Established September 2019, the Riverside Overdose Data to Action (RODA) program is integrated into Riverside University Health System (RUHS) - Public Health's Epidemiology and Program Evaluation Branch. The purpose of RODA is to enhance the surveillance of overdose morbidity and mortality and to use this enhanced surveillance data to guide overdose prevention efforts. Funded by the Centers for Disease Control and Prevention (CDC), the program is organized around six overarching strategies [Figure 2].

This brief discusses RODA's work under the strategy Providers and Health Systems Support [Figure 1], including successes and barriers encountered, ending with recommendations for year 3. The overarching goals of this strategy are to increase the use of non-opioid medications and non-pharmacologic treatments for pain by patients; decrease high-risk opioid prescribing; and increase the number of providers who can administer medically-assisted treatment for opioid use disorder (i.e. X-waivers).

Key activity areas within this strategy are:

- Clinical Outreach and Academic Detailing (AD)

Future Evaluation Briefs will highlight each of the remaining prevention strategies; Prescription Drug Monitoring Programs, and Empowering Individuals to Make Safer Choices [Figure 2]. Past Briefs highlighted RODA strategies Enhanced Overdose Surveillance, Integration of Overdose Prevention and Response Efforts, and Establishing Linkages to Care.

**Figure 1: Strategy's Simplified Logic Model**

- Clinical outreach and education
- Provider and health system awareness on safer opioid prescribing, non-opioid pain treatments and medically assisted treatment for opioid use disorder.
- Increased use of non-opioid medications and non-pharmacologic treatments for pain by patients; decrease in high-risk opioid prescribing; increase in the number of providers with and use of X-waivers.

**KEY MILESTONES**

- Though the COVID-19 pandemic was a considerable barrier, significant progress in RODA activities continued.
- Identified over 5,000 patients with opioid prescriptions that may place them at greater risk of overdose.
- Patient naloxone prescription fill rates increasing.
- Eleven providers received academic detailing on opioid stewardship.
The logic model below [Figure 2] shows the strategies, activities and expected outcomes of the RODA project. This brief discusses Prover and Health Systems Support; activities and outcomes highlighted in orange.

