There is no denying the statistics; North America is in the grip of an opioid epidemic and we are not alone. According to the latest numbers, Canada is home to the second-largest per capita consumption of opioids in the world (see Figure 1). Opioid-related hospitalizations have increased by 53% over the last decade\(^1\); and in 2016 alone, opioid overdoses were the cause of an average eight deaths a day\(^2\).

The statistics are even more concerning in the United States, where an average of 142 people die due to opioid overdoses every day\(^3\). Elsewhere, countries like Germany, Australia, and the United Kingdom are also contending with the issue.

Responses to the crisis have been varied. On October 26, 2017, US President Donald Trump declared the opioid epidemic a public health emergency\(^4\), and the European Union Drugs Strategy was recently updated to target the issue. Canada has yet to go so far as declaring a national health emergency, but in December of 2016 it did release a response in the form of its Canadian Drugs and Substances Strategy (CDSS)\(^5\).

Figure 1: Narcotic drug consumption by country (Daily doses per 1 million people per day)

Source: Federal Action on Opioids, Government of Canada, November 2017
With these initiatives in play, now is an opportune time to evaluate how countries are addressing the crisis and ask: What’s really working?

Epidemic on the Rise
The global opioid crisis can be attributed to both the addictive chemical nature of opioids and the frequency by which they are being prescribed as painkillers. Yet while physicians are under increased scrutiny in North America in regards to when and how often they prescribe opioids for pain relief, legal alternatives remain unknown, less readily available or more expensive.

It’s a different story for illegal alternatives. Dangerous, synthetic versions are being developed and distributed across international borders through the black market. They include fentanyl, which accounted for more than 60% of opioid-related deaths in Alberta in 2016.

It is clear that the opioid epidemic is here, and it’s spreading well beyond our borders. In the pages ahead, we will examine Canada’s CDSS program progress and explore other global strategies.

Common Response Criteria
While every country applies its own unique political, social, and economic context to any opioid solution strategy, the solutions tend to follow similar patterns. We have analyzed a group of global examples using the lens of the four action areas (or pillars) of Canada’s CDSS (see Figure 2).

Figure 2: CDSS framework, used to classify solutions to the opioid epidemic

- **Prevention**
  Strategies that include efforts to prevent all forms of opioid addiction from forming in the first place (e.g., combatting over-prescription behaviors and educating both prescribers and patients of the harmful effects of opioid use).

- **Treatment**
  Efforts that encompass all activity targeting the stabilization, treatment, and rehabilitation of those addicted to opioids (e.g., facilitating better access to medication and therapy related to overcoming opioid addiction and increasing collaboration between social services and the criminal justice system to treat individuals incarcerated for drug-use offenses).

- **Harm Reduction**
  Efforts that support the reduction of risk to those addicted to opioids, aimed at reducing hospitalizations, overdoses, and deaths from opioid misuse (e.g., facilitating access to overdose response drugs, changing legislation to encourage individuals to seek emergency assistance without fear of legal consequences, and increasing awareness of existing support).

- **Enforcement**
  Efforts to address illegal drug production, supply, and distribution (e.g., restricting the production of precursors to synthetic opioids, enhancing cooperation between jurisdictions to target drug trafficking, and increased training of law enforcement officers to investigate and act on drug-related offenses).

Canada
Canada’s CDSS has been in operation for over a year. In that short time, progress has been made on a number of fronts in regards to increasing access to support, revising legislation, and raising awareness for the inherent dangers of opioid prescription and use.
A summary of that progress can be seen in the table below:

<table>
<thead>
<tr>
<th>Prevention</th>
<th>Treatment</th>
<th>Harm Reduction</th>
<th>Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Complete</strong> – Share information on prescribing</td>
<td><strong>Complete</strong> – Amend regulations to enable access</td>
<td><strong>Complete</strong> – Support the establishment of supervised consumption</td>
<td><strong>Complete</strong> – Regulatory changes to control fentanyl precursor sale and</td>
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<td>best practices with provincial licensing bodies,</td>
<td>best practices with pharmaceutical grade heroin to</td>
<td>sites through legislative amendments,</td>
<td>distribution.</td>
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<td></td>
<td>treat opioid addiction,</td>
<td></td>
<td></td>
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<tr>
<td><strong>In Progress</strong> – Amend food and drug regulations</td>
<td><strong>In Progress</strong> – Bring together experts for a focused,</td>
<td><strong>Complete</strong> – Facilitate better access to naloxone (used to treat a narcotic</td>
<td><strong>Complete</strong> – Legislative changes to better control pill presses, allowing law</td>
</tr>
<tr>
<td>to allow for mandatory warning stickers and information</td>
<td>national discussion on the treatment of opioid use</td>
<td>overdose in an emergency situation) through amendments to the Prescription</td>
<td>enforcement to open small packages at the border in certain cases.</td>
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<td>handouts on prescription opioids,</td>
<td>disorder,</td>
<td>Drug List, and authorizing the use of naloxone nasal spray,</td>
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<tr>
<td><strong>In Progress</strong> – Implement an evidence-based public</td>
<td><strong>In Progress</strong> – Improve access to suboxone (opioid</td>
<td><strong>Complete</strong> – Drug Analysis Service to support governments in addressing</td>
<td></td>
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<tr>
<td>education campaign about problematic substance abuse,</td>
<td>addiction) treatment in rural and remote First Nations</td>
<td>the crisis by providing laboratory analysis services and sharing information</td>
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<td></td>
<td>communities,</td>
<td>across the country,</td>
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<tr>
<td><strong>In Progress</strong> – Consult with law enforcement</td>
<td><strong>In Progress</strong> – Consult with law enforcement to produce</td>
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<tr>
<td>to produce materials to educate agents on how to</td>
<td>materials to educate agents on how to investigate and press charges for the sale</td>
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<tr>
<td>investigate and press charges for the sale of unauthorized drugs,</td>
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</table>

Table 1: CDSS progress highlights since its announcement in December 2016 – Source: International Narcotics Control Board, United Nations, Report 2016

It is too early to evaluate the effectiveness of the CDSS in terms of health outcomes. In 2017, at least, the epidemic showed no sign of abating: early evidence suggests that Canadian overdose deaths in 2017 might surpass 4,000, which is well over the 2,861 opioid-related fatalities in 2016.

The opioid epidemic has drawn the attention of White House—and for good reason. Over an estimated two million Americans are currently addicted to opioids, while about 142 Americans die every day from opioid overdoses. Moreover, approximately 80 percent of the global supply of opioids is consumed in the United States, despite the fact that the country accounts for less than 5 percent of the global population.

In addition to declaring the opioid epidemic a national health emergency on October 26, 2017, President Trump addressed the topic in his first State of the Union in January 2018, insisting the US needs to get “much tougher on drug dealers and pushers if we are going to succeed in stopping this scourge.” In March 2018 the president presented a long-awaited opioids action plan with a focus on three areas: more punishment, fewer prescriptions, and more treatment. However, even with increased national attention and numerous initiatives targeting the opioid epidemic in the United States, the Institute for Healthcare Improvement notes that most of the efforts have not yet demonstrated significant or widespread impact. While there is no one reason for this, a key driver cited is the lack of effective implementation of promising practices.

Despite the struggle to effectively combat the opioid epidemic, a number of initiatives have yielded initial positive results.

Prevention in the US is a three-pronged strategy that includes limiting new opioid prescriptions; increasing the use of evidence-based, non-opioid treatments; and improving public awareness of the danger posed by opioids.

