

Introducing...

mtl

mtl.how

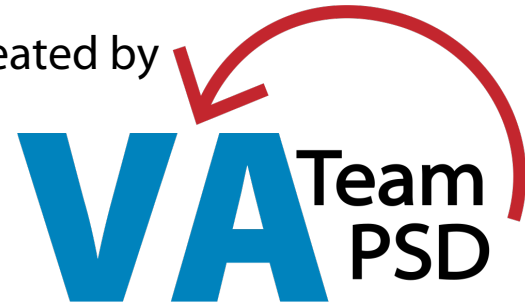


Lindsey Zimmerman, PhD

National Center for PTSD, Dissemination & Training
Division

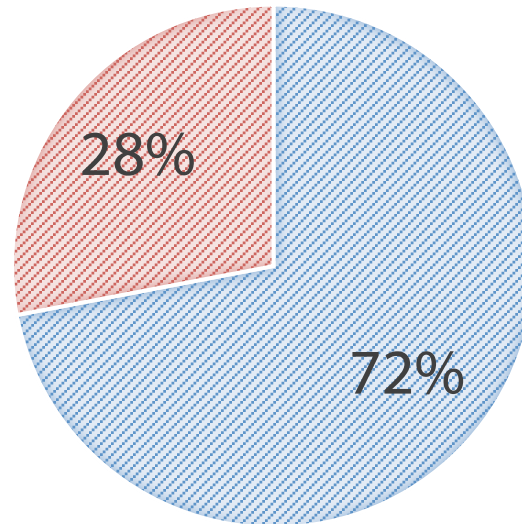
Lindsey.zimmerman@va.gov

Created by



The problem of EBP reach in teams: How can we reach more patients with our highest quality care?

■ Other services ■ Evidence-based practices



Source: VA Strategic Analytics for Improvement and Learning, FY 2017



Veterans Health Administration

Model of a US National Health Care System

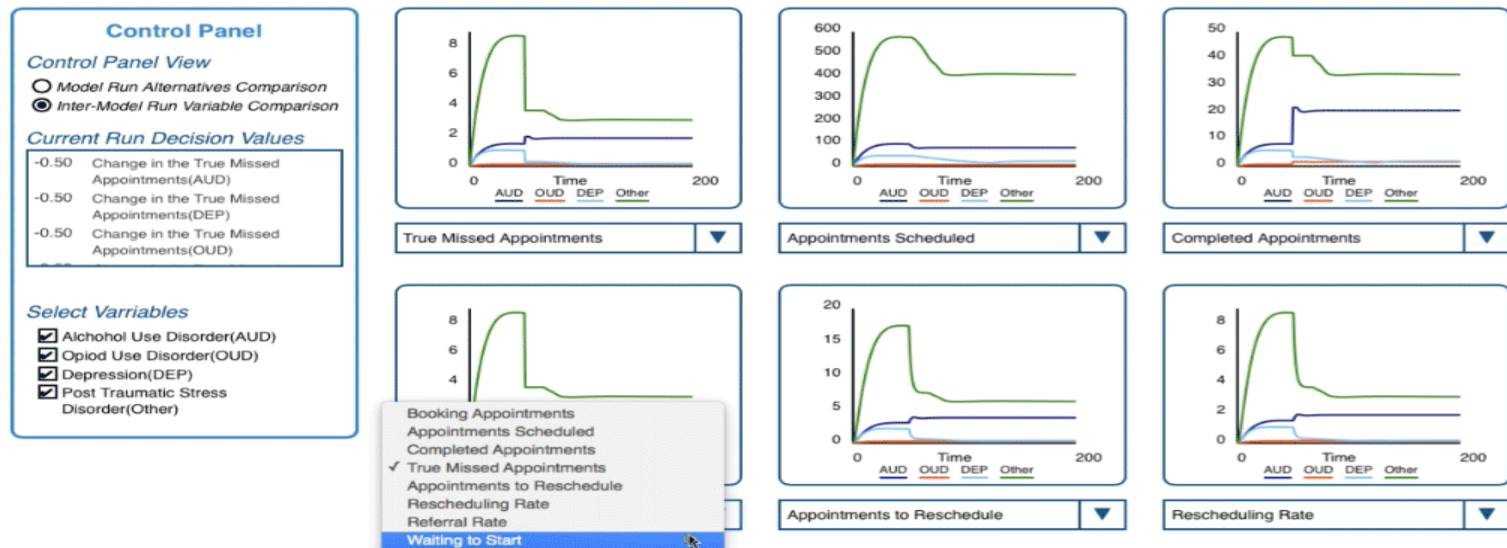
American J. Public Health 97, 2007

1. VA innovates with national dissemination efforts to train providers in evidence-based mental health practices
2. Enterprise-wide quality measures
3. Clinical practice guidelines and mandates for evidence-based care
4. National electronic health information system
5. Mental health care coordinated in multidisciplinary teams

Modeling to Learn

Test don't guess.

