

EQUIP: Implementation Research in Specialty Mental Health

Supported by HSR&D QUERI

Alexander S. Young, M.D., M.S.H.S.

Amy N. Cohen, Ph.D.

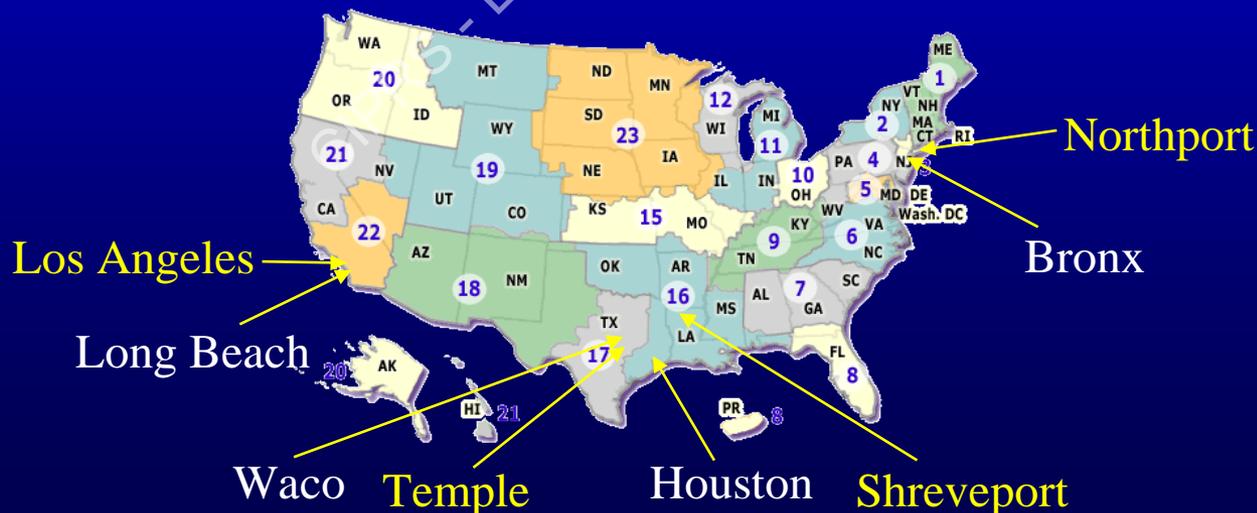
Alison Hamilton, Ph.D.

EQUIP Investigators: VISN 3, 16, 17, and 22

VA Desert Pacific Mental Illness, Research, Education, and Clinical Center (MIRECC)
UCLA Department of Psychiatry

EQUIP: Research – Operations Partnership

- ◆ Improve care for schizophrenia
 - Evidence-Based Quality Improvement
 - implementation methods & evaluation
- ◆ Clinic-level, 15-month controlled trial (VA QUERI)
 - partnership with 4 VA regional networks
 - each with 1 intervention and 1 control site (8 medical centers)
- ◆ QUERI Step 4, Phase 2-3
 - evaluation of both implementation and effectiveness



EQUIP: Specific Aims

- ◆ Assist VA VISNs to implement evidence-based care for schizophrenia
- ◆ Evaluate the effect (relative to usual care) of care model implementation
 - on provider competency, treatment appropriateness, patient outcomes, and service use
- ◆ Evaluate processes of and variations in care model implementation and effectiveness

Formative & Process Evaluation

- ◆ Using mixed methods, evaluate processes of and variations in care model implementation and effectiveness to strengthen implementation and to:
 - assess acceptability of the care model, and barriers and facilitators to its implementation
 - understand how the project's strategies and tools affect care model implementation
 - analyze the impact of individual care model components on treatment appropriateness

