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ANALYSIS OF MANAGEMENT PRACTICE

# COVID-19: PERSPECTIVES FROM THE EXPERIENCE OF ONE AUSTRALIAN PRIMARY HEALTH NETWORK

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## ABSTRACT

The Covid-19 pandemic is still current but has been particularly well addressed, so far, in the Australian context. This article presents an analysis of management practice to describe the experience of one Primary Health Network (PHN) and its approach and response to the pandemic within its geographical region in accordance with Federal government directives. The PHN is a large geographic area that includes the Central Coast, just north of the Sydney basin, the Newcastle and Hunter Valley region and the Northwest/New England region that extends from Tamworth to the Queensland Border.

The article describes the PHN function within its primary healthcare role (PHC) in respect to responding to national initiatives to address and reduce the impact Of the Covid-19 event. The article recounts the Federal Governments directive described through the 'National Cabinet' and the Federal Health Department and the PHN response to those directives and initiatives. The article also recounts the actual cases of Covid-19 over the period of the epidemic.

The article describes the governance, leadership, and management initiatives. The article then describes the PHN approach to evaluation of its approach from the perspective of general practice and other PHC providers as well as providing perspectives from governance, management, and staff. The evaluation process identified significant impacts on providers and strong support for the continuation of telehealth measures. There were positive responses to the PHN activity and as a strong sense of trusted information, ongoing education, and general engagement.

### KEYWORDS

Covid-19 Pandemic, primary healthcare, primary health networks

## INTRODUCTION

The Covid-19 pandemic while still current has been particularly well addressed, so far, in the Australian context. The 'post-Covid' phase, at time of publication is proving more problematic, with some significant spikes in notifications occurring at an individual state and territory level.

This article presents an analysis of management practice to describe the experience of one Primary Health Network (PHN) and its approach and response to the pandemic within its geographical region. The PHN is a large geographic area that includes the Central Coast, just north of the Sydney basin, the Newcastle and Hunter Valley region and the Northwest/New England region that

extends from Tamworth to the Queensland Border. This PHN operates as the Hunter New England and Central Coast (HNECC) PHN which incorporates two state based acute sector local health districts within its geographic footprint. This PHN has previously been more fully described. [1]

The authors analyse internal documentation, reports and minutes and include their own perceived experiences of the PHN function within its primary healthcare role (PHC). The article recounts the Federal Government's directives described through the 'National Cabinet' and the national or Federal Health Department in the PHN response. The article also recounts the actual cases of Covid-19 over the period of the pandemic.

The PHN evaluation of its approach from the perspective of general practice and other PHC providers is analysed. Perspectives from governance, management, and staff are included. The evaluation process identified significant impacts on providers and strong support for the continuation of telehealth measures. There were positive responses to the PHN activity and as a strong sense of trusted information, ongoing education, and general engagement.

