An Opioid Education Toolkit about Prescription Opiates

DNP Scholarly Project by

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Acknowledgements

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Introduction

- Opioid crisis one of the nation's most critical current issues.
- Opioid education toolkit developed to inform patients.
- Written education used as adjunct to clinicians' verbal teaching.
- Quality improvement project implemented at Southwest Spine & Pain Center in St. George, Utah.

Background & Significance

- National opioid crisis
- Pharmaceutical companies blamed (Volkow, 2014).
- Health community reassured opioids not addictive.
- Physicians prescribed, increased opioid prescriptions (CDC, 2017)
- Nurses administered liberally for pain (U.S. Department of Health and Human Services, 2019).

Background & Significance (continued)

- ER visits from prescription opioid OD increased (Volkow, 2014).
- Prescription OD deaths increased;115 people die each day in the U.S. from this (CDC, 2017).
- More deaths form prescription opioids than car crashes in Utah (Miner, J. et al., 2018).
- Population for prescription opioid deaths in 2016 ages 25 to 54 (NIH, 2018).
- Abused prescription opioids for non-medical reasons (Lipari, R.N. et al., 2017).

Background & Significance (continued)

Opioid crisis in Utah

- Utah is 7th highest for overdose deaths (Utah Department of Health).
- Utah 4th highest in prescription opioid deaths (Nichols, L. et al., 2015).
- Ogden, Utah opioid death rate of 31.6 per 100,000 people (Utah Department of Health, 2017).
- Carbon & Emery Counties higher; 47 prescription opioid deaths per 100,000 (Utah Department of Health, 2017).

Background & Significance (continued)

- Impetus for project
- Opioid misuse affected DNP student's family residing in Emery County.
- Elderly in-laws; mother with Alzheimer's disease mismanaged prescription opioids.
- Opioids for chronic pain not sustainable.
- Opioid Use Disorder (Appendix A); some reach out for help, average is 4 years from first use (Blanco, C. et al., 2013).

Background & Significance (continued)

Health, social, financial burden of opioid crisis to U.S.

- U.S. spent $1 trillion 2001-2018 (Altarum, 2018).
- Projected to add $500 billion to this burden in next 3 years; includes health care, criminal justice, social services, and other costs related to the opioid epidemic (Altarum, 2018).
- Effects of opioid epidemic far reaching.
- Solutions are significant to the future health of individuals, families, communities, and the country.

Needs Assessment

- Opioids previously easy to obtain.
- Government mandates to limit accessibility.
- Physicians in Utah limited to 7-day prescription (NCSL, 2018).
- Exceptions made for pain clinics; they monitor use, have contracts with patients, testing, and careful control of opioids.

Needs Assessment (continued)

Washington County (St. George) pain clinic chosen for this QI project implementation; older, retired population.

- Memory and knowledge retention issues, differing learning styles. With two styles, retention increases (UAFS, 2017).
- In Washington County the hospital ER treated 2171 patients with opioid overdoses in 2017 (St. George News, 2018).
- Washington County prescribing rate for opioids is 89 per 100 persons (CDC, 2016).

Needs Assessment (continued)

Southwest Spine & Pain clinic stakeholders identified need to enhance verbal opioid education with written resources. Their reasons for this were:

- Patients do not retain everything they hear during appointments.
- Clinicians have limited time with the patient during visit.
- Patients also have a need to self-educate.

This QI project filled the gap between verbal and written opioid information with an opioid education toolkit.

Problem Statement

- Prescription opioid misuse/abuse
- Nationwide epidemic
- Economic, social, and health consequences
- Knowledge needed; health risks, side effects of opioid use.
- Opioid education toolkit created as resource to aid in fight against opioid crisis.

Project Aim

- Prescription-opioid use patients treated at Southwest Spine and Pain Center who receive an opioid education toolkit state within three months:
  - Decreased or elimination of prescription opioid use
  - Not considering prescription opioid use
  - Find the opioid information helpful
  - Will recommend the opioid education to others

Clinical Question/PICOT

- *In individuals who use or who are considering use of prescription opiates (P)*
- *how does an opioid education tool kit (I)*
- *compared with current practice (C)*
- *affect their decision to decrease, eliminate, or avoid opioid use (O)*
- *within three months (T) as shown by surveys returned?*

Congruence with Organizational Strategic Plan

- Toolkit reinforces clinicians' verbal teaching.
- Generates physician-patient discussions.
- Non-opioid pain relief measures and/or opioid tapering
- Clinicians aid patients "to find the right balance of pain relief methods for each patient so that they can live active, fulfilling lives" (Freeman, E., 2017).

