

Submission  
No 168

**INQUIRY INTO HEALTH OUTCOMES AND ACCESS TO  
HEALTH AND HOSPITAL SERVICES IN RURAL,  
REGIONAL AND REMOTE NEW SOUTH WALES**

**Organisation:** Manning Base Hospital Taree (Department of Medicine)  
**Date Received:** 8 December 2020

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Partially  
Confidential

Recently, the physicians of the MBH met to discuss the Parliamentary Enquiry. The outcome highlighted the need for a submission. It was collectively decided that the aim for the submission was to create a meaningful, patient centred dialogue. This document is based on a collaborative approach from the members of the Department of Medicine MBH to highlight issues and provide potential solutions within the framework of the Terms of Reference.

## **TERMS OF REFERENCE**

1. That Portfolio Committee No. 2 - Health inquire into and report on health outcomes and access to health and hospital services in rural, regional and remote NSW, and in particular:
  - (a) health outcomes for people living in rural, regional and remote NSW;
  - (b) a comparison of outcomes for patients living in rural, regional and remote NSW compared to other local health districts across metropolitan NSW;
  - (c) access to health and hospital services in rural, regional and remote NSW including service availability, barriers to access and quality of services;
  - (d) patient experience, wait-times and quality of care in rural, regional and remote NSW and how it compares to metropolitan NSW;
  - (e) an analysis of the planning systems and projections that are used by NSW Health in determining the provision of health services that are to be made available to meet the needs of residents living in rural, regional and remote NSW;
  - (f) an analysis of the capital and recurrent health expenditure in rural, regional and remote NSW in comparison to population growth and relative to metropolitan NSW;
  - (g) an examination of the staffing challenges and allocations that exist in rural, regional and remote NSW hospitals and the current strategies and initiatives that NSW Health is undertaking to address them;
  - (h) the current and future provision of ambulance services in rural, regional and remote NSW;
  - (i) the access and availability of oncology treatment in rural, regional and remote NSW;
  - (j) the access and availability of palliative care and palliative care services in rural, regional and remote NSW;
  - (k) an examination of the impact of health and hospital services in rural, regional and remote NSW on indigenous and culturally and linguistically diverse (CALD) communities; and
  - (l) any other related matters.

## Statistics:

### 1. Hospital

- a. Manning Base Hospital is a major 160-bed regional centre that provides a broad range of specialist services.
- b. The hospital has specialist wards/units for:

Surgery/Day surgery	General medicine
Critical care	Obstetrics
Paediatrics	Emergency services
Oncology	Palliative care
Renal services	Rehabilitation
High dependency nursing	Mental health

- c. These facilities are backed up by a broad range of diagnostic and allied health services including radiology, ultrasound, physiotherapy, pharmacy, pathology, occupational therapy, social work, ECG and discharge planning. Plus, administration and hotel services support.
- d. The national bed allocation per 1000 patient population is 2.5 and based on this statistic, Manning Hospital should be a 250 bedded hospital with equitable and comparable resource allocation.
- e. For every 1000 PERSONS admitted to hospital, 24.6 ARE CONSIDERED POTENTIALLY PREVENTABLE. This compares to the NSW rate of 22.65/1000 (HNECCPHN 2015).
- f. The Manning Valley & Great Lakes has the oldest age demographic population in NSW and is predicted to be 47% of the population aged over 55 years by 2021 (ALGA 2004).
- g. Manning Hospital is the largest employer in the Manning Valley & Great Lakes.

### 2. Socioeconomic status in demographics of Taree (Region)

- a. Based on a range of Census characteristics, Greater Taree LGA's Index of Disadvantage score is 914 compared to the NSW score of 996 (Australia 1000). **THIS INDICATES THAT THIS LGA IS SIGNIFICANTLY MORE DISADVANTAGED THAN THE STATE AND THE NATION AND IS THE MOST DISADVANTAGED LGA IN THE PHN REGION (HNECCPHN 2015).**

% of Population living in economic disadvantage by area

	Taree	Taree Region	Old Bar-Manning Point-Red Head	Wingham
Population living in economic disadvantage (%)	22	19	14	15.2
Population +65yrs living in economic disadvantage (%)	14	13	13	10
Indigenous population living in economic disadvantage (%)	47	33	26	26

(NCOSS 2016)

### 3. Cardiology

- a. There is 1 local cardiologist for Taree and surrounding region. Services provided are consultation, echocardiogram (echo), stress echo, transoesophageal echo (TOE), angiogram/angioplasty (private) in Newcastle.

