Modeling to Learn

Test. Don't guess.

Session1: Helping Teams Find Local Improvements to Meet Veterans' Needs

@LZPhD

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Poll 1: I am a…

Please select all that apply.

A. Veteran
B. Frontline provider or clinician
C. Researcher
D. Healthcare leader/policy maker
E. Another professional role

HSR&D cyberseminars

This is session 1 of a four part series.

Date	Title	Focus
May 2, 2019 12noon Pacific/3PM Eastern	Introducing *Modeling to Learn* Helping Teams Find Local Improvements to Meet Veterans' Needs	mtl mtl.how
May 9, 2019 12noon Pacific/3PM Eastern	Introducing Measurement Based Stepped Care for Suicide Prevention	mtl session 6 systems story mtl session 7 base case
May 16, 2019 12noon Pacific/3PM Eastern	Comparing Measurement Based Care and Stepped Care for Suicide Prevention	mtl session 8 dynamic hypothesis mtl session 9 compare alternatives
May 22, 2019 12noon Pacific/3PM Eastern	Putting it Together: Combining Measurement Based Stepped Care for Suicide Prevention	mtl session 10 systems thinking

Poll 2: I am here to…

Please select all that apply.

A. …learn more about suicide prevention.
B. …learn more about measurement based care.
C. …learn more about stepped care.
D. …learn more about *Modeling to Learn*.
E. …get continuing education credit.

Registration

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Session 1 Learning Objectives

1. Describe the advantages of teams testing their own hypotheses about improvement plans using local team data.
2. Compare the advantages of team simulation learning against to trial-and-error learning in the real-world.
3. Identify ways systems thinking helps teams evaluate both the risks and benefits of clinic changes over time.

CE Accredited

Registration

https://www.hsrd.research.va.gov/cyberseminars/catalog-upcoming.cfm

Modeling to Learn

overall learning objectives
include activities and competencies that…

1. …are meaningful for you and align your learning goals with your team

2. …develop systems thinking skills and help you to see how several things fit together and understand causes that are hard to see without data and modeling resources

3. …make VA data, initiatives and standards transparent to you

4. …empower you to realize ongoing improvements in team quality of care and team quality of work life

Principles of the open science movement:

- collaborative
- free and open
- transparent and reproducible science.

Modeling to Learn

Test. Don't guess.

***Modeling to Learn* Links**

1. www.mtl.how/live - *Modeling to Learn* Live Sessions - Adobe Connect Room
2. www.mtl.how/data - Team Data User Interface - **Internal for VHA Providers Only
3. www.mtl.how/demo - Simulation Demonstration Self-Registration
4. www.mtl.how/sim - Simulation User Interface for Teams in *MTL Live*
5. www.mtl.how/menu - *Modeling to Learn* Menu - RedCap Survey of Team Needs/Priorities
6. www.mtl.how/facilitate - MTL Facilitator Dashboard at Forio Epicenter
7. www.mtl.how/github - This page - MTL GitHub Repository of Resources
8. www.mtl.how/video - MTL "How To" videos at YouTube
9. www.mtl.how/team - Team Participatory System Dynamics - The MTL Research & Development Team
10. www.mtl.how/lzim - MTL and Team PSD Lead - Lindsey Zimmerman, PhD
11. www.mtl.how/tms - VA TMS 2.0 Learning System for Accreditation
12. www.mtl.how/refs - MTL References
13. www.mtl.how/pubs - Publications & Presentations on MTL by Team PSD

HSR&D cyberseminars

Our series will focus on these two resources.

mtl.how

Session guides, links, and cheatsheets.

mtl.how/demo

Self-register
Course Code: cybersem

Poll Question 3: This four part series focuses on which two *MTL* resources?

Please select all that apply.

A. Modeling to Learn *Live*
B. Modeling to Learn *Demo*
C. Modeling to Learn *Data*
D. Modeling to Learn at *mtl.how*
E. All of the above

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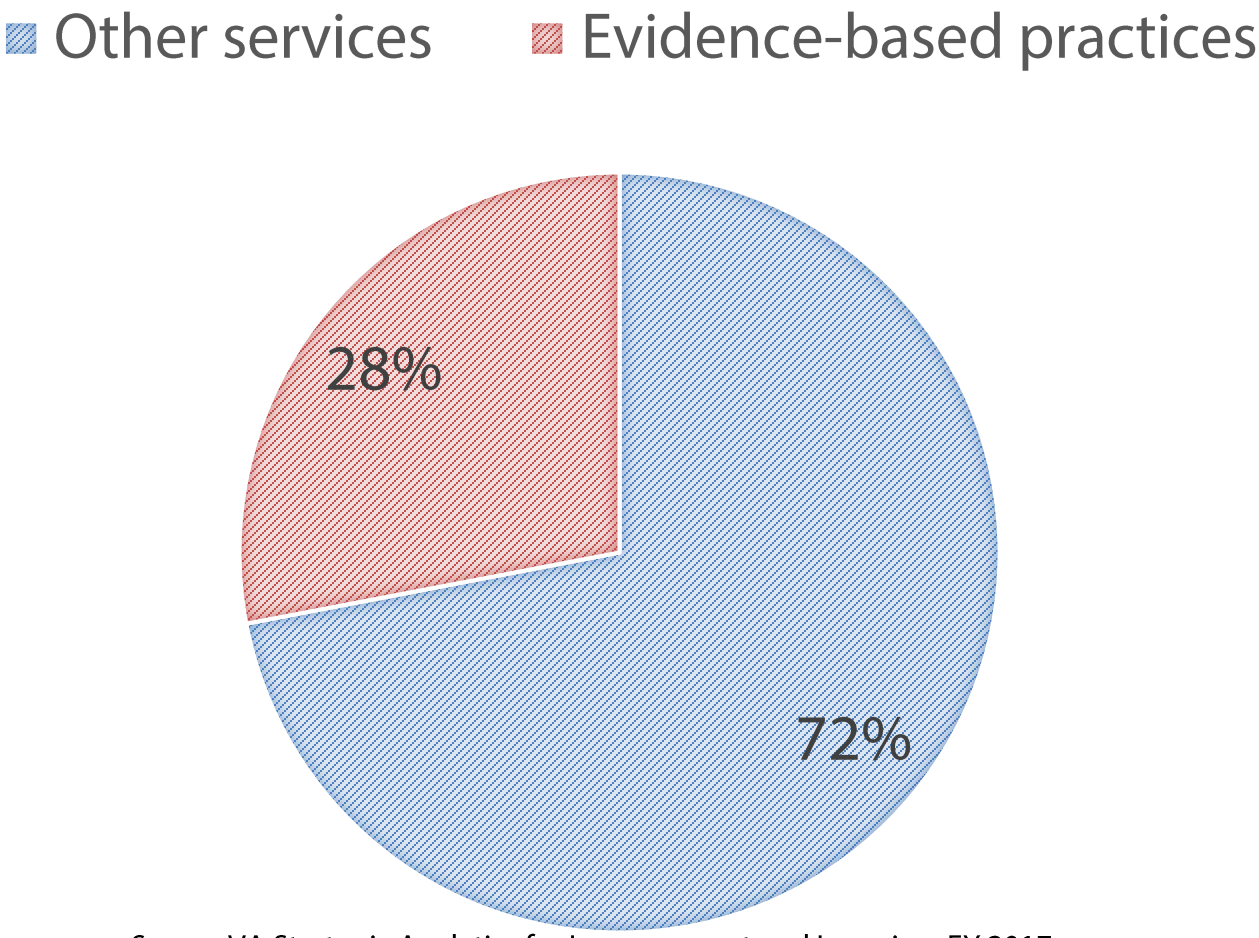
Modeling to Learn

We will have new learning opportunities this year.
But, these are not covered in this HSRD Cyberseminar.

How can we reach more patients with our highest quality care?