Results Dashboard



MTL tools helps frontline staff find the best local changes faster.

Modeling to Learn

Test don't guess.



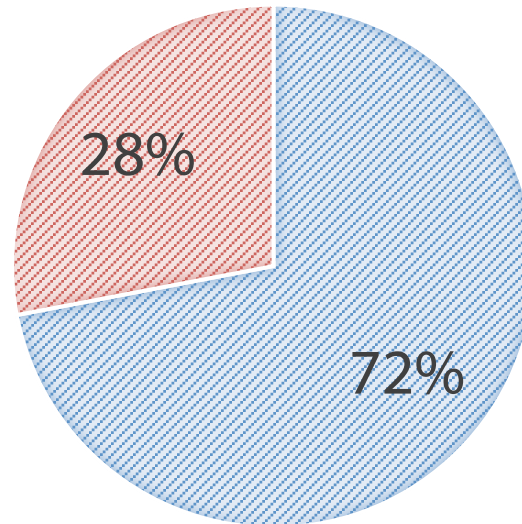
Look before you leap.



Measure twice cut once.

We define limited EBP reach among our patient population as a system behavior.

■ Other services ■ Evidence-based practices



Source: VA Strategic Analytics for Improvement and Learning, FY 2017



MTL Theory of Change

National Center for PTSD

Employee Education
Services

Office of Mental Health &
Suicide Prevention

OUR STAKEHOLDERS

VA policy-makers, patients, providers (psychiatry, psychology, social work, nursing, & certified peer support specialists)

Veteran Patients (VAPOR)

Veterans
Engineering
Resource Center

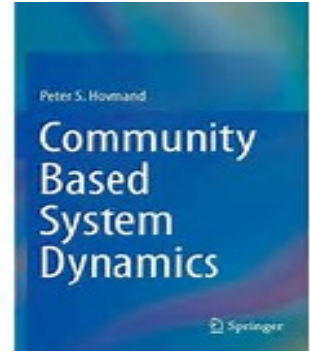
Director of Outpatient
Mental Health, MD

Core Modeling Group of
Frontline Staff

Frontline
Teams

Our approach – Participatory Research:

A partnership approach to research that equitably involves stakeholders in all aspects of the research process and in which all partners contribute expertise and share decision-making and ownership.



MTL focuses on learning

Scientific Model	Problem	<i>Drawn from Hovmand (2014)</i> Why problems persist
	Learning	Stakeholders cannot or do not learn and adapt to their situation.
Subjective	Coordination	Conflict or lack of stakeholder consensus.
	Analysis	Policies are inconsistent with the real system constraints.
Objective	Restructuring	The underlying structure of the system prevents workable solutions.

Modeling to Learn

Test don't guess.

Adm Policy Ment Health
DOI 10.1007/s10488-016-0754-1

ORIGINAL PAPER

Participatory System Dynamics Modeling: Increasing Stakeholder Engagement and Precision to Improve Implementation Planning in Systems

Lindsey Zimmerman^{1,2} · David W. Lounsbury³ · Craig S. Rosen^{1,4} ·
Rachel Kimerling¹ · Jodie A. Trafton^{4,5} · Steven E. Lindley^{4,6}



Administration and
Policy in Mental Health

AND

Mental Health Services
Research

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Springer

Target State: Lean SMART Goal

By April 2015, 40% of patients newly seen in outpatient mental health at Menlo Park for depression, PTSD, or anxiety disorders will have two psychotherapy visits completed within 28 days from time of intake assessment.

Specific.
Measurable.

Actionable: if never achieved morale may suffer.

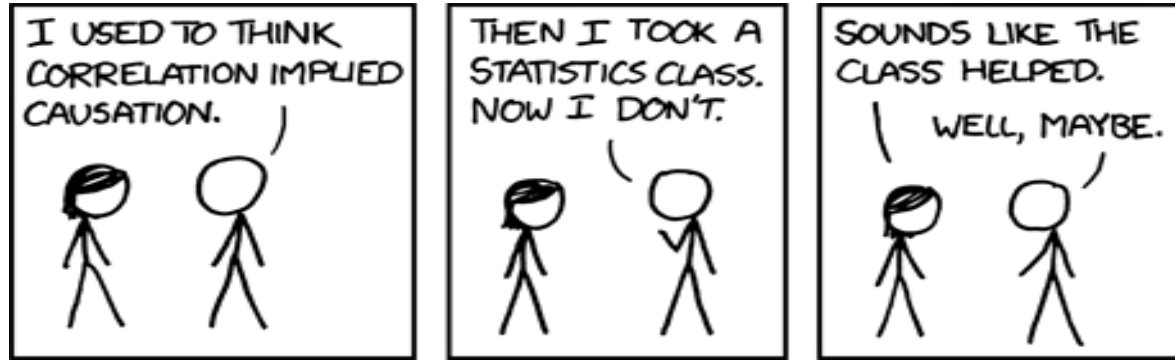
Realistic: with the available resources.

