HERO TRaILs
Health Extension Regional Officers: Translating Research into Localities

Chronic Pain Management and Opioid Abuse Prevention

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BACKGROUND: HERO TRAILS

Health Extension Regional Officers (HERO): Translating Research Into Localities (TRaILs)

Purpose: to study how to best disseminate established guidelines and evidence-based information to primary care providers serving rural, underserved, multiethnic populations.

THE DISSEMINATION PROBLEM

* Can take up to 17 years for proven info to change clinical behaviors

* Traditional methods for disseminating EB information does not guide/change clinical behavior (direct mail, journal publications, electronic dissemination, and traditional continuing medical education [CME] activities)

* No evidence on best practices for rural providers

WHY CHRONIC NON-CANCER PAIN (CNCP)?

From 1999 to 2013,
the amount of prescription painkillers prescribed
& sold in the U.S. nearly **QUADRUPLED.**

1999   2013
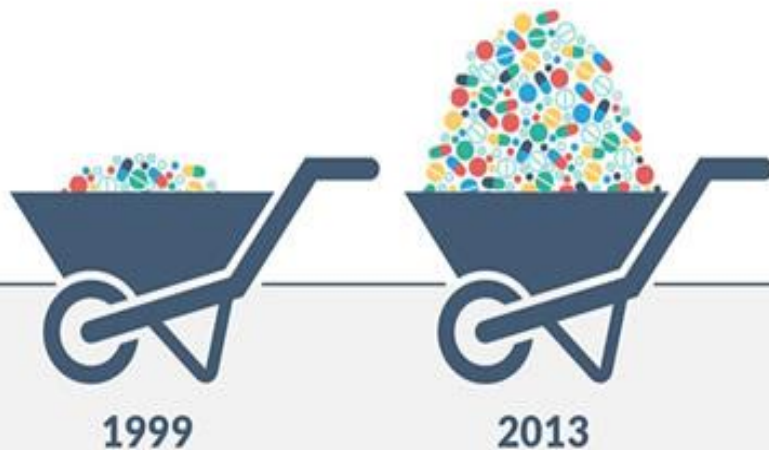
Yet there has not been an overall change in
the amount of pain that Americans report.

* CNCP costs $635 Billion per year (more than Diabetes, Cancer, and Heart Disease)

* New Mexico consistently #1-3 highest Rx drug overdose death rate

* Accidental OD Deaths from prescription painkillers have quadrupled since 1999 in the United States

* Opioid prescribing is controversial with providers. Patients are getting caught in the middle of new guidelines and regulations

www.cdc.gov/drugoverdose
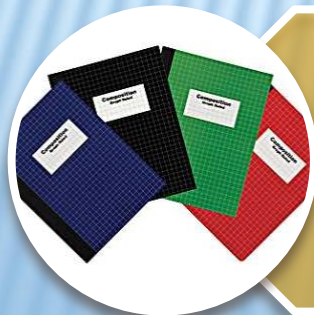
INTERVENTION COMPONENTS

CNCP EB Workshops

- Series of 3.5 hour CME workshops
- Provided in person at the clinic

Academic Detailing

- One-on-One sessions
- Delivered in person at the clinic or provider offices

Toolkit and Resources

- Clinical Algorithms, EB tools and pocket cards
- Delivered at workshops and adapted from provider feedback and learning needs

ACADEMIC DETAILING IN NEW MEXICO

- For this project, the detailer was a non-clinical, Master's level, health education professional

- Used academic clinical team for support. After each detailing visit, detailer consulted with the Project MD and Pharmacist as needed to determine follow-up.

- Through an adaptive design process, the subsequent learning needs of participant was assessed.

WHAT WERE THE TOOLS?

Three clinical algorithms: 1) initial assessment, 2) opioid initiation, 3) already on opioids

Non-Pharmacologic
- Brief Pain Inventory (BPI)
- PHQ2 (depression screen)
- PHQ9
- Wong Baker Faces (1-10)
- Patient Education
- SOAPP-R
- Urine Drug Screening
- Aberrant behaviors associated with misuse and abuse of opioids
- Controlled Substance agreement
- Approach for tapering or discontinuing opioids

Pharmacologic
- Neuropathic pain medications
- Topical pain medications
- Muscle relaxants
- NSAIDS
- Medication choice by comorbidities
- Opioid tables
- Indications for Long acting opioids

ADAPTIVE TOOLS DEVELOPED: POCKET CARDS

MME (Morphine Milligram Equivalent) Conversion Table
(All Conversion factors use Morphine as the Standard)

Potency	Drug	Conversion Factor	Example: MME Conversion
LESS ↓ MORE	Codeine	.15	200 mg
	Morphine	1	30 mg
	Hydrocodone	1	30 mg
	Oxycodone	1.5	20 mg
	Oxymorphone	3	10 mg
	Hydromorphone	4	7.5 mg

Conversion Steps for Table:

1. Convert beginning opioid mg to Morphine equivalent: Multiply beginning mg dose by beginning conversion factor = mg Morphine
2. Convert Morphine equivalent to Target opioid mg: Divide morphine equivalent by Target opioid conversion factor = mg Target

Conversion Example:

