



Shared health
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Manitoba

COVID-19 Capacity Planning

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Agenda

Introduction – Lanette Siragusa

Capacity Planning – Dr. Perry Gray

Team-based Models of Care – Lanette Siragusa and Monika Warren

Question & Answer

Expanding Capacity to Meet the Surge

As COVID-19 cases rise, health system capacity must increase in advance of an anticipated surge in demand.

Areas of Greatest Need:

- **Critical Care** – care for the most critically ill patients
- **Medicine/Family Medicine** – care for patients requiring hospitalization
- **Low Acuity** – care for non-COVID patients requiring support but whose needs can be met in an alternate non-hospital setting

COVID-19 Capacity Planning

**Chief Medical Officers – Rural, Northern,
Urban and Site-Based
Provincial Medical Specialty Leads
COVID-19 Operations Team
COVID-19 Planning Team**

* Operations and Planning Teams are provincial in scope and include representation from physician, nursing and allied health leadership, facility management, supply chain and logistics, administration, etc.

Pillars

Space
Equipment
Supplies
Staffing

*Pillars

- Throughout the spring and summer, every health region undertook a detailed space assessment to identify appropriate space; available equipment; needed supplies and to develop a provincial view of staffing.
- This included an assessment of decommissioned space; former hospitals and equipment, supplies and staffing supporting areas and activities that may be slowed down in order to redeploy resources to support urgent needs.

Acute Care - Expansion over 3 phases

Region	Baseline Critical Care	Baseline Medicine	Total acute surge Critical Care (173)	Total acute surge Medicine (1,014)
Shared Health	41	237	66	110
Winnipeg	24	583	92	649
Prairie Mountain	7	168	15	98
Interlake Eastern	0	50	0	32
Northern	0	150	0	70
Southern Health - Sante Sud	0	115	0	55

Phase One - Footprint of medicine and critical care units will be expanded to meet patient need with added beds and staffing. Repurposing surgery beds for medicine patients & expanding critical care into readily adjacent spaces.

Phase Two - As needs increase, additional spaces identified in the bed map will be brought online. Teams-based models of care will be deployed with redeployment of staff based on the assessment of their skills and history/experience. More complex repurposing of space and service relocation and/or realignment.

Phase Three - As demands increase further, non-COVID patients with lower care requirements may be decanted to low acuity sites in order to free up space for patients with a higher level of care or with isolation requirements.

Space

Staged expansion of acute care capacity

Phase in additional Critical Care

- Identification of space ideal for – or able to be converted to – critical care (electrical, medical air, oxygen, suction, additional footprint). Includes decommissioned ICUs, ORs, step down units.

Phase in additional Medicine/Family Medicine

- Identification of space ideal for medicine spaces (access to oxygen, electrical, suction)
- Provincial plan – space identified across the province

Space – Low Acuity Overflow

In the event of an extreme healthcare surge, low acuity overflow sites will provide space to care for patients currently in hospital who can be safely cared for in a non-health care environment.

Decanting this patient type to an overflow site will free up those in-hospital spaces for patients in need of a higher level of care and/or isolation.

SDO sites expanding into ‘non-traditional’ healthcare areas. ~300 beds.

Large Scale Overflow sites (LSO) non health care environments that can provide open-concept space to house ~180 beds at 4 locations within Winnipeg and Brandon as a start. Planning has considered ~400 beds.

*Equipment

Ordering and storing inventory & equipment to ensure ability to appropriately equip new and expanded treatment spaces has been underway since spring.

Item	Newly purchased and on hand	Total New
Ventilators (baseline inventory 234)	215	286 (includes 71 awaiting delivery)
Infusion pumps - Baxter (900), Fresenius (1,000)	1,900	1,900
Vital sign monitors / Critical Care Monitors	183	183
Beds - Basic Medical and Low Acuity	800+	800+
Beds - Critical Care	150	150
Oxygen concentrators	80	80
Glucometers – LAOS (70), Critical Care & Medicine (122)	192	192
Patient room divider panels (enough for 390 low acuity offsite bed spaces)	1,794	1,794

NUMBERS PROVIDED BY FACILITY MANAGEMENT - ACCURATE AS OF NOVEMBER 3, 2020

*Supplies

Warehousing and locating supplies where they can be easily and effectively deployed has been a focus. This includes a dedicated pandemic warehouse established to ensure appropriateness for medical use, cataloging of inventory and rapid distribution as required.

