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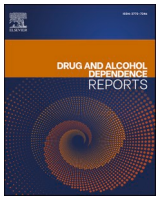

Policies, adaptations, and ongoing challenges to naloxone, buprenorphine and nonprescription syringe access across four-states: Findings from an environmental scan and key informant interviews☆

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HIGHLIGHTS

- Policy and practice changes were related to increasing availability of naloxone.
- Harm reduction organizations played a critical role in increasing opioid safety.
- Cost, stigma, and rural settings can be seen as barriers to accessing MOUD.

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ABSTRACT

Background: As the US opioid-involved morbidity and mortality increase, uptake and implementation of evidence-based interventions remain key policy responses. Respond to Prevent was a multi-component, randomized trial implemented in four states and two large pharmacy chains with the aim of improving the pharmacy's capacity to provide naloxone, dispense buprenorphine, and sell nonprescription syringes (NPS). We sought to provide context and assess how policies and organizational practices affect communities and pharmacies across the study states.

Methods: Using a multi-method approach we: 1) conducted an environmental scan of published literature and online materials spanning January 2015 to June 2021, 2) created timelines of key events pertaining to those policies and practices and 3) conducted semi-structured interviews with stakeholders (key informants) at the state and local levels (N=36) to provide further context for the policies and practices we discovered.

Results: Key informants discussed state policies, pharmacy policies and local practices that facilitated access to naloxone, buprenorphine and NPSs. Interviewees from all states spoke about the impact of naloxone standing orders, active partnerships with community-based harm reduction organizations, and some federal and state policies like Medicaid coverage for naloxone and buprenorphine, and buprenorphine telehealth permissions as key facilitators. They also discussed patient stigma, access in rural settings, and high cost of medications as barriers.

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Conclusion: Findings underscore the important role harm reduction-related policies play in boosting and institutionalizing interventions in communities and pharmacies while also identifying structural barriers where more focused state and local attention is needed.

1. Introduction

1.1. Background

The United States has experienced a dramatic rise in drug overdose deaths fueled by a rise in opioid use, especially synthetic opioids like fentanyl, with over 564,000 Americans dying of an opioid-related overdose from 1999 to 2020 and over 107,000 deaths in 2022 (Centers for Disease Control and Prevention, 2022; O'Donnell et al., 2021). A critical policy response has been to provide broad access to the rescue medication naloxone (Bohler et al., 2023). In addition to naloxone provision, states have also supported the retail sale of nonprescription syringes (NPS) to people who inject drugs (PWID) to minimize needle sharing and reduce transmission of bloodborne diseases (Meyerson et al., 2018; Zaller et al., 2010). Strategies to maximize the impact of opioid-related policies involve harm reduction services, including syringe services programs (SSPs), and leveraging healthcare resources, such as community pharmacies.

Community pharmacies can offer harm reduction supplies when SSPs are not open or in locations where they may not exist (Chatterjee et al., 2022; Irwin et al., 2024). Pharmacies also dispense medications like buprenorphine and naloxone. However, a recent study found that 1 in 5 pharmacies refused to dispense buprenorphine, and even when stocked, patients experience pharmacist-related, insurance-related and structural barriers in obtaining the medication (Kazerouni et al., 2021). In a survey of pharmacists in North Carolina, Parry et al. (2021) found that pharmacists in rural areas were less likely to provide naloxone and NPS than in urban areas. In recognition of pharmacies' role in naloxone provision, states have changed laws and developed mechanisms (e.g., standing orders) that enable patients to access naloxone directly from pharmacies, including distribution to third parties like family members of PWID and potential bystanders to overdoses (Prescription Drug Abuse Policy System, 2022).

1.2. Respond to Prevent intervention

The Respond to Prevent (R2P) study was a stepped-wedge, cluster randomized, controlled trial conducted in two large chain pharmacies across four states – Massachusetts, New Hampshire, Oregon and Washington. Studies sites were selected based on state overdose rates of the participating chains, and randomized to provide representation in urban, suburban, and rural locations. R2P aimed to increase the distribution of naloxone, buprenorphine dispensing and to promote the sale of NPS (Green et al., 2022). The intervention included three online self-guided trainings, in-person academic detailing, and educational material supports to community pharmacies to expand access to harm reduction resources (Irwin et al., 2023). The study includes online and one-on-one educational outreach (i.e. academic detailing) to identify and effectively engage with patients who may be at high-risk for an opioid overdose. Our goal was to conduct a descriptive analysis to provide the context of the environment in which the intervention takes place, combining a review of relevant policies and practices with observations from individuals who understood this local context. This approach identifies critical events to establish timelines for semi-structured interviews.

2. Material and methods

2.1. Study design

The study design included 1) a review of published literature and online materials and 2) key informant interviews with stakeholders who could speak to the intersection of community pharmacy and harm reduction initiatives at the state and local levels. To assess policies across these four states, two research assistants (TN and MB) conducted structured searches of peer-reviewed publications and the grey literature (e.g., government reports, white papers) regarding naloxone, buprenorphine and NPS. Results of the review were limited to the English language and documents published between January 2015 and June 2021. Data collection for the environmental scan was conducted from June 2021 to February 2022 as part of the R2P study, which took place from July 2019 to July 2022.

2.2. Environmental scan

Keyword searches were conducted within the following research databases and websites: Google and Google Scholar, academic research databases (PubMed, SocINDEX, Scopus, Policy File Index and Politics Collection (Proquest), organizational websites, LegiScan, grey literature (e.g. government reports, policy briefs, which papers) and state legislature websites (see Appendix C). Data collected from the searches were used to develop analytical summaries that identified potential policy barriers and facilitators of harm reduction resources. For each state, we developed a grid summarizing the action/category, the specific name of the policy/law/program, the year started, the scale (e.g. national, state or county-wide), a description, and the sources found.

2.3. Timelines

Materials were used to develop state-based policy timelines to inform the interview guide and other materials (see the example from Washington in Fig. 1 and all summaries in Appendix A). The timelines were used in key informant interviews (below) as a mechanism to help interviewees recall and/or elaborate on events and activities that may not have been broadly reported on in the press or literature.

2.4. Key informant interviews

In developing the interview guide, we drew upon expertize with the research team, along with guidance from the Social Ecological Model (Bronfenbrenner, 1979). Using this framework allowed us to assess changes in systems related to naloxone, buprenorphine and syringe access and to see facilitators and barriers at each of the social ecological levels. We sought to conduct up to 10 key informant interviews in each state with representatives from the Departments of Health, pharmacy boards, community organizations, harm reduction groups, as well as practicing pharmacists and public health professionals.