Time frame: A due date

Local clinic differences.

Menlo Park	Stockton
3548 unique patients/year	2043 unique patients/year
Lower caseload per provider	Higher caseload per provider
Rare wait for initial appointment	Occasional waitlist to get into clinic
5.2 psychiatrists per 9 EBPsy providers	3.0 psychiatrists per 4 EBPsy providers
Higher EBPsy providers/MD ratio	Lower EBPsy provider/MD ratio
Higher EBPsy base rate	Higher EBPharm base rate
Providers often self refer for EBPs	Referrals to other providers by necessity
Multiple on-site specialty programs	Only telehealth specialty care
Training program site multiple disciplines	No trainees providing care
Most groups "open" (ongoing enrollment)	Most groups "closed" (infrequent opening)
Shorter time to next available appointment	Longer time to next available appointment

What works to improve EBP reach, why, and under what conditions?

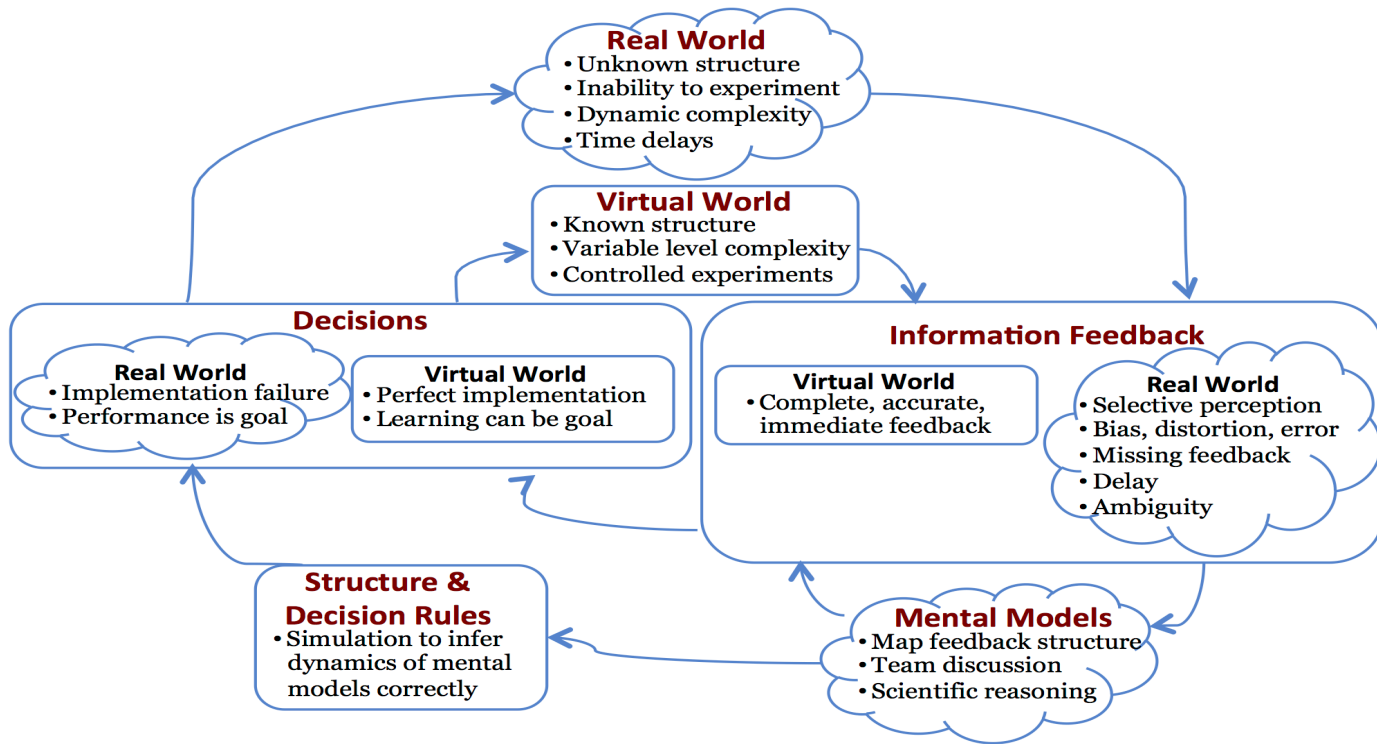


xkcd.com

Understanding causes of EBP reach, in local context, is critical to our stakeholders.

