

Development of a Hub and Spoke Model of Medication Assisted Treatment (MAT) in Rural Communities of Western Colorado for Patients with Opioid Use Disorder (OUD)

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Problem

- Opioid Use Disorder (OUD) impacts 2 million Americans
- Drug overdose deaths continues to increase
 - Prescription Opioids
 - Illegal Opioids
- Predicted without intervention this number will increase
- Medication Assisted Treatment (MAT) is the “Gold Standard” for treatment of OUD for risk reduction

Background Information

- 2017, in Colorado, more than 1,000 opioid - overdose deaths as a result of prescription opioids and illegal opioids
- Center for Disease Control identified 70,237 drug overdose deaths nationally
- Challenges exist in rural areas of western Colorado using MAT
- “Hub and Spoke” originally launched in Vermont in 2012 –deemed effective model for MAT therapy in rural areas where a health care facility serves as the service “hub” and community-based providers serves as “spokes”.
- A Hub and Spoke model of MAT implemented in rural western Colorado
 - Mind Springs Health: “Hub”
 - Two local provider offices: “Spokes”

Process

- Community leaders in Grand Junction partner together to address the opioid crisis locally
- “Hub” develops a team that included an Advanced Practice Psychiatric Nurse Practitioner, Peer Specialist, Therapist, Case Manager, and MOA.
- MAT was started using the Hub and Spoke Model, February 2018
- MAT Contract developed
- “Spokes” set up in the local community with two PCP offices.



