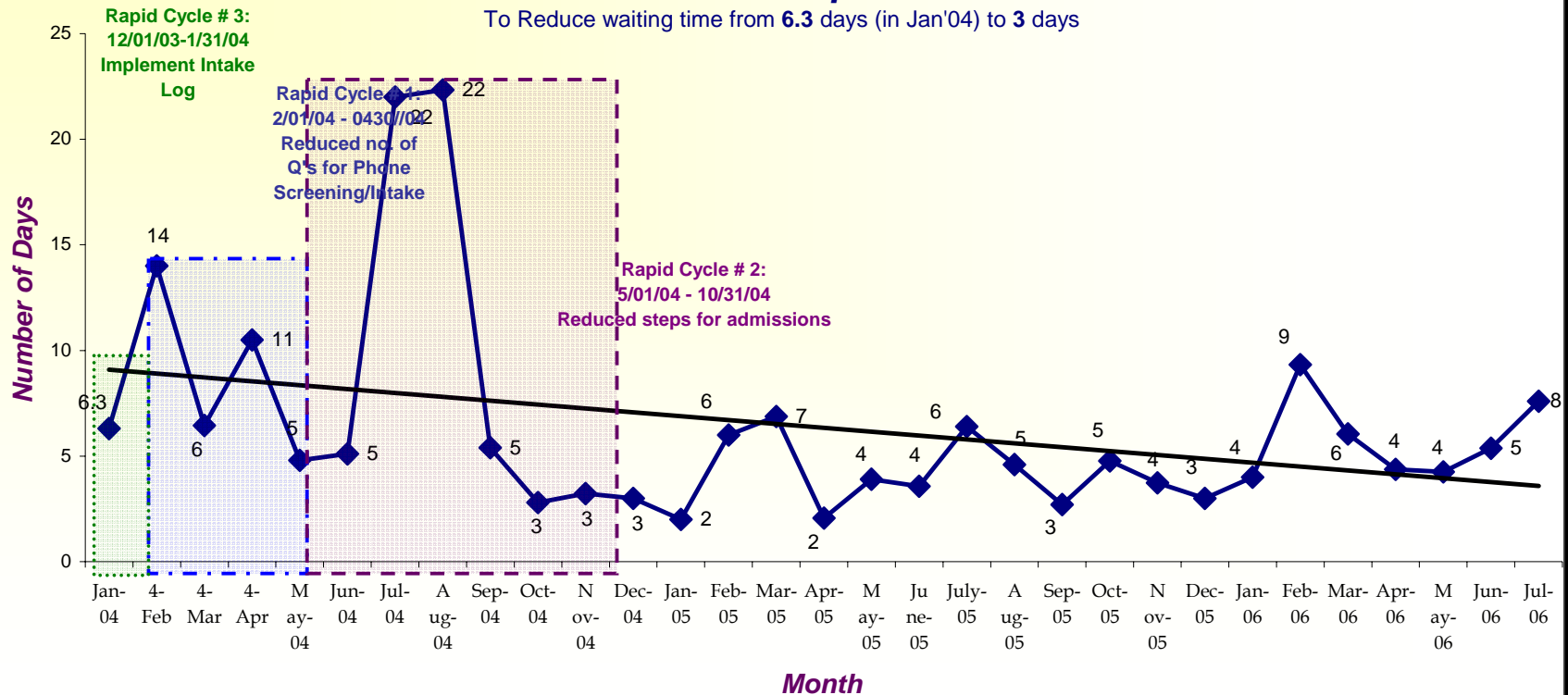
Percentage of No Show Rates to GROUPS at MOMs



Number of days between first request to Admission at MOM's

of days between 1st Request to Admission at MOM's
AIM 1 - Completed

To Reduce waiting time from 6.3 days (in Jan'04) to 3 days



IMPACT OF STAR/NIAT_x

- Improved staff climate at both programs by encouraging the staff to take ownership to improve processes related to access and retention
- Created opportunities for staff to think of creative ways to better serve our clients.
- Routine staff discussions to generate and implement ideas
- Use of data graphs to demonstrate progress towards achieving access and retention goals
- Staff satisfaction from positive client feedback
- Improved staff self-esteem when efforts are recognized and considered by the executive sponsors

SUSTAINABILITY

- STAR project activities that have made a positive impact on the delivery of services are now incorporated into the Women and Families Division's administrative and programmatic protocols.
- All staff are trained and evaluated on these protocols.
- The keys to successful sustainability is frequent and routine data monitoring by the designated sustain leader and, in turn, rapid cycle changes as needed.
- Staff at all levels recognize the importance of team effort in achieving program goals.

SUSTAINABILITY

- The overall mission at Entre Familia/Moms project centers on an unequivocal belief in a client-centered approach to substance abuse treatment.
- Executive sponsors and change leaders have built awareness and excitement about STAR and its goals among staff.
- Most staff have been involved in at least one change project
- Executive sponsors and staff celebrate successes and share progress with staff on a regular basis.



Aligning Performance Measurement with Evidence-Based Practice

Constance Horgan and Deborah Garnick



*Institute for Behavioral Health
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The Heller School for Social Policy and Management
Brandeis University*

September 13, 2006

*Supported by the Brandeis/Harvard NIDA Center on Managed Care and Drug Abuse Treatment
(Grant #3 P50 DA010233)*

PREMISE

Performance measures are tools, and as such, do not lead to improvements unless they are well designed, appropriately used and applied in a system or organization that is equipped to implement change.



RELATIONSHIP OF PERFORMANCE MEASURES AND EVIDENCE BASED PRACTICES

- Performance measurement is key to increasing effective health care delivery
- Use of evidence based practices can lead to improved outcomes
- Specific performance measures are selected because of evidence that substance abuse treatment services or prevention initiatives can lead to better outcomes



TWO PART PRESENTATION

Issues in using performance measurement in substance abuse treatment

Development of performance measures for the public sector: examples from National Outcome Measures (NOMS) and Washington Circle



ISSUES IN USING PERFORMANCE MEASUREMENT IN SA TREATMENT -- TODAY'S PRESENTATION

- I. Background
- II. Measurement Challenges
- III. Barriers to Adoption and Implementation



I. BACKGROUND

- Overview
- Framework
- Criteria for Selection
- Purpose
- Groups Involved



OVERVIEW

- Imprecise clinical diagnosis
- Care processes not captured in data systems
- Performance related to case mix



FRAMEWORK

- **Structure** (e.g., existence of electronic medical records)
- **Process** (e.g., initiation and engagement of alcohol and other drug services -- WC/NCQA)
- **Outcome** (e.g., decrease in symptoms of depression within six months of beginning treatment)
- **Access** (e.g., percent of individuals offered an appointment within three business days)
- **Patient experience** (e.g., percent reporting they “talk freely and openly with my counselor”)



CRITERIA FOR MEASURE SELECTION

- Importance
- Scientific soundness
- Feasibility



PURPOSE OF THE MEASURE

- Accountability
- Quality improvement



PURPOSE - ACCOUNTABILITY

- Important for multiple stakeholders
- Ability to report both process and outcomes
- Focus on common definitions and comparable information



PURPOSE – QUALITY IMPROVEMENT

- Measure a phenomenon
- Identify candidates for improvement
- Develop strategies for improvement
- Measure again to assess change



GROUPS INVOLVED IN MEASURE DEVELOPMENT AND DISSEMINATION

- Federal Agencies (e.g., SAMHSA, VA, AHRQ)
- Professional Clinician Associations
- Independent Organizations with Behavioral Health Focus (e.g., Washington Circle, American Managed Behavioral Healthcare Association (AMBHA), Forum on Performance Measurement)
- Independent Organizations with General Focus (e.g., NCQA, JCAHO, National Quality Forum)



II. MEASUREMENT CHALLENGES

- Nature of Service Delivery System
- Types and Availability of Data
- Data Quality
- Population Issues
- Calculation Issues



NATURE OF SERVICE DELIVERY SYSTEM

- Multiple settings of treatment
- Lack of integration of specialty behavioral health and primary care
- Alternative pathways to treatment in managed behavioral healthcare organizations (MBHOs)
- Separate treatment systems for mental health problems and substance use disorders
- Mix of public and private funding



TYPES AND AVAILABILITY OF DATA

- **Administrative data** (e.g., percent engaged with substance abuse services within 14 days of new episode)
- **Medical records** (e.g., percent of SA patients assessed for co-occurring mental health conditions)
- **Surveys** (e.g., percent of enrollees reporting getting a referral)



DATA QUALITY

- Miscoding of diagnoses
- Failure to code mental health or substance abuse diagnoses
- Availability of appropriate codes for substance abuse services
- Responses to surveys by persons with behavioral health problems



POPULATION ISSUES

- Risk adjustment
- Serious, yet rare conditions
- Co-occurring mental health and substance use disorders



CALCULATION ISSUES

- Small numbers
- Defining episodes of services



III. ADOPTION AND IMPLEMENTATION

- Room for Improvement
- Stakeholders
- Potential Changes
 - Information Technology
 - Incentives



ROOM FOR IMPROVEMENT

- Effective care for depression
 - 57.7% of time (McGlynn et al, 2003)
- Effective care for alcohol dependence
 - 10.5% of time (McGlynn et al, 2003)
- HEDIS – Behavioral health is flat from 1999-2002 (NCQA, 2004)
 - BH measures – 48 to 50 percent
 - Non-BH measures – 57 to 67 percent

(Goplerud, 2004)



CRITICAL JUNCTURE FOR STAKEHOLDERS

- Purchasers
- Health Plans
- Clinicians/Provider Groups
- Consumers/Patients
- Researchers



POTENTIAL CHANGES – INFORMATION TECHNOLOGY

- Uses of computer-based IT
 - screening
 - clinical decision-making
 - patient monitoring/reminders
- Automated databases and electronic medical record
- Diffusion is slow



POTENTIAL CHANGES - INCENTIVES

- Financial – “pay-for-performance”
- Non-financial
 - reputational/recognition
 - reduction in administrative burdens
- Other economic
 - IT investment
 - variable co-payment rates for patients



CONCLUSION

Performance measure are tools, and as such, do not lead to improvements unless they are well designed, appropriately used and applied in a system or organization that is equipped to implement change.

THE CHALLENGE IS LARGE!



DEVELOPMENT OF PERFORMANCE MEASURES FOR THE PUBLIC SECTOR – TODAY'S PRESENTATION

- Show how evidence based practices are influence performance measurement initiatives
- Use two examples
 - National Outcome Measures (NOMS)
 - Washington Circle Public Sector Workgroup



NOMS AND SOMMS

- National Outcome Measures (NOMS) Domains
 - Abstinence from Drug / Alcohol Use
 - Employment / Education
 - Crime and Criminal Justice
 - Family and Living Conditions
 - Access / Capacity
 - Retention
 - Social Connectedness
 - Perception of Care
 - Cost Effectiveness
 - Use of Evidence-Based Practices

- State Outcome Measurement and Management System (SOMMS)

<http://www.nationaloutcomemeasures.samhsa.gov/>



Welcome to National Outcome Measures (NOMS)

Substance Abuse and Mental Health Services Administration National Outcome Measures (NOMS)

DOMAIN	OUTCOME	MEASURES		
		Treatment		Prevention
		Mental Health	Substance Abuse	Substance Abuse
Abstinence	Abstinence from Drug/Alcohol Use	NOT APPLICABLE	Reduction in/no change in frequency of use at date of last service compared to date of first service ▶	No use in the prior 30 days ▶ Perceived risk of use ▶ Age at first use ▶ Perception of disapproval
	Decreased Mental Illness Symptomatology	Under Development	NOT APPLICABLE	NOT APPLICABLE
Employment/Education	Increased/Retained Employment or Return to/Stay in School	Profile of adult clients by employment status and of children by increased school attendance ▶	Increase in/no change in number of employed or in school at date of last service compared to first service ▶	ATOD suspensions and expulsions; workplace AOD use and perception of workplace policy
Crime and Criminal Justice	Decreased Criminal Justice Involvement	Profile of client involvement in criminal and juvenile justice systems	Reduction in/no change in number of arrests in past 30 days from date of first service to date of last service ▶	DUI arrests; drug-related arrests
Stability in Housing	Increased Stability in Housing	Profile of client's change in living situation (including homeless status) ▶	Increase in/no change in number of clients in stable housing situation from date of first service to date of last service ▶	NOT APPLICABLE

CURRENT GOALS AND ACTIVITIES

- Create a system to reduce reporting burden and develop valid and reliable measures
- Standardize operational definitions and outcome measures
- Develop benchmarking strategies
- Full State reporting by the end of fiscal year 2007 - SAMHSA support for infrastructure and technical assistance
- Four measures still in development (cost effectiveness, use of evidence-based practices, social connectedness, and client perceptions of care)



DATA COLLECTION AND REPORTING – SUBSTANCE ABUSE TREATMENT

- Data elements based upon TEDS information at admission and discharge
- Unique client identifier to track episodes across providers
- Modifications to add criminal justice variables and capture all client change indices at discharge



DATA COLLECTION AND REPORTING – SUBSTANCE ABUSE PREVENTION

- National Survey of Drug Use and Health (NSDUH)
- Department of Education (DoED) Administrative Records
- National Highway Traffic Safety Administration (NHTSA) and Uniform Crime Report (DOJ) data
- Center for Substance Abuse Prevention (CSAP) Minimum Data Set (MDS)
- State-specific prevention data sets



NOMS METHODOLOGICAL ISSUES: EXAMPLE CLIENT PERCEPTION OF CARE

■ **Specifying provider**

- When we ask about client perception of care, need to know which provider
- Clients may have multiple issues, see multiple providers, or visit multiple settings

■ **Timing**

- Before, during, and/or after treatment
- Phase in treatment trajectory
- Measurement at different times provides different information



NOMS METHODOLOGICAL ISSUES CONTINUED

■ Patient factors

- Patient factors may affect responses — even if unrelated to clinical care quality
- Those with certain disorders often report poorer experience of care
- Adjust for case mix?

