

# BMJ Open ‘Communities are attempting to tackle the crisis’: a scoping review on community plans to prevent and reduce opioid-related harms

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## ABSTRACT

**Objectives** We sought to understand the implementation of multifaceted community plans to address opioid-related harms.

**Design** Our scoping review examined the extent of the literature on community plans to prevent and reduce opioid-related harms, characterise the key components, and identify gaps.

**Data sources** We searched MEDLINE, Embase, PsycINFO, CINAHL, SocINDEX and Academic Search Primer, and three search engines for English language peer-reviewed and grey literature from the past 10 years.

**Eligibility criteria** Eligible records addressed opioid-related harms or overdose, used two or more intervention approaches (eg, prevention, treatment, harm reduction, enforcement and justice), involved two or more partners and occurred in an Organisation for Economic Co-operation and Development country.

**Data extraction and synthesis** Qualitative thematic and quantitative analysis was conducted on the charted data. Stakeholders were engaged through fourteen interviews, three focus groups and one workshop.

**Results** We identified 108 records that described 100 community plans in Canada and the USA; four had been evaluated. Most plans were provincially or state funded, led by public health and involved an average of seven partners. Commonly, plans used individual training to implement interventions. Actions focused on treatment and harm reduction, largely to increase access to addiction services and naloxone. Among specific groups, people in conflict with the law were addressed most frequently. Community plans typically engaged the public through in-person forums. Stakeholders identified three key implications to our findings: addressing equity and stigma-related barriers towards people with lived experience of substance use; improving data collection to facilitate evaluation; and enhancing community partnerships by involving people with lived experience of substance use.

**Conclusion** Current understanding of the implementation and context of community opioid-related plans demonstrates a need for evaluation to advance the evidence base. Partnership with people who have lived experience of substance use is underdeveloped and may strengthen responsive public health decision making.

## Strengths and limitations of this study

- Our systematic search of the literature included six electronic databases, three internet search engines, reference lists and referrals of unpublished sources; however, records could have been missed due to restrictions on date, language and the number of grey literature references reviewed.
- The potential use of these findings in practice is strengthened by our engagement of stakeholders to add perspective to the design and interpretation of our scoping review.
- Most opioid-related response plans were from urban communities in the USA and may not be applicable to other contexts; our scoping review did not analyse how plans varied by the context in each community.

## BACKGROUND

In Canada and the United States, opioid-related deaths continue to reach annual record-setting levels.<sup>1 2</sup> Many communities have developed comprehensive opioid-related plans including a range of prevention, treatment, harm reduction and enforcement or justice interventions across multiple socioecological levels and involving multiple sectors. Community action ‘involves deliberate organization of community members to accomplish some objective or goal’<sup>3</sup> and is a key public health strategy<sup>4</sup> for substance use prevention and health promotion and cited for reducing alcohol-related harms.<sup>5–7</sup> Throughout this paper, we refer to ‘plan’ as community-based, multistrategy, multi-sectoral approaches to prevent or reduce opioid-related harms.

To date, few studies have evaluated community opioid-related plans, and those that have been evaluated have demonstrated mixed results in preventing or reducing opioid-related harms. Evaluative research on Project



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Lazarus in North Carolina, a community-based initiative that involves seven strategies to address opioid overdose, observed a non-significant reduction in opioid deaths between 2009 and 2010 when it originated in Wilkes County,<sup>8</sup> and at the state level, unexpected increases in mortality were associated with some of the intervention components.<sup>9</sup> Several other communities have released comprehensive action plans,<sup>10 11</sup> and a public health guide for local response planning on opioid-related harms has been introduced.<sup>12</sup> Yet, there is little information that describes the development, implementation and evaluation of these plans to enable public health practice and improve health outcomes.

