

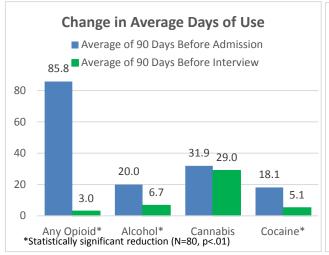
## **Hub & Spoke Model Evaluation 2017**

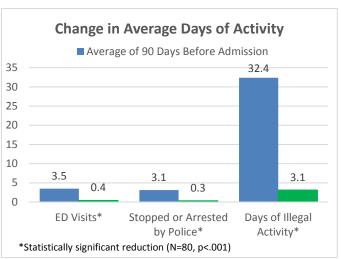
Vermont implemented the Care Alliance for Opioid Addiction, an innovative Hub & Spoke system of medication-assisted treatment (MAT) for people who are addicted to opioids. The primary goal of MAT is to reduce illicit opioid use. Since the introduction of this system of care in 2014, access to treatment has expanded, and new clinical and supportive services not typically included in MAT have been added. This study was conducted to better understand the impact of these services on the lives of those in treatment.

MAT and the Hub & Spoke model: People who are addicted to opioids suffer painful withdrawal when they stop using, and powerful cravings even after withdrawal has ended. Medication-assisted treatment – with methadone or buprenorphine at regional treatment centers (Hubs), or with buprenorphine in physician offices (Spokes) – has been shown to be the most effective treatment for people with opioid use disorders. MAT prevents cravings and increases a person's ability to avoid risky behaviors, and to care for themselves and their families. People with opioid use disorders may need to continue medication indefinitely, like people receiving medication for asthma, diabetes or high blood pressure.

## **KEY FINDINGS**

Study participants reported significant positive impacts. Those in both Hub and Spoke settings reported a 96% decrease in opioid use, including a 92% drop in injection drug use.





**Opioid, Alcohol & Other Drug Use** – Study participants reported statistically significant reductions in the use of alcohol and illicit drugs except cannabis/marijuana, which stayed relatively unchanged. There were no significant differences between males and females, or those treated at Hubs or Spokes. People with opioid use disorder who were not in treatment reported no significant changes in any measure.

**Public Health & Safety** – Significant reductions were reported by study participants in other measures:

- 89% decrease in emergency department visits
- 90% reductions in both illegal activities and police stops/arrests
- Zero had overdosed in the 90 days before the interview, compared to 25% who had overdosed before entering treatment

Percent of People Reporting Overdose: In-Treatment Group







In the 90 Days Prior to Treatment Admission (T<sub>1</sub>) In the 90 Days Prior to Interview (T<sub>2</sub>) **Improved Wellbeing** – Family conflict, feelings of depression, anxiety and anger decreased, and participants reported being much more satisfied with their lives. Hub and Spoke clients view medication as more important than the counseling, yet report liking their counselor. Those treated in Spokes perceive their improvement more positively and appreciate being treated like any other patient at the office.

"The shame goes away. I don't have to lie to my family and whatnot.

Then, everything falls into place after that. There's no deceit, secrets, hiding. You're not spending —

I have insurance, thankfully, because otherwise it just wouldn't be possible." — Study Participant

"I'm a lot healthier. I have money. Everything's changed, relationships, work – everything for the positive. There hasn't been one negative thing from the (buprenorphine) on my life since beginning on the program.

As far as lifestyle changes, they've all been positive." – Study Participant

"A lot better, my life has gotten a whole lot better. I've been able to hold down a job.
I'm a better mother. I'm just aware of everything now. I'm not doped up. I've been able to save money. It's
just a whole lot different, and better." – Study Participant

## Areas for continued focus and improvement:

- Wrap-Around Services Participants indicated a need for help finding employment and for additional mental health services. These recommendations were echoed in the family member/ significant other interviews. Family members and significant others would like to be more involved in the treatment process.
- **Stigma** Hubs treat only people with opioid use disorders, and participants report more stigma, frequent staff turnover, and drug talk/offers to sell drugs on the premises as negatives of Hub participation.
- **Regional Access** Access varies across the state. Typically, regions with high rates of Spoke access have lower rates of Hub access and vice versa. A more even balance of services in each region is needed, except in the southern and central regions where there is access to both Hubs and Spokes.
- Treatment Policies Variations in policies and protocols among both Hub and Spoke sites may have affected how participants received care and services, especially regarding cannabis use and testing. Some locations don't test for it, while others will stop treating an individual with a positive test.

**Evaluation Methodology:** 100 people around the state participated: 40 who were receiving methadone treatment in Hubs, 40 who were receiving buprenorphine treatment in Spokes, and 20 who were using opioids but not in treatment. Of the 20 not in treatment, 10 had never had MAT for opioid use disorder, and 10 had. Each group was made up of equal numbers of males and females. To evaluate change over time, participants in treatment were asked to recall their opioid use and life functioning during two separate 90 day periods. They were asked to recall opioid use and life functioning in the 90 days before admission to treatment, and again in the 90 days before the date of the evaluation interview. Participants who were not in treatment were asked to recall opioid use and life functioning in the 90 days prior to one year before the evaluation interview. In addition, 24 people in treatment and 12 family members or significant others provided in-depth interviews focused on their perceived value of MAT services.

FULL REPORT – Vermont Hub and Spoke Model of Care for Opioid Use Disorders: An Evaluation healthvermont.gov/alcohol-drug-abuse/alcohol-drugs/heroin-and-other-drugs