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OPIOID HARM REDUCTION: Increasing Naloxone Distribution at ED Discharge

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AIM

- Background
 - Deaths from opiate overdose remain a persistent public health crisis
 - Of the 11,557 patients discharged from the Emergency Department (ED) with non-fatal opioid overdose, one year mortality shows¹
 - 5.5% died within one year; 20.5% died within the first month; 22.4% died within the first two days¹
 - Naloxone can rapidly reverse fatal overdose and reduce mortality when available in the community
- Identify people at risk for overdose, intervene to reduce future harm, and consistently offer naloxone at discharge while promoting health, well-being, and recovery
- By December 1, 2023, >75% of patients aged 12 and older seeking care in the ED with opioid use disorder (OUD), opioid overdose or withdrawals will receive a naloxone kit or prescription at discharge**

PLAN: CURRENT STATE

- November 2022, Henry Ford Health System (HFHS) in conjunction with Michigan Emergency Improvement Collaborative (MEDIC) & Opioid Prescribing Engagement Network (OPEN) began collecting data on those at risk of opioid overdose
- ED clinicians can prescribe or offer a naloxone take home kit (see Figure 1) for high-risk patients, and provide education on use to patient/caregiver; encourages patient to teach others how to use kit and where it is stored
- From November 2022 to September 2023, approximately 42% of these patients were offered naloxone at discharge (see Figure 2)
- Implementation of a Best Practice Advisory (BPA) alert within the electronic medical record (EMR) can increase the amount of naloxone distributed at discharge (see Figure 3)

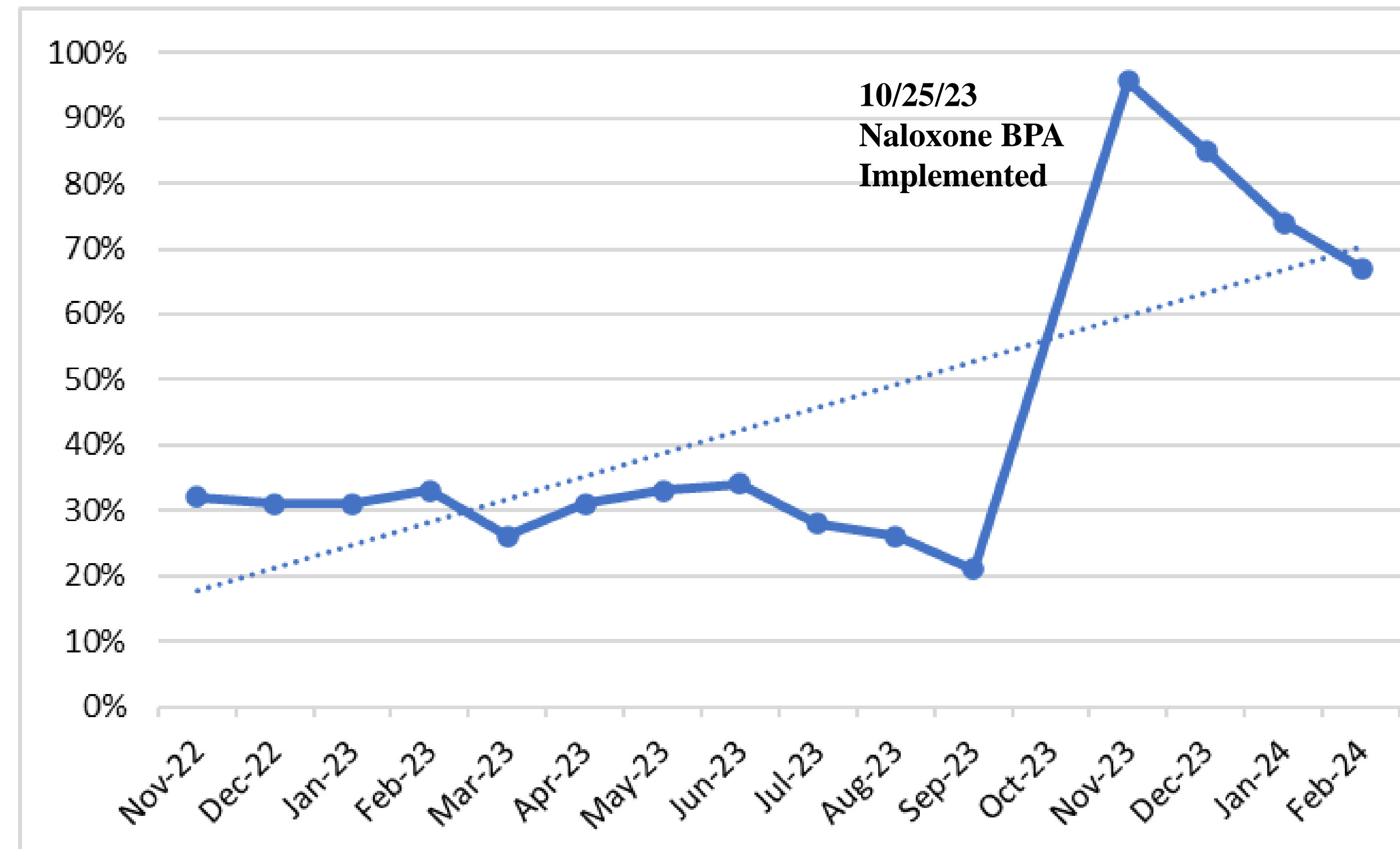
DO: INTERVENTIONS

- After leadership buy-in and collaboration with HFHS pharmacy, MEDIC and OPEN initiated naloxone kits for distribution which are available at no cost to the organization
- Pharmacist champion developed the process and protocol for naloxone storage, monitoring, ordering, dispensing, and tracking
- All hospital-based ED's have kits ready for dispersal through the on-site ED pharmacy; ambulatory ED's have kits available in the ED pyxis
- Confirm all naloxone prescriptions can be e-prescribed
- Approval granted by oversight council for BPA alert
- Education disseminated to providers by email and in staff meetings

