

Examples of Community- and State-level Logic Models for Addressing Opioid-related Overdose Deaths

Logic model development is central to strategic planning as it helps us identify ways in which specific activities address the risk and protective factors, identified via assessment, produce anticipated outcomes. Below are four examples of logic models—two present a community-level response to opioid-related deaths and two present state-level responses. Each example contains a statement describing the problem (opioid overdose death); the goals for addressing the problem; inputs—what resources and activities comprise the response; outputs—what is the result of these resources and activities; partners needed; and short-, intermediate-, and long-term outcomes.

Please note that these logic models are intended to be a guide, as the problem statements and inputs described are not relevant to, or present in, all states or communities.

COMMUNITY-LEVEL LOGIC MODEL: EXAMPLE #1

Problem Statement: Our needs assessment revealed a higher number of opioid-related overdose deaths in our community than in other communities in our state. Contributing factors identified through this process include the following: lack of knowledge among opioid users, friends, and family members about how to identify and reverse opioid-related overdoses; fear among opioid users, friends, and family members about legal repercussions of seeking help (i.e., calling 911) when overdoses occur; and a high number of overdoses resulting in death due to low rates of naloxone administration. Furthermore, our assessment of our community's capacity to address opioid-related overdoses revealed low numbers of first responders and healthcare providers with access to and training on how to administer naloxone.

Goal	Objectives	Inputs	Partners	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
Reduce opioid overdose-related deaths	Increase number of first responders and healthcare providers with access to naloxone	Purchase naloxone kits for first responders and other healthcare providers	Local public health agency purchases naloxone kits for community and coordinates with other agencies to develop a distribution and training plan. Law enforcement, fire department, hospital and health care clinics identify personnel to be trained and carry naloxone	Number of naloxone kits purchased	Percent of identified first responders and other healthcare providers receiving naloxone kits	Number of reported opioid-related overdoses reversed through the administration of naloxone increases by X% compared to previous year	Number of opioid-related overdose deaths decreases by X% compared to previous year
		Distribute naloxone kits for first responders and other healthcare providers					
	Increase number of first responders and healthcare providers trained on the administration of naloxone	Train first responders and other healthcare providers to administer naloxone	State's Office of Emergency Medical Services brought in to train first responders	Number of first responders and other healthcare providers attending training	X% of identified first responders and other healthcare providers who report having the knowledge, positive attitude and self-efficacy to administer naloxone		

Goal	Objectives	Inputs	Partners	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
Reduce opioid overdose-related deaths	Increase number of opioid-related overdoses that are reversed due to 911 calls	Launch social network intervention aimed at reaching opioid users, family members, and friends to educate them about Good Samaritan laws, identifying overdoses, and steps to take in an opioid-related overdose	Treatment facilities, hospitals, and homeless shelters help to identify “seeds” (users, family members, and friends who can help initiate the social network intervention)	Number of seeds identified and engaged in social network intervention Number of high risk individuals (and their families and friends) reached through intervention	Increase by X% from baseline in the number of individuals in target audience who report feeling confident that they can identify an opioid-related overdose and know what steps to take	Increase by X %, from previous year, in the # of reported opioid-related overdoses that result in 911 calls	Number of opioid-related overdose deaths decreases by X% compared to previous year

COMMUNITY-LEVEL LOGIC MODEL: EXAMPLE #2

Problem Statement: According to our needs assessment, there is a significantly higher number of opioid-related overdose deaths in our community than in other communities in our state. Assessment data also show that major contributors to overdose deaths include a combination of loss of opioid tolerance with relatively high opioid dosage among individuals released from incarceration, hospitals, and treatment facilities; and individuals mixing opioids with other substances such as alcohol and benzodiazepines.