Synthesis of Evidence

- Used CINAHL, PubMed, Cochrane, for years of publication 2010-2020.
- Inclusion criteria for adults 18 years and older
- Exclusions: references to heroin or narcotics (only prescription opioids used)
- Forty studies reviewed; twenty-four found relevant and included in project.

Synthesis of Evidence (continued)

Benefits of opioid education

- Patient satisfaction (Bozimowski, 2012)
- Practitioners can influence patients (Frank, 2016).
- Educating clinicians and nursing staff (Costello, 2016)
- Physician education improved confidence and practice changes in prescribing opioids (Alford, 2016).

Synthesis of Evidence (continued)

Alternative methods of teaching

- Computer brief to eliminate opioid use (Ondersma, 2014; Gryczynski, 2015)
- Project Lazarus' video about opioid use (Albert, 2015; Brason, 2015), and physicians being educated (Alexandridis, 2017) decreased mortality from opioid overdose.

Synthesis of Evidence (continued)

Multimodal education

- Written or verbal alone not enough (Alsaffar, 2016).
- Written and verbal together improved retention (McCarthy, 2015; De La Cruz, 2016; Smith, 2018).
- Multimodal approach: success in all but one case (Giffey, 2015; Chakravarthy, 2018; Ho, 2015; Waszak, 2018).

Theoretical Framework

- The theoretical framework "helps guide and inform the project" (Moran, Burson, & Conrad, 2017, p. 259).
- Dr. Katharine Kolcaba's Comfort Theory (CT) chosen.
- CT assumptions are: "(1) the need for comfort is basic, (2) persons experience comfort holistically, (3) self-comforting measures can be healthy or unhealthy, and (4) enhanced comfort (when achieved in healthy ways) leads to greater productivity" (Kolcaba, 2015, p. 382).

Theoretical Framework (continued)

Relevance to the PICOT

- Ease of pain; met holistically with the opioid toolkit.
- Help to eliminate opioids and replace with non-opioid interventions increases comfort; better pain control.
- Patients can achieve greater comfort with holistic, healthy alternatives to opioids.
- Allows healthy comfort actions to lead them to greater productivity.

Theoretical Framework (continued)

Patients' comfort achieved in physical, psychospiritual, sociocultural, and environmental ways (Kolcaba, 2015).

- Physical: homeostasis with decrease of opioid use.
- Psychospiritual: negatively impacted by extreme pain or opioid use.
- Sociocultural: relationships nurtured.
- Environmental: opioid dependence limits activities.

Opioid toolkit addresses these comfort needs.

Theoretical Framework (continued)

Opioid toolkit impacts those patients who have not yet begun regular opioid therapy.

- Opioid education aimed to inform before starting.
- Alternative options for new patients
  - Treatments for acute pain needs
  - Non-opioid medications
  - Clinician at Southwest can recommend other alternatives instead of beginning long-term opioid use.

Theoretical Framework (continued)

- “Increased engagement in health seeking behaviors (HSB's) results in institutional integrity (which) strengthens the institution and its ability to gather evidence for best practices and best policies” (Kolcaba, 2015, p. 383).

- QI project provided education as resource for clinicians.

- Feedback helps improve quality, patient outcomes, and comfort.

Theoretical Framework (continued)

- “Increased comfort of recipients results in their being strengthened for their tasks ahead” (Kolcaba, 2015, p. 283).
- Encourages resilience and self-reliance despite past experiences with opiate dependence.
- Opioid toolkit informs patients, opens dialog with clinician.

Project Design

- Non-experimental, quality improvement project
- Setting at Southwest's largest clinic.
- Clinic utilizes physicians, physician assistants (PA's), advanced-practice RN's, RN, and medical assistants (MA's).
- Clinic sees patients and provides procedure services.

Project Design (continued)

- Population and sample: patients 18 years old or above who use or are considering use of prescription opioids.
- No exclusions if met these criteria.
- Estimated sample size over the 3-month period was 150.
- Opioid education toolkit and survey in EHR for easy use.