■ Mode

- Options include: mail, face-to-face, telephone surveys
- Each has strengths and weaknesses
- Mode may influence responses



NOMS METHODOLOGICAL ISSUES CONTINUED

- **Non response**
 - Bias occurs when non responders are consistently different from responders
 - Non respondents may be more likely to be members of vulnerable populations

- **Consistency**
 - Consistent data collection methods
 - Methods may vary by State, facility, or staff member
 - Accuracy can be affected by staff capacity, data collection systems, data edits



EXAMPLE 2 – WASHINGTON CIRCLE BACKGROUND

- Convened in 1998 by SAMHSA's Center for Substance Abuse Treatment
- Develop and pilot test performance measures for substance abuse treatment
- Promote adoption of these measures by public and private stakeholders
- Technical support by Brandeis University (through CSAT supplement to Brandeis/Harvard NIDA Center)
- www.washingtoncircle.org



FRAMEWORK -- CONTINUUM OF CARE

- 1. Prevention/Education** -- Activities to raise the awareness of substance abuse as a major debilitating disorder affecting individuals, families, and society
- 2. Recognition** -- Efforts at case-finding, including: screening, assessment, and referral
- 3. Treatment** – Activities associated with rehabilitation of individuals who have an alcohol or other drug disorder diagnosis
- 4. Maintenance** -- Activities related to sustaining long-term positive outcomes



THREE WASHINGTON CIRCLE MEASURES

- **Identification** – Percent of adults with any substance abuse treatment
- **Initiation** – Percent of adults with an inpatient substance abuse admission or with an outpatient service for substance abuse or dependence and any additional substance services within 14 days
- **Engagement** – Percent of adults diagnosed with substance abuse disorders that receive two additional substance abuse services within 30 days of the initiation of care



ADOPTION OF WC MEASURES

- Performance measures developed first for application in managed care plans - National Committee on Quality Assurance (NCQA) adapted for commercial, Medicaid and Medicare managed care (www.ncqa.org)
- Veterans Administration uses for annual reports (www.chce.research.med.va.gov)
- Oklahoma Department of Mental Health and Substance Abuse Services adapted for state reporting system (<http://www.odmhsas.org/eda/rpm/okrpmfy2005q2.pdf>)
- Research applications, e.g., Tennessee adolescents



COMMERCIAL SECTOR RESULTS - ADULTS

	WC pilot testing 1997-2000	Medstat, 2001	National Committee on Quality Assurance, 2003
Identification Rate	0.7 % -1.4 %	0.46%	0.80%
Initiation Rate	26 %-46 %	47%	45%
Engagement Rate	14 %-49 %	12%	16%

Source WC: Garnick, Lee, Chalk, Gastfriend, Horgan, McCorry, McLellan, Merrick. Establishing the Feasibility of Performance Measures for Alcohol and Other Drugs, *Journal of Substance Abuse Treatment*, 23:375-385, December 2002

Source NCQA: Mardon, Renner and Rockswold, NCQA, 8/17/2004 for adults 18-64

Source Medstat: Calculations from Kay Miller for 2001 data, Medstat Inc. for adults over 18



PUBLIC SECTOR RESULTS - ADULTS

	Veterans Admin, 2004	Oklahoma, 2005	Medicaid, 1999
Identification Rate	6.30%	9.0%	2.70%
Initiation Rate	26.2%	75.3 % after outpatient	25.0%
Engagement Rate	8.8%	61 % after outpatient	14.0%

Source: Veterans Administration: (Harris et al., 2005)

Oklahoma: Identification rate denominator is adults under 200 % of poverty level. For initiation and engagement, Oklahoma reports rates separately according to whether an episode's first service is outpatient, detox, or residential (Oklahoma Department of Mental Health and Substance Abuse Services, 2005).

Medicaid: 1999 Medicaid data for all states except Hawaii from the Medicaid Statistical Information System (MSIS) by Christopher Tompkins and Sharon Reif, Heller School for Social Policy and Management, Brandeis University.



WASHINGTON CIRCLE PUBLIC SECTOR WORKGROUP - GOALS

- Assess suitability of three WC measures for public sector
- Develop and pilot test revised specifications



CHALLENGES OF TRANSLATING WC MEASURES FOR PUBLIC SECTOR

- Compared with managed care plans' data
 - Variability in data reporting capabilities and state specific data formats
 - Data completeness influenced by some clients using both state agency & Medicaid funded treatment
 - More detoxification services
 - More detail about types of services
 - No enrolled population
 - Variability in states' data reporting capabilities

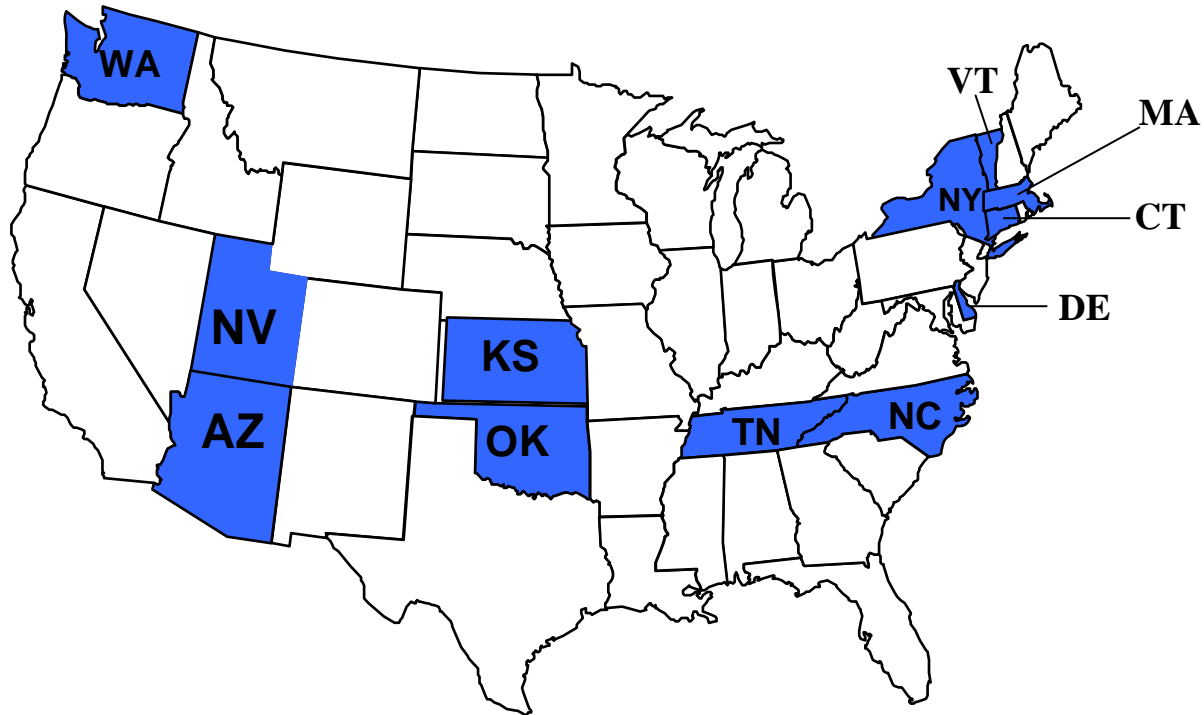


WC PUBLIC SECTOR WORKGROUP

- *November 2004* - States invited to participate
- *May 2005* – first meeting of WC members and state agency directors or research directors
- *December 2005* – second meeting expanded to include states' technical representatives
- *Spring 2006* – calculate descriptive statistics
- *June 2006* – third meeting to outline technical specifications
- *Fall 2006* – calculate and report on states' measures



WC PUBLIC SECTOR WORKGROUP PARTICIPANT STATES



DRAFT WC PUBLIC SECTOR MEASURES

1. Identification
2. Initiation after Outpatient
3. Engagement after Outpatient
4. Initiation after Intensive Outpatient
5. Engagement after Intensive Outpatient
6. Continuity of care after Assessment Service
7. Continuity of care after Detoxification
8. Continuity of care after Short-term Residential
9. Continuity of care after Long-term Residential
10. Continuity of care after Inpatient



NEXT DEVELOPMENT STEPS FOR BRANDEIS AND WC PUBLIC SECTOR WORKGROUP

- Continue to test measures with the WC Public Sector Workgroup
- Consider how the states can use measures in quality improvement efforts
- Disseminate pilot testing results with aim of adoption by non-participant states



WASHINGTON CIRCLE - SUMMARY

- Broad participation in WC effort to extend identification, initiation, and engagement for public sector
- Modifications include:
 - Additional focus on detoxification
 - Separate calculation of initiation and engagement depending on location at start of episode
 - Measures of continuity after assessment, inpatient, residential and detox
 - Consideration of quarterly reporting at facility level
- Pilot data for 10 states by end of 2006



SUMMARY

- Multiple initiatives aimed at defining evidence based practices
- Additional initiatives focused on developing and implementing performance measures – NOMS and Washington Circle
- States and providers active participants in these initiatives
- Common goal of improving quality of substance abuse treatment and prevention



