



Improving Naloxone Co-Prescribing Rates for Patients at Elevated Risk of Opioid Overdose

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Abstract

Deaths from opioid overdose have increased fivefold since 1999, with more than 564,000 persons having died due to overdose involving prescription opioid. Naloxone, an opioid reversal antagonist, has been available for decades in the United States and can safely reverse an overdose from opioids when administered promptly, including heroin, fentanyl and prescription opioid drugs. The CDC and the Substance Abuse and Mental Health Services Administration have called for expanded patient access to naloxone through standing orders at pharmacies, distribution through local organizations, and training basic emergency medical staff on how to administer the drug. In support of naloxone distribution, the Defense Health Agency (DHA) mandated co-prescribing of naloxone for patients at elevated risk of opioid overdose and implemented a new measure to track the rate of naloxone co-prescribing based on an approved criteria. At Naval Hospital Camp Pendleton, the average prescribing rate of naloxone for those at elevated risk of opioid overdose was at 15.3% (Jan 2021) and below the DHA benchmark of > 90%. In October 2021, the pharmacy department at Naval Hospital Camp Pendleton implemented a new screening process to identify patients at elevated risk of opioid overdose utilizing available screening dashboards, opioid registries and online opioid calculators. Patients at high risk of opioid overdose received a naloxone nasal spray based on an approved pharmacy standing order. The objective of the new initiative is to increase naloxone prescribing rate to a minimum of 60% by 1 October 2022. As of April 2022, the Naloxone co-prescribing rate increased from 26.8% (Oct 2021) to 53.6% (April 2022). Current results may be valuable in navigating and understanding effective ways to prevent opioid overdose.

Design/Methodology

A retrospective review of naloxone dispensing rates for elevated risk patients were collected from 1 October 2021 to 30 April 2022 using the DHA analytics and evaluation dashboard. Usage statistics supplied by the CarePoint Patient Look-Up Tool (PLT) were collected from 1 October 2021 to 30 June 2022.

At baseline, the dispensing rate of naloxone for enrolled beneficiaries at the main MTF for elevated risk patients of opioid overdose maintained an average of 12.7% and a range of 9.9% -18% between Jan 2021 and Sept 2021.

In order to meet the DHA's goal of naloxone dispensing rate (90%), the pharmacy department approved a new standing order for pharmacists to prescribe naloxone and developed new policies and procedures with implementation date of 1 October 2021. The objective of the new initiative is to identify, prescribe and dispense naloxone to beneficiaries at elevated risk of opioid overdose at time of processing new opioid prescriptions at the main hospital pharmacy site. All pharmacists and pharmacy technicians completed the Opioid Overdose Education and Naloxone Distribution Program (OEND) and obtained secured access to the CarePoint PLT dashboard. In addition, several in-services and presentations were provided to the medical staff on the DHA's guidelines and on the MHS GENESIS naloxone alert notification system.

Per DHA's guidance, naloxone co-prescribing is required if the patient meets one of the following four categories: Risk Index for Overdose or Serious Opioid-Induced Respiratory Depression (RIOSORD) score > 32, concomitant opioid/benzodiazepine therapy, on long-term opioid therapy (LOT), or morphine equivalent daily dose (MEDD) ≥ 50. From 1 October 2021 to 1 March 2022, the pharmacy staff used the CarePoint PLT as the main tool to screen patients at time of processing new opioid prescriptions. The CarePoint PLT provides inquiries on the underlying MHS Opioid Registry database, which contains seamless patient record of relevant health care information, including previous medication dispenses at both retail and MTF pharmacies. The CarePoint PLT data reflects patient's records and scores from previous day and may not include current data such as the current opioid prescription being processed at time of screening, recent hospital stay, or ED visits. The limitations of the CarePoint PLT resulted in flagging many patients as high risk at a later date after the prescription has been screened and dispensed.

Based on initial data analysis from 1 Oct 2021 to 31 Dec 2021, naloxone dispensing rate was the lowest (average = 7%) in the RIOSORD group when compared with other categories (concomitant opioid/benzodiazepine therapy, on long-term opioid therapy, or morphine equivalent daily dose ≥ 50). In addition, 100% of patients who received an opioid prescription from an MTF provider and met the RIOSORD category were on active duty status. This is possibly due to the updated DHA guidance of having active duty patients receive a baseline RIOSORD score of 15 with regards to opioid risk.

