Samaritan Health Services

YEAR 3 EVALUATION REPORT

STARS Rural Outreach/Opioid Treatment Expansion for East Linn County

YEAR 3 (September 30, 2020 – September 29, 2021)

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EXECUTIVE SUMMARY

EVALUATION PURPOSE AND EVALUATION QUESTIONS

The purpose of the Year 3 Evaluation Report is to summarize information about the implementation of STARS Rural Outreach Program to the Coast to the Cascades Community Wellness Network (CCCWN), Samaritan Health Services administration, the program staff, partners, and community members, and ultimately to the funder. The report addressed the evaluation questions posed in the project assessment plan.

PROJECT BACKGROUND

The STARS Rural Outreach Program uses a combination of evidence-based strategies to expand access to treatment for opioid use disorder in east Linn County,OR. Specifically, the program uses a Hub and Spoke Model to expand medication assisted treatment (MAT), Peer Support Specialists (PSS), community education, and naloxone distribution. This report marks the completion of the third year of grant activities.

EVALUATION QUESTIONS, DESIGN, METHODS AND LIMITATIONS

The evaluation includes both process and outcome questions for each of the 4 stated goals of the program. All evaluation questions are listed in the Evaluation Purpose and Evaluation Questions section of the report. The evaluation used both primary and secondary data, as well as quantitative and qualitative data. Key informant interviews were conducted with program staff (primary, qualitative). Quantitative data was tabulated from the program tracking database and EPIC. Mortality and morbidity data (secondary data source) were provided by the Sweet Home Police Department and from the Oregon Prescribing and Drug Overdose Data Dashboard.

CONCLUSIONS AND RECOMMENDATIONS

Although COVID-19 restrictions continued to impact the delivery of program activities in Year 3, the number of individuals identified with OUD and in treatment for OUD appeared to have increased. Community partnerships appear to be galvanized around a common purpose, and community awareness and attitudes have improved over the course of the 3-year grant.

Recommendations center on considering how to move from an implementation phase into a phase of program maintenance (or sustainability). Specifically, it is recommended that program leadership:

1. Identify an on-going source of funding for program activities.
2. Consider a Collective Impact Model for working with community partners and stakeholders.
3. Maintain an adequate level of staffing to maintain program activities.

EVALUATION PURPOSE & EVALUATION QUESTIONS

EVALUATION PURPOSE

The purpose of this report is to provide performance data about the STARS Rural Outreach program during its third year. Specifically, the report documents the implementation of program activities and progress toward meeting grant requirements. The report is intended to meet requirements set forth by the funder, the Health Resources Services Administration (HRSA), and the supervising body, the Coast to the Cascades Community Wellness Network (CCCWN). The intended audiences for this report are program staff, program partners, the CCCWN, and HRSA.

The evaluation report summarizes progress toward implementation goals and provides contextual information about challenges or barriers experienced. The annual evaluation report is intended to instigate and inform discussions about: (a) areas for improvement in the delivery of program activities; (b) communication with community members and program partners about successes and needs; and (c) insights about program implementation and impacts. Sharing information with the intended audiences demonstrates accountability and encourages further support of the program.

During the third year, the program continued implementation and worked toward sustainability. Thus, this annual evaluation report focuses on the current status of implementation of program activities, with an eye toward issues that may impact decisions regarding how to sustain or maintain the program. The report will address process evaluation questions, as well as outcome evaluation questions.

EVALUATION QUESTIONS

Goal 1: Coast to the Cascades Community Wellness Network (CCCWN) Consortium members work together to expand delivery of opioid related health services in east Linn County.

Process Questions:
1.1 Did the supervisory function of CCCWN operate as expected?
1.2 How did the consortium contribute to the expansion of opioid related services?

Outcome Question:
1.3 Have community supports related to OUD treatment and recovery increased as a result of the CCCWN's leadership?

Goal 2: Establish STARS Outreach to deliver a comprehensive program that features best practices for opioid treatment programs, including MAT (medication-assisted treatment), behavioral counseling, and peer support activities.

Process Questions:
2.1 Did capacity to deliver MAT increase?
2.2 How many individuals were screened for OUD?

2.3 How many activities and services were added for treatment or recovery?
2.5 To what degree are people with OUD engaged in the full spectrum of medical, behavioral and counseling services that are available?
2.6 What factors facilitate or impede access to the full spectrum of MAT, behavioral and peer support services?
2.7 Is STARS rural outreach reaching its intended audience?

Outcome Questions:
2.8 Has the number of individuals screened of OUD increased?
2.9 Has the number of individuals with OUD in treatment increased?
2.10 Has the number of individuals participating in recovery support activities increased?
2.11 How has the mortality rate changed since the implementation of the STARS rural outreach program?

Goal 3: Conduct OUD education and outreach activities in east Linn County that include community distribution of naloxone rescue kits by rural clinics and first responders supplied through Samaritan Lebanon Community Hospital (SLCH) pharmacy services.

Process Questions:
3.1 How many naloxone kits were distributed?
3.2 What factors facilitate or impede community education efforts?
3.3 Who are we reaching through education and outreach efforts?
3.4 Who and what are the natural community supports within the service area?

Outcome Questions:
3.5 How has the morbidity rate of OUD changed since the implementation of the STARS rural outreach program?
3.6 How has knowledge and awareness of OUD increased among community members as a result of STARS education and outreach efforts? [Premature to assess outcome at this time; assess for Year 2.]
3.7 How has the support system for families of individuals with OUD changed, and to what degree is it self-sustaining?

Goal 4: Extend the reach of STARS Outreach into outlying rural areas by utilizing the services of a trained Peer Support Specialist

Process Questions:
4.1 How has the rural PSS affected referrals made for OUD assessment and treatment?
4.2 How has the PSS identified and increased use of recovery assets within the community?
4.3 How has the PSS increased support for friends and family members of individuals with OUD?

Outcome Questions:
4.4 How has the number of individuals initiating treatment for OUD from rural East Linn changed?
4.5 How has the number of individuals participating in recovery support activities in rural East Linn changed?
4.6 How has the support system for individuals with OUD changed in the service area, and to what degree is it self-sustaining?

PROGRAM DESCRIPTION

Samaritan Treatment and Recovery Services' (STARS) Rural Outreach program aims to reduce the morbidity and mortality of OUD in rural east Linn County, Oregon through a number of activities. The county has had higher rates of opioid-related deaths, hospitalizations, and naloxone administrations in comparison to other counties in Oregon. The rate of opioid deaths in Linn County was 4.9 deaths per 100,000 population over the years 2015-2017 (Oregon Health Authority [OHA], n.d.). Hospitalization rates for heroin-related and other opioid-related use in 2017 in Linn County were 2.4 and 27.2 per 100,000 population, respectively. As a rural area, the population of east Linn County lacks transportation options and consequently, access to health services, although the project represents a considerable effort to increase access to services for SUDs. The area continues to have higher rates of unemployment and homelessness, as well as lower incomes on average. Community opposition to medication assisted treatment and naloxone distribution have improved over the course of the project and key relationships have been built with local leaders and service providers.