ADAPTIVE TOOLS DEVELOPED: POCKET CARDS

Medication Choice by Comorbidities

	Anxiety	Cardiac Disease: Arrhythmia	Cardiac Failure: Edema	Depression	Hepatic Disease	HTN	Insomnia; Obstructive Sleep Apnea	Obesity, Weight Gain	Renal Disease
Gabapentin (Neurontin®)	+	NI	-	J	+	NI	+	-	J
Pregabalin (Lyrica®)	++	NI	J	J	+	NI	++	-	J
Venlafaxine (Effexor®)	+	NI	+	++	J	-	J	J	J
Duloxetine (Cymbalta®)	+	NI	+	++	-	J	J	J	+
Milnacipran (Savella®)	+	NI	+	++	+	J	J	+	+
TCA	+	CI	J	+	+	J	++	J	+
NSAIDS	NI	NI	-	NI	J	J	NI	NI	-
Muscle Relaxants	+	NI	NI	NI	-	J	++	NI	J

Legend: + preferred; - non-preferred; J Judgment call; CI Contraindicated; NI: No Impact

RESULTS
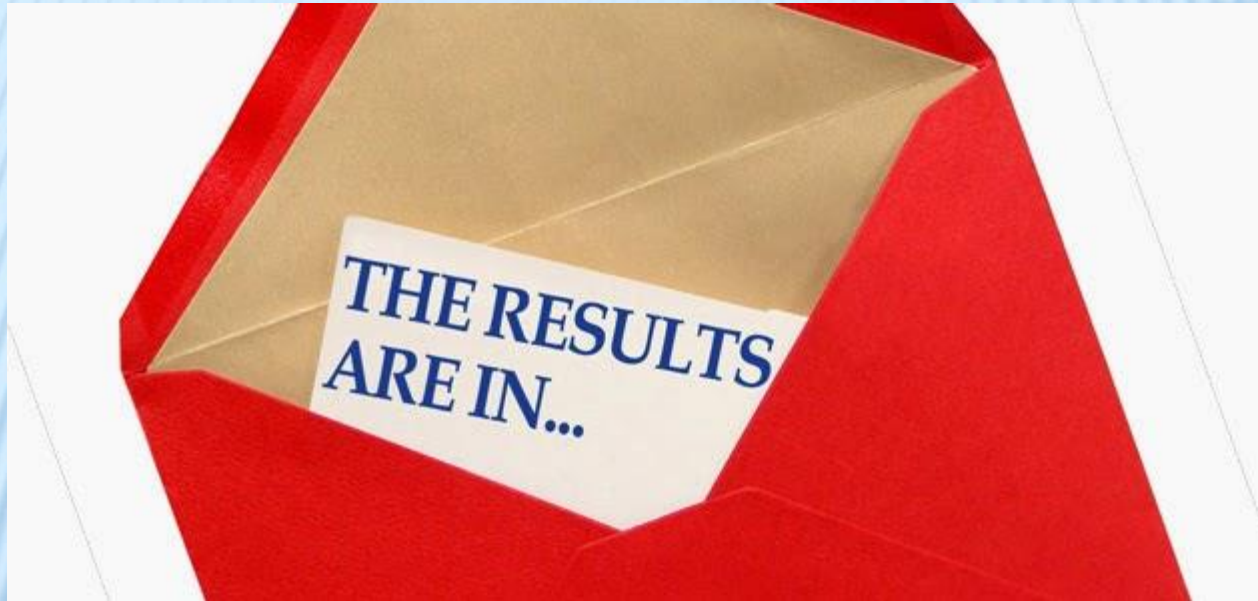
QUALITATIVE RESULTS: TOOLS

The tools provided were evidence based and gave providers options when treating and managing patients with CNCP.

"The toolkit gives us a basket of options to choose from."

-New Mexico Rural Provider

JUST LIKE USING A RECIPE....

RECIPE

This recipe shall be known as _____

From the kitchen of .... This recipe serves 1 2 3 4 5 6 7 8 9 10

▌INGREDIENTS▐

▌DIRECTIONS▐

SURVEY RESULTS: TREATING CNCP

For your patients who have chronic non-cancer pain (CNCP), do you manage their CNCP?