Key informants (KIs) were initially identified by members of the project's Advisory Board, who were asked to recommend potential KIs in their state to contact for expert input. Potential KIs were contacted by email to request their participation in the study and were provided the consent form, the interview guide, and a state-specific timeline of key events from the past five years related to study questions (see Appendix B). The study was approved by the Brandeis Institutional Review Board.

Three research team members (JS, GS, DB) conducted interviews using the Zoom video platform (San Jose, CA) between October 2021

and February 2022. All participants provided verbal informed consent and no identifiers were audio-recorded. Interviews lasted approximately 30 min. Recordings were transcribed automatically and verbatim by the Zoom platform and transcription documents were cleaned by study staff through comparison with recorded interviews as needed and added into Atlas.ti (Altas.ti, version 22) for data analysis.

2.5. Analysis

Initially, two analysts (GS, JS) independently reviewed a sample of transcripts to develop a list of major coding categories. They subsequently met with additional members of the research team (GS, JS, DB, TG, MB) to develop a comprehensive codebook for analysis. The research team met bi-weekly to discuss, refine and agree upon the code list and to identify patterns and themes that were later developed into a standard codebook. Transcripts were coded by research team members (JS, DB, MB, MR), and each transcript was cross-coded and reviewed by a second researcher. Following the coding process, reflective memos were written by each coder (JS, DB, MB, MR) using a 'memoing' technique (Charmaz, 2006). Research memos served to extract major thematic takeaways and to identify key facilitators and barriers to make within and across-state comparisons. After the completion of coding, synthesis memos were composed to draw out further comparisons across states.

3. Results

3.1. Findings of literature review

Findings from literature searches are summarized in Table 1 and represent the policy landscape for naloxone, buprenorphine, paraphernalia and drug possession in MA, NH, OR, and WA as of June 2021. Across all states, most legislative actions that occurred related to naloxone included: increasing ease of access, decriminalizing possession, and providing immunity for people administering the medication. Some actions were related to criminal prosecution for possession of illicit drugs or harm reduction supplies and increasing access to buprenorphine for treatment of opioid use disorder (OUD).

3.2. Key informant interview findings

Interviews were conducted with 36 individuals from four states, including interviewees from Massachusetts (n=12), New Hampshire (n=7), Oregon (n=9) and Washington (n=8). Over a third of KIs (36%) worked at non-profit organizations, while 31% were from the state or local government sector. The remaining interviewees worked for universities (19%) and for-profit companies (14%). Across states, KIs had been in their job positions for 5.5 years on average, with job tenure ranging from 3 months to 25 years. Demographic information on interviewees was not collected. KIs were not given incentives for their participation. Major themes identified in key informant observations are summarized in Table 2.

3.3. Commonalities of facilitators and constraints across states

3.3.1. Naloxone standing orders or similar mechanisms

Participants in all states mentioned a mechanism (e.g., pharmacy standing orders, prescriptive authority) that was enacted that enabled naloxone to be accessed directly from a pharmacy. For example, Massachusetts KIs perceived the series of naloxone standing orders—which require pharmacies to maintain a consistent supply of naloxone and allow pharmacies to dispense as much naloxone as needed without a prescription— as a key facilitator of harm reduction access (Massachusetts Department of Public Health, 2018; 2022). In New Hampshire, pharmacy chains also increased access to community recovery organizations, increasing the impact of the state's standing order. Washington KIs mentioned how their naloxone standing order increased naloxone offered by pharmacists to all patients with an opioid prescription over 50 Milligrams Morphine Equivalent (MMEs) which has also expanded access for health officials such as first responders. Oregon KIs mentioned

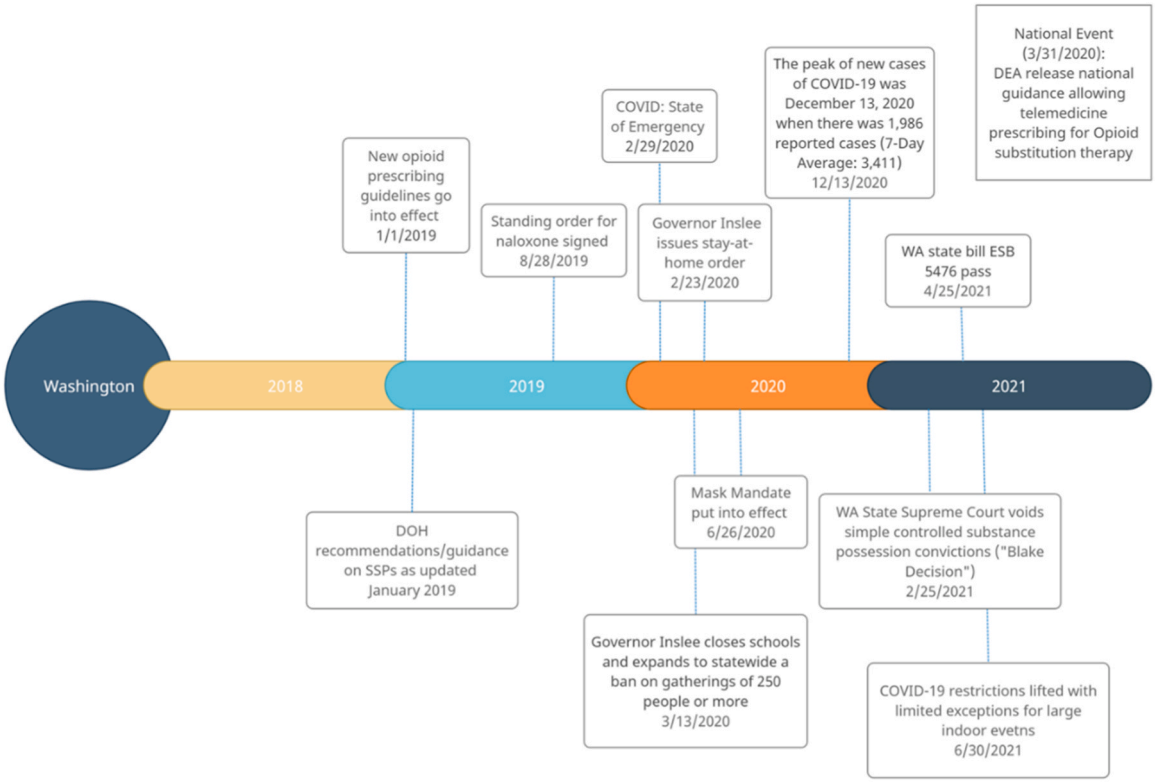

Fig. 1. Example timeline of events from Washington State for use in key informant interviews.