## THE PHN COVID_19 PANDEMIC CONTEXT

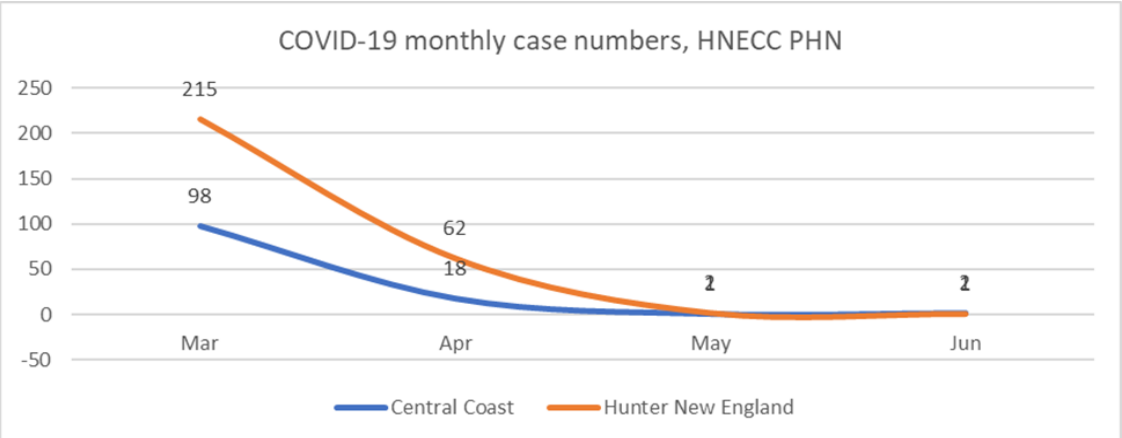
The context of the Australian health system is that acute care is mostly delivered through acute care facilities managed and operated by local health districts (LHDs) at the individual state and territory level. Primary Health Care (PHC) is mostly provided through individual general practices that are both for profit and not for profit, and other PHC providers such as allied health. PHC providers are supported by the Commonwealth, Federal or national government through regionally based primary health networks (PHNs). The PHNs also commission and contract a range of PHC services through these PHC providers on behalf of the Federal government. Addressing the pandemic requires collaboration and engagement of these two major organisational arrangements and of the three levels of government in Australia at national, state and territory, and local government structures.

The PHN role in the Federal government's' response to Covid-19 was initially requested on 21st February 2020 prior to local increases in cases, to assist with distribution of respiratory masks to general practices, community pharmacies and Aboriginal Community Controlled Health Services (ACCHSs), also described as Aboriginal Medical Services (AMS).

As the number of positive cases started to rapidly increase, it was announced by the Federal Government on 10th March 2020 [2] that PHNs would assist in identifying locations for up to 100 Community Respiratory Clinics (CRCs). These CRCs were intended to complement other Covid-19 clinics operated by LHDs and private pathology providers. By the following day, PHNs had additionally been verbally requested by the Federal Government to provide Covid-19 training to general practitioners and the broader primary care workforce. Within the PHN region of Hunter, New England and Central Coast, at the time the region had less than 10 positive Covid-19 cases. Within two weeks this had increased to 168 case on 25th March 2020, and within a month had escalated to 378 cases on 9th April 2020. [3]

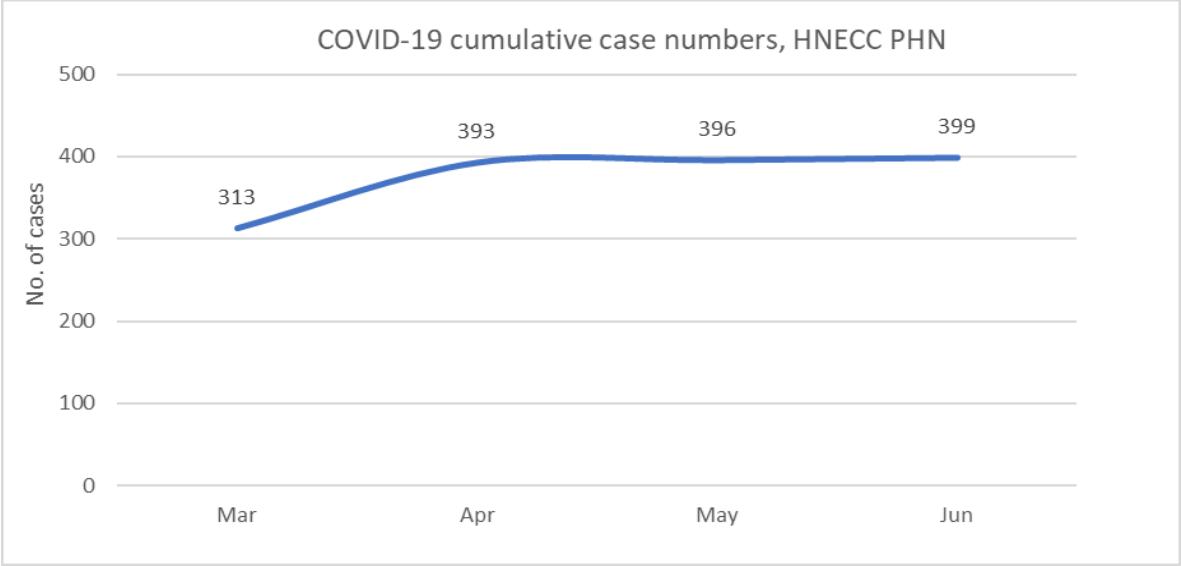
This activity is described in Figure 1 below in terms of monthly case numbers and in Figure 2 that describes the cumulative case numbers.

