

# A Hitchhiker's Guide to Research: Why? What? How?

Research Results Conference 2006

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Ohio Dept. of Mental Health

# A Hitchhiker's Guide to Research: Topics

- Views of the usefulness and relevance of research
- What we can do and are doing in Ohio
- Quiz questions to test knowledge and to see if you are awake

## Research Results Pop Quiz

- Of the following interventions, the one proven efficacious is:
  - **Acute inpatient treatment (vs. alternatives)**
  - **Critical Incident Stress Debriefing (CISD) for exposure to trauma**
  - **ECT for treatment resistant depression**
- That's right, ECT...

# One View: It's All About the Science

“Far too often, treatments and services based on rigorous clinical research languish for years rather than being used effectively at the earliest opportunity.” Final Report, President's New Freedom Commission on Mental Health

## Research Partnerships to Transform Services

*A Report by the National Advisory Mental Health Council's Workgroup on Services and Clinical Epidemiology Research*

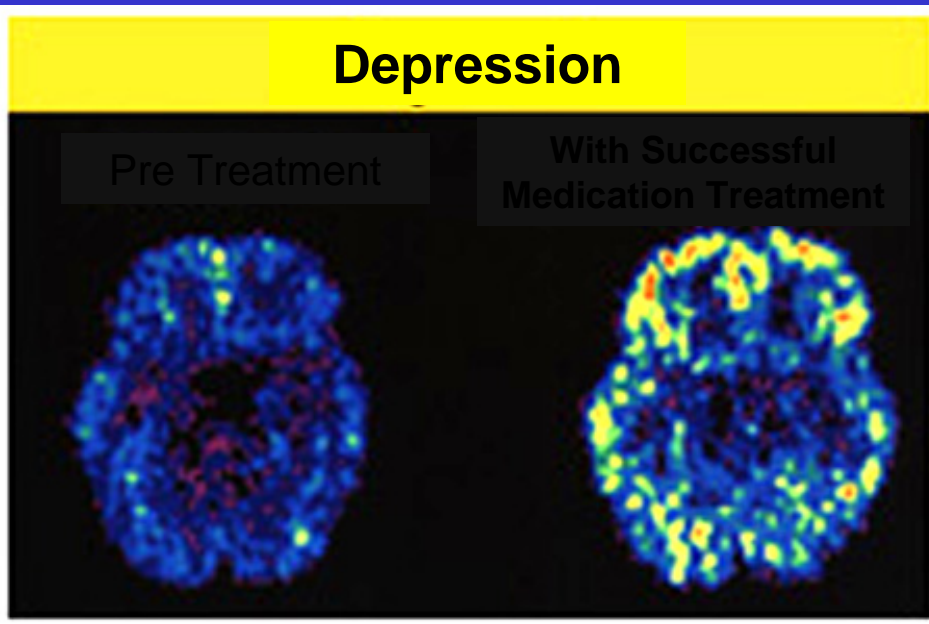
## Bridging Science and Service

*A Report by the National Advisory Mental Health Council's Clinical Treatment and Services Research Workgroup*

"When it comes to suicide and mental illness, the gap between what we know and what we do is lethal," said Surgeon General David Satcher, M.D.

**We Are Not Above Promoting This View: A Budget Slide:**

**“Mental Illness” is Medical Illness And Treatment Works:  
PET scans of a woman with treated depression.**



The scan on the left was taken when she was on no medications and very depressed. The scan on the right was taken several months later when she was well, after medication had treated her depression. Her entire brain is more active when well, especially the top/front “thinking” part of the brain.

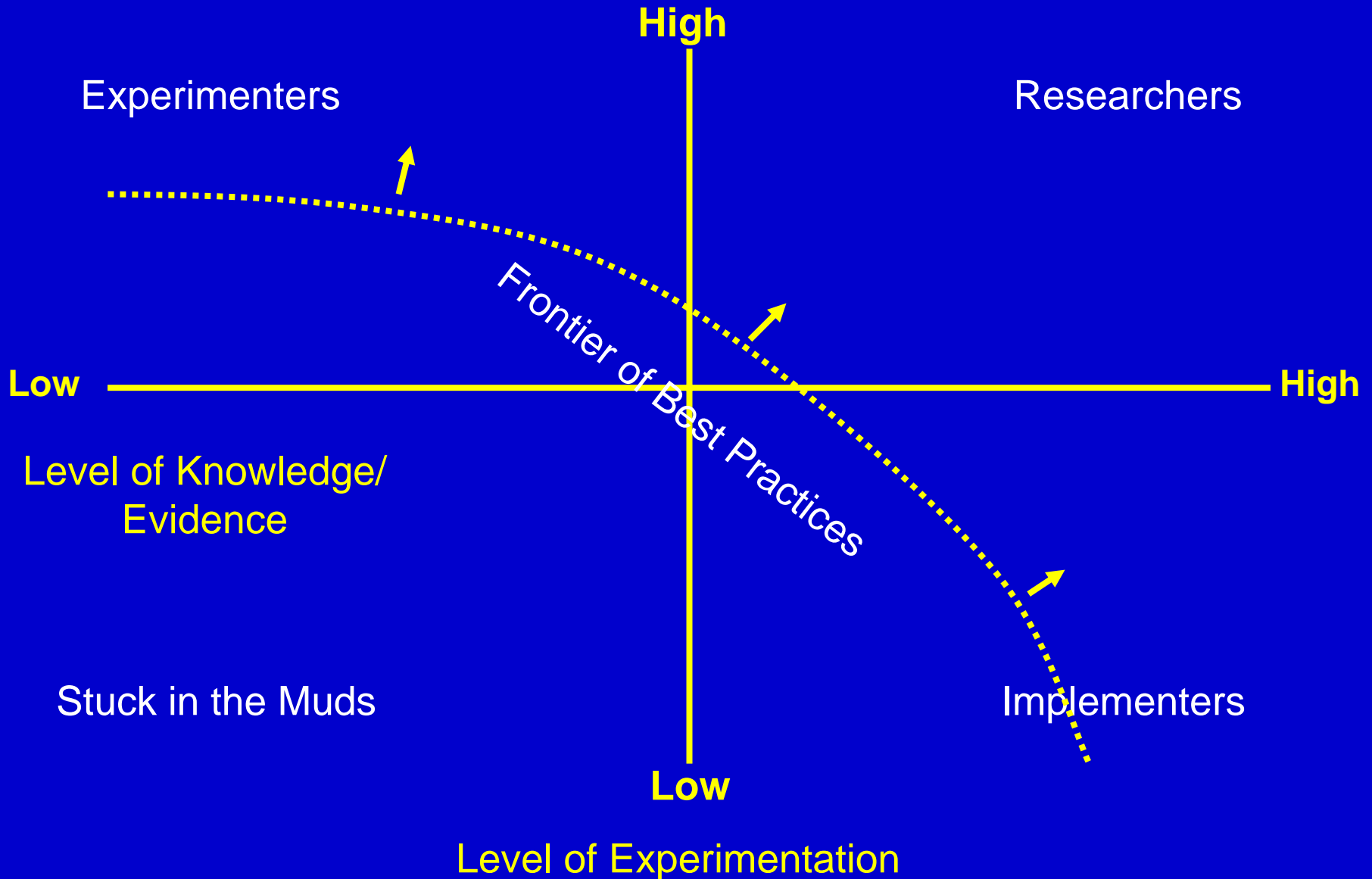
# Research Results Pop Quiz

- Which one of the following statements best summarizes results of treatment effectiveness studies of:
  - **Adolescent depression**
  - **ADHD**
  - **Schizophrenia**
- Meds worked better than appropriate psycho-social therapies
- Counseling worked better than meds
- Meds plus appropriate psycho-social treatments were most effective
- Combination Treatment more effective (TADS study, MTA study, Hogarty)