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

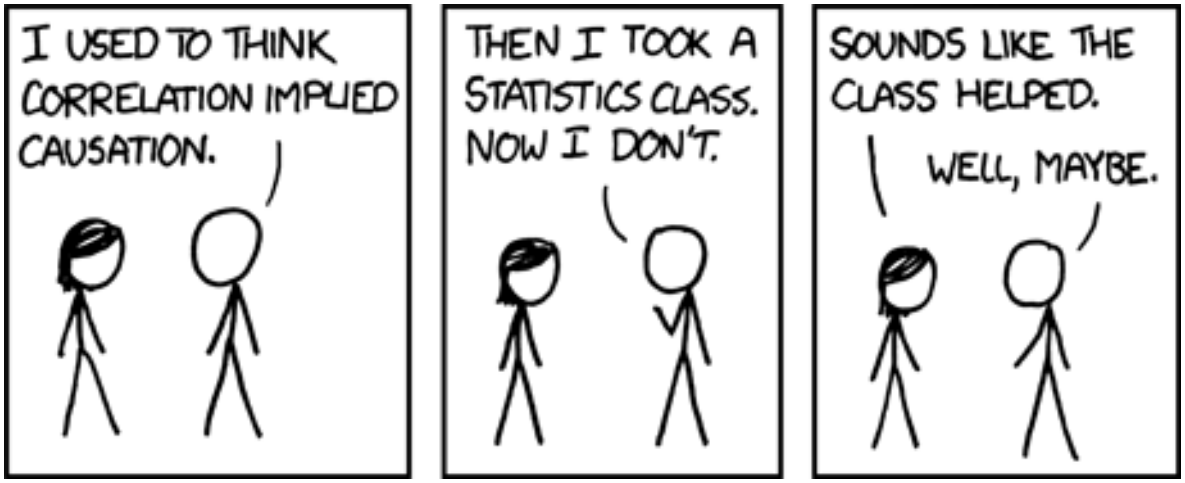
Veterans Health Administration

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

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.

OUR STAKEHOLDERS

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

VAPOR introduces Modeling to Learn

https://mtl.how/intro

Our PSD 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.

Hovmand, 2014; Oetzel et al., 2018

Participatory Research is an epistemology.

- Scientific inquiry that that actively considers the scope of current knowledge, its limits and validity.
- Participatory research asks, what knowledge is privileged or absent?

MTL focuses on learning among frontline teams making EBP-related care decisions.

Drawn from Hovmand 2014 & Scaccia et al., 2015

Scientific Model	Problem	Why problems persist
General Capacity	Learning	Stakeholders cannot or do not learn and adapt to their situation.
	Coordination	Conflict or lack of stakeholder consensus.
EBP Specific Capacity	Analysis	Policies are inconsistent with the real system constraints.
	Restructuring	The underlying structure of the system prevents workable solutions.

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.

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Local clinic strategies are needed to address local differences.

Clinic 1	Clinic 2
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

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.

Systems Science: interdisciplinary theory and methods for understanding complexity.

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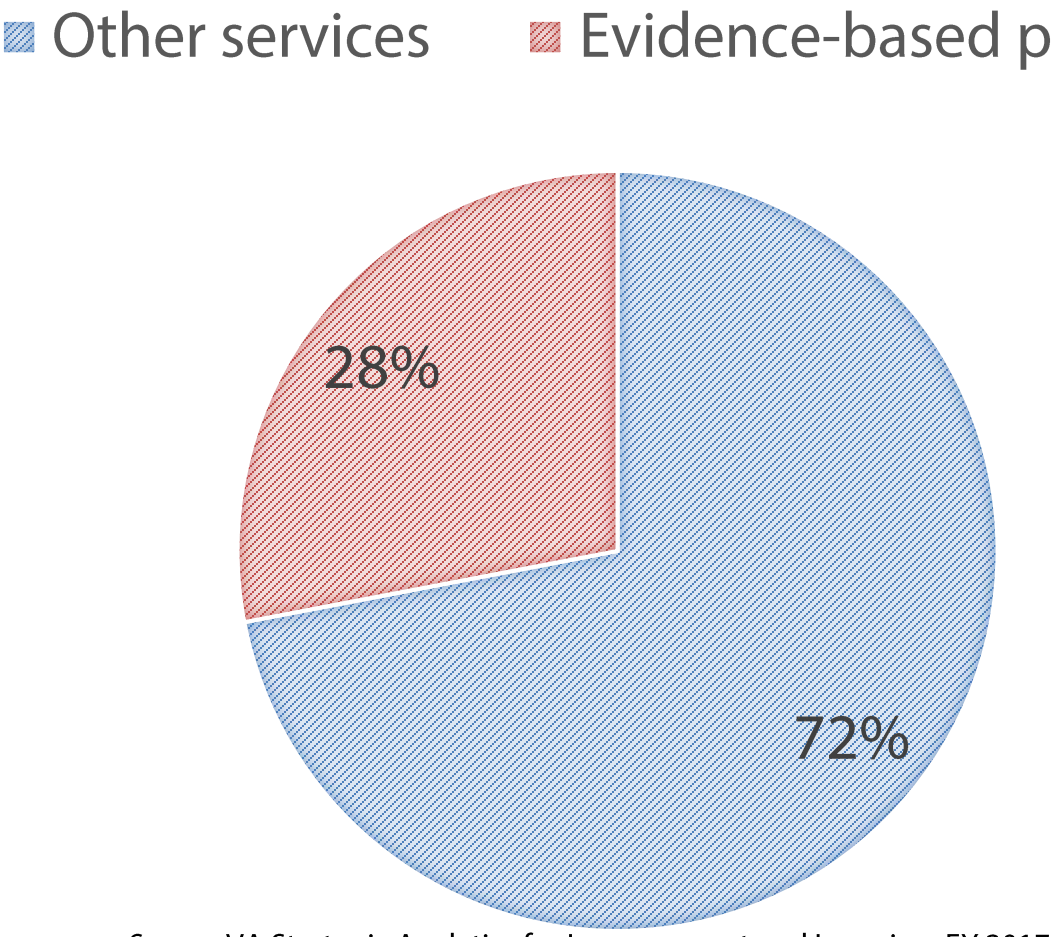
We define limited reach of high quality care among our patient population as a system behavior.



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

Find out more about our early work by downloading this paper at mtl.how/demo.

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. Lounsbury[3] · Craig S. Rosen[1,4] · Rachel Kimerling[1] · Jodie A. Trafton[4,5] · Steven E. Lindley[4,6]

Administration and Policy in Mental Health AND Mental Health Services Research
Volume 43 • Number 5 • September 2016
Springer