Services Provided	Annually
Consultation (Private & Public)	2400
Echocardiogram (Private & Public)	3700
Stress echo (Private & Public)	1000
TOE (Private & Public)	60
Angiogram (Private)	270
Angioplasty (Private)	110
Cases transferred to JHH for angio/angioplasty (Public)	≥250

### 4. Geriatrics

- a. Midcoast population estimate 2019: 93,288
- 2001 > 60 years: 21,456 (78,658)
  - 2016 > 60 years: 34,770 (90,299)
  - An increase of 13,314 people of over 60 y.o. in 15 years
- b. This population is serviced by 2 Geriatricians
- c. Residential Aged Care Facilities (RACF)
- 18 RACFs in our area Health Service
  - Current RACF bed estimate 1,577
  - 7 new RACF's over the last 20 years, which account for an additional 646 beds
  - Expansion of many existing RACFs
  - Estimated 3x as many beds in 21 years
  - Travel time is up to 3.5 hours just to drive to and from facilities
  - Multiple "assisted living/retirement" villages

## 5. ICU

Our current allocation is only 2 ICU and 2 HDU beds for Manning ICU servicing the entire Manning & Great lakes area.

### Issues & How the issues impact patient safety and health outcomes:

#### 1. Patient safety and health outcomes

##### a. Cardiology

- i. Outcomes of ACS patients in regional areas is poor in comparison to tertiary centres. The Heart of Inequality Study (ACU 2017) clearly defined that the Federal state of Lyne has the worst cardiovascular outcomes in regional Australia
- ii. Poor transfer times where patients are kept waiting in hospital for a minimum of >3 days to as long as 2 weeks for invasive cardiology treatment.
- iii. As highlighted in a Canadian study (Boyd et al, 2018), patients living furthest from the only cardiac catheterization centre in the Province have the highest rates of Acute Coronary Syndrome + Cardiogenic Shock (ACS + CS) and lowest access to invasive care”.
- iv. The cost of setting up a cardiac catheterization laboratory is comparable to the MRI set up. If this is set up locally, it will save time, money and achieve better outcomes for the patients.
- v. The argument that Port Macquarie is 60 minutes away and will support cardiac patients from Manning is FALSE. This may be true for a small number of patients living in Taree but excludes Forster/Tuncurry, Gloucester, Stroud etc.

##### b. Aging population & how to care for them

- i. Marked increase in demand over years with a decrease in services (withdrawal of services, allied health support, or medical administration),
- ii. No consultation by Medical Administration
- iii. Loss of
  - Transitional Behavioural Assessment and Intervention Service (TBASIS) Unit
  - Visiting Psychiatrist of Old Age
  - Secure ward area for patients with dementia
- iv. Move of Aged Care Services from community setting to Hospital-
- v. Orthogeriatric Service
  - No dedicated Fracture Liaison Nurse
- vi. Waitlist for associated services is between 6-12 months + a further 6-12 months for Geriatrician and Multidisciplinary Team input.

c. Respiratory Unit

Manning as a region does not have Pulmonary Function Testing facilities. This is a fundamental requirement in a 160-bedded hospital catering to a population of ~100,000. In addition, due to the number of sleep related disorders and its sequela, a 3-bedded polysomnography unit should be a part of the Respiratory Unit with appropriate staffing.

d. ICU

The current ICU is incongruent in the amount of work output to the funding structure.