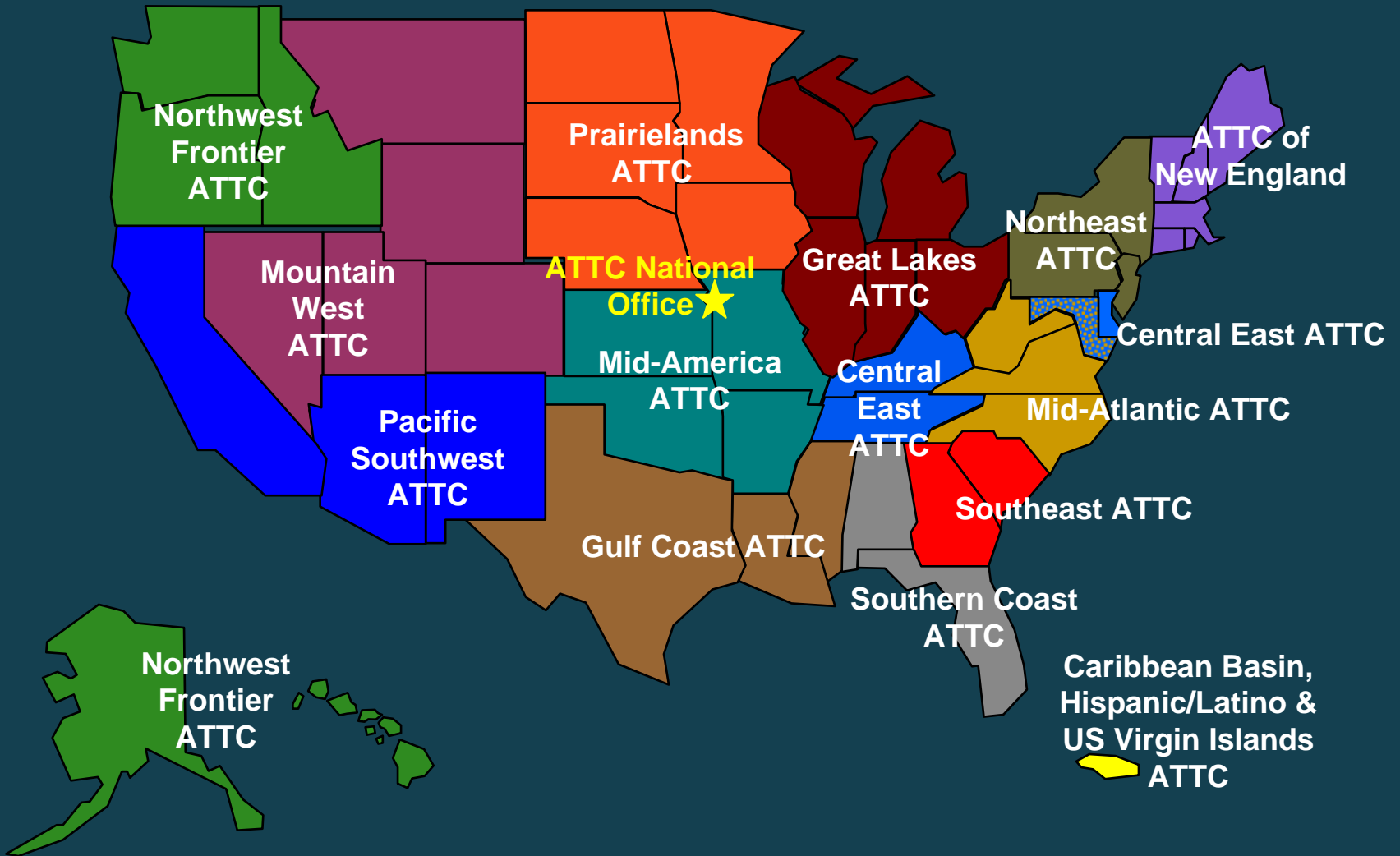
SUCCESSFUL IMPLEMENTATION OF EVIDENCE-BASED TREATMENT PRACTICES

THE COMPREHENSIVE
TECHNOLOGY TRANSFER MODEL

STEPHEN J. GUMBLEY, MA, LCDP

THE ADDICTION TECHNOLOGY TRANSFER
CENTER OF NEW ENGLAND

The ATTC Network





Ya cain't git theah
from heah.

So...

if the research says
“This intervention is an effective way
to treat the client’s problems,”

WHY ISN'T
RESEARCH-BASED
TREATMENT MORE
WIDELY USED?

CHARTING A PATH BETWEEN RESEARCH AND PRACTICE IN ALCOHOLISM TREATMENT

- The journey between research and practice is easier to initiate than to complete.
- With persistence, treatment programs can achieve the goal of providing *research-guided services*.

McCarty, Edmundson, and Hartnett, *Alcohol Research & Health*, Vol. 29, No. 1, 2006

INNOVATIONS DON'T SELL THEMSELVES . . .

- **In 1601...**

Capt. James Lancaster evaluates the effectiveness of lemon juice to prevent scurvy.

Results excellent.

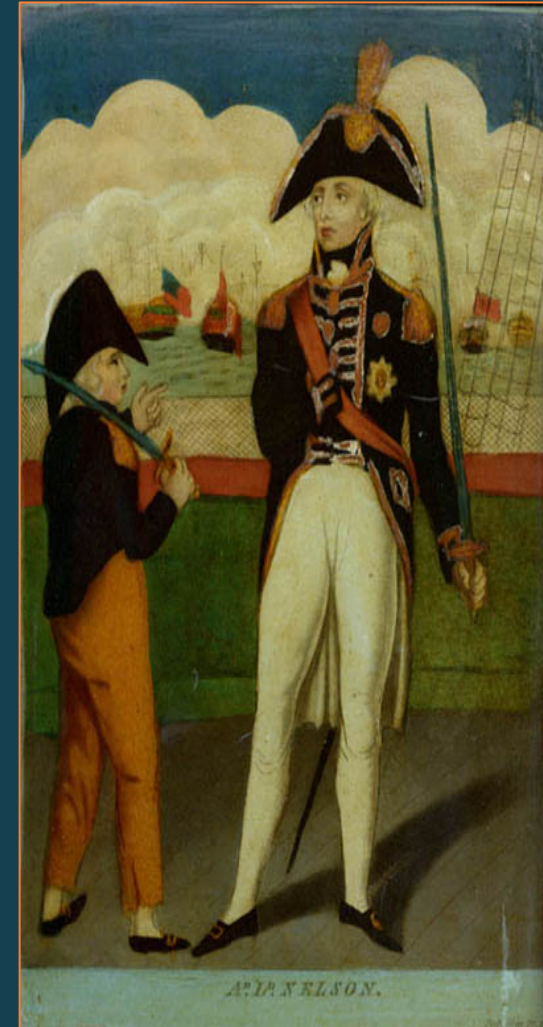
- **In 1747...**

Dr. James Lind carries out a **second study**.

Results excellent.

- **In 1796 ...**

British Navy **finally** adopts use of lemon juice to prevent scurvy.



Impediments to Adopting EBP

- ➔ The gap between scientist and practitioner
- ➔ Provider reluctance to using “evidence-based” practices
- ➔ Organizations’ lack of attention to practitioner’s performance, competencies, and training
- ➔ There are insufficient incentives from funders or oversight agencies to promote the use of research-guided treatment.
- ➔ There are many influences on clinical practice besides ‘best practice’.
- ➔ Complexity of the intervention

Impediments to Adopting EBP

➔ The gap between science and service

- Researchers and practitioners have different goals.
- Research has a special language.
- Knowledge of findings is limited.
- Limited use of professional literature, limited resources in the treatment community.

Impediments to Adopting EBP

- ➔ Provider reluctance to using “evidence-based” practices
 - There is no agreement on what are “evidence-based practices” and what makes an intervention “evidence-based”.
 - The treatment system has a history of valuing personal recovery experience more than research.
 - Many counselors are traditionally encouraged to use an *eclectic approach* with clients.
 - Staff perceive themselves to be competent so do not believe they need to learn new approaches.
 - Providers may resent the implications that their approaches are not successful.
 - Fear that manual-driven treatment may diminish personal effectiveness.

Impediments to Adopting EBP

- ➔ Organizations' lack of attention to practitioner's performance, competencies, and training
 - Traditional training venues fail to have a long-term impact on clinical practices.
 - Leaders underestimate the difficulty of changing behaviors and attitudes, as well as the complexity of the technology transfer process.
 - Supervisors often do not have the time or the training to examine and evaluate counselors' therapeutic approaches.

Impediments to Adopting EBP

- ➔ There are insufficient incentives from funders or oversight agencies to promote the use of research-guided treatment.
- ➔ There are many influences on clinical practice besides 'best practice'.
 - Funding mechanisms
 - Funder and regulator policies
 - Staffing
 - Program culture and philosophy
 - Cost and resources

Impediments to Adopting EBP

➔ Complexity of the intervention

- Despite encouraging research findings, however, implementing motivational interviewing in practice settings has proven to be a challenge. The primary barrier is the complexity of the interventions.
- For more complex interventions, treatment programs tend to need greater preparation.

CHARTING A PATH BETWEEN RESEARCH AND PRACTICE IN ALCOHOLISM TREATMENT, McCarty, Edmundson, and Hartnett, *Alcohol Research & Health*, Vol. 29, No. 1, 2006

How do we bring about successful change in the work environment?

Through
technology transfer --
a behavior change
process.



TRAINING vs. TECHNOLOGY TRANSFER

- Brief flurries of **TRAINING** alone are not sufficient to bring about lasting change.
- **TECHNOLOGY TRANSFER** involves
 - transmission of information to achieve application,
 - creating a mechanism by which a desired change is
 - accepted,
 - incorporated and
 - reinforced
 - at ALL levels of an organization or system.
- Training is a component of technology transfer.

Technology Transfer:

To infuse clinical competency for a research-based intervention.

in·fuse: verb, **-fused, -fus·ing.**

1. to introduce, as if by pouring; cause to penetrate; instill. 2. to imbue or inspire. ⁽¹⁾

Clinical competency is comprised of knowledge, skills and attitudes.

(1) Retrieved September 01, 2006, from Dictionary.com website:

<http://dictionary.reference.com/search?q=infuse&x=29&y=12>

TECHNOLOGY TRANSFER:

WHAT THE RESEARCH TELLS US

Backer: Characteristics of Effective Dissemination

- Interpersonal contact
- Outside consultation on the adoption process
- Organizational support for the innovation
- Persistent championship of the innovation by one or more adopting agency staff
- Adaptability of the innovation
- Availability of credible evidence of success for the innovative program

Backer et al. (1986)

Rogers: *Diffusion of Innovations*

- Rogers theorizes that decisions to adopt innovations are based on the attributes of the innovation.
- Rogers identified and studied five empirically related, but conceptually distinct properties (perceived attributes) of innovations that have proven to be highly predictive of adoption.

Rogers: *Diffusion of Innovations*

Perceived Attributes

- There is a relative advantage over current practice.
- There is compatibility with values, experiences and needs of adopters.
- Complexity: the innovation is perceived as relatively easy to understand and use.
- Trialability: the users can experiment with it.
- Observability: the results and advantages can be readily seen.

Rogers: *Diffusion of Innovations* Perceived Attributes

Subsequent research spanning four decades now has shown that these five attributes alone typically account for between one-half to nearly 90 percent of the variance associated with rates of adoption for innovations across numerous fields of study.

Rogers: Innovation-Decision Process

- Obtaining knowledge about the innovation
- Being persuaded to develop an opinion about it
- Making a decision to adopt
- Implementing the innovation into practice
- Confirming the innovation is meeting original expectations



A Comprehensive Technology Transfer Model

Developed in 2003 by the Addiction Technology Transfer Center of New England to offer an organizational change model that focuses on the *process* of technology transfer rather than on a specific evidence-based practice.



ATTC- NE Science to Service Laboratory

Key Components

1. Based on a **process model (Simpson)** for organizational learning and implementation which parallels the **transtheoretical change model**