**FIGURE 1: COVID_19 MONTHLY CASE NUMBERS, HNECCPHN**




Source: Internal PHN documents

**FIGURE 2: COVID_19 CUMULATIVE CASE NUMBERS HNECCPHN**




Source: Internal PHN documents

Within the region, the greatest numbers of cases have been concentrated in the following local government areas (LGAs):

- Central Coast (117 cases)
- Lake Macquarie (56)
- Newcastle (55)
- Mid-Coast (39)
- Port Stephens (34)
- Maitland (32)
- Cessnock (24)

The detail of cases from each local government area is described in Table 1 below:

**TABLE 1: CASES PER 100,000 POPULATION BY LOCAL GOVERNMENT AREA**

| LGA | CASES | CASES PER 100,000 |
|---|---|---|
| Armidale Regional | 4 | 12.7 |
| Central Coast NSW | 117 | 33.3 |
| Cessnock | 24 | 40.3 |
| Dungog | 5 | 53.0 |
| Glen Innes Severn | 2 | 22.5 |
| Gunnedah | 1 | 7.8 |
| Gwydir | 0 | 0 |
| Inverell | 3 | 17.9 |
| Lake Macquarie | 56 | 26.9 |
| Liverpool Plains | 2 | 25.3 |
| Maitland | 32 | 37.2 |
| Mid Coast | 39 | 41.2 |
| Moree Plains | 1 | 7.5 |
| Muswellbrook | 1 | 6.0 |

| | | |
|---|---|---|
| Narrabri | 0 | 0 |
| Newcastle | 55 | 32.5 |
| Port Stephens | 34 | 46.8 |
| Singleton | 4 | 16.8 |
| Tamworth Regional | 13 | 20.7 |
| Tenterfield | 1 | 16.0 |
| Upper Hunter Shire | 1 | 7.0 |
| Uralla | 1 | 16.3 |
| Walcha | 0 | 0 |

Source: NSW Health (https://data.nsw.gov.au/nsw-covid-19-data/cases)

Sources of infection for cases in HNECC PHN have been:

- Overseas (76.3%)
- Locally acquired - contact of a confirmed case and/or in a known cluster (15.1%)
- Locally acquired - source not identified (7.3%)
- Interstate (1.3%)

## THE PHN RESPONSE TO THE COVID_19 PANDEMIC

The PHN response to its role in support of regional primary healthcare services and in the safety and security of regional communities can be described in terms of three phases. Phase 1 is described as 'control and preparation', phase 2 is described as 'emergency pandemic management' and Phase 3 is described as 'recovery and planning ahead'. Events of this emergency nature, of course, do not occur in an ordered fashion or flow, so the above descriptors represent an organisational attempt to give the reader a logical order in which to understand circumstances that mostly occurred simultaneously.

### PHASE 1 CONTROL AND PREPARATION

The response of the PHN can be described as agile and involved rapid allocations of responsible executives for external delivery of both internal and external operational matters, and the rapid implementation of a Covid-19 response team. In part this was enabled by a decline in the PHN's normal business activity. The strategies and operational responses included:

### Governance, leadership, and management initiatives

This Covid-19 response leadership team comprised of the managers of all key response functions and ensured an agile and coordinated response. A coordinated communications protocol was introduced, to ensure effective communication with the PHN board, federal and state departments of health, primary care providers, local hospitals, and internal staff. Involvement of GPs, allied health, ACCHS teams and aged care providers was rapidly increased.

