Research and Evaluation Committee Meeting

Wednesday, September 1, 2021 9:00 AM- 12:00 PM



Agenda

9:00 am Welcome & Introductions

9:10 am Action: Approval of Meeting Minutes

9:20 am Information: Triage Grant Program & Preliminary Findings: Formative Evaluation

9:45 am Information: An Approach to Statewide Evaluation with an Application to Triage Programs

10:30 am **Break**

10:40 am Discussion: Triage Summative Evaluation Plan

11:45 am Wrap-up & Adjourn

Welcome

COMMISSIONERS DR. ITAI DANOVITCH AND KEN BERRICK



Agenda Item #1 Action: Approval of Meeting Minutes

COMMISSIONER DR. ITAI DANOVITCH



Public Comment



Vote



Agenda Item #2 Information: Triage Crisis Services - An Overview of the Triage Grant Program and Preliminary Findings from the Evaluation of Triage Program Implementation

TOM ORROCK, MHSOAC, CHIEF OF OPERATIONS & GRANTS DIVISION KAI LEMASSON, PHD, MHSOAC SENIOR RESEARCHER





Senate Bill 82

Investment in Mental Health Wellness Act of

2013

MHSOAC Evaluation Committee September 1, 2021





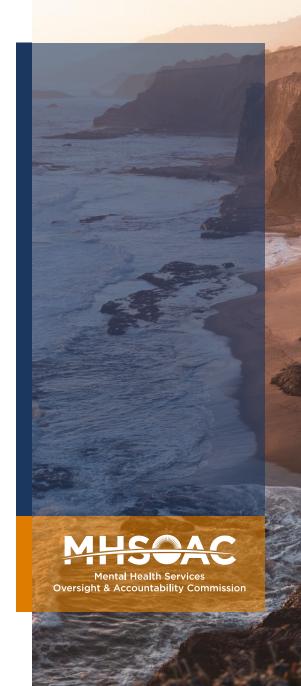
Background

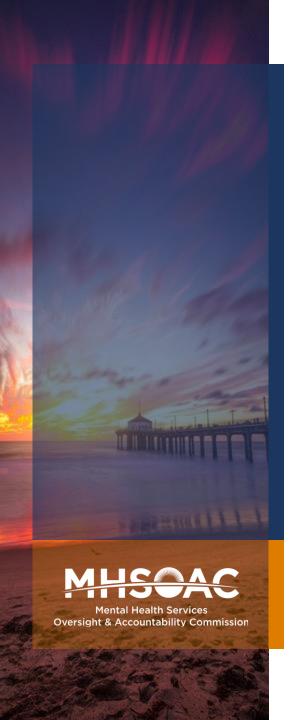
- \$20 million per year
- Personnel grants
 - Case Managers
 - Peer Providers
 - Clinicians
 - Nurses
 - Psychologists
 - Psychiatrists



Objectives

- Reduce unnecessary hospitalizations
- Reduce law enforcement expenditures and recidivism
- Expand the continuum of care for MH crisis by leveraging funds
- Provide linkage to MH services
- Improve the consumer experience





Triage Round 1 Funding (2014-2017)

- 24 counties funded
- \$96 million in total funding
- Three-year grants
- Hired 415 MH personnel
- Served 66,811 Californians

Lessons Learned from Round 1

- Need for Statewide Evaluation
- Services for Children and Youth-17%
- Apportionment based on county size



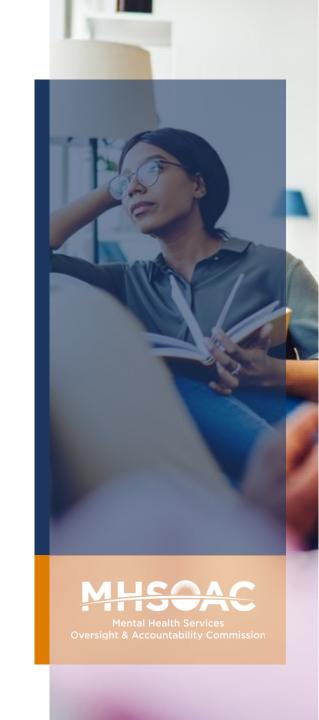
Lessons on Evaluation from Triage Round 1

- No unified approach to evaluation
- Unable to aggregate the collected data
- No statewide cost benefit analysis
- Unable to recommend best practices for intended outcomes



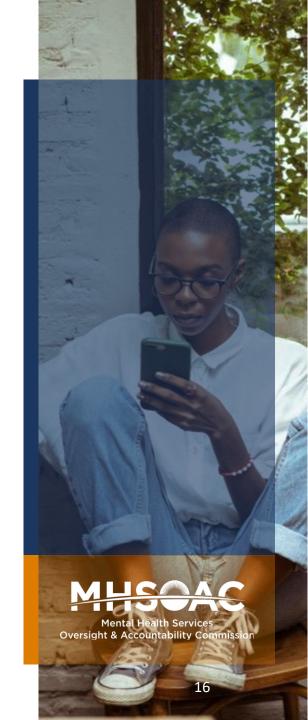
Program Modifications

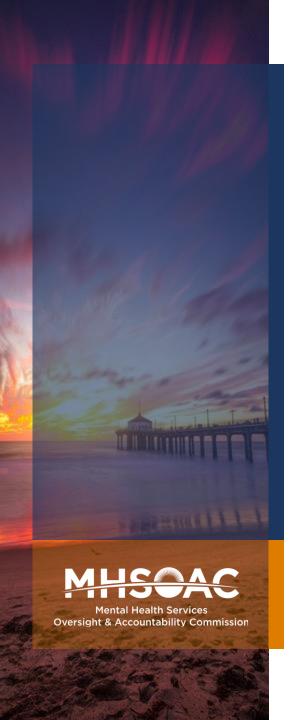
- Statewide evaluation strategy
- Set aside for children's Triage funding
- Population based apportionment (Small, Medium, Large)