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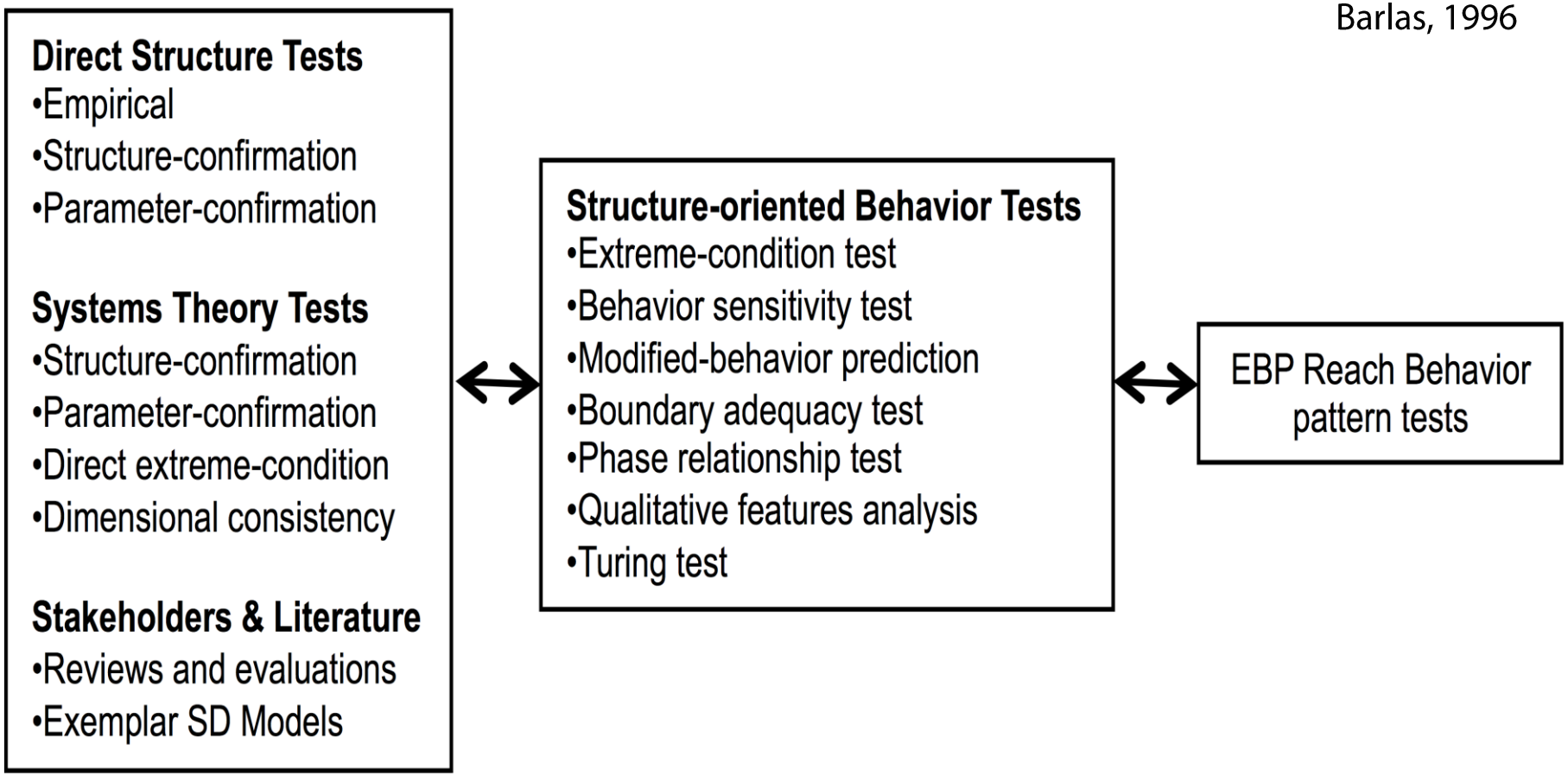
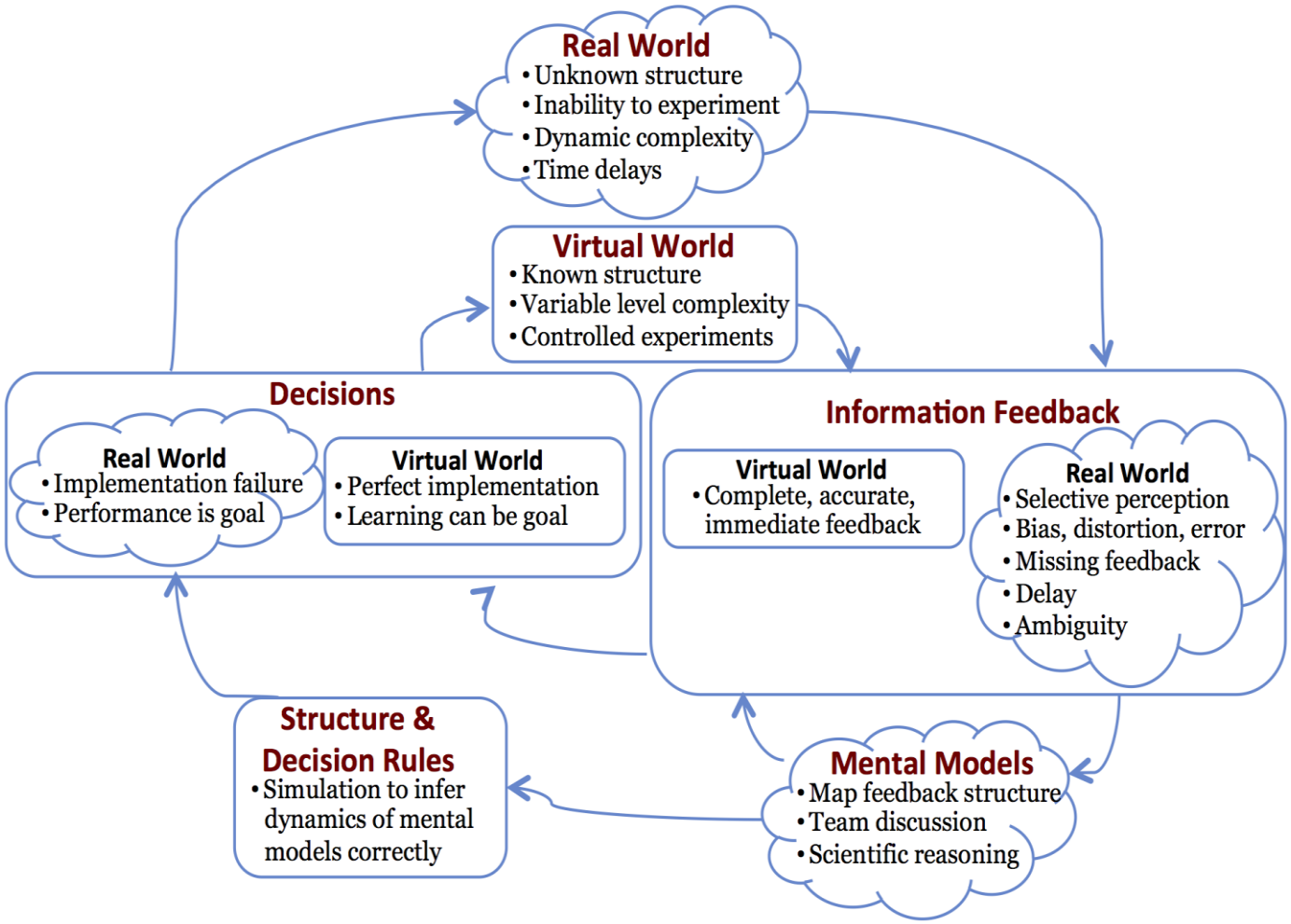
VA Team PSD

Saturation achieved during structural behavioral validity testing.