Goal	Objectives	Inputs	Partners	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
Reduce number of individuals who overdose on opioids due to loss of tolerance or mixing medications	Increase knowledge and self-efficacy of inmates at-risk related to the prevention of opioid-related overdoses	Conduct motivational interviewing intervention with inmates identified as at-risk for opioid-related overdoses due to loss of tolerance and mixing substances	County Correctional Center identify at-risk inmates and coordinate intervention	Number of trainings conducted per year with inmates	Trained inmates report increase in knowledge and self-efficacy related to the prevention of opioid-related overdoses	Decrease in opioid-related overdoses among recently-released inmates	Decrease in opioid-related overdose deaths by X% compared to previous year
	Increase knowledge related to preventing opioid-related overdoses among current opioid users and individuals in recovery	Develop and disseminate mobile/social media messaging campaign to increase knowledge of the dangers of opioid-related overdoses due to loss of tolerance and mixing substances, as well as steps to avoid these dangers, among current users and individuals in recovery	Hospitals, treatment facilities, harm reduction agencies encourage current users and individuals in recovery to sign up for mobile/social media messaging campaign	Number of individuals signing on to intervention (e.g., number of mobile devices reached, number of Facebook accounts participating, etc.)	At least X individuals in target audience report receiving and reading mobile/social media messages	At least X individuals in target audience report increase in knowledge and efficacy to prevent own and others' overdoses	

STATE-LEVEL LOGIC MODEL: EXAMPLE #1

Problem Statement: According to our Statewide Epidemiological Outcomes Workgroup (SEOW) there has been an increase in the number of opioid-related overdose deaths in the state, specifically in X counties. A closer examination of the problem revealed that, in many of these communities, first responders struggle to prevent these deaths because they do not carry naloxone and/or they do not know how to administer it. Through the data collected and examined by the SEOW six specific communities were identified as having the highest incidents of opioid-related overdose deaths.

Goal	Objectives	Inputs	Partners	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
Reduce the number of opioid-related deaths in the state	Fund naloxone distribution program for first responders in identified communities	Provide funding for each identified county to purchase and distribute naloxone kits for their first responders	Community-based public health agencies coordinate state grant Local police, fire, and medical emergency agencies coordinate with public health agency distribution of naloxone kits	Number of dollars disbursed per county Number of naloxone kits purchased per county Percent of first responders with access to naloxone kits per county	Naloxone kits distributed to at least X% of first responders per county identified	Number of opioid-related overdoses reversed through the use of naloxone increases by X% compared to previous year in identified counties	Decrease in number of opioid-related deaths in the state

Goal	Objectives	Inputs	Partners	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
Reduce the number of opioid-related deaths in the state	Train first responders in high risk counties on administering naloxone	Train first responders in identified counties on how to administer naloxone	Community public health agencies coordinates trainings with local hospitals, law enforcement agencies, fire departments, and other first responders State's Office of Emergency Medical Services trains first responders	Number of trainings conducted per county Number of first responders trained per county	X% of first responders in each county reporting increase in knowledge, positive attitudes, and efficacy to administer naloxone	Number of opioid-related overdoses reversed through the use of naloxone increases by X% compared to previous year in identified counties	Decrease in number of opioid-related deaths in the state

STATE-LEVEL LOGIC MODEL: EXAMPLE #2

Problem Statement: ANYSTATE's Statewide Epidemiological Outcomes Workgroup (SEOW) has identified adults (age 35-54) in three urban areas as being at highest risk for fatal opioid overdose. A key contributing factor to this problem identified by the state is the limited community providers¹ knowledge of an ability to respond to fatal overdose risk factors.

¹ Healthcare providers, social service providers, first responders, and others including those who come into contact with those at a high-risk overdose.

Goal	Objectives	Inputs	Partners	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
Increase the capacity of community providers in three urban areas to respond to fatal overdose risk factors	Train community providers on overdose risk factors, recognition, and response	Identify groups of first responders in each of the three communities (e.g., networks of healthcare providers, social service providers, first responders).	Networks of community providers (e.g., first responder agencies, community-based public health agencies). Overdose prevention trainers	Number of networks/community partners identified in each of three urban areas	Increase in the number of new community partners, providers, and/or sectors who have received training in overdose risk factors, recognition, and response	Community providers/trainees demonstrate improved knowledge of risk factors, recognition and response as demonstrated by...	Fatal opioid overdose rates for adults in three urban areas in ANYSTATE are reduced by X in X years, as indicated by...
		Recruit providers to trainings through identified networks		Number of community providers identified by network in each community			
		Deliver training to community providers in three urban centers		Number of community providers trained			