Triage Round 2 Funding (2017-2021)

- 30 programs in 20 counties
- \$83 million in total funding
- Three-year grants (Adult/TAY and 0-21)
- Four-year grants (School/County Collaborations)



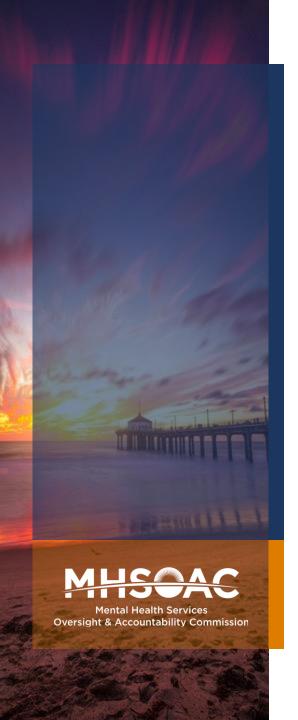


Evaluation of Triage Program Implementation (Round 2)

Formative and process evaluations conducted by UCLA for the Child and School-County Collaboration and UC Davis for the Adult/TAY Programs

General Aims

- 1) Describe implementation activities, processes, and intermediate outcomes.
- 2) Identify barriers and facilitation of program implementation.
- 3) Provide lessons learned and recommendations for future program implementation.



Data Sources

• Qualitative Interviews:

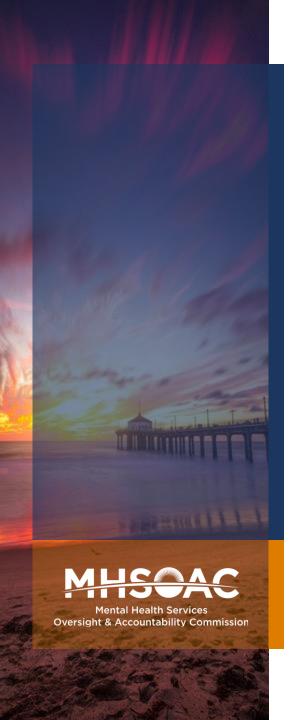
Program leads and administrators, clinicians, peers, and clients (Adult/TAY only).

Program Surveys:

Survey administered to program leaders about each county program.

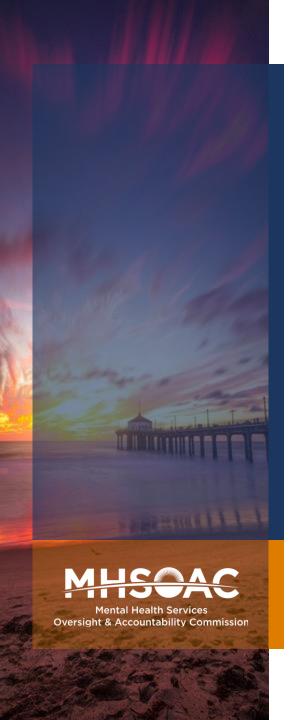
Other Data Sources:

Stakeholder advisory board, stakeholder workgroup meetings, quarterly MHSOAC meetings, County MOUs etc.



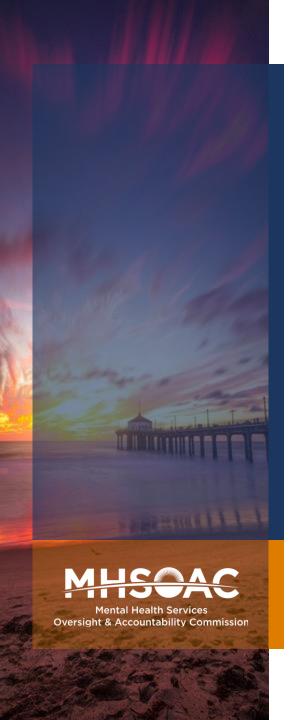
Triage Program Features

- Heterogeneity
 - Type of program (e.g., mobile crisis unit, school-based services)
 - Care process target areas (e.g., crisis services, care coordination, prevention)
- Complexity



Key Factors Affecting Triage Program Implementation

- COVID-19 Pandemic
- Staff and Leadership Engagement
- Staff Recruitment and Turnover
- Resources

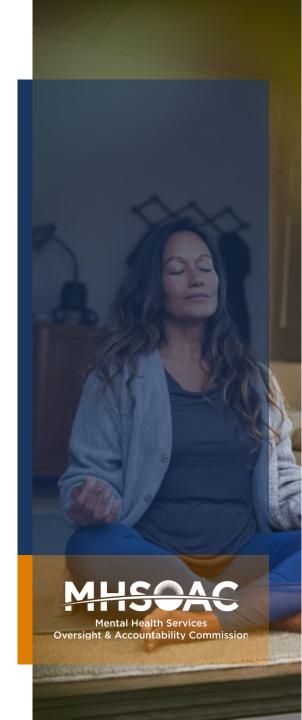


Early Lessons Learned

- Programs expand the continuum of crisis services
- Importance of peers and collaborating partners
- Adaptability and innovation are critical
- Must address client's basic needs
- Must be accessible after standard office hours