FIGURE 1: NALOXONE KIT FOR DISTRIBUTION



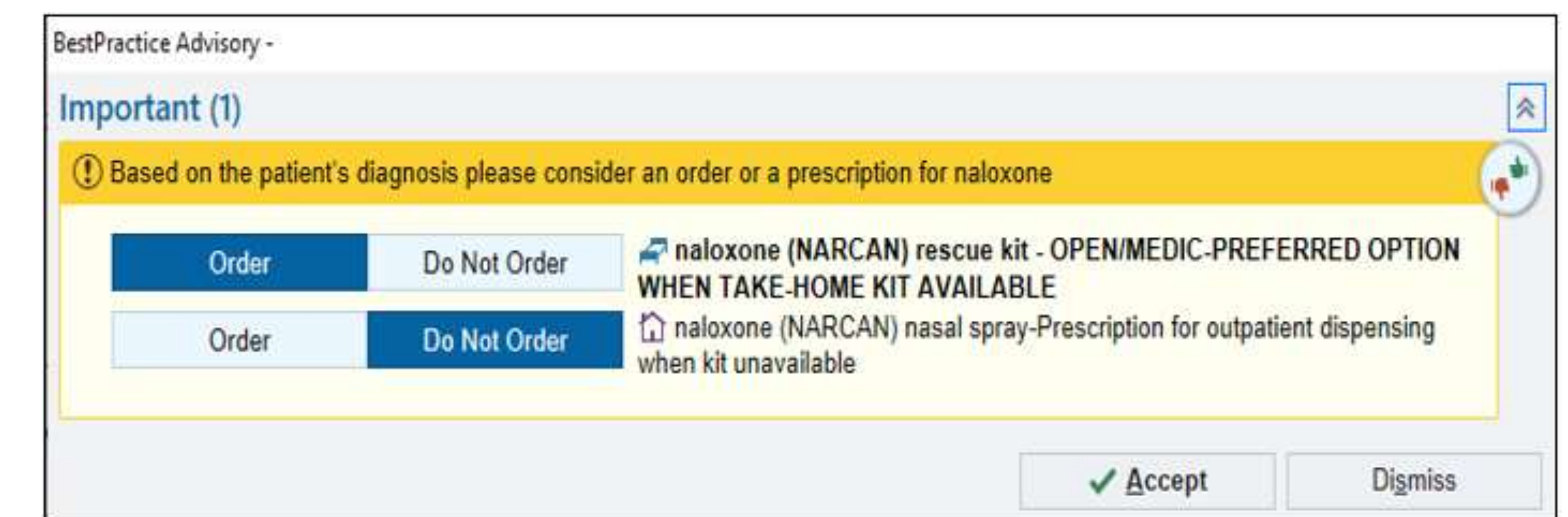
FIGURE 2: HISTORICAL NALOXONE OFFER RATE



CHECK: EVALUATION OF CHANGES

- A retrospective chart review, identified eligible ED visits based on ICD10 codes, from November 2022 through September 2023 which included 7 EDs across HFHS, including both hospital-based and ambulatory ED sites
- Complete chart abstractions determined whether naloxone was ordered as a take home kit or prescribed at ED discharge
- On October 25, 2023, an EMR BPA alert triggered by OUD, opioid overdose or withdrawal ICD-10 codes, with a disposition of discharge home was implemented in conjunction with Information Technology (IT) Program Management (PMO)
- Eligible cases from November 2023 to February 2024 was reviewed to determine the number of BPA fires that prompted a clinician to order a naloxone take home kit or prescribe naloxone; analysis included Chi-Square testing

FIGURE 3: NALOXONE BPA



ACT: SUSTAIN AND SPREAD

- From November 2022 through September 2023, 875 cases identified meeting ICD-10 code criteria, in which 372 patients received either a naloxone take home kit or a prescription for naloxone at a rate of 41.7%
- Chart reviews from November 2023 through February 2024 yielded 135 cases meeting eligibility criteria and a discharge home disposition triggering the BPA to fire with 104 of those patients receiving a naloxone take home kit or a naloxone prescription at a rate of 77%
- An increase of naloxone offer rate at ED discharge from 42.5% to 77%**
- Of those that received naloxone, 77/104 (74%) received naloxone take home kit
- The BPA was associated with a **4.54 times higher** odds of receiving a naloxone kit or prescription (95% confidence interval 2.97 – 6.92)

KEYS TO SUCCESS / LESSONS LEARNED

- Naloxone distribution saves lives and is cost-effective
- Increasing naloxone availability should be considered an important part of a multi-pronged approach to combatting the opioid epidemic
- Patient, family and community benefits from the availability of naloxone
- BPAs within the EMR could be a low-cost, effective intervention to increase naloxone availability for patients at-risk of opioid overdose in the ED
- Continue to consult peer recovery coaches and social work for treatment resources and referrals
- Further investigation is needed to explore patient centered outcomes related to ED naloxone and OUD

REFERENCES

- Weiner, S.G, Baker, O, Bernson, D., & Schuur, J.D.(2019). One-year mortality of patients after emergency department treatment for nonfatal opioid overdose. *Annals of Emergency Medicine*: June2019. doi:10.1016/j.annemergmed.2019.04.020.