A good example of using non-opioid treatments is St. Joseph’s Hospital in New Jersey, which banned opioid
painkillers as the first line of treatment. In January 2016, St. Joseph’s Regional Medical Center launched the Alternatives to Opiates (ALTO) Program to reduce the use of opiates in the emergency department of the hospital. The program trains physicians to use a variety of non-opioid treatments to meet the pain management needs of their patients while avoiding the addictive risks inherent in opioids. As a result, the hospital was able to reduce opioid use by 38 percent in a five-month period.16

Treatment, meanwhile, is being tackled by increasing linkages to medication-assisted treatment and expanding access to peer recovery support services. The AnchorED program in Rhode Island has become a leading example of how peer recovery services can be an effective tool in combating opioid addiction. The program places peer recovery coaches in the hospital who connect with individuals in the emergency department who have experienced non-fatal opioid overdoses. Peer recovery coaches build relationships with patients based on shared experience and connect patients to treatment and recovery resources, while providing education and mentoring. In the first 29 months of the program, 1,400 patients met with a peer recovery coach and 80 percent engaged in recovery support services upon discharge from the emergency department.17

Studies have demonstrated variations in opioid use across geographies, populations, and even different times of the year.18 Governments have leveraged data and analytics at increasing rates for harm reduction to both understand the current state of the opioid problem to inform strategy and monitor changes so that trends can be identified. 49 states (all except Missouri), the District of Columbia, and Guam have enacted legislation authorizing the creation and operation of a prescription drug monitoring program (PDMP), and almost all are currently collecting data and reporting on it to authorized users. While not a full data analytics solution, agencies do have the option to expand the use of their PDMPs as a first step to creating a more comprehensive surveillance solution in addition to providing point-of-care support. Currently, prescribers in 29 states are required to check PDMP databases before prescribing certain controlled substances.

Finally, legal enforcement is being increased as both providers and pharmaceutical companies become increasingly diligent. In August 2017, U.S. Attorney General Jeff Sessions announced that the Justice Department will hire a dozen attorneys to investigate health-care providers suspected of dispensing prescription opioids for non-medical use. Additionally, more than 100 states and cities are suing drug companies and the US is providing intensive counter-narcotics assistance to countries including Mexico and China.

Australia
Prevention, Treatment and Harm Reduction listed

Opioid use almost quintupled in Australia from 22 million doses annually in 2001 to 106 million doses in 2013.21 The National Drug and Alcohol Research Centre found that opioid-related hospitalizations among Australians aged 30 to 59 years old have steadily increased from 2012 to 2017 and legally prescribed opioids in Australia are now estimated to be killing more people than heroin.22 A total of 800 people in Australia die every year from opioid overdoses, with rural and regional areas being particularly affected by the crisis.24

The Australian Drug Law Reform Foundation has made a series of recommendations to help Australia combat the opioid issue. They are primarily focused on vastly increasing the scale of existing efforts, including expanding treatment for heroin users and people dependent on other opioids, providing heroin prescription treatment for select heavy users, providing supervised injecting centers in areas with large numbers of drug overdoses, and expanding the distribution of naloxone which can reverse the effects of an opioid overdose in emergency situations to improve harm reduction.25

The Australian federal government’s latest approach, announced in July 2017, has been to commit an additional AU$16 million (CAD$15.95 million) to accelerate the roll-out of a national real-time monitoring system that will alert pharmacists and doctors if patients attempt to obtain multiple supplies of prescription drugs.26 The government of the State of Victoria has already committed AU$30 million (CAD$29.9 million) for the implementation of Real Time Prescription Monitoring.27 The roll-out will include over 1,900 medical clinics, 1,300 pharmacies, and 200 hospitals across the state.28 The hope is that this monitoring system will allow for front line pharmacy staff to take preventative measures for at-risk individuals.
The opioid epidemic: Spotlighting international efforts to address the crisis

The European Drug Report 2017, published by the European Monitoring Centre for Drugs and Drug Addiction, states that there are currently 1.3 million high-risk opioid users across Europe. Five countries account for 76 percent of these people (Germany, Spain, France, Italy, and the United Kingdom). Two trends among this population include the growing use of synthetic opioids and the aging population of opioid users; that is, people in their 40s and 50s with multiple health issues who place a significant burden on healthcare resources.