Why is PSD effective?

Two Causal Theories: Systems and Decision Science



Sterman, 2000; Sterman 2006



MTL Theory of Change

Modeling to Learn



Test don't guess.

Virtual
Facilitation


Transparent
Local Data

Real-time
Simulation

1. Equitable access to resources.
2. Mutual learning.
3. Shared decision-making.


Why is PSD effective?


Facilitation to develop '*Systems Thinking*.'

 Outputs

samplefile.xls

< BACK


 Medication Management





Our Question

Briefly describe what your team wants to learn from this experiment.

If we get an increase in opioid use disorder referrals, will it increase the wait-time for 🏠

 Save

 Copy


 Export

Calendar - Week 02

0 10


010

Advance End Wks




Our Hypothesis

Outline the systems story your team believes will cause the outcomes your team expects to observe.



Our Findings

Describe your team's findings, insights and conclusions from this experiment.



Our Decisions

Based on what was learned in this experiment, what changes is the team ready to make in their practice?

We developed a secure website for reviewing team trends over time.

BISL CDW VISNs



BISL

PTSD_OMHO

Drill Down To Your Team

Request New Team Folder

Request Team Membership Change

PTSD_OMHO

Pages

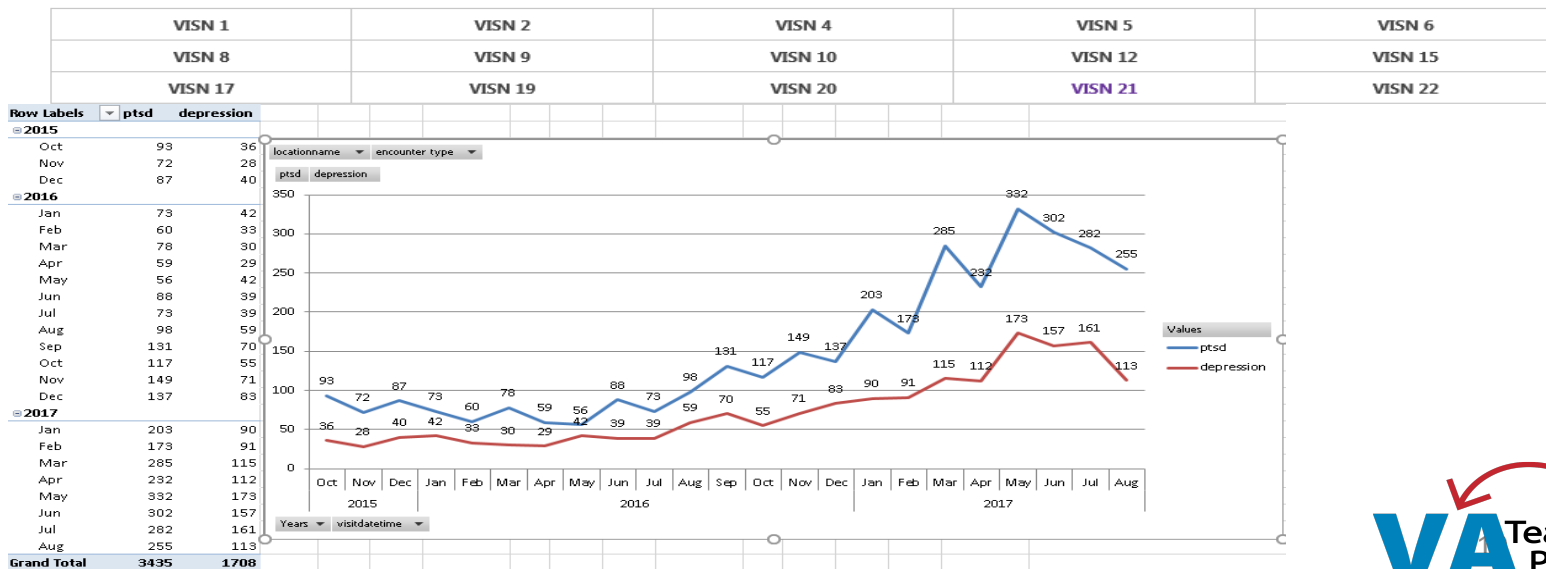
Administrative

User Guide

Contact Us

Site Contents


Select Your VISN




MTL resources help teams
look back two years
and look ahead two years.