Table 1
Summary of legislative findings from literature searches across states.

Components	Specific laws	Massachusetts	New Hampshire	Oregon	Washington
Naloxone	Naloxone co-prescription mandate				✓
	Pharmacists' dispense naloxone without prescription	✓	✓	✓*	✓
	Statewide standing order	✓	✓		✓
	Prescriptive authority for naloxone (Physician Assistants/Advanced Practical Registered Nurses)			✓	
	Recipient educational requirement	✓			
	Civil/criminal immunity for person administering naloxone	✓	✓	✓	✓
	Immunities for prescriber and dispenser of naloxone	✓	✓	✓	✓
Possession of drugs/drug paraphernalia	Decriminalization of personal drug possession			✓	✓**
	Decriminalization of possession of fentanyl test strips/drug checking equipment	✓		✓	
	Decriminalization of nonprescription syringe possession	✓	✓	✓	✓
Buprenorphine	Buprenorphine prescription authority of PA/APRN	✓	✓	✓	✓
	Buprenorphine dispensing model	Nurse case manager model	Doorways model	Outpatient office model (OBOT)	Hub-and-spoke model
	Telehealth for buprenorphine	✓	✓	✓	✓

*At the time of key informant interviews, prescriptions could be written by pharmacists in Oregon.
**Occurred through judiciary action in WA State Supreme Court decision.

the naloxone law (Oregon Revised Statutes 689) – passed in 2013 – that allowed for non-prescription distribution in the form of kits by pharmacies. This allowed them to distribute naloxone to social services agencies and other organizations and individuals who work with at risk populations (e.g., homeless shelter, syringe service program).

As one key informant reflected:

> *We were able to change the law to allow pharmacists to dispense and at that time there was a lot of the Board of Pharmacy and Oregon Health Authority did a lot of work … to let pharmacists know that they could now do this and put together like a pharmacy packet where pharmacist could know the law but also put up signs that are like, "Hey, if you need naloxone just ask." Oregon Key Informant.*

The findings related to naloxone access align with our post-intervention evaluation of study pharmacies, where the majority of locations successfully provided naloxone as trained (Gray et al., 2023).

3.3.2. Community-based harm reduction organizations

Another theme mentioned by KIs was efforts of community organizations to facilitate harm reduction resources and medication treatment, which were amplified by policy and financial investments in

Table 2
Facilitators and barrier commonality by state as reported by key informants.

	Massachusetts	New Hampshire	Oregon	Washington
Facilitators				
A. Naloxone standing orders or similar mechanisms	✓	✓	✓	✓
B. Community-based harm reduction organizations	✓	✓	✓	✓
C. Health insurance coverage and state policies	✓		✓	✓
D. Increased availability of telehealth		✓	✓	
E. Buprenorphine prescribing			✓	✓
F. Drug decriminalization			✓	✓
Barriers				
A. Stigma	✓	✓	✓	✓
B. Rurality	✓	✓	✓	✓
C. High medication costs	✓	✓	✓	✓
D. Limitations on MOUD prescribing	✓		✓	✓

infrastructure to treat OUD and care for PWUD. In New Hampshire, the most highly referenced facilitator was the Doorways Initiative (a federally funded, statewide program providing resources and access to treatment for opioid use disorder) which began in 2019 (State of New Hampshire, 2023). This initiative received both federal and state funding to connect PWUD to a variety of local providers, which can serve as access points for treatment services and harm reduction supplies.

One key informant described the importance of these activities:

I worked for two organizations between 2015 and 2018 that did not want anybody carrying [naloxone]. I interacted with a lot of police departments that had chosen publicly not to carry [naloxone] for really stigmatizing reasons. …It was very interesting to watch how drastically that changed around 2019 when the Doorways Program kind of switched everything up… it was exactly the push that was needed to make it widely acceptable both by general citizens but then also by professionals that interact with people who use drugs—New Hampshire Key Informant.

3.3.3. Buprenorphine prescribing

Key informants mentioned improvements in buprenorphine prescribing as a facilitator to harm reduction services. Washington KIs mentioned policies and investments in buprenorphine access, the increased availability of buprenorphine related to telemedicine adaptations during COVID, and policy changes that no longer require patients to attend counseling or in-person clinical visits to get a prescription. Key informants in New Hampshire and Oregon similarly noted the important role that the COVID-19 pandemic played in expanding access to harm reduction resources through efforts to implement telehealth prescribing of buprenorphine. For instance, the Oregon Health Authority chose to recognize harm reduction services as essential services. Some limitations on medications for opioid use disorder (MOUD) prescribing were also mentioned, including the (then required) Drug Enforcement Agency (DEA) X-waiver requirement for buprenorphine prescribing, which created a shortage of certified prescribers in some communities.

As a key informant encouraged:

…I think there's a lot more flexibility with partnering with particular pharmacists that are interested in co-management of buprenorphine, especially using, you know, these new modalities of telemedicine.– New Hampshire Key Informant.

3.3.4. Health insurance coverage

Key informants discussed how different state policies increased coverage for health needs related to harm reduction, primarily for naloxone and buprenorphine, and in some states, NPS. For example, Washington KIs praised the state for expanding coverage of medication treatment through Medicaid, including for buprenorphine and other forms of MOUD. According to one Washington key informant, 90% of Medicaid recipients with diagnosed OUD could have MOUD prescriptions covered by Medicaid without a copay.

As this key informant summarizes:

[Healthcare expansion] has really improved access because insurance pays for […] buprenorphine, it pays for naloxone, and it pays for syringes also at the pharmacy—Massachusetts Key Informant.

3.3.5. Medication costs

Limitations on coverage and medication costs, particularly for naloxone, were mentioned across the four states as barriers to access. Oregon KIs articulated sentiments representative of KIs in other states, reflecting frustration with prescription processing becoming more complex due to insurance difficulties. They referenced expensive copays for naloxone and NPS, and insurance not covering naloxone without a prescription. Also, some insurance companies placed quantity limits on the number of dispensed naloxone kits patients could receive, which runs counter to a naloxone saturation model striving for broad distribution.

As one key informant reflected:

[High prices, even with health insurance] are a major factor when most patients refuse naloxone; as much as 10% [of refusals] were due to the cost of the copay—Massachusetts Key Informant.