Internal operations were altered, involving redeployment of the majority of the PHN workforce into Covid-19 response activities, and involving most staff working from home, apart from the primary care support, mask distribution and other emergency operations.

Policies for working from home and business continuity were updated, and risk and critical function plans were implemented and adapted through the pandemic. This work included priority ratings and descriptions of the priority of critical functions, lead and alternate staff members, and strategies to manage critical functions in the event of serious illness or incapacity.

The PHN was able to utilise a pre-existing technology base which serviced a dispersed regional office structure. This enabled staff the capability to work from home.
Key insights from surveying the executive and staff following this experience include:

- Staff self-reported being more productive when working remotely (e.g. can complete tasks at a higher standard without interruption and meet deadlines). Staff also acknowledged that working from the office allows for incidental collaboration, attendance at important meetings and the building of personal and professional relationships. After this experience, staff would like to continue a mixture of working from the office and remotely.
- Staff valued the digital capability at the PHN. Regular video meetings and 'team huddles' have resulted in more cohesive teams and cross functional teamwork has increased since working remotely. Most of our managers have staff across various office locations and having all staff working remotely increased perceived trust and equability across teams.
- The executive of the PHN have identified challenges in enabling further dispersion of the workforce, while maintaining levels of teamwork and cohesion that enable a positive culture and ongoing successful delivery.

The experience of working in responsive teams with increased flexibility in roles has been positive, but also a challenge to continue in post-Covid-19 operations. Similarly, the increase in engagement with GPs, allied health, Aboriginal health, and aged care providers during Covid-19 has been identified by the PHN as a key challenge to continue.

Examples of major involvements of the PHN in Phase 1 include the following:

### Mask and personal protection distribution

The acquisition of product, mostly masks was predominantly through the Federal Department of Health with 287,000 masks (6864 boxes), described as PPE (personal protective equipment), distributed by the PHN. Significant mask distribution continues to occur through the Aboriginal Health Access Team (AHAT) and Primary Care Improvement officers (PCIO) of the PHN. In addition to masks supplied through the Federal government, the PHN was the recipient of donated masks from the NIB Health Foundation (a foundation of a private health insurance fund), and a further contribution from funds organised by the Australian Chinese community, facilitated by the Society for Health Administration Programs in Education (SHAPE), an association representing university health management programs in Australia and the Asia Pacific.

These latter donations enabled the PHN to assist the broader cross section of PHC providers (particularly Allied Health) while the government provision was directed towards general practices, ACCHSs and community pharmacies. These initiatives enabled a greater profile and engagement with the region's service providers.

### Community respiratory clinics

Community respiratory clinics (CRCs), an initiative of the Federal government to provide a further option for testing, have been established across the PHN region with assistance in establishment from a private government contractor and from the PHN. These clinics were established and still operate at Raymond Terrace, Tamworth, Erina, Moree, and Boggabri, with a sixth being established at Taree. As at the beginning of June more than 6000 patients have been assessed at CRCs within the HNECC region. In addition to these clinics and testing at general practices, the two State based local health districts (Hunter New England and Central Coast Local health Districts) that have a significant state based acute care provision role, also conducted extensive general community testing across the two districts within the PHN region.

### Training for GPs, ACCHS, commissioned services and residential aged care facilities

As part of the PHN strategic response some 27 events with more than nine thousand participants were provided. Some events were provided with the support of, or through other organisations such as the Asthma Foundation. These events were held substantially as live stream webinars at both the regional and in some cases, sub regional level.

The PHN drew upon the expertise of local clinical experts, including infectious diseases and public health physicians and enabled direct access to advice for local primary care clinicians. Recent events included a webinar for allied health and commissioned services about 'managing stress through resilience and self-care' and business continuity, and a mastermind class on E-prescribing and Plan-Do-Study-Act (PDSA) approaches to service delivery and safe practices in the pandemic context. Webinars were hosted with focus areas, including clinical pandemic preparedness and management of that context for residential care facilities (RACF) and the Aboriginal and Torres Strait Islander communities. The high levels of attendance and participation rates underline the importance and positive appreciation of providers for this educational support. The recorded events remain

accessible through the PHN website and the content of 'HealthPathways' has been aligned with webinar content.