This includes beds, cleaning supplies, nutritional supplies, equipment, PPE, etc.

The experience of H1N1 was used for the purpose of projecting anticipated medication needs for patients in medicine and critical care.

Personal Protective Equipment

PPE category	Days on hand in reserve	On hand after reserve	Days on hand - not including 90-day reserve
Disposable gowns	90	4,005,952	314
Eyewear protection frame	90	4,545,734	921
Eyewear protection lens	90	5,816,058	490
Face shield	90	3,064,312	2,871
Gloves (pair)	90	42,369,403	297
Hand sanitizer	90	1,059,362,559	1,181
Mask	90	7,830,136	120
N95 – standard	90	640,783	53
N95 – small	53	0	0
Reusable gowns	90	1,1614,025	247
N95 - half mask	90	3,776	239
N95 - half mask filter	90	24,983	829

* Reflective of current practice; does not include product in circulation/stocked at health care facilities

Health Workforce

- **The limiting factor in any pandemic plan will be human resources.**
- Manitoba's planning is founded in the approach that staffing will be extended and reinforced as much as possible to safely meet the needs of patients and that as much as staffing can be optimized, those staff will have access to protective equipment, space, and supplies/equipment for direct patient care.

Physician Planning

- CMO Leadership from across the province and Provincial Medical Specialty Leadership have been central to the development of the plan.
- Surge planning is mostly focused on critical care, medicine/family medicine.
 - Current Physician Workforce in all Specialty Areas
 - Physician/Clinical Assistants, Medical Residents
 - Community and Primary Care Physician Support -
 - Training/Orientation - ~100 physicians have responded to our call to work in various clinical areas

Staff Planning

Nursing, Allied Health, Support Staff

Team Based Models of Care

- Utilizing highly skilled and specialized staff in leadership roles, with appropriate support and help to safely manage patient care across an expanded bed base.
- Guiding principles were established in the spring to support staffing model changes. Consultation has occurred with 23 regulatory colleges.

Staff Planning

Nursing, Allied Health, Support Staff

- **Current Staff** – identify our most experienced and specialized staff working in critical care, medicine, surgery, ambulatory care settings
- **Trained Staff** – identify all staff who have been trained in specialty care areas (e.g. critical care) but who are working elsewhere in the system (~600 critical care trained nurses)
- **Past Staff** – call out for former staff with specific skills sets or who could backfill staff moved to more specialized areas (~31 retirees hired; 197 new hires since April; 405 total hires to COVID-19 Pool)
- **Future Staff** – identify skills and competencies of health care students (~6000 students)

Regulatory Bodies

Scope of Practice

- Identify scope of practice and opportunities to use the broader skills of staff.
- Jurisdictional review of models of care and approaches being taken elsewhere.

Duties and Tasks

- Work has begun to break down the care needs of a patient within critical care and/or medicine and to identify tasks that must be done by the most specialized members of the team.
- Tasks that can be supported by other team members working within their scope of practice with guidance and oversight are also a focus.
- This informs new models of care and nurse to patient ratios that will allow a team based approach.

