

The Opioid Manager: A point-of-care tool to facilitate the use of the Canadian Opioid Guideline

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ABSTRACT

The Opioid Manager is designed to be used as a point-of-care tool for providers prescribing opioids for chronic noncancer pain. It condenses the key elements from the Canadian Opioid Guideline and can be used as a chart insert. The Opioid Manager has been validated and is available for download from the Guideline's Web site <http://nationalpaincentre.mcmaster.ca/opioidmanager/>. The Opioid Manager is divided into the following four parts: A) before you write the first script, B) initiation trial, C) maintenance and monitoring, and D) when is it time to decrease the dose or stop the opioid completely? The Opioid Manager has been downloaded by 1,432 users: 47 percent family physicians, 18 percent pharmacists, 13 percent other physicians, and 22 percent miscellaneous. To show how to use the Opioid Manager, the authors created a 10-minute video that is available on the Internet. The Opioid Manager is being translated to French, Spanish, Portuguese, and Farsi.

BACKGROUND

In May 2010, the Canadian Guideline for Safe and Effective Use of Opioids for Chronic Noncancer Pain was released by the National Opioid Use Guideline Group (NOUGG).¹ NOUGG formed under the guidance of the Federation of Medical Regulatory Authorities of Canada with support and/or representation from all provincial and territorial medical regulatory authorities (MRAs) in Canada. Canadian MRAs undertook this guideline development in response to physicians and other stakeholders seeking guidance regarding safe and effective use of opioids; a growing concern about opioid misuse creating patient and public safety issues and the lack of systematically developed national guidelines on opioid use for chronic noncancer pain. The ultimate goal of the Canadian Opioid Guideline is to promote safe and effective use of opioids for chronic noncancer pain. However, the 164-page document containing 24 recommendations seem overwhelming to the busy physician.

The “knowledge-to-action” framework developed by Graham et al.² states that the process to support improvements in quality of healthcare

involves two major concepts: knowledge creation and action. The first concept was achieved with the knowledge inquiry and synthesis for the guideline's development. The second concept is the focus of the **OPIOID MANAGER** tool. This study focused on the development of the *OPIOID MANAGER* and future plans to its continued improvement.

METHODS

The *OPIOID MANAGER* is designed to be used as a point-of-care tool for providers prescribing and dispensing opioids for chronic noncancer pain. It condenses key elements from the Canadian Opioid Guideline and can be used as a chart insert. The *OPIOID MANAGER* contains reminders about overdose risk, an initiation checklist, the Opioid Risk Tool,³ suggested initial doses and titration, a morphine equivalence table, a stepped approach to opioid selection, information about when and how to stop opioids, and a list of aberrant drug-related behaviours.⁴ The development of the *OPIOID MANAGER* was entirely funded by the Alternative Funding Plan (AFP) Innovation Fund from the Ontario Ministry of Health and Long Term Care. The

OPIOID MANAGER is free for download from the Guideline's Web site (<http://nationalpaincentre.mcmaster.ca/opioidmanager/>).

Preliminary drafts

The initial draft of the *OPIOID MANAGER* was developed by a team comprising the physician who led the research team for the development of the Canadian Opioid Guideline (Andrea Furlan), the NOUGG co-chair (Rhoda Reardon), the Director of Knowledge Support Services at the Centre for Effective Practice in Toronto (Lena Salach), and a psychiatrist consultant (Jose Silveira). The individual components to be included in the *OPIOID MANAGER* were selected from the tables, charts, and tools included in the Opioid Guideline. New initiation trial chart and maintenance and monitoring chart were developed exclusively for the purpose of the *OPIOID MANAGER*. The preliminary draft was sent for feedback to four physiatrists with interest in chronic noncancer pain, one family physician with interest in addiction medicine, and one family physician who practices comprehensive medicine.