Barlas, 1996



Why is PSD effective?
Two Causal Theories: Systems and Decision Science



Nilsen, 2015; Sterman, 2000, 2006

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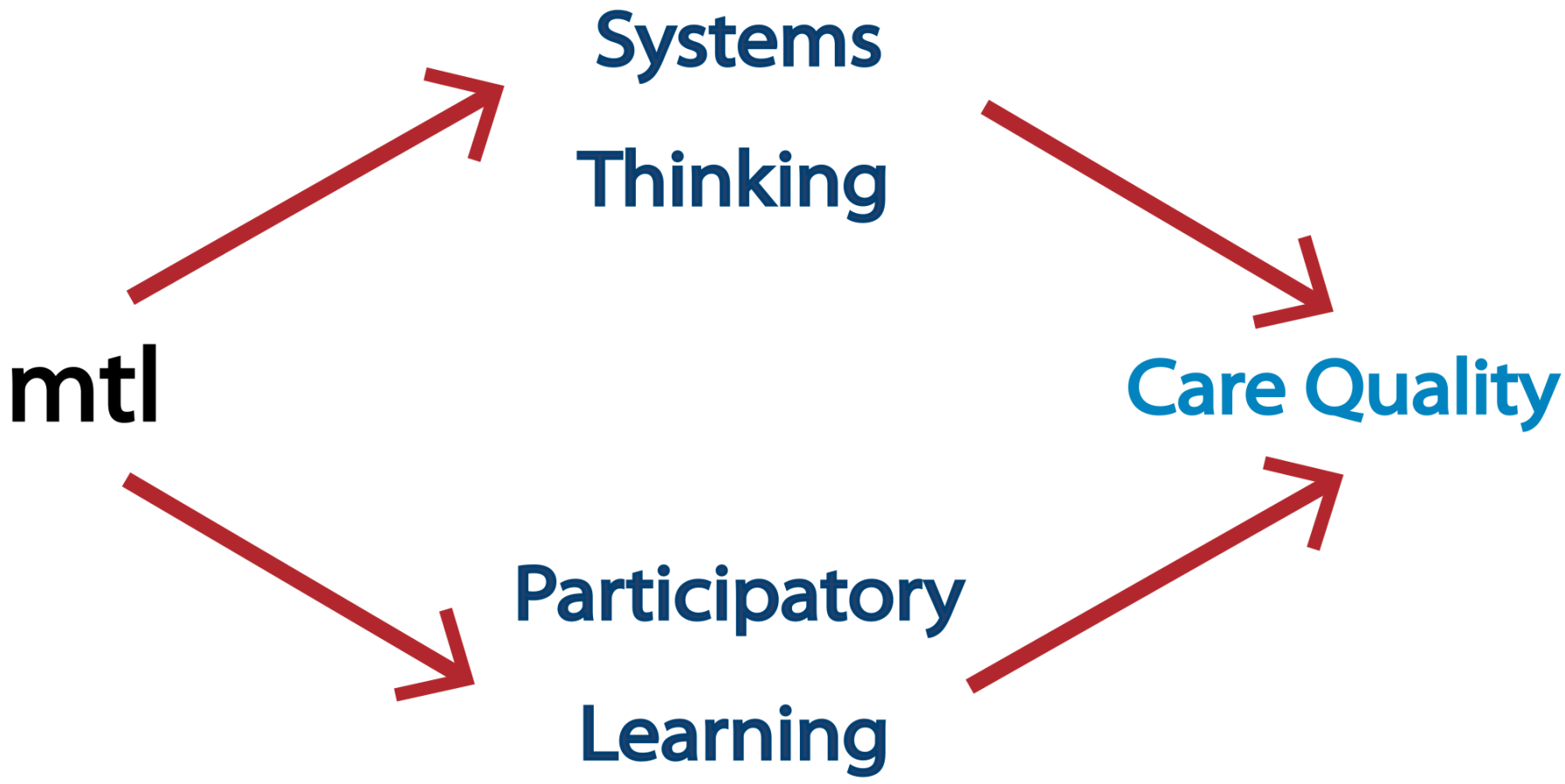
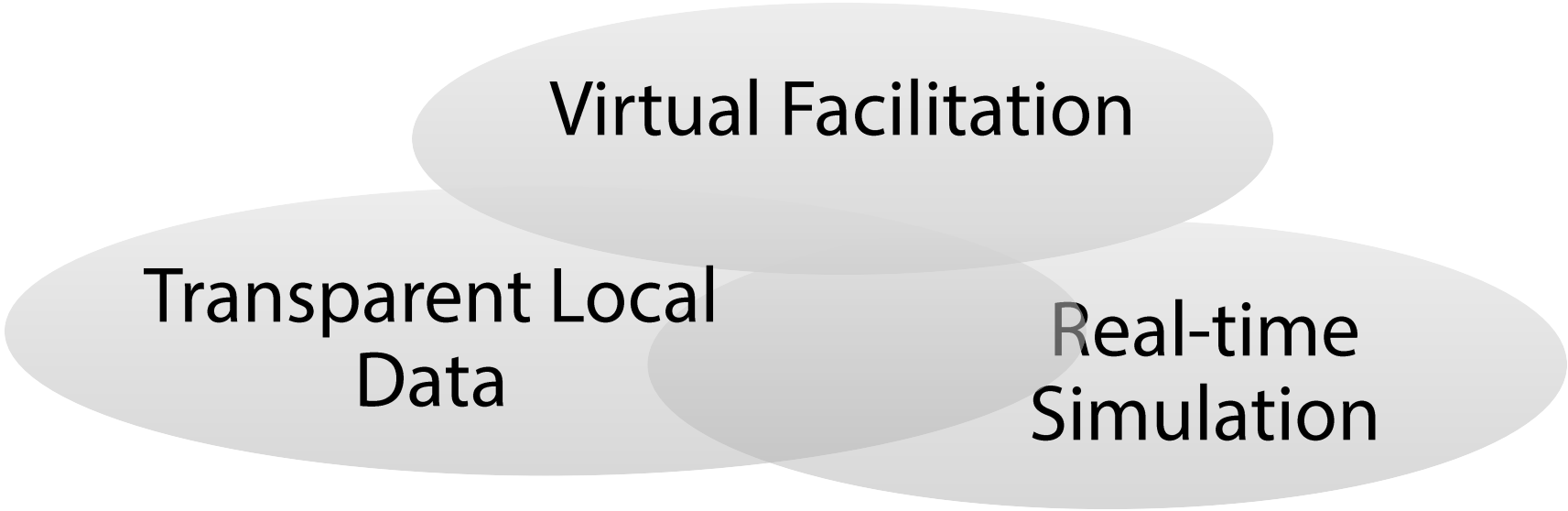
Modeling to Learn

Theory of Change



Modeling to Learn

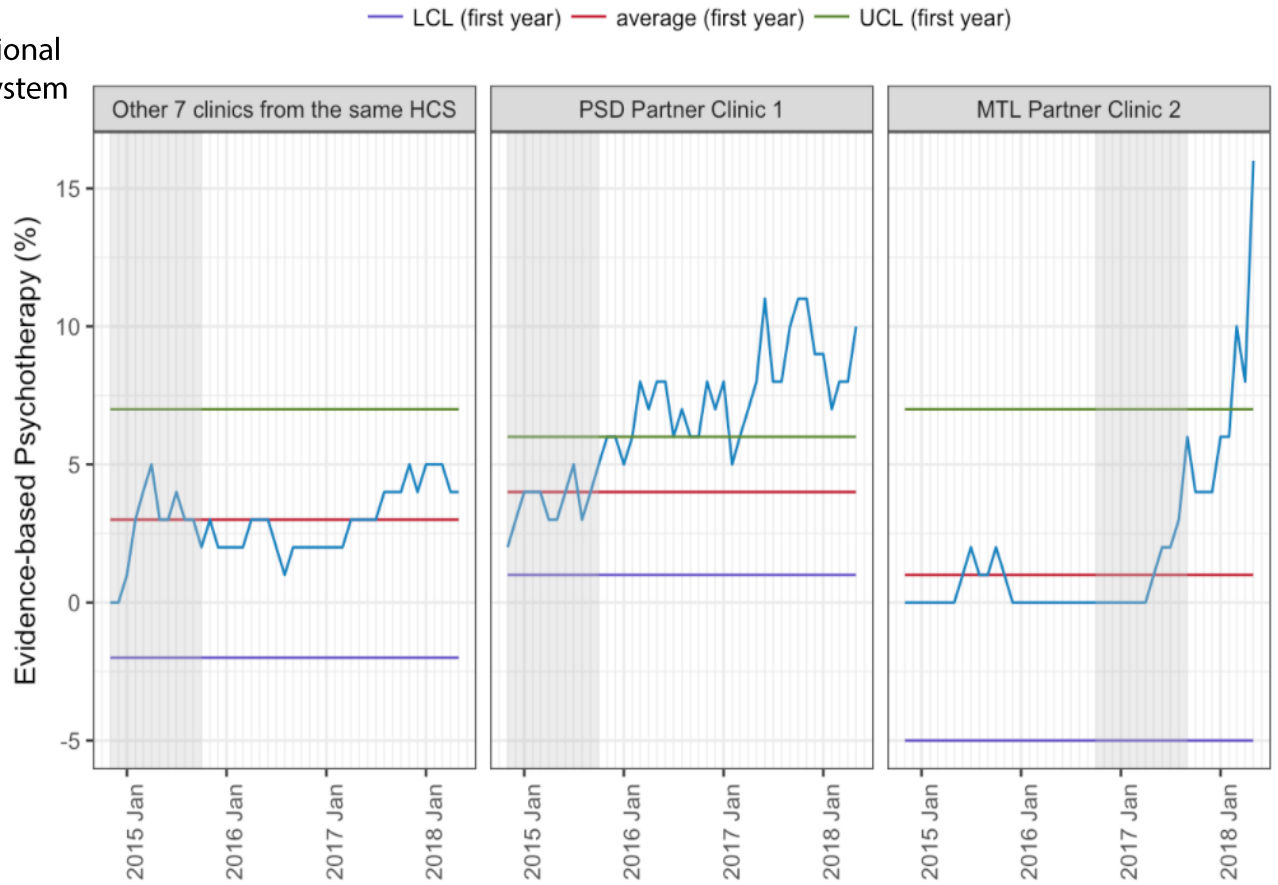
Test. Don't guess.