- PRE EDUC: No 29%, Yes 71%
- POST EDUC: No 4%, Yes 96%

Legend: No (green), Yes (orange)
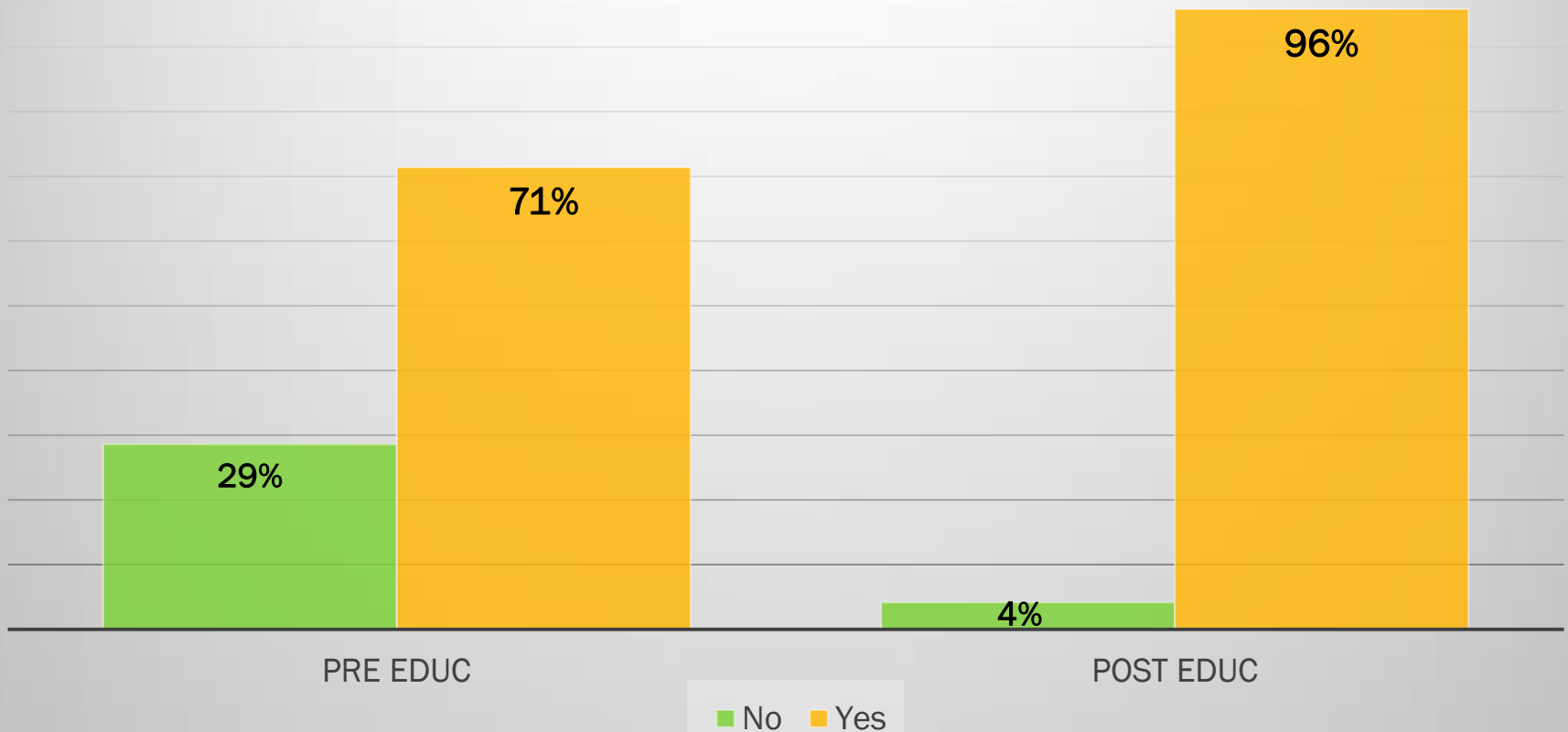
RESULTS: DO PROVIDERS PRESCRIBE?

Under what circumstances do you prescribe long-acting opioids for people with CNCP?

- DO NOT PRESCRIBE: Pre Educ 41%, Post Educ 17%
- CONTINUE BUT DO NOT INITIATE: Pre Educ 32%, Post Educ 29%
- INITIATE AND CONTINUE: Pre Educ 27%, Post Educ 54%