Triage Round 3 Funding

- Developing the Request for Applications
- Award funds in Summer of 2022
- Building in time for implementation
- Focus on expansion or development of three main components:
 - Mobile crisis teams
 - Regional call centers (988)
 - Continuum of diversion options





Agenda Item #3 Information: An Approach to Statewide Evaluation with an Application to Triage Programs

HEIKE THIEL DE BOCANEGRA, PHD, MPH, MHSOAC RESEARCHER MANAGER MIKE HOWELL, UC RESEARCHER AND DATA INTEGRATION MANAGER DENIS HULETT, MS, MHSOAC RESEARCHER

Mental Health Services
Oversight & Accountability Commission



AN APPROACH TO STATEWIDE EVALUATION WITH AN APPLICATION TO TRIAGE PROGRAMS

Denis Hulett, MS; Mike Howell, MS; Heike Thiel de Bocanegra, PhD, MPH

Triage Summative Evaluation



Whole Population: Positive mental health, wellbeing, and school success for Californians Client Population: Early detection and treatment to foster recovery and resilience.

Stakeholder Engagement is Central						
Broader Context Existing systems, resources & unmet needs	Structure What is the structure of the program or services?	Formative/Process How much is being done? How well is it being done (and why)?	Short-Term Outcomes Does it make a difference and for whom?	Long-Term Outcomes Are there public health benefits?		
Infrastructure Capacity Partnerships Resource mapping Needs assessment/gaps Individual/family risk factors School/community context Cultural barriers Access (e.g., transportation)	 Description of Program/services Logic model SMART goals Target population Capacities and resources Cultural/linguistic responsiveness Flexibility 	 Feasibility Community acceptance Outreach and Engagement Implementation barriers and facilitators # of activities or services # served and their characteristics 	Improved mental health and school outcomes Improved family wellbeing and resilience Reduction in disparities Increased connectedness	High school graduation College admission and retention Reduced system involvement Employment Housing Quality of life		

Standards for Evaluation: Utility, Feasibility, Ethical, and Accurate

Dissemination and Lessons Learned

Whole Population: Positive mental health, wellbeing, and school success for Californians Client Population: Early detection and treatment to foster recovery and resilience.

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Dissemination and Lessons Learned

Triage Legislative Objectives:

- Expanding crisis treatment services by adding crisis residential treatment beds, crisis stabilization services, Mobile Crisis Support Teams, Triage personnel,
- Improving the client experience, achieving recovery and wellness, and reducing costs,
- Reducing unnecessary hospitalizations and inpatient stays,
- Reducing recidivism and mitigating unnecessary expenditures of law enforcement, and
- Expanding the continuum of services with early intervention and treatment options that are wellness, resiliency, recovery oriented in the least restrictive environment.



Triage Summative Evaluation Questions:

- (1) Do SB-82/833 programs for adults, TAY and children:
- Reduce unnecessary psychiatric hospitalizations?
- Reduce the rate of mental health emergency department encounters?
- Reduce arrests and recidivism?
- Increase participation in gainful employment?
- Provide linkages to other behavioral health services and increase provision of those services?
- (2) Among behavioral health clients under age 16, do SB-82/833 programs positively impact school related behavior?



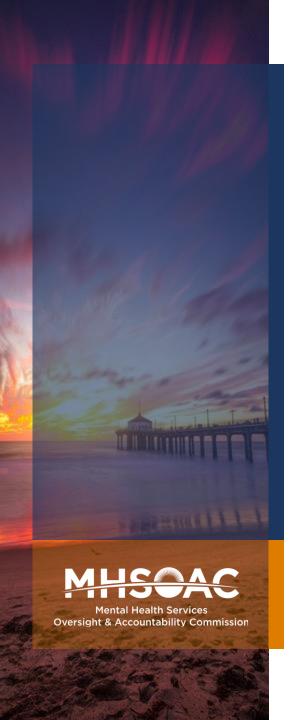
Programmatic/Policy implications

- Replicate successful Triage models
 - Best practices
 - Contextual factors
 - Equity and inclusion of hard-to-reach populations
- Provide the legislature with reliable data to support policy making



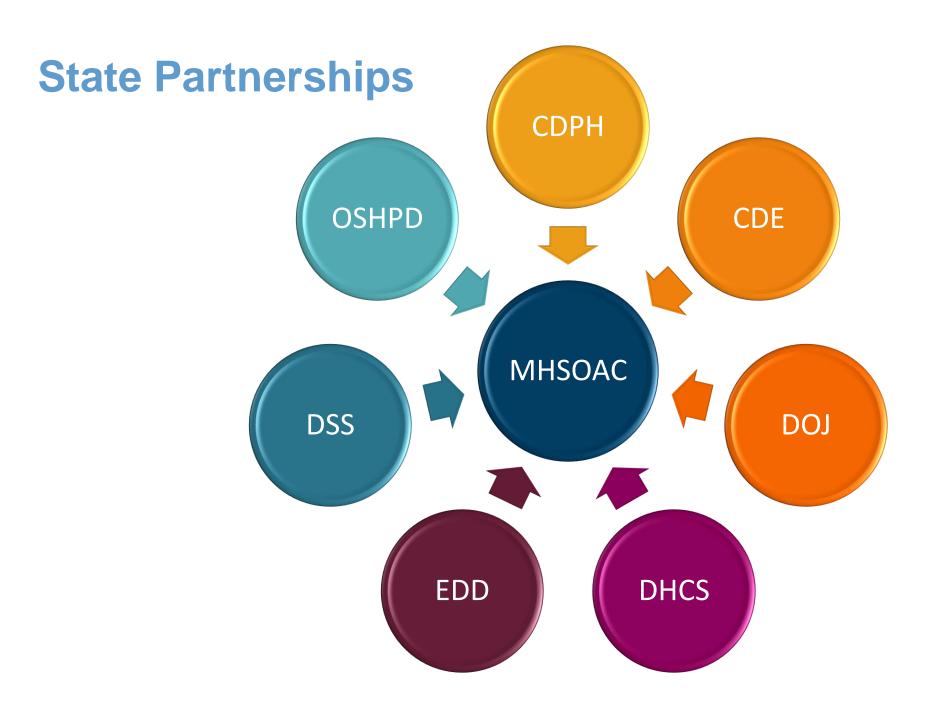
Evaluation Methodology: Statewide Databases





