BRITISH COLUMBIA
Ministry of Health

MINIMUM NURSE-TO-PATIENT RATIO

Rural and Remote Hospital Sector Ratios

Ministry of Health

Division

Nursing Policy Secretariat

Table of Contents

Introduction **2**

Aim Statement 2

Why a mNPR Rural and Remote Framework? 2

Principles 3

Using the mNPR Rural & Remote Framework – Proposed Approach to Next Steps 4

Group 1: Community Health Centre with an Emergency Department (ED) for Diagnosis & Treatment and no inpatient beds **6**

Group 1 Definition 6

Group 1 Considerations for mNPR Application 6

Group 2: Small Rural & Remote Hospitals **7**

Group 2 Definition 7

Group 2 Considerations for mNPR Application 7

Group 3: Rural Hospital with Low Volume Specialty Services **8**

Group 3 Definition 8

Group 3 Considerations for mNPR Application 8

Group 4: Rural Hospital with Greater than One Inpatient Unit **10**

Group 4 Definition 10

Group 4 Considerations for mNPR Application 10

References **12**

Acknowledgment

The Ministry of Health acknowledges the traditional territories of the Indigenous Peoples, First Nations, and Métis chartered communities throughout B.C. and welcomes their graciousness toward our work that strives to support the health and wellness for all in B.C.

Introduction

Aim Statement

A minimum Nurse to Patient Ratio (mNPR) Rural and Remote Framework provides a strong foundation for the successful implementation and application of mNPR in rural and remote settings. This work has been informed by findings and advice shared by the Ministry of Health's (Ministry) Rural Strategic Lead as development of the Ministry of Health's Rural and Remote Strategy is underway.

The work is embedded in a collaborative approach with the Ministry, British Columbia Nurses' Union (BCNU), Executive Directors (EDs) mNPR, and the mNPR Rural & Remote Working Group.

Why a mNPR Rural and Remote Framework?

The Ministry of Health commissioned the development of a Provincial Rural and Remote Health Strategy in January 2024. The Rural Strategy has been informed by an extensive literature review and consultation process led by the Rural Strategic Lead. Over 48 formal consultations have been conducted with rural health stakeholders to ensure the Rural Strategy is forward thinking, comprehensive and reflective of rural citizen and rural communities' health interests and needs.

The Provincial Rural and Remote Health Strategy seeks to improve health equity for rural and remote communities. Approximately one in five people live rurally and 65% of the Indigenous population lives outside large urban centres in British Columbia (Focus on Geography Series, 2021 Census - British Columbia (statcan.gc.ca)). Multiple health indicators show persistent disparities in health outcomes for rural populations. In recognition of these disparities, one of the goals in the Provincial Rural and Remote Health Strategy is to support and develop a workforce with broad capabilities to meet the health needs of rural communities and to enable services closer to home. The mNPR Rural and Remote Framework is an important part of responding to these strategic goals.

Rural hospitals, facilities, and health services are diverse and must be highly adaptive to factors such as fluctuating population health needs and size, geographic location, topography and inclement weather. The patient volume and complexity may be impacted by the presence of industry, tourism, and associated seasonal population surges. Most of these sites serve a surrounding rural and remote population that includes both small rural and remote communities and a number of First Nations communities. Many of these health care facilities are several hours distant from the next level of health care.

These rural and remote sites require different nursing staffing considerations to support a generalist nursing approach that allows nurses and the health care team to respond to a broad range of patient needs and to manage planned and unplanned capacity pressures that are common in rural environments. Generalist nursing in the rural and remote context requires consideration of the education, skill development, and cross training the nursing team may need to support quality patient care. A feature of rural nursing includes

complexities such as the receipt of patients whose needs exceed the capabilities of the site and require stabilization and transport coordination to definitive care. A reasonable level of staffing redundancy is often necessary to address the unpredictability inherent in rural and remote service delivery. The mNPR Rural and Remote Framework recognises the diversity within and across rural hospitals and facilities and calls attention to the nursing staffing levels required to support generalist, team-based care, not only within units but across units and services as part of a whole facility approach to providing nursing care.