“Staff” and “Time” barriers as dynamics.

 **Experiments**

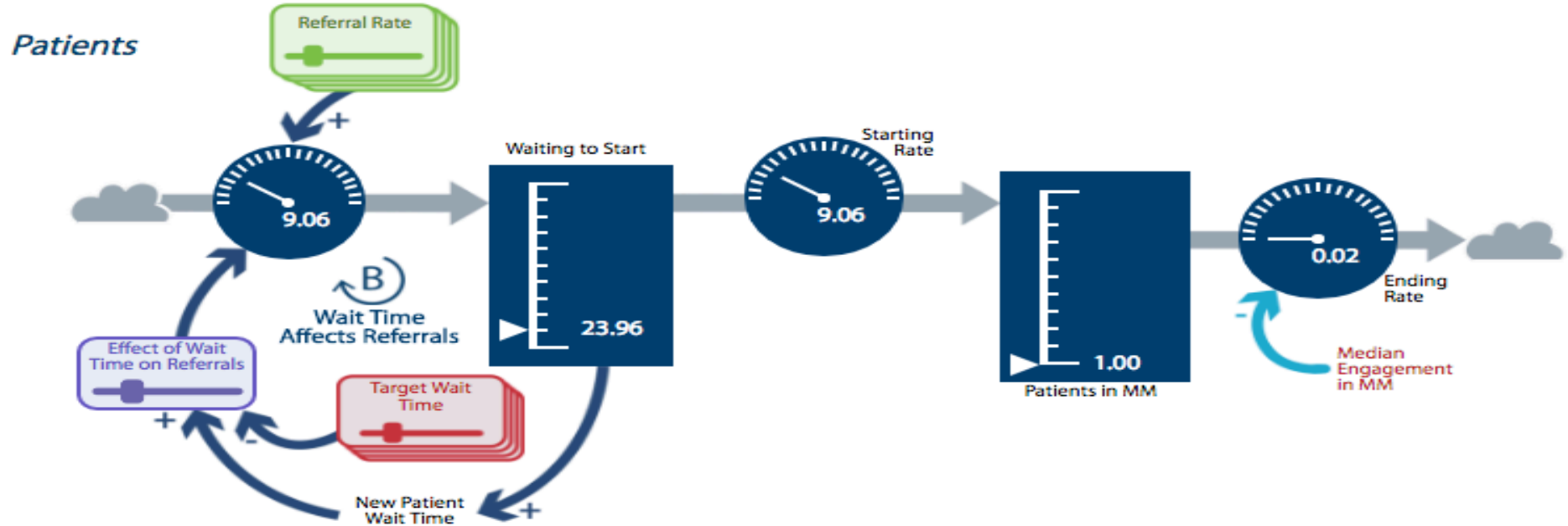
 **Use Team Data for Starting Rate**
ON ☒ OFF

Team Data

Appointment Supply (Appt/Week)	75			
% Appointment Slots (has X-Waiver)	50			
	AUD	DEP	OOD	Other
Median Engagement in MM (Week)	128.14	113.14	101.86	127
Return Visit Interval (Week)	20	19	20	21
True Missed Appointment % (%)	20.64	28.19	33.78	21.44
Starting Rate (Patient/Week)	0.08	3.52	0.04	23.12
Target Wait Time (Week)	1.64	4.5	2.57	4.71
Slots Allocation (w/X Waiver) (%)	0.39	16.16	0.11	83.35
Slots Allocation (No X Waiver) (%)	0.39	16.17	0	83.44

