Health Workforce Needs Assessment Summary Report:

Northern Queensland Region

June 2021

Table of Contents

Introduction 2

Participants 3

Workforce and Service Gaps 4

Telehealth in Focus 9

Quantitative Methodology Findings........................14

What People Said?...15

List of Abbreviations 16

Introduction

The Health Workforce Needs Assessment (HWNA), undertaken annually by Health Workforce Queensland, conducts an online survey targeting general practitioners (GPs), practice managers, primary health care nurses, Aboriginal and Torres Strait Islander Health Workers/Practitioners and allied health professionals working in Modified Monash (MM) 2-7 locations in Queensland. Survey items are developed to gauge health practitioner and health service manager perceptions about workforce gaps, primary care service gaps, and to identify primary health concerns in their community(s) of practice. Quantitative and qualitative results from this survey that are applicable to the **Northern Queensland (NQ)** region are enclosed in the following report.

The report for the Northern Queensland region supplements the state-wide 2021 HWNA Summary Report which is available on the Health Workforce Queensland website. The 2021 HWNA Summary Report details the HWNA methodology and provides an overview of state-wide workforce issues, numbers, and initiatives undertaken in Queensland during the previous 12 months.

Northern Queensland Region

Participants

Surveys were conducted with general practitioners (GPs), health service/practice managers, primary health care nurses/midwives, Aboriginal and Torres Strait Islander health workers/practitioners and allied health professionals. The total number of participants in **NQ region** were 252, which was made up of 103 general practitioners, 46 practice managers, 21 nurses/midwives, and 79 allied health practitioners (Table 1).

Workforce and Service Gaps

The surveys contained 31 statements about a serious primary care workforce or service gap existing in their community(s) of practice and required participants to rate their level of agreement from **'0 = Strongly disagree'**, to **'100 = Strongly agree'**. There were 18 statements framed in terms of serious workforce gaps and 13 statements about serious primary care service gaps. Higher scores therefore indicate stronger levels of agreement with the statement and a stronger perception of the existence of a serious workforce gap or service gap in the community. The number of general practitioners, practice managers, nurses/midwives and allied health practitioners/others are provided in Table 1 according to HHS areas.

Table 1: NQ Region participants by type and by HHS areas

	Cairns & Hinterland HHS	Mackay HHS	Torres and Cape HHS	Townsville HHS	*NQ Region Total*
Type	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*N* (%)
General Practitioners	46 (43.4%)	21 (32.8%)	13 (68.4%)	23 (59.0%)	**103** (40.9%)
Practice Managers	20 (18.9%)	11 (17.2%)	2 (10.5%)	13 (33.3%)	**46** (18.3%)
Nurses/Midwives	15 (14.2%)	4 (6.3%)	1 (5.3%)	1 (2.6%)	**21** (8.3%)
Allied Health Practitioners/Others	25 (23.6%)	28 (43.8%)	3 (15.8%)	24 (61.5%)	**79** (31.3%)
Total	**106**	**64**	**19**	**39**	**252**

Mean workforce gap ratings are provided in Table 2 and primary care service gap ratings in Table 3. These are presented for the whole **NQ region** as well as for each of the HHS areas, with gap rating means ranked from 1-18 for **NQ region** and each HHS.

Means in 'bold' are values of 60 of higher, indicative of a possible serious gap existing.