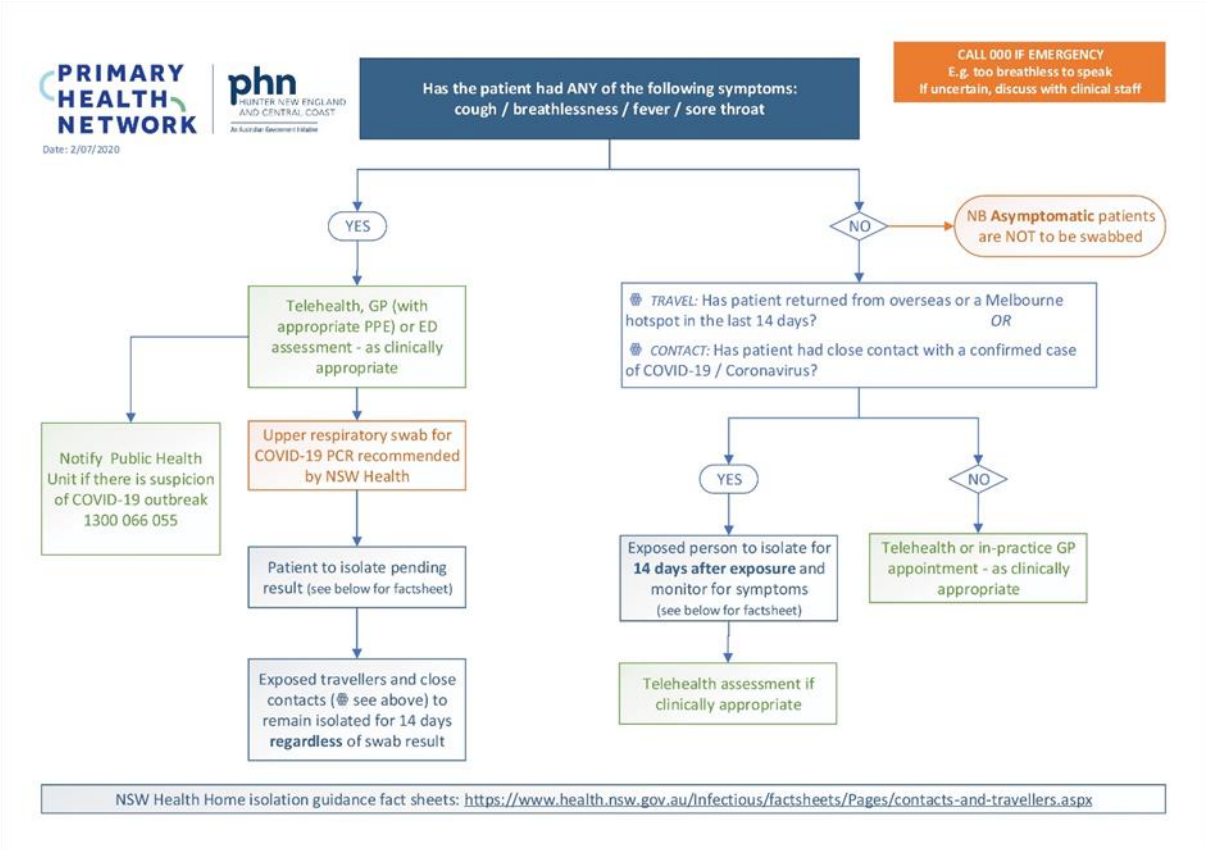
The success of the training and education initiatives suggests an ongoing strategy for the PHN in the 'new normal' of a sustainable element of business strategy.

### Information for GPs, ACCHS, patients and communities

'HealthPathways', a set of pathways and options for clinicians to use at the point of care in referral and management of patients through the health system, were rapidly updated to include Covid-19 pages of added content specific to within the region. These pages were utilised by PHC providers on more than 82,000 occasions. Disability resources were added to the initial assessment and management pathway.