Harnessing Statewide Data

- The Commission has built an extensive data infrastructure
- Merging previously siloed data
- Creating comprehensive pictures for individuals
- Observing trends over time
- Building comparison groups





Outcomes





Linking to Outcome Data



Clients

Linking Variables State Database

Outcomes

CSI (1999-2021), FSP (2006-2021) and Program Participants

Persons
receiving
publicly
funded
behavioral
health services

Client ID, SSN, Name, Date of Birth DHCS CSI/FSP Behavioral Health Service Records (2000-2021)

Behavioral Health Services



Linking State Clients **Outcomes Variables Database** CSI (1999-2021), **FSP** EDD (2006-2021) Employment/ Employment and Program Records Income **Participants** (2001-2020)SSN & Name DSS* Persons **Financial** CalFresh, receiving support, CalWorks, publicly Foster system Child Welfare funded behavioral health services

*Pending access

Mental Health Services
Oversight & Accountability Commission

Linking State Clients Outcomes **Variables** Database OSPHD* Psychiatric Patient hospital CSI Records **Inpatient Stays** (1999-2021), (2000-2021)**FSP** (2006-2021)OSHPD* Psychiatric ER and Program **ER Visits** Visits **Participants** (2000-2021)SSN DHCS* Physical & Persons Medi-Cal **Psychological** receiving Records Wellbeing publicly funded DOJ behavioral Criminal Justice Arrests & health services Records (18+) Incarceration (2000-2016)**Mental Health Services**

Oversight & Accountability Commission

^{*}Pending access

Linking State Clients **Outcomes** Variables Database CSI (1999-2021), FSP (2006-2021)and Program CDE Absences, Participants Name, Date of Student Suspensions, Birth, Sex Records Persons (2010-2019) Assessments receiving publicly funded behavioral

health services



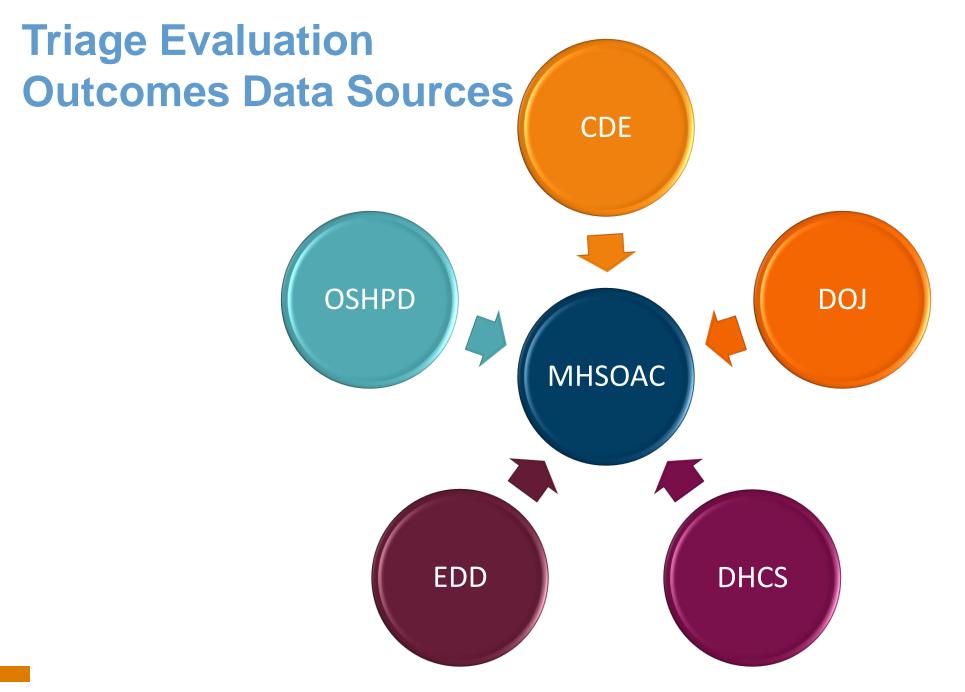
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Linking State Clients **Outcomes Variables** Database CSI (1999-2021), FSP CDPH (2006-2021)Death Records Suicides and Program (2000-2019)Participants Name, Date of Birth, SSN, Sex Persons Maternal/ CDPH receiving Perinatal Birth Records publicly Outcomes (2000-2019 funded Link Parents** behavioral health services

