

# A PHARMACIST TELEPHONIC INTERVENTION: SAVING LIVES, ONE NALOXONE AT A TIME

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## BACKGROUND

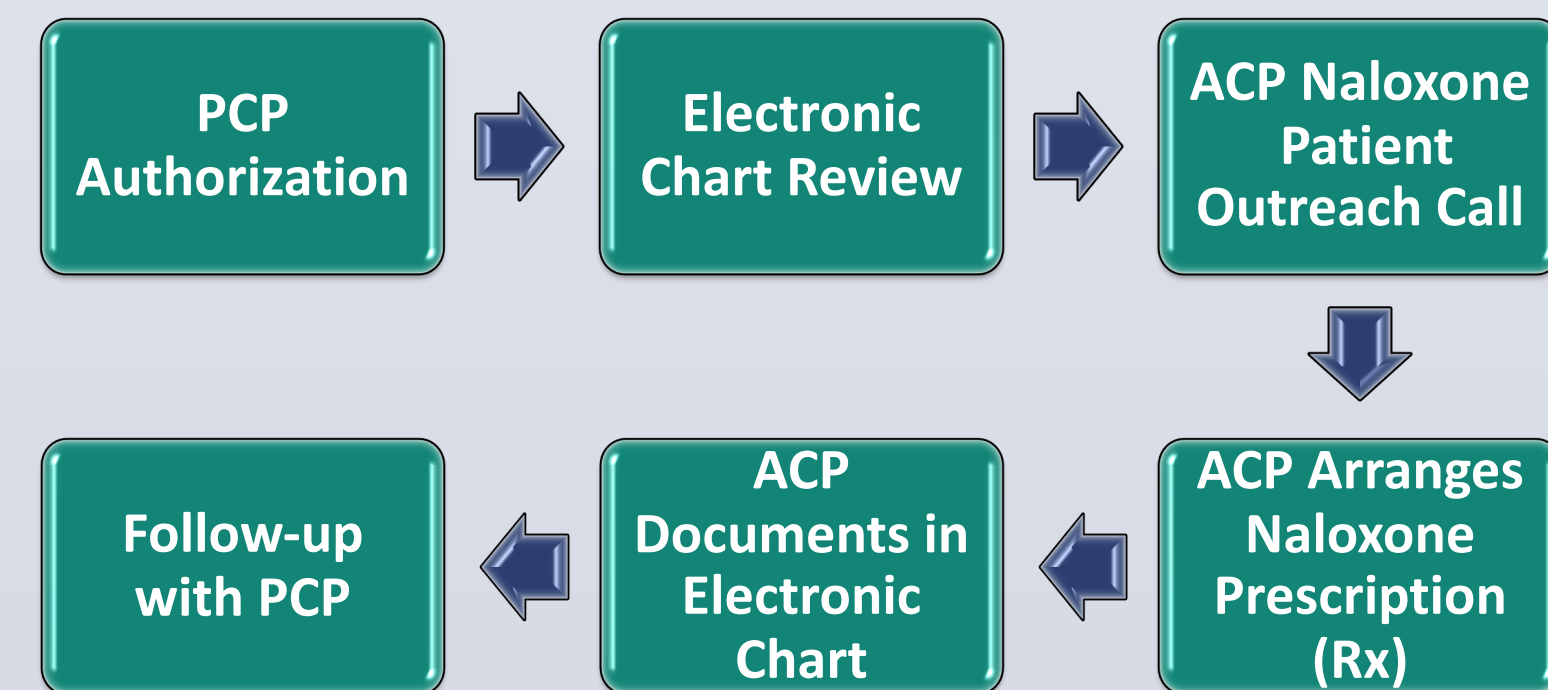
- According to the CDC report in 2018, every day 41 people died from prescription opioid overdose.<sup>1</sup> In 2019, the National Institute on Drug Abuse (NIDA) added that 30% of opioid-related overdoses involve benzodiazepines.<sup>2</sup> Use of naloxone is a key recommended mitigation strategy to reduce the incidence of death due to opioid-induced respiratory depression.<sup>3</sup>
- As of January 1<sup>st</sup> 2019, the California Assembly Bill (AB) 2760 (amended January 2020 to AB714) requires physicians to offer a naloxone prescription and education to high-risk patients.<sup>4,5</sup>
- In 2019, the Kaiser Permanente Riverside Service Area (SA) Local Controlled Substances Safety Committee (LCSSC) identified 666 high-risk patients on concurrent opioid(s) plus a benzodiazepine (BZD).
- Naloxone was ordered for 81% of these patients and 38% of these patients did not pick up their naloxone prescription up to four months later, and thus remained at a high-risk for opioid-induced respiratory depression (OIRD).
- In November 2019, LCSSC developed a plan for an ambulatory care pharmacist (ACP) second naloxone outreach for these high-risk patients that would be performed by an ACP to increase naloxone prescription pick-up rates. This study aims to analyze the outcomes of the ACP naloxone outreach.