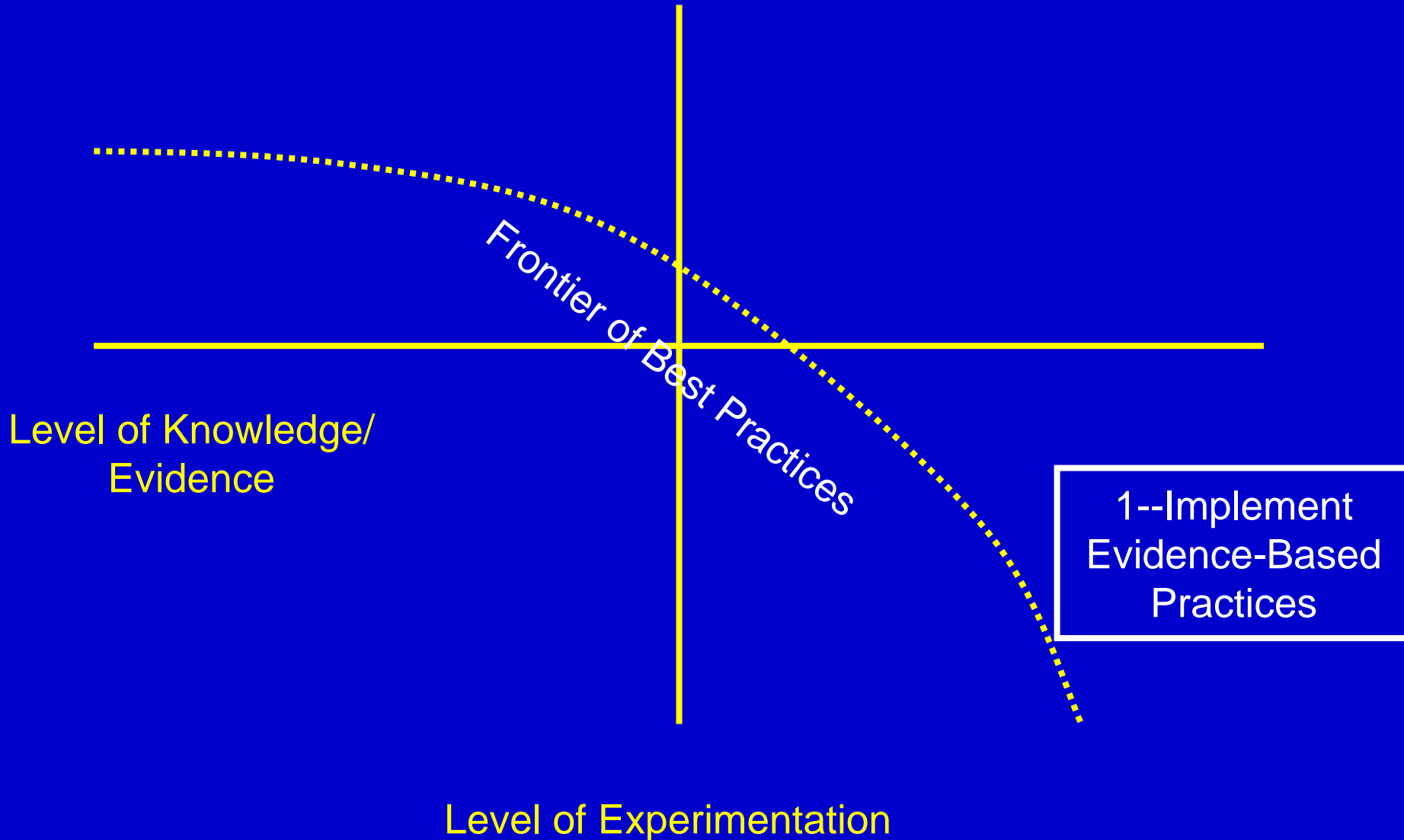
# The Other Extreme: Science is Irrelevant

- It's all about the billable units...and only the billable units
- My friend got better with megavitamins. I know this to be true.  
New Hampshire
- Oh, sure it worked in Madison. But it would never work HERE
- We work in the real world. We don't have time for that stuff...

# A Framework for Knowledge and Research: Where do We Want to Be?



# A Framework for Knowledge and Research: What We Can Do



# Research Results Pop Quiz

- True or False:
- Of the various characteristics of an innovation, scientific proof of its effectiveness is the most important prediction of adoption
- That would be...FALSE
- Hear why in tomorrow's IDARP presentation

# If You Want to try an EBP: Coordinating Centers of Excellence (CCOE's)

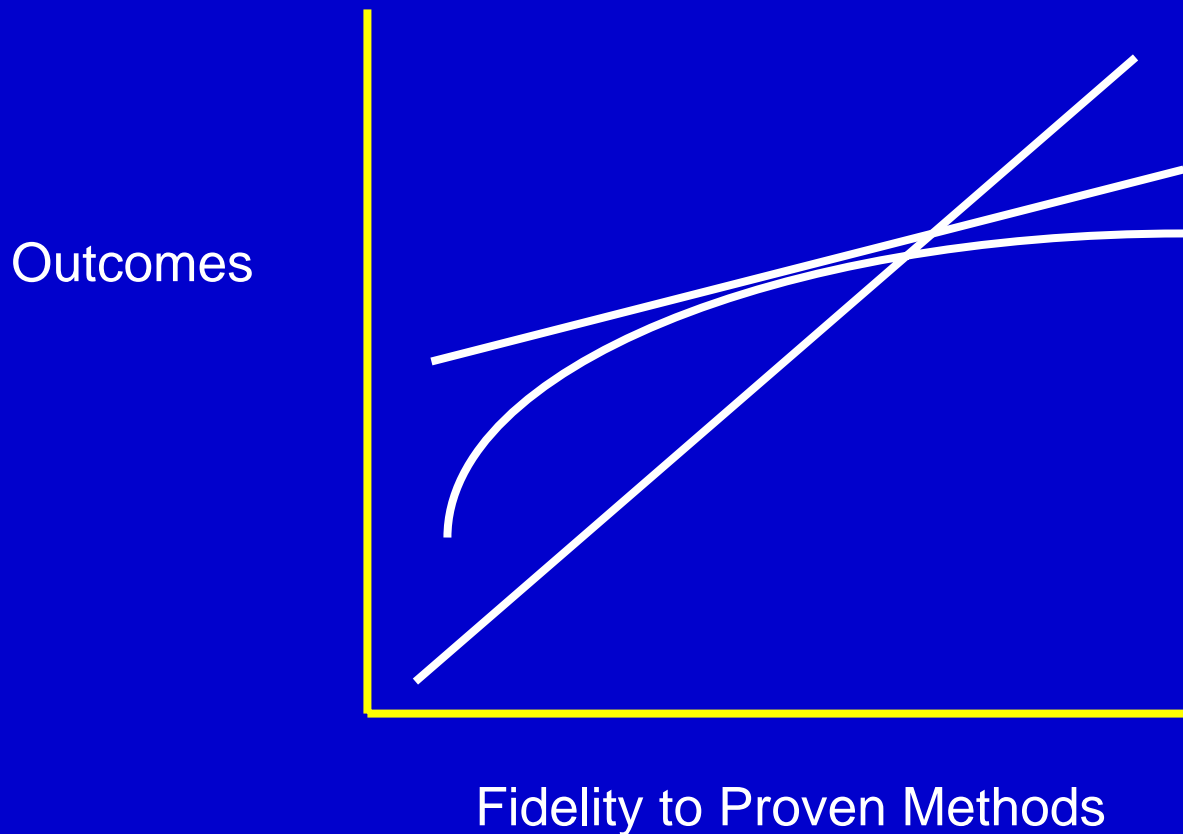
## ◆ Functions:

- ◆ Promote Best/EB Practice
- ◆ Education & training
- ◆ Capacity development
- ◆ Fidelity measurement
- ◆ Cross-system sharing

## ■ Ohio CCOE's

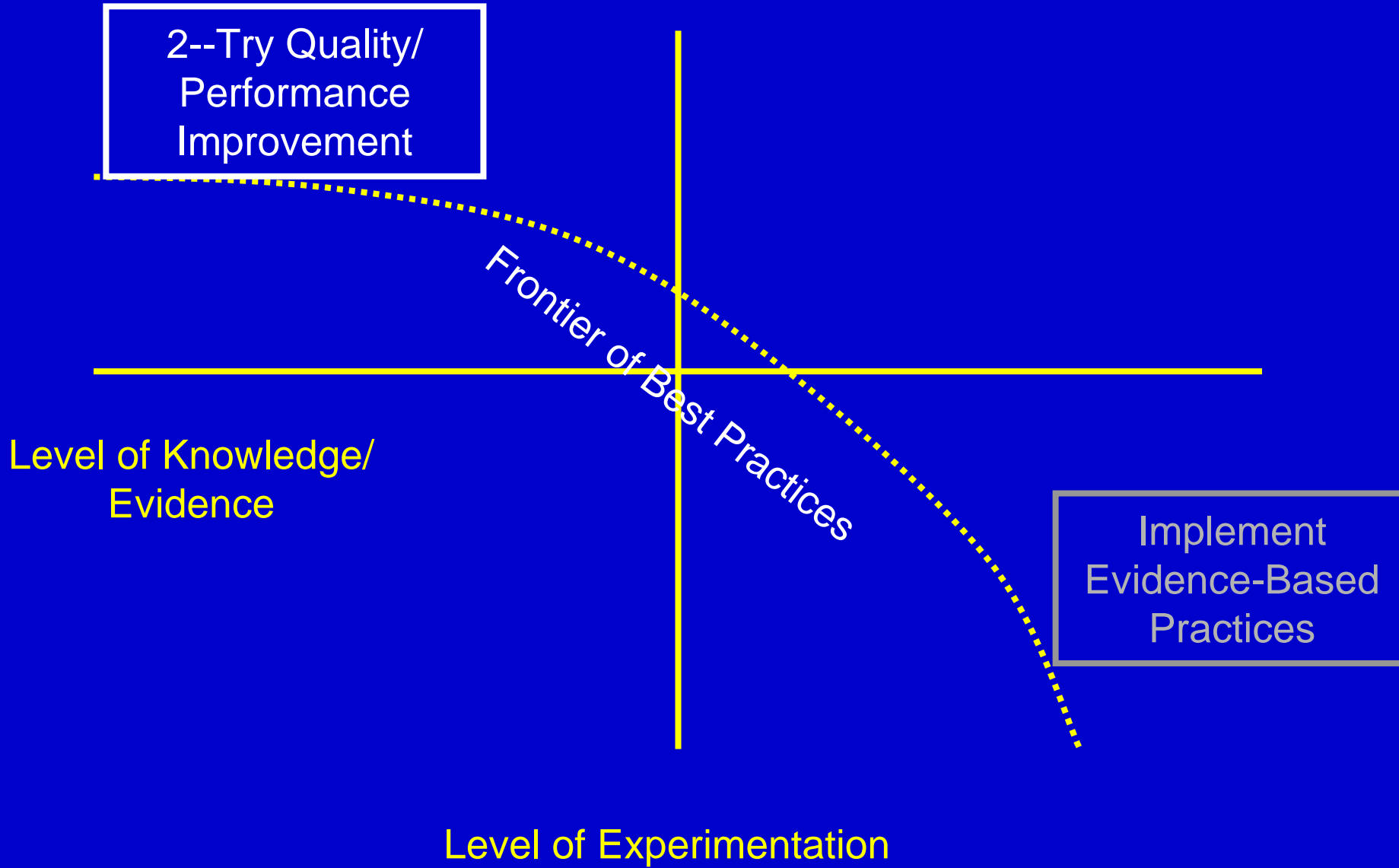
- SAMI/IDDT
  - ◆ [www.ohiosamiccoe.cwru.edu](http://www.ohiosamiccoe.cwru.edu)
- Supported Employment
  - ◆ (also at Case)
- Center for Innovative Practices (MST, Wrap-Around)
  - ◆ [www.cipohio.org](http://www.cipohio.org)
- Dual Dx. MI/MR
  - ◆ [www.ohiomimrdd.org](http://www.ohiomimrdd.org)
- MH/CJ
  - ◆ [www.neoucom.edu/CJCCOE](http://www.neoucom.edu/CJCCOE)
- Center for Learning Excellence
  - ◆ <http://altd-mh.org/index.html>
- Illness Management/Recovery
  - ◆ [www.meduohio.edu/depts/psych/ccoe/about.html](http://www.meduohio.edu/depts/psych/ccoe/about.html)
- Cluster Based Planning
  - ◆ [www.ohiocouncil-bhp.org](http://www.ohiocouncil-bhp.org)