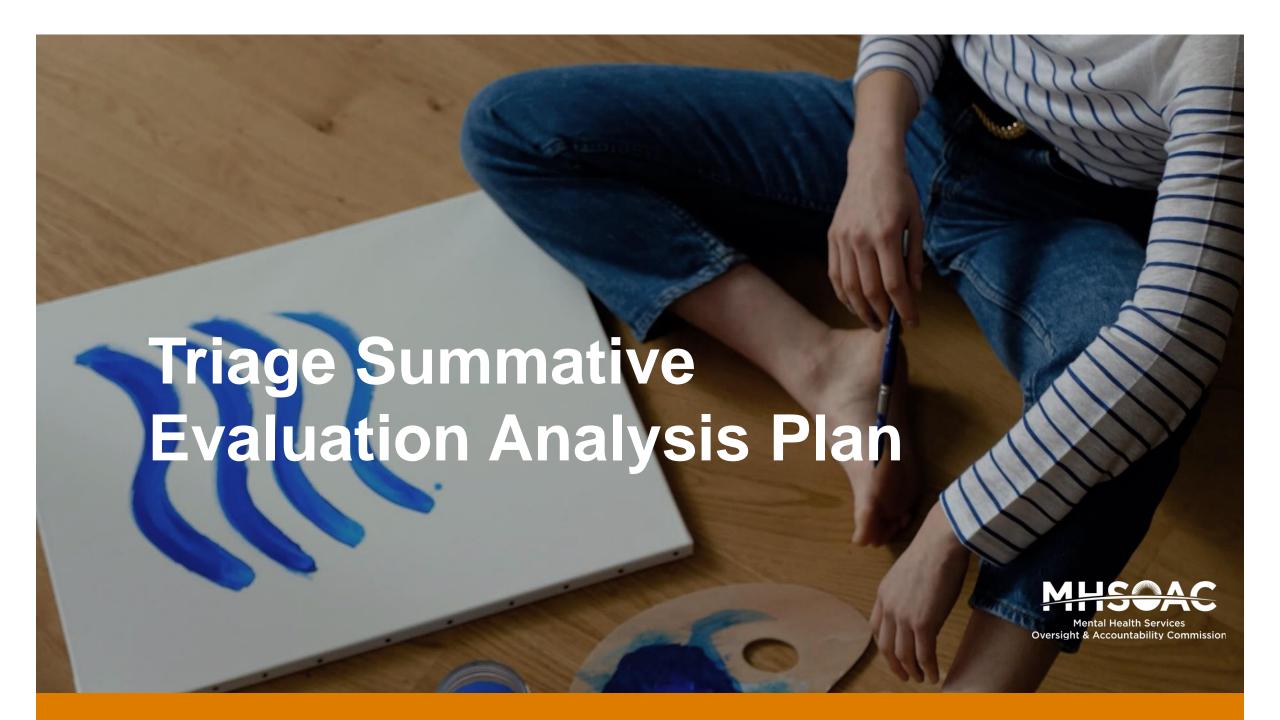


Application to Triage Evaluation

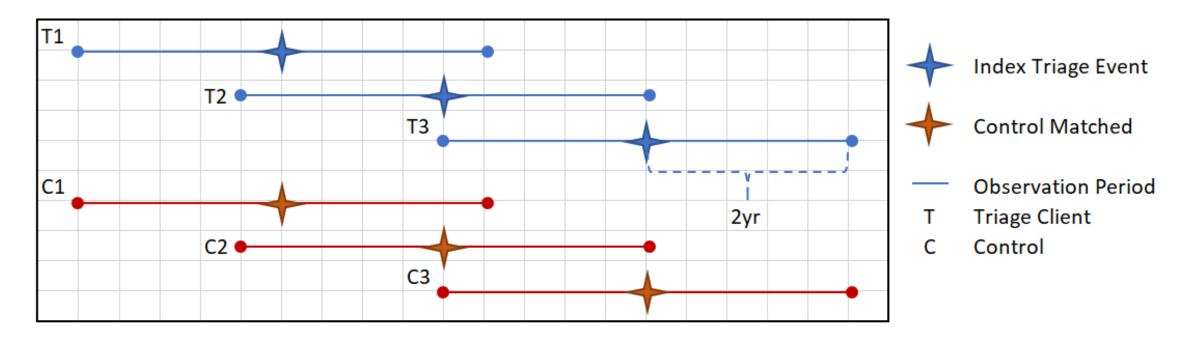








Case Control Longitudinal Framework



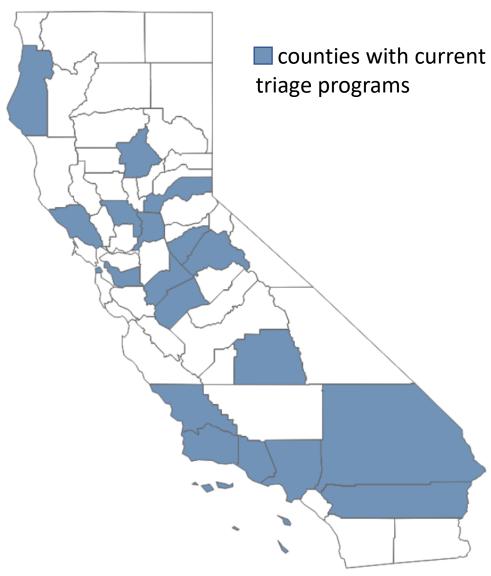
Study Period





Partnering with Triage Counties

- County/MHSOAC Collaboration
- Data Exchange Agreements
- Secure data transfers



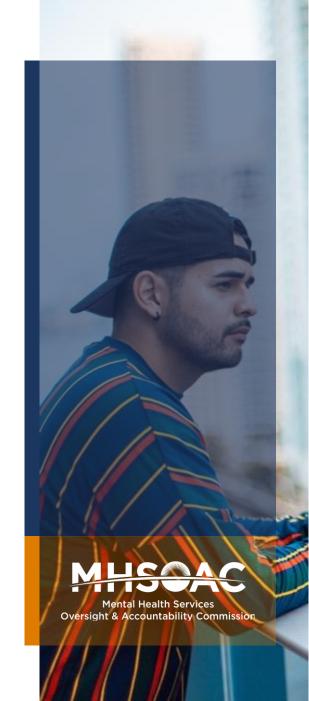
Study Design

- Randomized Control gold standard
 - Not ethical or practical for many interventions
- Pre/post-intervention study design
 - Not valid during COVID-19: crime down, increased prevalence of mental health disorders and substance abuse
- Non-randomized control group, pre/post-intervention, difference in differences (DiD) design
 - Accounts for unobserved or poorly observed variables



Selection of Controls

- Chosen from the same county
- Exact match upon diagnosis, age, sex ...
- Propensity score



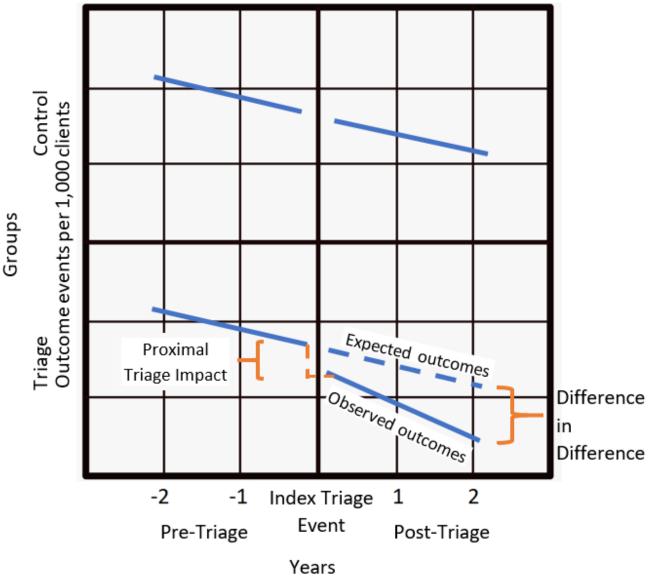
Interrupted Time Series Difference in Difference Model

- The Commission will employ a pre-/post-test design called an Interrupted Time Series with a Difference in Differences (DiD) non-randomized control study design