The European Union Drugs Strategy 2013–2020 outlines a “five pillar” approach to tackling drug use. It also promotes a balanced perspective which places equal emphasis on two policy areas: the reduction of drug demand and supply. Supporting these two policy areas are three cross-cutting themes that include coordination, international cooperation, and research and evaluation.

The strategy was recently updated with a 2017–2020 action plan, including amendments to focus on emerging challenges and opportunities. These include encouraging stronger synergies in the use of information and communications technology for prevention purposes, complementary drug data collection across European Union (E.U.) member states, as well as actions to further engage “civil society” in the formulation and evaluation of drug policies. Two opioid-specific treatment and intervention programs are being prioritized: opioid substitution treatment and take-home naloxone programs.

An estimated half of opioid users across the E.U. are receiving substitution treatment, and the majority of this treatment is provided in outpatient and community settings. In places such as Germany and France, this includes general practitioners (primary care providers) as prescribers of substitution treatment. In some places, such as Slovenia, mental (behavioral) health facilities are important coordinators of care. Psychosocial intervention is also typically included within these treatment programs.

Building on World Health Organization guidelines from 2014, ten E.U. countries currently support take-home naloxone programs to assist in harm reduction in the case of overdose. Based upon the effectiveness of community management of opioid overdose, these approaches include providing training and access to non-medical individuals who are likely to witness an opioid overdose, including friends and family of victims, as well as staff at services such as hostels and shelters.

Among E.U. countries, Portugal has taken a particularly radical approach in combating opioid use. In the 1980s, drug use was a serious social and health issue and, as such, the Portuguese government increased investment in prosecution and administered severe punishments. As time went on, it became clear that the approach only exacerbated the crisis; by the end of the 1990s, one percent of the entire population (100,000 people) was addicted to heroin. Therefore, in 2001, the country began to attack the crisis as a public health issue rather than one of criminality. Portuguese leaders implemented a paradigm shift and decriminalized the personal use of illegal drugs. Drug addiction was viewed through the lens of being a chronic disease, and medical care became the focus of intervention.

The distribution of drugs remains illegal in Portugal; however, those caught with less than a 10-day supply are brought before the Commission for the Dissuasion of Drug Addiction. A panel of three members, generally comprised of a mix of a lawyer, judge, doctor, psychologist, and a social worker, has three options: recommend treatment, a small fine, or do nothing. Counselling is the most common outcome.

Serious drug use in Portugal is down by half since the introduction of these changes and drug mortality is the lowest in Western Europe. Additionally, the criminal justice system has been relieved of the strain of processing high volumes of drug offense charges.

Importantly, young people have responded. In 2014, it was reported that the proportion of 15 to 24-year-olds who said that they had used drugs in the last month had decreased by almost 50 percent since decriminalization in 2001. Targeted education and community support have promoted an open dialogue about drug use and its associated harm, with the conversation focused on helping those at risk avoid negative health
Final Thoughts
The aforementioned strategies sound promising on paper, but they also make clear the reality that there are few easy wins or "magic cures" for the opioid crisis. Radical and transformative approaches in how to successfully tackle the epidemic are rare.

Still, it is reassuring to note that the strategies developed by many countries appear to follow a similar approach, meaning there is some consensus among academics and policy makers on how to combat the crisis. In this issue brief, the different approaches were categorized into the four pillars of prevention, treatment, harm reduction, and enforcement. Opioid addiction is a long-term medical condition, and treating this condition will require a similarly long-term and comprehensive response. Stakeholders across the globe must be aligned, a variety of health, social, and law enforcement services must be mobilized, and all levels of government must collaborate in answer to this epidemic.

The challenge is becoming less about "what" should be done, and is increasingly more about "how" interventions are being implemented to ensure they are effective, consistent, and scalable.
References


The opioid epidemic: Spotlighting international efforts to address the crisis


31 ibid


33 Ibid