**Figure 2: Riverside Overdose Data to Action (RODA) Logic Model**

<table>
<thead>
<tr>
<th>Strategies and Activities</th>
<th>Short-term Outcomes</th>
<th>Intermediate Outcomes</th>
<th>Long-term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Component 1: Surveillance</strong></td>
<td></td>
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<tr>
<td>Implement innovative surveillance to support RODA interventions: enhanced surveillance capacity building; strengthen cross-agency data sharing; explicit efforts to improve partner and community access to timely surveillance data.</td>
<td>Timely and actionable surveillance data disseminated by recipients: to enhance the implementation of RODA interventions; to recipients’ stakeholders working to reduce drug overdoses in Riverside County; to CDC to rapidly inform the public and key regional and national stakeholders</td>
<td>RODA surveillance data contributed to improvements in drug overdose interventions</td>
<td>Decreased rate of opioid misuse and opioid use disorder</td>
</tr>
<tr>
<td>Prescription Drug Monitoring Programs: Access and utilize the Controlled Substance Utilization Review and Evaluation System (CURES) data to help inform overdose surveillance; Access and utilize CURES data to help guide prevention activities.</td>
<td>Increased measurable collaboration and communication; increased application of data to drive prevention and response activities between state and local efforts.</td>
<td>Identification of high risk prescribing and patient behaviors; better tracking of opioid prescriptions.</td>
<td>Increased provision of evidence-based treatment for opioid use disorder</td>
</tr>
<tr>
<td>Integration of State and Local Prevention and Response Efforts: Explicit efforts to better integrate state and local prevention efforts; Enhance coordination of prevention and response strategies at the state and local level; Improve local and state awareness of local overdose mortality for policy and system change.</td>
<td>Increased understanding of context, resources, and needs in Riverside County, CA; increased focus on highest risk groups; policy and systems change recommendations produced.</td>
<td>Greater awareness of drug and opioid overdose epidemic by state/local health departments, with respect to burden and resources, including at the city/county level; increased state involvement in local-level prevention efforts; increased preparedness and response at the local level.</td>
<td>Decreased rate of ED visits due to misuse or opioid use disorder</td>
</tr>
<tr>
<td>Establishing Linkages to Care: Identify systems-level strategies in healthcare, community programs, and public safety to support care linkages with improved awareness, coordination, and technology.</td>
<td>Increased awareness and coordination of linkages to care.</td>
<td>Increased referrals to and engagement in evidence-based treatment.</td>
<td>Decreased drug overdose death rate, including prescription and illicit opioid overdose death rates</td>
</tr>
<tr>
<td><strong>Component 2: Prevention</strong></td>
<td></td>
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</tr>
<tr>
<td>Providers and Health Systems Support: Clinical education and training based on evidence-based guidelines; insurer and health systems supports.</td>
<td>Provider, health system, and payer awareness of and support for guideline-concordant opioid prescribing, non-opioid medications, and non-pharmacological treatments; Provider, health system, and payer awareness of and supports for medically assisted treatment for opioid use disorder and SAMHSA practitioner (X) waiver training and application process.</td>
<td>Increased use of non-opioid medications and non-pharmacologic treatments for pain by patients; decrease in high-risk opioid prescribing; increase in the number of providers with and use of X-waivers.</td>
<td></td>
</tr>
<tr>
<td>Empowering Individuals to Make Safer Choices: Build overdose prevention and lifesaving skills among high-risk youth; train first responders on trauma-informed practices; develop mass media campaign on harm reduction strategies for youth.</td>
<td>Awareness of the risks of prescription and illicit opioids; increase number of youths trained in overdose prevention; increase number of first responder trained in trauma-informed practices, safe coping skills, symptoms of behavioral health challenge, types and number of messages developed.</td>
<td>Decreased initiation of opioid use and misuse; Raise awareness among high-risk youth of overdose prevention; raise awareness for trauma-informed practices, safe coping skills, and symptoms of behavioral health challenges.</td>
<td></td>
</tr>
</tbody>
</table>
Evaluation Goals and Questions

The internal evaluation of the Riverside Overdose Data to Action’s (RODA) strategies is designed to collect information that will convey a credible, well-rounded picture of the program’s efforts. These evaluation briefs are intended to highlight which interventions are working well and areas that may need improvement.

The following questions were used to guide the evaluation efforts for this strategy:

- How and to what extent have provider, health system, and payer awareness and support for guideline-concordant opioid prescribing, non-opioid medications, and non-pharmacological treatments been improved?
- How and to what extent have provider, health system, and payer awareness and support for medically assisted treatment for opioid use disorder been improved?

Lead Partners for this Strategy

- RUHS - Public Health, Riverside Overdose Data to Action (RODA)
- Inland Empire Health Plan - Clinical Pharmacy Programs
- San Francisco Public Health Department (SFPH)-Center for Innovation in Academic Detailing on Opioids

Baseline and Regional Context

Riverside County trends depicted a 10-year increase in overdose deaths, emergency department (ED) visits, and hospitalizations [Figure 4]. Overdose deaths increased from 230 deaths in 2008 to 430 deaths in 2017, and rates increased 63% from 2008 to 2017 (from 11 to 18 per 100,000). For up-to-date data on overdoses in Riverside County, see the RODA Overdose Data Dashboard.

The Riverside Overdose Data to Action (RODA) Academic Detailing project is the first program within RUHS-PH specifically designed to provide clinical education on safe opioid prescribing.