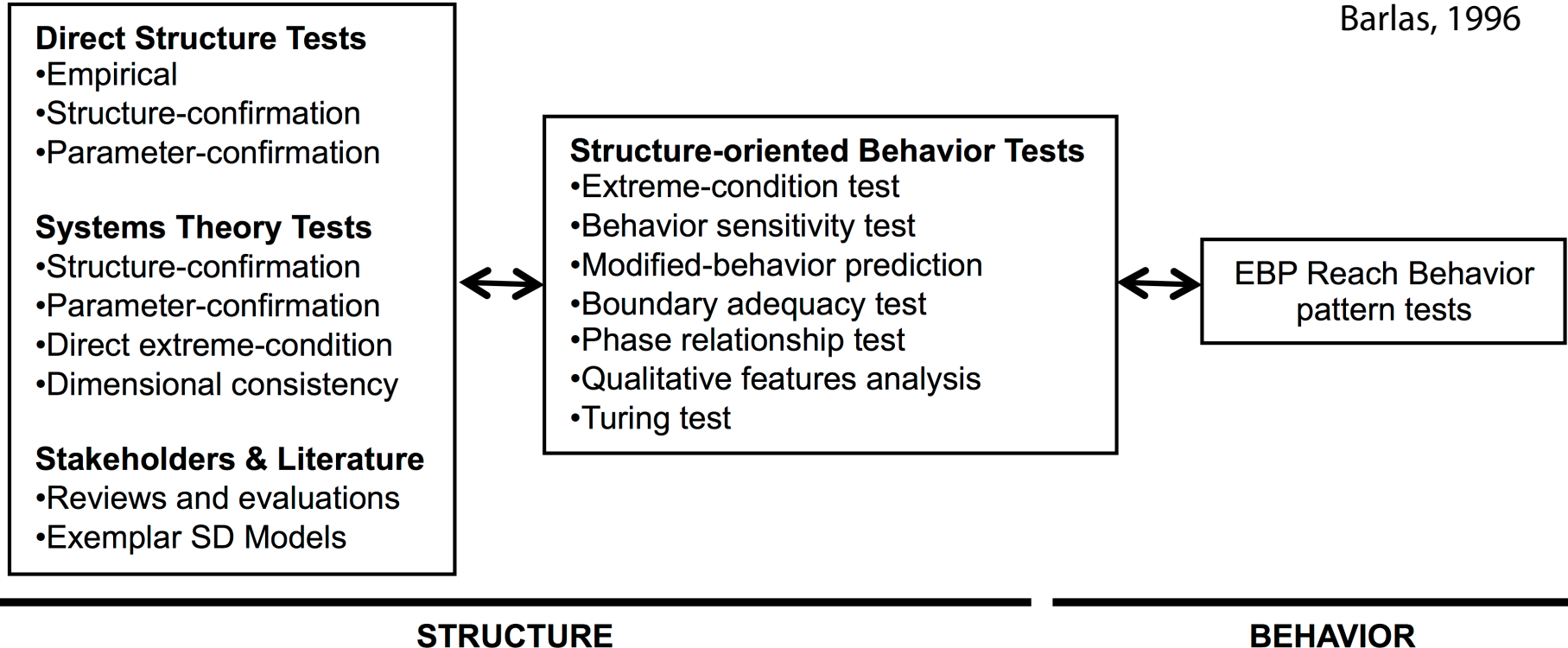
Why is PSD effective?

Facilitation to develop systems thinking.

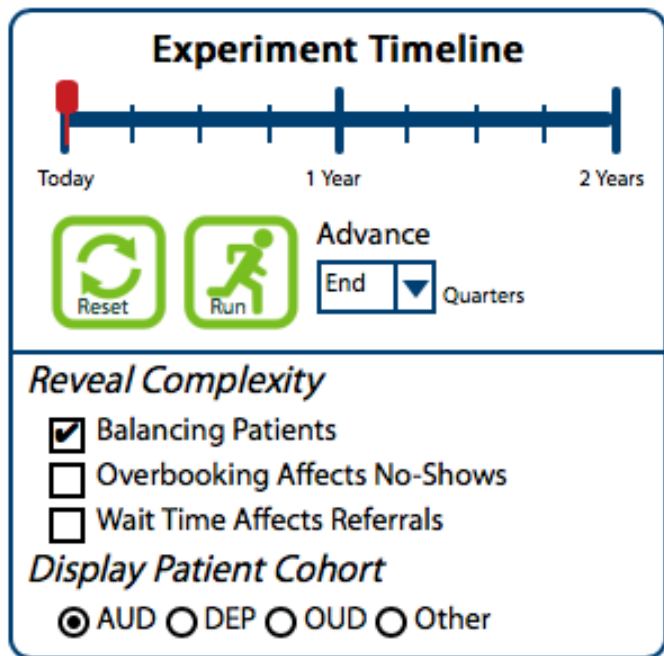


Saturation achieved during structural behavioral validity testing.

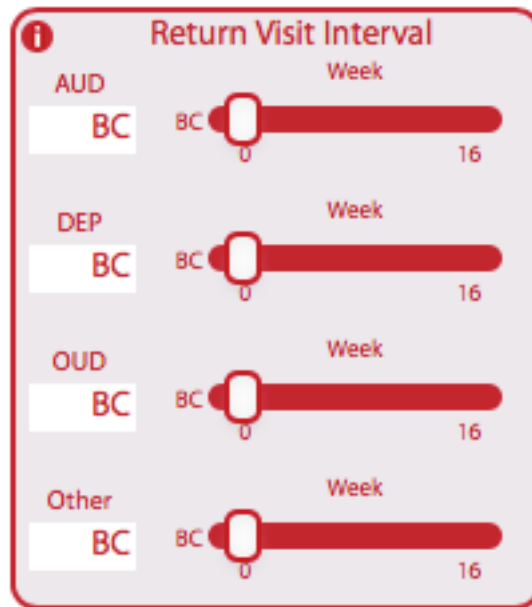
Barlas, 1996



“Staff” and “Time” barriers as dynamics.