At Baseline

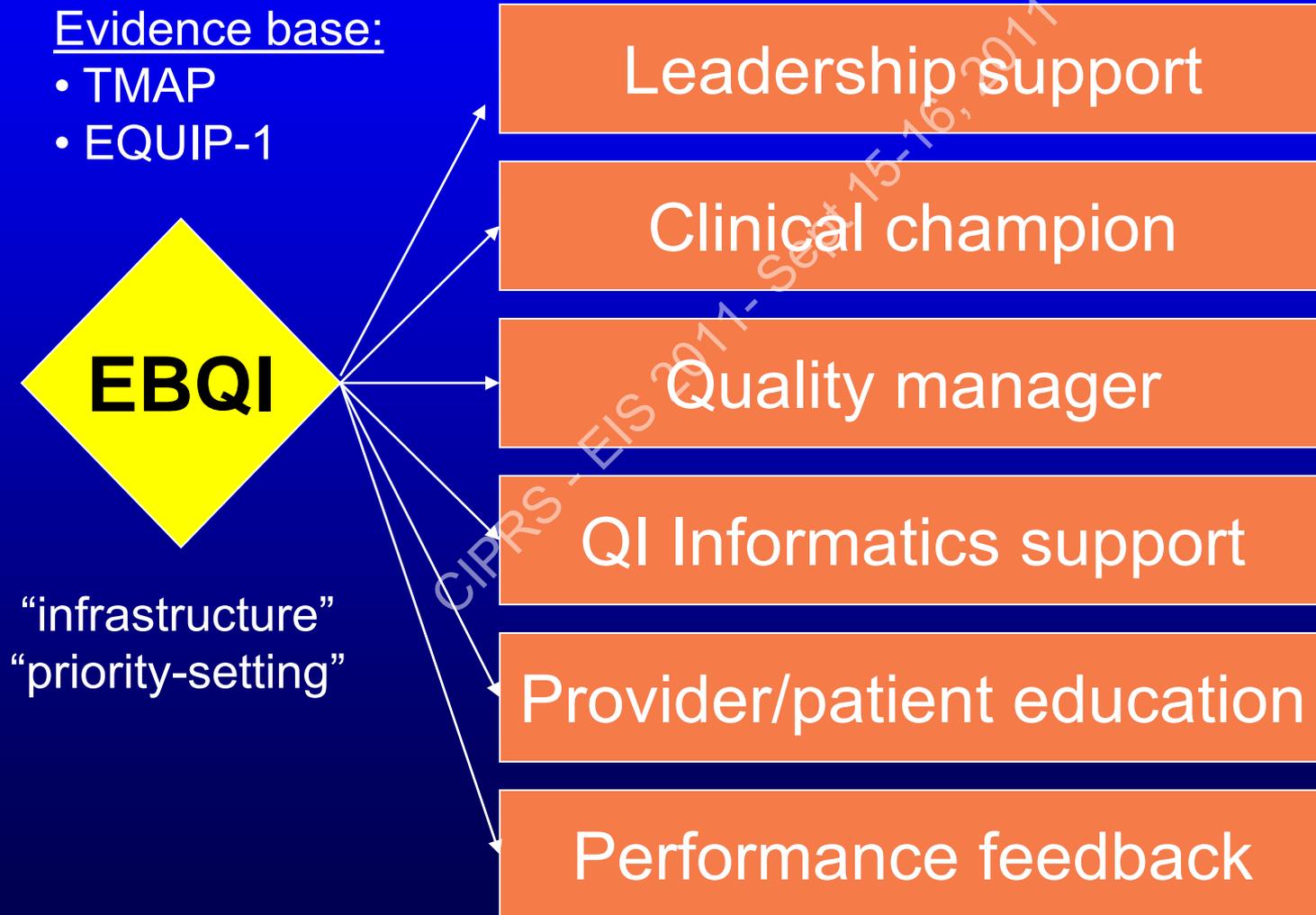
◆ Strategic planning

- choice of 2 evidence-based practices for implementation
- care targets: weight & work outcomes

◆ Diagnostic evaluation

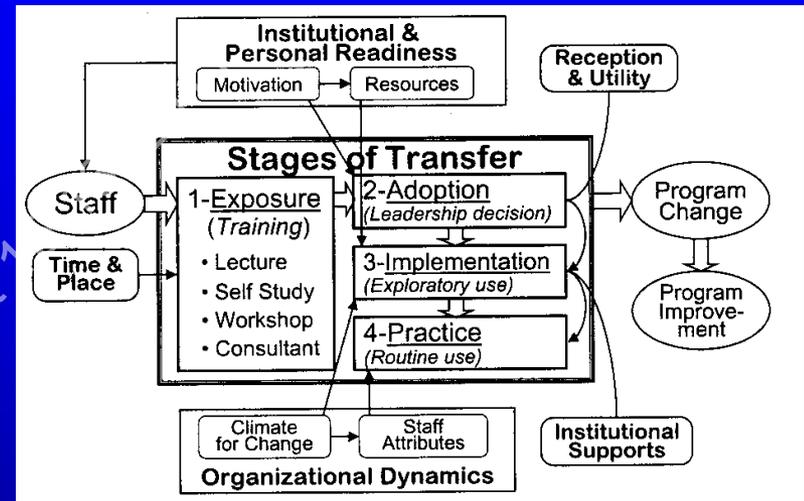
- structure of care for patients with schizophrenia varied across sites
- availability & quality of these care targets varied across sites

Implementation Tools & Strategies: Evidence-Based Quality Improvement (EBQI)