Table 2: Mean workforce gap ratings for NQ region and each HHS

	NQ Region Total	*Cairns & Hinterland HHS*	*Mackay HHS*	*Torres & Cape HHS*	*Townsville HHS*
Type of workforce	*M (Rank)*	*M (Rank)*	*M (Rank)*	*M (Rank)*	*M (Rank)*
Speech Pathology	**72.4 (1)**	**74.9 (1)**	**74.8 (2)**	**65.9 (14)**	**67.5 (2)**
Psychology	**72.0 (2)**	**66.3 (3)**	**76.7 (1)**	**81.4 (2)**	**74.9 (1)**
Occupational Therapy	**68.4 (3)**	**68.8 (2)**	**72.7 (3)**	**68.4 (10)**	**63.2 (4)**
Social Work	**66.9 (4)**	**65.4 (4)**	**71.6 (5)**	**74.6 (4)**	**61.3 (5)**
Nutrition/Dietetic	**61.5 (5)**	55.5 (12)	**66.9 (7)**	**69.1 (8)**	**64.8 (3)**
General Practitioner	**60.9 (6)**	**64.6 (5)**	**72.0 (4)**	**65.4 (16)**	43.7 (15)
Nursing/Midwifery	59.5 (7)	58.8 (9)	58.5 (11)	**72.9 (6)**	56.5 (6)
Podiatry	57.3 (8)	57.6 (10)	58.9 (10)	**68.3 (11)**	50.4 (11)
Sonography	57.4 (9)	**63.2 (6)**	45.5 (14)	**68.1 (12)**	54.1 (9)
Exercise Physiology	56.9 (10)	56.9 (11)	**60.6 (9)**	**74.3 (5)**	48.3 (12)
Diabetes Education	56.5 (11)	53.7 (14)	**61.8 (8)**	**79.5 (3)**	47.2 (13)
Dentistry	56.1 (12)	59.9 (8)	47.3 (15)	**81.9 (1)**	45.9 (14)
ATSI Health Worker/Practitioner	54.7 (13)	**60.9 (7)**	**67.4 (6)**	**66.4 (13)**	55.6 (7)
Audiology	54.2 (14)	51.6 (15)	50.7 (12)	**71.3 (7)**	54.6 (8)
Radiology	50.1 (15)	49.4 (16)	46.6 (13)	58.5 (17)	51.2 (10)
Physiotherapy	49.0 (16)	54.1 (13)	37.2 (17)	**65.5 (15)**	43.7 (15)
Optometry	44.6 (17)	44.0 (17)	46.1 (16)	**69.0 (9)**	23.3 (18)
Pharmacy	33.1 (18)	32.4 (18)	32.3 (18)	53.9 (18)	26.2 (17)

For the **NQ region** there were six workforce gap ratings of 60 or more. The highest means were for speech pathology, psychology, both above 70. The occupational therapy, social work, nutrition/dietetic and general practitioner workforce followed ranked 3 – 6. There were three types of workforce gap rating means of 50 or lower which were physiotherapy (*M* = 49.0), optometry (*M* = 44.6), and pharmacy (*M* = 33.1).

Cairns and Hinterland HHS had seven workforce gap ratings of 60 or more. The highest rating was for speech pathology (M = 74.9). Occupational therapy, psychology, social work, general practitioner, sonography, and Aboriginal and Torres Strait Islander health worker/practitioner workforces were ranked 2-7.

Mackay HHS had nine means higher than 60, with psychology, speech pathology, occupational therapy, social work, and general practice respectively having the highest rankings, all above 70. Four more workforces, Aboriginal and Torres Strait Islander health worker/practitioner, nutrition/dietetics, diabetes education, and exercise physiology, were respectively ranked next highest, with mean ratings above 60.

Torres and Cape HHS had all but two workforce groups with mean rates above 60. There were two workforces, dentistry and psychology, that were ranked 1 and 2 with M = 81.9 and M = 81.4 respectively. Five workforces had mean gap ratings above 70, including diabetes education, social work, exercise physiology, nursing/midwifery, and audiology. Six workforces had mean workforce gap rating above 60; nutrition/dietetics, optometry, occupational therapy, podiatry, sonography, Aboriginal and Torres Strait health worker/practitioner, speech pathology, physiotherapy, and general practitioner.

Townsville HHS had five workforces above 60, with psychology rating M = 74.9, and speech pathology, nutrition/dietetics, occupational therapy, and social work scoring in the 60s. Seven workforces had mean ratings below 50, exercise physiology, diabetes education, dentistry, physiotherapy and general practice (tied), pharmacy, and optometry.