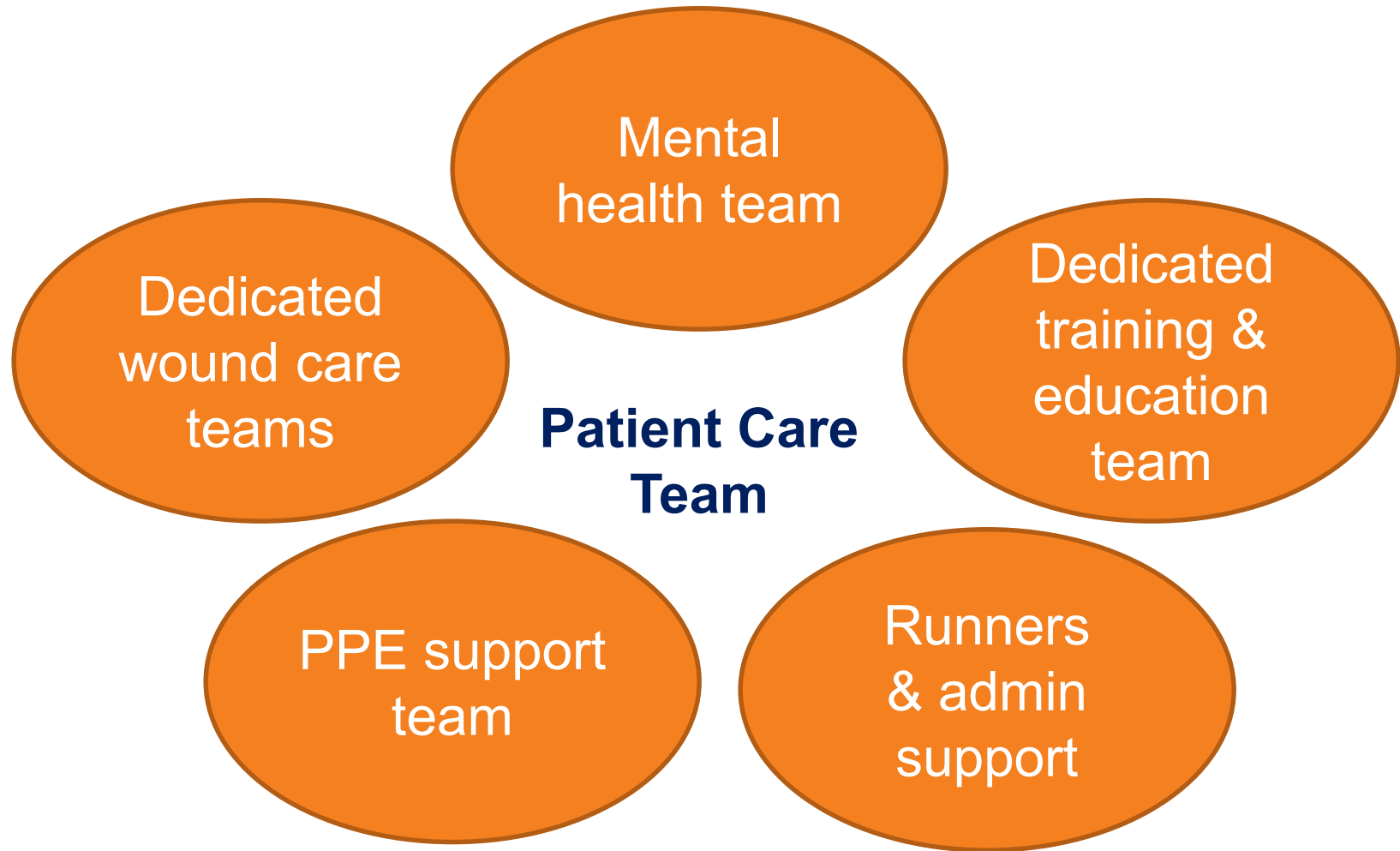
Example

- **Critical Care Team Based Model -**
- Within medicine or critical care – physiotherapists can perform a chest assessment, manage intake or output and assess vital signs and interpret laboratory results
- Consider how can we incorporate allied health to full scope of practice – respiratory therapists, pharmacy, rehab assistants to support an expanded nurse to patient ratio while safely providing patient care.
- (e.g. RT can take vitals, read an EKG, monitor vent settings).

Example – HSC Medicine Pilot

- **HSC Medicine Pilot -**
- A list of daily activities has been developed and the nursing team, along with colleagues, have determined which activities can be safely performed by other professionals as members of a care team.
- The intent is to free up specialized nursing staff to perform duties that only they are equipped to do.
- This will begin on a small scale at HSC with the intention to spread. Regular touch points and huddles will occur as staff learn new workflows and perform new functions and a formal review will occur at the end of each shift.

Support, Training and Orientation



Phased Approach

- Planning has been developed provincially but with localized context and resourcing
- Existing capacity will be accessed first before expanding capacity
- COVID-19 patients not requiring critical care will be kept as close to home as possible
- Critical care intended to remain at the current sites
- Patients cohorted by unit
- As COVID demands increase, non-COVID low acuity patients will be moved from the facility to identified low acuity overflow areas/care spaces



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