First draft

The first draft was released simultaneously with the Canadian Opioid Guideline on May 3, 2010. Interested users registered to the Web site to download the color or black and white versions of the *OPIOID MANAGER*. From May to December 2010, there was a note in the first draft of the *OPIOID MANAGER* inviting users to provide feedback regarding its content, layout, and usability. An electronic, anonymous survey was posted in SurveyMonkey® (a web-based free service intended for conducting surveys) and it was closed on December 31, 2010. It contained the following questions:

1. Professional designation: family physician/general practitioner, other physician, nurse practitioner, registered nurse, pharmacist, or other profession.
2. Practice location: remote, rural, suburban, or urban.
3. Is there information in the Opioid Manager that does not need to be included?

4. Is there information missing that you need to safely and effectively prescribe opioids?
5. Does the material help to address questions you have about prescribing opioids?
6. Is the layout effective?
7. Are there sections that you think need to be highlighted or more at the forefront of the document?
8. Do you have suggestions about improving the layout?
9. Will you use or have you used this tool?
10. Please share any further comments you might have regarding the content, format, and usability of this tool.

Final version

The same team that developed the preliminary drafts assessed the results from the electronic survey. The results were tabulated quantitatively. Written comments were analyzed qualitatively by themes. We also invited comments and feedback from the Guideline's National Faculty members. The National Faculty comprises ~35 people (representing nine provinces, one territory, and eight national associations) and has the goal to disseminate, implement to practice, and evaluate the *Guideline's* impact. The final version of the *OPIOID MANAGER* was released in February 2011 and replaced the first draft on the Guideline's Web site.

RESULTS

Electronic survey results

In total, 71 people started the electronic survey from May to December 2010. Sixty-eight answered the question regarding their professional designation: 30 family physicians/general practitioner (44.1 percent), 13 pharmacist (19.1 percent), 12 other physician (17.6 percent), 4 nurses (6 percent), and 10 miscellaneous other (14.7 percent). Sixty-six answered the question about their practice location: 33 urban (50 percent), 17 suburban (25.8 percent), 13 rural (19.7 percent), and 3 remote (4.5 percent).

Table 1. Responses to the electronic survey (May-December 2010)

	Number of responses	Yes	No
Is there information in the Opioid Manager that does not need to be included?	36	5	31
Is there information missing that you need to safely and effectively prescribe opioids?	35	13	22
Does the material help to address questions you have about prescribing opioids?	38	36	2
Is the layout effective?	36	28	8
Are there sections that you think need to be highlighted or more at the forefront of the document?	34	6	28
Do you have suggestions about improving the layout?	36	8	28
Will you use or have you used this tool?	35	28	7

The answers to the remaining questions are shown in Table 1. Various members of the National Faculty provided direct comments via e-mail or by responding to the electronic survey. Thirteen people (37 percent) answered that there was information missing that they needed to safely and effectively prescribe opioids. The analyses of the written comments suggested that the information missing was related to 1) monitoring results of the urine drug screening, 2) monitoring aberrant drug-related behaviors, 3) automatic calculations of morphine equivalents, 4) recommendation of how often the physician should be seeing the patients, and 5) information regarding pregnant/breastfeeding patients. However, the main suggestions for change were in the layout and content of the initiation trial chart and maintenance and monitoring chart.

The main changes to the OPIOID MANAGER in response to the electronic survey were in the initiation trial chart and maintenance and monitoring chart. We modified the layout and were able to add four rows at the bottom of the chart for 1) complications (reviewed yes/no), 2) aberrant behavior (reviewed yes/no), 3) urine drug screening (yes/no), and 4) other medications.

Another recurrent theme was the suggestion to integrate the OPIOID MANAGER into Electronic Medical Record (EMR) systems most commonly used in Canada.

The OPIOID MANAGER VIDEO

To facilitate the application of the OPIOID MANAGER, we developed a 10-minute video explaining

how to apply each part of the OPIOID MANAGER in practice. This video was also sponsored by the AFP Innovation Fund and it was conducted by the Dalhousie University Continuing Medical Education. The video can be seen at http://nationalpaincentre.mcmaster.ca/opioidmanager/opioid_manager_video.html and on youtube <http://www.youtube.com/watch?v=BpS4QzDPIa8>.

