

# Evaluation of HealthPathways Response to the Bushfire and COVID-19 Pandemic

in ACT & Southern NSW and Illawarra Shoalhaven regions

December 2021







### **Executive Summary**

#### Introduction

This evaluation is a collaboration between the ACT&SNSW and Illawarra Shoalhaven HealthPathways teams to assess the utilisation and effectiveness of the two HealthPathways platforms during the bushfire and COVID-19 periods.

The evaluation was supported by ACT Health, CHN, COORDINARE, ISLHD and SNSWLHD.

The aim of this joint research is to:

- Determine how HealthPathways supported providers in their response to bushfire and the pandemic in both regions.
- Assess the role HealthPathways played in supporting integrated and coordinated care during the disaster and pandemic response in both regions.

#### **Evaluation questions**

- 1a Was the information on HealthPathways locally relevant and evidence based?
- To what extent did HealthPathways enable rapid access to locally relevant and evidence-based information?
- Did HealthPathways support the integration (and coordination) of care during COVID-19 and Bushfire?
- To what extend did the pathways support health professionals in their response to bushfire/COVID-19?

#### **Evaluation methods**

- 1. Google Analytics
- 2. Joint Quality Assurance Audit
- 3. Semi-structured interviews\*
- 4. Online Survey\*

Other data sources – In addition to the above evaluation methods, this project also incorporated relevant findings from the **Streamliners National Evaluation Report**.

#### Participant engagement

Despite best attempts to recruit a larger sample size of participants to capture a cross-section of clinician experiences and views, the overall engagement from healthcare professionals for this evaluation remained lower than ideal. However, the high demand for clinical services during the bushfire and pandemic response periods were a likely barrier to engagement. More generally, this cohort can also be more challenging to engage as evidenced by other similar evaluation attempts such as the Australian and New Zealand HealthPathways evaluation. <a href="Publication Database">Publication Database</a> (healthpathwayscommunity.org)

#### Data synthesis and report write up

ThinkPlace was engaged to conduct an independent review, synthesis and write up of the evaluation data. This report documents the key findings and recommendations provided by ThinkPlace and HealthPathways program teams.

### **Executive summary** (continued)

#### **Summary of Findings**

## Evaluation question 1a – Was the information on HealthPathways locally relevant and evidence based?

HealthPathways continued to be a trusted source of reference during the bushfire and COVID-19 periods, with an overall increase in site usage for local pathway referrals. The information was rapidly updated in alignment with the rapidly evolving national guidelines.

The information influx related to the bushfires and COVID-19 from across multiple channels may have reduced the need for other clinicians to use or rely on HealthPathways. There is evidence to suggest that some clinicians experienced difficulties finding the relevant localised pathways, leading them to believe these had not been localised.

#### Evaluation question 1b – To what extent did HealthPathways enable rapid access to locally relevant and evidence-based information?

The rapid updates published on the HealthPathways sites made this information easily accessible to users, particularly for those who were already familiar with the websites. The newsletters were an effective channel to distribute important communications.

There is evidence to suggest that further efforts to enable rapid access to information could have been considered. There is also evidence to suggest that the HealthPathways website structure could be improved to support more rapid access to important information.

# Evaluation question 2 – Did HealthPathways support the integration (and coordination) of care during COVID-19 and Bushfire?

Overall, the majority of the information required to support the integration of care was provided on HealthPathways and there is evidence to indicate that this was being accessed by clinicians. Content was tailored to the needs of populations at risk of poorer health outcomes such as Aboriginal and Torres Strait Islander people. However there was some feedback to suggest the need to further strengthen information for populations at risk of poorer health outcomes.

# Evaluation question 3 – To what extent did the pathways support health professionals in their response to bushfire/COVID?

HealthPathways was used more often by practices as a preparation guide for delivering safe and high quality healthcare services, rather than for accessing clinical treatment guidelines.

HealthPathways was also used by clinicians to find pathway and referral information about local mental health services.

There may be a need to explore other opportunities for HealthPathways to support health professionals for future disaster management.

#### **Summary of recommendations**

- Prioritise information to help practices adhere to changing guidelines and navigate local referral pathways
- Continue building the pathways for populations at risk of poorer health outcomes
- Improve awareness and promotion of new content
- Better support clinicians to find the information they need quickly

### **Contents**

- 05 Introduction
- 07 Methods
- 09 Findings
- 21 Recommendations
- 24 Discussion
- 28 Conclusion
- 30 Appendices



### Introduction

#### **Background**

2020 delivered unprecedented challenges to primary care provision. The arrival of the COVID-19 virus in Australia superseded an unprecedented bushfire season that impacted all Australians.

The HealthPathways platforms were able to rapidly review and develop pathways to assist general practice with the preparation and management of the bushfires and pandemic.

This period saw a series of new challenges for clinicians and health care professionals. As events were unfolding so too was the information that clinicians required to ensure that they could provide the best care possible to their patients.