Data Collection Tools

- Survey about the opioid education toolkit
- Survey developed with input from mentor, team advisor, physicians, and pertinent studies.
- Survey included instructions and anonymity statement (see Appendix B).

Data Collection Tools (continued)

Survey questions about the opioid education information asked:

- Was it helpful?
- Did it influence their decision to not begin opioid use?
- Did it influence their decision to decrease or eliminate use?
- Would they share the information with others?
- What is their age and gender?

Project Plan

Description of the interventions and implementation process:

- Training meeting held for staff before implementation.
- Toolkit explained various aspects of opioid use.
- Alternative, non-opioid treatments to be discussed with each patient.
- MA's would give patients information then place surveys in box.

Project Plan (continued)

Project outcomes were articulated in project proposal using SMART goals.

- Surveys measured outcome of these goals; was opioid information helpful, influenced decisions, and would they share it with others.
- Age and gender questions were included for comparisons helpful to the QI project aims.

Project Plan (continued)

Evaluation and sustainability plan

- Dissemination of opioid information within EHR enables sustainability if stakeholders feel this education is useful.

- Charts and graphs available for clinic to review for adaptation of written education to their other clinics.

- Timeline for project altered as needed (see Appendix C).

Institutional Review Board & Ethical Issues

- IRB application: Bradley University's Committee on the Use of Human Subjects in Research (CUHSR).
- CUHSR concluded study did not need IRB approval, since it was a QI project for the clinic (see Appendix D).
- Survey anonymous to protect patients' privacy during survey and data collection. Identifying marks removed by staff.
- HIPAA statement included in survey instructions.

Organizational Assessment

Readiness for change

- Stakeholders indicated need for written education as adjunct to their verbal teaching of patients.
- Barriers: MA's responsible to give opioid toolkit to patients. Lack of time for extra process.
- Facilitators to implementation: agreeability of clinicians and staff. Approval of opioid education content. Implementation at Southwest's largest clinic.

Organizational Assessment (continued)

Risks or unintended consequences

- Possibility patients would not participate, not read, or not understand the material.
- New process; MA's too busy to distribute the toolkit.
- Worry that patients may view toolkit as a means for clinicians to avoid prescribing opioids, which could lead to resentment and other high emotions.

Organizational Assessment (continued)

Role of interprofessional collaboration

- Stakeholders impacted toolkit development.
- Clinicians gave input to content.
- Experiences shadowing with clinic staff provided foundational underpinnings.
- MA's exemplified professionalism and efficiency.
- Front line office staff offered encouragement.
- Patients showed progress, leading to confidence in project.

Cost Factors

- Written education cost approximately 5 cents per patient.
- Estimated 150 patients to receive during 3-month survey period; did not exceed budget (see Appendix E).
- Cost avoidance or savings: saved time for clinicians as adjunct to verbal teaching.
- Generated patient interest in non-opioid treatments/procedures.
- Contributed to overall fight against national opioid crisis burden.

Results

Analysis of implementation and intervention process

- Process changed as progressed.
- New clinicians and staff hired; more training done as needed.

Lessons learned:

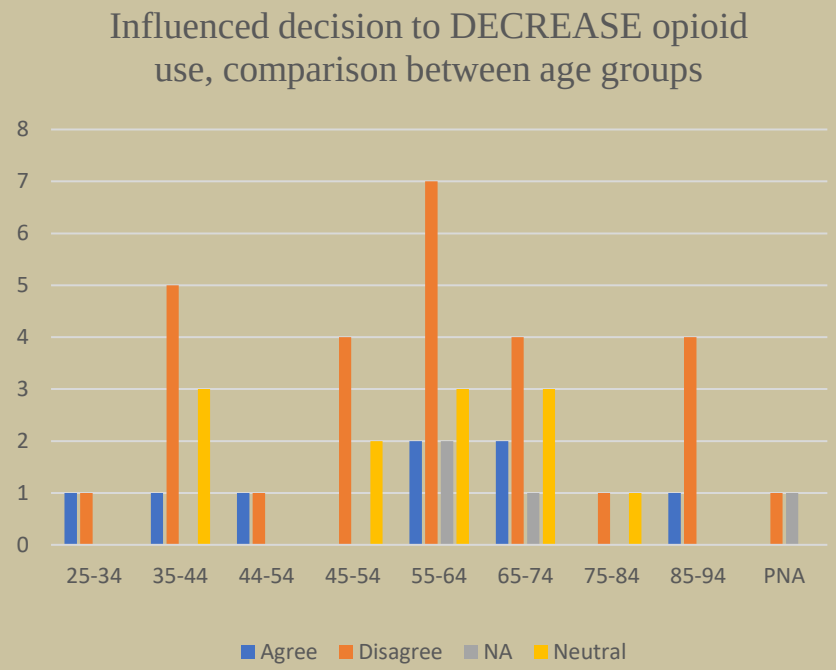
- MA’s busy and few surveys collected in beginning stages.
- Best results later whenever student was on-site helping with toolkit distribution and survey collection.