Our scoping review sought to address the following research question: what is the scope of the literature on community-based interventions to prevent and reduce population-level harms related to opioids? A scoping review methodology was undertaken due to the broad nature of the literature. Though the definition of 'community' varies within public health, in this paper, it refers to a local or regional geographic location.<sup>13</sup> Our objectives were to examine the extent of the peer-reviewed and grey literature on community opioid-related plans, characterise the key components and identify gaps for future research and evaluation.

## METHODS

Our methodological approach followed the six-staged framework proposed by Arksey and O'Malley<sup>14</sup> and refined by Levac *et al*<sup>15</sup> and the Joanna Briggs Institute.<sup>16</sup> Our reporting conforms to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standards for scoping reviews.<sup>17</sup> The review protocol was not registered; however, the protocol was peer reviewed as part of the grant approval process.

### Search strategy

In March 2018, our research librarian (SM) developed the search strategy for peer-reviewed English language publications dated after 2008. This period is most relevant to the current context of opioid-related harms and prior to the original publication of the first and most well-known community response, Project Lazarus, in 2011. We searched six electronic databases: MEDLINE, Embase, PsycINFO, CINAHL, SocINDEX and Academic Search Primer, with terms including, 'community networks' OR 'multi-component or multi-faceted' AND 'drug overdose' OR 'substance-related disorders' OR 'prescription misuse' (see online supplement 1).

The search strategy developed for the peer-reviewed literature was adapted for the grey literature, and the searches were performed in Google and two of Google's custom search engines. For each search query, the first 100 results were reviewed. An additional Indigenous-specific search strategy was developed to locate records relevant to Indigenous contexts. This strategy was included because of the disproportionate burden of opioid-related

harms among Indigenous groups<sup>18</sup> and need to identify how community plans consider Indigenous people. The electronic searches were supplemented by citation searching, referrals from the research team and consulting with stakeholders for relevant documents.

### Study selection

To capture relevant community plans, eligible records were those describing plans that: (1) addressed opioid-related harms or overdose at the community level; (2) involved interventions within at least two pillars of the Canadian Drugs and Substances Strategy (CDSS) (prevention, treatment, harm reduction and enforcement interventions)<sup>19</sup>; (3) included interventions that involved two or more partner organisations; and (4) occurred in an Organisation for Economic Co-operation and Development member country. The CDSS four-pillar approach to substance use originated in Switzerland in the 1990s<sup>20</sup> and has been adopted internationally as a comprehensive approach to address substance use-related harms.

We used these criteria as our unit of interest was comprehensive multistrategy, multisector approaches rather than organisations working independently on isolated interventions. We included both community-wide and smaller community-based initiatives that included multisector partners and integrated strategies from at least two pillars. Additionally, provincial/state plans were included if local implementation was discussed or if the province/state was small in geographic size and population (eg, Rhode Island). Records were excluded if community plans: (1) were not opioid or overdose-specific strategies; (2) included partners or interventions from only one pillar of the CDSS<sup>19</sup>; and (3) occurred exclusively in a specific setting (eg, emergency department or prison). Two reviewers independently completed the title and abstract screening, followed by reviewing the full-text articles. Disagreements were resolved by discussion and involved a third reviewer when needed. Screening of the grey literature and the reference lists of included records followed the same selection process.

### Data charting and synthesis

We developed a data extraction spreadsheet available in online supplement 2 for data extraction variables. These included, for example, intervention components (prevention, treatment, harm reduction, enforcement and justice and enabling), community partnerships, community engagement strategies and reported outcomes. We defined enabling components as those that span and support activities across the pillars of the CDSS,<sup>19</sup> and examples included surveillance, and approaches to address stigma or other social determinants of health. Our extraction of implementation strategies was guided by the National Implementation Research Network framework (NIRN).<sup>21</sup>

Two reviewers independently extracted relevant data from a sample of four records in the peer-reviewed and grey literature using a standardised data extraction form.

Following pilot testing, data extraction of the peer-reviewed and grey literature was separated and completed by one reviewer, and a sample (20%) was independently verified by an additional reviewer to ensure reliability.