The Rural Outreach Program employs a number evidence-based strategies to address OUD. Over the past three years, STARS created and refined the operations of a Hub and Spoke model to expand access to treatment for opioid use disorder. Individuals initiate treatment at the Hub in Lebanon (in-patient residential or out-patient) and are then referred to spokes (e.g., Sweet Home Family Medicine) for MAT, peer support, and other treatment and recovery services. Peer Support Specialists (PSS) work within the community to identity and engage individuals with suspected OUD, and to coordinate treatment and recovery services for these individuals using a strengths-based approach. Education and naloxone distribution within the surrounding community complements these two project activities. The CCCWN provides project oversight and governance. The project's logic model, as well as detailed descriptions of program activities, can be found in Appendix A.

At the conclusion of Year 3, the STARS Rural Outreach Program continued in the implementation phase and began preparing for sustainability of the program. The program is also seeking a no-cost continuation with HRSA to exhaust available grant funding. The Hub and Spoke model has been in effect, with the support of two peer support specialists for all of Year 3. James Page, the project's coordinator, has also continued in his role until July of 2021; Molly Gelinas took over project coordination at that time. Community education and naloxone distribution activities, although impacted by COVID-19 restrictions, have also continued during Year 3.

The STARS Rural Outreach Program benefits from broad community support and resources. Program oversight is provided by the CCCWN. The consortium represents community stakeholders and project partners from the service area including SHS, CHANCE Recovery, Family Tree Relief Nursery, Linn County Department of Health Alcohol and Drug Treatment, Sweet Home Police and Fire Department, and others. The program is administered by Samaritan Health Services (SHS). SHS contributes both staff expertise and time, as well as project facilities. Project staff funded by SHS include Kelley Story (Director of Substance Abuse Treatment Services), Dr. Richard Hindmarsh and Dr. Bruce Matthews (board certified physicians in Addiction Medicine), and Dr. Carl Hoogesteger and Dr. Ian Maness (Family Medicine providers in Sweet Home and Brownsville clinics). The HRSA grant provides funding for key project staff including the PSS and the project's coordinator. Grant funds also provide for program supplies (e.g., naloxone kits).

EVALUATION METHODS & LIMITATIONS

Data sources for the evaluation report include primary and secondary sources of data. The primary data sources include key informant interviews conducted by the evaluator and a program tracking database maintained by program staff. Secondary data were obtained from the Oregon Prescribing and Drug Overdose Data Dashboard, from CCCWN Mental Health/Substance Use Disorders Advisory Committee meeting minutes, and from EPIC, SHS's electronic health record.

Key informant interviews were conducted with key program stakeholders at the conclusion of Year 3 (August – October, 2021). Interviewees included project staff, CCCWN Mental Health/Substance Use Disorders Advisory Committee members, one healthcare provider, community partners, and east Linn County residents receiving STARS services. A total of eight interviews were completed. The evaluator recorded notes for each interview; statements from interviews were then used to provide further context to the relevant evaluation questions.

During Year 3 the program staff maintained records of program activities and contacts using program tracking database through July. Project staff conducted follow-up with individuals in the database at regularly scheduled interviews through April. The database (developed by Samaritan's Research Development Office) was the intended source of data for the following measures: number of individuals screened for OUD; number of individuals identified as having OUD, number of individuals referred to medical, behavioral, and counseling services; persistence in treatment; number of naloxone kits distributed; and number and descriptors of community education participants, according to the project's assessment plan. Because data collection using the tracking database was inconsistently implemented and based on the guidance of the new project coordinator, the assessment plan shifted in September to rely on EPIC as the main source of data for the indicators listed above. A populated patient list (generated in EPIC using specific search criteria) was reviewed by STARS staff to determine each individual's engagement with and persistence in treatment.

CCCWN Mental Health/Substance Use Disorders Advisory Committee agendas and minutes were reviewed by the evaluator to describe the amount and nature of feedback provided to STARS by the Committee.

To address the morbidity and mortality measures of opioid-related overdoses and deaths during the project period, the evaluator used two data sources. First, Sweet Home Police Department (SHPD) shared overdose and fatality numbers. Second, the report presents relevant figures from the Oregon Prescribing and Drug Overdose Data Dashboard. These figures have some notable limitations. First, figures from the SHPD report heroin overdoses and fatalities specifically; the time frame of the reported numbers follows the calendar year (January – December) rather than the project period. Second, the Oregon Prescribing and Drug Overdose Data Dashboard has a significant lag in updating data, and no information is available regarding opioid-related fatalities for the current project period. Moreover, these data represent Linn County as whole and cannot be specified to the service area.

FINDINGS, CONCLUSIONS & RECOMMENDATIONS

FINDINGS

Goal 1

Goal 1 of the program plan states, “Coast to the Cascades Community Wellness Network (CCCWN) Consortium members work together to expand delivery of opioid related health services in east Linn County.” Below are the results for the two process and one outcome evaluation questions related to Goal 1.

Did the supervisory function of CCCWN operate as expected? (1.1)

Review of CCCWN Mental Health/Substance Use Disorders Advisory Committee meeting minutes and key informant interviews, the CCCWN continued to execute its supervisory responsibilities during the project period. The advisory committee met six times during Year 3 on the following dates: 10/14/20, 12/09/20, 02/10/21, 04/14/21, 06/09/21, and 08/11/21. According to the meeting minutes, the STARS Rural Outreach Program was specifically discussed in all meetings. In the 10/14/20 meeting the advisory committee gave guidance on using an EPIC report on SBIRTs performed in the clinics to increase the number of screenings performed; the evaluation incorporated this feedback into Year 3 quarterly reports and PIMS reporting. In the 12/09/20 meeting, the discussion addressed needed improvements to communication and referral between the Lebanon ED and the Rural Outreach program. The notes suggest that the project coordinator kept the advisory committee informed as to quarterly reports, the HRSA sustainability report, project activities, and plans.

How did the consortium contribute to the expansion of opioid related services? (1.2)

Key informants and meeting minutes provided some insights about the external and internal circumstances impacting the CCCWN’s role in expanding services this year. One key informant noted that COVID-19 restrictions, as well as the added burden on the entire health system for COVID response, limited opportunities to expand Community Court and other activities in east Linn. Measure 110, which was passed in November 2020, was a frequently discussed topic in CCCWN advisory committee over the past year; whatever opportunities for further connections with community partners that were created by the referendum were not quite realized because of COVID. At least one person interviewed commented on the perceived narrow focus of proceedings of the meeting, in that discussions often concentrated on Samaritan programs and services rather than taking a larger view of the overall needs of the community.

Have community supports related to OUD treatment and recovery increased as a result of the CCCWN’s leadership? (1.3)

The membership of the advisory committee continues to be hopeful about the opportunities provided by Measure 110 for the expansion of treatment and recovery resources. The CCCWN was asked by the State of Oregon to take a leadership role in convening stakeholders in the Linn/Benton/Lincoln area as they work to increase supports for treatment, recovery, and prevention.

> *"Overall, I think our partnerships for Narcan distribution, with law enforcement and first responders, have been successful. We have a Live Longer Lebanon coalition . . . of over 40 active leaders that meet at 7AM in the morning monthly [all working to generate services and solve problems]."*

Goal 2

Goal 2 states that STARS will establish "a comprehensive program that features best practices for opioid treatment programs, including MAT, behavioral counseling, and peer support activities." This section addressed the six process questions and four outcome questions related to this goal.