Findings & Outcomes, SMART Objectives

Findings linked to SMART objectives:

- *Prescription-opioid use patients treated at Southwest Spine and Pain Center who receive an opioid education toolkit state decreased or elimination of prescription-opioid use within three months.*
- Summary: most patients surveyed indicated they did not feel that the opioid education influenced their decision to decrease or eliminated opioids (see Appendix F).

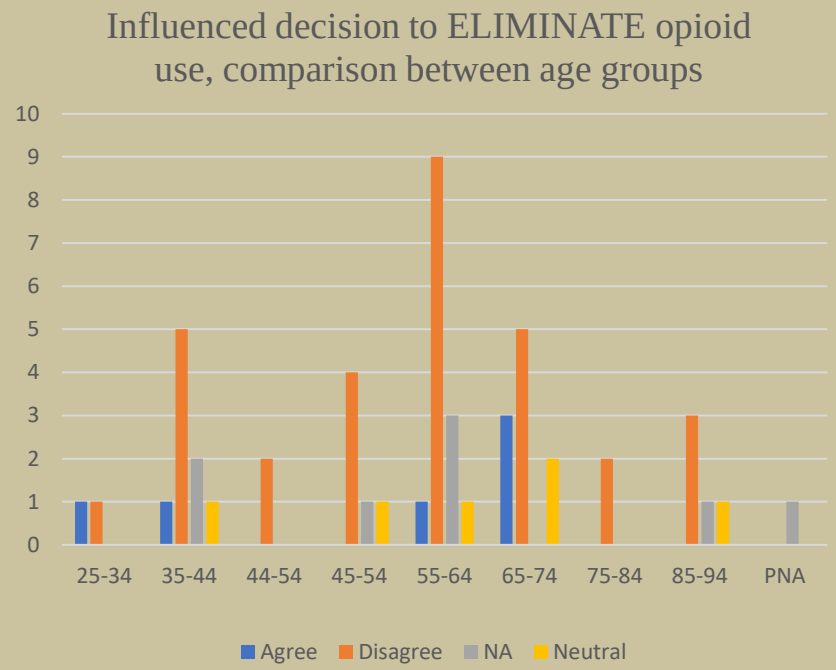
Decreased Use of Opioids due to Education



Q3: Influenced decision to decrease opioid use

Age years	Agree	Disagree	NA	Neutral	Total	Percent
25-34	1	1			2	4%
35-44	1	5		3	9	17%
44-54	1	1			2	4%
45-54		4		2	6	12%
55-64	2	7	2	3	14	27%
65-74	2	4	1	3	10	19%
75-84		1		1	2	4%
85-94	1	4			5	10%
PNA		1	1		2	4%
Total	**8**	**28**	**4**	**12**	**52**	**100%**