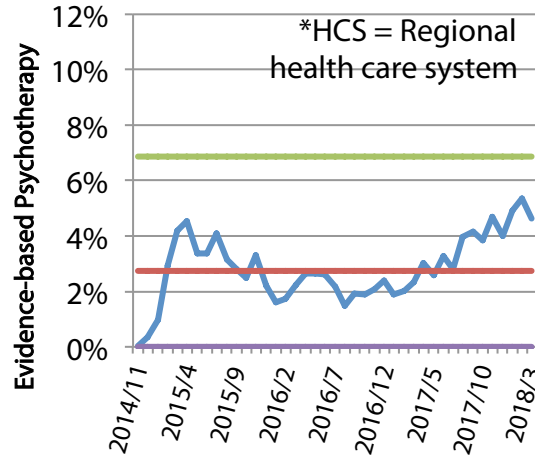


Engagement Pattern

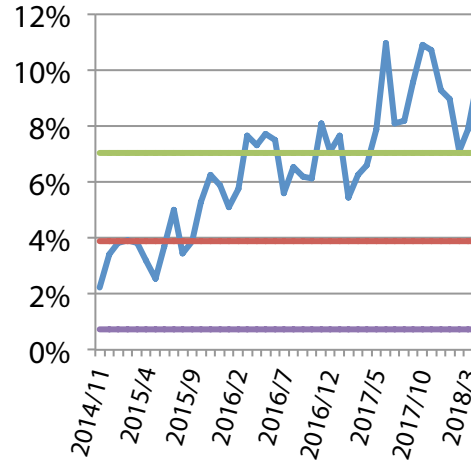


Is PSD/MTL effective for improving EBP reach? Strong signal in R21 pilot clinics.

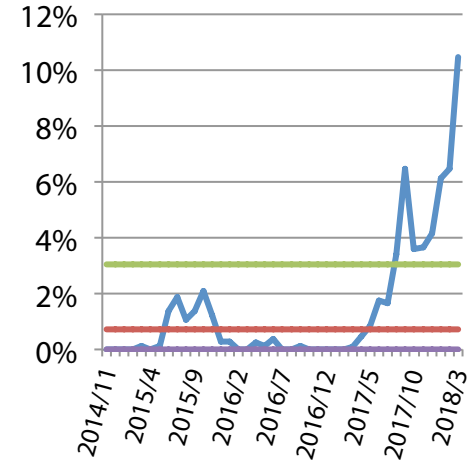
Other 7 clinics
from same *HCS



PSD Partner Clinic 1



MTL Partner Clinic 2



Key:

Green = Upper control limit (UCL)