Due to initial data analysis, the pharmacy department expanded the screening and co-prescribing of naloxone to all branch clinic pharmacies, added additional screening tools, and implemented a new pharmacy workflow to target a higher percentage of patients at elevated risk of opioid overdose. The updated workflow was implemented on 1 March 2022, and the designated narcotic pharmacy technician at each pharmacy was responsible in following several steps when processing new opioid and tramadol prescriptions. The process starts by utilizing the CarePoint PLT database. If the patient does not meet any of the four categories, the pharmacy technician will then review the patient's profile to assess active duty status, calculate the MEDD score using a standard pharmacy online calculator, and review the medication profile for active benzodiazepine prescriptions. Patients who meet one of the approved categories were offered a naloxone prescription prescribed by the staffing pharmacist (Figure 1).

Results

Patient screening data and co-prescribing rates were collected on monthly basis from 1 October 2021 to 30 April 2022. Routine feedback was provided to all staff at the main hospital pharmacy and branch clinics if screening opportunities were missed. CarePoint PLT usage by pharmacy staff increased from 35% (October 2021) to 78% (June 2022), while the PLT usage for all MHS DMIS have increased from 50% to 55% for the same time period (Figure 2).

The co-prescribing rate for naloxone has more than doubled from 22% (Oct 2021) to 54% (April 2022) (Figure 3). In comparison, all MHS DMIS naloxone prescribing rates remained between 42% and 46% during the same time period. In addition, for the month of April 2022, greater than 70% of naloxone prescriptions were prescribed by the pharmacy staff (Figure 4).

Figure 2: Percentage of Opioid Fills Screened by Pharmacy Staff Utilizing CarePoint PLT