3.4. Broader contextual factors

3.4.1. Pharmacy-based stigma

Concerns around pharmacy-based stigma, were referenced across multiple interviews. In Massachusetts, KIs described negative attitudes and misconceptions about PWUD that were pervasive among many pharmacists, policymakers, and the public at-large, and frequently deterred PWUD from seeking harm reduction materials in SSPs, as well as in community pharmacies. KIs also described pharmacists' lack of knowledge about laws around harm reduction materials, with some pharmacy staff incorrectly believing naloxone or NPS require a prescription to dispense or that prospective customers require identification for their purchase. Similar observations were made by Oregon KIs, where the acceptance of buprenorphine prescription requests varied. In several interviews, the design of the pharmacy itself came up, where KIs pointed to the challenge of having the pharmacy situated in the middle of the store, whereas pharmacies located in the back of the store or having a private consultation room promoted privacy and low barrier access.

As one key informant describes:

… We heard a lot about syringes left in [pharmacy] bathrooms and parking lots. We also heard straight up stigma of, "these people cost us more money than they're worth, they steal everything from our [pharmacy] stores, we got to watch them like a hawk", that kind of thing—New Hampshire Key Informant.

3.4.2. Rurality

Rurality was sometimes raised in relation to stigma and was noted by KIs across all states. Rural and suburban communities may lack harm reduction community organizations and treatment programs and even when present, their services can be limited or only intermittently available. For instance, New Hampshire KIs described challenges to receiving harm reduction services due to the lack of public transportation, community organizations that offer NPS, buprenorphine and naloxone. KIs stated that in these areas, stigma was deeply pervasive, and there was a general lack of awareness and understanding about the use of MOUD and harm reduction services. KIs named challenges in some communities that limit the choice of MOUD (such as naltrexone only), while others limit the number of NPS that can be purchased or possessed.

As a key informant shared about their centralized supply distribution model (i.e. hub and spoke):

There's always the barrier about people that don't believe in MOUD. I don't think that's specific to Washington. Although I will say that the reason, when they did the Hub and Spoke, they included naltrexone in their approach was that they were pretty clear about people – particularly in the eastern part of the state, which is very rural and very frontier – who didn't believe in medications and wanted an abstinence-based option…. Washington Key Informant

3.5. Changes in criminal prosecutions related to drug possession

Oregon and Washington experienced policy changes that effectively decriminalized drug use and possession by individuals. The changes had less of a direct effect on pharmacy practice, but served as important anchors in discussions with KIs, who spoke about the opportunity that decriminalization of drug use provided, both in terms of communicating a clear message of destigmatizing drug use and the availability of funds to support more investments in care and recovery. In Oregon, voters passed ballot initiative *Measure 110* in November 2020, decriminalizing small amounts of illegal drugs and expanded funding for substance use treatment resources in the state. Passage of measure 110 helped secure funding for the harm reduction clearinghouse which provided harm reduction supplies to qualifying organizations at no cost and help

provide behavioral health infrastructure. In Washington, the state Supreme Court struck down felony drug possession as unconstitutional in 2021.

4. Discussion

4.1. Study findings

The policy landscape for buprenorphine, NPS, and naloxone access varied across the four states that were a part of the R2P intervention. Analyses of key informant interviews showed the most commonality across states in access to naloxone and involvement of community-based organizations as key facilitators. Barriers that were identified include rurality and associated stigma, along with the cost of medications. Pharmacies played a vital role in the distribution of naloxone and harm reduction supplies, though work is needed to reduce stigma in that setting. While not the expressed focus of this paper, the COVID-19 pandemic, which occurred during the study period, cannot be ignored for both the irreparable harms and disruptions for people with substance use disorder, but also the opportunities to transform how harm reduction services are delivered.

Key informants discussed themes around the intersection of rurality and stigma. KIs described rural areas of their state that were conservative and as a result less accepting of opioid use and treatment (Des Jarlais et al., 2015; Green et al., 2020; Bohler et al., 2021, 2023). They also described the lack of privacy available in pharmacies in areas where resources come from a common source (such as groceries and medications in one store) and describe this as a concern across other health conditions. An advantage of the study intervention in a pharmacy setting is the onsite academic detailing (training) component, which helps to address concerns in real-time with pharmacy staff present, though it may do less for persistent community-wide attitudes.

Key informants also noted that, while barriers to buprenorphine prescribing were being lifted, the limited amount of buprenorphine prescribing, coupled with some community restrictions in harm reduction services and medication costs, undermined efforts to provide sustainable care and reinforced stigma around OUD treatment. These sentiments underly the motivations for implementing the R2P intervention, which is to address barriers head on with people working directly with patients in order to develop strategies that work in their communities. The expansion of buprenorphine stocking and dispensing, emphasized by the intervention could see a boost to dispensing too, which could also expand naloxone distribution. Buprenorphine prescribing also intersects with the emerging trend of telehealth that accelerated during the pandemic and continues to expand with evidence of success (Hammerslag et al., 2023). Interviewees described buprenorphine telehealth as having great potential impact, especially in areas that were more remote and where privacy issues remain a concern (Weintraub et al., 2018; Jones et al., 2022; Williams et al., 2023).

Finally, as resources are redirected from criminal justice to public health activities, changes in criminal prosecution for illicit drug possession may further accelerate harm reduction and OUD treatment and recovery services. At the same time, there is the potential for increased stigma and resistance at the community level in response to decriminalizing illicit drug use, with an unintended consequence of endangering existing services. Close observation is needed to determine how these early policies impact access to evidence-based supplies like buprenorphine, NPS, and naloxone in pharmacies (Chatterjee et al., 2023).

4.2. Limitations

A key strength of the design is the conduct of a literature review and timeline analysis preparatory to key informant interviews which created critical anchors for those discussions. The interviews provided a snapshot of an evolving policy landscape and are limited by that context. However, key informant interviews during the study time could not capture all the ongoing policy changes, and they do not reflect policy changes after 2021. As specific examples, changes in criminal prosecution for possession in Washington State were subject to further legislative actions in 2023, after the study period ended, and evaluations of Oregon's decriminalization measure is underway, with its full impact not yet known (Joshi et al., 2023; Spencer, 2023).

For other policy changes that were shaped by the global pandemic, such as those related to telemedicine, it remains to be seen what changes will become permanent. Already we have seen the approval of over-the-counter naloxone availability and the end of the DEA X-waiver for buprenorphine prescribing (Messinger et al., 2023; Saloner et al., 2023), both of which are likely to drive dispensing and sales of harm reduction medications and supplies from pharmacies. Importantly, the study sites were limited to Northern and costal states and may not reflect the reality of policy changes in other areas, such as Southern and Appalachian settings.