Red = 12-month pre-PSD EBP proportion

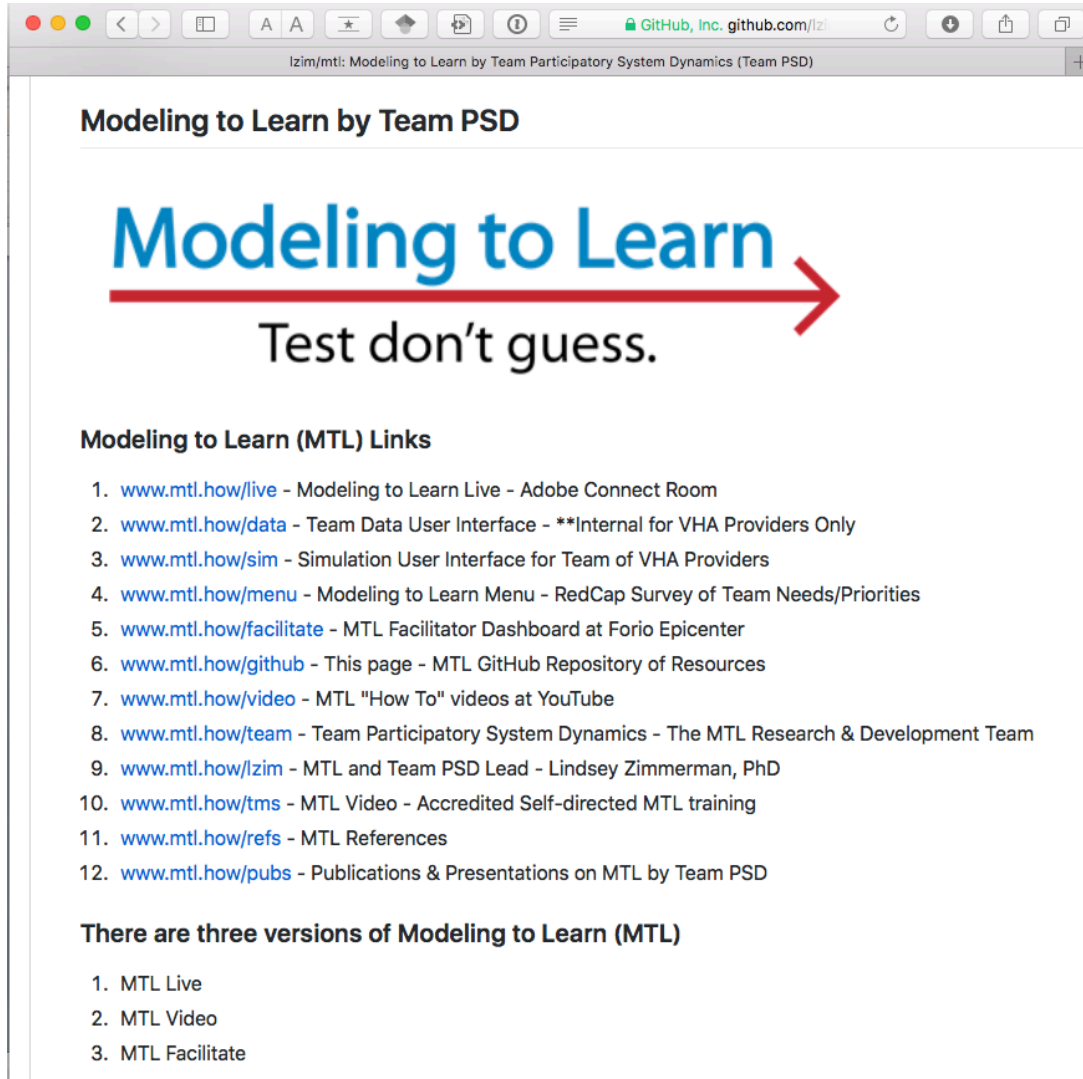
Purple = Lower control limit (LCL)

SD = standard deviations

mtl
mtl.how

VA Team
PSD

mtl.how



The screenshot shows a web browser window with the address bar displaying 'Izlim/mtl: Modeling to Learn by Team Participatory System Dynamics (Team PSD)'. The page content includes the title 'Modeling to Learn by Team PSD', a large blue heading 'Modeling to Learn' with a red arrow pointing right, and the text 'Test don't guess.' below it. A section titled 'Modeling to Learn (MTL) Links' contains a numbered list of 12 links. At the bottom, a section titled 'There are three versions of Modeling to Learn (MTL)' contains a numbered list of 3 items.

Modeling to Learn by Team PSD

Modeling to Learn

Test don't guess.

Modeling to Learn (MTL) Links

1. www.mtl.how/live - Modeling to Learn Live - Adobe Connect Room
2. www.mtl.how/data - Team Data User Interface - **Internal for VHA Providers Only
3. www.mtl.how/sim - Simulation User Interface for Team of VHA Providers
4. www.mtl.how/menu - Modeling to Learn Menu - RedCap Survey of Team Needs/Priorities
5. www.mtl.how/facilitate - MTL Facilitator Dashboard at Forio Epicenter
6. www.mtl.how/github - This page - MTL GitHub Repository of Resources
7. www.mtl.how/video - MTL "How To" videos at YouTube
8. www.mtl.how/team - Team Participatory System Dynamics - The MTL Research & Development Team
9. www.mtl.how/izim - MTL and Team PSD Lead - Lindsey Zimmerman, PhD
10. www.mtl.how/tms - MTL Video - Accredited Self-directed MTL training
11. www.mtl.how/refs - MTL References
12. www.mtl.how/pubs - Publications & Presentations on MTL by Team PSD

There are three versions of Modeling to Learn (MTL)

1. MTL Live
2. MTL Video
3. MTL Facilitate

*Modeling to
Learn on
GitHub*



Our aims

- develop a systems understanding of VA mental health services and the limited reach of evidence-based mental health care.
- empower mental health stakeholders to make locally optimized quality improvement decisions.



MTL Theory of Change

mtl



VAPOR introduces Modeling to Learn

What do we want you all to be able to do at the end?

1. Describe the *MTL* resources and principles for achieving the *MTL theory of change*.
2. Test questions using *MTL* resources.
3. Assess strategies for co-facilitated the *MTL Live* 12-session roll-out.

Questions?



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VAPOR (Veteran VA Consumer) Board

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