Did capacity to deliver MAT increase? (2.1)

Interviews with program and clinic staff suggest that capacity to deliver MAT has been realized, and that MAT services are operating well in the service area. Although there will always be room for improvement, project staff and providers both noted that the consistent presence and availability of PSS in the clinics to provide a warm hand off has been crucial in connecting identified individuals to services immediately. The partnership between providers and PSS is highly valued and is characterized by open communication and collaboration.

How many individuals were screened for OUD? (2.2)

Based on guidance from the CCCWN Mental Health/Substance Use Disorders Advisory Committee, we began to use EPIC records to identify individuals who had been screened for OUD during Year 3. Specifically, we identified patients with an SBIRT flowsheet in the Sweet Home and Brownsville clinics (see row 3 in Table 1). The number of individuals identified as having OUD include all individuals from the program database who indicated that they were currently using opioids and individuals in EPIC with an F11 diagnoses (OUD) who reside in Sweet Home or Brownsville for the current reporting cycle. The number of individuals with OUD who were referred and who started the treatment process were identified by STARS staff from the populated list of individuals identified as having OUD.

Table 1. OUD Screening and Treatment	**First Year**	**Second Year**	**Third Year**
Number of individuals screened for OUD using the tracking database	40	24	55
Number of individuals screened for OUD using EPIC records of SBIRT flowsheet	3735	2992	4059
Number of individuals, who, after being screened for OUD, were identified as having OUD	32	14	250

Number of individuals with OUD who were referred by one provider to another provider for the treatment of OUD	30	14	41
Number of individuals with OUD, who, after receiving an initial consultation with a treatment provider, started the treatment process	22	9	41

How many activities and services were added for treatment or recovery? (2.3)

According to James Page, the project coordinator through July 2021, the following activities and services were added in Year 3:

- PSS doing outreach within the community to identify individuals with OUD, in partnership with Sweet Home Emergency Ministries (SHEM)
- Community Court launched in September of 2020. PSS and project staff attend each session and are instrumental in interviewing/assessing and in connecting individuals to services.
- An open recovery support group was added in the Sweet Home area by the PSS.

To what degree are people with OUD engaged in the full spectrum of medical, behavioral and counseling services that are available? (2.5)

Again, specific, reliable data about the number of individuals who have engaged with the full spectrum of medical, behavioral, and counseling services is not available; key informants indicated that there is variation with how individuals choose to engage. PSS follow a strengths-based, client-led approach meaning that clients choose and lead the selection of treatment and recovery services. This creates a relationship of cooperation between the individual and the PSS and contributes to the empowerment of individuals as they are not forced into treatment options. Key informants also indicated that engagement overall tends to be challenging. One key informant estimated that out of ten referrals, one or two individuals will engage in services of any kind. Community Court has seen some participants complete their program, and an equal number of individuals who did not complete the program in the prescribed time.

What factors facilitate or impede access to the full spectrum of MAT, behavioral and peer support services? (2.6)

The factors that facilitate or impede access, apart from how the program functions, have not significantly changed over the last three years of the grant funded project. Key informants noted that transportation continues to be a significant barrier; COVID prevented PSS from providing some transportation support during year 3. Family life and social networks can also create more stress or obstacles, or they can support someone in successfully accessing and continuing with treatment and recovery services. A provider noted that many individuals presenting at the clinic have complex co-morbidities, which can limit treatment options. COVID-19 continued to impede access over the past year.

Key informants, including patients, generally spoke positively about referral procedures, and technical aspects of making referrals and coordinating care between providers. PSS are often available and immediately responsive to providers' requests. Communication and referral have

continued to improve over time. (Integrating peer support into a medical model did take some education, communication, and work.) Looking forward, there may be an opportunity to improve care coordination by visualizing the complete set of service providers (within and outside of SHS). One key informant noted that Linn County Public Health maintains a large panel of individuals on MAT but does not have the peer support available for that panel. Likewise, because Family Tree Support Nursery (PSS contractor) supports several other service providers in the area, there may be reasons that PSS cannot take on particular clients under the SHS agreement.

Is STARS rural outreach reaching its intended audience? (2.7)

Tables 2 and 3 represent demographic variables of individuals identified with OUD through the STARS Rural Outreach program. Project staff are confident that they are reaching the intended audience, even if numbers remain small. PSS keep a consistent and robust caseload. Current needs within the community are not restricted to OUD (alcohol and methamphetamine use was also noted by key informants; the tracking database reflects this as well). Efforts have been made to improve communication and referral between the ED grant staff and the Rural Outreach grant staff for residents of Sweet Home and Brownsville who first access services at the hospital in Lebanon.

Table 2. Demographics (Individuals Receiving Treatment for OUD)	**First Year**	**Second Year**	**Third Year**
Race			
American Indian/Alaska Native	1	0	0
White	23	13	40
Unreported	8	1	1
Ethnicity			
Hispanic/Latino	0	0	0
Non-Hispanic Latino	26	13	40
Unreported	6	1	1
Age Group			
Adolescents (13-17)	1	0	0
Adults (18-64)	26	13	37
Elderly (65+)	5	1	4
Unknown Age	0	0	0

Demographics (Table 2) and Insurance status (Table 3) for the individuals receiving direct services from STARS for OUD was obtained through EPIC; years 1 and 2 used the program database to report these figures. Please note that the way insurance provider is reported in EPIC, it is not possible to differentiate individuals with Medicare plus supplemental and those with Medicare only (these individuals were categorized as having Medicare only).

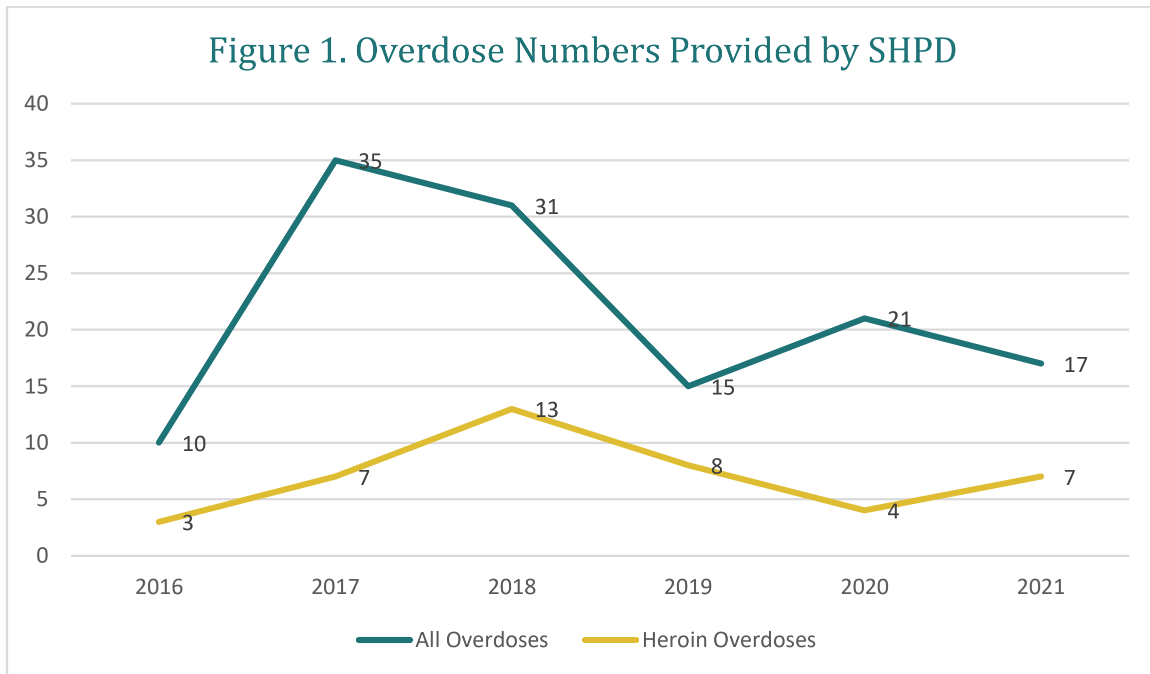
Table 3. Insurance Status of Individuals Receiving Treatment for OUD	**First Year**	**Second Year**	**Third Year**
None/Uninsured	0	0	2
Dual Eligible (covered by both Medicaid and Medicare)	0	1	3
Medicaid/CHIP only	20	3	27