While the literature search attempted to be exhaustive, some relevant information may not have been found or accessible. We have identified our source materials to help readers identify any gaps in knowledge. Finally, because KIs were not random and were identified based on referrals from others, some critical perspectives may not be included in the interviews. The intent was to identify those with knowledge of the local context.

5. Conclusion

The four states participating in a large multilevel intervention study of pharmacy-based naloxone and related services shared many commonalities in terms of facilitators and barriers to the provision and uptake of harm reduction supplies from the pharmacy. Remarkable, measurable work has been done around availability and access to naloxone in pharmacies, but there has been less focus to enhance NPS and buprenorphine access from pharmacies in comparison. Pervasive stigma and lack of resources in rural areas remain and may amplify disparities in pharmacy harm reduction supply access. Within these dynamic settings, focused supports like the R2P intervention may provide practical tools to help pharmacies more comprehensively support individual harm reduction actions and standardize community responses to growing morbidity and mortality related to opioid use.

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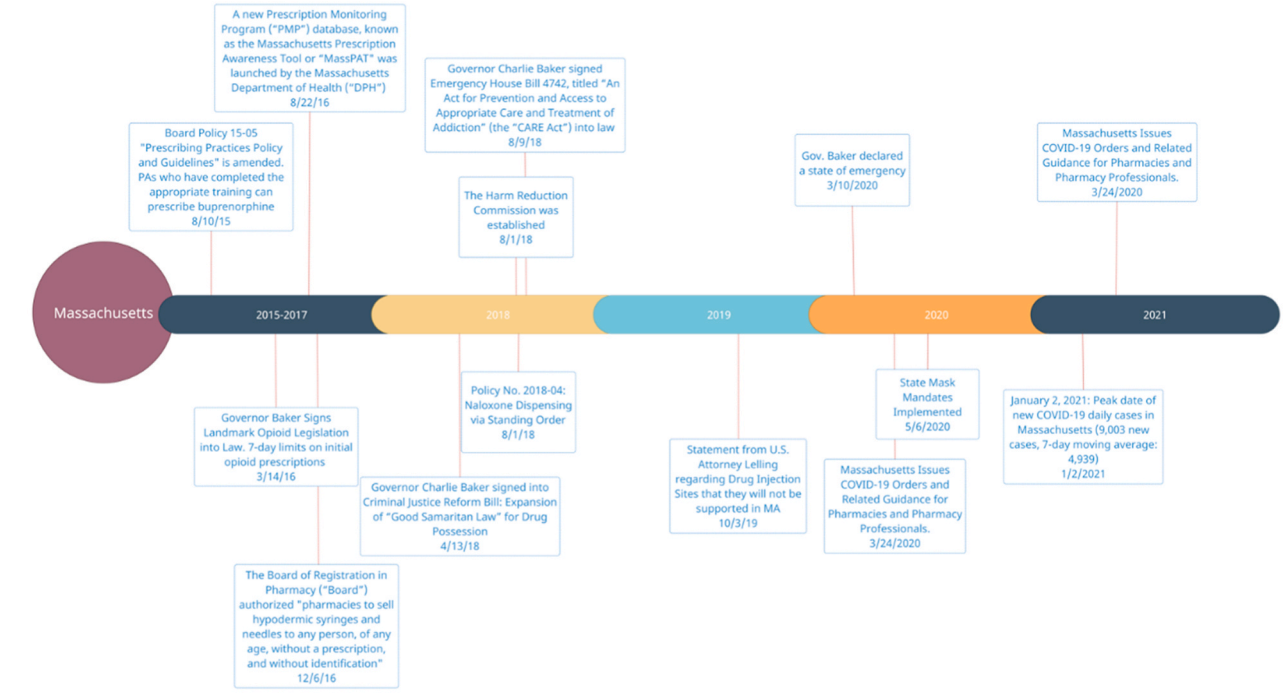
CRediT authorship contribution statement

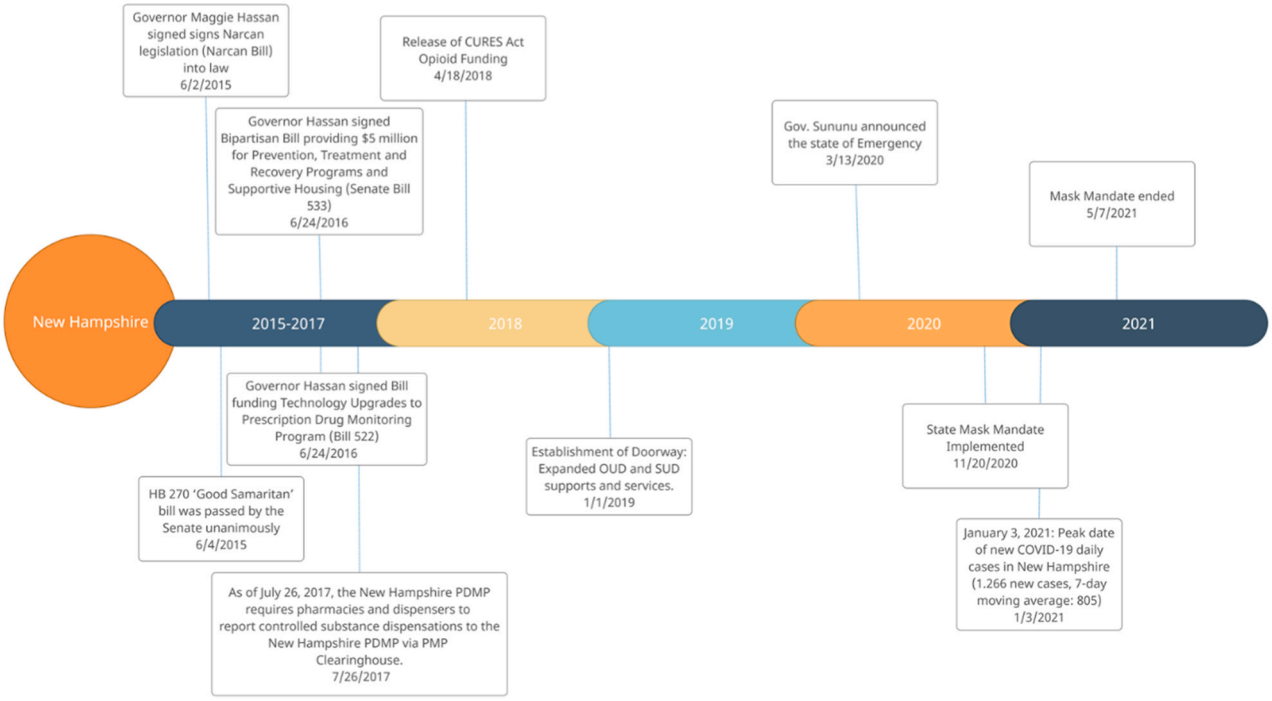
Robert Bohler: Writing – review & editing, Investigation. **Anthony S. Floyd:** Writing – original draft, Investigation, Formal analysis. **Joseph Silcox:** Writing – original draft, Investigation, Formal analysis. **Daniel M. Hartung:** Writing – review & editing, Investigation, Conceptualization. **Ryan N. Hansen:** Writing – review & editing, Investigation, Conceptualization. **Jeffrey Bratberg:** Writing – review & editing, Investigation, Conceptualization. **Adriane N. Irwin:** Writing – review & editing, Investigation, Conceptualization. **Derek Bolivar:** Writing – review & editing, Investigation, Formal analysis. **Megan Rabin:** Writing – review & editing, Investigation, Formal analysis. **Thuong Nong:** Writing – original draft, Investigation, Formal analysis. **Malcolm Blough:** Writing – review & editing, Investigation, Formal analysis. **Traci C. Green:** Writing – original draft, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Gail Strickler:** Writing – original draft, Investigation, Formal analysis.