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

Is *MTL* effective for improving quality? Strong preliminary signal in pilot clinics.

*HCS = Regional health care system



12 mos. sustained sig. improvement + 3 *SD* (α = .003)

8 mos. sustained sig. improvement + 3 *SD* (α = .003)

Key:
Green = Upper control limit (UCL)
Red = 12-month pre-PSD EBP proportion
Purple = Lower control limit (LCL)
SD = standard deviations

Participatory Learning to develop *Systems Thinking.*

MTL Fidelity Checklist for 12-session Plan

Sesson Summaries across *MTL* Modules

session 01. Today we're *modeling to learn* how to align our **team vision.**

session 02. Today we're *modeling to learn* how to check our **patient data** and **team trends.**

session 03. Today we're *modeling to learn* how to produce **team data** for simulation.

session 04. Today we're *modeling to learn* how to prioritize **team needs.**

session 05. Today we're *modeling to learn* how to log-in to our **team world.**

session 06. Today we're *modeling to learn* how to tell a **systems story.**

session 07. Today we're *modeling to learn* how to evaluate our **base case** of no new decisions.

session 08. Today we're *modeling to learn* how to test a **dynamic hypothesis.**

session 09. Today we're *modeling to learn* how to **compare alternatives.**

session 10. Today we're *modeling to learn* how to use **systems thinking.**

session 11. Today we're *modeling to learn* how to make future **team decisions.**

session 12. Today we're *modeling to learn* how to turn **team learning** into a **team plan.**

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

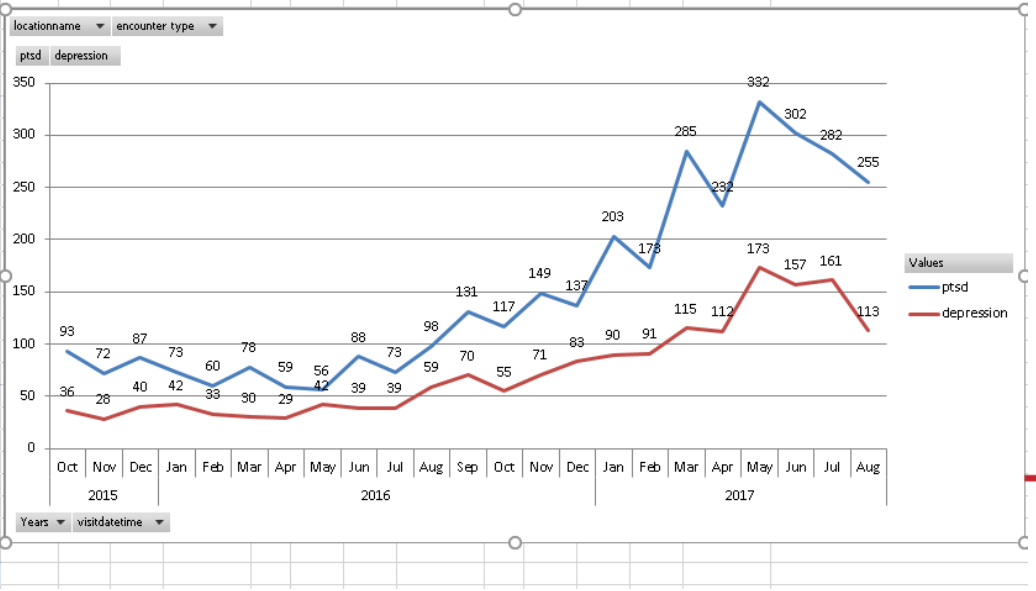
PTSD_OMHO

Pages
Administrative
User Guide
Contact Us
Site Contents

Select Your VISN

VISN 1	VISN 2	VISN 4	VISN 5	VISN 6
VISN 8	VISN 9	VISN 10	VISN 12	VISN 15
VISN 17	VISN 19	VISN 20	VISN 21	VISN 22

Row Labels	ptsd	depression
2015		
Oct	93	36
Nov	72	28
Dec	87	40
2016		
Jan	73	42
Feb	60	33
Mar	78	30
Apr	59	29
May	56	42
Jun	88	39
Jul	73	39
Aug	98	59
Sep	131	70
Oct	117	55
Nov	149	71
Dec	137	83
2017		
Jan	203	90
Feb	173	91
Mar	285	115
Apr	232	112
May	332	173
Jun	302	157
Jul	282	161
Aug	255	113
Grand Total	3435	1708



mtl.how/data

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

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mtl.how/menu

Session

Join Current Session ○

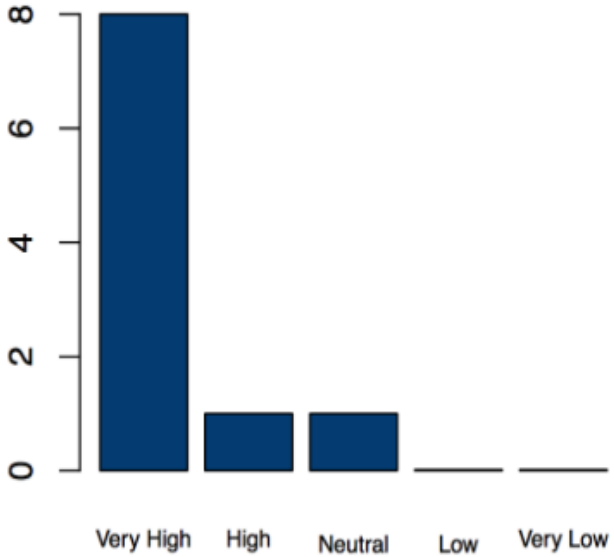
Suicide Prevention -- Week 0 100a1_abc_teama_2018_11_01.xlsx

Play

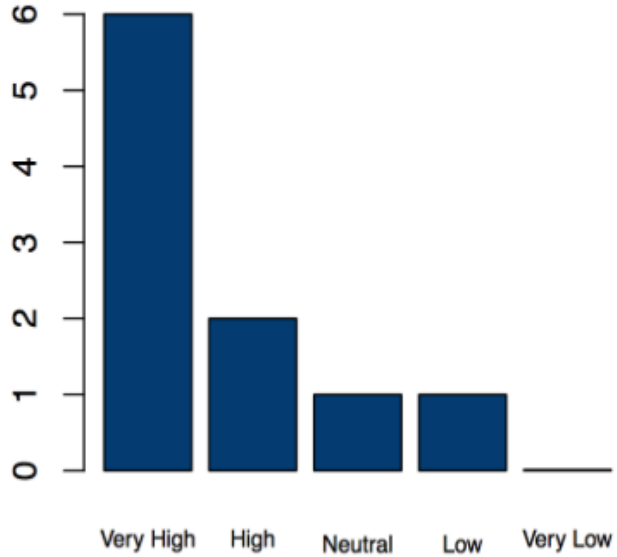
Start a New Session

- Care Coordination ○
- Medication Management ○
- Psychotherapy ○
- Aggregate ○
- Suicide Prevention ○

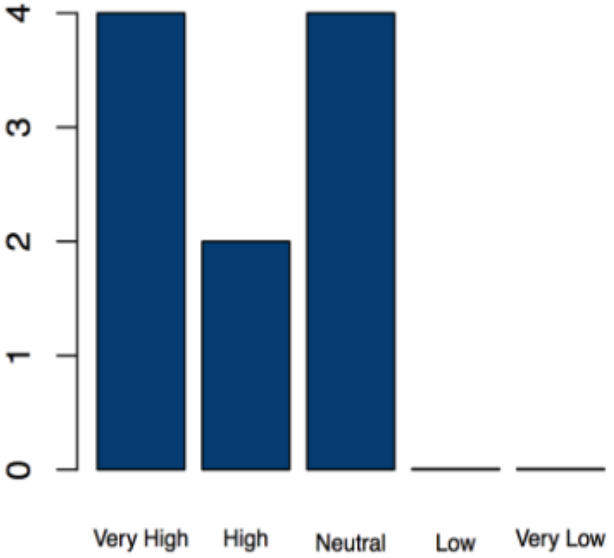
Schedule – How to manage team schedules (i.e. clinics/grids) to meet patients needs.