Medicare plus supplemental	6	2	0
Medicare only	0	2	5
Other third party	4	0	4
Unknown	2	6	0

Changes in Outcomes (2.8 – 2.11)

In Year 3, the number of individuals screened for OUD appears to have increase slightly over Year 1 when comparing figures from both the program database and SBIRT flowsheets (Table 1). The total number of individuals receiving direct services from STARS (i.e., treatment) also increased slightly in Year 3.

We have two sources of data to assess the mortality rate over the time period of the grant. The Sweet Home Police Department (SHPD) has been keeping records of drug-related overdoses and fatalities since 2016. After highs in 2017 and 2018, the number of overdoses overall appear to be decreasing. However, this downward trend may have been interrupted by COVID-19. According to preliminary data published by the Centers for Disease Control (2021), drug overdose deaths in Oregon increased by 40% between March 2020 and March 2021.



The Oregon Prescribing and Overdose Data Dashboard publishes county-wide figures. No new data has posted to the dashboard since the Year 2 Evaluation report. Using data from the Medical Examiner, there was a slight (but probably not statistically significant) decrease in the mortality rate for Linn County as whole between 2018 and 2019 (data for 2020 is not yet available). According to Medical Examiner data, there were 4 opioid-related deaths in Linn County in 2018, with a mortality rate of 3.27 deaths per 100,000 population. In comparison, there were 4 opioid-related deaths in 2019, with a mortality rate of 3.16 deaths per 100,000.

Goal 3

Goal 3 of the STARS Rural Outreach project is to "Conduct OUD education and outreach activities in east Linn County that include community distribution of naloxone rescue kits by rural clinics and first responders supplied through Samaritan Lebanon Community Hospital (SLCH) pharmacy services." There are four process questions and three outcome questions under Goal 3.

How many naloxone kits were distributed? (3.1)

According to the tracking database, 174 units of Narcan were distributed during Year 3. (As a reference, the total of naloxone kits w distributed during Year 2 was 79, and during Year 1 was 145.) The information about specific recipients in the database is incomplete.

What factors facilitate or impede community education efforts? (3.2)

Interviewees provided a number of perspectives on community education efforts. First, to the person, key informants noted how COVID-19 disrupted all services, including education and outreach efforts. The program staff shifted to webinars or online education and published several articles in the Sweet Home newspaper, *The New Era*. There is sense from key informants and program partners that it was necessary to first concentrate on building and refining the systems of support for individuals with OUD, before engaging in broad community outreach. Still, key informants generally agree that the narrative around OUD has shifted in comparison to three years ago. There is a broader awareness of OUD as an issue and the attitudes (particularly attitudes consistent with stigma) have slowly shifted. Some noted successes in the area of community education include education of the Sweet Home City Council and the Sweet Home Health Committee.

Who are we reaching through education and outreach efforts? (3.3)

Through the implementation of Community Court, which diverts individuals to treatment rather than the criminal justice system, the program is reaching individuals with substance use issues who are in the court system. According to one key informant, STARS involvement in the Community Court program has led to "greater community awareness of issues, or more meaningful supports for people with OUD, and it's been great cooperation between service providers." Program staff have had continuing involvement with local leaders like the Sweet Home City Council and the Sweet Home Health Committee. One program partner shared, "James has been consistently involved in the Sweet Home Health Committee. He did a great presentation on addiction and the challenges that a person faces. It was timely and really put things into perspective for me." The local newspaper (*The New Era*) has an estimated reach of 6,000 readers in East Linn County. Articles published this year provided information about grant activities, including the availability of MAT and peer support.

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The New Era

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Grant helps local addicts find help support, recovery

By Benny Westcott

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April 28, 2021

JAMES PAGE, right, chats with Dr. Carl Hoogesteger at Sweet Home Family Medicine.

In 2018, Mid Valley Healthcare received a Human Resources and Services Administration grant from the federal government.

The grant, overseen by the Coast to the Cascades Community Wellness Network (CCCWN), financed a support system in which a project director, a project coordinator, and peer support workers working out of Sweet Home Family Medicine offer services to aid in reducing substance overuse and addiction.

The grant money, which is intended for Sweet Home, Brownsville and the surrounding areas, initially came in response to a string of fatal overdoses and a lack of resources and su...

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Figure 2: New Era Article from April 28, 2021

Table 4 presents the number of individuals reached through direct (e.g., presentations, consultations, webinars, online modules) and indirect (e.g., flyers, newsletters, mailings, and other mass media).

Table 4. Direct and Indirect Community Education	First Year	Second Year	Third Year
Children (0-12)	0	0	0
Adolescents (13-17)	0	0	0
Adults (18-64)	4	22	41
Elderly (65+)	1	0	0
Unknown Age	0	0	6000
Estimated Reach for Indirect Communication	110	3100	6041

Who and what are the natural community supports within the service area? (3.4)

Previous evaluation reports have focused on the identification of specific service providers and local assets (e.g., SHEM, Family Assistance Center, local churches). Key informant interviews in Year 3 emphasized how conditions in the service area have changed over the last three years and that partnerships are stronger.