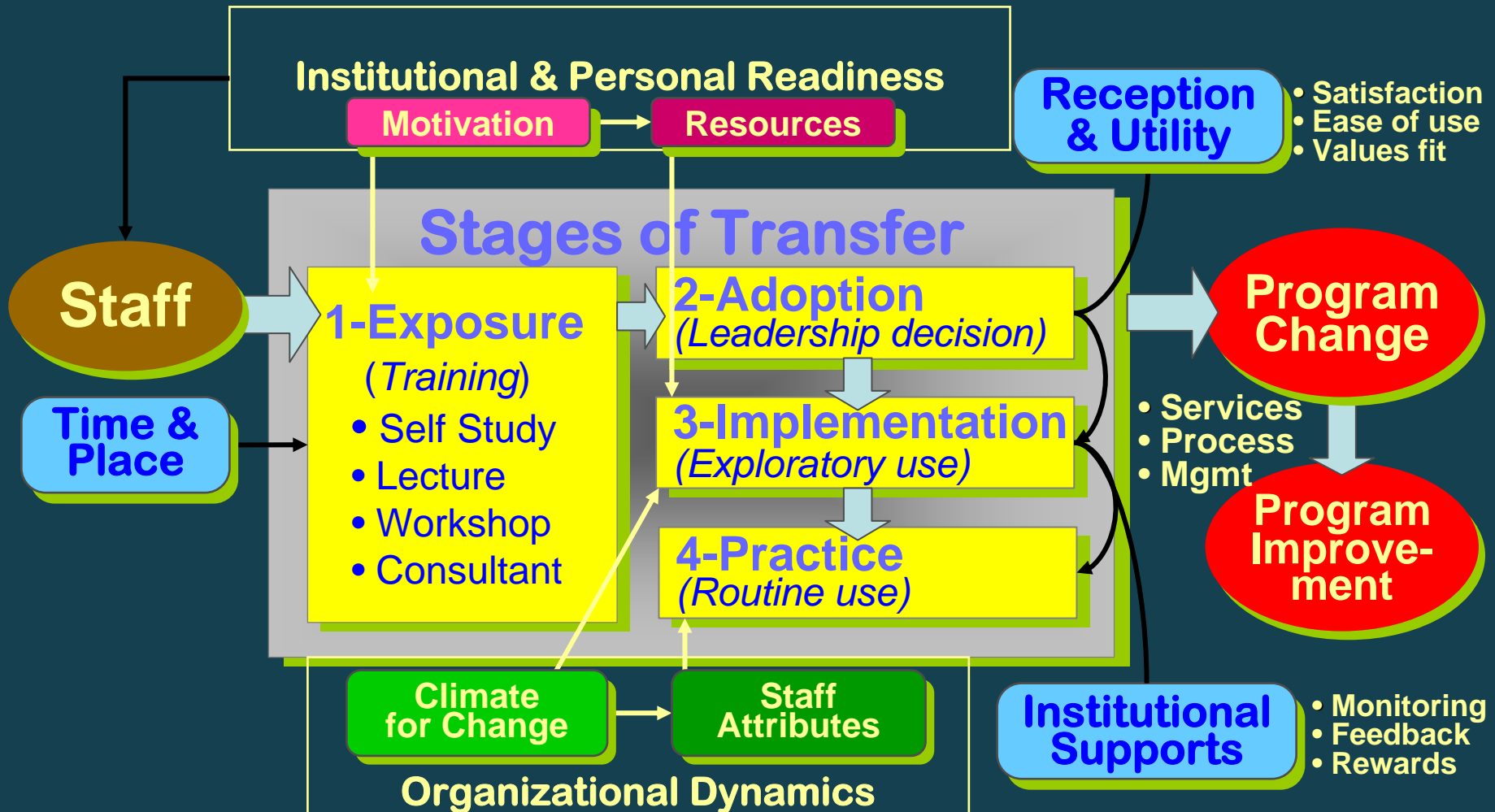


TASKS OF CHANGE AGENTS

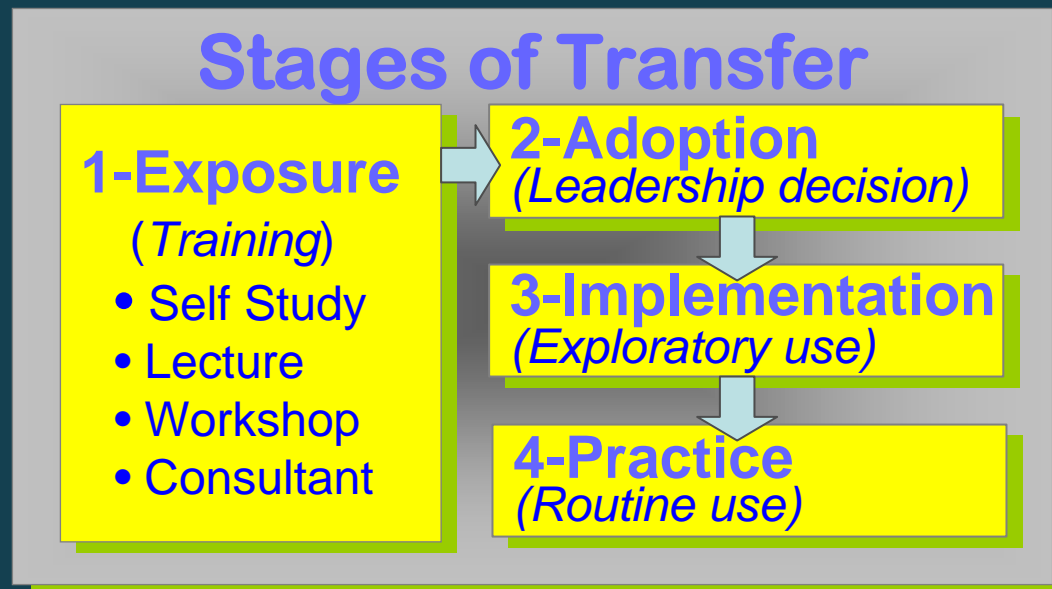
- To identify where “the changee” is in the process of change
- To employ techniques that enhance the motivation and ability to change
- To identify environmental (organizational) and internal barriers to change



Simpson's Program Model for Transferring Research to Practice



Simpson's Program Model for Transferring Research to Practice



Exposure

- Initial training through lecture, self-study, workshops, or expert consultants.
- There must be adequate readiness for change as indicated by *motivation* (defined by perceived needs and pressures for change) from program leaders and staff members.
- There must be sufficient *institutional resources* (staffing, facilities, training, and equipment) for realistically considering innovations.

Simpson, D.D., (2002) A conceptual framework for transferring research to practice. *Journal of Substance Abuse Treatment*, 22, 4. 171-182

Adoption

- An intention to try an innovation.
- May be made by program leadership, but must have staff buy-in.
- Decision is guided by the *reception and utility* of an innovation:
 - adequacy of the training received
 - perceived ease of use
 - how well it fits (or has value) within the accepted therapeutic scheme and abilities of the users

Simpson, D.D., (2002) A conceptual framework for transferring research to practice. *Journal of Substance Abuse Treatment*, 22, 4. 171-182

Implementation

- A period of trial usage to allow testing of feasibility and potential
- Requires resources and an atmosphere conducive to carrying through on decisions to adopt an innovation.
- Important organizational dynamics include
 - ◆ an appropriate *climate for change*
 - clarity of mission and goals
 - staff cohesion
 - clinical autonomy
 - communication
 - openness to change
 - ◆ *institutional supports* that encourage and sustain an innovation
 - monitoring
 - feedback
 - rewards that reinforce positive program changes

Simpson, D.D., (2002) A conceptual framework for transferring research to practice. *Journal of Substance Abuse Treatment*, 22, 4. 171-182

Practice

- Incorporating an innovation into regular use and sustaining it (even in some modified form)
- Depends on
 - *staff attributes* that promote the change process
 - professional growth
 - efficacy
 - influence
 - adaptability
 - fit between innovations and organizational (Klein and Sorra,1996)
 - using feedback and positive reinforcement for effectively putting an innovation into place (Andrzejewski, Kirby, Morral, and Iguchi, 2001)

Simpson, D.D., (2002) A conceptual framework for transferring research to practice. *Journal of Substance Abuse Treatment*, 22, 4. 171-182

Putting it together, Part 1

Stage 1: **Learning it:** Exposure / Contemplation

Stage 2: **Planning it:** Adoption / Determination

Stage 3: **Trying it:** Implementation / Action

Stage 4: **Keeping it:** Practice / Maintenance





ATTC- NE Science to Service Laboratory Key Components

2. Use **external consultant** (technology transfer specialist) to provide on-going support and technical assistance with the change process.

Provide training and supervision for the specialists.





ATTC- NE Science to Service Laboratory Key Components

- 3. Connect the researcher/expert and practitioner** in bi-directional translation* and communication
 - Train the specialists
 - Train the organization's implementation teams
 - Train the clinical supervisors



*McCarty, Edmundson, and Hartnett, *Alcohol Research & Health*, Vol. 29, No. 1, 2006



ATTC- NE Science to Service Laboratory

Key Components

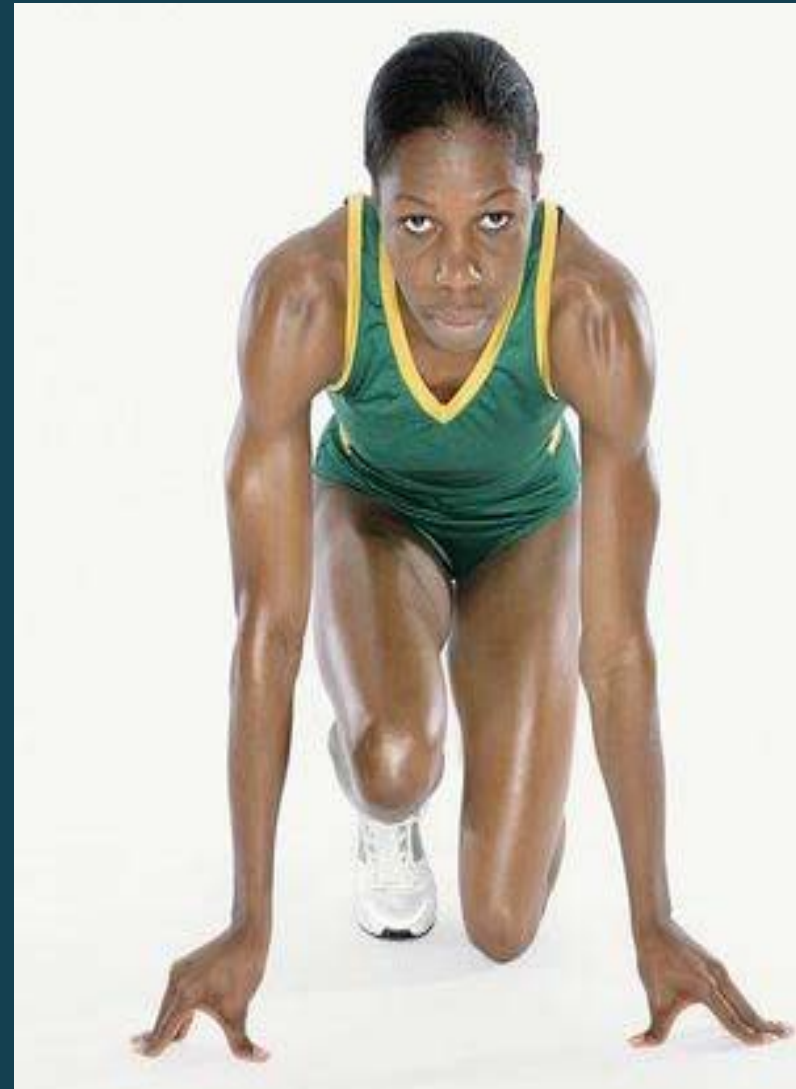
4. Engage the organization

- Recruitment / Exposure meeting
- Executive commitment to the learning/implementation processes
- Identify and organize “champions” and implementation team from the organization
- Commitment to provide appropriate clinical supervision to support the fidelity of the intervention

Who are CHAMPIONS?

Individuals in an organization who

- provide enthusiastic support for a particular new idea.
- have characteristics of **high readiness**:
 - Enthusiasm for change
 - Willingness to **endure** some anxiety and startup problems in order to adopt the innovation.





ATTC- NE Science to Service Laboratory

Key Components

5. Form the agency implementation teams into **work groups**

- Supported by technology transfer specialists
- Learn about the technology transfer process
- Reinforce the training of the evidence-based practice
- Facilitate discussion about the importance of utilizing research as fundamental to effective treatment
- Establish a forum for feedback on implementation efforts and collaborative problem-solving
- Balance fidelity and adaptation of intervention

People's perceptions of innovations also are influenced by *how* they are communicated.

The source of this communication is very important as well: members of a group typically accept information on new technology more readily from colleagues who already have tried it.

Balance fidelity and adaptation

Program Fidelity:


The degree of fit between the developer-defined components of a program, and its actual implementation in a given organizational or community setting.

Program Adaptation:

Deliberate or accidental modification of the program, i.e., *planned change vs. "drift"*

- 👉 Adaptation may diminish effectiveness of the intervention.
- 👉 Rigid fidelity may produce an adverse effect.





How to balance fidelity and adaptation

- Identify and understand the **theoretical foundation** of the intervention.
- Locate or conduct a **core components analysis** of the intervention -- those elements that analysis shows are most likely to account for its positive outcomes.
- **Ask:**
 - How much fidelity is essential?
 - How much adaptation is possible?