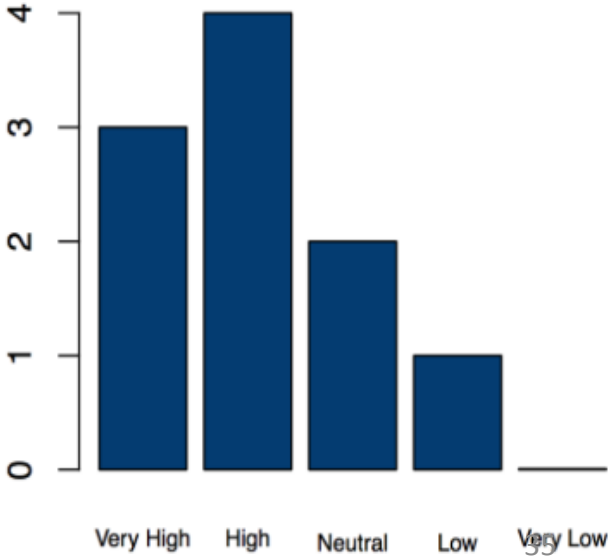
New patients – How to get new patients in care, while meeting existing patients needs.



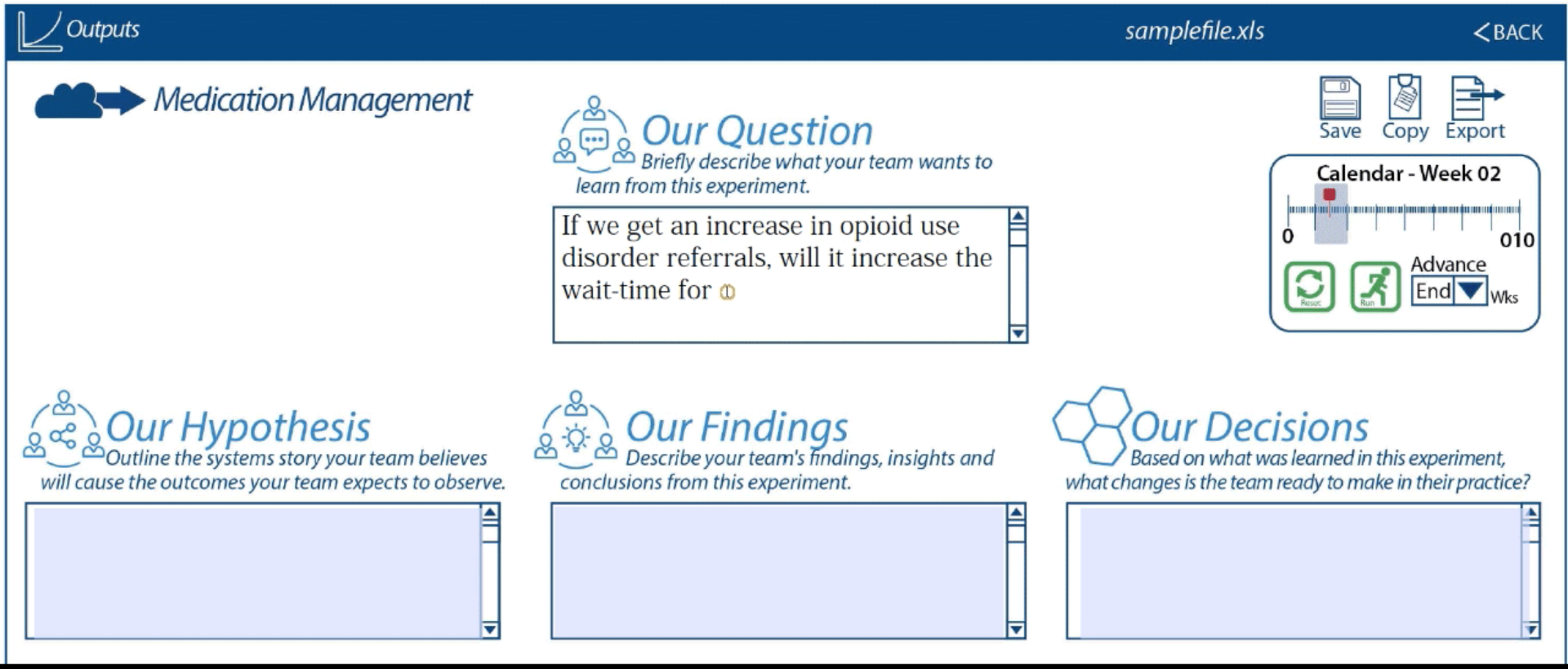
Return to clinic – How return to clinic orders free free us to get patients to the right treatment at the right time.



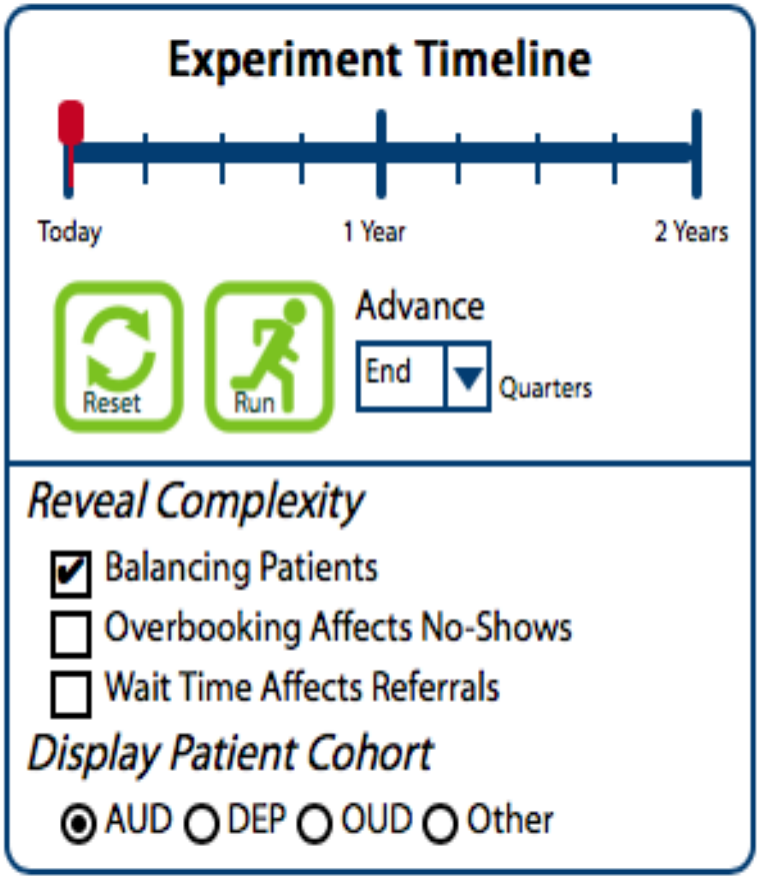
Overwork – How overbooking or overworking increases patient no shows.