Data extraction was an iterative process and categories were refined, expanded or added based on stakeholder input during consultations. The following categories were added: framing or definition of the problem (eg, prescription opioid and drug overdose), lead agency, funding, data collection sources and system-level outcomes. Furthermore, using a socioecological framework,<sup>22</sup> we recharted implementation strategies to capture the ecological level in which they occurred: intrapersonal, interpersonal, organisational, community and policy.

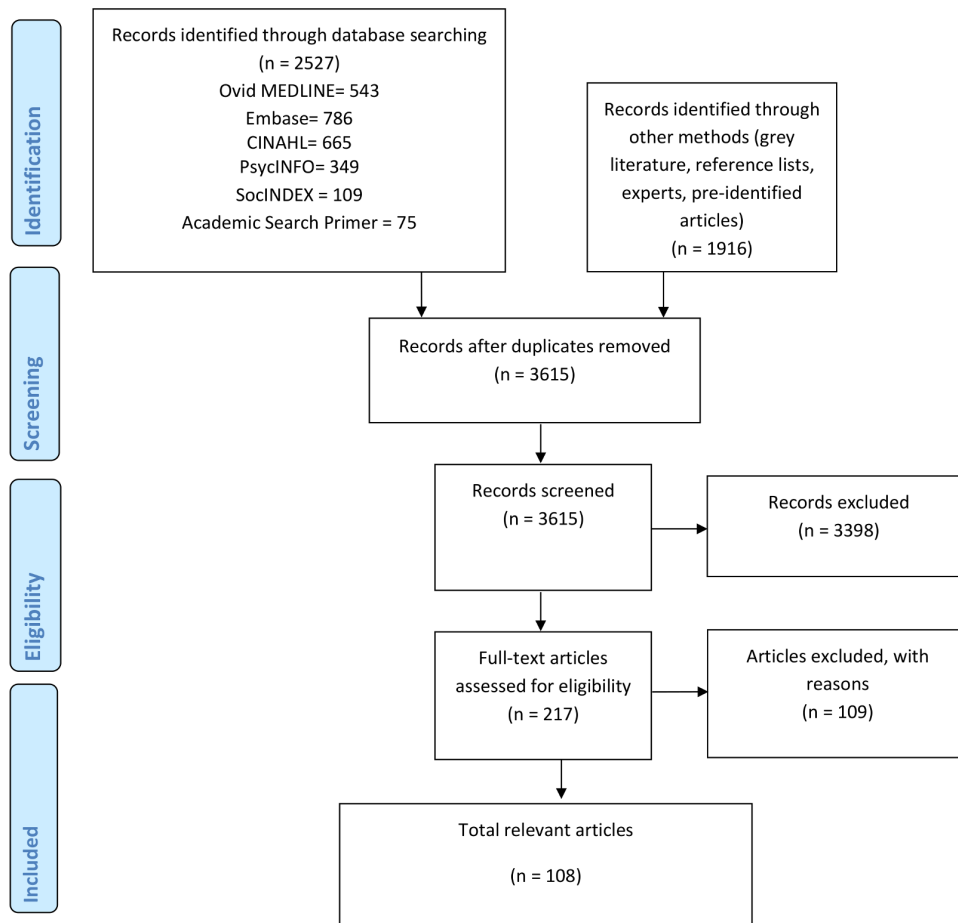
We used a qualitative thematic approach to develop themes from the extracted information and code our findings. The themes were analysed using the data extraction form, and frequencies were calculated for the themes within each data extraction category. Several records discussed similar or multiple plans; thus, frequencies were derived from the number of plans identified rather than the number of included records.

### Stakeholder consultations

The consultation phase of our scoping review involved interviews, focus group discussions and a multistakeholder

workshop. First, we conducted interviews and focus groups to refine our data extraction strategy to ensure that findings would be relevant and applicable to practice. We recruited a purposive sample of participants that represent diverse perspectives involved in opioid-related responses across Canada and in North Carolina (where Project Lazarus originated as a community action model), including people with lived experience of substance use, family members, researchers, physicians, first responders, public health professionals, and community and social service providers (referred to herein as stakeholders). Participants were contacted via email invitations through the investigators' professional networks or snowball sampling methods and received a consent form, a project overview and list of interview questions.