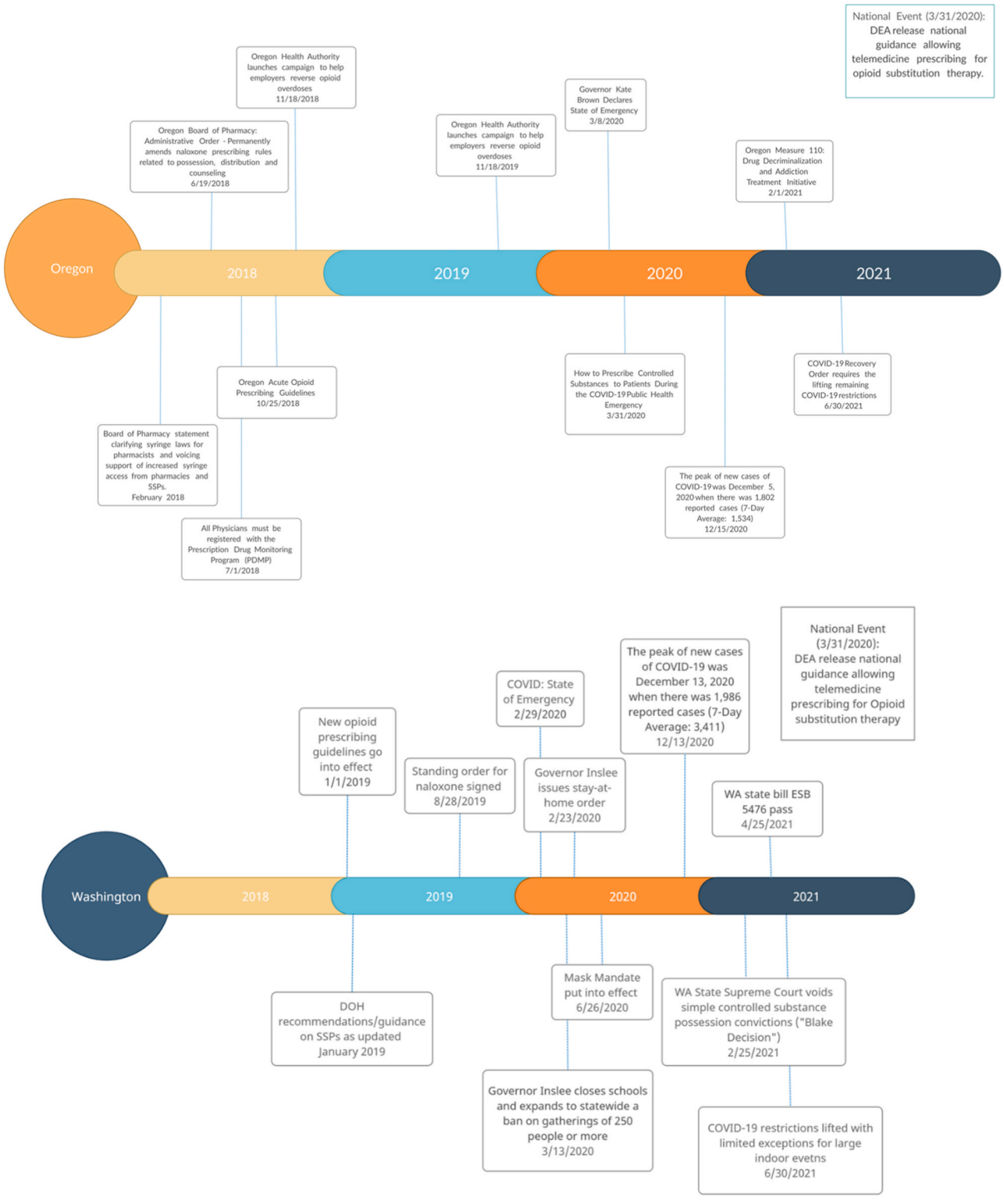
Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Key informant interview anchoring event reference timelines







Appendix B. Key informant interview guide

INTERVIEW QUESTIONS

1. Could you describe your position in your organization and how long you have been in this position?

2. I've sent you a timeline with a few key events in the past 5 years related to naloxone, syringe and buprenorphine for OUD treatment access in your state. This is what we are going to use for reference. So, thinking back 5 years, to the beginning of 2017 or so, can you briefly describe any key facilitators **in the state** may have helped improve access to naloxone, syringes or buprenorphine for OUD treatment here? Facilitators are defined as *any factors that promoted or helped i*n improving access to naloxone, syringe or buprenorphine access.
3. How about facilitators that may have affected access to naloxone, syringes, or buprenorphine **in pharmacies** during this same time period?

Probes:

- Describe any state or local laws and policies or store-level policies that may have facilitated access.
- Describe any regional or state characteristics that may have facilitated access.
- Describe any events or initiatives that may have facilitated access to naloxone, nonprescription syringe access, or buprenorphine treatment.

4. OK, next I want you to think about the same time period, but consider what key challenges or barriers, if any**, in the state**, may have hindered access to naloxone, syringes and buprenorphine here? If relevant, describe how these barriers/challenges were addressed.
5. How about challenges or barriers that may have affected access to naloxone, syringes, or buprenorphine specifically **in pharmacies** during this time period?