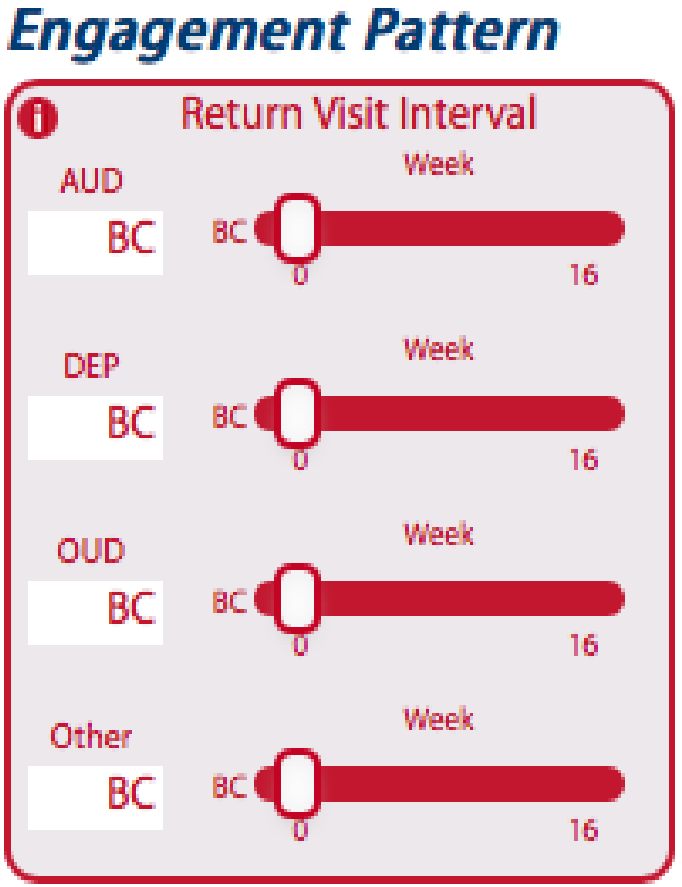


Why is *Modeling to Learn* effective?



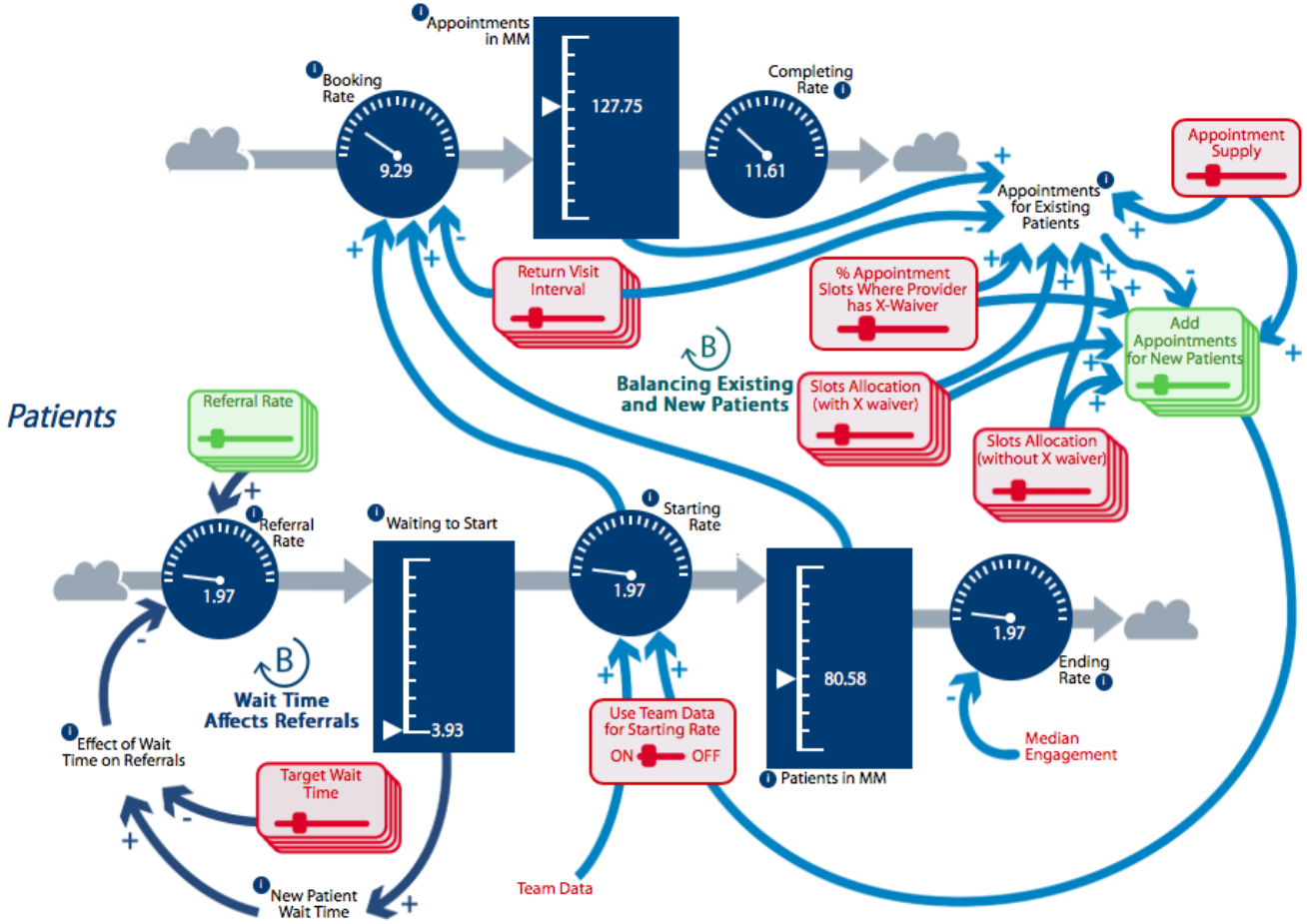
“Staff” and “Time” barriers as dynamics.





mtl.how/demo

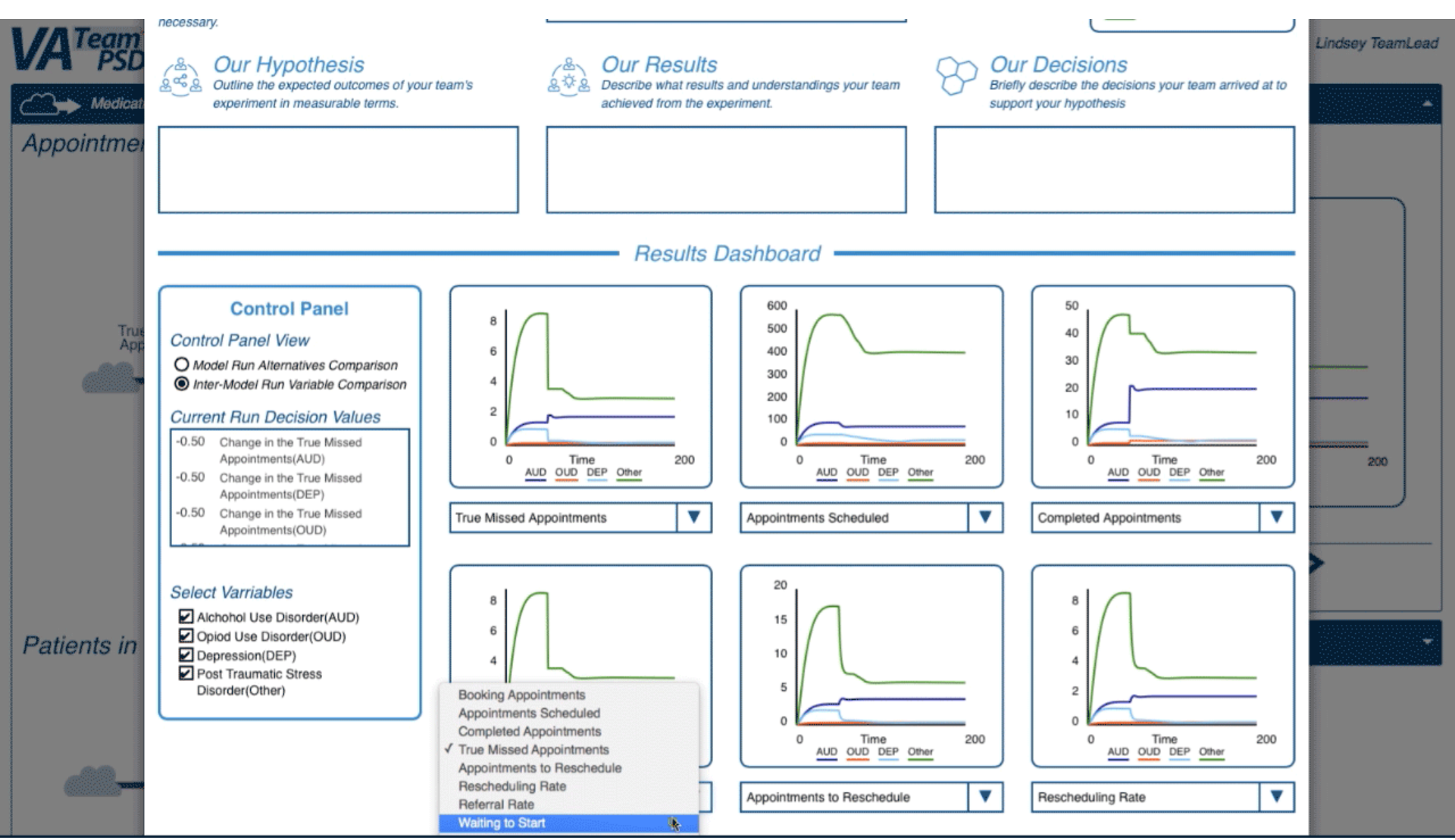
Causal mechanisms (dynamics) are made transparent for local learning.