Semistructured interviews (n=14) and focus group discussions (n=3; groups that included three to five participants), 30 min to 1 hour in duration, were conducted via telephone or in-person by two researchers (PL and TK). Participants were asked to: (1) describe how the results of the scoping review might be used; (2) provide suggestions on how the results might be best shared with others; and (3) identify additional supports needed to facilitate the uptake of results into practice. All participants provided verbal consent for audio-recording.



**Figure 1** Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

Two researchers (PL and TK) independently coded six transcripts and met to discuss and develop the coding framework, which was then applied by one coder (TK) to all transcripts using NVivo 11 software. An inter-rater reliability exercise was completed, whereby a sample of five transcripts was independently coded by a second coder (PL). A sufficient kappa coefficient was achieved (87%).

In our second stage of consultation, we reported the preliminary results of the extracted literature to previously consulted stakeholders at a full-day workshop on 23 July 2018. Forty-five participants from across Ontario, British Columbia, Alberta and North Carolina were brought together to: (1) interpret the results; (2) identify gaps; and (3) describe the implications for practice. Data were collected using notes and posters, and responses from each discussion were summarised by one team member (TK) using thematic analysis.

### Patient and public involvement

Our research team included members who work closely with people who have lived experience of substance use (CS, JC, MP and PL) and provided strategic advice on the scoping review design and consultation approach. Interview and focus group consultations included people with lived experience of substance use and family members. These consultations informed our record selection, data extraction and knowledge translation strategies. Furthermore, this group was invited at a later stage as workshop participants to interpret the results, identify gaps and implications of our results for practice. We did not have specific criteria to include people in our research due to their engagement in clinical care (ie, patients).

## RESULTS

Our literature search resulted in the retrieval of 4443 records, and 3615 records were screened after removing duplicates. Our PRISMA flow diagram is presented in figure 1.

A total of 108 records were included,<sup>8–11 18 23–125</sup> of which 79 were grey literature references (eg, reports and web pages) (see online supplement 3). From these records, we identified 100 community plans or initiatives from 82 communities and 12 provinces/states, which often encouraged or mandated plan development. Of the 100 plans, 81 were from the USA and the remaining 19 were from Canada. Most community plans referred to actions to address issues of opioid poisoning as the focus of their problem definition (n=57) (see table 1).

### Organisation

#### Leadership

Reports based on 71 plans described the lead agency, which most frequently indicated public health leadership (n=22); an additional seven plans included coleadership by public health and community-based organisations.<sup>36 42 61 74 80 103</sup> One plan provided a rationale for public health as an appropriate convener<sup>35</sup> and another

**Table 1** Characteristics of plans

Characteristics of plans	No. of 100 plans
<b>Location</b>	
USA	81
Canada	19
<b>Level of response implementation</b>	
Provincial/state	15
Municipal/county/regional	85
<b>Problem definition</b>	
Opioid poisoning	57
Drug poisoning	3
Heroin poisoning	2
Prescription drug poisoning	14
Heroin and opioid poisoning	16
Other	8
<b>Lead agency</b>	
Province/state	5
Municipality/county	11
Public health	22
Public health co-led	7
Regional health/health authority	6
Healthcare including, Local Health Integration Networks	6
Other	14
Not specified	29
<b>Funding</b>	
Federal government	3
Provincial/state government	26
Municipal/county/local	3
Non-profit organisation	10
Other	11
Not specified	47
Centralised supports	9
Not reported	91
<b>Types of data collected</b>	
Coroner data	22
Local public health data	23
Emergency medical services data	15
Hospital data	22
Prescription monitoring programme data	16
Law enforcement data	15
Addiction treatment admissions	8
None specified	54
<b>Specific groups considered in interventions</b>	
Homeless and housing insecure	10
People in conflict with the law	34