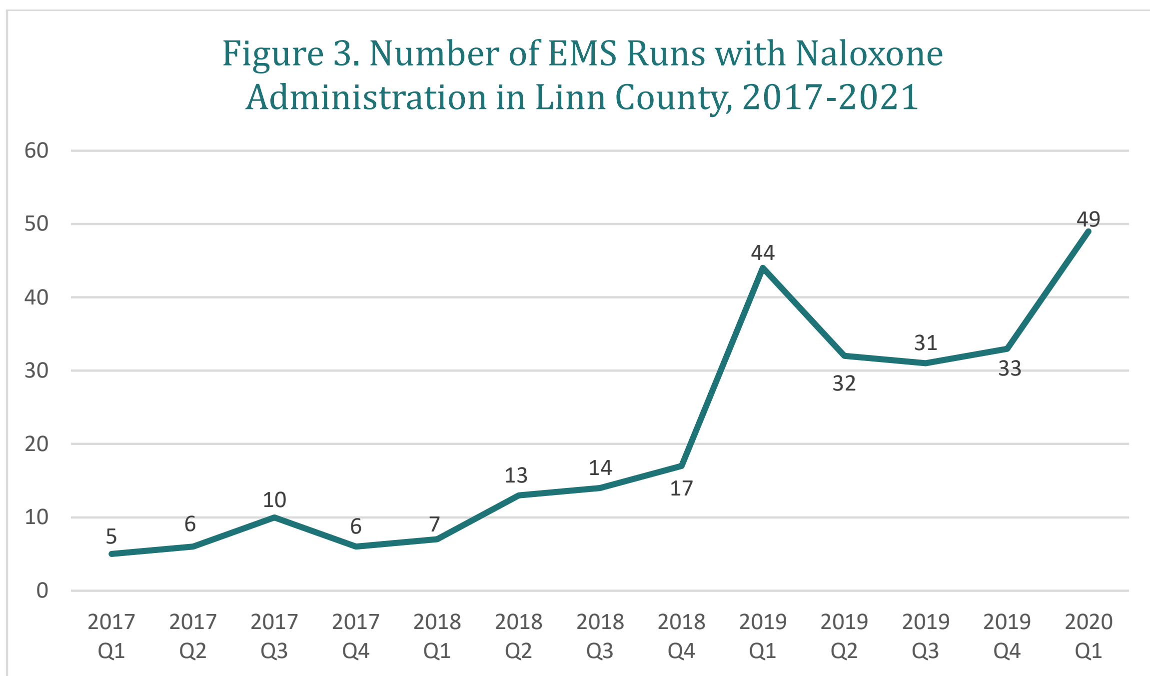
> *"We have more people working on OUD than we had in the past. This includes recovery supports, like Country Counseling and Exodus Recovery in town, and having James and the peer supports is more than we've had in town in the past. The focus on Narcan and MAT is also good."*

> *"People are aware that we have services now. I'm hearing 'my friend met with someone here' – just knowing that it exists is good."*

How has the morbidity rate of OUD changed since the implementation of the STARS rural outreach program? (3.5)

The true prevalence of OUD in east Linn County is not known. Prior to the initiation of the Rural Outreach Program, Linn County's hospitalization rate for use of any opioid in 2017 was among the highest in the state (37 hospitalizations; 29.6 hospitalizations per 100,000 population) according to data from the Oregon Prescribing and Overdose Data Dashboard. The number of opioid-related hospitalizations decreased slightly in 2018 for the county (29 hospitalizations; 22.8 hospitalizations per 100,000 population). Although reported in last year's evaluation report, these are still the most recent data points available.

Naloxone administrations using EMS data is another measure that can be used to better understand morbidity. Figure 2 depicts the trend of EMS naloxone administration in Linn County, using the most recent data available from the Oregon Prescribing and Drug Overdose Data Dashboard. (Please note that data have not been updated since Q1 2020.)



These figures represent Linn County as a whole and are not specific to the service area of the Rural Outreach Program. The number of naloxone administrations should be interpreted with caution; proliferation of naloxone in the service area could have increased its use, whether or not the rate of OUD changed during the same time frame.

How has knowledge and awareness of OUD increased among community members as a result of STARS education and outreach efforts? (3.6)

Key informants generally agreed that awareness of OUD and stigma around OUD has improved. However, as one partner noted, there are still areas where more education and support in the community will be needed.

> *"The Broad community of Sweet Home is tired of it, the net effect of it. There are a lot of mental health issues from the last year and we've got to do something to fix it. The*

> *broader community isn't aware of the finer details of recovery and what it takes to encourage folks along that path. They believe it results in crime and they're tired."*
>
> *"There's greater community awareness of the issues, and more meaningful supports for people with OUD. And there has been great cooperation between service providers."*
>
> *"[Addressing] stigma as a barrier to treatment and recovery is really something that the region has adopted. More and more partners are asking for [training in] stigma reduction."*

How has the support system for families of individuals with OUD changed, and to what degree is it self-sustaining? (3.7)

Supports for families of individuals with OUD is available through the Family Tree Relief Nursery, and presumably other local service providers. Key informants generally noted that this was an area in which they wanted to grow or expand efforts.

Goal 4

Goal 4 of the STARS Rural Outreach Program is to "Extend the reach of STARS Outreach into outlying rural areas by utilizing the services of a trained Peer Support Specialist." The evaluation questions listed under Goal 4 include:

How has the rural PSS affected referrals made for OUD assessment and treatment? (4.1)
How has the PSS identified and increased use of recovery assets within the community? (4.2)
How has the PSS increased support for friends and family members of individuals with OUD? (4.3)
How has the number of individuals initiating treatment for OUD from rural East Linn changed? (4.4)
How has the number of individuals participating in recovery support activities in rural East Linn changed? (4.5)
How has the support system for individuals with OUD changed in the service area, and to what degree is it self-sustaining? (4.6)

Key informants see peer support specialists as very knowledgeable, available, and filling in gaps that cannot be addressed through traditional medical services – gaps like transportation, home visits, assessments, and support groups. The peer supports continue to help individuals to effectively access and navigate services. A number of individuals are actively participating in recovery support activities, but STARS staff also noted that some individuals in the service area must be creative about finding meaningful social supports and activities, especially in the context of COVID-19 restrictions. This may continue to be a challenge.

> *"Having a warm hand-off with peer support is vital. When someone is ready and willing, they need to go now, so it's nice to have the peer support specialists there."*
>
> *"Now we have people. That's great to have point people. We have a direct line for STARS. We get people in, and they are referred quickly. The program is building on itself,*

but [due to the nature of the magnitude and severity of SUDs in the service area] I think we're always going to want more resources."

Peer support specialists are also serving a vital role in connecting with members of the community. As one peer support specialist noted, "The more we're out here, the more we're engaging in community things, we're present in Community Court, people know where we're at and how to get a hold of us." Patients, likewise, praised the fantastic job that PSS are doing:

"I've been working with Josh . . . it's good to see him a few times a week and to call him when I need to. I know that I can call him, if I was to relapse, and it could be in the middle of the night. I don't feel judged, I feel like I can tell him anything."

"I feel like they [STARS] really do try to go above and beyond. Even in the very beginning I didn't have a phone, or have an email that hooked up to my phone. They found alternative ways for connecting."

The total number of individuals receiving direct services from STARS staff for OUD increased in Year 3. Please note that figures reported for Years 1 and 2 came directly from the program database. In Year 3, we populated a list of individuals identified with OUD within the service area, and then asked the STARS staff to review and report how these individuals engaged in treatment.

Table 5. Individuals with OUD in Treatment	**First Year**	**Second Year**	**Third Year**
In treatment 0-2 months without interruption	4	6	9
In treatment 3-5 months without interruption	4	3	9
In treatment 6-12 months without interruption	1	0	4
In treatment 1 year + without interruption	9	10	3
Referred, but not yet started treatment	10	0	6
Discontinued treatment	4	5	10

CONCLUSIONS

Despite significant disruptions caused by COVID-19, the Rural Outreach program had some notable successes in Year 3. The number of individuals identified with OUD and in treatment for OUD appeared to increase slightly. Community partnerships appear to be stronger and galvanized around a common purpose. The Sweet Home community seems to have made significant progress in awareness of OUD as an issue and in lessening the stigma around substance use disorders and treatment. Individuals receiving direct services report being pleased with the support they are getting.