Legend: Pre Educ, Post Educ
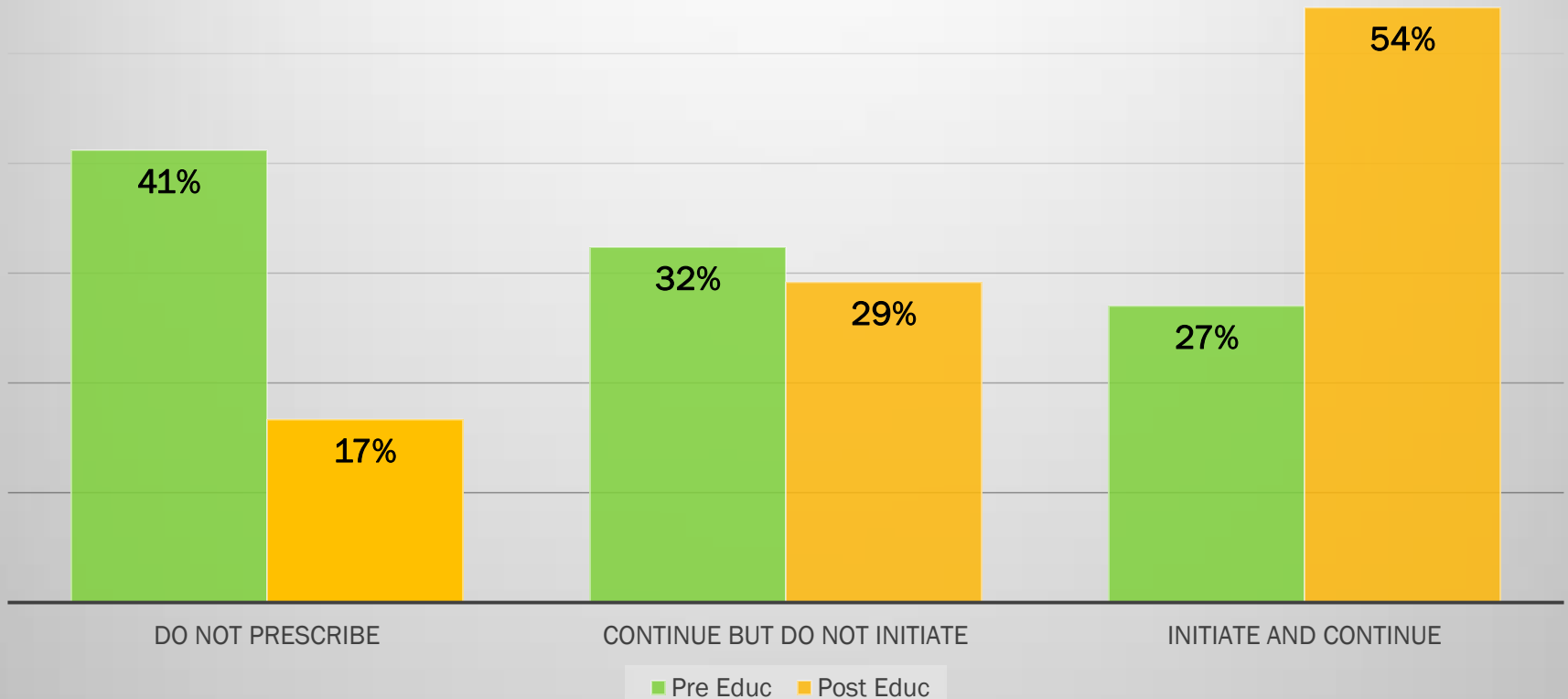
RESULTS: CNP AND PA PRESCRIBING

Prescribing long-acting opioids for people with CNCP:
CNP and PA

	DO NOT PRESCRIBE		CONTINUE BUT DO NOT INITIATE		INITIATE AND CONTINUE
PRE EDUC	POST EDUC	PRE EDUC	POST EDUC	PRE EDUC	POST EDUC
52%	18%	36%	35%	12%	47%
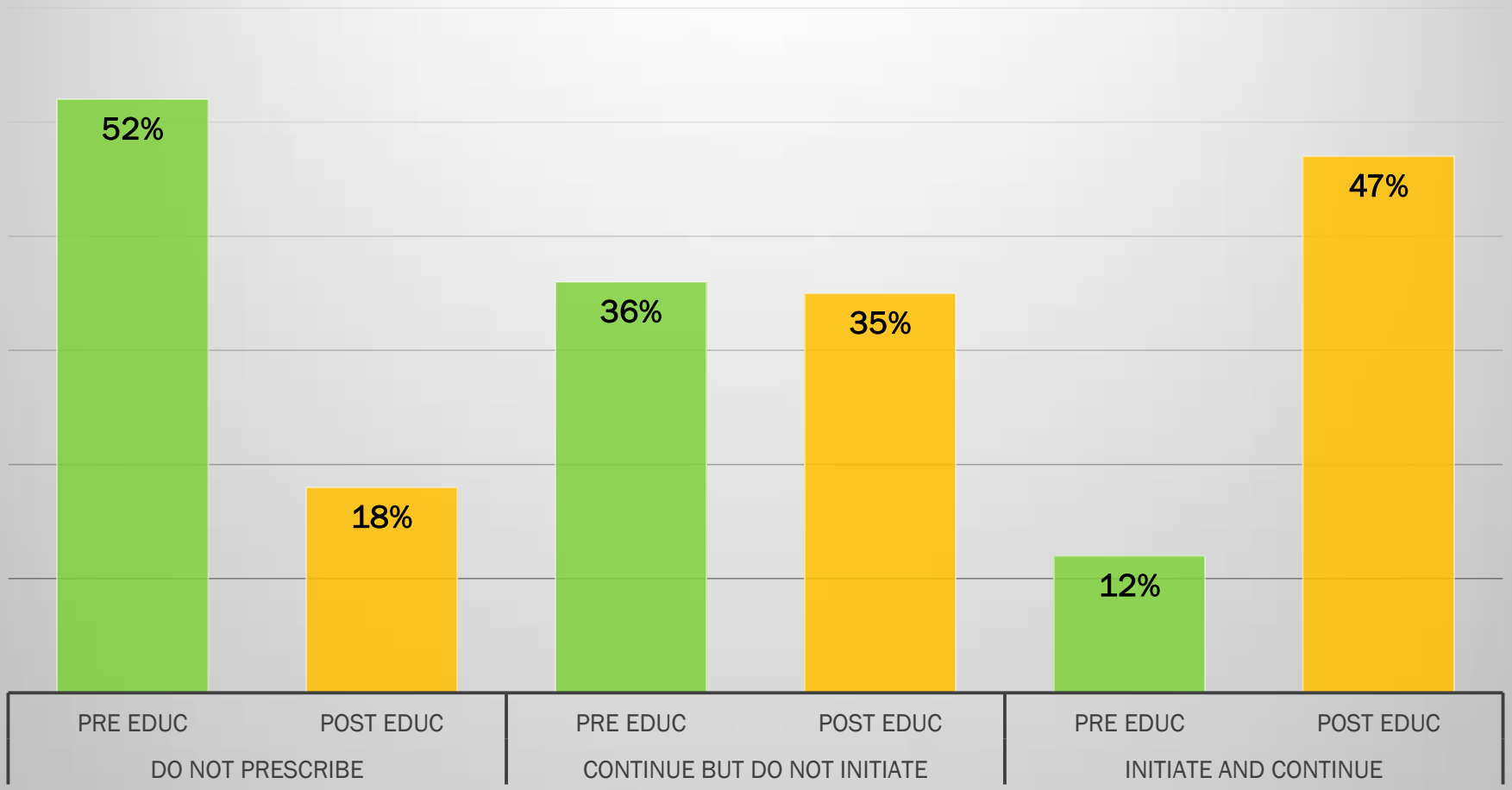
RESULTS: PRESCRIBING & YRS OF EXPERIENCE