Continued

**Table 1** Continued

Characteristics of plans	No. of 100 plans
Indigenous	9
Women	13
Youth	16
Other	8
None reported	47
Community engagement	
Survey	2
Forums	15
Meeting	5
Town halls	6
Other	6
None reported	71
Implementation strategies	
Training: for example, public and professional training; in-service training for programme delivery	95
Systems interventions: for example, policy advocacy, developing standards and facilitating intersector collaboration	83
Coaching: for example, outreach, recovery coaches and consultation	36
Planning: for example, strategic, financial, advocacy or communications plans; infrastructure	19
Organisational development: for example, redeploying or hiring employees with certain competencies	27
Evaluation: for example, establishing targets and collecting data to monitor programmes	52
Assessment: for example, conducting needs assessments and assessing intervention feasibility	14
Ecological level of implementation	
Intrapersonal: for example, knowledge on the use of opioids or naloxone	95
Interpersonal: for example, peer support	27
Organisational/institutional: for example, mandatory workplace policies	44
Community: for example, collaboration to deliver services, share data and address stigma	79
Policy: for example, drug policy reform, system-wide guideline implementation	43

evaluated the effectiveness of public health leadership.<sup>26</sup> Plans were also led by municipal/county-level government (n=11), regional health authorities (n=6),<sup>18 51 60</sup> provincial/state governments (n=5),<sup>54 56 83 99 123</sup> health-care organisations (n=6),<sup>24 34 79 85 91 115</sup> or others (n=14) (see [table 1](#)).

**Table 2** Categorisation of partners in community opioid-related plans

Sectors	No. of 100 plans
Healthcare	61
Law enforcement	60
Public health	44
Government	40
Addiction treatment services	40
Non-profit organisations	36
Mental health services	32
Corrections	26
Public	23
Emergency medical services	21
Education	20
Fire services	16
Harm reduction	16
Pharmacy	15
Social services	15
Recovery services	14
Antidrug/substance use prevention coalitions	12
Health services research and evaluation	11
Indigenous population	9
Faith-based organisations	9
Politicians	8
People with lived experience of substance use	8
Support and advocacy groups	7
Youth and youth groups	7
Private sector	6
Regional health	6
Coroners	4
Community leaders	4
Health insurance providers	3
Media	3
Poison control	1
Emergency management	1
Library	1
Dentists	1
Military services	1

### Partnerships

Ninety-one plans discussed members of the partnerships in community plans. Across the 91 plans, a total of 35 different partner groups were represented, and an average of seven partners involved. Most commonly represented partners were healthcare (n=61), law enforcement (n=60), public health (n=44) (see [table 2](#)). We found little information on decision-making processes; one plan<sup>8</sup>

described decision making through the use of advisory committees, although the process for finalising decisions was unclear.

### Funding and centralised support

Fifty-three plans described their direct source of funding for development of plans or service delivery implementation. Often, community opioid-related plans received funds from the province/state (n=26). Ten plans received funding from non-profit organisations and 11 plans described multiple funding sources, including private sector or university grants. Fewer plans were funded federally (n=3)<sup>38 122 123</sup> or locally (n=3).<sup>46 73 113</sup> Nine plans described a centralised entity, which offered funding and/or technical assistance to support community plans and initiatives.<sup>9 35 39 54–56 71 87 99</sup>

### Theoretical basis

Five plans described the use of the Collective Impact Model<sup>126</sup> to inform the organisation and implementation of community action and strategic response planning (n=5).<sup>30 35 39 42 70</sup> Additionally, a study on Project Lazarus described the use of a Community Readiness Framework to assess how prepared the community was prior to implementation, based on two behaviour change theories: stages of change model and diffusion of innovation theory.<sup>100</sup>

