

# NL vs. Tasmania: Level of Hospital Services

## Objective

To compare acute hospital services currently provided in NL, an island province of Canada (CAN), to Tasmania (TAS), an island state of Australia (AUS).

## Methods

1. We compared the clinical services matrix for Tasmanian hospitals to those provided currently in NL, with the limitation that the role delineation criteria have not been applied to hospitals in NL.
2. TAS hospitals were defined by level of service for 47 services. The level of service ranges from the lowest level 1 to the highest level 6 (Figure 1).
3. The definitions can be obtained from the Tasmanian Role Delineation Framework and Clinical Services Profile at [dhhs.tas.gov.au](http://dhhs.tas.gov.au).
4. Here we provide comparisons for only 10 services.

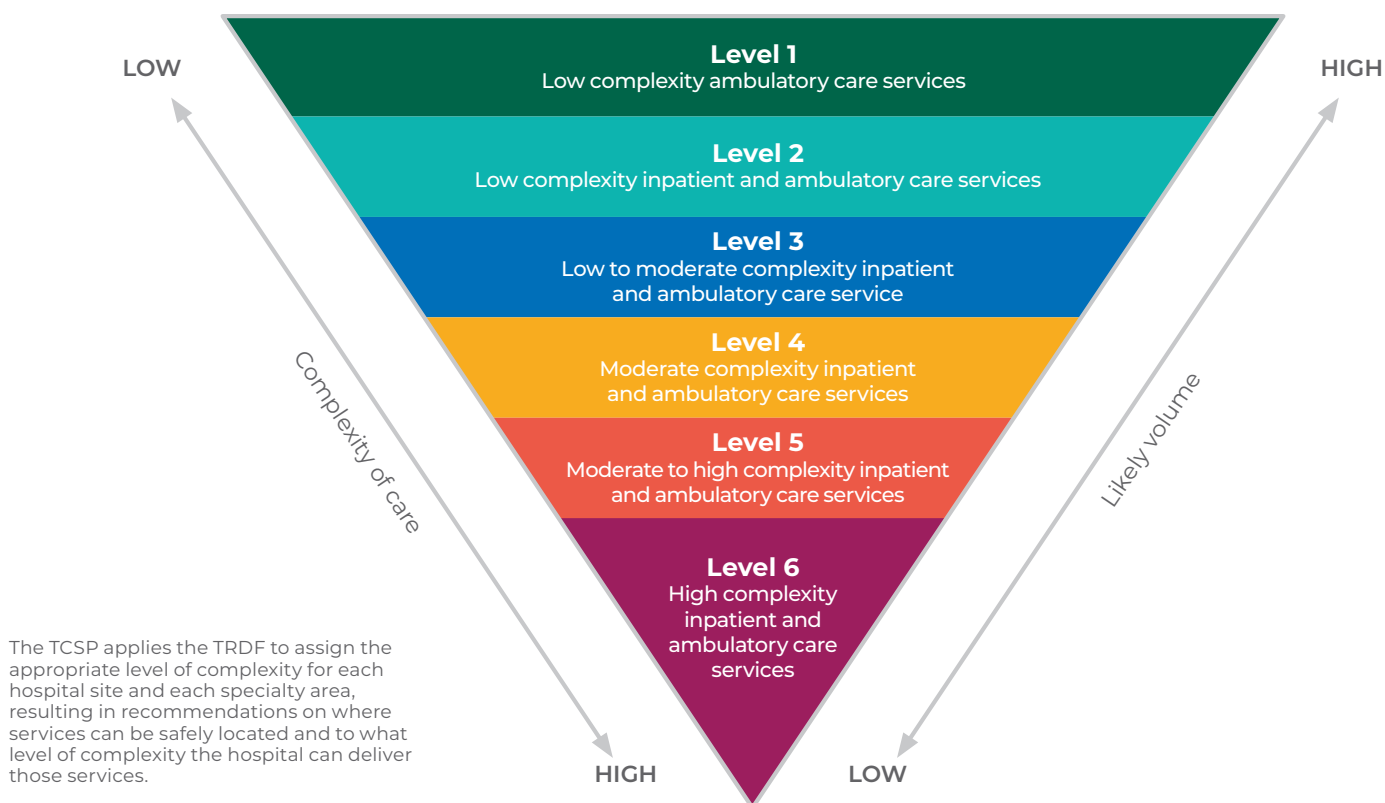


Figure 1. Tasmanian Role Delineation Framework Service (TRDF) Complexity Levels

## Results

- NL has 13 acute care hospitals, 1,022 beds and 15 health centres which provide acute care (110 beds).
- TAS has 4 acute care hospitals and 13 health centres.

### A. OBSTETRICS

**Table 1. Number of Hospitals by Level of Service (1–6) for Obstetrics in NL and TAS**

	1	2	3	4	5	6
NL	0	0	0	7	2	1
TAS	7	0	0	1	1	1

- N births/year: NL: 4,052; TAS: 5,835.
- Despite having a lower birth rate, NL provides a substantially higher level of obstetrics services. Level 1 in TAS provides community antenatal and postnatal care by a midwife for mothers and infants who have normal care needs, with access to an obstetrician. There are no planned birthing services.
- Level 4 (7 services in NL) provides intrapartum care for low and moderately complex mothers and babies with pregnancies  $\geq 34$  weeks by an obstetrician.

