

# Fentanyl Test Strip Distribution in the Emergency Department: Early Experience and Outcomes

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## Background

- In 2023, deaths from fentanyl and its analogues represent the majority of overdose deaths<sup>1</sup>
- Fentanyl is detected in roughly 12.5-14.8% of stimulants<sup>2</sup>
- Fentanyl test strips (FTS) allow patients to detect the presence of fentanyl<sup>3</sup> and make informed choices about safer substance use
- FTS have been associated with changes in drug use behavior<sup>4</sup>
- Literature on the outcomes of distribution of FTS to people who use drugs is sparse
- Emergency departments (ED) serve as a common touchpoint with the healthcare system for people who use drugs
- Highest rate of repeat overdose is within 30 days<sup>5</sup>

## Objectives

- Demonstrate feasibility of distributing FTS to patients in a busy, urban Emergency Department
- Investigate if distribution of FTS was associated with fewer repeated ED presentations for overdose

## Methods

- Clinician training was completed prior to implementation
- Clinicians offered patients presenting after a suspected opioid overdose or with a history of a substance use disorder FTS
- An FTS order in the EMR documented acceptance or refusal of FTS by patients
- Patient demographics, type of overdose, and 14-day follow up in the ED were recorded

FTS distribution in the Emergency Department

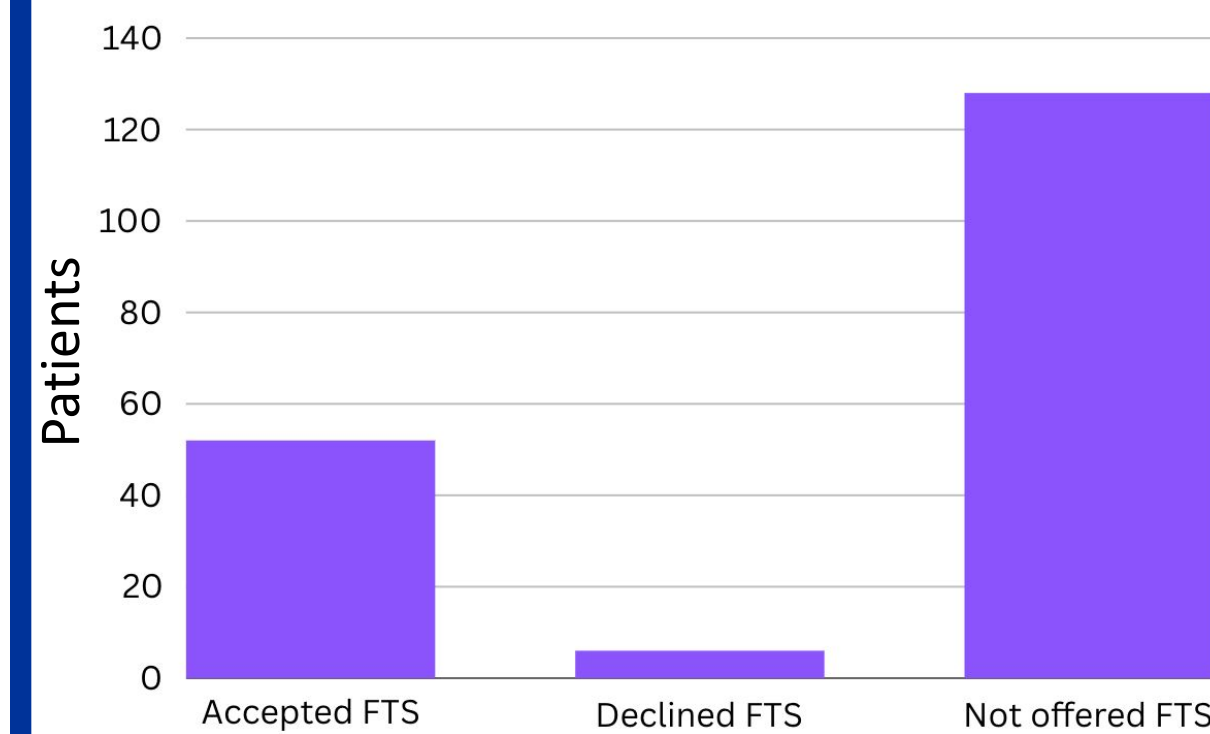


Figure 1: Proportion of patients accepting FTS

