**VETERAN’S ADMINISTRATION**

**PARTICIPATORY SYSTEM DYNAMICS MODELING TO LEARN COURSE**

**FACILITATOR GUIDE**

**TABLE OF CONTENTS**

1. **Preface**
2. **Introduction**
3. **Acknowledgments**
4. **Course Guidance**
5. **Course Staffing and Roles**
6. **Target Audience**
7. **Technology and Mechanics**
8. **Course Schedule**
9. **Session Guides**
10. **Continuing Education Credits**
11. **Communications**
12. **Session Guides**

**Session 1. Shared Vision**

**Session 2. Our Data**

**Session 3. System Dynamics**

**Session 4. Care Coordination, Part 1**

**Session 5. Care Coordination, Part 2**

**Session 6. Medication Management, Part 1**

**Session 7. Medication Management, Part 2**

**Session 8. Psychotherapy, Part 1**

**Session 9. Psychotherapy, Part 2**

**Session 10. Aggregate Model, Part 1**

**Session 11. Aggregate Model, Part 2**

**Session 12. Future Decision-Making**

1. **Additional Resources**
2. **References**
3. **Appendices**

**Appendix A. Icon Glossary**

**Appendix B. Terms and Acronyms**

**Appendix C. Using the Data Interface in SharePoint**

**Appendix D. Using the Model Interface in Forio**

1. **Preface**
2. **Introduction**

Providers, patients, policy makers and scientists each have a stake in ensuring all patients with opioid use disorder (OUD), alcohol use disorder (AUD), depression and posttraumatic stress disorder **(PTSD**), receive timely, evidence-based care. In the Veterans Health Administration (VA), these common, costly conditions comprise the majority of outpatient addiction/mental health needs.1–3 But highly effective treatments such as evidence-based psychotherapy (EBPsy) and evidence-based pharmacotherapy (EBPharm) reach only 3-28% of patients.4–6 National evidence-based practice (EBP) dissemination programs,7–11 policies,12–14 incentivized quality measures,15,16 and EBP-focused electronic health records17 have been insufficient to realize greater EBP reach,18–20 key to preventing chronic impairment, relapse, overdose,21–23 and suicide 24–26 among Veterans.

Like most health systems, 27–29 VA uses team huddles and audit-and-feedback (AF) processes to coordinate and improve EBPsy/EBPharm care. But AF outcomes vary widely, 30 with the least success for complex tasks like multidisciplinary EBP continuity and coordination.31 Research suggests that solving complex, multidisciplinary challenges such as team EBP delivery requires addressing system-level causes.35–40 Participatory System Dynamics (PSD) offers a method of active group learning, using system diagrams and simulation models, 41,42 that builds capacity for understanding and managing causal system dynamics.43,44 Simulation modeling overcomes cognitive limitations 45,46 to prospectively restructure delay and feedback dynamics that influence EBP reach over time.47 Using such models lets teams test their hypotheses and gain shared insights about how decisions within their control interact to affect outcomes they care about.

The Modeling to Learn course leads front-line clinic staff, working together in their teams, through a progressive PSD process designed to:

* Enhance VA team members’ knowledge and skill in systems thinking;
* Make VA data, initiatives and standards transparent to clinic staff;
* Help teams understand complex interactions among factors – including decisions within their control and resource limitations that constrain them – that are difficult, if not impossible, to see without data and models; and
* Empower teams to generate ongoing quality improvements in both patient care and work life.

Four system dynamics models of limited EBP reach were developed by a team of stakeholders and other experts:

* Lindsey Zimmerman, PhD
* Team PSD Project Lead/Principal Investigator
* Implementation Scientist, National Center for PTSD, Dissemination & Training Division (NCPTSD-DT)
* Stacey Park, BA
* Team PSD Project Administrator
* NCPTSD-DT
* **PSD Partners Research and Development (Current)**
* Veterans Advisory Partnership for Operations and Research (VAPOR) –Current Board Members
  + Tammy Thompson, BS, Certified Peer Support Specialist; Air Force Veteran
  + Donald “DC” Barlow, Certified Peer Support Specialist;
  + Marine Veteran
  + Reynold “Ren” Kramer, Certified Peer Support Specialist;
  + Air Force Veteran
* **PSD Partners Research and Development (Alumni)**
* VAPOR Alumni
  + Erik Ontiveros, Certified Peer Support Specialist; Marine Veteran
  + Trent Van Dyke, Certified Peer Support Specialist; Air Force Veteran
  + Leroy Edwards, Certified Peer Support Specialist; Army Veteran Retired
* **PSD Partners Research and Development (Supervisors)**
* VAPAHCS Peer Support Specialist Supervisors
  + Jill Hudson, LCSW, VAPAHCS Chief of Social Work
  + Soni Adams, LCSW, VAPAHCS Director, Peer Support and MHICM (detailed to GA)
  + Ryan Gardner, LCSW, VAPAHCS Director, Veterans Recovery Center and Peer Support Supervisor

The models help explain “reach as a function of local front-line staff decisions and available resources. 48,49 Three focus on specific services: Care Coordination (CC), Medication Management (MM), and Psychotherapy (Psy). A fourth, Aggregate (Agg) model, looks at combined services across a local VA mental/behavioral health clinic.