Table 3: Mean service gap ratings for NQ Region and each HHS

Type of service	NQ Region Total M (Rank)	Cairns & Hinterland HHS M (Rank)	Mackay HHS M (Rank)	Torres and Cape HHS M (Rank)	Townsville HHS M (Rank)
Mental Health	**73.90 (1)**	**73.86 (2)**	**70.49 (2)**	**68.20 (6)**	**78.69 (1)**
Community Based Rehabilitation	**71.80 (2)**	**75.28 (1)**	**71.18 (1)**	**75.00 (2)**	**65.38 (4)**
Alcohol and Other Drugs	**67.79 (3)**	**67.53 (3)**	**61.98 (6)**	**66.06 (10)**	**74.85 (2)**
Aged Care	**66.29 (4)**	**65.06 (8)**	**69.09 (3)**	**70.33 (5)**	**63.68 (6)**
Palliative Care	**64.32 (5)**	**65.66 (4)**	**65.59 (4)**	**73.07 (4)**	57.06 (11)
Social Support Services	**64.13 (6)**	**65.09 (7)**	59.84 (8)	**67.33 (7)**	**65.32 (5)**
Disability	**63.58 (7)**	**65.58 (5)**	**64.11 (5)**	**75.00 (3)**	55.74 (12)
Health Promotion	**63.49 (8)**	**62.18 (10)**	**60.56 (7)**	**64.93 (11)**	**68.61 (3)**
Oral Health	**62.66 (9)**	**65.46 (6)**	54.03 (12)	**77.29 (1)**	59.94 (8)
Refugees and Immigrant Health	**60.88 (10)**	**63.42 (9)**	59.60 (9)	47.43 (12)	**61.74 (7)**
Child Health	56.23 (11)	57.21 (11)	48.90 (13)	**66.00 (9)**	58.70 (10)
ATSI Health	54.75 (12)	48.87 (13)	56.20 (10)	**66.06 (8)**	58.98 (9)
Maternal Health	51.11 (13)	50.67 (12)	54.27 (11)	45.14 (13)	50.91 (13)

Health Workforce Queensland

There were ten service gap means of 60 or more reported in the **NQ region.** The two highest means, above 70, were for mental health and community-based rehabilitation services.

The **Cairns & Hinterland HHS** reported ten service gap means above 60, the two highest means, above 70, were for community-based rehabilitation and mental health services. The community-based rehabilitation service gap mean for the Cairns & Hinterland HHS was the 2nd highest service gap rating reported in the region.

The **Mackay HHS** reported seven service gap means above 60, the two highest means, above 70, were community-based rehabilitation and mental health services.

The **Torres & Cape HHS** reported eleven service gap means above 60, the five highest means, all above 70, were oral health, community-based rehabilitation, disability, palliative support, and aged care services. In contrast to the other HHS areas the Torres & Cape was the only HHS to report oral health as its service of greatest need. The oral health service gap mean was the 2nd highest reported mean across the entire **NQ region**.

The **Townsville HHS** reported seven service gap means above 60, the two highest means, above 70, were for mental health and alcohol and other drugs services. The mental health service gap rating in the Townsville HHS was the highest reported service gap rating in the entire **NQ region**.

Child health, Aboriginal and Torres Strait Islander health, and maternal health services were consistently reported with means below 50 across the **Cairns & Hinterland**, **Mackay, and Townsville HHS.** Conversely, in the **Torres & Cape HHS**, child health and Aboriginal and Torres Strait Islanded health services had means of above 60 indicating a stronger indication that there were serious gaps for these services in some communities.

Workforce Gap Comments

Comments about workforce gaps (*N* = 72) were thematically analysed and the main themes and issues are presented below:

Workforce Gap Themes

Insufficient Workforce (*n* = 32):

- ✓Allied Health Workforce (*n* = 26)
- ✓General Practitioner Workforce (*n* = 3)
- ✓Specialist Practitioner Workforce (*n* = 2)

Access to Services (*n* = 35):

- ✓Wait Time (*n* = 13)
- ✓Cost (*n* = 8).
- ✓Travel (*n* = 8)
- ✓Funding (*n* = 6)

Workforce Issues (*n* = 15)

- ✓Recruitment (*n* = 5)
- ✓Inadequate Incentives (*n* = 5)
- ✓Competition with Hospital System (*n* = 5)

**comment counts may be larger than the number of issues due to multiple issues identified in one comment*

The main workforce gap theme was centred around **insufficient workforce**, specifically in the **allied health** and **medical practitioner** workforce in **NQ region**. Several participants mentioned insufficiencies in the Aboriginal and Torres Strait Islander health workforce.

Access to services was the second most prominent theme identified, due to four primary reasons; out-of-pocket cost, prolonged wait times, lack of funding, and having to travel long distances to metro-hubs to receive care.