Principles

The principles guiding the development of the rural and remote framework expand on those outlined in the Ministry of Health's mNPR Implementation Instructions for BC Health Employers:

1. **Collaboration & Engagement**: Involve direct care nurses, nursing leadership and professional practice in the implementation and application of the framework to ensure the framework addresses their specific needs and challenges.
2. **Quality Practice and Learning Environment (QPLE):** As referenced in the Ministry of Health's mNPR Implementation Instructions for BC Health Employers, QPLE refers to the conditions and factors that support effective and optimal delivery of care in clinical settings. Implementation of mNPR in rural and remote settings builds the capacity to focus on patient safety and quality care, positive patient outcomes, nurse satisfaction and retention, preceptorship and mentorship opportunities, clinical education and experiential learning, and building a culture of excellence and continuous improvement.
3. **Cultural Safety & Humility and Addressing Anti-Indigenous Specific Racism**: Many First Nations communities are situated in rural and remote areas of British Columbia. Access to health services is often through British Columbia's rural and remote health care facilities and services. Unfortunately, many First Nations and Métis people have experienced barriers to accessing care including evidence of racism and a lack of cultural safety and humility. Addressing anti-Indigenous specific racism, cultural safety and humility, and trauma-informed care in partnership with First Nations and Métis people and communities is a critical aspect that will be enabled through mNPR implementation in rural and remote facilities.
4. **Adaptability and Flexibility:** Ensure that the framework is flexible and adaptable to the unique needs of rural and remote sites.
5. **Monitoring, Evaluation, and Continuous Improvement**: Establish mechanisms for monitoring the implementation of mNPR in rural and remote settings and evaluating their impact on healthcare service delivery, outcomes, and nurses' satisfaction. Through such monitoring and evaluation quality of care continuous improvement opportunities will be identified and will ensure the framework remains effective over time.
6. **Data-Driven Decisions**: Use local health data to inform the application of mNPR, ensuring that the ratios are based on population health needs and service utilization patterns (such as surge and seasonal planning).
7. **Training and Support**: Provide support to help health authorities implement the framework effectively. This could include workshops, online resources, and/or ongoing support.

Using the mNPR Rural & Remote Framework – Proposed Approach to Next Steps

The mNPR Rural and Remote Framework (Framework) is intended to be used for the purposes of applying and implementing mNPR in rural and remote facilities. As referenced above, this Framework has been informed by the Ministry of Health's development of a Provincial Rural and Remote Health Strategy that is currently underway. Over time, the finalization of the Provincial Rural and Remote Health Strategy will further inform the ongoing development, revision, and implementation of this Framework.

The Framework sets out a definition and proposes an approach to establishing the minimum nurse to patient ratio in each of the four groupings of rural and remote facility/sites. These groupings are specifically for the purpose of applying mNPR ratios in rural and remote facilities/sites. They do not replace the levels of care and distribution of services Health Employers have established for their rural sites. Upon completion of the Ministry of Health's Provincial Rural and Remote Health Strategy, these groupings may need to be aligned to the Strategy. The four groupings of rural and remote facilities/sites include:

- **Group 1:** Diagnostic and Treatment Centres/Community Health Centres with Emergency Departments (EDs) with less than 7,500 annual visits and no inpatient beds (may have variable hours of service)
- **Group 2:** Small rural/remote hospitals with 3 to 10 beds and less than 7,500 annual Emergency Department visits
- **Group 3:** Rural Hospital with 8 to 15 beds, some specialty services at a low volume, and between 7,500 and 14,000 annual Emergency Department visits
- **Group 4:** Rural Hospital with more than one inpatient unit, some specialty services and between 10,000 and 18,000 annual Emergency Department visits

The nature of rural and remote facilities across the province means that there may be facility specific nuances due to geography, services available, and population health needs where a facility may not exactly fit the proposed definitions. In these cases, it will be important for the Health Employer's Executive Director, mNPR Implementation to lead a specific site analysis with the support of the JRIC and operational leadership and outline in the Health Employer's mNPR Implementation Plan how the Framework definitions and proposed mNPR has been applied or varied with a focus on achieving the overarching goals of retention and recruitment of nurses to rural and remote facilities and sites.