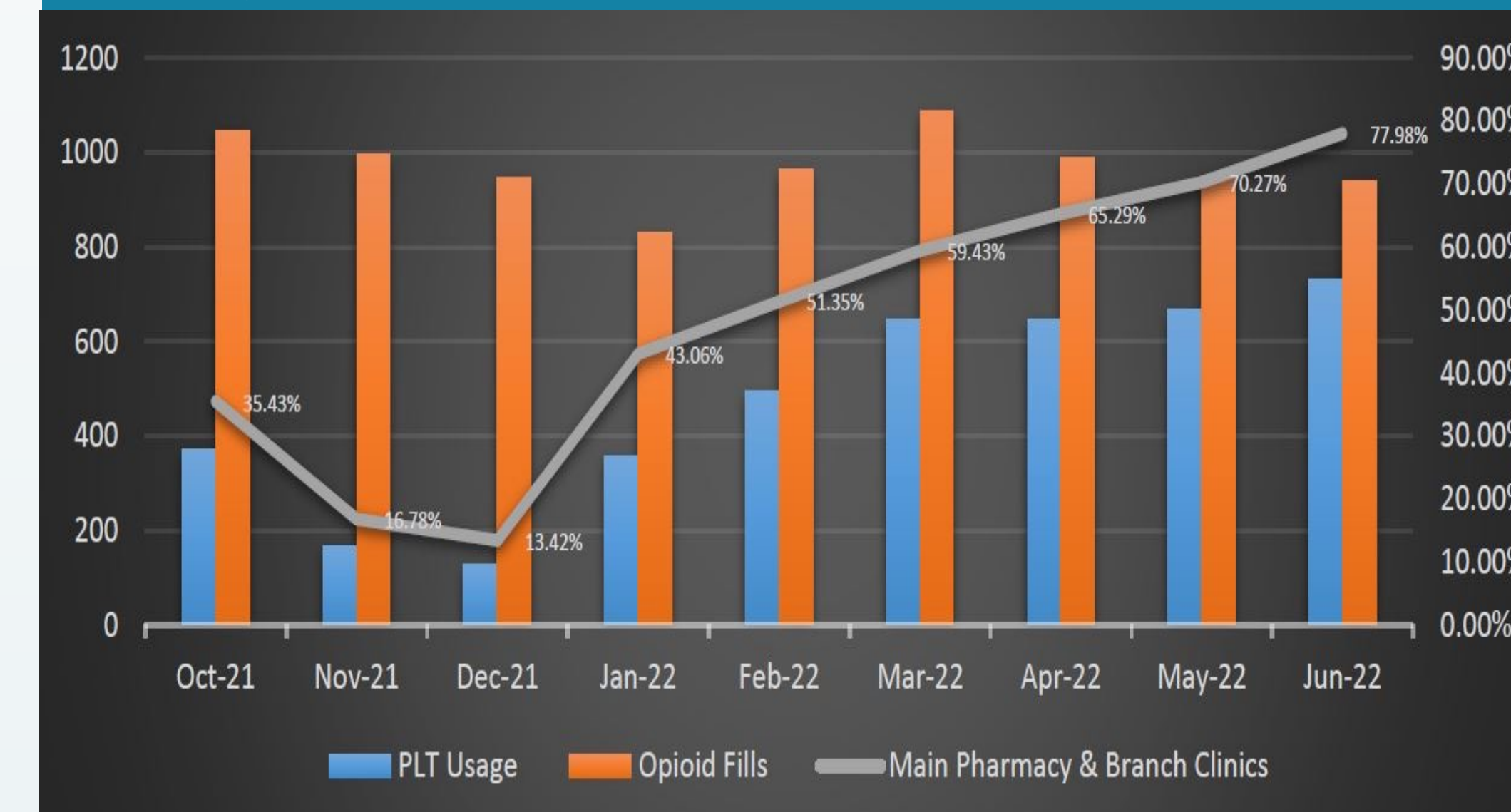


Figure 3: Naloxone Prescribing Rate for Patients at Elevated Risk of Opioid Overdose