Finding the Balance: Program Fidelity and Adaptation in Substance Abuse Prevention

A State-of-the-Art Review

Thomas E. Backer, Ph.D.,
Human Interaction Research Institute

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Prevention
www.samhsa.gov

<http://modelprograms.samhsa.gov/pdfs/FindingBalance.pdf>



<http://www.tacinc.org/Docs/HS/EBPmanual.pdf>

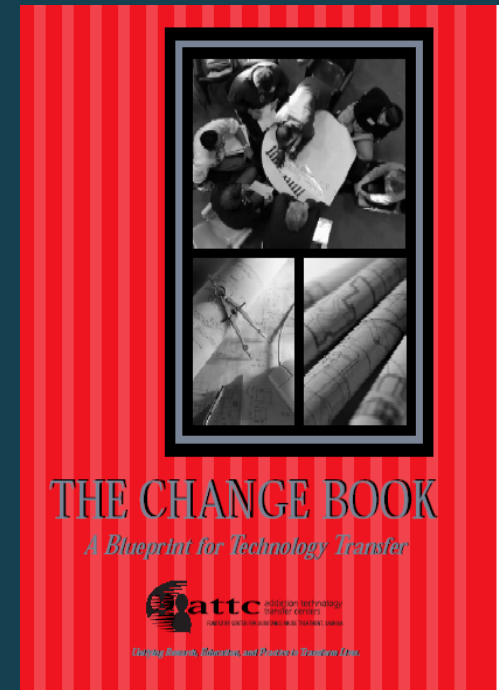


<http://www.uiowa.edu/~iowapic/files/EBP%20Guide%20-%20Revised%205-03.pdf>



ATTC- NE Science to Service Laboratory Key Components

- Develop a written agency implementation plan.
- Follow the implementation steps outlined in “The Change Book”* as a blueprint for change.



* Currently under revision

A man in a dark suit and light shirt stands in a hallway with large windows. He is holding a large, white sheet of paper that covers his torso. The hallway is brightly lit, and the windows show a view of the outdoors.

The Change Book

Creating a Blueprint for Change

1. Identify the problem.
2. Organize a team for addressing the problem.
3. Identify the desired outcome.
4. Assess the organization or agency.
5. Assess the specific audience(s) to be targeted.
6. Identify the approach most likely to achieve the desired outcome.
7. Design action and maintenance plans for your change initiative.
8. Implement the action and maintenance plans for your change initiative.
9. Evaluate the progress of your change initiative.
10. Revise your action and maintenance plans based on evaluation results.



ATTC- NE Science to Service Laboratory
Key Components

6. Evaluate

- The implementation process
- Clinician fidelity to the intervention
- Client outcomes

ATTC-NE training product: Measuring What We Do: How to know if we're doing a good job (*Under development*)

Keys to Successful implementation of Evidence-Based Treatment Practices

- Planning
- Prioritizing
- Preparation
- Practice
- Persistence and patience

Science to Service Lab

2003-2005 Results

- There were three iterations of the Lab.
- 50 agencies throughout New England participated in one of our Science to Service Labs.
- 32 agencies successfully implemented the selected EBP (contingency management - fishbowl technique).

Science to Service Lab

Next Steps

- New Supportive Products
 - Clinical Supervision To Support The Implementation, Fidelity & Sustaining Of Evidence-Based Practices
 - Measuring What We Do: How to know if we're doing a good job
- SSL 4.0: Using the Comprehensive Technology Transfer Model with a more complex intervention (CBT)

The Peer In-Reach SBIRT Team Model

12 years of Prevention Research & Practice

Edward Bernstein MD & Judith Bernstein RNC, PhD

Boston University
Schools of Medicine and Public Health



NIAAA Youth Alcohol Prevention Center
BNI-ART Institute

Intersection of Opportunity & Need

- 7.6 /111 million ED visits are alcohol attributable

(McDonald, 2004)

- 31% of urban ED pts ≥ 2 CAGE positive

(Bernstein, 1996)

- 26% of ED patients high risk/dependent

(Academic ED SBIRT Collaborative, 2005)

Motivational Interviewing

Translating Evidence Based Practice
from the Psychology Literature
to a Medical Setting

ED BRIEF INTERVENTION: THE FIRST CT

- Chafetz et al, 1961
 - (n=200)
 - 65% of those receiving brief intervention in the MGH ED kept a subsequent appointment for specialized treatment compared to 5% of controls.
 - 40% kept 5 appointments.

**Establishing treatment relations with alcoholics.
J Nerv Ment Dis 1962; 134: 390-410.**

Brief Intervention in the Trauma Center

- 1153 (46%) of 2524 screened positive
- Intervention n = 366 vs control n = 396
- at 6 months, decreases in both groups (NS)
- at 12 months, alcohol consumption 54% f/u
 - down by 21.9 drinks per week in intervention group
 - down 6.7 drinks per week in control group
- in injuries requiring ED or admission
 - down 47% in the intervention group vs controls (p=.07)

Gentilello, Rivara et al. *Ann Surg* 1999; 230: 473-483

Brief MI for injured drinkers in the ED (n=539)

Longabaugh et al. *J Stud Alcohol* 2001;62:806-816

- AUDIT ≥ 8 , BAC ≥ 0.03 mg/dl, drinking 6hrs pre-injury
- 3 groups: standard care (SC) vs MI vs MI+booster
- follow up at one year = 84%
- all 3 groups reduced days of heavy drinking
- MI+booster had fewer consequences (DrinC)
 - 2.24 vs 2.4 (MI) and 2.52 (SC)
- MI+booster had fewer alcohol-related injuries than SC
 - 0.456 (SC) vs 0.165 (MI+booster)

Meta-analyses of Motivational Interviewing

- small but real effect sizes
 - Dunn et al, 2001
 - Hettema et al, 2005 (.30 at 1 yr)
 - Vasilaki et al, 2006 (aggregate .18, .60 at 3 mo)
- intervention already compared against some tx, not against actual practice (no screening or referral)

Project ASSERT

A Model for Brief Intervention in the ED

1993 SAMHSA –CSAT

Critical Populations Demonstration Grant

Bernstein E, Bernstein J, Levenson S: Project ASSERT: An ED-based intervention to increase access to primary care, preventive services and the substance abuse treatment system. *Ann Emerg Med* 1997;30:181-189.

P
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A
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A
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Project ASSERT Linkage Strategy

General
Medical
Setting

Screening for
Health and
Safety
Needs

Community
Health Promotion
Advocates

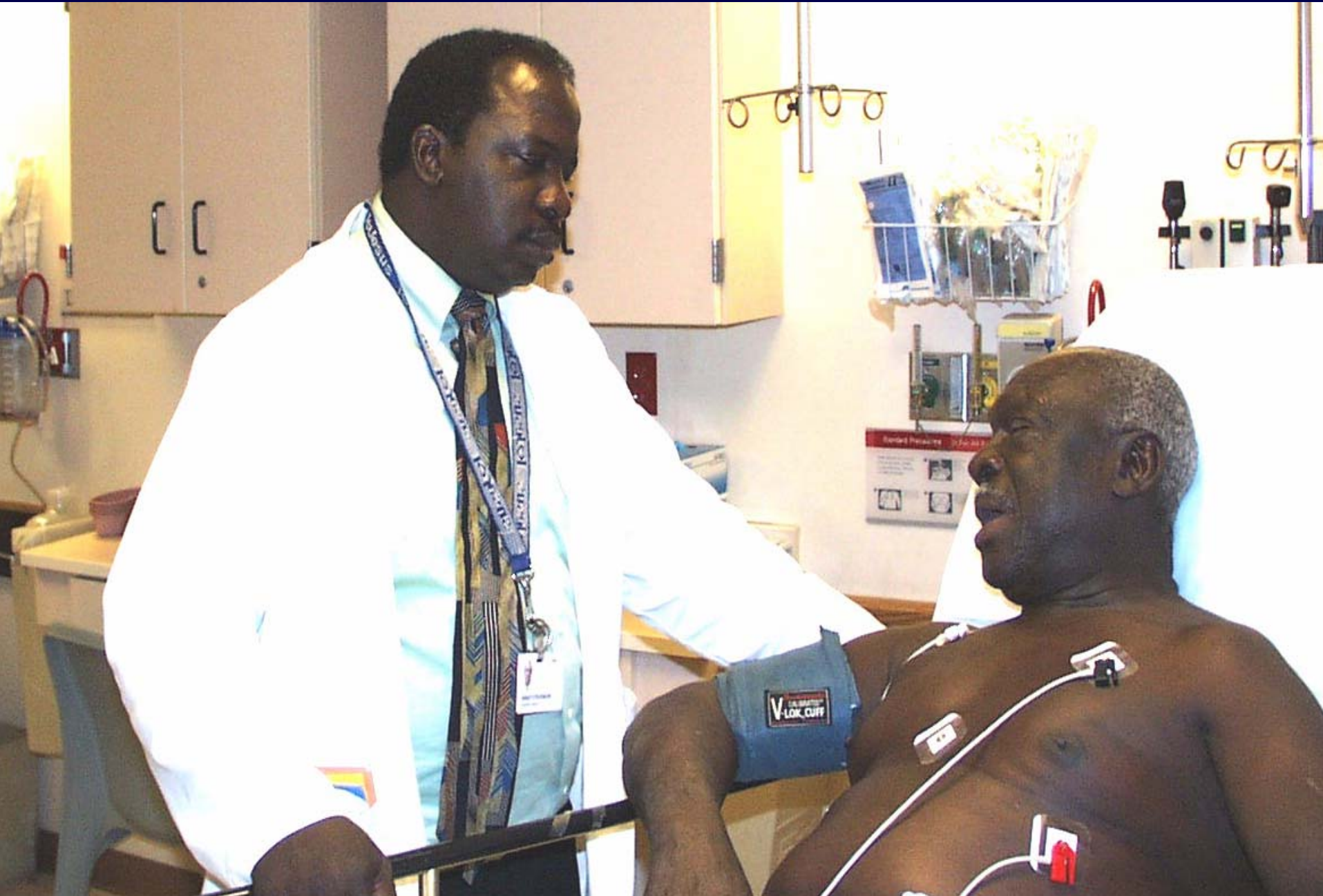
Empowerment
through
Brief
Intervention

Active
Referral Network
for
Community
Resources

Peer educators provide consultation to nurses and physicians



...providing empathy and support



...offering resources



...negotiating with patients



...providing consultation to physicians



THE ED BRIEF NEGOTIATION INTERVIEW



**A toolkit for enhancing motivation for change
in the clinical setting--
developed with Stephen Rollnick, 1994**

NEGOTIATING BEHAVIOR CHANGE

Principles of Motivational Interviewing

- Respect the autonomy of clients (a voice & a choice)
- Set an agenda for change together
- Use open-ended questions and reflective listening
- Expect resistance
- Avoid confrontation, labeling, stereotyping, and forcing acceptance of a diagnosis

THE BRIEF NEGOTIATION INTERVIEW

- establish rapport & ask permission to raise subject
- provide feedback
- enhance motivation
 - explore pros and cons
 - assess readiness to change and sources of resilience
 - explore discrepancies between actual state & goals
- develop action plan, using strengths/resources
- referral to primary care and tx if indicated

NOT READY
(1 - 3)

UNSURE
(4 - 7)

READY
(8 - 10)



From CSAT Demonstration Grant to Boston Medical Center ED Budget Line Item... RESULTS FROM PROJECT ASSERT

- 17,495 patients received screening and BNI from 2001-2005
- 16,114 total referrals made to SA treatment, AA/NA, social service, behavioral health and primary care.
- 5,607 patients sent to detox often by taxi
- 1608 beds detox unavailable
- 1708 SA outpatient
- 1,656 appointments made for primary care

Project Link

1998 - 2002

A randomized, controlled trial to test the effectiveness of a peer delivered SBIRT in an Urgent Care setting

NIDA Notes, November 2005

Brief Intervention in the Clinical Setting Reduces Cocaine and Heroin Use

Bernstein et al. *Drug & Alcohol Dependence*, 2004;77:49-59

- 23,669 patients screened
- 1175 enrollees (follow-up rate 82%)
- among 778 with positive hair at baseline
 - intervention group more likely to be 30 days abstinent than the control group
 - cocaine alone (22.3% vs 16.9%)
 - heroin alone (40.2% vs 30.6%)
 - both drugs (17.4% v s 12.8%), with adjusted OR of 1.51-1.57
 - cocaine levels in hair reduced
 - 29% for intervention group vs 4% control group

Cost-effectiveness of LINK

unpublished data

Aaron Beaston-Blaakman, Brandeis University
Schneider Center for Health Policy

- direct costs (client and institution)
 - \$12.80 per screening
 - \$164.97 per intervention
- incremental cost per abstinent year = \$3,586
- no statistically significant cost-offsets in health care costs for the first post-intervention year

Brief Encounters Can Provide Motivation To Reduce or Stop Drug Abuse

- “This study not only shows that this type of intervention provides true benefits in reducing cocaine and heroin abuse, it also suggests that peer interventionists can play an important role in busy clinical environments,” says Dr. Nora A. Volkow, Director of National Institute of Drug Abuse.