The implementation of the proposed Framework in Health Employers with rural and remote sites and facilities is recommended to proceed as follows:

- Implement mNPR as outlined in the Framework in rural and remote facilities early in the overall mNPR implementation process.
- Implement mNPR across the entire rural or remote facility with the exception of psychiatry, Long Term Care, and community, non-hospital which are currently under future development.
- On an annual basis, the ED mNPR Implementation will lead a site analysis with the support

of the JRIC and operational leadership of volumes and services at each site over the past fiscal year to assess the appropriateness of the rural and remote site groupings and recommend adjustments accordingly.

- As outlined in the Ministry of Health Policy Instrument, Minimum Nurse-to-Patient Ratio – Hospital Based Care Settings, when additional patients above the bed base are admitted to the facility, every reasonable effort will be made to call in additional nursing staff, including for overtime, to bring the facility back up to the required ratio.

The Charge Nurse role in rural and remote facilities has the potential to be a powerful role for providing at the elbow clinical support and supporting quality improvement, continuous improvement, quality practice and learning environments, cultural safety and humility and team building. The Charge Nurse in these settings may also provide the additional support needed to coordinate patient transport to definitive care. A rural and remote lens will need to be included in the provincial planning and development of the role and functions of the Charge Nurse. Once the Charge Nurse role is finalized, the Framework will need to be updated to include how this role will be implemented in rural and remote sites.

In addition, a rural and remote perspective will also need to be applied to the development of the remaining hospital, long term care and community, non-hospital ratios. The Rural and Remote mNPR Framework will need review and revision as these mNPRs are developed to determine the application in the rural and remote context.

Group 1: Community Health Centre with an Emergency Department (ED) for Diagnosis & Treatment and no inpatient beds

Group 1 Definition

Group 1 includes rural and remote facilities or sites that provide:

- No inpatient acute care beds and the facility may operate 24/7, extended day hours, or regular office hours. There may or may not be an on-call service.
- Primary care/community health services where primary care services are provided by family physicians and nurse practitioners and may include a small community health services/primary care team.
- Emergency Department services with the annual patient volume normally ranging from 1,000 to 7,500. Generally, the ED services range from urgent care to stabilization/transport for most CTAS 1, 2, 3 presentations to the ED. The patient volume and complexity may be impacted by the presence of industry, tourism, and seasonal population surges. There may be a few sites across the province that are outliers with an annual ED patient volume that exceeds 7,500. The ED hours of operation may vary from 24/7 services, extended day hours, or regular office hours. Some sites may have an after-hours on-call service requiring an on-call rotation for nursing staff.
- These sites are dependent on BCEHS for patient transport and may be required to hold patients awaiting transport. Patient transport arrangements are a critical function of the site and facility physicians, nurse practitioners, and nurses may be relied upon to escort patient during patient transport. Sites may need to consider additional workload staffing when dealing with specific patient transport situations.

Group 1 Considerations for mNPR Application

A specific rural and remote mNPR is proposed for the Group 1 sites and facilities. In most situations, the nursing staff at a group 1 facility work as a team and may provide support across the facility as patient care needs fluctuate.