# Research Results Pop Quiz: Which Best Depicts the Fidelity/Outcomes Link?

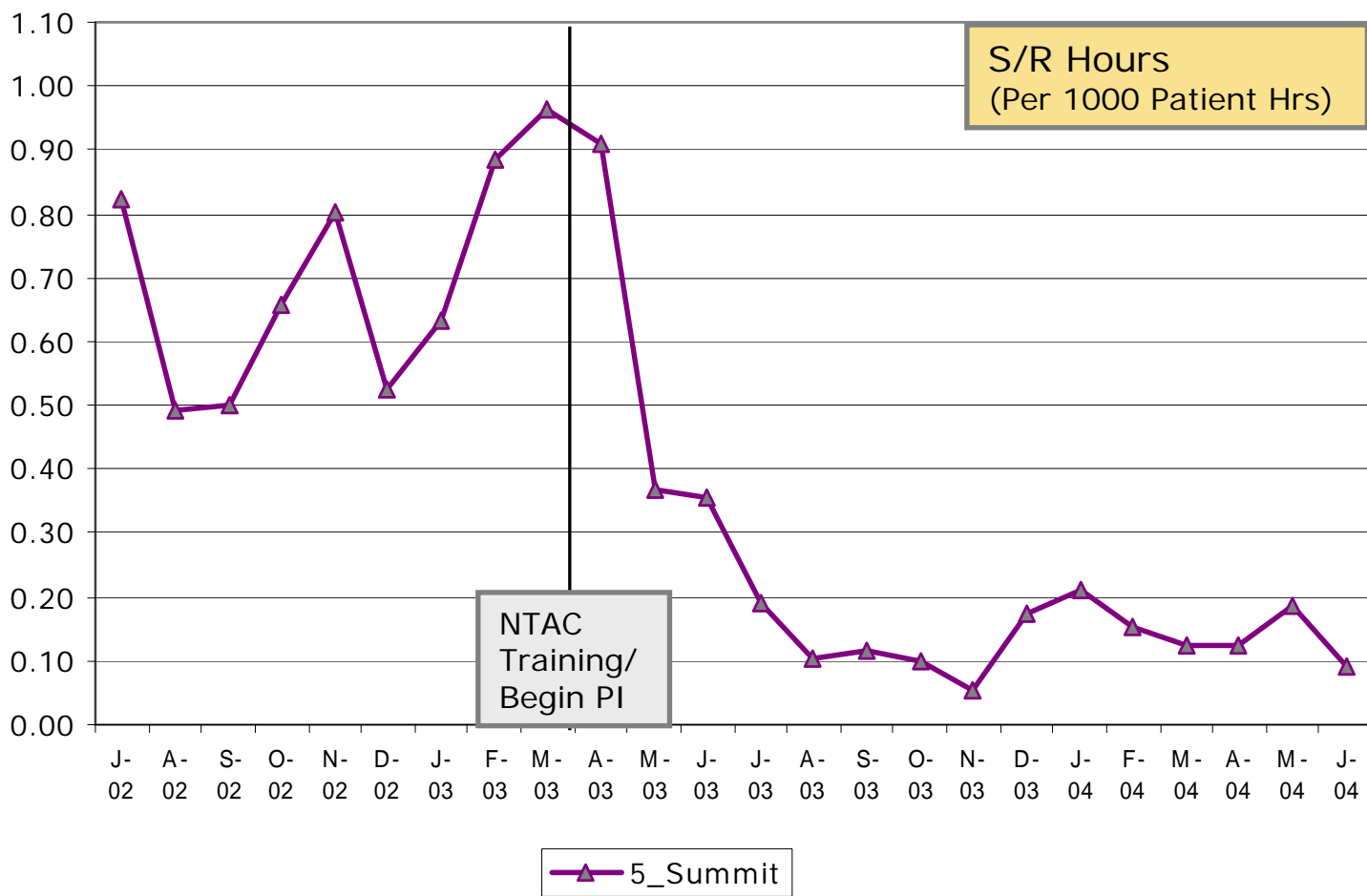


In Replication Studies of MST, FFT, ACT, etc. there is basically a direct relationship between fidelity to model and outcomes

# A Framework for Knowledge and Research: What We Can Do



# The Power of Commitment + Data + Learning: Seclusion/Restraint at Summit Behavioral Healthcare



July 2002 to Jun 2004

# Research Results Pop Quiz

- True or False:
- A majority of people exposed to terrible trauma will develop PTSD
- False. About 35-40% of those exposed to serious trauma may develop PTSD
- We do not know what resilience (protective) factors protect some people and not others. Being studied by Joe Calabrese et al. for returning vets

# A Framework for Knowledge and Research: What We Can Do

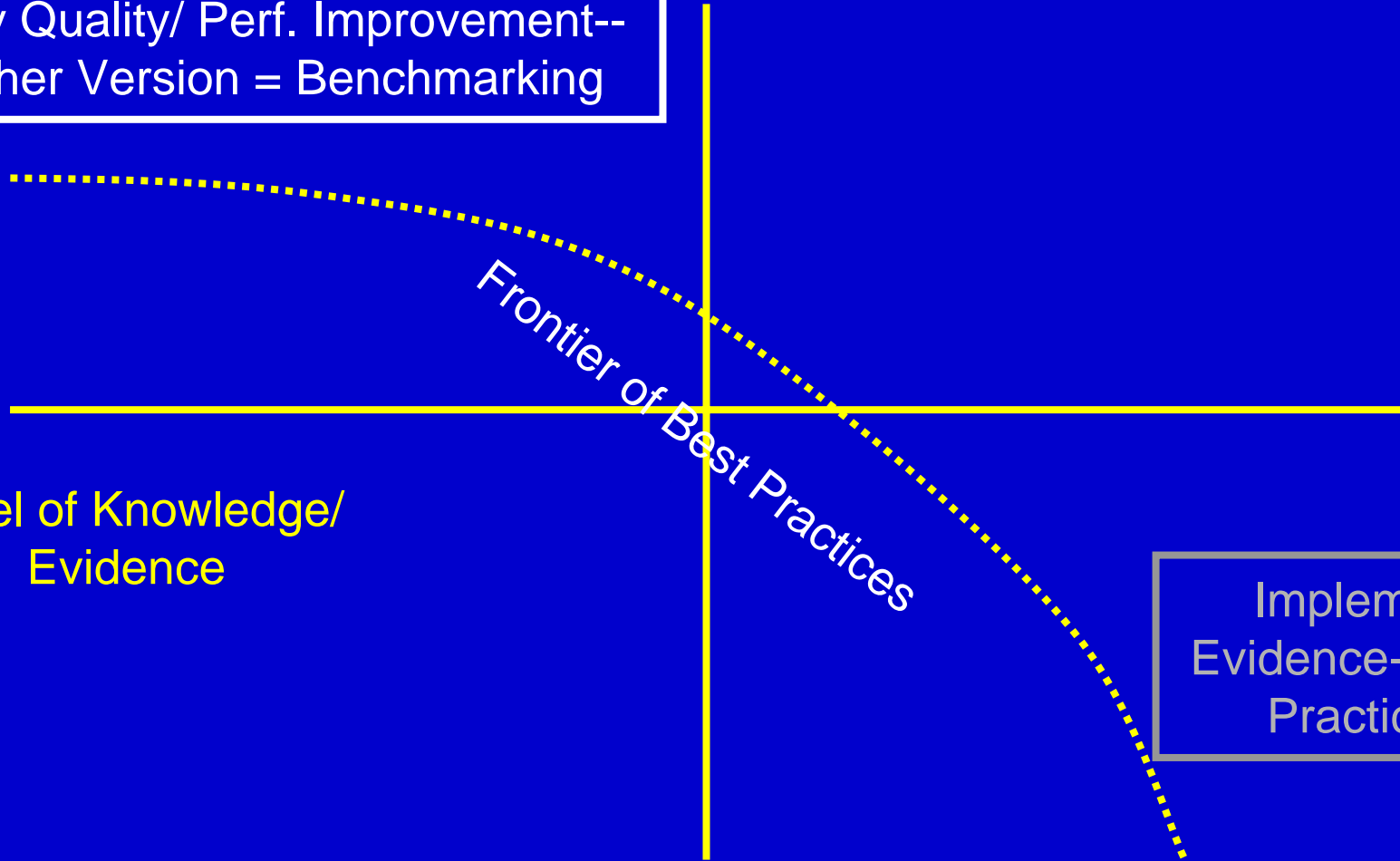
3-Try Quality/ Perf. Improvement--  
Another Version = Benchmarking