Figure 4: Historic trend in overdose deaths, Riverside County, 2007-2018
A Note on COVID-19 impact on RODA operations

Beginning in March 2020, many of the core and supporting RODA staff were required to work at the Riverside County Emergency Operations Center (EOC). During this time, epidemiologists and research analysts were conducting contact tracing and statistical modeling to understand the impact of COVID-19 in Riverside County. The public health nurses were monitoring calls on the public health nurse call line, contact tracing, and conducting follow-up with individuals in isolation or quarantine. The RODA project investigator, program director, and program coordinators were all involved with planning and operational duties to ensure an effective county-wide response to COVID-19. The program director and one program coordinator returned to RODA operations full-time in July 2020. At the end of year 2, the RODA project investigator, surveillance lead, lead evaluator, and program coordinator continue to be partially or fully assigned to COVID-19 response.

What is RODA academic detailing?

**Academic detailing** is an evidence-based educational outreach method focused on clinician education and behavior change to improve practices. RODA funds one (1) IEHP Clinical Pharmacist to provide academic detailing services to physicians, pharmacists, other clinical staff, and health systems on prescribing opioids for chronic pain management, X-waiver resources, naloxone prescribing and distribution, and optimizing the use of California’s Controlled Substance Utilization Review and Evaluation System (CURES). Prescribing clinicians can choose from this list of topics, focusing on those modules that are of most interest to them. The academic detailing overall and individual topics are voluntary.

What is a SAMHSA X-waiver?

Physicians, Nurse Practitioners (NPs), Physician Assistants (PAs), Clinical Nurse Specialists (CNSs), Certified Registered Nurse Anesthetist (CRNAs), and Certified Nurse-Midwives (CNMs) can apply to the Substance Abuse and Mental health Services Administration (SAMHSA) for a waiver to administer, dispense, and prescribe buprenorphine. Buprenorphine is a medication approved for the treatment of opioid use disorders.

Qualified practitioners who undertake required training can treat up to 100 patients using buprenorphine for the treatment of opioid use disorder (OUD) in the first year. An alternative waiver allows practitioners to forego the training requirement and treat up to 30 patients.

CLINICAL OUTREACH AND ACADEMIC DETAILING

**Objective:** Inland Empire Health Plan (IEHP) - Clinical Pharmacy Programs will use academic detailing while leveraging other techniques, including harm reduction, to increase the use of non-opioid medications, decrease high-risk opioid prescribing, and increase the number of X-waivers among clinicians.

**Timeline and Successes**

**Year 1 (9/1/2019—8/31/2020):**

- San Francisco Public Health Department (SFPH) - Center for Innovation in Academic Detailing on Opioids (CIAO) trained seven (7) IEHP clinical pharmacists and pharmacy technicians on academic detailing practices for opioid stewardship, toxicology reports, and X-waiver requirements.
- CIAO staff attended monthly RODA workgroup meetings to provide technical assistance on implementation and address any curriculum or other questions.
- IEHP developed an implementation plan and survey to track the progress of outreach and detailing sessions.

**Year 2 (9/1/2020—8/31/2021):**

- CIAO staff attended monthly RODA workgroup meetings to provide technical assistance on implementation and address any curriculum or other questions.
- December 2020, the Academic Detailer presented to the Inland Empire Opioid Crisis Coalition (IEOCC) on the benefits of AD, topics covered, and how to schedule a training.
- IEHP used their PhysNarc Report (narcotic prescribing data) to identify providers for academic detailing based on prescriptions with elevated morphine milligram equivalents (MME) per day or receiving a concurrent benzodiazepine with opioid medication. IEHP identified 187 providers for outreach and launched virtual academic detailing sessions in February 2021.
- March - August 2021, IEHP conducted initial outreach to seventeen (17) physicians, with twelve (12) providers returning contact. Eleven (11) providers were detailed. One (1) detailed provider became x-waiver certified [Figure 5].
- Due to barriers from the COVID-19 pandemic, including low provider participation, the academic detailer adjusted the methods for outreach and education. Work began on the development and implementation of additional outreach and education techniques including:
  - A naloxone continuing education course.
  - Outreach to pharmacies for naloxone distribution, including fax blasts.
  - Faxing providers on their patients identified to be at risk of overdose with prescribing guidelines, naloxone recommendations, and an offer of academic detailing.
- June 2021 - Outreached to thirteen (13) pharmacies, providing academic detailing on opioid stewardship, naloxone education, and naloxone distribution [Figure 5].
- End of year 2, IEHP identified 1,333 providers with 5,006 patients at risk based on elevated morphine milligram equivalents (MME) per day or receiving a concurrent benzodiazepine with opioid medication. Scheduled outreach in year 3 to ask providers to reassess patient’s opioid regimen, recommend naloxone, and offering of academic detailing.
Barriers / Challenges