January 5, 2005 NIH Press Release

Nation's Public Health Agenda: Healthy People 2010

26-22. Increase the proportion of persons who are referred for follow-up care for alcohol problems, drug problems, or suicide attempts after diagnosis or treatment for one of these conditions in a hospital emergency department.

DATA SOURCE: Ambulatory Medical Care Survey (NHAMCS)

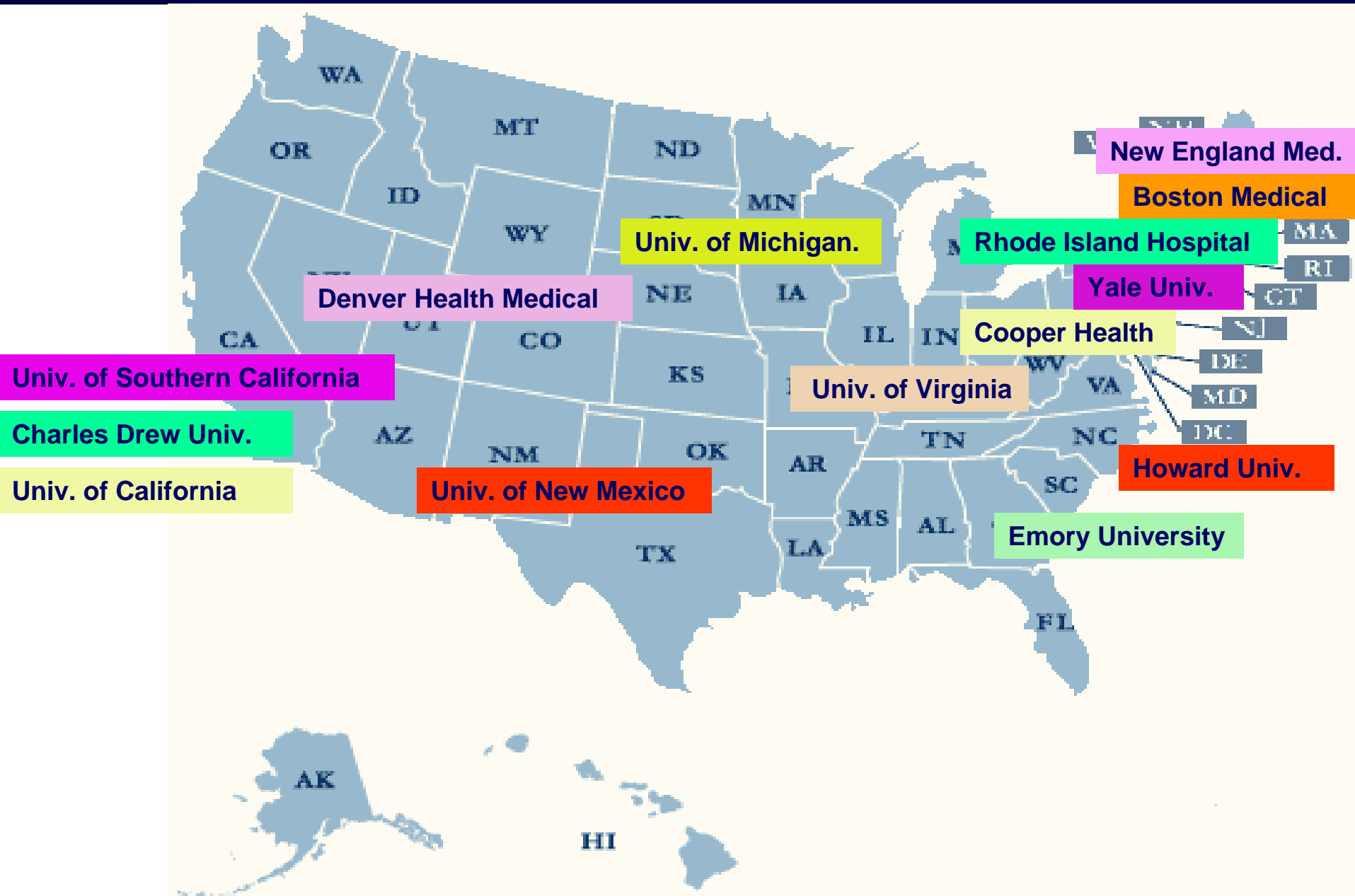
The Academic ED SBIRT Research Collaborative

a 14 Site Study of

Changes in Provider Practice & Perception and
ED Patients' Response to Intervention

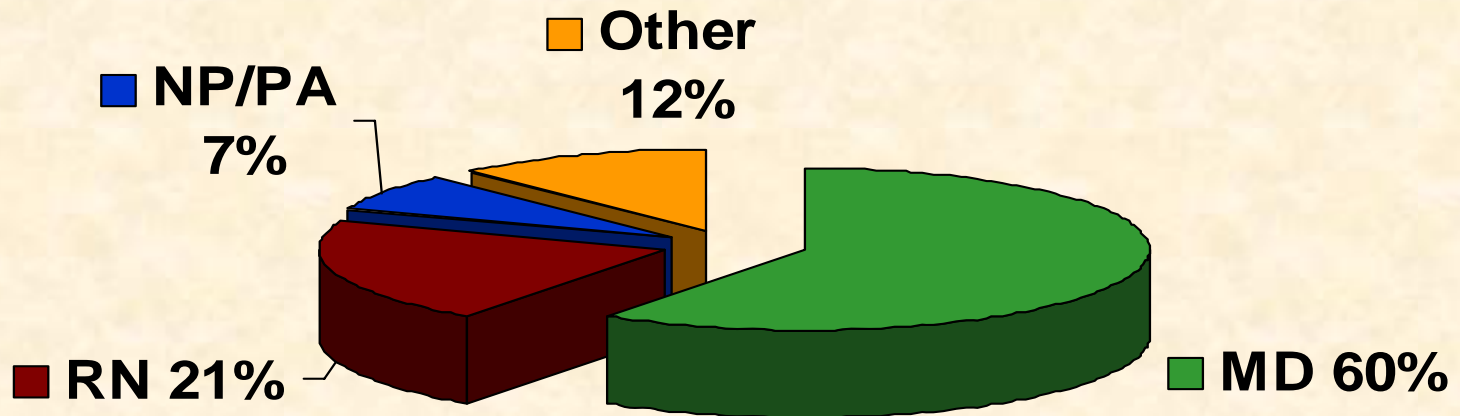
**funded in part by NIAAA
1R25AA014957, 1R03AA01511-14**

Academic Emergency Medicine SBIRT Collaborative



Providers by Profession

Provider Type (n=401)



www.ed.bmc.org/sbirt

Algorithm Principles

- Used Project Assert algorithm with new emphasis on
 - providing feedback from screening tool
 - discussing NIAAA guidelines/norms
 - making a connection between drinking & reason for ED visit
 - using the readiness to change ruler to elicit statements of motivation

ASSESSING READINESS TO CHANGE

On a scale of 1-10, ten meaning 'most ready' and one 'least ready', please mark on the ruler where you are now on your readiness to change your use of alcohol and/ or drugs?

You marked five, which indicates you are 50% ready to make a change, so tell me....

why didn't you mark a lower number like 1 or 2?



Measuring Change in Provider Practice & Perception

- follow-up rate at 3 months = 85%
12 months = 72%
- paired samples t-tests demonstrated improvement in SBIRT after exposure to standardized curriculum in all 4 domains:
 - confidence in ability
 - responsibility
 - perceived barriers
 - utilization

Utilization of SBIRT

at 3 months:

30% increase over BL

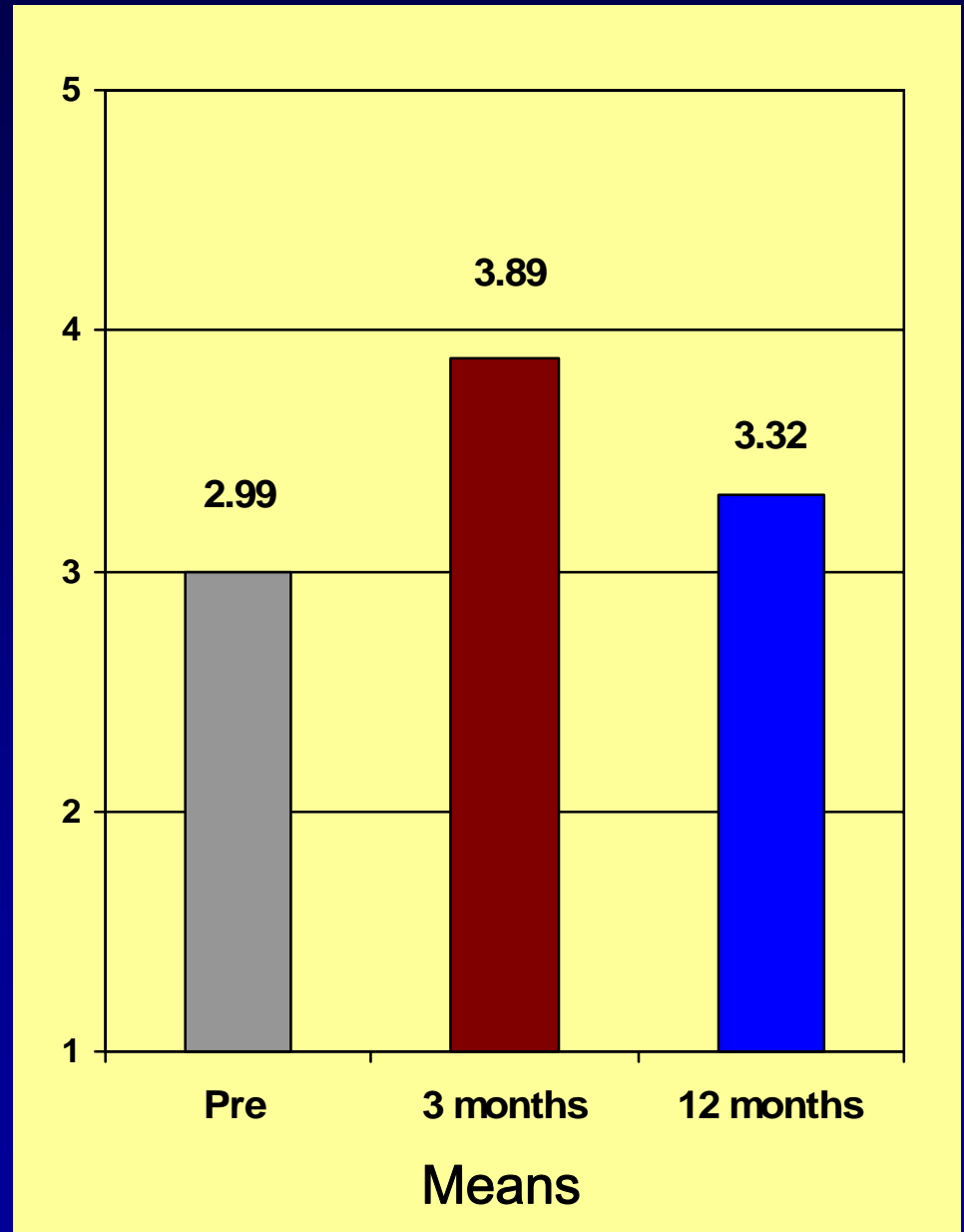
$p < .001$, 95% CI -.977, -.831

at 12 months:

11% increase over BL but a

15% drop-off from 3 months

$p < .001$, 95% CI -.44, -.30



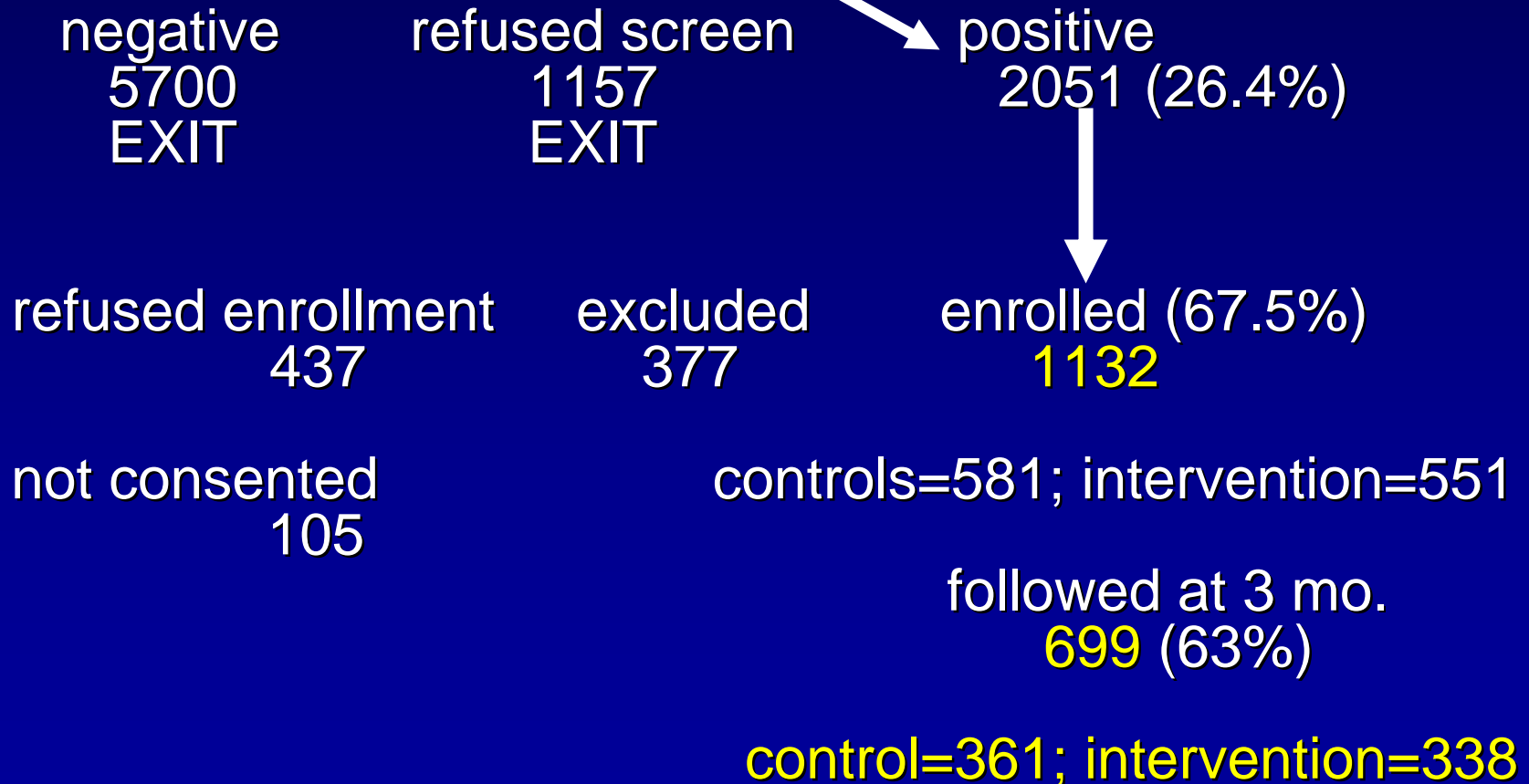
THE IMPACT OF SBIRT ON ED PATIENTS' ALCOHOL USE

Funded in part by NIAAA R21 AA015123
and 14 RO3s AA 01511-14
with collaborative funding from SAMHSA

Screening Results

Total Approached for Screening: 8908

Screened: 7751 (87%)

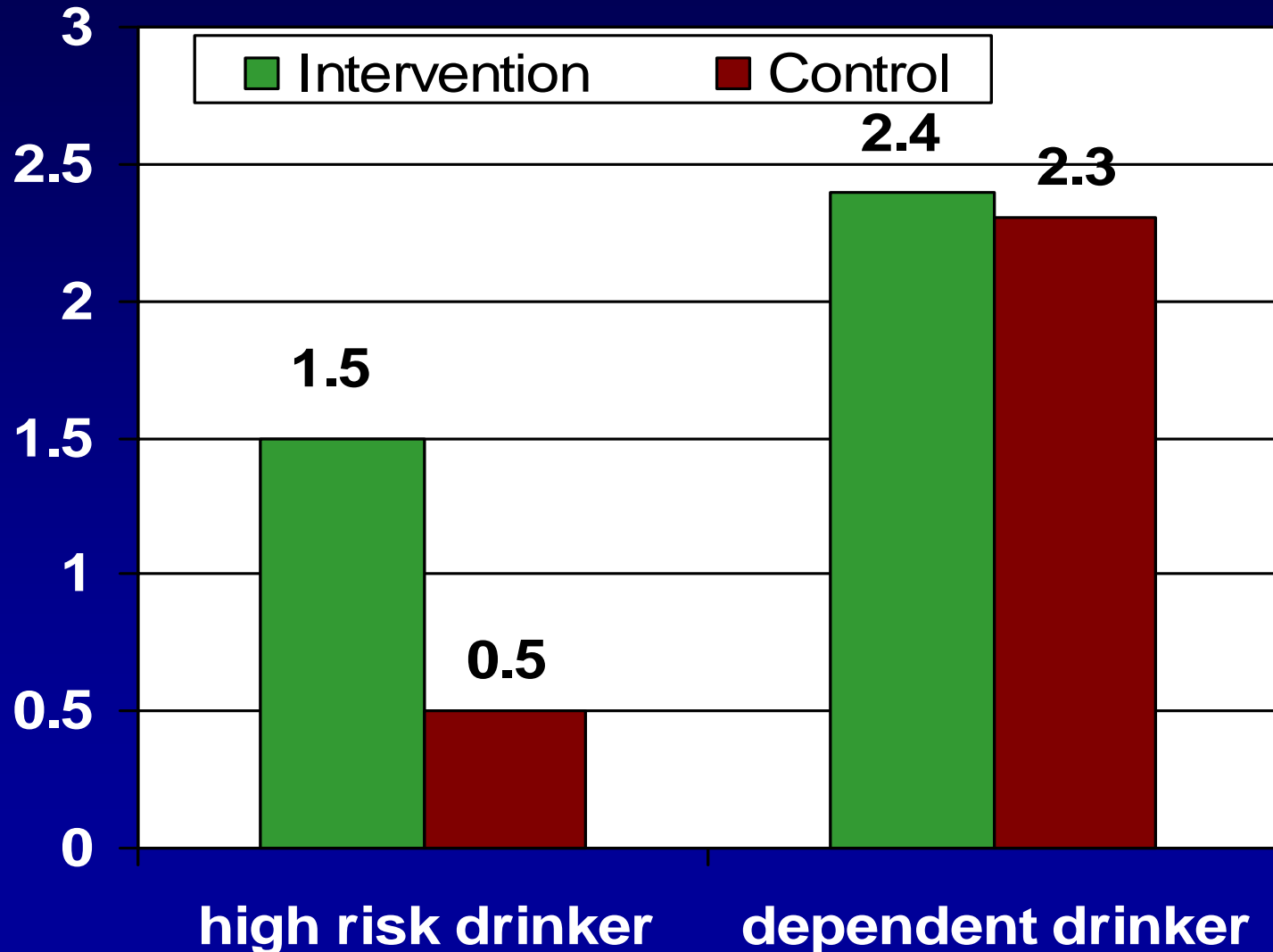


Randomization by Time Period

- Controls (n=581) were enrolled in a 3 week window (Time Period 1, Spring, 2004), in order to avoid contamination effects of training.
- Training at the 14 sites occurred immediately following enrollment of controls.
- Intervention patients (551) were enrolled during in a second 3 week window (Summer, 2004, Time Period 2).

Maximum # Drinks Per Occasion, by BL CAGE

Mean Pre-Post Reductions: Intervention vs Control



Patient Response to SBIRT at 3 month F/U

Summary

- At 3 months, controlling for baseline drinking levels, patients receiving the intervention reported
 - 3.25 fewer ‘typical number of drinks per week’ than controls ($B = -3.25$ $SE = 1.16$, $p < .05$)
 - almost $\frac{3}{4}$ of a drink less for ‘maximum number of drinks per occasion’ than controls ($B = -.72$ $SE = .32$, $p < .05$).
- Benefits of brief intervention were confined to those with at-risk drinking rather than dependent drinking patterns, as measured by the CAGE.

% Abstinent or Drinking below NIAAA Guidelines

- At 3 month follow-up, 28% of the intervention group vs 18% of the control group were no longer drinking above the level of risk.
- This finding was independent of contact with treatment, since there were no significant differences between intervention and control in treatment participation rates (13% vs 13%).
- This intervention effect is very meaningful in light of the fact that controls were all screened, assessed and received a written referral.

Implications

- This translational study demonstrates that SBIRT is feasible and modestly effective in the ED setting.
- Access to treatment services appears to be a critical component of successful SBIRT for the dependent drinker.
- The ED needs resources (i.e. extenders such as peers, social workers) to implement SBIRT nationwide in accordance with HP 2010.

Recommendations from ED SBIRT Study

- Practitioners appear to need infrastructure changes to reduce barriers to SBIRT in the ED.
- Resources such as computerized screening and the addition of ancillary support personnel to the ED team might increase SBIRT utilization and improve tx referral for dependent drinkers.
- A booster workshop at 6 months might increase SBIRT sustainability.

Translation to Non-Academic Settings

The New York City Project:
Testing the feasibility of practitioner education and
patient intervention in the busiest of ED settings

Boston University Schools of Medicine and Public Health

Edward Bernstein MD, Judith Bernstein RNC, PhD

The New York City SBIRT EM Collaborative

MDs

Orlando Adamson, Rajeev Bais, Steven Bernstein, Ken Fine, Marianne Haughey,
Stuart Kessler, Ann Nguyen, Lynn Richardson, Chris Shields, Michael Touger

RNs

Milagros Diaz Acosta, Debra Ballantine, Joyce Buffalino, Antoinette Cirillo,
Curlean Duncan, Daphne Georges, Patricia Hinds

Social Workers

Mary Caram, Christina Laboy-Caussade, Regina Riolo, Dee Rogers, Wendy Slater

NYC ED SBIRT Demonstration Project

- 5 city hospitals, funded by NYC Health & Mental Hygiene
 - Bellevue, Elmhurst, Jacobi, Kings, Lincoln
- systems approach to ensure sustainability
 - meetings with CFO, CMO, administrators
 - evaluation (common data collection elements)
 - infrastructure (hiring & supervision, triage, forms)
- cross-disciplinary, collaborative model
 - workshops for social workers, MDs, RNs, EMTs
 - liaison with Addiction Services and Psychiatry Depts

NYC Project: Applying Lessons from NASD Results to Date

- 400 providers trained
- a team of 3 from each hospital (MD, RN, social worker) prepared to provide on-site booster/training
- value added services identified for each site
- referral network at each site individualized / enhanced
- 5 public health advocates (peer extenders) are now working alongside the ED team, with a guarantee from NYC PHMH for salary support through June 2007

Massachusetts ED SBIRT Initiative

Building Collaborative Teams for Sustainability

- 3 year grant awarded by MA DPH/BSAS to the BNI-ART Institute at BU School of Public Health
- Funds provided to train ED professionals in 6 sites and hire 2 peer educators at each site to enhance the capacity of each ED's professional team
- 40 EDs (50% of Massachusetts EDs) have submitted letters of intent to apply for the program (applications due 9/30/06)

Studies in Progress

- Project RAP (Reaching Adolescents for Prevention)
 - a randomized, controlled trial of a peer intervention to reduce drinking, marijuana use and associated consequences among 14-21 y.o. BMC Pediatric ED patients
(NIAAA Youth Alcohol Prevention Center)
- Project Safe
 - a randomized controlled trial of a peer intervention to reduce the rate of sexually transmitted diseases among ED patients who use heroin and cocaine
(NIDA)

In summary...