Level of Knowledge/  
Evidence

Level of Experimentation

Frontier of Best Practices

Implement  
Evidence-Based  
Practices





# Ohio Mental Health Consumer Outcomes Data Mart

**i** ← Click on the symbol at left for general instructions

## **i** Consumer Population (Required)

Consumer Group:

## **i** Source of Data (Required)

Source of Data:

## **i** Consumer Characteristics (Optional)

Gender:   
Age:   
Education Range:

Race:   
Diagnostic Group:

## **i** Time the Consumers Have Been in Treatment (Required)

Time in Treatment:

## **i** Reporting Period (Optional)

Reporting Year:

- Fiscal Year  
 Calendar Year  
 Include Results for All Years

## **i** Outcomes to be Reported (Required)

Outcome Category:

Outcome Type:

## **i** Report Format (Required) (Please Select Graph or Table)

Graph  Table

Select area and specify:  The Entire State  One Service Board   
 One Residency Board   
 One Provider Agency

Reset Fields

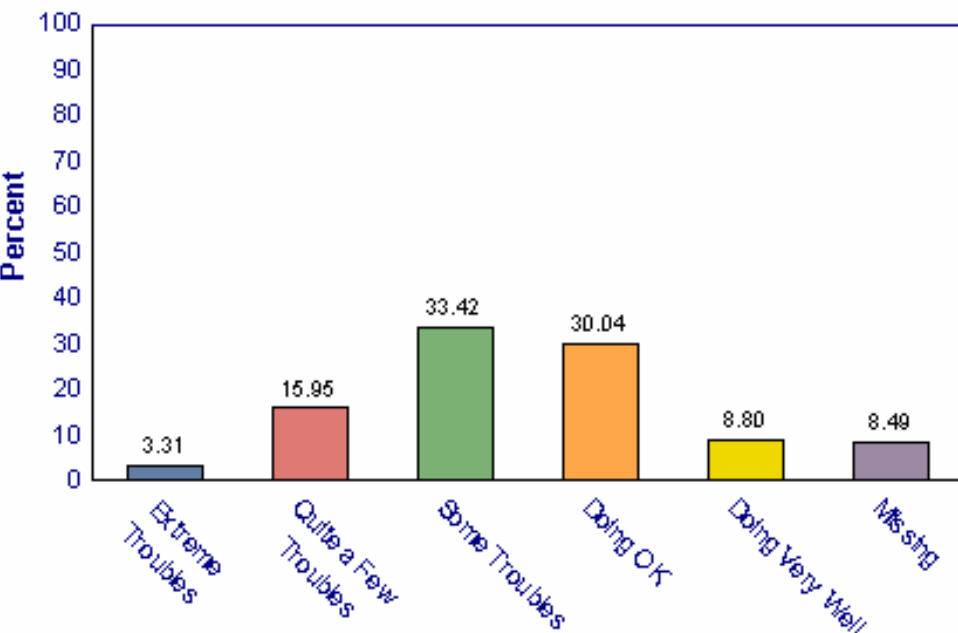
Create Report

Start Over

Users choose which data sets they want to examine by chart or graph



## Functioning-Overall Functioning



Example: Level of functioning—All children in care at 30 days

### Population Statistics:

Count = 109,617  
 Mean = 44.92  
 Standard Deviation = 15.14

### Scale Range:

0 - 16 Extreme Troubles  
 17 - 32 Quite a Few Troubles  
 33 - 48 Some Troubles  
 49 - 64 Doing OK  
 64 - 80 Doing Very Well

### Outcomes Records Included For:

#### Child and Adolescent Consumers' Parents

**Gender:** All Genders Combined

**Time in Treatment:** 30 Days

**Race:** All Races Combined

**Living Situation:**

**Primary Diagnostic Group:** All Diagnoses Combined

**Age Group:** All Ages Combined

**Education Range:** All Education Ranges Combined

**Marital Status:**

**Employment Status:**

**Mandated Treatment Status:**

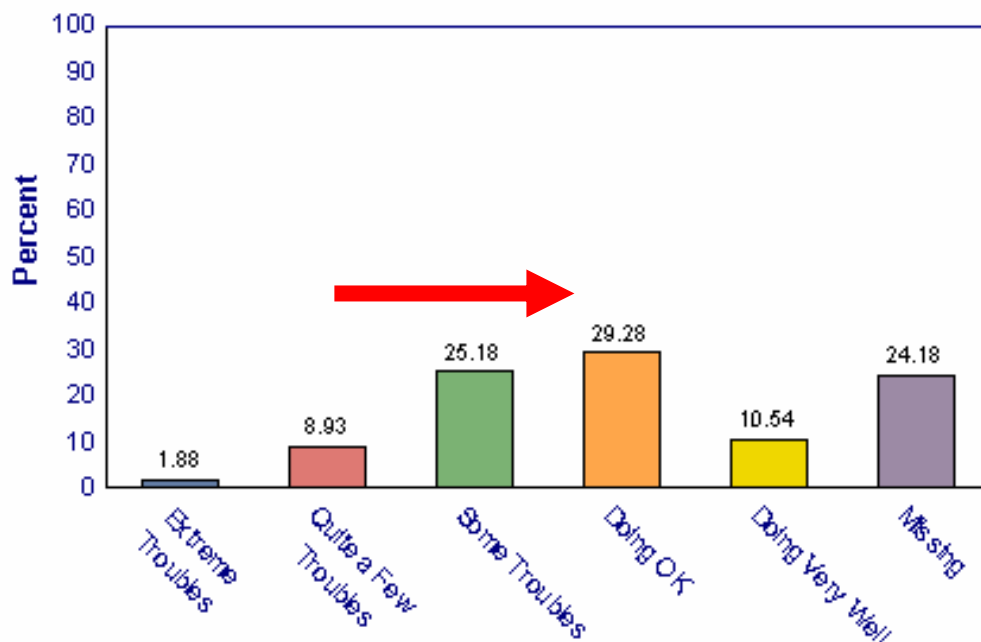
**Type of Year:** Include Results for All Years