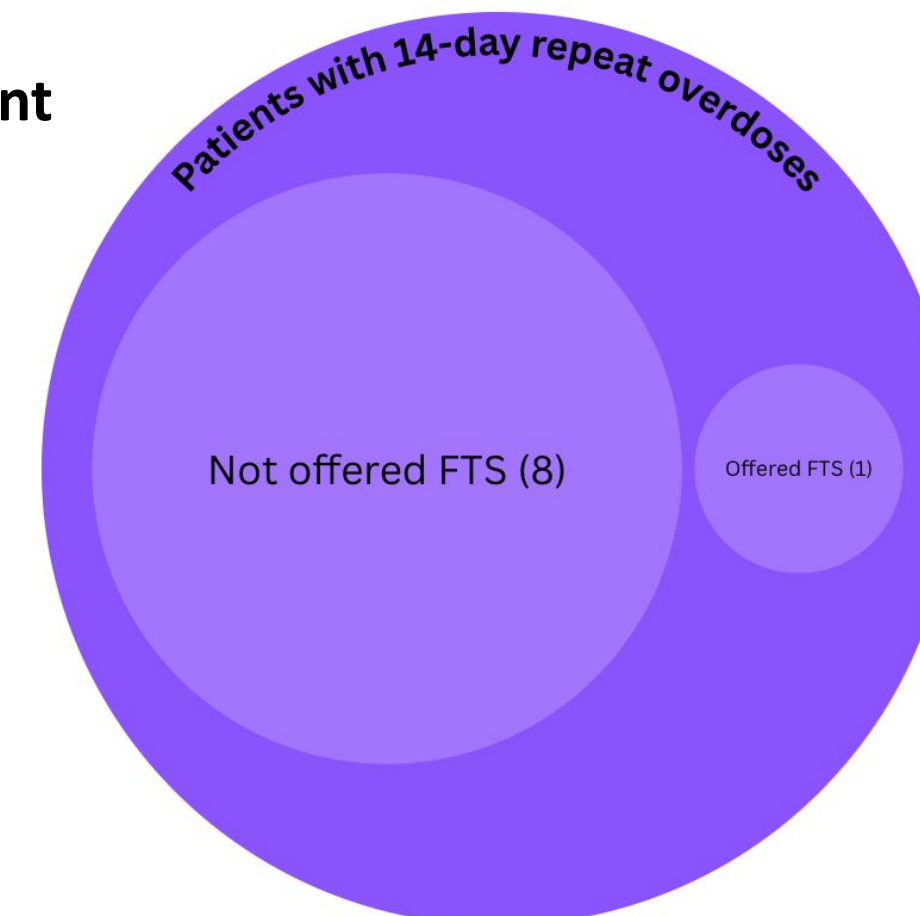


Figure 2: Number of patients with 14-day repeat overdoses



Figure 3: FTS kits include four test strips, how-to card, addiction medicine referral information, and ways to obtain more

## Results

- Over three months, 186 opioid overdose encounters were identified
- FTS were offered to 58 (31%) patients, 52 patients (28%) accepted; no significant differences in the demographics of who accepted FTS
- Of the initial 186 patients, 21 (11%) patients had repeat overdose presentations; average time was 22 days between overdose visits
- One (1.9%) patient in the FTS group compared to eight (6.4%) patients not offered FTS had a repeat overdose at the 14 day mark ( $p=0.18$ )
- Average time to overdose was longer for those who accepted FTS, 34 days, than those who were not offered FTS, 18 days. ( $p=0.15$ )

## Discussion

- Around a third of patients presenting after an overdose were offered FTS, with the majority accepting it, and no adverse effects identified
- Being offered FTS was associated with fewer repeat overdose presentations, though not statistically significant
- Clinician participation in the FTS distribution should be encouraged
- Limitations include a limited sample size and no data about patient utilization of FTS
- Future studies aim to better understand the effect distributing FTS has on provider's perceptions of people who use drugs, patient's perspectives around being offered FTS, and their ease of use

## References

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