At the conclusion of Year 3 of the grant, foundational activities are in place and seem to be functioning well. These activities include the Hub and Spoke model, offering MAT and peer support through the spokes, structured community activities like Community Court, and solid relationships with key community partners. Key informants continue to be enthusiastic, and each noted that significant improvements in services and community attitudes have been made over the past three years.

RECOMMENDATIONS

Although the Rural Outreach Program will continue for another year of funding, there is an opportunity to have meaningful and purposeful discussions around how to move from an implementation phase into a maintenance phase of operations. According to Aarons, Hurlburt, and Horwitz (2011), the following contextual factors should be considered when a program that is using evidence-based practices shifts from implementation to sustainability:

- Executive leadership demonstrates a commitment to continue implementing evidence-based practices.
- The organization also has policies that support continued use of evidence-based practices.
- The program receives consistent, ongoing funding to the level that is needed to keep service delivery at a high quality.
- There is continued collaboration with community partners and stakeholders that is characterized by trust and frank discussion of concerns.
- Day-to-day programmatic leadership espouses team participation and psychological safety.
- There is a critical mass of expertise on the staff who is implementing the evidence-based practices.
- The program continues to assess fidelity requirements of implementing the evidence-based practice.
- The program maintains adequate staffing.

Although all the bulleted items above are important, the STARS Rural Outreach program may benefit from specifically discussing these factors specifically:

1. How can the Rural Outreach program achieve consistent **funding** so that the same level of services can continue in the service area after grant funds have been exhausted?

2. Considering that STARS and the PSS refer individuals to treatment services outside of the Samaritan system (and based on client needs and preferences), how can the program, or program leadership, continue to build on the relationships currently in place? A **Collective Impact Model** (Kania & Kramer, 2011) could be beneficial in further galvanizing partners around common goals and increasing information sharing across client-serving organizations. In a collective impact model, partners establish a common agenda, agree to measure progress the same way and to share data, coordinate their activities with each other, and continuously communicate.

3. Without a full-time program coordinator dedicated to implementation of the program, how can the program maintain an adequate level of **staffing** to ensure that relationships are maintained, and that activities are being implemented with fidelity?

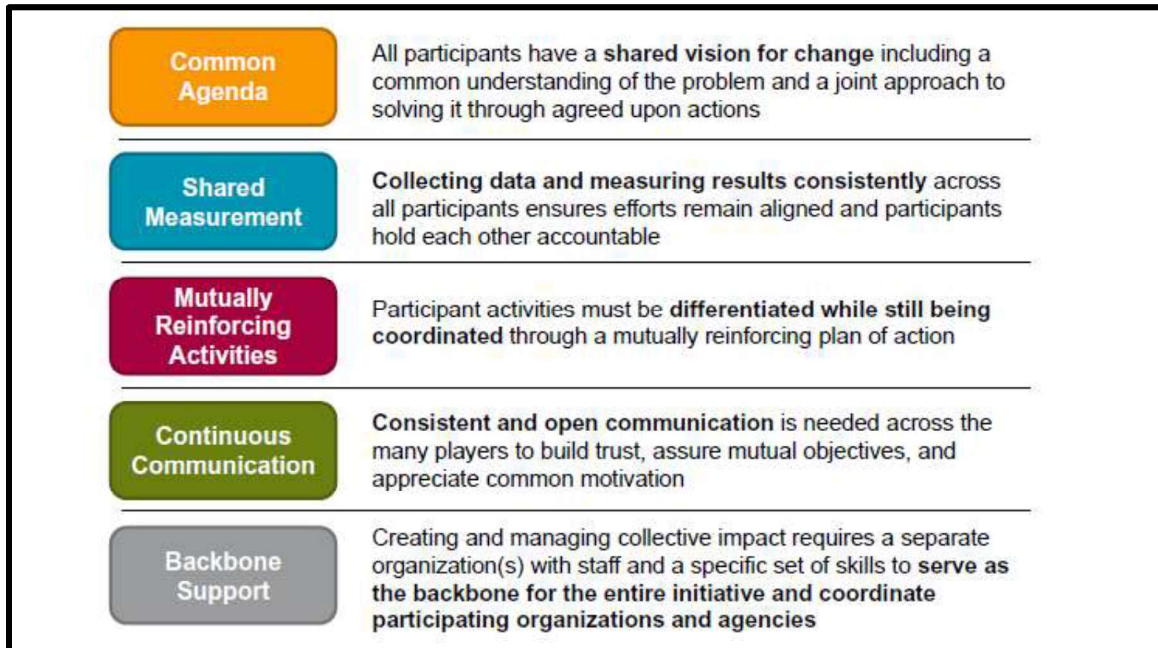


Figure 4. Channeling Change: Key Conditions for Collective Impact (from FSG.org)

USE AND DISSEMINATION PLAN

As previously stated, the intended users of this evaluation report are program and clinic staff, the CCCWN advisory committee, program partners, and community members. Information contained within the report may also be relevant the funder, as well as the SHS administration.

With guidance and direction from program staff and the CCCWN advisory committee, the evaluator recommends that the following steps be taken for communication of evaluation findings for Year 3:

Step 1: Discuss evaluation findings internally and identify needed or desired adjustments to program plans and activities.

Step 2: Identify audiences and opportunities to communicate evaluation findings.

Step 3: Work with SHS marketing/communications to create specialized media tools for communicating with these audiences (e.g., newsletter story or PowerPoint presentation).

Step 4: Create a list of audiences, a timetable for presentations and publications, and make plans to complete them.

APPENDICES

APPENDIX A: PROGRAM ACTIVITIES AND LOGIC MODEL

Coast to the Cascades Community Wellness Network (CCCWN) Mental Health/Substance Use Disorders Advisory Committee

The CCCWN provides oversight and supervision to the STARS Rural Outreach project. The consortium provides a formal structure for key community leaders and decision-makers to supervise program implementation. The consortium identifies and leverages community assets, assists in moving initiatives forward, and ensures that the project follows all grant requirements. Using a consortium or community coalition to provide leadership within a community has long been a recommended strategy to combat substance use disorders. The National Rural Health Association ([NRHA]; Gale, 2016) recommends developing broad community coalitions in order to deepen the community's capacity to address OUD locally. Project Lazarus, which used a community activation and coalition building model for an opioid overdose prevention program in North Carolina, documented reduced opioid-related mortality (Albert et al., 2011). The NRHA (Gale, 2016) reports than many other communities across the U.S. are also implementing and evaluating this promising strategy.