### Community engagement

Five strategies to engage the community in response planning were identified among 29 plans. These five strategies were described as: in-person community forums (n=15), town halls (n=6),<sup>8 9 56 69 76 89</sup> meetings (n=5),<sup>56 61 68 97 117</sup> and surveys (n=2).<sup>10 125</sup> The range of community members engaged included people with lived experience of substance use (n=8),<sup>10 30 37 54 65 68 98 121</sup> family members (n=7)<sup>10 37 38 65 80 88 116</sup> and Indigenous people (n=4).<sup>10 68 88 121</sup>

### Plan components

Among the four pillars of the CDSS, treatment components for opioid-use disorder or pain management (n=96) were most common, followed by harm reduction (n=93), prevention (n=58) and enforcement and justice (n=55). Seventy-nine plans included enabling components (n=80) that supported activities across the four pillars. A complete list of categories within each intervention pillar is presented in online supplement 4.

### Subgroup and equity considerations

Fifty-three plans included interventions with a specific target population (n=53). Most common were interventions specific to people in conflict with the law (n=34), followed by youth (n=16), women (n=13), people experiencing homelessness (n=10) and Indigenous people (n=9).<sup>9 11 51 54 60 68 74 76 85</sup> When Indigenous communities were considered (n=9), plans described the need for culturally appropriate and trauma-informed treatment approaches (eg, land-based healing practices),<sup>18 60 68 74</sup>

increasing access to either treatment or naloxone among Indigenous communities,<sup>51 55 60 76 85</sup> offering Indigenous cultural safety training to health providers,<sup>60</sup> Indigenous harm reduction (eg, integrating Indigenous culture into harm reduction practices)<sup>60 68</sup> care coordination<sup>68 74</sup> and engaging elders in response planning.<sup>60</sup>

### Implementation activities

Using the NIRN framework,<sup>21</sup> the categories of implementation activities described in local opioid response plans are summarised in table 1. Most common were training strategies (n=95), often related to overdose prevention, naloxone use and safer prescribing, as well as systems interventions (n=83) (eg, developing standards or collaboration) and evaluation activities (n=52) (eg, establishing data monitoring).

When compared against the socioecological model,<sup>22</sup> strategies commonly targeted the individual level (n=95) (eg, knowledge about the use of naloxone), community-level (n=79) (eg, intersectoral collaboration to deliver direct services or share data) or the organisational (n=44) (eg, mandatory workplace policies) (see table 1).

### Facilitators and barriers

We identified five common facilitators or barriers impacting community opioid-related plans, among those described or implied (n=67). These included: funding (n=47), stigma (n=22) (eg, experienced in relation to operating and accessing addiction treatment programme), availability of addiction treatment (n=15) (eg, numbers of treatment beds) policies and legislation (n=12) (eg, involving harm reduction services, law enforcement practices) and staffing (n=11).

### Data collection and outcomes

Fifty-five plans described data collection and evaluation activities, such as collecting local public health data (n=23), healthcare administrative data (n=22) and coroner reports (n=22).

Four community plans were evaluated (n=4), which included: (1) Project Lazarus that observed a decline in opioid-related mortality and opioid prescribing between 2009 and 2010 in Wilkes County, North Carolina<sup>8</sup>; (2) the state-wide implementation of the seven intervention components of Project Lazarus found non-significant decreases in opioid overdose mortality associated with provider education and hospital emergency department policies and increases associated with the addiction treatment intervention component<sup>9</sup>; (3) Staten Island's five-part response to opioid-related harms observed a decline in opioid-related mortality and opioid prescribing; however, an increased rate of heroin-related overdose deaths occurred<sup>89</sup>; and (4) centrally funded coalitions in California experienced a greater decrease of opioid prescribing and an increased rate of buprenorphine prescribing compared with non-funded coalitions.<sup>35</sup>

### Stakeholder consultations

From our stakeholder consultations, including 14 interviews, 3 focus groups and a workshop between May and July 2018, we report the major themes that emerged.