Prescribing long-acting opioids for people with CNCP:
10 years or less since completion of residency or school

	DO NOT PRESCRIBE		CONTINUE BUT DO NOT INITIATE		INITIATE AND CONTINUE
PRE EDUC	POST EDUC	PRE EDUC	POST EDUC	PRE EDUC	POST EDUC
48%	13%	39%	22%	13%	39%
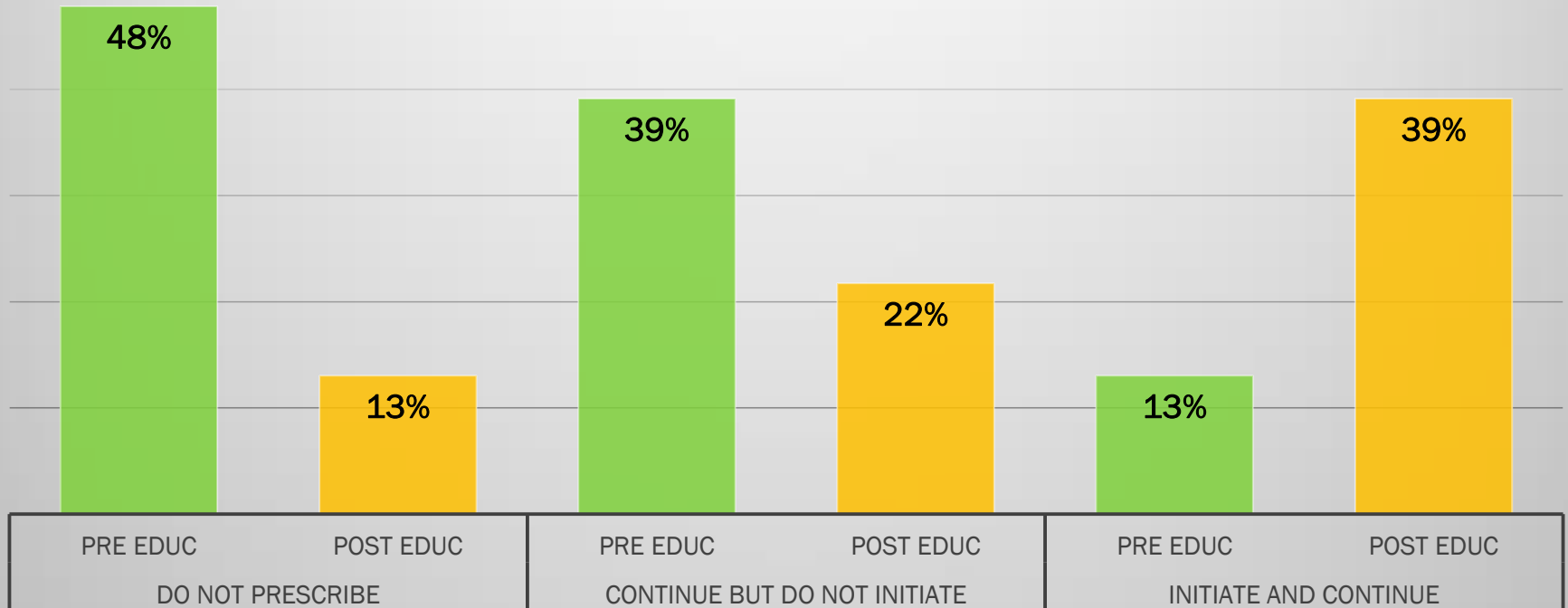
PMP CLINIC COMPARISON: % ≥ 100 MME