Eliminated Opioids due to Education



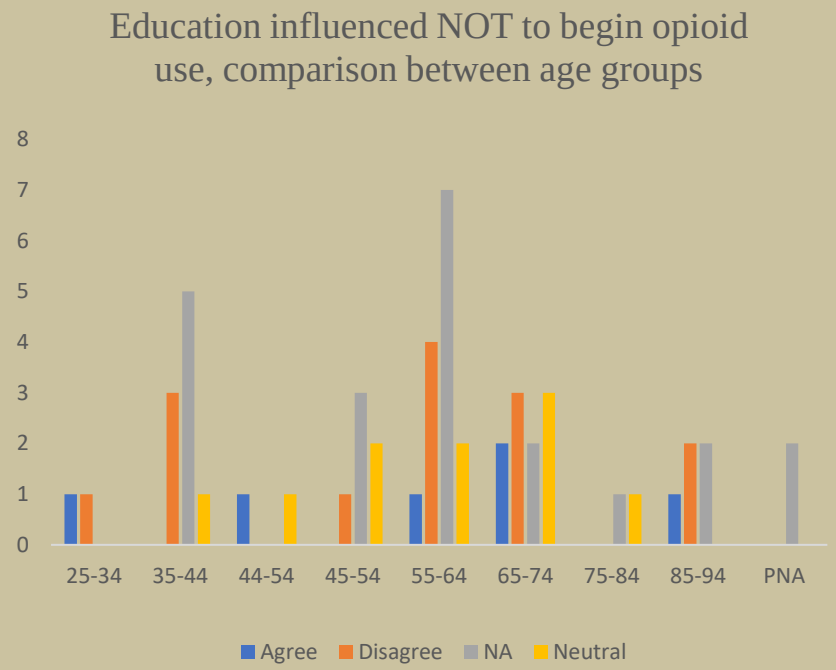
Q4: Influenced decision to eliminate opioid use

Age years	Agree	Disagree	NA	Neutral	(blank)	Total	Percent
25-34	1	1				2	4%
35-44	1	5	2	1		9	17%
44-54		2				2	4%
45-54		4	1	1		6	12%
55-64	1	9	3	1		14	27%
65-74	3	5		2		10	19%
75-84		2				2	4%
85-94		3	1	1		5	10%
PNA			1		1	2	4%
Total	**6**	**31**	**8**	**6**	**1**	**52**	**100%**

Findings/Objectives in SMART Objectives (continued)

- *Patients treated at Southwest Spine and Pain Center who are considering opioids for pain management and receive an opioid education toolkit state they are not considering prescription-opioid use within three months.*
- Summary: most patients who met this criteria did not feel the opioid education influenced their decision to not begin prescription opioid use.

Opioid Education Influenced Not to Begin Opioids



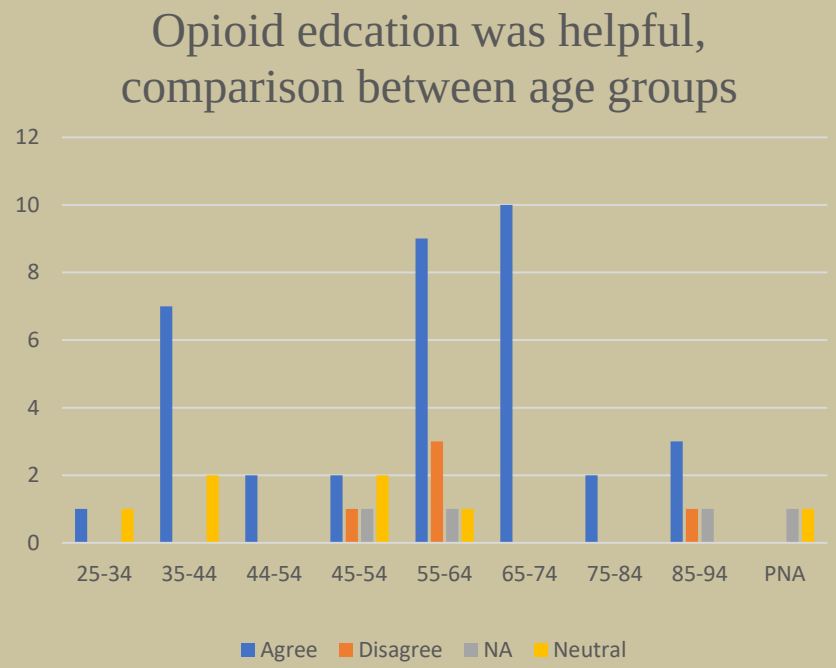
Q2 (cont.): Education influenced decision NOT to BEGIN

Age years	Agree	Disagree	NA	Neutral	Total	Percent
25-34	1	1			2	4%
35-44		3	5	1	9	17%
44-54	1			1	2	4%
45-54		1	3	2	6	12%
55-64	1	4	7	2	14	27%
65-74	2	3	2	3	10	19%
75-84			1	1	2	4%
85-94	1	2	2		5	10%
PNA			2		2	4%
Total	**6**	**14**	**22**	**10**	**52**	**100%**

Findings/Objectives in SMART Objectives (continued)

- *Patients treated at Southwest Spine and Pain Center who receive the opioid education toolkit will find the information helpful and/or recommend the information to others within three months.*
- Summary: Most of those surveyed indicated that they found the opioid education helpful and that they will share it with others.
- This was an unexpected positive finding.