## ACP OUTREACH PROJECT: PURPOSE AND WORKFLOW

### Project Purpose

- Increase naloxone (Narcan®) prescription pick up rates
- Identify barriers to picking up naloxone prescription

### ACP Outreach Project Workflow



## OBJECTIVE

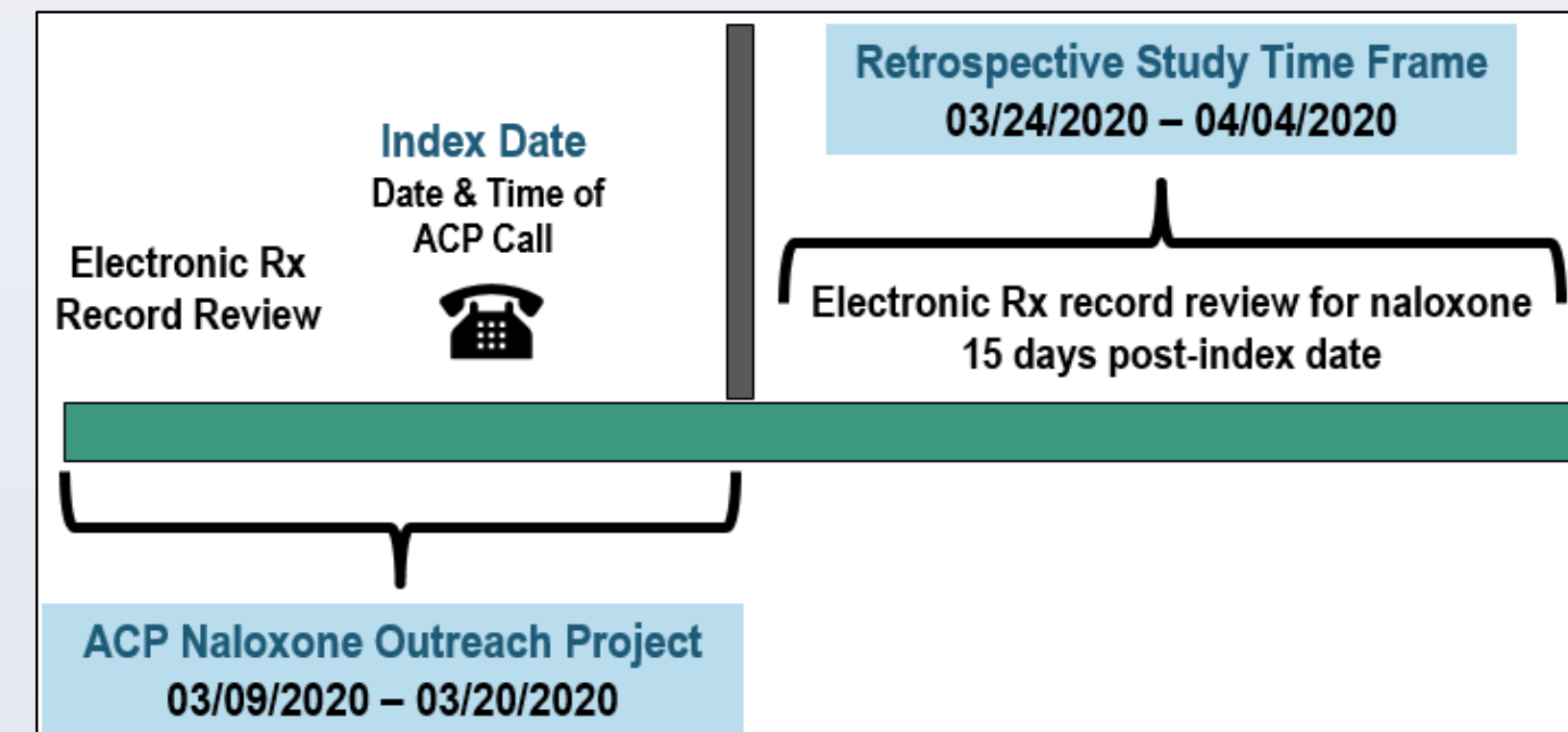
- To determine the effectiveness of ACP telephonic outreach on naloxone prescription pick-up rates
- Patients on opioid(s) plus a benzodiazepine concurrently, that either:
  - Declined first naloxone offer by primary care provider (PCP) or did not pick up first naloxone ordered by PCP
- To identify patient reasons for refusal of naloxone prescription and barriers to picking up their naloxone prescription ordered by their PCP