- SBIRT in the ED setting can reduce use of AODA.
- ED providers are increasingly interested in improving the care of patients with high risk and dependent drinking, drug abuse and smoking.
- It is both feasible and necessary to provide SBIRT education and MD/RN extenders (peers or social workers) to support screening and referral.
- The web can be a useful adjunct to workshops.
- A core group of SBIRT 'champions' at each site is critical to the implementation of the project.

The Women's Recovery Group Study

A trial of women-focused group therapy for substance use disorders vs. mixed gender group drug counseling

Shelly F. Greenfield, MD, MPH

Associate Professor of Psychiatry,
Harvard Medical School

Associate Clinical Director, Alcohol and Drug Abuse Treatment
Program, McLean Hospital

Improving Quality in Massachusetts Substance Abuse
Programs Through Evidence Based Practices and Performance
Measures

Brandeis University
September 13, 2006

Acknowledgements

- **National Institute on Drug Abuse**
(R01DA 015434)
- **Co-investigators and Consultants:** Kathleen Brady, MD, PhD, Grace Hennessy, MD, Hadine Joffe, MD, Roger Weiss, MD, Robert Gallop, PhD, Dennis Daley, PhD
- **Group Therapists:** Monika Kolodziej PhD, Laura Ruegg, LICSW, Barbara Raymond, LICSW
- **Research Staff:** Elisa Trucco, BA, Kate McHugh, BA, Melissa Lincoln, BA

Practice → Research → Practice

- Practice: Clinical Question: Are single-gender women's treatment groups more effective for women with substance abuse than mixed-gender treatment groups?

- Research:

Behavioral Treatment Development: Design a Manual Based Single-Gender Treatment for Women with Substance Abuse and test its effectiveness against mixed-gender group treatment

- Practice: If effective, disseminate and adopt in practice

Rationale for Gender-Specific Treatment

- **Individual Differences and Preferences**
- **Effects of Gender on Group Process**
- **Gender-Specific Content**

Women's vs. Mixed Gender Treatment

Women's experiences and perceptions:

- 34 women in 2 addiction treatment programs were interviewed about their experiences in therapy groups, both co-ed and women-only
- Women preferred women-only groups where they could talk about relationships, children and other intimates, free of sexualization and perceived harassment experienced in mixed-gender groups

(Kaufman, et al, 1995)

Do women have better outcomes in single-gender, women-focused treatment?

Evidence-based research on women's treatment is limited:

- Women Only (WO) vs Mixed Gender (MG) treatment programs
- Specific treatments for specific subgroups of women with substance use disorders (e.g., group therapy for women with PTSD, pregnant or post-partum women, etc)

New Research Study for Women's Recovery

- While there are a number of existing treatments for specific sub-groups of women with substance use disorders
- No current evidence regarding effectiveness of delivering generic substance abuse treatment in single-gender vs. mixed-gender group therapy format
- Group therapy is a mainstay of treatment in substance abuse treatment programs
- In order to test this, you need a specific manual-based group treatment designed for a heterogeneous group of women with substance use disorders

Women's Recovery Group Study

Overall Research Study Goals:

- To develop a new manual-based group treatment for women with substance use disorders
- Two main Components
 - ◆ All women group composition
 - ◆ Content relevant to women in recovery
- Test this new group therapy vs. mixed-gender group treatment

Research Questions

- Is the new Women's Recovery Group feasible?
- Will the manual-based WRG have patient acceptability and satisfaction?
- Are there any differences in *within-treatment* outcomes between women-focused WRG vs. mixed-gender control group (GDC)?
- Are there any differences in *6 month post-treatment* patient outcomes between single-gender WRG vs. mixed-gender GDC?

Structure of Sessions

90 minute structured relapse prevention group therapy session:

- Brief check-in
- Review of skill practice and last week's topic
- Presentation of session topic
- Discussion by participants
- Review session's "take home message" and upcoming week's skill practice
- Check-out

Group Therapy Development

- 12 session manual developed (14 topics can be flexibly chosen) for Women's Recovery Group (WRG)
- Conducted two pre-pilot trials (N=13 women)
- Conducted pilot randomized controlled trial of WRG (N= 16) versus mixed-gender GDC (N=7 women and 10 men)

Control Condition: Group Drug Counseling GDC

- Effective manual based group treatment delivered in the NIDA Collaborative Cocaine Treatment Study (Crits-Christoph et. al., 1999)
- Conducted in a mixed-gender group composition
- 12 weekly sessions chosen from a total of 20 sessions
- One 90 minute session each week focusing on a specific topic

Hypothesis Regarding Outcomes of Pilot RCT of WRG versus GDC

- Pilot RCT of WRG vs. GDC:

Women enrolled in WRG will have better post treatment outcomes than women enrolled in mixed gender controlled condition (Group Drug Counseling or GDC) including:

- ◆ Fewer days of any substance use
- ◆ Fewer drinking days
- ◆ Fewer drinks/drinking day
- ◆ Greater improvement in the ASI

Inclusion Criteria

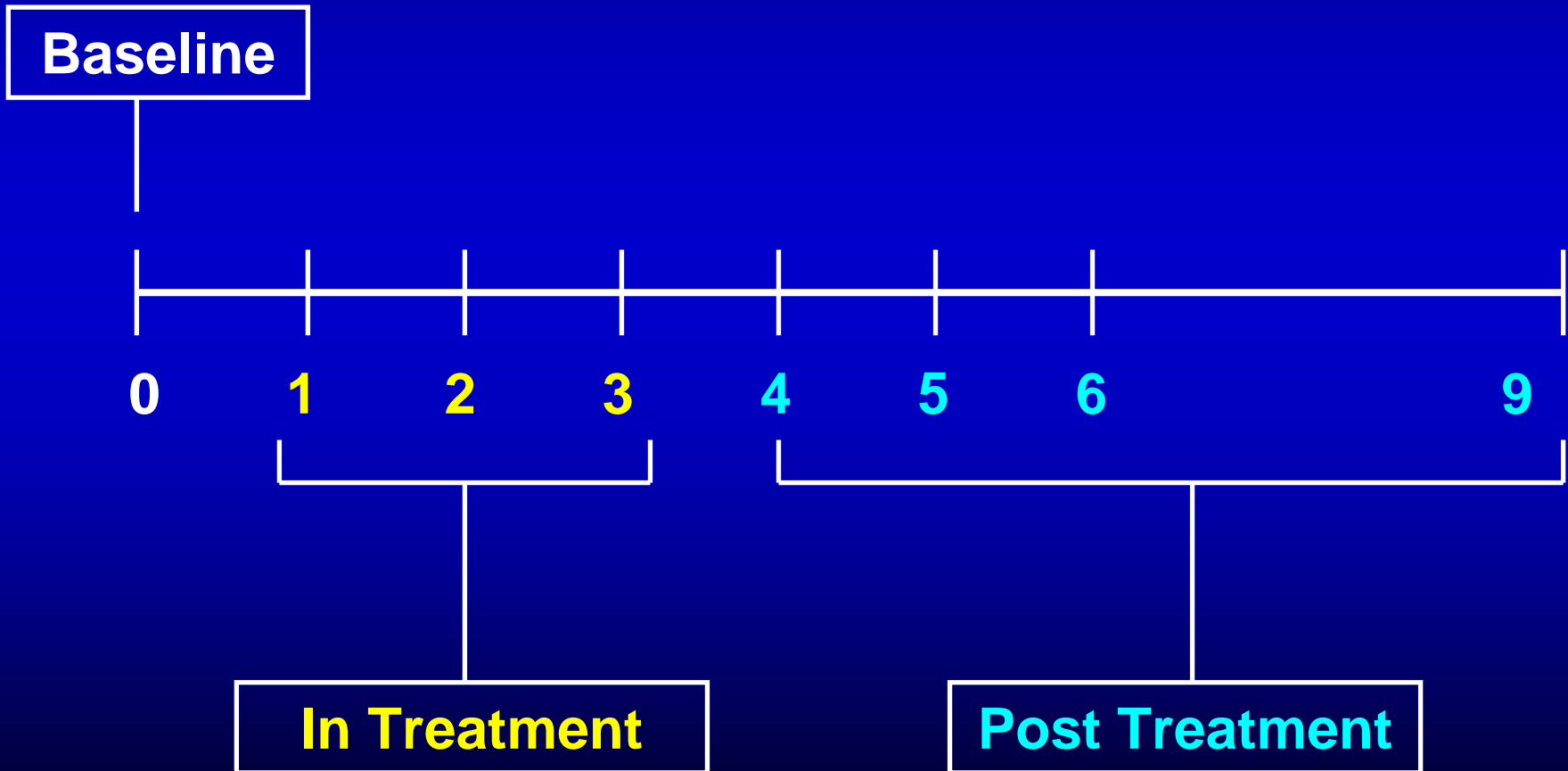
- Age 18 or older
- Diagnosis of any Substance Dependence according to DSM-IV (in addition to nicotine dependence)
- Would remain in the Boston area for duration of the study and follow-up period
- Signed informed consent
- Signed permission for research team to communicate with any other mental health professional from whom they were receiving care
- Provided two locator names to assist in locating them during the study period

Exclusion Criteria

- Current medical or psychiatric condition that would prevent regular group attendance
- Certain co-occurring Axis I psychiatric disorders according to the SCID for DSM-IV (First, 1996) (psychotic, bipolar, or post-traumatic stress disorders)
- Mandated to treatment
- Would be in residential treatment during study or simultaneously participating in other substance abuse treatment programming (not including self-help groups, individual therapy, pharmacotherapy)
- Required medical detoxification (these patients were eligible to enter the study after being detoxification)

Schedule of Assessments

MONTHLY ASSESSMENTS



Primary and Secondary Outcomes

Primary

- Change from baseline in number of days/month of any substance use
- Change from baseline in number of drinking days/month

Secondary

- Change from baseline in number of drinks/drinking day
- Change from baseline in ASI scores including drug and alcohol composite scores

Summary: Demographics

- Predominantly white, well-educated (>90% had >12th grade), 41% married
- Mean age was only significant difference between pilot WRG subjects and GDC subjects
- WRG subjects younger on average than pilot GDC subjects (45 v. 58 y; $p < .001$)

Summary: Lifetime Drug Use Disorder Diagnoses

- Current substance dependence diagnoses predominantly alcohol dependence (86%)
- Other current substance dependence: cannabis (6.8%); cocaine (3.4%); other stimulants (3.4%)
- Lifetime other drug disorder diagnoses:
WRG: cannabis dependence/abuse (10%/10%); cocaine dependence/abuse (10%/7%); stimulant dependence (7%); opioid abuse (3%); sedative abuse (3%); hallucinogen abuse (3%)
GDC: cannabis abuse (14%)

Summary:

Co-occurring Disorders

- Majority (75.9%) with lifetime mood disorders
- 37.9% with current mood disorders
- 44.8% lifetime anxiety disorders
- 31% current anxiety disorders
- 34.5% current Axis II disorders
- No statistical differences in prevalence of Axis I or Axis II disorders between groups

Summary of Outcome Results

Six-month post-treatment reductions from baseline were greater for WRG subjects than GDC subjects in the:

- **Mean days of substances** (medium effect size)
- **Mean drinking days** (medium effect size; trend to statistical significance)
- **Mean drinks/drinking day** (statistically significant in pilot WRG vs. GDC with large effect size)
- **Improvement in ASI scores** (medium effect size, trend to significance)

Limitations

- Stage I development trial
- Small numbers for comparison
- Small proportion with current drug dependence compared with alcohol dependence
- Demographically homogeneous

Conclusions

- The Women's Recovery Group is a manual-based group therapy for women with substance use disorders
- WRG is feasible and acceptable with high satisfaction
- In a small pilot study, WRG produced reductions in substance use within treatment equivalent to GDC; however,

sustained improvements in substance use in the 6-month post-treatment phase were greater in WRG compared with GDC

Future Research Questions

- If WRG is effective, what are the most effective “ingredients” of the treatment?
- Is single gender composition or women-focused content the effective ingredients?
- Are these two synergistic?
- Will we see similar results with a larger more-heterogeneous sample of women?

Next Studies

- Group process analysis of all-women versus mixed-gender groups
- Post-treatment phase utilization of professional and self-help treatment
- Larger stage II trial of WRG versus GDC with more heterogeneous population