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Increasing Naloxone Availability

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FM Project: Increasing Naloxone Availability

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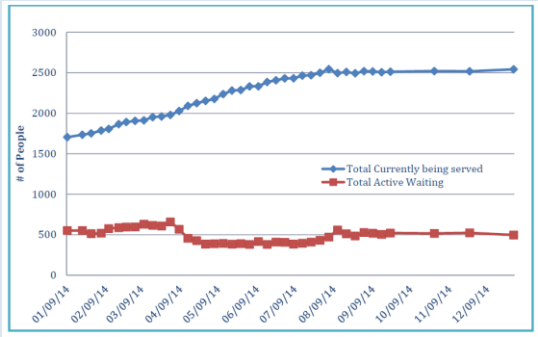
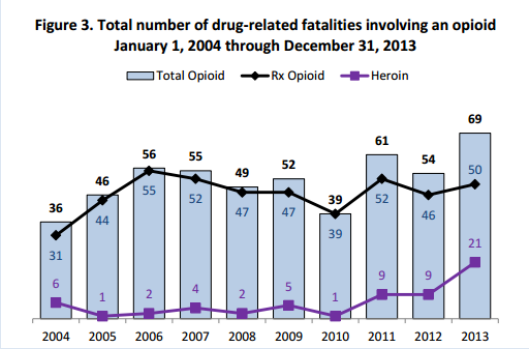
The Problem:

- Opioid abuse remains a major problem in U.S. public health. In 2013, 4.5 million people reported nonmedical use of prescription pain relievers in the prior month; 289,000 reported use of heroin.[1]
- Nationally, nearly 80 percent of people with opioid use disorder are not receiving treatment.[2]
- In Vermont, despite an expansion of treatment Hub capacity, there remain significant waiting lists as all 7 treatment Hub sites and Spokes, thus increasing the likelihood of continued overdose deaths (graph 1). [3]



- Nationally, in 2012, there were 16,007 deaths involving opioid analgesics and 5,925 involving heroin.[4]
- Despite the Vermont's shift towards treatment-based approaches, prescription overdose deaths continue at a steady rate, and heroin deaths are increasing (graph 2).[5]



The Problem:

- Between 1996 and 2010, the CDC reported 10,171 successful opioid overdose reversals using the opioid antagonist naloxone. [6]
- Intranasal naloxone has been shown equally effective to I.V. dosing and confers a preferable safety profile in the pre-hospital emergent settings.[7]
- A retrospective study of naloxone administered by healthcare professionals and non healthcare professionals in Massachusetts found no difference in efficacy reversing overdose. [8]
- Although Vermont's Act 75 (2013) provides for expanded distribution of the drug, both prongs of the state's strategy have faced obstacles:
  - First, despite the planned provision of doses to all emergency medical response teams, one of the state's two largest police forces has resisted carrying the drug.
  - Second, despite the free distribution of naloxone at 7 treatment hubs, multiple sites report significant shortages, and the escalation of price for the drug (63% in the last year) is likely to further limit the availability of free doses.
- Despite provisions in Act 75 ('13) affording legal protections for physicians directly prescribing Naloxone to those in recovery, their family members, and persons who might find themselves in a position to help those who might overdose, providers at Stowe Family Practice (STFP) and their MAT team colleagues were unaware of any physicians doing so in the state and were eager to research the necessary parameters for such a practice.

Discussions With Partners:

- In order to better understand the problem, the author:
  - Attended the northern VT MAT (medically assisted treatment) team learning collaborative session to investigate other physician's naloxone prescribing habits, the current role of treatment Hubs in naloxone distribution, and to consult with addiction experts from Dartmouth Hitchcock.
  - Engaged with Michael Leyden, Deputy Director of Emergency Medical Services at the Department of Public Health, to better understand the Department of Health's interpretation of provisions within Act 75 regarding legal protections for physicians wishing to prescribe naloxone.
  - Engaged with local pharmacies to asses their:
    - (1) Current supplies of naloxone (none carried nor had any previously filled a prescription).
    - (2) Their willingness to carry the drug.
    - (3) Ability to acquire the necessary components (drug and atomizer are sold separately).
    - (4) The price at which they would sell the drug to someone without insurance.
  - Engaged with the Medicaid bureaucracy and the contractor charged with executing their reimbursements (Gould) to find the price for naloxone for those on Medicaid.

Methodology & Intervention:

- Based on the information gathered and the direction of providers at STFP, the author:
  - Coordinated with a local pharmacy to begin stocking naloxone doses and Teleflex Mad 300 atomizers.
  - Ordered sample atomizers to facilitate in office training of drug administration.
  - Drafted a memo to other MAT teams across the state describing current federal guidelines, provisions of Act 75 related the issue, and STFP practice related to the prescribing of naloxone.

Results & Response Data:

- On April 14th, two days after a STFP methadone patient died of an overdose, the first prescription known to the author for prophylactic naloxone given to the family member of a current users was written in the state of Vermont.

- The physicians at STFP intend to start/continue prescribing naloxone to:
  - Current users.
  - Family members of current users.
  - Those who frequent settings where an overdose may occur.

Evaluating Effectiveness & Limitations:

- Evaluation:
  - The continuity of care provided by the "Spoke" model allows for a thorough evaluation of this project's efficacy. Patients undergoing MAT return to STFP at least monthly for urine analysis, counseling, and prescription refills. MAT team members plan to (1) confirm prescriptions are filled, and (2) track whether they are used.

- Limitations:
  - This project is primarily limited by time. With more time, those involved would have liked to further investigate means of gaining financial support from the state to fund this program.

Future Projects:

- Future projects might:
  - Analyze MAT team generated data on number of prescriptions written, number of prescriptions filled, and how frequently doses are used. This data can be compared with data collected from the Department of Health on use patterns from doses distributed by Hubs.
  - Seek to understand why more doctors have not yet moved to prescribe naloxone to those in recovery and those close to them.
  - Seek to understand how the availability of naloxone impacts drug use behaviors.
  - Seek to understand the street value of naloxone and the impact of wider availability of the drug on that street value.
  - Seek to understand why some community groups have opposed making the drug more accessible in our community.

Sources:

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2: Arfken CL, Johanson CE, diMenza S, et al. Expanding treatment capacity for opioid dependence with buprenorphine: National surveys of physicians. J Subst Abuse Treat. 2010 Sep;39(2):96–104.

3: Vermont Blueprint for Health, 2014 Annual report. Page 71. http://legislature.vermont.gov/assets/Legislative-Reports/VTBlueprintforHealthAnnualReport2014-Final.2015.01.26.pdf

4: Warner M, Hedegaard H, et al. Trends in Drug-poisoning Deaths Involving Opioid Analgesics and Heroin: United States, 1999–2012. CDC Office of Analysis and Epidemiology.
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6: Centers for Disease Control and Prevention (CDC).Community-based opioid overdose prevention programs providing naloxone - United States, 2010. MMWR Morb Mortal Wkly Rep. 2012 Feb 17;61(6):101-5.

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8: Doe-Simkins M, Quinn E, et al. Overdose rescues by trained and untrained participants and change in opioid use among substance-using participants in overdose education and naloxone distribution programs: a retrospective cohort study. BMC Public Health. 2014 Apr 1;14:297. doi: 10.1186/1471-2458-14-297.