### Use of the scoping review results

Stakeholders often described their interest in using the scoping review results to identify opportunities to strengthen their own efforts to prevent and reduce opioid-related harms. Learning about practices from other communities was seen by many as a way to understand how to overcome barriers in response planning, how to implement intervention components or integrate innovative approaches to their multistrategy plans. Additionally, several stakeholders described the potential use of the scoping review results for policy and programme advocacy. Locally, some spoke about advocating for community partnerships to involve people with lived experience of substance use.

Stakeholders also described barriers related to response planning, including structural barriers, such as social determinants of health and stigma towards people with lived experience of substance use. Organisational barriers included coordination and collaboration among sector partners, as well as coordinated leadership to spearhead community action.

### Gaps in the literature

Workshop participants identified several gaps in the current literature, many of which were also identified in the data extraction phase. The first was a gap in the role and involvement of certain groups in community partnerships responding to opioid-related harms, including the lesbian, gay, bisexual, transgender, queer, questioning, two-spirit, intersex and asexual community, family members affected by substance use, pharmacists and representatives from the housing sector. Especially seen as critical was the lack of inclusion of people with lived experience of substance use and community-led or peer-driven approaches.

The second gap concerned the role of context in the literature, including the geographic, sociocultural, economic and political contexts in which plans were implemented. Also noted was a lack of drug policy interventions, approaches that address the social determinants of health, and targeted strategies for at-risk populations (eg, people experiencing homelessness). Lastly, participants noted the gap in evaluative research to support the implementation of community plans as well the use of intervention research to justify the selection of included approaches.

### Implications for practice

Three main implications for practice were identified among consultation workshop participants.

First, based on the gaps identified in the literature, improving documentation and evaluation emerged as priorities for practice. Stakeholders recommended

actions focused on information sharing, conducting real-time implementation evaluation and building local evaluation capacity. Second, stakeholders also described the need to incorporate strategies to reduce stigma related to people with lived experience of substance use, such as promoting inclusive language use in organisations and workplace antistigma training. Finally, based on the under-representation of certain community partners in the literature, stakeholders suggested improving meaningful partnership with people who have lived experience of substance use, through inclusion of multiple perspectives and providing equitable payment for participation throughout the development, implementation and evaluation of community opioid-related plans

### DISCUSSION

Our scoping review synthesised 100 community opioid-related plans described in the peer-reviewed and grey literature. We found that most community opioid-related plans were provincially/state funded, public health-led efforts that involved an average of seven partners, with law enforcement, healthcare and public health sectors commonly represented in partnerships. Most plans employed individual level training as an implementation strategy and focused on treatment and harm reduction approaches to prevent and respond to overdose incidents, particularly increasing the accessibility of addiction treatment and naloxone. Tailored interventions for people in conflict with the law were common, and community forums were used to engage the public in response planning. Overall, there was a lack of representation of Indigenous people in community partnerships as well as intervention approaches.

This scoping review identified several knowledge gaps, all of which were verified and expanded on through our stakeholder consultations. Generally, a very limited body of evidence exists on community opioid-related plans including design, implementation and evaluation. Indeed, the nature of the emerging practice of community opioid-related plans, and the resources required to publish, contribute to the paucity of literature at this time. It is perhaps not surprising that documented evaluations are limited, given the urgency to respond and the difficulty to ascertain the impact of complex multistrategy plans.<sup>8 9 35 89</sup> Despite this, conducting and widely sharing rigorous and ongoing evaluation of implementation and outcomes is critical to allow for course corrections and advance the evidence base. In the case of Project Lazarus, state-wide evaluation activities were facilitated by a community-academic partnership,<sup>8</sup> and lessons learnt were documented and shared with other community coalitions.<sup>33</sup> These strategies may be helpful for other communities to engage in evaluation and learn from the experience of others.