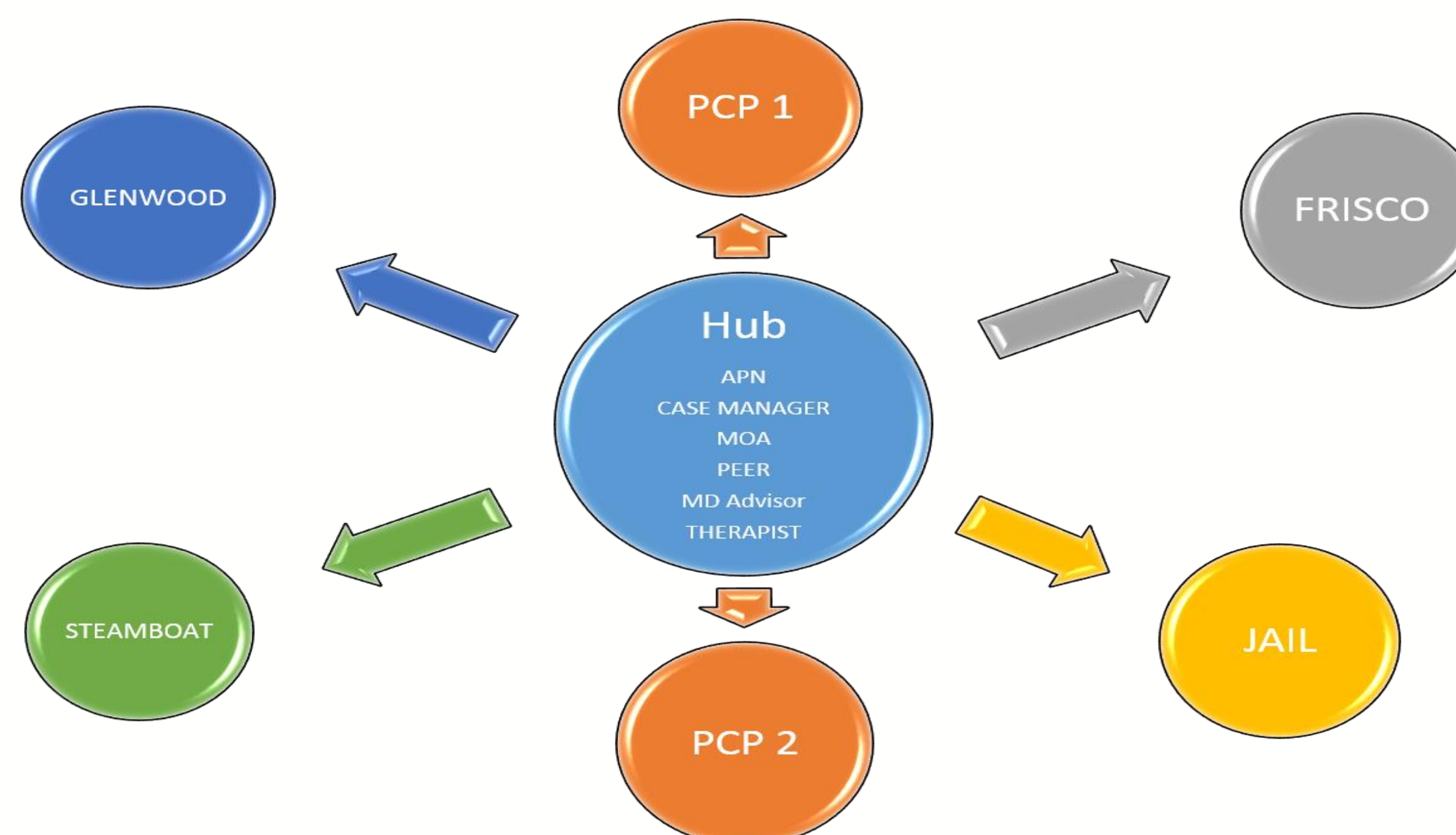
Setting and Participants

- Rural Western Colorado
- Grand Junction--largest town on the western slope of Colorado
- Estimated population of 61,881
- HUB: Mind Springs Health (MSH)-- largest community mental health clinic in Grand Junction
- SPOKES: Local primary care providers (PCPs), MSH mental health clinics in smaller rural areas of the western slope
- Clients self referred to MSH or referred by PCPs
- Clients have qualifying diagnosis of an OUD
- Clients agree to the MAT contract
- Clients seen at the “Hub” for evaluation and appropriateness for MAT by the Nurse Practitioner
- Clients placed into a category of induction vs maintenance

Results

- Fully operational and reached max clients (30) by October 2018
- APN approved to expand to 100 clients November 2018 in MAT
- Clinic team added another APN April 2019
- Coordination with Mesa County Public Health early 2019 for education at CMU and the local community
- Started Telehealth to rural areas March 2019
- Two PCP practices successfully able to see clients as spokes by December 2018
- Plan for expansion of MAT to the jail
- Quality Improvement (QI) projects for patient satisfaction in early stages by April 2019

Hub and Spoke Model



References

- Brooklyn, J., Sigmon, S. "Vermont Hub-and-Spoke Model of Care for Opioid Use Disorder: Development, Implementation, and Impact." *J Addict Med.* 11.4 (2017): 286-292.
- Daley, J. (2017, September 12). Colorado Heroin And Opioid Deaths Rise Even More Dramatically. *CPR News*, p. 1-6.
- Hedegaard, Holly, Brigham Bastian, James Trinidad and Margaret Warner. "Drugs Most Frequently Involved in Drug Overdose Deaths: United States, 2011-2016." *CDC National Vital Statistics Reports.* 67.9 (2018): 1-13.
- "Medication-Assisted Treatment for Opioid Use Disorder Study (MAT Study)." *Center for Disease Control (CDC) Opioid Portal.* Web. Mar 2019. <https://www.cdc.gov/opioid/Medication-Assisted-Treatment-Opioid-Use-Disorder-Study.html>
- Scholl, L., Seth, P., Kariisa, M., Wilson, N., Baldwin, G. "Drug and Opioid-Involved Overdose Deaths--United States, 2013-2017." *Weekly.* 67.5152 (2019): 1419-1427.

Acknowledgements:

- Dr. Erin Donavan, Ed.D., MSN, RN, edits
- Dr. Kathleen Hal, PhD, ANP edits and IRB
- Dr. Sarah Kooienga, PhD, FNP edits and ongoing advising/support