Hub and Spoke Model for OUD Treatment + Medication-Assisted Treatment

The project will establish a Hub and Spoke model to expand OUD treatment and recovery services into rural East Linn County. Samaritan Treatment and Recovery Services, which is located at the nearest community hospital in Lebanon, will serve as the hub, providing comprehensive and intensive outpatient services and coordinating care for STARS participants. The spokes of the model will be located in Sweet Home and Brownsville where primary care physicians will supervise outpatient MAT and a peer support specialist will organize and implement recovery support activities. The Hub and Spoke model has been offered as a promising practice in rural areas where typical outpatient treatment services are unavailable or not feasible to serve the needs of the population (Chou et al., 2016). Vermont implemented the Hub and Spoke Model in 2014 with the primary goal of reducing illicit opioid use. An evaluation conducted by the Vermont Department of Health in 2017 found that those patients involved in Hub and Spoke settings reported a 96% decrease in opioid use and a 92% drop in IV use. They also reported an 89% decrease in ED visits and 90% reduction in arrests and zero overdosed 90 days before the interview compared to 25% who had overdosed 90 days before entering treatment. Vermont is a very rural area as is East Linn County and the demographic profiles of the two areas are similar.

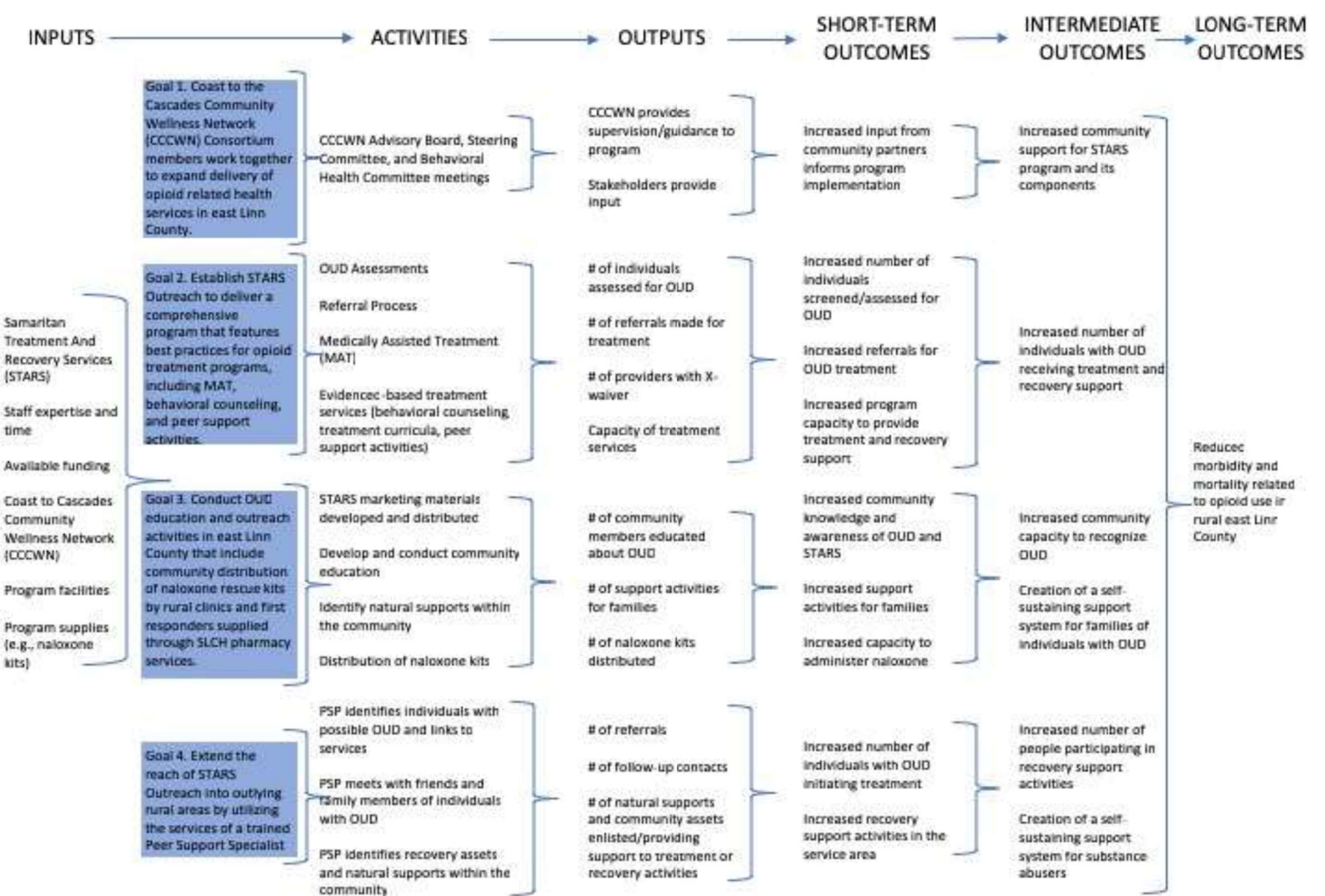
The American Society of Addiction Medicine and the Substance Abuse and Mental Health Services Administration among other national agencies have recognized MAT as an evidence-based practice for OUD treatment. Research has demonstrated that MAT is effective in reducing mortality among individuals with OUD (e.g., Sordo et al., 2017), in promoting recovery from opioid dependence (e.g., Mattick et al., 2012), and in persistence in OUD treatment (see Connery, 2015).

Peer Support

Peer support services provide outreach to and engage individuals with substance use disorder by individuals who themselves have "lived experience." A Peer Support Specialist (PSS) is individual in recovery who has also completed formal training in addiction treatment who, benefitting from lived experience with addiction, can often relate to individuals with OUD in ways that medical or treatment staff cannot (SAMSHA, 2018). Because of their lived experience and successful recovery, peer support specialists can offer a level of support, understanding and hope that traditional behavioral health specialists and medical professionals are often unable to provide. Peer support specialists are able to bridge the cultural gap between the medical community, and the behavioral health system for persons suffering from the consequences of substance use. Information provided by peers is often seen to be more credible than that provided by mental health professionals (Woodhouse & Vincent, 2006).
STARS will use a PSS in a variety of ways throughout the project. The PSS will provide a critical role in coordinating care in the Hub and Spoke model by serving as a "care connector" and facilitating recovery activities at the spoke sites (Chou et al., 2016). The PSS will also follow up on referrals of individuals with OUD and conduct community education activities. Research indicates that the use of peers in recovery support may improve effectiveness of treatment outcomes (e.g., Bassuk et al., 2016).

Community Education and Targeted Naloxone Distribution

In the rural setting, access to life-saving Naloxone will be essential to reducing OUD-related mortality. The Centers for Disease Control and Prevention (CDC, 2018) and the National Institutes of Drug Abuse (NIDA, 2017) recognize targeted distribution of naloxone as an evidence-based practice. A recent study by Pitt and Brandeau (2018) concluded that increased naloxone distribution, coupled with MAT and improved access to treatment not only reduced opioid-related deaths, but also increased years of life and quality-adjusted life years. STARS will provide naloxone to first responders and clinics within the service area. Research supports that naloxone distribution to first responders and others close to OUD users is effective at reducing opioid-related mortality, even in rural areas (e.g., Bagley et al., 2017; Faul et al., 2015; Lewis, Vo, & Fishman, 2017; and Wheeler et al., 2012).