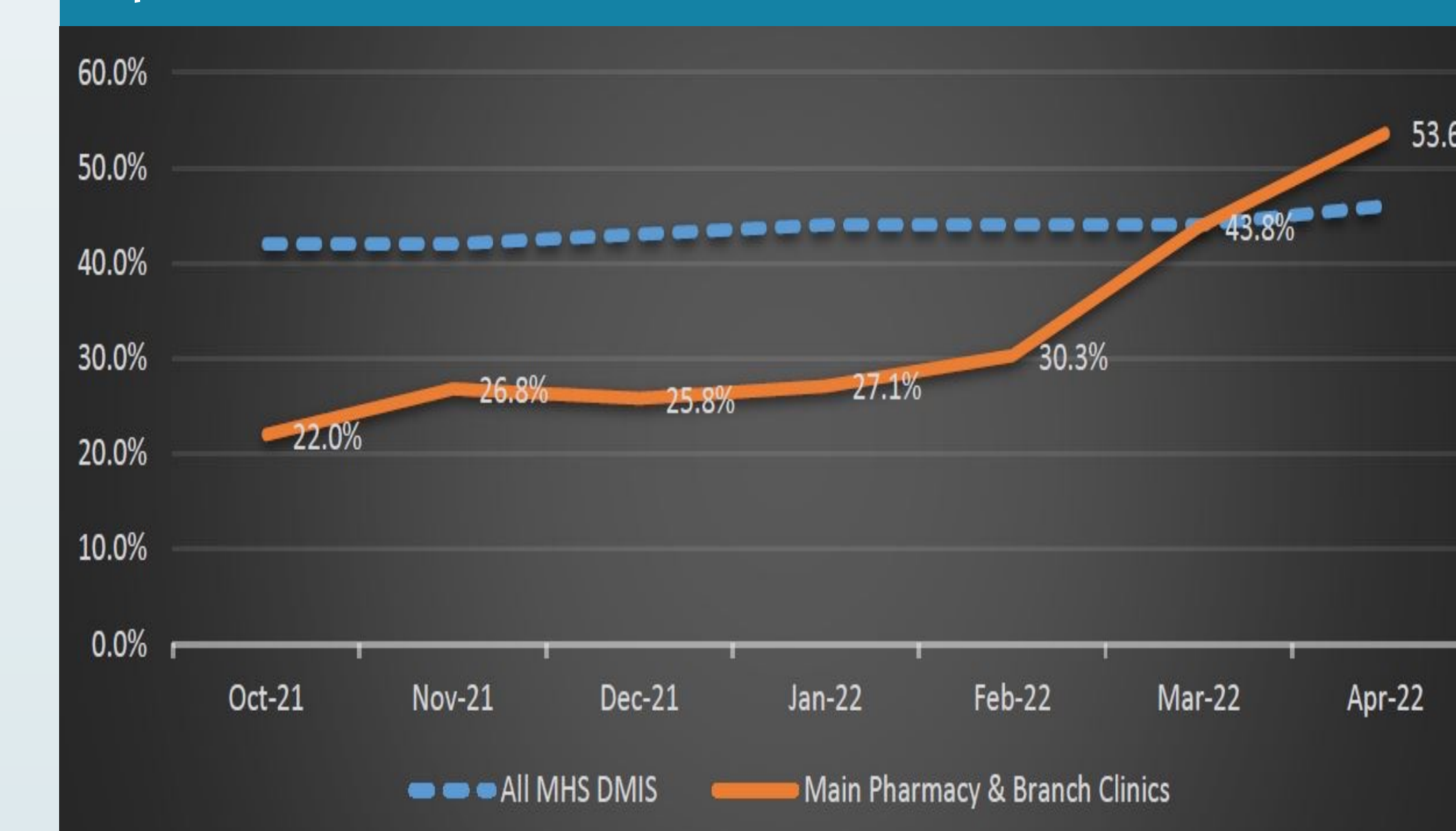
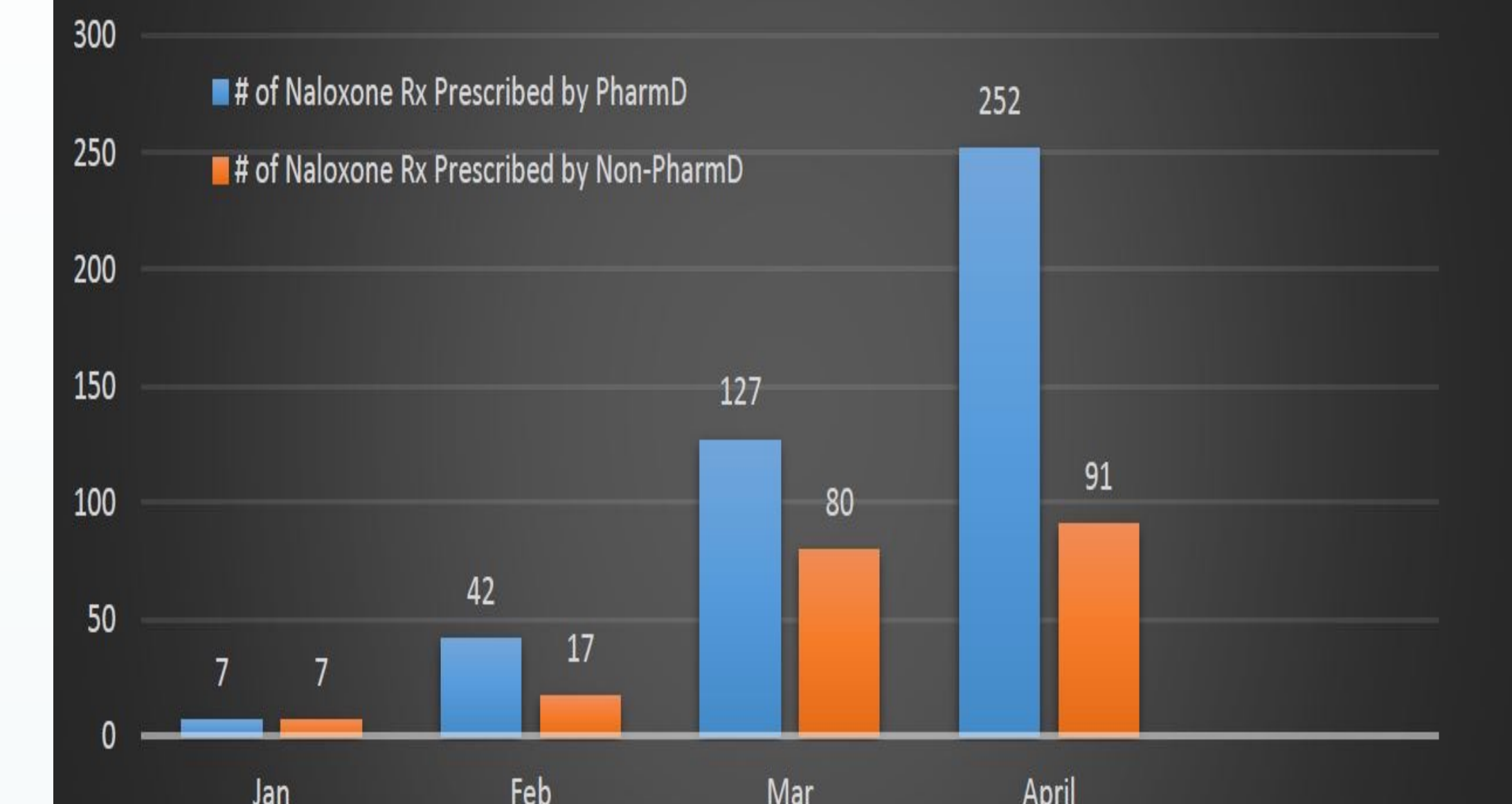