There were few descriptions of how interventions were identified or sustained, how implementation was approached or who was involved and in what sociocultural

and political contexts plans took place. It is critical to consider the community context and systems in which response planning occurs, in that contextual factors contribute<sup>127</sup> to opioid-related harms<sup>12</sup> and influence development and implementation of community actions. Future research should address the contexts in which plans are situated in order to identify context-specific barriers and modifiable strategies to guide practice.

We also found that most community plans used implementation strategies that focus on changing the knowledge and skills of individuals rather than recommending changes to impact systemic factors. As recognised by socioecological models, individual behaviour is embedded within a system of interacting interpersonal, organisational and policy influences.<sup>22</sup> Though it may be methodologically challenging to demonstrate impact of community level strategies,<sup>128</sup> by relying on individual level implementation, these plans miss opportunities to intervene on community and policy factors that influence access to resources and achieve population-level change.<sup>129</sup>

Also lacking was the use of evidence to support the selection of intervention components in community opioid-related plans; thus, conclusions about which interventions constitute best practice in local plans cannot be made. Evidence supports several interventions aimed at reducing opioid or substance-related harms that were used in plans, including: supervised consumption services,<sup>130 131</sup> needle and syringe programmes,<sup>132</sup> overdose education and naloxone distribution,<sup>133</sup> methadone maintenance or buprenorphine treatment<sup>134</sup> and school-based strategies that address youth protective factors.<sup>135–137</sup> Several plans included interventions that have been found ineffective (eg, Drug Abuse Resistance Education programmes)<sup>138</sup> or have little evidence for effectiveness (eg, medication take-back programme).<sup>139 140</sup> A complete mapping of the effectiveness of interventions employed across community opioid-related plans warrants further investigation.

There was also minimal description in the literature to identify key principles for developing community opioid-related plans, such as the principles of social justice, health equity and cultural safety described in a recent community guide for overdose response.<sup>12</sup> This finding may relate to our observations on the lack of involvement of those disproportionately affected by the crisis (eg, Indigenous persons and people with lived experience of substance use) and initiatives addressing structural determinants of health. Particularly as the value of involving people with lived experience of substance use is well documented,<sup>141</sup> our findings underscore the need for meaningfully involving people with lived experience of substance use to ensure approaches better meet population needs.

The strengths of our review include the systematic search of the literature through six electronic databases, three internet search engines, reference lists and referrals of records not identified through the literature source (eg, unpublished sources). The potential use of

our findings is enhanced by our engagement of diverse stakeholders in consultations to add perspective to the design and interpretation of the review. Despite our broad search strategy, it is possible that relevant records were missed due to date and language restrictions and screening of the grey literature limited to the first 100 records; however, the language restrictions reduced the search results from MEDLINE, Embase and PsycINFO by less than 5%. Our review primarily identified opioid-related plans from urban communities in the USA, thus our findings may not be applicable to different socioenvironmental contexts (eg, rural communities or outside Canada and the USA). We did not include US state plans that did not describe activities focused at the local level, so our review may under-represent actions at the state level that influence community plans. Our equity analysis was not designed to fully assess such social conditions that impact health status related to opioids; however, this is the basis of a subsequent planned analysis. Finally, our review likely under-represents current community-led responses to opioid-related harms, which are not publicly documented or did not meet our inclusion criteria if intervention components were implemented in isolation of a comprehensive community plan.

## CONCLUSION

Through synthesising the current literature, our scoping review identified some consistent components of community opioid-related plans. This characterisation and identification of gaps can inform the efforts of other communities confronting the opioid crisis. Due to the paucity of evaluations, limited use of evidence in planning, and the variation in interventions, partnerships, engagement and implementation strategies, it is difficult to suggest which components are effective and in what contexts. Considering the growing crisis, and the complexity of multistrategy plans, it is essential that the implementation and contexts of these efforts be documented and evaluated to enable public health decision making. In addition, we heard from stakeholders about the importance of developing community opioid-related plans in partnership with people with lived experience of substance use to better ensure efforts are responsive and relevant.

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