Pathways for Covid-19 assessment and management in children and in palliative care pathway have been added. The Central Coast ongoing assessment and management pathway is now operational and strengthening of Aboriginal health content and resources continues. Patient information views were greater than twenty thousand and daily updates by email now has more than 3451 subscribers. The utilisation of 'HealthPathways' was extensive and favourably supported by providers. An example of one pathway is described in Figure 3 below:

**FIGURE 3: COVID-19 GP TRIAGE FLOW CHART, HNECC PHN**




Source: Hunter New England Community 'HealthPathways' https://hne.communityhealthpathways.org/707728.htm

## PHASE 2: EMERGENCY PANDEMIC MANAGEMENT

The main features of this phase included scenario planning to respond to outbreaks and the development of a general practice template for this purpose that was distributed to general practices through the PCIO team. A capacity status tracker has been developed based on a model from the United Kingdom National Health Service. [4] This innovative capacity tracker is an online tool where general practice, Aboriginal medical services and residential aged care facilities can provide real-time information during (and after) the Covid-19 pandemic. This helps to rapidly link with response and support plans and services.

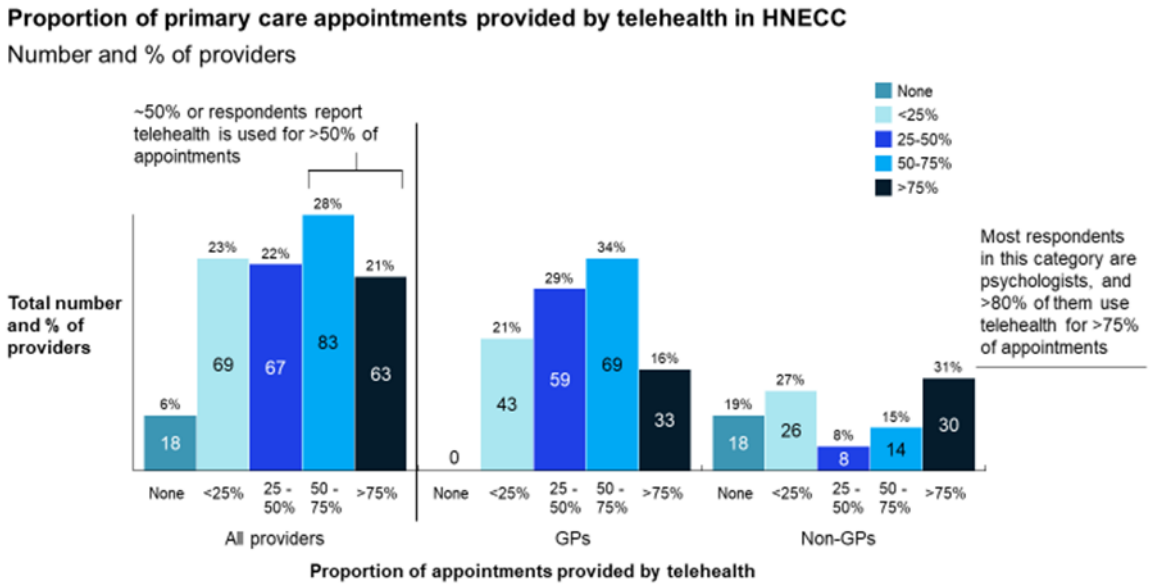
The tracker currently has 189 registered users, including 83 general practice and Aboriginal medical services that represents 20% of providers. More than 63% of residential aged care facilities (RACF), 106 in number are registered users.

The complexity of the pandemic and the need for the PHN to operate not only across internal teams but also together with other state and commonwealth organisations saw the PHN take the initiative in the establishment of an emergency operations centre. This enabled an increase in the out of hospital emergency coordination between the major organisations, being the HNECCPHN and the local health districts of the HNELHD and the CCLHD. This collaboration was effective and consistent with the 'national cabinet' approach and was additionally benefited by the ongoing inclusion of LHD representatives in the PHN's board governance. The collaboration at the regional level also developed a comprehensive primary and aged care risk matrix.