In addition to this, several participants reported difficulties in the **recruitment and retention** of both **allied health** and **general practice** staff. This has been attributed to the inability of these practices to provide sufficient incentives (e.g. renumeration, benefits, work-life balance) to secure staff as a result of poor funding and limited income.

Service Gap Comments

Comments about service gaps (*N = 28)* were thematically analysed and the main themes and issues are presented below:

Service Gap Themes

1. **Mental Health Services (*n* = 6)**
2. **Financial viability (n = 6)**
3. **Transport availability and costs (*n* = 5)**
4. **Community Based Rehabilitation Services (*n* = 3)**
5. **Alcohol and Other Drug Services (n = 3)**

**comment counts may be larger than the number of issues due to multiple issues identified in one comment*

Participant responses for primary health care service gaps highlighted themes regarding inadequate **mental health, alcohol and other drug** and **community-based rehabilitation** service provision. **Financial viability of services** and **transport availability and cost** were also significant themes.

Telehealth in Focus

An unanticipated consequence of restrictions due to the COVID -19 pandemic in 2020 was advances in the use of telehealth in primary health care in Queensland, including the national rollout out of temporary COVID-19 MBS Telehealth items. The HWNA survey included several questions to gauge perceptions of practitioners and managers in remote and rural Queensland about the impact and potential for telehealth. The first item was an agreement rating question where participants were asked to respond to three statements along a 101-point scale from **'0 = Strongly disagree'** to **'100 = Strongly agree'**. The statements were:

1. **Telehealth has had a positive impact on my professional life**
2. **Telehealth has had a positive impact on primary care for community members**
3. **I would like telehealth to be more widely available for rural/remote practitioners**

Mean agreement ratings are presented in Table 4.

Table 4: Mean telehealth impact ratings for NQ region and each HHS

Telehealth item	*MM 2-7 QLD*	*NQ Region Total*	*Cairns & Hinterland HHS*	*Mackay HHS*	*Torres & Cape HHS*	*Townsville HHS*
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*	*M (SD)*
Positive impact on professional life	72.27 (25.75)	72.23 (25.62)	72.06 (25.02)	68.42 (29.03)	68.61 (22.49)	77.08 (24.45)
Positive impact on community members	76.60 (22.14)	78.37 (20.45)	76.93 (21.57)	79.40 (20.25)	71.56 (19.84)	82.31 (18.57)
Would like telehealth to be more widely available.	82.51 (20.59)	84.15 (18.49)	82.67 (17.68)	85.61 (19.15)	77.00 (26.37)	87.52 (15.51)

The majority of means for all items were higher than 70, suggesting that participants viewed telehealth as having a positive impact on professional life and on primary care for community members. The mean rating for positive impact on professional life for the **Mackay HHS** (M = 68.4) and the **Torres and Cape HHS** (M = 68.6) were below 70. Compared to QLD overall, the **NQ region** had relatively similar mean ratings across telehealth items. The **Torres and Cape HHS** had the lowest or tied for lowest mean ratings across all telehealth items in the **NQ region.** In contrast, the **Townsville HHS** reported the highest ratings across all items.

Participants were given the opportunity to provide more information about their impact ratings and whether they would like telehealth to be more widely available.
Comments (*N* = 76) were thematically analysed, and the following themes identified.

Telehealth Impact Themes

Improved patient access (*n = 40*):

- Improved access to regular & follow-up care
- Improved access to specialist care

Improved practice financial standing (*n = 14*):

- Able to bill Medicare for telehealth appointments

Increased workload (*n = 10*):

- Technology challenges
- Appointment setup
- Lack of ePrescribing
- Harder to do patient assessments

Unsuitable for some appointments (*n = 28*):

- Visual observations
- Interpreter required
- New patients

**comment counts may be larger than the number of issues due to multiple issues identified in one comment*

Four themes were identified from the 76 comments provided on the impact of telehealth. These were reports of patients having **improved access to care** including specialist care and the **improved financial standing of the practice** because of Medicare billing for telehealth services. Some practitioners reflected on the **increased workload** associated with telehealth because of technology challenges, time required to set up appointments, and a lack of ePrescribing. Some noted **telehealth was unsuitable** for new patients and those requiring visual observations or an interpreter.