PMP prescribing for all Hero Trails Providers

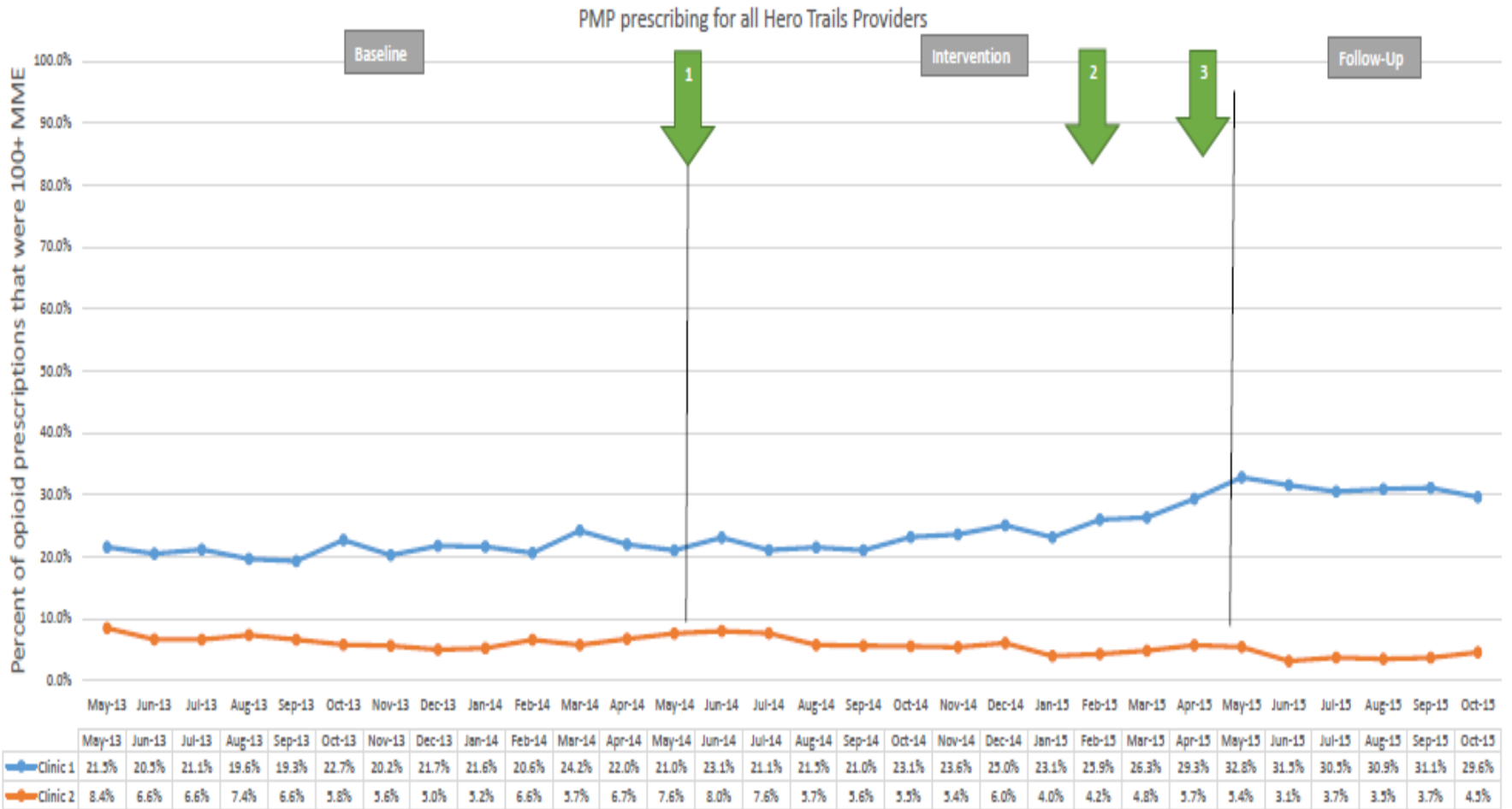|	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
Clinic 1	21.5%	20.5%	21.1%	19.6%	19.3%	22.7%	20.2%	21.7%	21.6%	20.6%	24.2%	22.0%	21.0%	23.1%	21.1%	21.5%	21.0%	23.1%	23.6%	25.0%	23.1%	25.9%	26.3%	29.3%	32.8%	31.5%	30.5%	30.9%	31.1%	29.6%
Clinic 2	8.4%	6.6%	6.6%	7.4%	6.6%	5.8%	5.6%	5.0%	5.2%	6.6%	5.7%	6.7%	7.6%	8.0%	7.6%	5.7%	5.6%	5.5%	5.4%	6.0%	4.0%	4.2%	4.8%	5.7%	5.4%	3.1%	3.7%	3.5%	3.7%	4.5%

PROVIDER MME PRESCRIBING (PMP DATA)