## METHODOLOGY

### STUDY DESIGN AND TIMELINE

Kaiser Permanente Riverside Service Area IRB-approved, single-center, retrospective study

### STUDY TIMELINE



### STUDY INCLUSION AND EXCLUSION

Inclusion Criteria	Exclusion Criteria
Age ≥ 18	Loss of KP membership
Opioid(s) + Benzodiazepine	Hospice/Palliative Care
Received and declined provider primary naloxone education/prescription offer	Active Chemotherapy
No history of "Naloxone Sold"	Naloxone Allergy

## OUTCOMES

- Primary Outcome:** (For Patients Who Declined First Naloxone Offer by PCP or Did Not Pick Up First Naloxone Ordered By PCP)
  - Evaluate impact of ACP telephonic outreach on successful naloxone prescription pick-up rates
- Secondary Outcomes:**
  - Identify patient reported barriers for picking up their naloxone prescription ordered by their PCP
  - Evaluate average recorded time for ACP telephonic outreach process as a work-process measure
- Descriptive statistics were used to analyze this data

## RESULTS

### PATIENT BASELINE CHARACTERISTICS

	n = 79 Patients
Mean Age (Years)	60.8 (32-86)
Age ≥ 65 Years	30 (37%)
Age ≥ 80 Years	50 (63%)
Sex: Female	55 (69%)
Avg MME	33.5
OIRD risk factors (RF)	
1-2 RF	18 (22%)
3-4 RF	27 (34%)
5-6 RF	31 (39%)
> 7 RF	3 (4%)
BZD + NBZD drug	34 (43%)
BZD + SMR drug	28 (33%)
BZD + NBZD + SMR	10 (12%)

