THE PROCESS OF OPTIMIZING CARDIAC PRE-PRINTED ORDERS IN NORTHERN HEALTH (NH)

PROJECT AIM
To revise and create a standardized, pre-printed order set for the initial management of suspected ischemic chest pain by December 2019 based on the feedback collected from acute care sites within the Northern Health Authority and the interdisciplinary team of the NH Cardiac Services Working Group.

BACKGROUND
Despite Northern Health (NH) serving the largest geographical region in British Columbia, NH faces unique challenges in providing care for patients who require tertiary cardiac services as these services are only available in other health regions. Thus, as part of the NH Cardiac Strategy, the NH Cardiac Services Working Group was created with the aims to revise existing cardiac order sets based on current evidence, to educate health care professionals (HCPs) on effectively utilizing these revised order sets, and to improve the quality of cardiac care in NH.

The NH Cardiac Services Working Group included the following representatives from the 3 health service delivery areas of NH to ensure adequate representation and engagement across the region:

- Lead, Cardiac Care and Stroke Care
- Clinical Nurse Specialist, Cardiac Services BC
- Executive Lead for ER, Trauma, and Patient Transfer
- Medical Lead, Cardiac Services
- Physicians (internal medicine, emergency, family)
- Nurses (ER, clinical nurse educators)
- Hospital pharmacist
- First Nations Health Authority

TEAM MEMBERS

The team members’ practice locations have been identified on the map above.

PROBLEM STATEMENT
Due to the diverse geographic areas within NH including cities, towns, and remote communities, developing a regional order set that is applicable to these various areas poses unique challenges including, but not limited to:

- Navigating how to provide quality cardia care in settings with limited access to resources (i.e., the distance to tertiary cardiac services are such that primary percutaneous coronary intervention is not a readily available option).
- Providing person-centred care to diverse populations.
- Striving for documents that are comprehensible to HCPs with varying levels of knowledge/experience.
- Facilitating engagement of HCPs within different workplace cultures.

This project hopes to address the following aspects of the BC Health Matrix:

- Increase the efficiency in initiating investigations and management for patients coming in to the emergency department with suspected ischemic chest pain.
- Increase the safety by standardizing order sets that will help guide HCPs in providing comprehensive, quality care to cardiac patients.

CHANGE IDEA

Using PDSA Cycles:

1. Develop an interdisciplinary working group involving providers from various practice areas.
2. Review current evidence on the management of cardiac ischemia.
3. Build from the existing “Initial Chest Pain Management” order set to develop NSTEMI/Unstable Angina and STEMI order sets.

Steps in this project:

1. Create a draft “Initial Management of Suspected Ischemic Chest Pain” order set by comparing existing order sets and obtaining feedback from working group members.
2. Pilot the draft at Mills Memorial Hospital in Terrace, BC.
3. Collect written and verbal feedback from staff.
4. Integrate feedback to modify and optimize the order set.

RESULTS

SUMMARY OF FEEDBACK

Location: Mills Memorial Hospital – ER

<table>
<thead>
<tr>
<th>Duration: August 2019</th>
<th>Type of Feedback:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents Included:</td>
<td>Total = 19</td>
</tr>
<tr>
<td>• Registered Nurses</td>
<td></td>
</tr>
<tr>
<td>• Physicians</td>
<td></td>
</tr>
<tr>
<td>• Resident Physicians</td>
<td></td>
</tr>
<tr>
<td>• Medical Students</td>
<td></td>
</tr>
</tbody>
</table>

RISK STRATIFICATION ALGORITHM OF NSTEMI/UA

**This algorithm was adapted and developed with consideration of local resources after the creation of the “Initial Management of Suspected Ischemic Chest Pain Orders”. This algorithm will be incorporated into the NSTEMI/UA and STEMI order sets that is currently in progress.

NEXT STEPS

With the successful revision and approval of this order set, plans are in motion to:

1. Apply a similar process to the NSTEMI/Unstable Angina and STEMI pre-printed order sets.
2. Consider future plans to evaluate if these updated order sets contribute to an increase in patients receiving evidence-based cardiac care.

ACKNOWLEDGEMENTS

- NH Cardiac Services Working Group
- Mills Memorial Hospital ER Staff
- Dr. Denise Jaworsky
- Lee Cameron

CONTACT INFORMATION

Primary contact: tony.chae@alumni.ubc.ca
Secondary contact: denise.jaworsky@northernhealth.ca