- The DiD design will compare the experience pre-/post-Triage index date among the Triage clients to the experience of a non-Triage control group
- The model explores whether:
 - ✓ Trends in the outcomes among Triage clients is significantly different than that of non-Triage clients
 - ✓ An intervention had an immediate impact upon outcomes

 $Y_t = \beta_0 + \beta_1 time_t + \beta_2 intervention_t + \beta_3 time_post_t + \beta_4 Group + \beta_5 Group \times time_t + \beta_6 Group \times intervention_t + \beta_7 Group \times intervention \times time_post + \beta_8 Covatiate_1 + \dots + \beta_{(p+8)} Covariate_p + \varepsilon_t$



Difference-in-Difference (DiD) Statistical Analysis





Cost Analysis

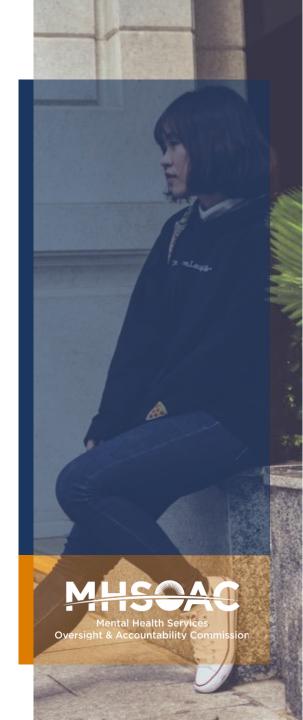
- Estimate public costs associated with evaluation outcomes
- Calculate cost change as a function of outcome changes
- Subtract amounts of Triage grant awards from calculated cost change



Beyond evaluation of statewide success

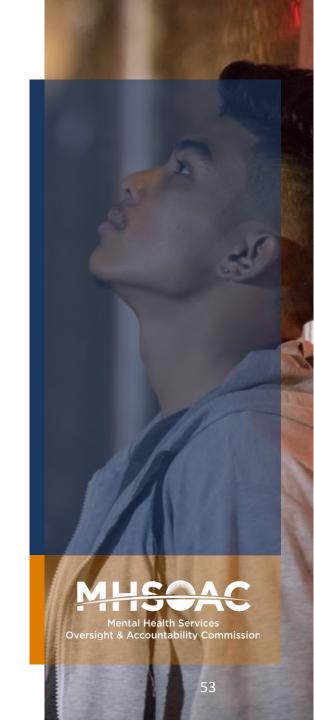
Sub-analyses for Triage currently under consideration are:

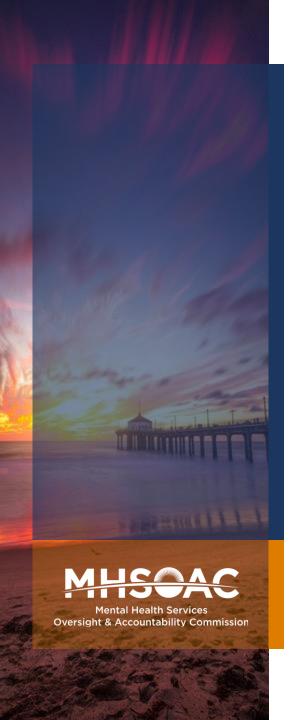
- Individual counties
- Triage program type
- By race/ethnicity
- Age
- Trauma
- More than one PDC code
- Geographic region
- Place of birth
- Language



Limitations

- This approach uses proxies for mental health and cannot assess client experience.
- Data is not standardized and evenly reported across counties. Commission is working on standardizing with dashboards, feedback, & training.
- Record linking errors need assessment
- Varied timing of data availability may restrict periods for evaluation

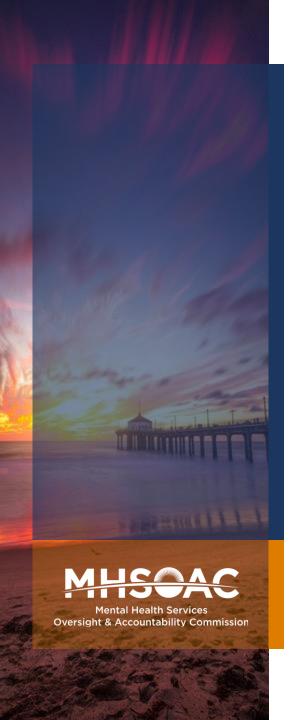




Comments from Committee Members

- The plan generally has the right evaluation questions and design.
- Data quality must be considered.
- Consider measuring: (1) not only whether an outcome occurred but when an outcome occurred, and (2) varying treatment effects by county.
- More information about programs and how they work (formative and process evaluations)

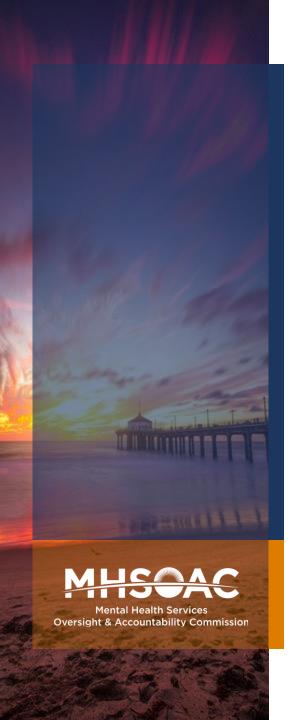
"Need to understand how the Triage program links people to the right programs/services, and why people do and do not follow-up with services."



Dissemination Timeline*

- Dashboard, April 2022
- Statewide Triage conference, Sept 2022
- Data briefs, 2023
- Final report, *July 2024*

*Pending data availability



Policy/Programmatic Implications

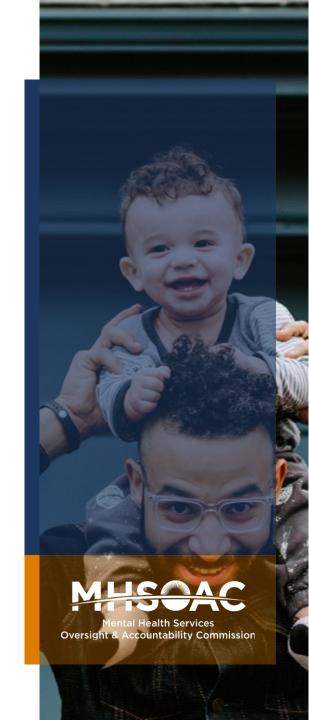
- Replicate successful Triage models
 - Best practices
 - Contextual factors
 - Equity and inclusion of hard-to-reach populations
- Provide the legislature with reliable data to support policy making

Application to Mental Health Student Services Act



Mental Health Student Services Act (MHSSA)

- Partnerships of behavioral health and education
- Provide services to students and their families
- 38 School-County partnerships
- The Commission is anticipating an additional 20 awards next year, amounting to 58 MHSSA programs statewide