The proposed rural and remote mNPR for Group 1 sites and facilities includes:

- Start with a baseline of 2 nurses.
- Increase by a nurse if ED volume exceeds 7,500 and increase by a nurse in increments of 7,500 for annual visits exceeding 7,500.
- Shifts may be staggered according to patient demand mapping. Seasonal variations due to tourism population surges and the presence of industrial camps or itinerant industry workers and their families may need to be factored in above the mNPR.
- If the site or facility provides community health/primary care nursing services or provides long term care services on site, the staffing will remain status quo until the non-hospital ratio planning is underway.

Group 2: Small Rural & Remote Hospitals

Group 2 Definition

Group 2 includes small rural and remote hospitals that provide:

- Inpatient services on one general medicine inpatient unit ranging in size from 3 to 10 beds. The inpatient services are oriented to those provided on a general medicine unit. There are no specialty services. Often the patients can be described as lower acuity, stable medical-surgical inter-facility transfers from a higher level of care prior to discharge, and some patients may be alternate level of care. The facility may have a respite bed or a community hospice level palliative care bed.
- There are long term care beds integrated into most but not all facilities included in this group.
- Emergency Department services with an annual patient volume ranging between 2,500 to less than 7,500. The Emergency Department operates 24/7 and provides services for patient presentations across CTAS levels. The patient volume and complexity may be impacted by the presence of industry, tourism, and seasonal population surges. The ED provides stabilization and transport to definitive care for CTAS 1, 2 and sometimes CTAS 3 patient presentations.
- These sites are dependent on BCEHS for patient transport and may be required to hold patients awaiting transport. Patient transport arrangements are a critical function of the site and facility physicians, nurse practitioners, and nurses may be relied upon to escort patient during patient transport. Sites may need to consider additional workload staffing when dealing with specific patient transport situations.
- Sites may have a secure/observation room to enable psychiatric patients to be safely held and cared for while awaiting transfer. The inclusion of these services will need future assessment and consideration when psychiatry ratios are confirmed.

Group 2 Considerations for mNPR Application

A specific rural and remote mNPR is proposed for the Group 2 hospitals. In most situations, the nursing staff at a group 2 facility work as a team and may provide support across the facility as patient care needs fluctuate.

The proposed rural and remote mNPR for Group 2 rural and remote hospitals includes:

- Start with a baseline of 3 nurses for the site. (assumes a base of 4 inpatient acute care beds or less)
- Increase by a nurse for every four acute care bed increment over the initial 4 beds included in the baseline. Rounding up to be applied.
- Increase by a nurse if the annual patient volume in the Emergency Department exceeds 7,500.
- Shifts may be staggered according to patient demand mapping. Seasonal variations due to tourism population surges and the presence of industrial camps or itinerant industry workers and their families may need to be factored in above the mNPR.
- Sites with an integrated nursing rotation for the site may include less than 10 LTC beds. Sites that have more than 10 LTC beds typically have a separate rotation for Long Term Care. Until further work is completed in relation to mNPR in Long Term Care, sites with an integrated nursing rotation will retain existing nursing staffing levels and will comply with Ministry of Health Hours of Care per Resident Day policy. This will be revisited as the mNPR approach in LTC is clarified.

Group 3: Rural Hospital with Low Volume Specialty Services

Group 3 Definition

Group 3 includes rural hospitals that provide:

- Inpatient services on one general medical/surgical unit ranging in size from 8 to 15 beds. Inpatient services include care for stable med-surg and alternate level of care patients. The site may provide low risk maternity services for fewer than 49 births/year (family practice physicians, nurse practitioners, midwifery, GP surgeon and GP anesthetist).
- There may be one operating room providing day surgery procedures, possible scope procedures, and potentially C-section back-up.
- The hospital may have a respite bed and or a community hospice level palliative care bed.
- Emergency Department services with an annual patient volume ranging between 7,500 to less than 14,000. The Emergency Department operates 24/7 and provides services for patient presentations across CTAS levels. The patient volume and complexity may be impacted by the presence of industry, tourism, and seasonal population surges. CTAS 1 & 2 patient presentations would generally be stabilized and transferred to definitive care.
- These sites are dependent on BCEHS for patient transport and may be required to hold patients awaiting transport. Patient transport arrangements are a critical function of the site and facility physicians, nurse practitioners, and nurses may be relied upon to escort patient during patient transport.
- The site is unlikely to include LTC beds as there is generally a separate stand-alone LTC facility in the community.
- Sites may have a secure/observation room to enable psychiatric patients to be safely held and cared for while awaiting transfer. The inclusion of these services will need future assessment and consideration when psychiatry ratios are confirmed.