Distribution of the OPIOID MANAGER

As of May 30, 2010, there were 1,432 registered people who downloaded the OPIOID MANAGER from the Guideline's Web site: 675 family physicians (47.1 percent), 259 pharmacists (18.1 percent), 189 other physicians (13.2 percent), and 309 miscellaneous (21.6 percent), which included 93 nurses, 33 pharmaceutical industry representatives, 18 students, 10 residents, 12 patients or patients' relatives, 10 physician assistants, five general public, three lawyers, two law enforcements, two EMR vendors, two chief medical officers, etc. In addition to the number of downloads, we have also monitored the number of paper copies that have been distributed; as of May 2011, at least 3,000 paper copies have been distributed across Canada. These copies have been distributed at conferences, meetings, workshops, rounds, and continuing medical education activities.

Utilization of the OPIOID MANAGER

The primary intended use of the OPIOID MANAGER was to enable guideline-based decision making

at point of care by providers prescribing and dispensing opioids for chronic noncancer pain. In addition, the *OPIOID MANAGER* has been used as an educational tool to teach about the key messages contained in the Canadian Opioid Guideline. The *OPIOID MANAGER* is divided into four parts that match the following four most common clinical questions that physicians have when prescribing opioids for chronic noncancer pain:

- (a) What should I consider before writing an opioid prescription?
- (b) How do I initiate a trial of opioids?
- (c) How do I monitor for effectiveness and patient safety?
- (d) When do I decrease or stop opioids?

Integration of the *OPIOID MANAGER* into EMRs

The *OPIOID MANAGER* has been integrated to X-WAVE® and Practice Solutions Suite®. These two full integrations are being tested in Ontario. The *OPIOID MANAGER* has been partially integrated to Optimed® and is being tested in Saskatchewan.

Translations of the *OPIOID MANAGER* to other languages

Official translations of the *OPIOID MANAGER* are underway and will include French (Canadian), Spanish (South America), Portuguese (Brazil), and Farsi (Iran). Once these translations are completed, they will be posted on the *OPIOID MANAGER*'s webpage for free download.

DISCUSSION

The *OPIOID MANAGER* is a tool that can be used by healthcare providers, including primary care physicians, specialists, nurses, policy makers, and pharmacists. It can also be used as an educational tool to teach medical students, residents, and professionals in practice pursuing continuing education. The Canadian Opioid Guideline contains many other tools and instruments that were not included in the *OPIOID MANAGER*, such as a recommended tool to monitor functional changes, a benzodiazepine tapering protocol, information about urine drug screening detection times, and other

instruments to assess the risk of opioid misuse, abuse, and addiction.

The main limitations of the *OPIOID MANAGER* are that it is a paper-based tool and many medical offices have adopted EMRs, therefore, the eminent need to integrate the *OPIOID MANAGER* to EMRs. However, each EMR has its own technical requirements, and integration of a tool like this needs to be carefully implemented and evaluated. Many users have expressed concerns that the *OPIOID MANAGER* contains too much information, and it is unreasonable to ask physicians to fill all of its fields with every patient. This problem has been addressed in the *OPIOID MANAGER VIDEO* and explained that although it might look like a busy tool, once the user becomes familiar with it, it is easier to use. Also, it is not required that all fields be completed for every patient in one visit. The prescriber may use the information contained in the *OPIOID MANAGER* as a guide to what is important to assess and document at various points during the opioid prescribing activities.

The *OPIOID MANAGER* is out-of-date 1 year after its release because some opioids, for example, buprenorphine patch, tapentadol, and oxymorphone, have been introduced in the Canadian market after the release of the Canadian Opioid Guideline and are not mentioned in the *OPIOID MANAGER*. Although there is no planned further revision to the *OPIOID MANAGER* in the near future, we will evaluate the effectiveness of the *OPIOID MANAGER* to improve patient' outcomes, satisfaction with treatment, and physicians comfort and confidence levels with the addition of the *OPIOID MANAGER* to their practices. We will continue monitoring the use of the *OPIOID MANAGER* by the individuals who download it from the Guideline's Web site.

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