Probes:

- Describe any state or local laws and policies or store-level policies that may have been a barrier to access
- Describe any regional or state characteristics that may have been a barrier to access.
- Describe any events or initiatives that may have been a barrier to access to naloxone, nonprescription syringes, or buprenorphine treatment

6. How would you describe the current access to naloxone in your state/county?
7. How would you describe the current access to nonprescription syringes in your state/county?
8. How would you describe the current access to buprenorphine in your state/county?

******Interviewer describes R2P Intervention*****

9. What are your impressions/thoughts about this intervention? What concerns –if any—do you have about it?
10. What essential changes (e.g., policy, program) are needed in your state to improve the implementation and effectiveness of interventions like R2P?
11. Is there anything else you would like to share with us today?
12. Is there someone you think we should talk to for expert input on these topics?

We thank you again for your time today. We may need to reach out later to clarify some of your responses. Do we have your permission to follow-up with any clarifying questions regarding the information you have shared with us today? Please contact us anytime at tracigreen@brandeis.edu if you have any questions. Thank you!

Appendix C. Policies, guidance and legislative actions by state

Search terms included combinations of [county/state]+[naloxone or narcan or syringe(s) or MAT or "medication assisted therapy" or buprenorphine or "medication for opioid use disorder" or MOUD or "harm reduction" or "syringe service program" or "syringe exchange" or "safe injection" or "opioid treatment" or "opioid task force" or pharmacy or pharmacist.

State	Date	Type	Topic	Title	Description
Massachusetts	8/10/15		State Policy	Board Policy 15–05	"Prescribing Practices Policy and Guidelines" is amended
Massachusetts	3/14/16	Press Release	State Policy	Governor Baker Signs Landmark Opioid Legislation into Law	Gov. Charlie Baker signs bill "An Act relative to substance use, treatment, education and prevention"
Massachusetts	4/13/18	Press Release	State Policy	Governor Charlie Baker signed into Criminal Justice Reform Bill: Expansion of "Good Samaritan Law" for Drug Possession	Protects people who experience drug overdoses, and people who call for emergency medical help for another person experiencing a drug overdose from probation, parole, or any conditions of pre-trial release.
Massachusetts	8/9/18	Press Release	State Policy	Governor Charlie Baker signed Emergency House Bill 4742, titled "An Act for Prevention and Access to Appropriate Care and Treatment of Addiction" (the "CARE Act") into law	*The CARE Act directed The Department of Public Health to issue a statewide standing other that authorize phamarcies to dispense naloxone * Encourages broader use of naloxone: practioners dispensing naloxone in good faith are protected from ciminal and civil liability *Allow patients to receive a portion of their full opioid prescription
Massachusetts	8/1/18	Press Release	State Policy	Policy No. 2018–04: Naloxone Dispensing via Standing Order	Pharmacies are allowed to dispense naloxone without a prescription to assist individuals who are at risk of opioid-related overdose.

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State	Date	Type	Topic	Title	Description
Massachusetts	8/1/18	Press Release	Significant Public Health events	The Harm Reduction Commission was established in August, 2018	Roles: Review and making recommendations regarding harm reduction opportunities to address substance use disorder
Massachusetts	10/3/19	Press Release	Press statement	Statement from U.S. Attorney Lelling regarding Drug Injection Sites	The U.S. Attorney for Massachusetts Andrew Lelling considered drug injection site harmful to communities and informed that efforts to open injection facilities in Massachusetts, will be met with federal enforcement
New Hampshire	6/2/15	Press Release	State Policy	Governor Maggie Hassan signed signs Narcan legislation (Narcan Bill) into law	The Bill protects a health care professional or other person who prescribes, dispenses, distributes, stores Narcan, or administer it to someone suffering from a heroin overdose from the provisions of the controlled drug act.
New Hampshire	6/4/15	Press Release	State Policy	HB 270 'Good Samaritan' bill was passed by the Senate unanimously	The Bill protects individual who calls 911 for medical help for a drug overdose from arrest, prosecution, or conviction for the crime of possession of the controlled drug.
New Hampshire	6/24/16	Press Release	State Policy	Governor Hassan signed Bipartisan Bill providing $5 million for Prevention, Treatment and Recovery Programs and Supportive Housing (Senate Bill 533)	The additional funding ($5 million) increase access to supportive housing for those battling addiction as part of the strategy to combat opioid crisis.
New Hampshire	6/24/16	Press Release	State Policy	Governor Hassan signed Bill funding Technology Upgrades to Prescription Drug Monitoring Program (Bill 522)	The Bill supports tenology updates to help more prescribers access the prescription drug monitoring program timely.
New Hampshire	1/1/19	Press Release	Significant Public Health events	Establishment of Doorway	The 9 Doorway locations throughout the State enable residents with an opioid use disorder (OUD) to access help within an hour.
New Hampshire	4/18/18	Press Release	Significant Public Health events	Release of CURES Act Opioid Funding	NH received $3.8 millions to combat the opioid crisis
Oregon	1/1/2016	Oregon Legislature	Good Samaritan Law & Syringe Regulations	Chapter 274, SB 839	Good Samaritan Law indemnifying individuals who calls emergency services for a drug overdose from prosecution on drug possession and paraphenalia charges (inc. syringes).
Oregon	4/4/2016	Oregon Legislature	Naloxone	House Bill 4124	"[A] pharmacy, a health care professional or a pharmacist with prescription and dispensing privileges or any other person designated by the State Board of Pharmacy by rule may distribute unit-of-use packages of naloxone, and the necessary medical supplies to administer the naloxone, to a person who conducts naloxone trainings and/or is trained by the Oregon Health Authority."
Oregon	April 2017 (no day given)	Oregon Health Authority	Syringe Regulations	Oregon Syringe Services Program Guidance	Oregon Health Authority (OHA) guidance for SSPs. Describes the key components of SSPs, outreach strategies, and evaluation methods according to Oregon and the OHA.
Oregon	8/8/2017	Oregon Legislature	Naloxone	House Bill 3440	"Removes special training requirement from statutes governing prescribing, dispensing and distributing naloxone." Provides civil liability protections for the distribution of naloxone.
Oregon	October 2017 (no day given)	State of Oregon	Syringe Regulations	Syringe Services Program	Oregon was approved by the CDC to use federal DHHS funding for SSPs due to the heightened risk for Hepatitis and HIV among PWID.
Oregon	February 2018 (no day given)	Oregon Board of Pharmacy	Syringe Regulations	Position Statements	Board of Pharmacy statement clarifying syringe laws for pharmacists and voicing support of increased syringe access from pharmacies and SSPs.
Oregon	6/19/2018	Oregon Board of Pharmacy	Naloxone	Permanently amends naloxone prescribing rules related to possession, distribution and counseling	Standing order for naloxone
Oregon	7/1/18 (Physicians must be registered with PDMP)	State of Oregon	Monitoring Program	Prescription Drug Monitoring Program (PDMP)	Discusses the requirements for Oregon's PDMP.
Oregon	10/25/18	Oregon Health Authority	Prescribing Guidelines	Oregon Acute Opioid Prescribing Guidelines	New opioid prescribing guidelines go into effect
Oregon	11/18/19	Oregon Health Authority	Naloxone	Oregon Health Authority launches campaign to help employers reverse opioid overdoses	Oregon pilot program that helps employers incorporate overdose response into their workplace safety practices
Oregon	3/8/20	News	COVID-19	Governor Kate Brown Declares State of Emergency	State of emergency for COVID
Oregon	3/12/20	News	COVID-19	COVID-19 Cases in Oregon, A Timeline of Events	Governor Brown orders K-12 schools closed.