Found Opioid Education Helpful

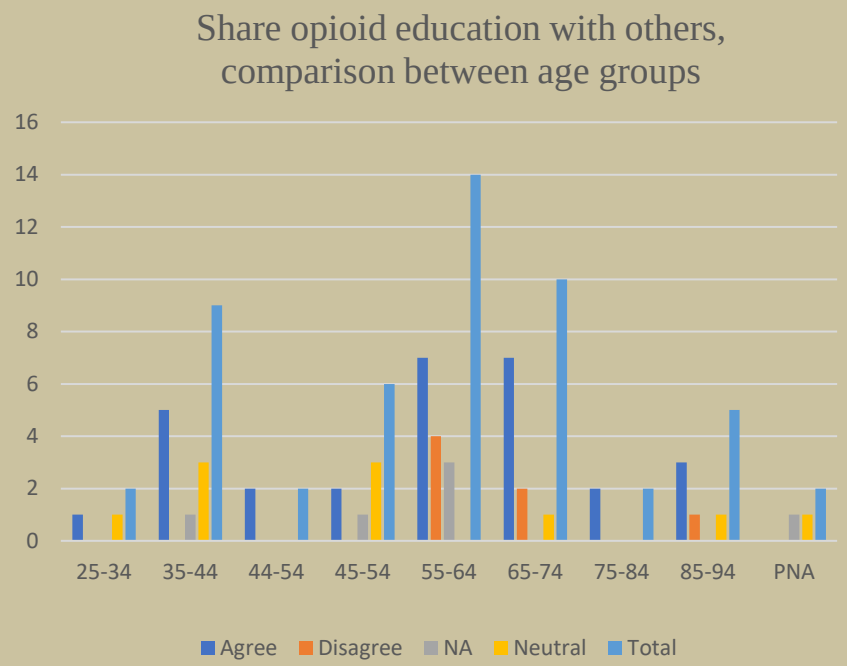


Question 1: Opioid education was helpful

Age years	Agree	Disagree	NA	Neutral	Total	Percent
25-34	1			1	2	4%
35-44	7			2	9	17%
44-54	2				2	4%
45-54	2	1	1	2	6	12%
55-64	9	3	1	1	14	27%
65-74	10				10	19%
75-84	2				2	4%
85-94	3	1	1		5	10%
PNA			1	1	2	4%
Total	**36**	**5**	**4**	**7**	**52**	**100%**

Abbreviations: not applicable to participant (NA), preferred not to answer (PNA), question (Q)

Will Share the Opioid Education with Others



Q5: Will share opioid education with others

Age years	Agree	Disagree	NA	Neutral	Total	Percent
25-34	1			1	2	4%
35-44	5		1	3	9	17%
44-54	2				2	4%
45-54	2		1	3	6	12%
55-64	7	4	3		14	27%
65-74	7	2		1	10	19%
75-84	2				2	4%
85-94	3	1		1	5	10%
PNA			1	1	2	4%
Total	**29**	**7**	**6**	**10**	**52**	**100%**

Limitations or Deviations from Project Plan

- Sample size smaller than expected; 52 surveys vs. 150.
- Unique individual choices of patients whether to participate.
- Implementation did not continue fully when student was not on site to participate in opioid education toolkit and survey distribution to patients.

Implications of Results

Practice implications

- Opioid education toolkit is already in EHR.
- Information may continue to be used in other clinics.
- Education impacts patient's family and friends.

Future research:

- Future QI project with specific patients

Implications of Results (continued)

Nursing and health policy implications

- CMS requires that patients receive written education (Shipman, 2016).

- Advanced-practice nurses have unique teaching and leadership roles (AACN, 2020). They could champion this health policy practice change.

Value and Impact of Project to Healthcare and Practice

- Impacts the opioid crisis one person at a time.
- Helpful and will share it with others (over half surveyed).
- A few choices about opioids were influenced.
- Model can be replicated in other settings to generate and answer questions to continue to improve health.

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Questions?