PMP prescribing

Legend: ■ >0 to 100 MME ■ >100 MME
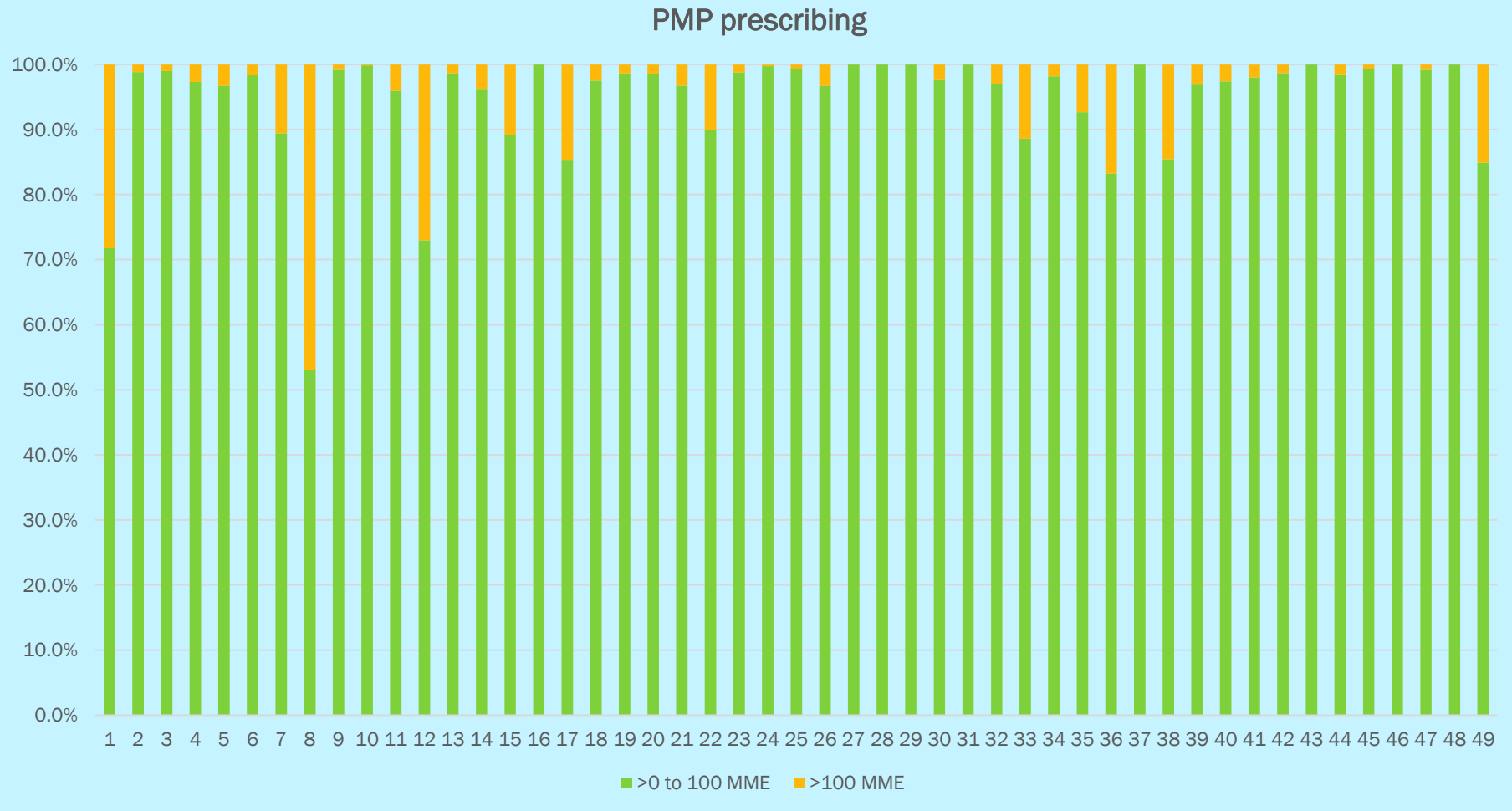
- Clinic 1: 1-18
- Clinic 2: 19-30
- Participant 49 is the average of for all providers