## EVALUATION – PHASE 1 AND 2

The PHN conducted a Covid-19 impact survey over the April/May period of 2020. The survey, distributed online through the PHN digital channels, received 300 responses predominantly from general practices and additionally from other PHC providers such as allied health practices. The 204 general practices represent 50% of general practitioners in the region. All 8 AMS' also responded to the survey. Further, detail of the response is provided in Figure 4.

**FIGURE 4: PROPORTION OF PRIMARY CARE APPOINTMENTS PROVIDED BY TELEHEALTH IN HNECCPHN**




Source: Incorporating telehealth into the future of Australian Primary Healthcare – Continuation of Telehealth MBS Items post Covid-19. May 2020 [5]

## MAJOR FINDINGS

The key findings and results indicate that pandemic has had a significant negative impact on many general practices and allied health practices across the region. The acceptance and uptake of telehealth has been extraordinary and the feedback from practices has endorsed the work of the PHN as being appreciated and useful. It is intended that the results will be utilised to enable further consultations with clinicians and providers on key issues, priorities, success, and innovations to guide further responsive delivery from the PHN.

The results indicate that 26% of practices tested for coronavirus. This was in addition to the testing undertaken by the two LHDs and that of the CRCs. 46% of practices reported a serious negative impact on practice caseloads. At the same time 37% of practices reported a serious impact on the emotional wellbeing of staff. 59% were concerned about the future emotional wellbeing of staff. In addition, 74% of practices found 'healthpathways' and PHN regular updates provided the most valuable Covid-19 support.

These updates were described by one member of the Community Advisory Committees (CACS) as her most trusted sources of Covid-19 information throughout this period. This feedback was consistent across general feedback and survey results. In addition to the positive 'healthpathways' support the provision of information through specific webinars and the provision of PPE supplies were also favourably supported.

'HealthPathways' is an online health information portal for GPs and other primary health clinicians, to be used at the point of care. It provides information on how to assess and manage medical conditions, and how to refer patients to local specialists and services.

Specifically, general practices reported that they were testing for Covid-19 in 24% of practices in the Hunter sub region, 33% in the New England Northwest and 27% in the Central Coast. At the same time general practices reported a serious to severe negative impact on caseloads for 42% of practices in the Hunter, 53% in the New England NorthWest and 50% on the Central Coast. Additionally, there was a reported serious to severe negative impact on staff wellbeing for 32% of practices in the Hunter, 57% in the New England and 41% on the Central Coast. Again, the Hunter, New England NorthWest found 'healthpathways' and PHN updates as the most valuable, whereas the Central Coast favoured PPE supply the most.

### TELEMEDICINE

The percentage of practices using telehealth for 50 -100% of appointments varied markedly with 48% in the Hunter sub region, 19% in the Northwest/New England and 71% on the Central Coast.

Extensive support for the use of telehealth was also demonstrated in the evaluation survey. 48% of practices overall reported using telehealth for 50-100% of appointments. 49% of practices were using a combination of phone and video for telehealth and at that time Zoom was the most popular video platform. The use of a combination of phone and video in general practice was consistent in the Hunter at 51%, the Northwest/New England at 52% but only at 35% on the Central Coast. Importantly 97% (95% to 98% across the sub regions) of practices asked the PHN to advocate for a continuation of the MBS telehealth consultation rebate.

Subsequently the PHN developed a proposal to government for the continued use of telehealth that was supported by other NSW PHNs and submitted as a statewide policy paper.

## DISCUSSION

The impact of the PHN engagement in the pandemic response has described a capability to respond to emergency management, including the PHN's initiative in the establishment of an emergency operations centre. It demonstrated the capacity of PHC professionals and providers to work alongside each other and for both to be more effective in their respective roles. The capacity to deliver and the appetite for continuing professional development (CPD) across the sector was impressive, and further work is now occurring for its sustainability. The development of the capacity tracker by the PHN was innovative. The positive experience of working in responsive flexible teams was positive and these gains are currently being built into sustainable ways of working.