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State	Date	Type	Topic	Title	Description
Oregon	3/16/20	News	COVID-19	COVID-19 Cases in Oregon, A Timeline of Events	Governor Brown bans public gatherings of 25 or more and restricts restaurants to takeout-only.
Oregon	3/31/20	Drug Enforcement Administration	Prescribing Guidelines	How to Prescribe Controlled Substances to Patients During the COVID-19 Public Health Emergency	DEA national guidance allowing telemedicine prescribing for opioid substitution therapy.
Oregon	12/5/20	News	COVID-19 Peak	Tracking Coronavirus in Oregon: Latest Map and Case Count	The peak of new cases of COVID-19 was December 5, 2020 when there was 1,802 reported cases (7-Day Average: 1,534).
Oregon	1/16/21	News	COVID-19 Peak	Tracking Coronavirus in Oregon: Latest Map and Case Count	The peak of deaths was January 16, 2021 with 37 deaths (7-Day Average: 28).
Oregon	2/1/21	News	Controlled Substances Law	Oregon leads the way in decriminalizing hard drugs	Measure 110 goes into effect which decriminalizing the possession of drugs
Oregon	6/30/21	Executive Order	COVID-19 Reopening	Governor Kate Brown Announces Oregon to Reopen No Later than Wednesday, June 30	COVID-19 Recovery Order requires the lifting remaining COVID-19 restrictions by June 30, 2021.
Washington	2007 (BEFORE TIMELINE RANGE)	Washington Department of Health	Monitoring Program	Prescription Monitoring Program (PMP)	Washington's PMP was created in 2007 and took full effect in 2011.
Washington	2010 (BEFORE TIMELINE RANGE)	University of Washington	Good Samaritan Law	Washington's 911 Good Samaritan Drug Overdose Law: Initial Evaluation Results	"The law provides immunity from prosecution for drug possession charges to overdose victims and bystanders who seek aid in an overdose event."
Washington	January 2019 (no day given)	Washington Department of Health	Syringe Regulations	Recommendation Needs-Based Syringe Access	DOH recommendations/guidance on SSPs as updated January 2019.
Washington	1/1/19	Washington Medical Commission	Prescribing Guidelines	Opioid Prescribing & Monitoring	New opioid prescribing guidelines go into effect
Washington	8/28/19	Washington State Department of Health	Naloxone	State officials make it easier to access overdose reversal drug	Standing order for naloxone signed
Washington	2/29/20	Office of the Governor	COVID-19	Proclamation by the Governor	State of emergency for COVID
Washington	3/9/20	University of Washington	COVID-19	Impact of Hotels as Non-Congregate Emergency Shelters	Beginning of "de-intensified" shelters and hotels for people experiencing homeless/home insecurity
Washington	3/13/20	News	COVID-19	A timeline of the COVID-19 outbreak in Washington	Governor Inslee closes schools and expands to statewide a ban on gatherings of 250 people or more.
Washington	3/16/20	News	COVID-19	A timeline of the COVID-19 outbreak in Washington	Governor Inslee closes restaurants, bars, and entertainment facilities.
Washington	3/23/20	News	COVID-19	A timeline of the COVID-19 outbreak in Washington	Governor Inslee issues stay-at-home order
Washington	3/27/20	Executive Order	COVID-19 Healthcare	Proclamation by the Governor Amending Proclamation 20–05–20.32 Department of Health - Healthcare Worker Licensing	Waives laws/licensing requirements that present legal barriers to continued access to care during the COVID-19 pandemic.
Washington	3/31/20	Drug Enforcement Administration	Prescribing Guidelines	How to Prescribe Controlled Substances to Patients During the COVID-19 Public Health Emergency	DEA national guidance allowing telemedicine prescribing for opioid substitution therapy.
Washington	7/2/20	Executive Order	COVID-19 Healthcare	Proclamation by the Governor Amending and Extending Proclamations 20–05 and 20–29, et. Seq. 20–29.5 Telemedicine	Allows for telehealth during the COVID-19 pandemic.
Washington	12/13/20	News	COVID-19 Peak	Tracking Coronavirus in Washington: Latest Map and Case Count	The peak of new cases of COVID-19 was December 13, 2020 when there was 1,986 reported cases (7-Day Average: 3,411).
Washington	1/27/21	News	COVID-19 Peak	Tracking Coronavirus in Washington: Latest Map and Case Count	The peak of deaths was January 27, 2021 with 49 deaths (7-Day Average: 39).
Washington	2/1/21	Washington State Department of Health	Naloxone	Standing Order to Dispense Naloxone	Standing order for naloxone renewed
Washington	2/25/21	WA State Supreme Court	Controlled Substances Law	WA State Supreme Court voids simple controlled substance possession convictions ("Blake Decision")	Court's drug possession ruling upends WA's criminal justice system
Washington	3/22/21	King County	Campaign	Laced & Lethal	Fentanyl lacing information site with free naloxone ordering for anyone in the county (focused on <18)
Washington	4/25/21	WA State Legislature	Controlled Substances Law	WA state bill ESB 5476 pass	Recriminalizing drug possession as misdemeanor from Class C felony
Washington	6/30/21	Governor's Statement	COVID-19 Reopening	Inslee statement on upcoming economic reopening	According to the Healthy Washington plan, all industries can "return to usual capacity and operations, with limited exceptions for large indoor events" on June 30, 2021.

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