**Reporting Period:** All Quarters Combined

**Region:** The Entire State



## Functioning-Overall Functioning



Example: Level of functioning—All children in care after 180 days

### Population Statistics:

Count = 26,008  
Mean = 48.60  
Standard Deviation = 14.96

### Scale Range:

0 - 16 Extreme Troubles  
17 - 32 Quite a Few Troubles  
33 - 48 Some Troubles  
49 - 64 Doing OK  
64 - 80 Doing Very Well

### Outcomes Records Included For:

#### Child and Adolescent Consumers' Parents

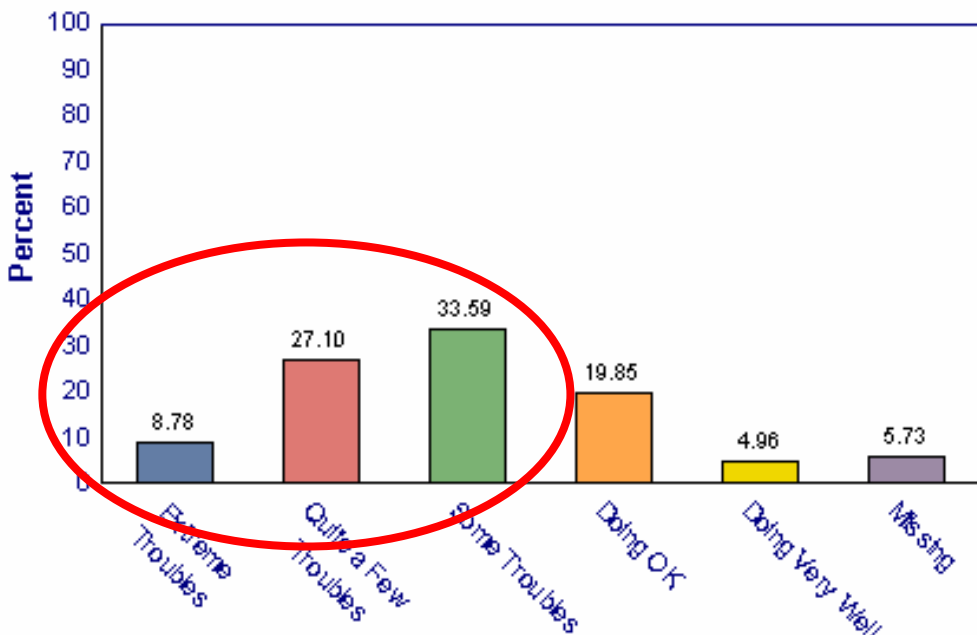
**Gender:** All Genders Combined  
**Time in Treatment:** 180 Days  
**Race:** All Races Combined  
**Living Situation:**  
**Primary Diagnostic Group:** All Diagnoses Combined  
**Age Group:** All Ages Combined  
**Education Range:** All Education Ranges Combined  
**Marital Status:**  
**Employment Status:**  
**Mandated Treatment Status:**  
**Type of Year:** Include Results for All Years  
**Reporting Period:** All Quarters Combined  
**Region:** The Entire State

# Research Results Pop Quiz

- True or False: (Place yourself in early 1980's)
- A majority of the homeless are “the deinstitutionalized mentally ill”
- Ahhh...Dee?
- And, what about prisoners with mental illness today?



## Functioning-Overall Functioning



Example: Level of functioning—Children in MST, one agency—at 30 days

### Population Statistics:

Count = 262  
Mean = 37.84  
Standard Deviation = 16.15

### Scale Range:

0 - 16 Extreme Troubles  
17 - 32 Quite a Few Troubles  
33 - 48 Some Troubles  
49 - 64 Doing OK  
64 - 80 Doing Very Well

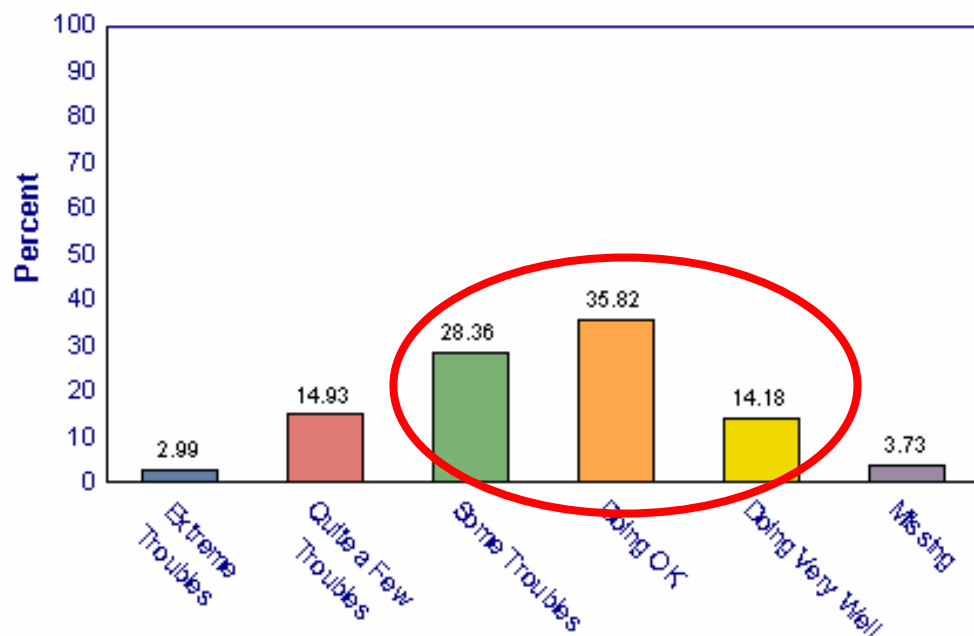
### Outcomes Records Included For:

#### Child and Adolescent Consumers' Parents

- Gender:** All Genders Combined
- Time in Treatment:** 30 Days
- Race:** All Races Combined
- Living Situation:**
- Primary Diagnostic Group:** All Diagnoses Combined
- Age Group:** All Ages Combined
- Education Range:** All Education Ranges Combined
- Marital Status:**
- Employment Status:**
- Mandated Treatment Status:**
- Type of Year:** Include Results for All Years
- Reporting Period:** All Quarters Combined
- Region:** CRISIS CENTER (1492)



## Functioning-Overall Functioning



Example: Level of functioning—Children in MST, same agency—180 days

### Population Statistics:

Count = 134  
Mean = 47.68  
Standard Deviation = 16.87

### Scale Range:

0 - 16 Extreme Troubles  
17 - 32 Quite a Few Troubles  
33 - 48 Some Troubles  
49 - 64 Doing OK  
64 - 80 Doing Very Well

### Outcomes Records Included For:

#### Child and Adolescent Consumers' Parents

**Gender:** All Genders Combined  
**Time in Treatment:** 180 Days  
**Race:** All Races Combined  
**Living Situation:**  
**Primary Diagnostic Group:** All Diagnoses Combined  
**Age Group:** All Ages Combined  
**Education Range:** All Education Ranges Combined  
**Marital Status:**  
**Employment Status:**  
**Mandated Treatment Status:**  
**Type of Year:** Include Results for All Years  
**Reporting Period:** All Quarters Combined  
**Region:** CRISIS CENTER (1492)