Existing VA health system data was extracted using standard definitions for diagnoses, appointments, visits and EBPs, and calculated model parameter values for local teams.15,50 Models define mechanisms identified by stakeholders’ using systems theory and calculus (structural validity), which are validated against historical data (structural-behavioral validity).51 PSD learning is via real-time visual emergence of local causes of EBP reach in virtual experiments.52–54 Simulations are a safe way to build systems thinking in to EBP decisions.44,55,56

[Should we spell out Participatory Systems Dynamics on each use because the acronym is close to PTSD?]

1. **Acknowledgments**
2. **Course Guidance**
3. **Course Staffing and Roles**

PSD Lead Facilitator

PSD Assistant Facilitator (where applicable)

Logistics and Communications

1. **Target Audience**
2. **Technology and Mechanics**

Adobe Connect – application, computer requirements, webcam, VOIP or phone recommended?

Data interface in SharePoint – software?, browser specs, login, other?

Model interface in Forio – browser specs, login, other?

1. **Course Schedule**

The course is designed to be delivered in twelve, 60-minute sessions. The sessions are as follows:

1. Team Learning Goal / Shared Vision – [insert brief overview of session that appears at the top of each Session Guide]
2. Introduction to Team Data
3. Review Team Data, Introduce System Dynamics & Care Coordination Model
4. Care Coordination, Part 1
5. Care Coordination, Part 2
6. Medication Management, Part 1
7. Medication Management, Part 2
8. Psychotherapy, Part 1
9. Psychotherapy, Part 2
10. Aggregate Model, Part 1
11. Aggregate Model, Part 2
12. Future Decision-Making / Wrap-up
13. **Session Guides - Facilitator**

Session Guides for the facilitator will follow a standard outline:

1. Introduction / Session Overview: a short description to orient the facilitator & the learner
2. Learning Objectives: 2 to 3 unique learning objectives for each session that will be assessed in the evaluation and post-test for CEUs for each discipline
3. Time: an estimate of the amount of time it will take to prepare for, conduct, and follow up on the session
4. Required Resources: a list of materials, links, software, etc., needed for the session
5. Pre: DONEs (latest accomplishments) & DOs (to be accomplished this session)
6. Pre-session Preparation: reading, handouts, or other actions required to prepare for facilitation of the session
7. Session: see Session Agenda for Learners (below)
8. Post: DONEs (what was accomplished this session) & DOs (what will be accomplished next session)
9. Evaluation: steps for administering session post-test; prepare summary of post-test results
10. **Continuing Education Credits**

Each session offers CEU to participants in six disciplines:

* Psychiatry
* Psychology
* Social Work
* Nursing
* Certified Peer Support
* Counseling

[Information about accrediting body, how to receive credit, etc.]

1. **Communications**

* Scheduling sessions
* Pre-session communications
* Post-session communications

1. **Session Agenda for Learners**

Session Agendas are currently in separate GitHub documents – a draft outline for these agendas is presented below.

Session Agenda for the learner to follow during the training session:

1. Introduction / Session Overview: a very short session description to orient the learner
2. Learning Objectives: 2 to 3 unique learning objectives for each session that will be assessed in the evaluation and post-test for CEUs for each discipline
3. Pre: Done’s (prior team learning) & Do’s (to be accomplished this session)
4. Learning Activity:
   * Review (understand content, data, case, simulation)
   * Act (interaction among learners using content, data, case, simulation)
   * Discuss (learnings from review of content, data, case, simulation)
5. Post: Done’s (what was accomplished this session) & Do’s (what will be accomplished next session)
6. Post-session evaluation
7. **Additional Resources**
8. **References**
9. **Appendices**

**Appendix A. Icon Glossary**

**Appendix B. Terms and Acronyms**

[starter list]

VA = Veteran’s Administration

PSD = Participatory Systems Dynamics

EBP – Evidence-based Practice

CC = care coordination

MM = medication management

CPRS = Computerized Patient Record System

ATS = Addiction Treatment Services

EES = VA Employee Education Services

**Appendix C. Using the Data Interface in SharePoint**

**Appendix D. Using the Modeling to Learn Interface in Forio**