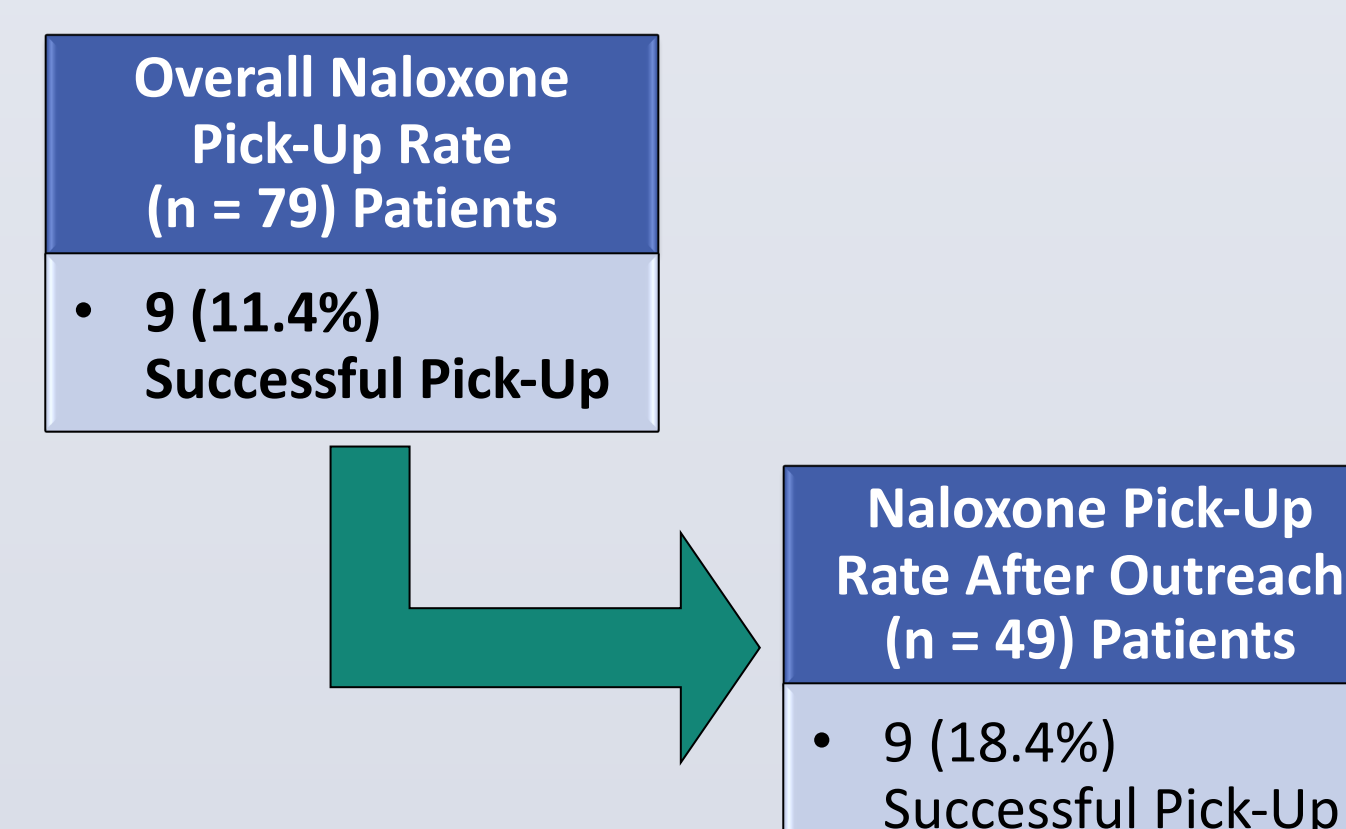
### Abbreviations:

MME, morphine equivalents; OIRD, opioid-induced respiratory depression; BZD, benzodiazepine; NBZD, non-benzodiazepine; SMR, skeletal muscle relaxant

### ACP Telephonic Outreach Results (n = 79) Patients

- ACP was successfully able to reach 49 patients
- All 49 patients reached received the detailed naloxone education
- 19 of the patients reached accepted the ACP offer for naloxone
- 30 of the patients reached: declined the naloxone second offer

### PRIMARY OUTCOME



- The overall naloxone prescription pick-up rate, 15 days after the outreach call, for these patients was 11.4%
- However, in a sub-analysis of the 49 out of 79 patients that were reached by phone, the naloxone prescription pick-up rate was 18.4%

Naloxone Pick-Up Rate After Accepting ACP Offer (n = 19) Patients
9 (47.4%) Successful Naloxone Rx Pick-Up

- Although it was not a primary outcome, of the 49 patients reached, 19 patients accepted ACP second offer for naloxone
- Of these 19 patients, the successful naloxone prescription pick-up rate was 47.4%.