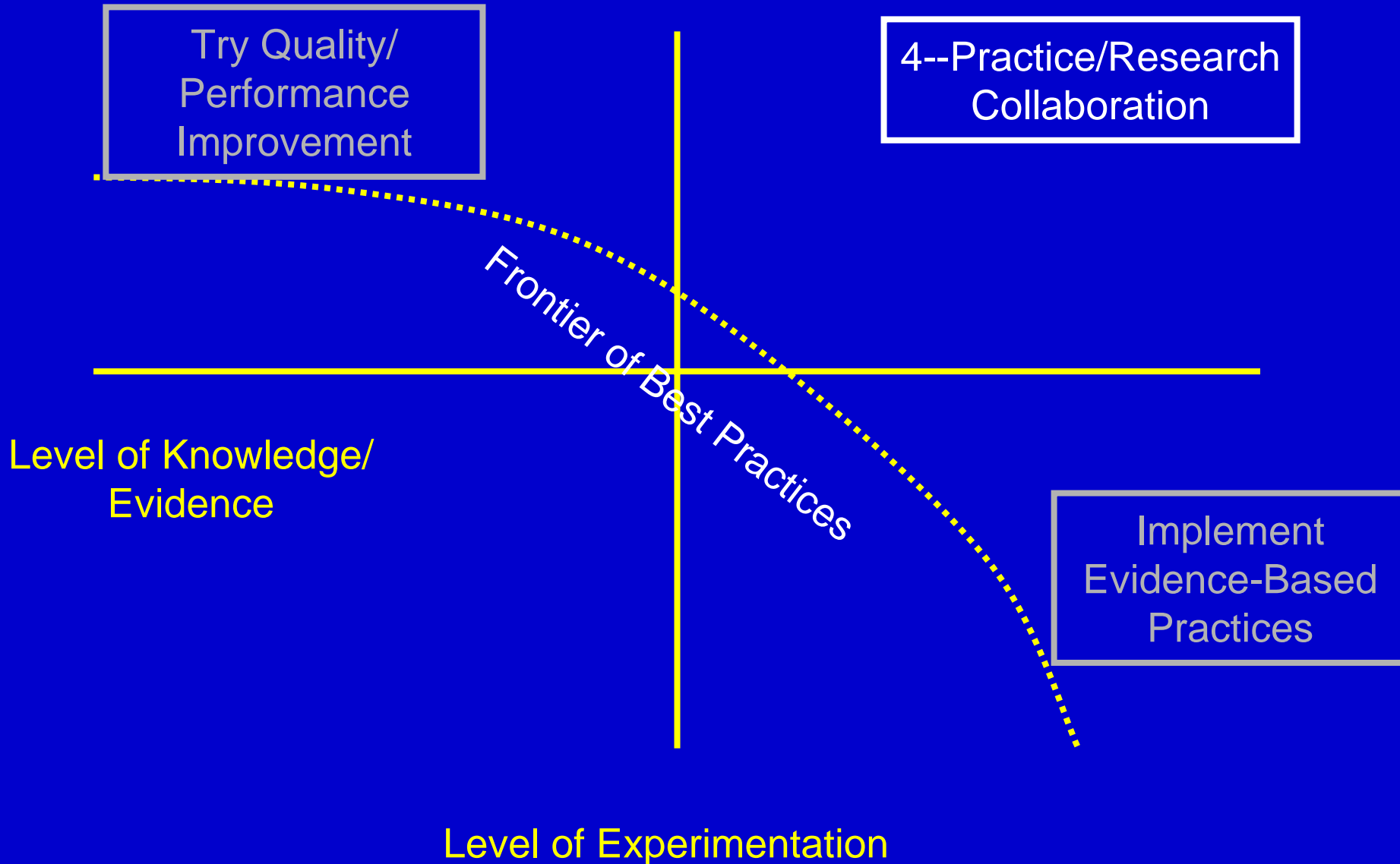
# Research Results Pop Quiz

- Which was more predictive of improved outcomes for “SMD” consumers in Ohio’s Longitudinal Consumer Outcomes study?
  - **Having a strong “voice” in the services you received**
  - **Receiving high levels of community services**
  - **Receiving levels of community services tailored to your clinical condition**
- Yes. “Consumer-driven” is effective

# Research Results Pop Quiz

- Which best characterizes results of the Vermont longitudinal study of “discharged back ward schizophrenics” followed 20 years later?
  - **Low rates of hospital use but high reliance on CMHC services**
  - **Significant criminal justice system involvement**
  - **60% clinically indistinguishable from non mentally ill peers**
- “Rational optimism” (Harding) is a sound basis for policy

# A Framework for Knowledge and Research:



# Conducting Evaluation and Research: Not For Amateurs, But It CAN Be Done

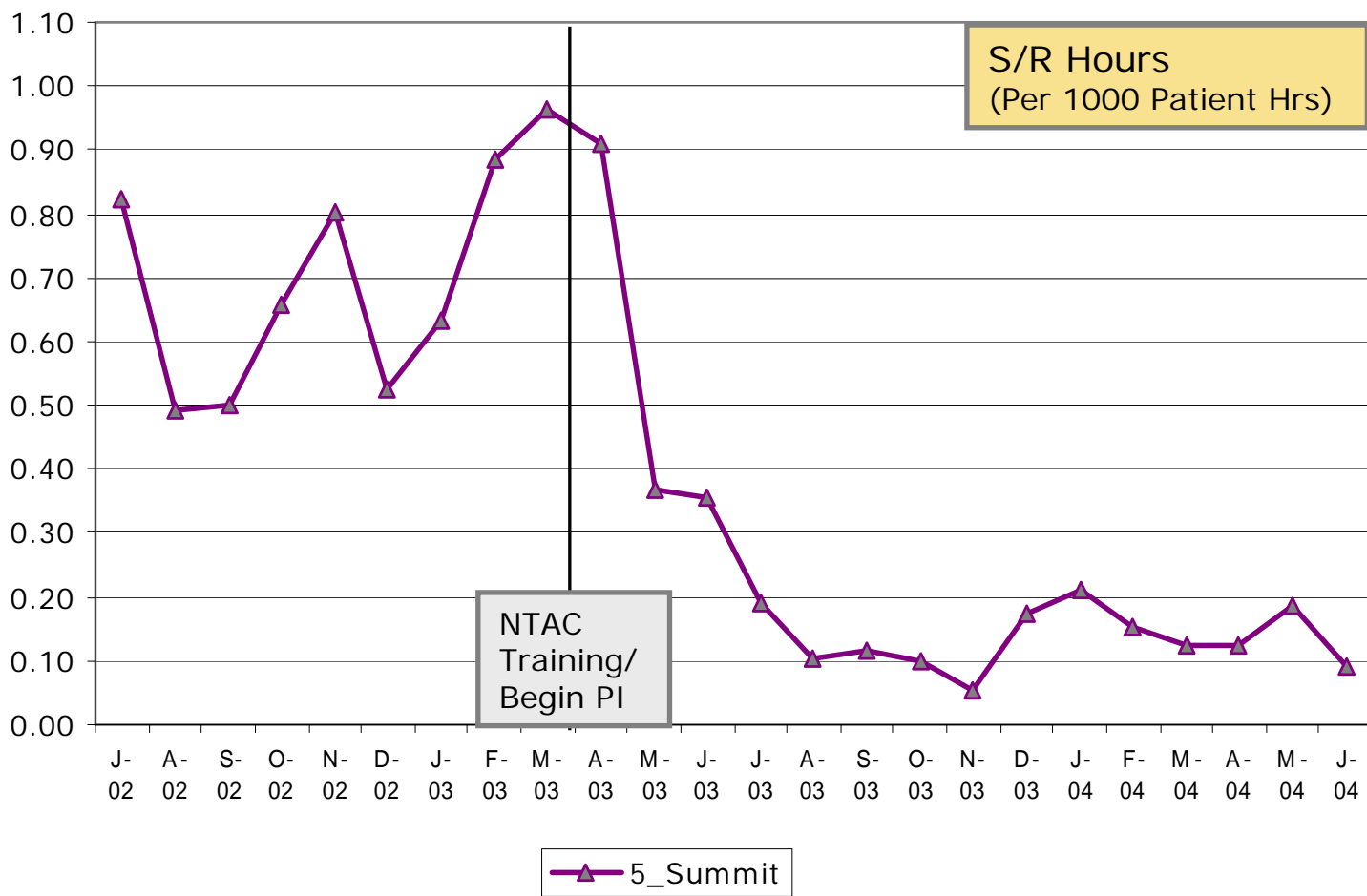
## Continuum of Evaluation/Research Designs