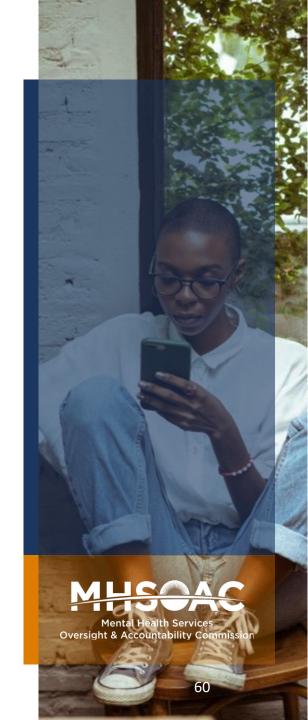
Priority areas of MHSSA grant programs

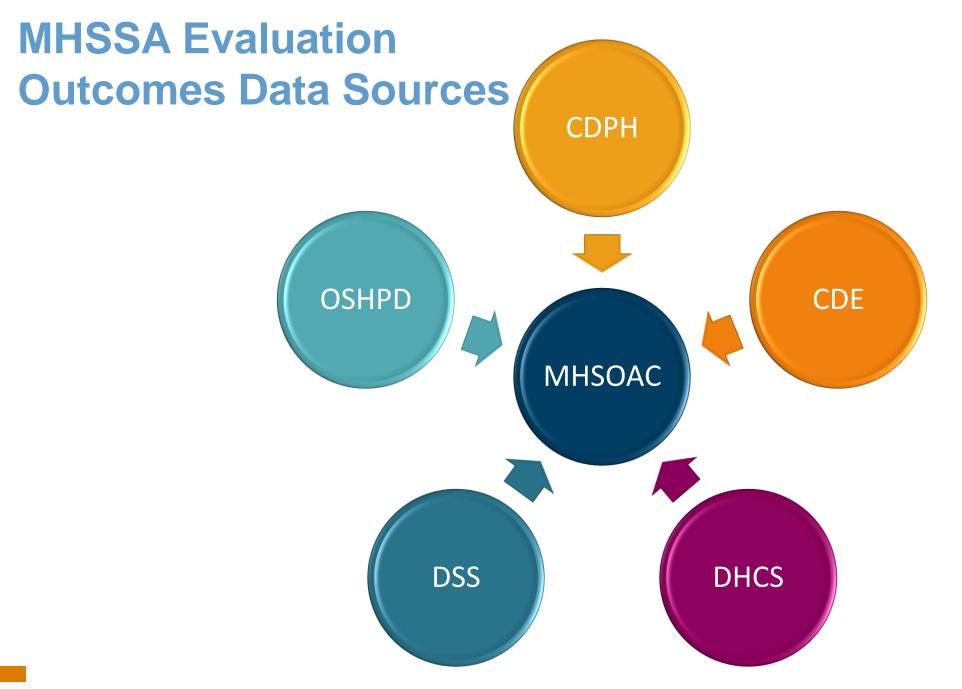
- 1. Preventing mental illnesses from becoming severe and disabling.
- 2. Improving timely access to services for underserved populations.
- 3. Providing outreach to families, employers, primary care health care providers, and others to recognize the early signs of potentially severe and disabling mental illnesses.
- 4. Reducing the stigma associated with the diagnosis of a mental illness or seeking mental health services.
- 5. Reducing discrimination against people with mental illness.
- 6. Preventing negative outcomes in the targeted population, including: (a) Suicide; (b) School failure or dropout; (c) Removal of children from their homes; (d) Involuntary mental health detentions



Application of the Framework to MHSSA

- The same approach can be used for the summative evaluation of MHSSA programs
- CDE data can be utilized to gather educational data over time for participants
- Utilizing the infrastructure presented, high-risk youth can be identified
 - This potentially includes foster youth, gender identity, those with suspensions and/or expulsions

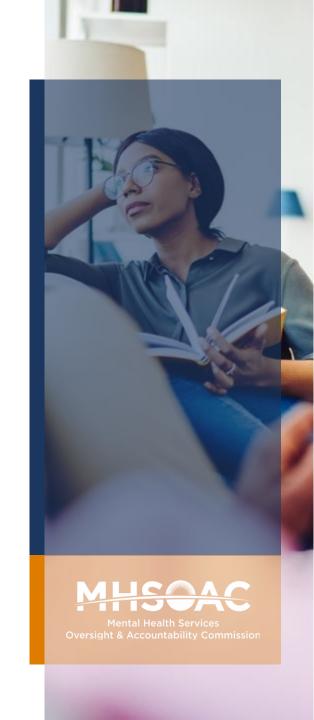






MHSSA Evaluation Design Consideration

- Statewide implementation requires special attention when building comparison groups
- Can staggered implementation (2020, 2021 and 2022)
 of awards be used to form control groups?
- Potential of long-term follow up of students beyond award period remains



...and beyond: An example

A child receives services by a school counselor funded by a program in their southern California middle school. A file is opened for this child in the CSI. Access to these services by this child allows the Commission to investigate the child's academic performance by linking to the Department of Education.

This child moves with their family to a northern California halfway through their freshman year in high school. Fortunately, this school can help the child with the transition to a new environment at their wellness center. This student goes on to graduate.

As time moves beyond graduation, the student has only one minor incident with the criminal justice system. While this student moved across and beyond several school systems (moving, graduation), the Commission can observe outcomes beyond the educational system.



Acknowledgments

Dawnté Early, PhD, MS; Chief of MSHOAC Research and Evaluation Division

Brian Sala, PhD; MHSOAC Deputy Director for Research and CIO

Ann A Lazar, PhD; UCSF Statistician

Kai LeMasson, PhD, MHSOAC Researcher

Heather Barr, MPH, CPH; former Triage Program Manager

Triage county frontline and administrative staff





BREAK



Agenda Item #4 Action: Summative Evaluation Plan

FACILITATOR: BRIAN SALA, DEPUTY DIRECTOR OF RESEARCH AND CIO



Discussion



Question #1a

Are we asking important evaluation questions?

What suggestions do you have for improving the framing of those questions, given our charge to conduct a statewide evaluation of highly heterogeneous grant programs?

Question #1b

Given the program constraints and the data constraints, how would you suggest we refine our methods to answer these important evaluation questions?

Question #1c

1c) What is your advice regarding the overall evaluation plan? Are there major outcome domains that we are missing and what are your recommendations? Are there major confounders that we are missing and what are your recommendations?

Question #2a-c

Issues of health equity are of high interest to the Commission.

- 2a) How can we improve this evaluation's attention to equity?
- 2b) What lessons can and should we apply to future evaluation efforts about how to better build equity considerations in from the start?
- 2c) How will the results allow us to inform practice, policy, and improve equity?

Public Comment



VOTE



Wrap-Up & Adjourn

COMMISSIONERS DR. ITAI DANOVITCH AND KEN BERRICK



Thank you!