Conceptual Framework: Simpson Transfer Model

- ◆ Stages of organizational change
- ◆ Validated survey measures for each stage
- ◆ 4 Action steps:
 - Exposure: Introduction and training
 - Adoption: Intention to try the care model through a program leadership decision and subsequent support
 - Implementation: Exploratory use of the care model
 - Practice: Routine use of the care model



Intervention Strategies and Formative Evaluation Activities by STM Stages

STM Stages	Intervention Strategies and Tools	Formative Evaluation (time-point)
Exposure ↓	<ul style="list-style-type: none"> •Secure commitment •Training and Observation of care model by Regional PIs and Project Managers •Review evidence •Address values •Identify and prioritize needs •Begin tailoring intervention 	<ul style="list-style-type: none"> •Program Training Needs •Organizational Readiness for Change •Provider Burnout
Adoption ↓	<p>Predisposing activities:</p> <ul style="list-style-type: none"> •VISN Implementation Teams •Opinion leaders •Continue tailoring •Continue to secure commitment, address values 	<ul style="list-style-type: none"> •Field notes
Implementation ↓	<p>Enabling activities:</p> <ul style="list-style-type: none"> •Patient Assessment System •Assertive care •Discuss and start using provider supports & incentives •Social marketing 	<ul style="list-style-type: none"> •Project documents (Minutes from Implementation Team meetings, Project Managers' field notes, Quality Coordinators' logs) •Provider & Clinic Manager interviews (pre- & mid-implementation)
Practice	<p>Reinforcing activities (performance monitoring & feedback):</p> <ul style="list-style-type: none"> •Monthly Quality Meeting/Quality Reports •Implementation Team Meetings •Continue tailoring with provider input •Quality Reports 	<ul style="list-style-type: none"> •Provider & Clinic Manager interviews (post-implementation) •Organizational Readiness for Change •Provider Burnout

Data for Formative Evaluation

*Pre-
Implementation*
*(STM: Exposure
& Adoption)*

Implementation
*(STM:
Implementation)*

*Post-
Implementation*
(STM: Practice)

Developmental

- Field notes
- Documents (minutes, etc.)
- ORC & Burnout Inventory
- Key stakeholder interviews

Implementation- Focused

- Field notes
- Quality Coordinator logs
- Documents
- Key stakeholder interviews