STARS Rural Outreach Program
Logic Model
Overarching Goal: To reduce morbidity and mortality related to opioid use in rural east Linn County.
INPUTS
ACTIVITIES
OUTPUTS
SHORT-TERM OUTCOMES
INTERMEDIATE OUTCOMES
LONG-TERM OUTCOMES
Samaritan Treatment And Recovery Services (STARS)
Staff expertise and time
Available funding
Coast to Cascades Community Wellness Network (CCCWN)
Program facilities
Program supplies (e.g., naloxone kits)
Goal 1. Coast to the Cascades Community Wellness Network (CCCWN) Consortium members work together to expand delivery of opioid related health services in east Linn County.
CCCWN Advisory Board, Steering Committee, and Behavioral Health Committee meetings
CCCWN provides supervision/guidance to program
Stakeholders provide input
Increased input from community partners informs program implementation
Increased community support for STARS program and its components
Goal 2. Establish STARS Outreach to deliver a comprehensive program that features best practices for opioid treatment programs, including MAT, behavioral counseling, and peer support activities.
OUD Assessments
Referral Process
Medically Assisted Treatment (MAT)
Evidencec-based treatment services (behavioral counseling, treatment curricula, peer support activities)
# of individuals assessed for OUD
# of referrals made for treatment
# of providers with X-waiver
Capacity of treatment services
Increased number of individuals screened/assessed for OUD
Increased referrals for OUD treatment
Increased program capacity to provide treatment and recovery support
Increased number of individuals with OUD receiving treatment and recovery support
Goal 3. Conduct OUD education and outreach activities in east Linn County that include community distribution of naloxone rescue kits by rural clinics and first responders supplied through SLCH pharmacy services.
STARS marketing materials developed and distributed
Develop and conduct community education
Identify natural supports within the community
Distribution of naloxone kits
# of community members educated about OUD
# of support activities for families
# of naloxone kits distributed
Increased community knowledge and awareness of OUD and STARS
Increased support activities for families
Increased capacity to administer naloxone
Increased community capacity to recognize OUD
Creation of a self-sustaining support system for families of individuals with OUD
Goal 4. Extend the reach of STARS Outreach into outlying rural areas by utilizing the services of a trained Peer Support Specialist
PSP identifies individuals with possible OUD and links to services
PSP meets with friends and family members of individuals with OUD
PSP identifies recovery assets and natural supports within the community
# of referrals
# of follow-up contacts
# of natural supports and community assets enlisted/providing support to treatment or recovery activities
Increased number of individuals with OUD initiating treatment
Increased recovery support activities in the service area
Increased number of people participating in recovery support activities
Creation of a self-sustaining support system for substance abusers
Reducec morbidity and mortality related to opioid use ir rural east Linr County

APPENDIX B: LIST OF ACRONYMS

ASAM: American Society of Addiction Medicine
CADC: Certified Alcohol Drug Counselor
CCCWN: Coast to the Cascades Community Wellness Network
HRSA: Health Resources and Services Administration
MAT: Medication-Assisted Treatment
OHA: Oregon Health Authority
OUD: Opioid Use Disorder
PSS: Peer Support Specialist
P&P: policy and procedure
SEM: Sweet Home Emergency Ministries
SHPD: Sweet Home Police Department
SHS: Samaritan Health Services
STARS: Samaritan Treatment and Recovery Services

REFERENCES

Aarons, G.A., Hurlburt, M., & Horwitz, S.M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health, 38,* 4-23. DOI 10.1007/s10488-010-0327-7.

Bagley SM, Forman LS, Ruiz S, Cranston K, Walley AY. Expanding access to naloxone for family members: The Massachusetts experience. Drug Alcohol Rev. January 2017:n/a-n/a. doi:10.1111/dar.12551

Centers for Disease Control and Prevention. ([CDC],2018). Evidence-Based Strategies for Preventing Opioid Overdose: What's Working in the United States. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, 2018. Retrieved from http://www. cdc.gov/drugoverdose/pdf/pubs/2018-evidence-based-strategies.pdf.

CDC (2021). Vital Statistics Rapid Relsease: Provisional Drug Overdose Death Counts. Retrieved from https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm#dashboard.

Chou R, Korthuis PT, Weimer M, et al. Medication-Assisted Treatment Models of Care for Opioid Use Disorder in Primary Care Settings [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2016 Dec. (Technical Briefs, No. 28.) Available from: https://www.ncbi.nlm.nih.gov/books/NBK402352/

Connery, H. S. (2015). Medication-assisted treatment of opioid use disorder: review of the evidence and future directions. Harvard review of psychiatry, 23(2), 63-75.

Faul M, Dailey MW, Sugerman DE, Sasser SM, Levy B, Paulozzi LJ. Disparity in Naloxone Administration by Emergency Medical Service Providers and the Burden of Drug Overdose in US Rural Communities. Am J Public Health. 2015;105(S3):e26-e32. doi:10.2105/AJPH.2014.302520

Gale, J. A. (2016). Rural communities in crisis: Strategies to address the opioid crisis. National Rural Health Association Policy Brief. Retrieved from https://www.ruralhealthweb.org/getattachment/Advocate/Policy-Documents/RuralCommunitiesinCrisisStrategiestoAddresstheOpioidCrisisPolicyPaperApril2016.pdf.aspx

Kania, J., & Kramer, M. (2011). Collective Impact. Stanford Social Innovation Review, 9(1), 36–41. https://doi.org/10.48558/5900-KN19

Lewis CR, Vo HT, Fishman M. Intranasal naloxone and related strategies for opioid overdose intervention by nonmedical personnel: a review. Subst Abuse Rehabil. 2017;8:79-95. doi:10.2147/SAR.S101700

Mattick RP, Breen C, Kimber J, Davoli M. Methadone Maintenance Therapy Versus No Opioid Replacement Therapy for Opioid Dependence. In: Cochrane Database of Systematic Reviews. John Wiley & Sons, Ltd; 2009. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002209.pub2/abstract. Accessed January 30, 2014.

NIDA. (2017). The Federal Response to the Opioid Crisis. Retrieved from https://www.drugabuse.gov/about-nida/legislative-activities/testimony-to-congress/2017/federal-response-to-opioid-crisis.

Oregon Health Authority. (n.d.). Opioid data dashboard. Retrieved from https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Pages/data.aspx.

Pitt, A.L., Humphreys, K., & Brandeau, M.L. (2018). Modeling health benefits and harms of public policy responses to the US opioid epidemic. American Journal of Public Health, 108(10), 1394-1400. Doi: 10.2105/AJPH.2018.304590.

Sordo, L., Barrio, G., Bravo, M. J., Indave, B. I., Degenhardt, L., Wiessing, L., ... & Pastor-Barriuso, R. (2017). Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ, 357, j1550. doi: 10.1136/bmj.j1550.

Vermont Department of Health. (2017). Hub & Spoke Model Evaluation 2017. Retrieved from http://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP_Hub_and_Spoke_Evaluation_Brief_2018_1.pdf.

Wheeler E, Davidson PJ, Jones TS, Irwin KS. Community-Based Opioid Overdose Prevention Programs Providing Naloxone—United States, 2010. MMWR Morb Mortal Wkly Rep. 2012;61(6):101-105.

Woodhouse, A., & Vincent, A. (2006). Mental health delivery plan. Development of Peer Specialist Roles: A Literature Scoping Exercise. Scottish Recovery Network, Glasgow.

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