Group 3 Considerations for mNPR Application

A specific mNPR is proposed for the Group 3 rural hospitals. In most situations, the nursing staff at a group 3 facility work as a team and may provide support across the facility as patient care needs fluctuate.

The proposed mNPR for Group 3 rural hospitals includes:

- Baseline of 3 nurses. (assumes a base of 4 inpatient acute care beds)
- Increase by a nurse for every four acute care bed increment over the initial 4 beds included in the baseline. Rounding up to be applied.
- Given that Group 3 sites may provide low risk maternity services for less than 50 deliveries per year, the Health Employer will support some of the nursing staff to receive skills training to provide care to low risk maternity families. Additional workload staffing may be required to support maternity care.
- If the ED volume exceeds 7,500 annual visits, increase by a nurse for every 7,500-visit increment e.g. increase by a nurse for 7,500 to 14,000 annual visits. Shifts may be staggered according to patient demand mapping.

- If there is an OR, apply ratios as outlined in the mNPR policy for the operating room.
  Note: maintain status quo staffing for day surgery/ambulatory care until the provincial mNPR is confirmed.
- Seasonal variations due to tourism population surges and the presence of industrial camps or itinerant industry workers and their families may need to be factored in above the mNPR.

Group 4: Rural Hospital with Greater than One Inpatient Unit

Group 4 Definition

Group 4 includes rural hospitals that provide:

- Inpatient services provided in a facility between 16 to 28 acute care beds. The inpatient units include a general medical/surgical unit where the majority of inpatient care is provided.
- The hospital may provide maternity services with up to 2 maternity beds and maternity patient volume between 50 and 250 per year.
- The hospital has 1 to 3 operating rooms and can provide c-section back up to support maternity services.
- May have a small high acuity unit which may or may not be situated in close proximity to the emergency department.
- Emergency Department services with an annual ED visits exceeding 10,000 and ranging between approximately 10,000 to 18,000. The Emergency Department operates 24/7 and provides services for patient presentations across CTAS levels. The patient volume and complexity may be impacted by the presence of industry, tourism, and seasonal population surges. There is hospital capacity to provide care for some CTAS 2 patient presentations. CTAS level 1 patient presentations and some CTAS level 2 would be stabilized and transferred to definitive care. The site is not classified as a trauma centre.
- There are generally family practice physicians, nurse practitioners, midwives and sometimes but not always one or more physician specialists available at the site either as visiting services or on-site, e.g. Internal Medicine and General Surgery.
- Sites may have a secure/observation room to enable psychiatric patients to be safely held and cared for while awaiting transfer. In some sites, there may be designated mental health and substance use beds. The inclusion of these services will need future assessment and consideration when psychiatry ratios are confirmed.

Group 4 Considerations for mNPR Application

The proposed mNPR for Group 4 rural hospitals includes:

- Apply the approved mNPR ratio for the med-surg inpatient unit and the operating room. Rounding up to be applied. Note: maintain status quo staffing for day surgery/ambulatory care until the provincial mNPR is confirmed.
- When a Group 4 rural hospital has established maternity services with up to 2 maternity beds with a volume of 50 to 250 births per year:
  - Baseline of 1 nurse available to cover antepartum, labour & delivery, postpartum care 24/7 for volumes between 50 to 100 births/year.
  - Baseline of 2 nurses available to cover antepartum, labour & delivery, postpartum care 24/7 for volumes between 100 to 250 births/year.
  - May require additional workload during a maternity surge. The Health Employer will support some of the nursing staff to be cross-trained when additional staffing is required to provide care for maternity families.