### B. PEDIATRIC MEDICINE

**Table 2. Number of Hospitals by Level of Service (1–6) for Paediatrics in NL and TAS**

	1	2	3	4	5	6
NL	2	6	1	0	1	0
TAS	9	0	1	1	1	0

- The increased level for paediatrics in NL is driven by the presence of paediatricians in 6 centres.

### C. GENERAL SURGERY

**Table 3. Number of Hospitals by Level of Service (1–6) for General Surgery in NL and TAS**

	1	2	3	4	5	6
NL	--	0	0	1	10	2
TAS	--	0	1	1	1	1

- If level 5 is defined as doing general surgery with a moderate to high level of complexity and risk and has an on-site ICU, there are 10 level 5 general surgery units, which is substantially higher than in TAS. Seven of the surgery units do less than 200 inpatient surgeries per year.

### D. INTENSIVE CARE

**Table 4. Number of Hospitals by Level of Service (1–6) for Intensive Care in NL and TAS**

	1	2	3	4	5	6
NL	--	0	1	9	1	2
TAS	--	1	0	1	1	1

- If an ICU is defined as providing mechanical ventilation, there are 9 level 4 ICUs in NL, a level of service substantially higher than in TAS.

### E. ORTHOPEDICS

**Table 5. Number of Hospitals by Level of Service (1–6) for Orthopedics in NL and TAS**

	1	2	3	4	5	6
NL	--	7	0	1	3	2
TAS	--	0	1	1	1	1

- St. Anthony does <200 orthopedic inpatient procedures/year. St John's Orthopedic Service works collaboratively on 2 sites.
- Level 2 is the provision of minor reduction of fractures on low-risk patients by a doctor with anaesthesia support.

### F. UROLOGY

**Table 6. Number of Hospitals by Level of Service (1–6) for Urology in NL and TAS**

	1	2	3	4	5	6
NL	--	--	--	1	1	2
TAS	--	--	--	2	0	2

## G. GENERAL MEDICINE

Table 7. Number of Hospitals by Level of Service (1–6) for General Medicine in NL and TAS

	1	2	3	4	5	6
NL	—	0	16	1	6	5
TAS	—	13	0	1	1	2

- TAS has 13 low-acuity medical services with access to a FP whereas NL has 16 FP lead health centres. In addition, NL has substantially more units with internal medicine attending staff than TAS.

## H. GERIATRICS

Table 8. Number of Hospitals by Level of Service (1–6) for Geriatrics in NL and TAS

	1	2	3	4	5	6
NL	—	0	0	1	1	0
TAS	—	9	5	1	1	1

- TAS has a far more robust geriatrics care structure than NL, which is rudimentary. A level 2 service in TAS provides outpatient and outreach care from a higher-level geriatrics service and has access to a health practitioner specializing in geriatric assessment. A level 3 service has inpatient beds in the facility with onsite FP, and access to a visiting geriatrician. Level 4 adds interdisciplinary assessment and management of the care and needs of older people, with service by a geriatrician. Level 5 adds inpatient care by a geriatrician, and level 6 provides inpatient care for specialized geriatric assessment.

## I. MEDICAL IMAGING

Table 9. Number of Hospitals by Level of Service (1–6) for Medical Imaging in NL and TAS Based on Equipment

	1 General Radiology	2 +Ultrasound	3 +CT	4 +MRI	5 +Nuclear	6 +Interventional
NL	24	4	7	0	4	1
TAS	10	3	1	1	1	1

- NL has substantially more general radiology units than TAS (40 vs. 17), ultrasound (16 vs. 7), CT (12 vs. 4), MRI (5 vs. 2), nuclear imaging (5 vs. 2), and interventional radiology (5 vs. 2).

## J. EMERGENCY MEDICINE

Table 10. Number of Hospitals by Level of Service (1–6) for Emergency Medicine in NL and TAS

	1	2	3	4	5	6
NL	0	0	13	11	0	2
TAS	7	6	1	1	1	1

- Level 1 is basic life support by a RN with access to a doctor within 30 minutes. Level 2 is 24 hour advanced life support by an RN with access to a doctor and/or paramedic within 15 minutes, Level 3 is a unit staffed by FPs who can provide emergency treatment to low risk patients and have access to a higher level emergency unit. Level 4 is staffed by emergency physicians 24 hours and has an ICU onsite. Level 5 has access to interventional cardiology and critical medicine 24 hours. Level 6 can manage complex trauma and can provide full range of time critical services 24 hours.
- NL has substantially more emergency services than TAS.

## Conclusions

- NL has substantially higher level of hospital services than TAS for Obstetrics, General Surgery, Intensive Care, Emergency Medicine, General Medicine, and Medical Imaging.
- NL has an extremely large dearth of Geriatrics services compared to TAS.
- Each level of service by speciality has different service requirements and workforce requirements, which have not been assessed. The current provision of these requirements in NL should be obtained, and a plan created to rationalize services and to provide optimal outcomes for the population.