- The COVID-19 pandemic limited providers' time for continuing education, necessitated adjusting the Academic Detailing to an online format, and diverted RODA resources for COVID response.
- Lack of incentives for provider participation (CMEs, etc.)
- Although seven detailers were trained, RODA currently only funds one (1) academic detailer, limiting the scope of the effort.

Impact of Academic Detailing and Clinical Outreach

This strategy is implemented through a contract with Inland Empire Health Plan (IEHP), the largest not-for-profit Medicare-Medicaid plan in the country with 1.5 million members and over 7,000 providers spread over Riverside and San Bernardino Counties.

Improved naloxone prescribing and fill rates among patients on extended use of prescription opioids in Riverside County [Figure 6].

**Figure 6:** Naloxone prescription fill rate among IEHP members on extended use of prescription opioids*
SUMMARY OF EVALUATION QUESTION RESPONSES

How and to what extent has provider, health system, and payer awareness and supports for guideline-concordant opioid prescribing, non-opioid medications, and non-pharmacological treatments been improved?

- Seven (7) IEHP clinical pharmacists and pharmacy technicians trained in conducting opioid stewardship academic detailing.
- IEHP identified 5,006 patients with opioid prescriptions that may place them at greater risk of overdose. Clinical outreach, education, and recommendations for a targeted medication review to the 1,333 providers of those patients will begin in year 3 of the grant.
- Increasing naloxone prescription fill rates among IEHP members.
- Eleven (11) opioid prescribing providers received Academic Detailing.

How and to what extent has provider, health system, and payer awareness and supports for medically assisted treatment for opioid use disorder been improved?

- In year two, one detailed provider received a SAMHSA x-waiver to administer, dispense, and prescribe buprenorphine for medically-assisted treatment for opioid use disorder.

RECOMMENDATIONS FOR YEAR 3

The recommendations below reflect the position of the author and not necessarily those of RUHS - Public Health or partner agencies.

1. Continue to expand academic detailing to pharmacists to aid in naloxone distribution and opioid stewardship.
2. Explore the use of classroom style continuing education when appropriate. This may allow the academic detailer to expand services beyond the traditional one-on-one academic detailing session.
3. Examine creating a partnership between the IEHP academic detailer and RUHS—Medical Center and Community Health Centers.
4. Explore ways to further support the IEHP Clinical Pharmacist/Academic Detailer.
5. Begin quarterly identification of IEHP members with opioid prescriptions that place them at risk for overdose and fax providers with targeted recommendations for medication review and an offer of academic detailing services.
6. Enhance the naloxone prescription fill rate report to capture month-to-month prescribing rates of naloxone.
7. Explore alternate ways to raise awareness and support for medically assisted treatment for opioid use disorder, including increasing the number of providers x-waiver certified.
8. Utilize the provider network established through the IEOCC to expand academic detailing opportunities.
LIST OF ACRONYMS USED IN THIS BRIEF

**AD:** Academic Detailing

**CDC:** Centers for Disease Control and Prevention

**CDPH:** California Department of Public Health

**CURES:** Controlled Substance Utilization Review and Evaluation System

**EPE:** Epidemiology and Program Evaluation Branch of RUHS-Public Health

**IEHP:** Inland Empire Health Plan - Clinical Pharmacy Programs

**IEOCC:** Inland Empire Opioid Crisis Coalition

**RODA:** Riverside Overdose Data to Action project

**RUHS – Public Health:** Riverside University Health System – Public Health / Riverside County Department of Public Health

**SAMHSA:** Substance Abuse and Mental Health Services Administration