

Improving Patient Safety At End-Of-Life Through Implementation Of A Standardized Symptom Relief Kit On Manitoulin Island

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Abstract

Historically, there were several variations of a symptom relief kit (SRK) in use across Manitoulin Island. This which presented multiple challenges leading to reduced efficiency and effectiveness, and delays in care. Under the auspices of the Manitoulin Palliative Care Resource Team, an inter-professional group of providers set out to develop a unified SRK to address these challenges and implement novel additions to the traditional kit in order to provide efficient and effective home based palliative care and minimize the risk of medication diversion within our communities. This poster highlights the challenges and outcomes in developing a unified rural SRK.

Introduction

Providing home-based end-of-life care in rural settings is challenging.¹⁻³ Manitoulin Island hosts several health centers within each community, each using a different version of a SRK, thus creating several challenges which impacted the practice of many providers. To improve upon this, a unified SRK was developed that extended beyond the traditional SRK's in current practice. In doing so, we set out to streamline practice, enhance delivery of care, minimize diversion and provide enhanced education to families in order to minimize distress at end-of-life.



Manitoulin Island is the largest freshwater island in the world, located on Lake Huron in Ontario, Canada. The Manitoulin District is 3,107.23 square kilometers with a population of 13, 255 (2016), representing a population density of 4.3 persons per square kilometer.⁴ The island is home to 7 health centers/Family Health Teams.

Challenges

- Physicians unsure which kit to use or where to send it to
- Pharmacies unable to complete orders due to lack of supply
- Nurses having to draw up various doses of medications, leading to an increased risk of medication error
- Appropriate supplies not being provided
- Lack of insurance coverage due to multiple provincial and federal insurers

Novel Additions To The Standard Symptom Relief Kit

Strategy #1

Colour coded labelling system for each medication used

Morphine/Hydromorphone

Midazolam

Atropine/Glycopyrrolate

Haloperidol

- Worked alongside pharmacies and patients to develop a system that would enhance comprehension of what each medication was used for
- Provided an extra step when handing out a SRK to impart education about each medication
 - Corresponded colour to medication name and symptom it was used to treat
 - Simplified the process for families who had to administer medications if nurse was not present

Strategy #2

Tracking tool provided to families and pharmacies to monitor medication usage and return

Appendix B: Symptom Relief Kit Return Form
PLEASE RETURN KIT ASAP TO ANY LOCAL PHARMACY

Patient Name: _____
DOB (DD/MM/YYYY): _____ HCN: _____

(to be completed by Community Nurse)
Date Kit Closed (DD/MM/YYYY): _____
Medication Reconciliation completed by: (initial columns under Section 1 below)
Name: _____ Signature: _____

Medication	Quantity Left	Name Initials	Comments	Quantity Verified by Pharmacy	Pharmacy Staff Initials	Discrepancy (if any, to be initiated by patient reg-drop off only)
Lorazepam 1mg tabs						
Haloperidol 5mg/ml amps						
Atropine 1% eye drops						
Glycopyrrolate 0.2mg/ml vials						
Midazolam 5mg/ml vials						

ONE OF THE FOLLOWING:
Morphine _____ mg/ml
Hydromorphone _____ mg/ml
OTHER (if applicable): _____

(to be completed by Family/Other)
Date Kit Returned to Pharmacy (DD/MM/YYYY): _____
Returned by Name: _____ Relationship to Patient: _____
Signature: _____

(to be completed by local pharmacy staff)
Medication Reconciliation completed by Pharmacy Staff: (initial columns under Section 2 above)
Name: _____ Signature: _____

This form must be returned to ANY local pharmacy along with any used or unused medications/medical supplies.
The pharmacy MUST keep this form as a part of their drug destruction documentation.

Safety & Diversion

- Diversion can be a problem within communities, especially at end-of-life when family and friends know there are medications in the home to treat pain (i.e., opioids).
- By ensuring consistency, this will also minimize medication errors and ensure the correct supply is available at the time of need in order to minimize delay in care.
- Yearly audits will be performed to identify and address any issues that may have arisen.

Access & Distribution

- Allows us to track if medications being supplied are used, being returned, or if more medications are being requested than initially anticipated.
- Allows us to modify the order set in order to reduce waste and provide adequate supply to patients and their families in order to minimize a delay in care
- Allows us to match supply and demand to ensure pharmacies maintain adequate supply at all time

Strategy #3

Providing education to each community health center on Manitoulin Island

- Travelled to various communities across Manitoulin Island upon SRK implementation to provide in-depth education to primary care providers, pharmacists and administrative support staff
 - Education was focused on the mechanics of the kit, colour coding system and what supplies would accompany the medications
 - During these sessions, old versions of the SRK were discarded to avoid confusion moving forward
- This opportunity was also used to provide brief education surrounding a palliative approach to care
 - Appropriate pain management and techniques when switching opioids (i.e., accounting for incomplete cross tolerance, conversion from oral to subcutaneous and when this is typically done during a patient's journey)

Literature Cited

- Pesut B, Bortoff JL, Robinson CA. Be known, be available, be mutual: a qualitative ethical analysis of social values in rural palliative care. *BMC Med Ethics*. 2011;12:19. doi:10.1186/1472-6939-12-19.
- Pesut B, Robinson CA, Bortoff JL. Among neighbors: An ethnographic account of responsibilities in rural palliative care. *Palliat Support Care*. 2014;12(2):127-138. doi:10.1017/S1478951512001046.
- Kaasalainen S, Brazil K, Williams A, et al. Barriers and Enablers to Providing Palliative Care in Rural Communities: A Nursing Perspective. *The Journal of Rural and Community Development*. 2012;7(4):4-19.
- Statistics Canada. Focus on Geography Series, 2016 Census: Manitoulin District, Ontario. Accessed June 10, 2019.

Future Direction

Translating patient handout into Anishinabek

Performing yearly audits to assess for diversion and if supply is appropriate

Aligning SRK with in-hospital order sets to ensure a smoother transition to home

Ensuring constant review of best practice guidelines to ensure the kit is reflective of these changes

Community Feedback

"It is so nice to see that things that were discussed a year ago, back in the early stages, are being incorporated into the kit... the families will really find these changes beneficial."

"This is going to be great for our patients with improved access and a system that is more patient friendly."

"Finally we have one unified kit for the entire island... there was so much confusion prior to this on which kit to use and where to send it to."

"I was a part of creating the original symptom relief kit years ago... it is wonderful to see how far it has come now with all of these new changes."

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