

Analysis of Emergency Medicine Services and Workforce Alignment in Newfoundland and Labrador

Objective

To compare the level of emergency medical services (EMS) in Newfoundland and Labrador (NL) to those in Tasmania (TAS) and to assess the alignment of the workforce and level of service provided in each hospital and health centre.

Practice Points

1. In health centres in NL service is unsustainable and unstable, closures have become common.
2. Health centres are predominantly used for primary care rather than emergency care. Health centres better meet population needs providing primary care or urgent care.

Results

Table 1. Number of Facilities in TAS and NL Providing Each Level of EMS

Level	Description	TAS	NL
1	Basic life support provided by an Registered Nurse (RN)	7	0
	Access to a physician or family physician for attendance at the facility within 30 minutes		
2	24 hour advanced life support provided by an RN	6	0
	Access to a physician and/or paramedic for attendance at the facility within 15 minutes		
3	On-site emergency treatment for low-risk patients with uncomplicated minor acute illnesses without the need for referral to a higher level EMS	1	12
	On-site emergency treatment for the initial management of sick patients pending referral and transport to a higher level facility		
	Ambulance patients are not managed on-site with the exception of suspected acute coronary syndrome and subacute patients		
4	Medically staffed by emergency physicians	1	10
	On-call access to emergency physicians 24 hours		
5	Access to on-site interventional cardiology and critical care medicine services 24 hours	1	0
6	Capacity to manage complex trauma	1	6
	Provides a full range of time-critical medical services 24 hours		

- In TAS, only hospitals provide emergency treatment, along with life support available at rural inpatient facilities.
- Emergency treatment is provided in all hospitals and health centres with acute beds in NL.

Table 2. Description of Workforce Requirements to Provide Each Level of EMS

Level	Workforce Description
1	On-site RN 24 hours for basic life support
	Access to a physician
2	On-site RN 24 hours for advanced life support
3	Medically staffed by family physicians, rural and remote medicine specialists, rural and remote medicine trainees or physicians with postgraduate training in emergency medicine
	Fellow of the Royal College of Physicians and Surgeons of Canada (RCPSC), emergency medicine for clinical governance and education and training on-site during business hours
	Resident in emergency department 24 hours on-site
4	On-site RNs with emergency medicine experience available 24 hours
	Emergency physicians on-site 16 hours a day and on-call 24 hours
	RNs with experience and/or post graduate qualifications in emergency nursing on-site 24 hours
	Emergency medicine residents on-site 24 hours
5	General surgeon on-site and on-call 24 hours
	Internal medicine specialist on-site and on-call 24 hours
	Critical care medicine specialist on-site/on-call after-hours
	On-site intervention cardiology services on-call 24 hours
	Clinical nurse specialist providing clinical leadership in emergency care
6	Clinical nurse educator to support undergraduate and post-graduate nursing students and skill development of nurses
	Specialist pharmacist, emergency
6	On-site medical and surgical sub-specialists to support emergency service, including neurosurgery, cardiothoracic surgery, vascular surgery, and angiography

Table 3. Level of EMS and Level of Workforce Providing EMS for Each Hospital in NL

Hospital	Service Level	Workforce Level
Eastern Health (EH)		
Health Sciences	6	5 (6M)
St. Clare's	4	3
Janeway	6	4 (2M)
Carbonear	4	4
Burin Peninsula	4	2
Dr. G.B. Cross	6	4
Central Health (CH)		
James Paton	6	4
Central NL	6	4
Western Health (WH)		
Western Memorial	6	4
Sir Thomas Roddick	4	2
Labrador-Grenfell Health (LGH)		
Charles S. Curtis	4	4
Labrador	4	2
Labrador West	4	4

- Most hospitals in NL do not have the workforce required to support the level of emergency services being provided.

Table 4. Level of EMS and Level of Workforce Providing Emergency Medicine for Each Health Centre in NL

Health Centre	Service Level	Workforce Level
Eastern Health (EH)		
Dr. Walter Templeman	3	2
Dr. William H. Newhook	3	2
Placentia	3	2
Dr. A.A. Wilkinson	4	2
Bonavista	3	2
US Memorial	3	2
Grand Bank	1	2

Table 4 continued

Health Centre	Service Level	Workforce Level
Central Health (CH)		
Connaigre	3	3
Dr. Y.K. Jeon Kittiwake	3	3
Fogo Island	3	3
Notre Dame Bay	3	3
Lewisporte	1	3
Dr. Hugh Twomey	1	3
Green Bay	3	3
Baie Verte	3	3
A.M. Guy	3	3
Western Health (WH)		
Calder	4	2
Dr. Charles L. Legrow	4	2
Bonne Bay	3	2
Rufus Guinchard	3	2
Labrador-Grenfell Health (LGH)		
White Bay Central	3	2
Strait of Belle Isle	3	2
Labrador South	3	2

- Health centres in Eastern, Western, and LGH do not have the workforce required to support the level of emergency services being provided.

Conclusions

1. If the workforce was not spread so thin, it would be better able to staff core facilities and potentially provide better quality care with improved outcomes for patients. This will need an improved ambulance system to transport emergencies to locations where the resources and skills to provide the care needed are located while paramedics provide care during transport without need to delay ultimate care by receiving initial care in health centres.
2. CH reports they have the required workforce in health centres, but since the survey has been completed, there have been many ER closures in the region so this is probably no longer the case.