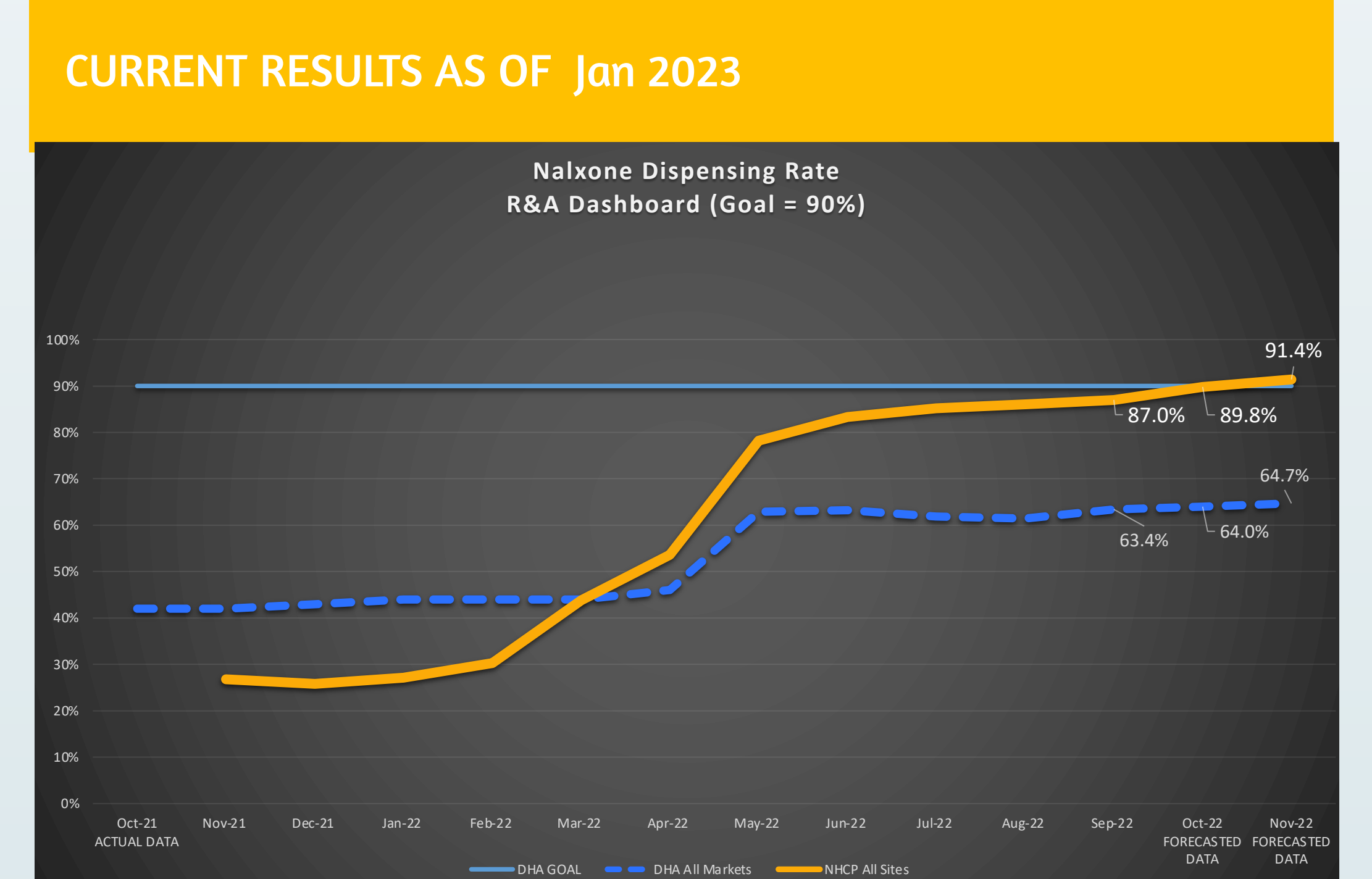
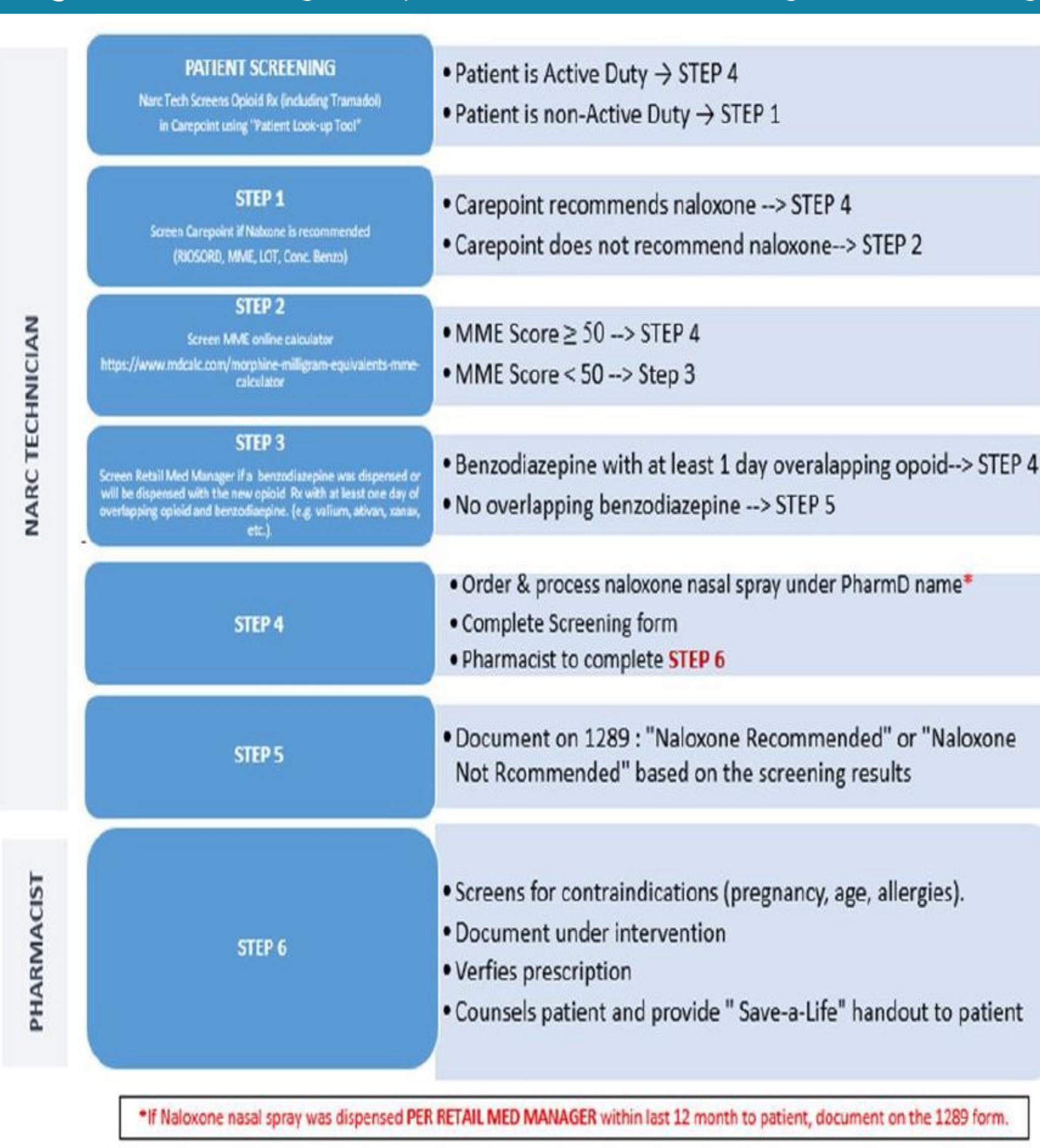
Figure 4: Naloxone Prescriptions Prescribed by Pharmacists Vs. Non-Pharmacy Providers



Conclusion

Distribution of naloxone is a critical component of the public health response to the opioid overdose epidemic. Local data reveals that the naloxone initiative proved to be successful in increasing naloxone prescribing for patients at elevated risk of opioid overdose, with the expectation of reaching the projected goal of 60% by October 2022. With almost 70% of naloxone prescriptions having been a direct result of pharmacy directed dispensing, additional efforts are still needed to improve provider education on identifying high risk patients. In addition, a focus on sustainment by ongoing departmental quality improvement process will be critical in maintaining current trends. Current results are valuable in navigating and understanding effective ways to prevent opioid overdose.

Figure 1: Pharmacy Workflow – Naloxone Screening and Prescribing



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