## 2. Equitable access to health care

As previously stated, the population of Taree and surrounds are significantly more disadvantaged when compared to the State (NSW) and the Nation. This should be a serious issue in terms of planning for equitable access to health care and safe health care delivery. When it is widely known that people from lower socioeconomic groups are at greater risk of poor health, have higher rates of illness, disability and death, and live shorter lives than those from higher groups (AIHW 2016), why is it that this particular LGA is not receiving adequate funding? There have been many academic papers written on the topic, collectively stating that:

- access to care can affect a person's socio-economic status through a downward trajectory,
- poverty reduces access to healthcare, which leads to increased morbidity, which leads to increased poverty and further reductions in access to care (McMaughan, Oloruntoba & Smith 2020) and,
- socioeconomically disadvantaged groups are more likely to engage in health-damaging behaviours, experience poorer psychosocial health, make less use of the healthcare system for preventive purposes, and have a more adverse risk factor profile (Turrell & Mathers 2000).

This is further complicated by context. A person's context, such as rurality, also affects access to care, as noted in areas with limited access to care due to lack of healthcare providers (like rural or remote communities). Given the relative difficulty of changing context and the extended timeframe needed to do so, it is essential to target interventions at the more immediately accessible constructs of access to care (McMaughan, Oloruntoba & Smith 2020). As stated by the Australian Institute for Health and Welfare, on average, Australians living in rural and remote areas have shorter lives, higher levels of disease and injury and poorer access to and use of health services, compared with people living in metropolitan areas. Poorer health outcomes in rural and remote areas may be due to multiple factors including lifestyle differences and a level of disadvantage related to education and employment opportunities, as well as access to health services. In 2015, the total disease burden rate in Remote and very remote areas was 1.4 times as high as Major cities. In 2016, people in Remote areas were more likely to report barriers accessing GPs and

specialists than Major cities (AIHW 2019). Why are these statistics even remotely acceptable?

These disparities are known by researchers and policy makers alike. However, in our LGA there are no changes for the better. Why is this acceptable? It isn't, but it is overlooked in the name of efficiency. In terms of funding, efficiency involves the allocation of available resource inputs in a way that provides the best outcomes for the community — in other words, efficiency is attained when the community's wellbeing is maximised, given the resources available (Productivity Commission 2015). In this case, which community? Our community's wellbeing has certainly not been maximised, medically speaking. Would it not be prudent to fund our LGA for evidence-based practice for clinicians and our community's needs? That would require consultation between our health professionals and the executive management of the PHN.

### **3. Inadequate management of resources (how funding is utilised)**

Currently our hospital is facing a crisis between the administration and medical/nursing staff/allied health staff. There has been an increase in funding, yet there has not been any consultation to establish the best use of the funding. We now have a multilevel carpark at the cost of \$20million that provided and extra 12 car parks. Additionally, the new radiology and renal unit has problems regarding the practical space and how it is utilised. For example, a mobile Xray machine cannot access the renal unit. The radiology rooms are small, and the new beds do not fit. Most importantly, the access for ICU patients is exceptionally difficult and could have life threatening consequences. In addition, our current use of locum doctors requires approximately 10% of the hospital's budget (\$120 million).

### **4. Attract & retain medical/nursing workforce and skill mix**

How do we get them here and keep them?

There are significant risks to patients as a result of understaffing and inadequate skill-mix, including compromised safety and diminished quality of care; increasing morbidity (incidence of disease) and mortality (death rate); and an increased occurrence of adverse or sentinel events (injury or death resulting from a health care intervention, not the underlying condition of the patient). These factors can also increase the length of stay for patients in health care settings (ANF 2009). When there is disharmony in the workplace there can be a widespread sense that "priorities of caring are being subordinated to the demands of administration" and, there can an exacerbation of low morale and stressful working conditions (such as increasingly high and complex workloads) of those that remained (Newman et al 2001).

For the hospital, turnover costs also may be linked either to direct or indirect costs. Some of the direct costs include recruitment, orientation, training, and termination of staff. Indirect costs are created by a reduced work environment, diminished

productivity, additional staff turnover, and reduced or lessened health outcomes (Health Stream 2017).

## 5. No standardisation of infrastructure

Given the issues in access to health care services regionally, would it not be beneficial to standardise the infrastructure throughout regional centres? One example is both Tamworth and Port Macquarie hospitals offer a cardiac catheterization laboratory. However, where there is a desperate need (2021 projection is 47% of the population will aged 55 and over (ALGA 2004)), the Manning Base hospital does not. Another is radiation oncology services.