**The Post-Test  
Only, No  
Control Group,  
One-Shot  
Design**

**The “Before  
and After  
Pictures”  
Design**



# The Power of Commitment + Data + Learning: Seclusion/Restraint at Summit Behavioral Healthcare



July 2002 to Jun 2004


# Conducting Evaluation and Research: The High-Octane Stuff is Not For Beginners Alone

The Post-Test  
Only, No  
Control Group,  
One-Shot  
Design

The “Before  
and After  
Pictures”  
Design

“Quasi-  
experimental”  
Designs

Randomized,  
Controlled  
Trial Designs



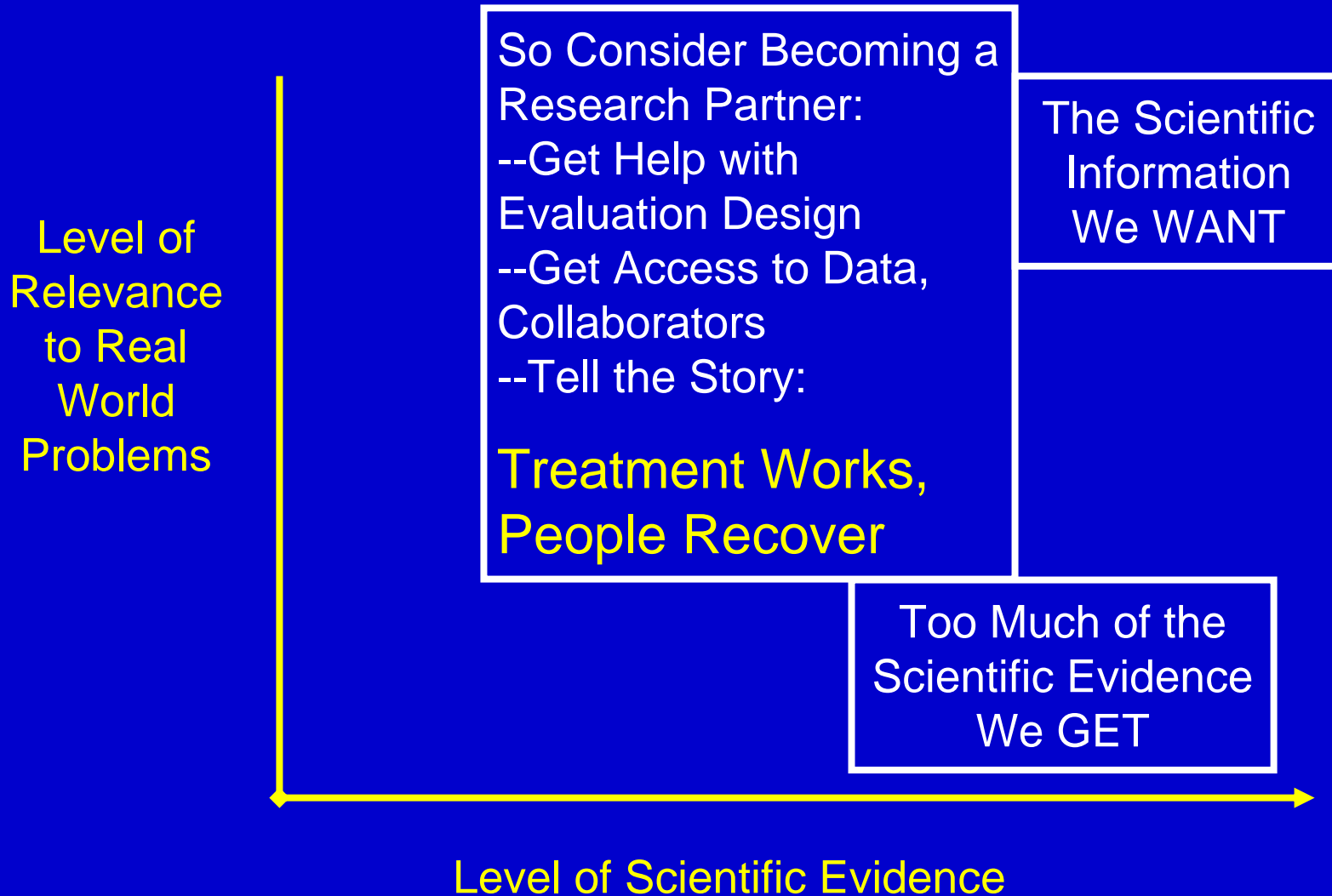
“Knowledge develops best in the conversation between  
a scholar and a practical man.” Chairman Mao

And both practitioners and researchers can benefit

## Looking at Results Broadly: Does a Theory Emerge?

- **Resilience is powerful...not definitively explained (risk of PTST)**
- **Good lives are lived, long term, by most people who have a mental illness (Harding, others)**
- **A sense of self and self control is a common thread in recovery (SIS/LCO)**
- **The right mix of meds and practical therapies works for most people with “SMI” (TADS, MTA, PT)**
- **People with complex disorders benefit best from coherent interventions (replication studies: MST, ACT)**
- **You can’t just do the right thing poorly. You have to do the right thing right. (replication studies)**
- **The behavior of complex systems is poorly predicted by correlations (homelessness, incarceration and DI)**
- **In science as in life, relevant partnerships often help**

# In Conclusion, And For Our Action: What Do We Want and Expect From Science?



Thank You