Red =

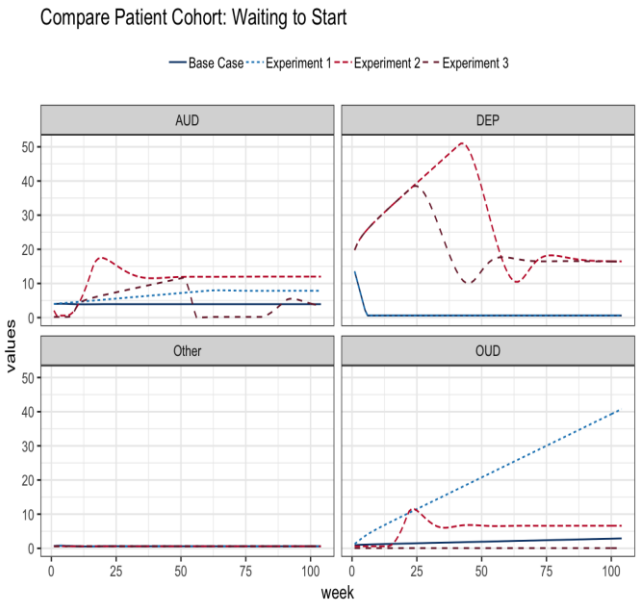
- Read in from existing team data
- Standardized

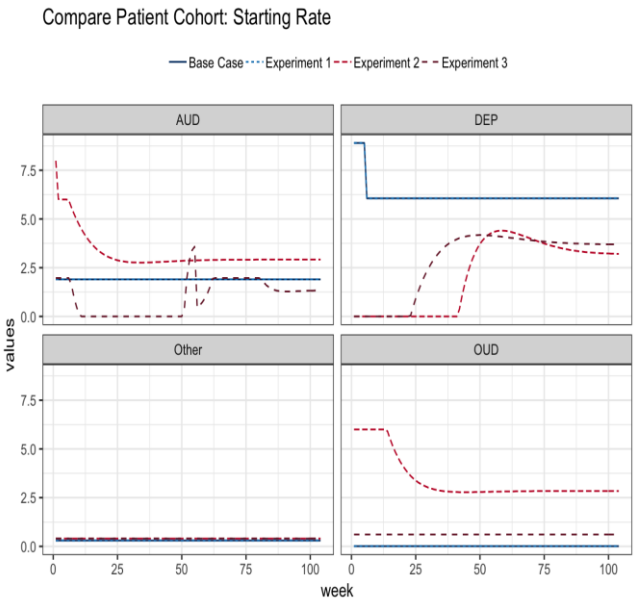
mtl.how/sim

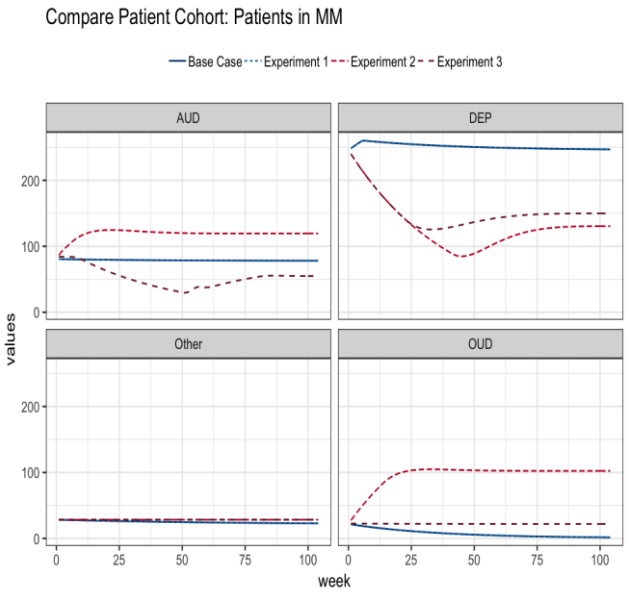


MTL tools helps frontline staff find the best local changes faster.

team time







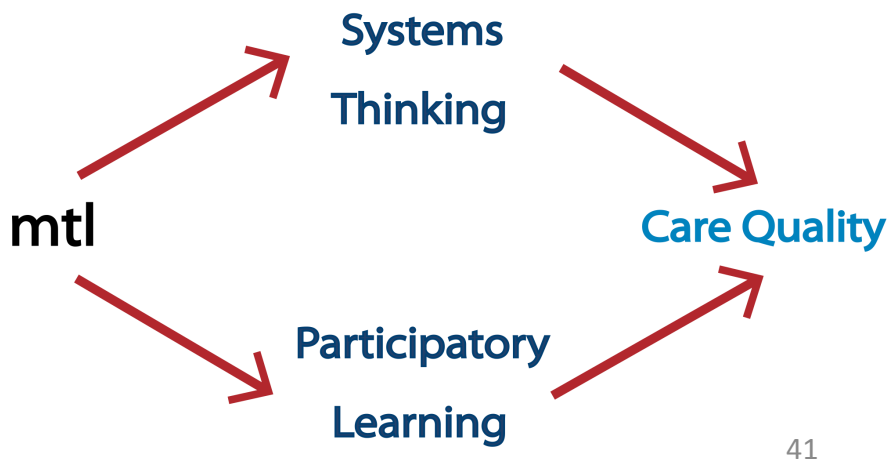
MTL shows whether things may get better before worse or worse before better.

mtl.how

Poll 4: Which is likely most useful for team learning?

Please select all that apply.

A. Facilitation
B. Team data
C. Simulation
D. All of the above
E. None of the above



Modeling to Learn

Test. Don't guess.

***Look before you leap*.**

Measure twice cut once.

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VA Team PSD

Team
Participatory System Dynamics

Five ways to improve MTL usefulness.

Email: **mtl.info@va.gov**

Subject line: **Learning**

1. MTL Live Team/Clinic
2. Pilot Review EES materials (e.g., Video, Guides)

Design

3. Data User Interface (mtl.how/data)
4. Simulation User Interface (mtl.how/demo)

Research

5. Advisory Board and other opportunities

Optional Poll 5: I am interested in

Please select all that apply.

A. Partnering to improve *MTL* Learning
B. Partnering to improve *MTL* Design
C. Partnering to improve *MTL* Research
D. All of the above
E. None of the above

mtl.info@va.gov

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mtl.how/refs

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mtl.how/refs

Resources and Help

mtl.how

Session guides, links, and cheatsheets.

mtl.how/demo

Self-registration for simulation demo. *Course code: cybersem*

@LZPhD

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National Center for PTSD, Dissemination & Training Division

Tom Rust, PhD
Office of Healthcare Transformation

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https://www.hsrd.research.va.gov/cyberseminars/catalog-upcoming.cfm