## SOLUTIONS

### 1. Cardiology

Given that access to invasive care appears to provide the best chance of survival, continued public health efforts to increase access” (Boyd et al 2018). In addition, the need and the critical mass of work, a local cardiac catheterization laboratory will address the important issues of patient outcomes in terms of better outcomes, reduced travel, stress on family members ('treat locals locally'), economic benefit to both the area health board and the state government where the gains made here can be appropriately redistributed to other areas of need.

With the restructuring of the operating theatres, it is cost efficient to add a HYBRID OPERATING ROOM (is a surgical theatre that is equipped with advanced medical imaging devices such as fixed C-Arm) as it has multi-purpose uses.

#### **Clinical Applications of Hybrid Operating Room:**

1. General Surgery including Emergency, Laparoscopy,
2. Orthopaedic surgery including Emergency, Arthroscopy,
3. Cardiology (coronary angiography + PCI, pacemaker implantation, direct current cardioversion, TOE, large line placements),
4. Gastroenterology (gastroscopy, colonoscopy),
5. Respiratory (bronchoscopy),
6. Nephrology (renal biopsy, large line placements) and
7. Biopsies using the advanced imaging techniques.
8. **Future:** Vascular surgery (This will enable MBH to attract a vascular surgeon)

**Cost:** Between 2-3 million depending on what is the hospital's need, multi-speciality needs etc.

## 2. Geriatrics

By providing access to growth funds to our LGA, there can be an improvement in the capacity to provide services to our ageing community. To adhere to the Australian Local Government Population Ageing Action Plan, this will include improving the quality of the hospital and community infrastructure, employ additional doctors, nurses and allied health professionals to deliver multidisciplinary, team-based primary care and help counter growing regional inequality.

As a priority for the delivery of geriatric care, an Acute Care of Elderly (ACE) Unit is needed. This would consist of a 6-bedded delirium/behavioural management unit where elderly can be appropriately managed with optimal levels of stimulation and regular re-orientation.

## 3. MACU

This is a 10-bedded unit will provide comprehensive care to patients for 48hrs prior to transfer to medical ward or home. In order to provide efficient admission process for medical patients, this unit will need to be covered from 8am to 4.30pm by an SRMO / Medical Registrar and JMO. This unit should not be used as an Emergency Short Stay Unit (ESSU) or additional medical ward. NSW health has a clear pathway for MACU patient flow to admission. This unit will require funding to employ a Physician, medical registrar/SRMO and JMO.

## 4. ICU

The number of ICU beds needs to be increased proportionate to the population being serviced and it should be reflective of the national standards. Currently, it is 9.4 per 100,000 of population as per data released on a pre-pandemic setting of baseline activity in Australian ICUs and published in MJA in March 2020. **This is not inclusive of CCU beds.** The ventilator bed capacity needs to be increased to 4 PER 100,000, and the remaining 6 as HDU beds to do the catch-up with the rest of the country. In addition to the capital costs for establishing these additional ICU beds, there should be resources provided in terms of staffing to run the place in a sustainable and safe fashion.

## 5. Retention/Skill Mix

Any effort to strengthen healthcare service quality must concentrate on building and promoting the professional culture of healthcare professionals and should create a conducive environment for working that meets both professional and organization goals. This will increase the job satisfaction, commitment of the professionals towards their organization and promote their intention to stay (Bhattacharya et al (2015)).

## Signatures

Name	Speciality	Signature
Peter BRAUDE	Respiratory	
Giovanna CELLI-MARCHETT	Medical Oncology	
Krishan GUPTA	Acute Care Medicine, Respiratory & Sleep	
Jacinta GUTHRIDGE	Geriatrics	
Anne KNIGHT	Acute Care Medicine, Respiratory	
Nevin KOLLANOOR	Intensive Care	
Edward LIVISHIN	Medical Oncology	
Nilar LWIN	Infectious Diseases	
Seshasayee NARASIMHAN	Acute Care Medicine, Cardiology	
Sathya NOOKALA	Geriatrics	
Purvish PATEL	Acute Care Medicine, Nephrology	
Senanayake PREMATHILAKE	Acute Care Medicine, Gastroenterology	
Hariharan RAMASWAMYKANIVE	Intensive Care	

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