    - Often inductions and c-sections are planned in collaboration with the maternity unit to enable a coordinated approach to staffing levels.
- Emergency Departments do not generally have separate areas for type of patient presenting to the Emergency Department. Therefore:
    - Baseline of 3 nurses assuming an average of 14,000 to 15,000 annual visits.
    - Increase by a nurse for every 7,500 increment increase over 15,000 annual visits.
    - If ED volume is less than 14,000 start with a baseline of 2 nurses.
    - Shifts may be staggered according to patient demand mapping. Seasonal variations due to tourism population surges and the presence of industrial camps or itinerant industry workers and their families may need to be factored in above the mNPR.

References

Australian Government, Office of the National Rural Health Commissioner. (2023). *The National Rural and Remote Nursing Generalist Framework: 2023-2027.*

Kulig, J., Kilpatrick, K., Moffitt, P., & Zimmer, L. (2013). *Rural and remote nursing practice: An updated documentary analysis.* Lethbridge, AB: University of Lethbridge. RRN2-02.

Kulig, J., Kilpatrick, K., Moffitt, P., & Zimmer, L. (2015). Recruitment and retention in rural nursing: It's still and issue! *Canadian Journal of Nursing Leadership, 28(2):* 40-50.

MacLeod, M (1999). "We're it": Issues and realities in rural nursing practices. In W. Ramp, J. Kulig, I. Townshend, & V. McGowan (Eds.), *Health in rural settings: Contexts for action* (pp. 165-178). Lethbridge, AB: University of Lethbridge Press.

MacLeod, Martha, Kulig, Judith, & Stewart, Norma. May 13, 2019. Lessons from 20 years of research on nursing practice in rural and remote Canada. *Canadian Nurse.* https://www.canadian-nurse.com

MacLeod, M.L.P., Martin-Misener, R., Banks, C., Morton, M., Vogt, C., & Bentham, D. (2008). "I'm a different kind of nurse": Advice from nurses in rural and remote Canada. *Canadian Journal of Nursing Leadership, 21(3),* 40-53. https://doi.org/10.12927/cjnl.2008.20060

MacLeod, M.L.P., Stewart, N.J., Kulig, J.C., Anguish, P., Andrews, M.E., Banner, D., Zimmer, L. (2017). Nurses who work in rural and remote communities in Canada: A national survey. *Human Resources for Health, 15(34).* https://doi.org/10.1186/s12960-017-0209-0

MacLeod, M.L.P., Zimmer, L.V., Kosteniuk, J.G., Penz K.L., & Stewart, N.J. (2021). The meaning of nursing practice for nurses who are retired yet continue to work in a rural or remote community. *BMC Nursing*, 20: 220. https://doi.org/10.1186/s12912-021-00721-0

Pitblado, R., Koren, I., Macleod, M., Place, J., Kulig, J., Stewart, N. (2013). *Charactertistics and distribution of the regulated nursing workforce in rural and small town Canada, 2003 and 2010.* Prince George, BC: Nursing Practice in Rural and Remote Canada II. RRN2-01.

Stewart, N.J., MacLeod, M.L.P., Kosteniuk, J.G., Olynick, J., Penz, K.L., Karunanayake, C.P., Kulig, J.C., Labrecque, M.E., & Morgan, D.G. (2020). The importance of organizational commitment in rural nurses' intent to leave (pdf). *Journal of Advanced Nursing,* 76: 3398-3417. https://doi.org/10.1111/jan.14536

Additional Resources available at the following sites:

Canadian Association for Rural & Remote Nursing (CARRN) – https://www.carrn.com

University of Northern British Columbia web page on the studies, Nursing Practice in Rural and Remote Canada. https://www.unbc.ca/rural-nursing/en/publications