The evaluation has demonstrated significant and varied levels of impact and stress for PHC practices. The rapid and responsive utilisation of telehealth is impressive as were some rapidly implemented models of care across settings.

The PHN has faced a substantial challenge in supporting PHC through major stress and pressure. This period has seen an extraordinary and positive rise in engagement and an increased familiarisation between the PHN and PHC providers across the region. This creates both challenges and opportunities for the PHN to build on these increased relationships with PHC providers.

The senior executive and the governing body have adopted five key strategies to build upon the learnings from this period in the phase 3 recovery period. They are:

### SUPPORTING GP AND ALLIED HEALTH RECOVERY

This approach intends to build on the success, lessons learned and the meaning behind some of the survey findings by utilising focus groups, and forums, webinars and training events and build on change support strategies. The intent is to identify key priorities and share support practices successes and innovative models. The recent experience has been that providers have come forward and led education and update sessions, and that this voluntary commitment needs to be retained and supported.

### COMMUNITY CAMPAIGN- DO NOT DISTANCE FROM YOUR HEALTHCARE

The evaluation results demonstrated concern about the wellbeing of practitioners and staff and a reluctance on the part of patients to return to the 'old normal'. Feedback from community members indicates that this reluctance largely stems from anxiety around the pandemic and the inadequacy of traditional practice waiting areas to provide recommended distancing. The risk is that the current reduction in chronic care and immunisation processes will worsen health outcomes during and after the pandemic. The campaign is to attempt a return to perhaps a new model of what might become the 'new normal' to address these concerns. Social and local media and a recovery communication plan are being adopted to encourage a reversal of patient trends in primary care.

### SUPPORTING ACCESS TO CARE

The intention here is to build on the key priorities findings described above and it may include initiatives such as pilot(s) of remote monitoring, designing optimal after hours and urgent care, increase suicide prevention, progressing telehealth and digital approaches, and supporting primary care coverage of aged care and further developing Aboriginal 'HealthPathways'. The intent is to actively develop and support a 'new normal' and future opportunities and to be able to respond effectively to emerging needs following the Covid-19 pandemic.

### ALLIED HEALTH STRATEGY

It became obvious that the GP focus, funding, and contractual arrangements of the PHN role did not permit the adequate inclusion of stand-alone allied health PHC providers. The strategy will focus on clinical information management and systems, telehealth, education, and the involvement of allied health clinicians in development of clinical programs and new models of care.

### PHN CULTURE AND DELIVERY - COVID-19 RECOVERY AND PLANNING AHEAD

Continuation of the approach that has already commenced to internal operational activity through staff surveys, focus groups and team consultation and development to identify and preserve gains in delivery, flexibility, and innovation.

## CONCLUSION

The Covid-19 PHN experience has seen rapid and effective response of PHN staff who performed well beyond the normal expectations of workload. They seemed energised by the challenges confronted and this article is partly written to recognise and describe the commitment, innovation, and energy they have displayed throughout this period.

The other significant impact has been the response of general practitioners, allied health personnel and other clinicians and community members. These groups and clinicians unreservedly offered their time and energy to provide education seminars and webinars and to present updates to colleagues and communities as representing the PHN.

These groups, some of whom also participate as either a Chair or member of our clinical and community advisory committees, demonstrated leadership in responding to support requested by the PHN and have enhanced the collaboration generally. This represents a significant increase in engagement and collaboration, an achievement that needs to be consolidated as part of normal practice.

The authors would welcome further feedback around the contents of this article and would encourage other PHNs to publish their experiences and learnings from this period.

### CONFLICT OF INTEREST

DS Briggs is both a Board member, Deputy Chair of HNECCPHN and is Editor in Chief of APJHM. As such, he was excluded from the review and editorial process of this article.

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