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The Pursuit of Responsible Opioid Overdose Prevention Technologies: Divergent Pasts and Managed Futures

In October 2017, President Trump officially declared the so-called "opioid crisis" a public health emergency in response to an increase in the rate of opioid use mobility and mortality[1]. Over the next two months the Office of Science and Technology Policy convened a Fast Track Action Committee (FTAC) on Health Science and Technology Response to the Opioid Crisis (Opioid FTAC) under the National Science and Technology Council (NSTC) Committee on Science. They were charged with the task to create a roadmap for research and development (R&D) to support the president's response. The committee identified "overdose prevention and recovery" as a main priority for R&D and offered recommendations in the "development of novel medications, vaccines, and devices" (National Science and Technology Council 2019, p. vii[2]). Currently there is one medication available for overdose treatment: naloxone. Its past is fraught with contradictions.

Naloxone, an opioid antagonist, is a medication designed to *reverse* an overdose by blocking the effects of other opioids and ultimately preventing fatalities. The drug, patented in 1961, has overcome many legal barriers. It was initially articulated as a controversial harm reduction measure as a community-based provision of take-home naloxone rescue kits (THN) in the 1990s by active users and their family members. In recent years it has been reconceptualized as a evidence-based public health strategy linked to coordinated efforts for long term opioid abuse treatment[3]. The controversies over the drug formulation, cost, convenience, administration have turned naloxone into a political object. As new discoveries are made and current technologies are improved, how might we manage divergent interests in the future?

Taking naloxone as an ethnographic object, we focus on its socio-technological formulations--vial for injection, prefilled autoinjection (Evzio) and prepackaged nasal spray (Narcan)-- and their affordances for community management. Without a bystander to an

[1] https://www.whitehouse.gov/opioids/ (Accessed 29 January 2020)
[2] https://www.whitehouse.gov/wp-content/uploads/2019/10/Health-Research-and-Development-for-Opioid-Crisis-National-Roadmap-2019.pdf (Accessed 29 January 2020)
[3] http://www.unodc.org/docs/treatment/overdose.pdf (Accessed 29 January 2020)

overdose, naloxone is ineffective. Drawing on ethnographic fieldwork at a take-home naloxone program in Central New Mexico, we employ the concept of "technologies of repair" (Smith) to make visible the people and sociotechnical schema that maintain a compassionate and sustainable practice of care. Their involvement in developing locally situated curriculum on naloxone, advocacy for widespread access, and other relational activities are often overlooked in the discovery phase of innovation. We argue that close attention to these practices and the people whom overdose has come to matter to *is* responsible research and innovation that may lead to a more civically managed future of opioid overdose prevention technologies.