## RESULTS

### SECONDARY OUTCOMES

#### Secondary Outcomes: Patient Reported Barriers (n = 79)

Reasons for Declining Naloxone	Declined FIRST Naloxone Offered by PCP (n = 49) Patients	Declined SECOND Naloxone Offered by ACP (n = 30) Patients	% Change After ACP Intervention
"I don't need it"	26 (53%)	17 (35%)	- 18%
"Too expensive"	10 (20%)	9 (18%)	- 2%
"What is naloxone?"	9 (18%)	0 (0%)	- 18%
"I live alone"	2 (4%)	3 (6%)	+ 2%
"My spouse has it"	2 (4%)	1 (2%)	- 2%

- Column 1:** Patient reported barriers for NOT picking up their FIRST naloxone prescription offered by their PCP
- Column 2:** 53% of the patients outreach reported they did not "need" naloxone since they were "taking the opioid medication safely and as prescribed"
- Column 3:** Patient reported barriers for declining the second naloxone offer offered by the ACP
- Column 4:** Percent of patients that reported they did not "need" the naloxone and the percent of patients that reported "what is naloxone" after the ACP naloxone outreach, both decreased by 18 percent compared to when the PCP made the first offer for naloxone

#### Secondary Outcomes: Total Time for ACP Workflow (n = 79)

Patients Reached (Avg Time: 28.2 min)	Patients Not Reached (Avg Time: 11.1 min)
<ul style="list-style-type: none"> <li>Pre-assessment Rx review*</li> <li>Naloxone outreach call: Avg 12 min</li> <li>Documentation on electronic chart</li> <li>Rx benefit cost* and Rx fill</li> <li>Post-assessment Rx review*</li> <li>PCP follow-up, if applicable*</li> </ul>	<ul style="list-style-type: none"> <li>Pre-assessment Rx review*</li> <li>Voicemail message</li> </ul>
<b>Total ACP Outreach Project Time</b> <ul style="list-style-type: none"> <li>2,277 min (37.95 hour)</li> </ul>	

- The average time for the ACP workflow was 28 minutes for those reached and 11 minutes for those not reached
- The total time for the ACP outreach project for the 79 patients was 38 hours
- Tasks were determined that could be performed by ancillary support staff to assist the ACP in the telephone outreach process, which could help to decrease the pharmacist time spent and lower future expenses to provide this service

## LIMITATION

- Retrospective study
- Small sample size
- Investigator bias
- Timing of outreach during the COVID-19 pandemic outbreak

## CONCLUSION

- Nine patients (18%) who initially declined their PCP offer for naloxone, successfully picked up their prescription after ACP telephonic outreach.
- Through ACP patient interviewing, it was learned that 18% of patients, (that were previously offered and declined a naloxone prescription from their provider), reported they did not know what naloxone was. It appears either they did not understand their PCP, or the physicians may not have had time to do the required patient naloxone education. The study helped to identify areas for improvement in naloxone patient education.
- The study proved the ACP service can successfully be done using telehealth phone visits

## FUTURE PLANS

- Present outcomes of the study to group leaders at Kaiser Permanente
- Publish a paper on development on ACP-led telephonic naloxone outreach program
- LCSSC to continue ACP-led outreach and consider new, feasible initiatives to increase naloxone prescription pick-up rates in patients a high risk for OIRD
- Future studies to evaluate the impact of an outpatient pharmacist-led naloxone education outreach service for patients at a risk for OIRD
- Conduct further studies with a larger sample size incorporating addition of ancillary support staff to improve efficiency and lower future expenses for the service

## DISCLOSURE

- Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation

## REFERENCES

- Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Stats; 2020.
  - Benzodiazepines and Opioids. National Institute on Drug Abuse. 2019.
  - NIH National Institute on Drug Abuse: *Benzodiazepines and Opioids*. 2018.
  - "Assembly Bill No. 2760." California Legislative Information. 2019.
  - "Assembly Bill No. 714." California Legislative Information. 2020.
- \*Additional references available upon request