Some participants commented on the impact of a lack of access to appropriate devices and connectivity concerns. In general, this tended to be coupled with a preference for face-to-face consultations.

The next item asked participants to indicate how satisfied they were with Telehealth delivered through both telephone and through online video communication. Responses were along a scale from '**0 = Not at all satisfied**' to '**100 = Extremely satisfied**'. Results are presented in Table 5.

Table 5: Mean satisfaction with telephone and video telehealth provision

Telehealth Satisfaction	*MM 2-7 QLD M (SD)*	*NQ Region Total M (SD)*	*Cairns & Hinterland HHS M (SD)*	*Mackay HHS M (SD)*	*Torres & Cape HHS M (SD)*	*Townsville HHS M (SD)*
Telephone Telehealth	72.19 (23.41)	71.0 (22.3)	72.3 (21.4)	70.0 (26.3)	68.3 (17.0)	70.4 (21.8)
Video Telehealth	65.04 (22.14)	65.0 (25.9)	65.0 (24.7)	65.7 (27.7)	71.5 (17.0)	62.0 (29.1)

Most satisfaction means for **telephone telehealth** were above 70, with the **Torres & Cape HHS** having the lowest mean (M = 68.3) and **Cairns and Hinterland HHS** having the highest mean (M = 72.3). For **video telehealth satisfaction**, all means were above 60, closely reflecting the state mean. The highest satisfaction rating was the **Torres & Cape HHS**, which was 6 points above the state mean. The lowest was **Townsville HHS**, which was 3 points below the state mean. These results show that there was generally higher satisfaction with telephone telehealth than video telehealth in the **NQ region**, with the exception of the **Torres & Cape HHS** where participants preferred video telehealth.

Participants were asked to comment on any issues they experienced with telephone and/or video telehealth. Responses (*N* = 52) were analysed, and major themes are provided below:

Telehealth Issues Themes

Technology Issues (n = 50)

- Connectivity issues (internet and phone)
- Affordability, knowledge, and access to technology

Other Issues (n = 66)

- Platform only appropriate for some consultation types
- Hard to get patient context
- Patients forget to attend appointments
- Does not support other attendees in consults

**comment counts may be larger than the number of issues due to multiple issues identified in one comment*

In total, eleven comments noted that telehealth supported the quality and continuation of care, particularly for compliance with ongoing treatment. 101 comments provided information on issues. The first main theme of these comments was **"Technology Issues"**: patchy internet bandwidth and telephone services that inhibited video conferencing and phone calls; affordability, knowledge, and ownership of technology and data. **"Other issues"** were mainly comments around consultations that were not appropriate for telehealth delivery, including; initial consultation where a doctor develops an understanding of the patients' social determinants of health, assessments requiring palpation and observation, and patients that required either a translator, a family member, or a culturally specific and safe service. For **Torres & Cape HHS**, the particular concern was patient handover; the systems side of telehealth where a "patient's documentation is recorded inconsistently between services".

The final telehealth question asked participants to suggest any changes they would like for the improvement of primary care delivery via telehealth in the community(s). An analysis of responses (*N* = 81) was undertaken, and themes were identified which are presented below:

Telehealth Changes Themes

Developing guidelines around telehealth (n = 36)

- Clinic-clinic communication
- When telehealth is inappropriate
- Training requirements
- Cultural safety online

Developing appropriate technology supports (n = 21)

- Secure/encrypted platform
- Stronger connectivity
- Office phone lines supporting 3way+ calls

Cheaper and stable connectivity (n = 19)

- Doctor-only bandwidth
- Cheaper satellite internet and phone

**comment counts may be larger than the number of issues due to multiple issues identified in one comment*

The three main themes for changes in future telehealth services all revolved around the development of systems for telehealth integration into the health system. A need to **develop guidelines** for parameters and expectation management of what telehealth can be used for (clinic-clinic paperless communication, types of health appointments), and training for appropriate use (technology training, cultural safety training). **Developing appropriate technology supports** such as a secure encrypted platform and phone lines that could support three-way calls were suggested, as was a doctor-only bandwidth and **cheaper and stable** satellite internet and phone services.