Progress-Focused

- QI tools

Interpretive

- Field notes
- Key stakeholder interviews
- ORC & Burnout Inventory

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Evaluation

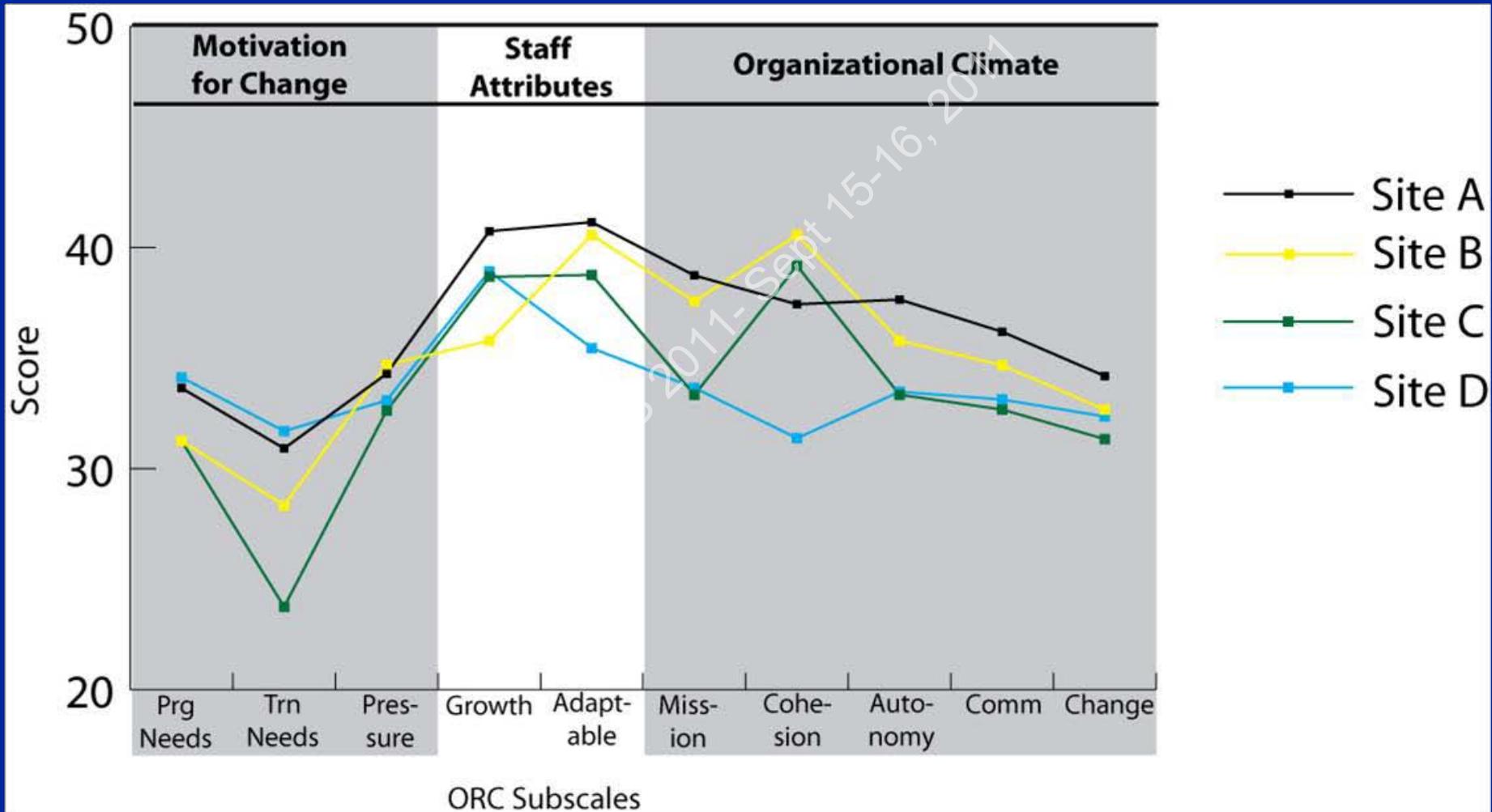
◆ Summative

- 801 patients
- 201 providers (clinicians and managers)
- evaluate effect on provider competency, treatment appropriateness, patient outcomes, service utilization
- patient interviews at 0 and 12 months
- VistA data on treatment use

◆ Process

- characterize provider competencies, organizational readiness, barriers, facilitators
- interview providers & managers at 0, 6, and 12 months
- survey providers and administration at 0 and 12 months
- monitor use of informatics
- logs and minutes of implementation team meetings
- field notes from local QI teams

Institutional and Personal Readiness for Change



Tailoring of Implementation Based on Readiness

- ◆ Sites A and B: more ready to change
 - no specific tailoring
- ◆ Site C: less ready to change
 - needs (low): heighten awareness of gaps in care; use clinical champions and educational programs
 - mission (moderate but lowest of all clinics): study staffing kept consistent; consistency of message
 - autonomy (moderate but lowest of all clinics): let clinicians help determine how to implement the care targets

Results: Implementation

◆ Organization

- strong support
- collaboration between services was difficult (nutrition, primary care wellness programs, specialty mental health)

◆ Clinician competencies

- improved through education and practice

◆ Managers used data to reorganize care

- scales placed in each clinic
- routine weighing of patients established
- clinical staff trained to provide services

Results: Summative

- ◆ At baseline
 - 45% of patients obese, mean BMI = 30
 - 70% on medications that cause substantial weight gain
 - 22% used services, mean sessions used = 2
- ◆ As a result of the intervention, patients were 2.3 times more likely to use services ($\chi^2=14$, $p<.01$)
 - mean sessions used increased to 11
 - no changes at control sites
- ◆ Control site patients: 13 pounds heavier at end-point (± 7.6 pounds, $F=4.8$, $p=.03$)
 - controlling for: pre-baseline weight, baseline weight, psychotic symptoms, negative symptoms

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Reference Slides

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Multiple Data Sources: Measuring & Documenting Implementation

	EQUIP	Examples
Semi-structured interviews: leaders, clinicians, managers	✓	participation, level of implementation
Organizational site surveys: administrators & staff	✓	clinic structure, processes, change
Field journals	✓	group-level dynamics, implementation details
Administrative data	✓	visits, prescriptions
patient surveys	✓	kiosk self-assessments
Activity logs	✓	time spent on aspects of study

Stages of Formative Evaluation

*Pre-
Implementation*

Implementation

*Post-
Implementation*

Developmental

“Diagnostic” of the existing context (baseline assessment)

- Organizational readiness for change
- Expectations of project
- Existing services and structure of care

Implementation- Focused

“Actuality” of implementation

- Barriers to change
- Adjustments to interventions

Progress-Focused

“Monitoring impacts & indicators of progress toward goals”

- Dose & intensity of intervention

Interpretive

“Uses results of all other FE stages”

- Key stakeholder experiences
- Could “re-diagnose” the context

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◆ For further information

- Alexander S. Young, MD MSHS
- West Los Angeles VA MIRECC & UCLA
11301 Wilshire Blvd. (210A), Los Angeles CA 90073
- alexander.young@va.gov