PMP CLINIC COMPARISON CONTROLLING FOR OUTLIERS

PMP prescribing for Hero Trails Providers (Providers #1, 8 and 12 separate)
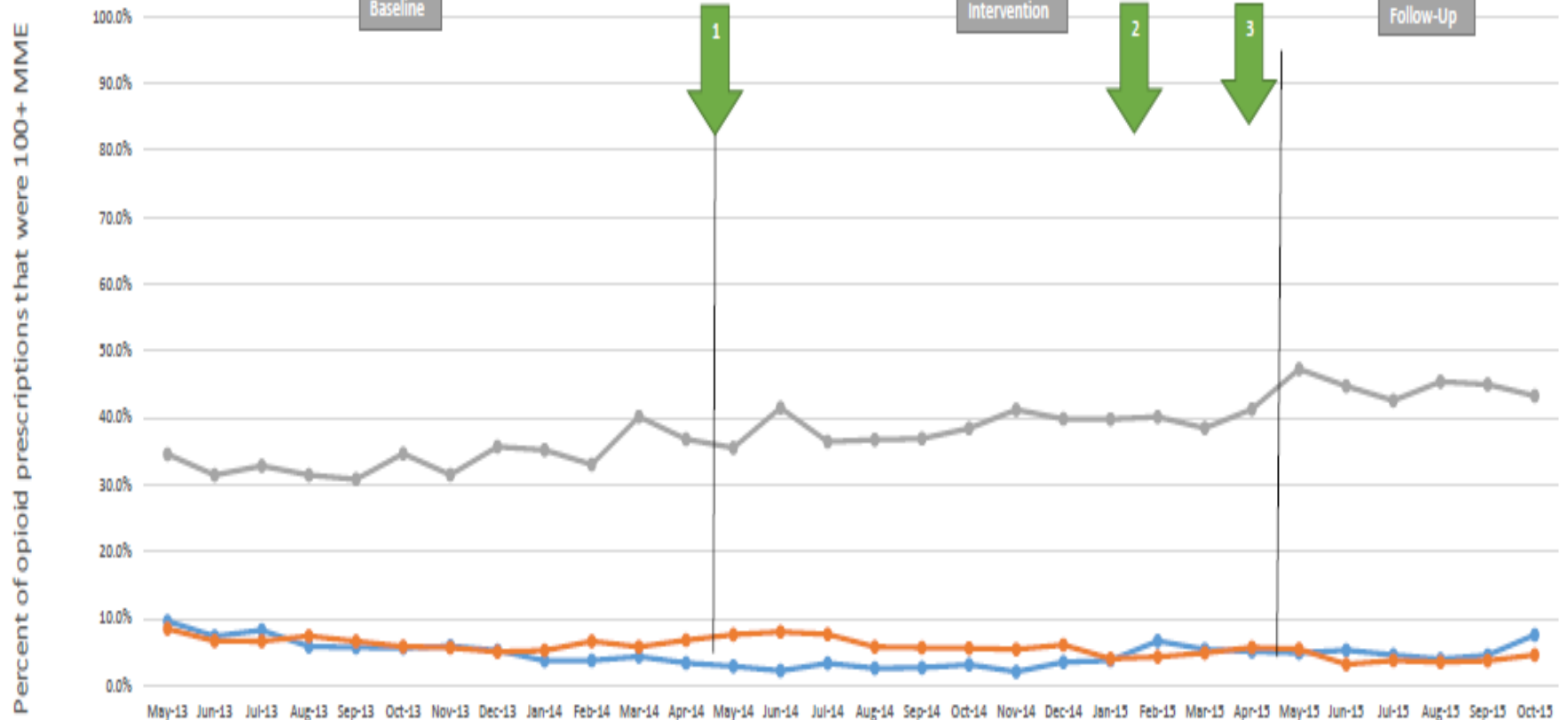
	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
Clinic 1 100+	9.6%	7.3%	8.2%	5.8%	5.7%	5.6%	5.9%	5.2%	3.7%	3.7%	4.3%	3.3%	2.8%	2.2%	3.3%	2.5%	2.6%	3.1%	2.0%	3.5%	3.7%	6.6%	5.4%	5.0%	4.8%	5.3%	4.5%	3.9%	4.5%	7.5%
Clinic 2 100+	8.4%	6.6%	6.6%	7.4%	6.6%	5.8%	5.6%	5.0%	5.2%	6.6%	5.7%	6.7%	7.6%	8.0%	7.6%	5.7%	5.6%	5.5%	5.4%	6.0%	4.0%	4.2%	4.8%	5.7%	5.4%	3.1%	3.7%	3.5%	3.7%	4.5%
Providers #1, 8, 12	34.5%	31.4%	32.8%	31.4%	30.8%	34.6%	31.5%	35.7%	35.2%	33.0%	40.1%	36.8%	35.5%	41.5%	36.4%	36.7%	36.9%	38.4%	41.2%	39.8%	39.8%	40.1%	38.4%	41.3%	47.3%	44.7%	42.6%	45.4%	45.0%	43.3%

ACADEMIC DETAILING SURVEY QUESTION RESPONSES

Survey question	Mean	Max	Min
73. How useful was the practice detailer to you in terms of your care for patients with CNCP?	7.4	10	4
74. My interactions with the practice detailer were positive.	1.2	2	1
75. The interactions with the practice detailer disrupted clinic workflow.	4.5	6	2
76. The practice detailer has the appropriate personality type for this type of work.	1.2	2	1
77. The interactions with the practice detailer took too much time.	4.7	6	3
78. I would like some more clinic visits from the practice detailer to help with my management of chronic non-cancer pain.	3.6	5	1
79. I would like some more clinic visits from the practice detailer to help with my management of other clinical conditions.	3.5	5	1

✖ Question 73 Scale: 1=not useful at all to 10=extremely useful

✖ Question 74-79 Scale: 1=Strongly Agree, 2=Agree, 3=Somewhat Agree, 4=Somewhat Disagree, 5=Disagree, 6=Strongly Disagree

CONCLUSIONS: PRESCRIBING BEHAVIOR

- Clinicians, advanced practice providers and those out of training ≤ 10 years, reported being more comfortable managing CNCP as a result of the CME + AD educational interventions.

- A few dangerous opioid prescribers accounted for a large difference between clinics.
  - Most providers were prescribing within a safe MME level

  - Outliers may or may not indicate bad prescribing

  - Possible they were pain champions for practice with higher prevalence of CNCP pts. TBD.

- The adaptive, iterative design for CME method was very well received
  - Closed the loop of communication and created engagement in learning for rural primary care providers

  - Providers' questions and suggestions led to the production of useable algorithms and clinical tools

CONCLUSIONS: ACADEMIC DETAILING

- AD provided a direct link to providers who developed trust and reliance on detailer
  - Led to open discussion, identification of barriers, and toolkit innovations
  - Clinicians felt we listened to their learning needs
  - They did not feel the time required for a visit took too much time
- Link b/t detailer and academic health center important
  - Providers' questions and suggestions were answered
  - Detailer felt supported
  - Led to iterative design of adaptive CME