In all HHS regions, except the Torres and Cape HHS, there was a call for more supported funding of telehealth MBS items and for a public health campaign to educate communities about the usefulness and trustworthiness of telehealth. In the **Torres and Cape HHS**, there was a continued call for the maintenance of face-to-face options, to support holistic and culturally safe health consultations.

Quantitative Methodology Findings

Below are the top ten SA2 areas ranked by need for the Northern Queensland region. These areas were identified by a methodology which incorporated GP FTE to population ratio, MM classification of remoteness, and SEIFA (IRSAD). There were further adjustments based on the population identified as being of Aboriginal and Torres Strait Islander origin and also for vulnerable age groups, those under 5 and over 65. Also included are the main towns or communities located within each SA2. Further information about the methodology can be found in the state-wide HWNA available on the HWQ website.

Northern Queensland Region: Statistical Area 2 (SA2) Ranked by Need

Rank	SA2	Main towns or communities
1.	Torres Strait Islands	Badu Island | Boigu Island | Mabuiag Island | Saibai Island
2.	Croydon- Etheridge	Croydon | Georgetown
3.	Aurukun	Aurukun | Wallaby Island
4.	Tablelands	Almaden | Dimbulah | Mount Malloy
5.	Herberton	Herberton | Mount Garnett | Ravenshoe
6.	Palm Island	Palm Island
7.	Kowanyama	Kowanyama | Pormpuraaw
8.	Cape York	Coen | Hope Vale | Laura | Mapoon
9.	Collinsville	Collinsville | Mount Coolon
10.	Northern Peninsula	Bamaga | New Mapoon | Injinoo

What people said….

"There is a severe gap in the level of health care that is accessible to those that are living within the community and it[s] surrounds due to the ***geographical location*** *as well as* ***the lack of interest and resources*** for those of other specialities to come to the area.

… Such disciplines that are lacking and we have seen an increased demand for are ***Radiology, Sonography, Social Work*** and ***Psychology*** - due to the isolated location of the town as well as an increase in drug and mental illness".

- **Dysart**

In the Indigenous communities in which I work, ***there needs to be a personal connection before there is any buy in****. Thus a specialist beaming in or health promotion people extolling virtues does not work without an intermediary such as the patients trusted GP or Long term Nurse from that location. The positives are for the patient not having to travel South for appointments, but it does not replace the face-to-face interactions that remain the basis of making real long-term inroads into health.*

- **Thursday Island**

"There are gaps in … ***psychology, drug rehabilitation, mental health support, social work and physiotherapy*** where acute issues can be accommodated but **serious issues** either **cannot** or have a long wait time equivalent to routine issues. For example, people facing a serious mental health crisis that are not immediately in danger of suicide or committing murder."

- **Yungaburra**

List of Abbreviations

AH	Allied Health
GP	General Practitioner
HHS	Hospital and Health Service
HWNA	Health Workforce Needs Assessment
HWQ	Health Workforce Queensland
IRSAD	Index of Relative Socio-economic Advantage and Disadvantage
MBS	Medicare Benefits Scheme
MM	Modified Monash
NBN	National Broadband Network
NQ	Northern Queensland
NQPHN	Northern Queensland Primary Health Network
PHN	Primary Health Network
SA2	Statistical Area Level 2
SEIFA	Socio-Economic Indexes for Areas

Our Vision

To ensure optimal health workforce to enhance the health of Queensland communities.

Our Purpose

Creating sustainable health workforce solutions that meet the needs of remote, rural, and regional and Aboriginal and Torres Strait Islander communities.

Our Values

Integrity

We behave in an ethical and professional manner at all times showing respect and empathy.

Commitment

We enhance health services in rural and remote Queensland communities.

Equity

We provide equal access to services based on prioritised need.

Acknowledgements

Health Workforce Queensland is funded by the Australian Government Department of Health.

Health Workforce Queensland acknowledges the traditional custodians of the land and sea where we live and work, and pay our respects to Elders past, present and future.

Authors

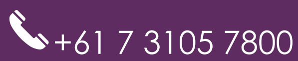
David Wellman
Christian Hughes
Julia Henseleit

GPO Box 2523, Brisbane

Queensland Australia 4001

Level 4/348 Edward Street,

Brisbane QLD Australia 4000


+61 7 3105 7800

+61 7 31057801

admin@healthworkforce.com.au

healthworkforce.com.au