#### Purpose of the evaluation

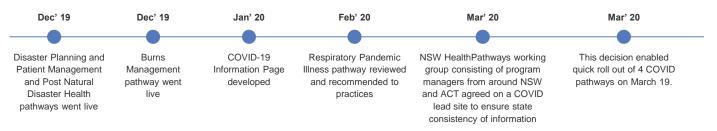
This evaluation is a collaboration between the ACT & Southern NSW and the Illawarra Shoalhaven HealthPathways teams to assess the utilisation and effectiveness of the two respective HealthPathways platforms during bushfire and COVID-19 response periods. The evaluation was jointly undertaken by ACT Health, CHN, COORDINARE, ISLHD and SNSWLHD.

While website data (or Google Analytics) demonstrates increased overall usage of both platforms during these periods, there is more to understand about how HealthPathways can support health system redesign and integration.

The aim of this joint research is to:

- determine how HealthPathways supported general practitioners and their practices in their response to bushfire and the pandemic in both regions.
- assess HealthPathways' role in supporting integrated and coordinated care during the disaster and pandemic response in both regions.

#### High level timeline





### **Methods**

A mixed methods approach was chosen for this research combining both qualitative and qualitative methods. Understanding the research from both a qualitative and quantitative perspective allowed for a holistic understanding of the evaluation.

There were four methods to gather this data.

- 1. **Google Analytics** relating to the websites was analysed to provide an understanding of the interactions that occurred during the bushfire and COVID-19 response periods.
- 2. A Joint Quality Assurance Audit of the two HealthPathways sites was conducted using a number of clinical scenarios specific to COVID-19 and Bushfires to test the utility, currency and relevance of the information presented on HealthPathways
- **3. Semi-structured interviews\*** were completed to contextualise the experiences of using HealthPathways from the clinician perspective. The interviews consisted of 4 GPs, 1 practice manager and 1 practice nurse.
- **4. A Survey\*** was conducted to capture responses at scale from health professionals. The survey consisted of 6 GPs, 1 practice nurse and 1 other healthcare professional.

**The Streamliners National Evaluation Report** of HealthPathways COVID-19 Content was also used to cross-reference the semi-structured interview findings related to COVID-19.

\*It should be noted that participation numbers for the interviews and surveys were lower than desired, and as such, are not a statistically significant representation of all HealthPathways users.



Was the information on HealthPathways locally relevant and evidence based?

Finding 1: HealthPathways continued to be a trusted source of reference during the bushfire and COVID-19 periods, with an overall increase in site usage for the relevant pages

The Google Analytics data shows an overall increase in site usage. The diagram below captures the percentage increase in number of sessions, page views and total users when compared to the same time period in the previous year.

REGION	ACT & SNSW			Illawarra Shoalhaven		
EVENT	BUSHFIRE	COVID-19	OVERALL SITE USAGE	Bushfire	COVID-19	OVERALL SITE USAGE
PERIOD	1Dec19 –	1Feb20 –	1Dec19 –	1Dec19 –	1Feb20 –	1Dec19 –
	28Feb20	30Jun20	30Jun20	28Feb20	30Jun20	30Jun20
% Increase in page views compared to the same period in the previous year	↑ 21%	个 13%	↑ 14%	个 42%	个 74%	个 66%
	(37,763)	(80,570)	(101,482)	(17,866)	(41,537)	(51,637)
% Increase in sessions compared to the same period in the previous year	个 38%	个 42%	个 41%	个 61%	个 112%	↑103%
	(9,863)	(22,981)	(28,717)	(4,307)	(11,524)	(13,992)
% Increase in users compared to the same period in the previous year	↑ 38%	个 3%	↑ 10%	<b>个 18%</b>	↑ 17%	个 16%
	(1,628)	(2,758)	(3,419)	(919)	(1,881)	(2,279)

Was the information on HealthPathways locally relevant and evidence based?

Finding 1: HealthPathways continued to be a trusted source of reference during the bushfire and COVID-19 periods, with an overall increase in site usage for the relevant pages

HealthPathways was reported to be among the more commonly accessed websites for updated information. Many clinicians interviewed noted that they do use HealthPathways as part of the regular day-to-day workflow and for users such as these, the bushfire and COVID-19 response periods were no exception.

Several interview participants made positive comments about the bushfires and COVID-19 information. This included that there was relevant information available such as mental health services, claiming Medicare Benefits Schedule (MBS) for telehealth, and other relevant referral information.

The Joint Quality Assurance Audit findings overall were positive revealing that the information accessed was useful, current and relevant and enabled rapid access to locally relevant and evidence-based clinical and referral information. Pathways were graded on how they align with the WHO's principles of integrated care, with 1 being weak and 5 being strong alignment. Pathways were graded 4-4.5/5. The audit also assessed specific clinical needs and referral associated with populations at risk of poor health, such as Aboriginal and Torres Strait Islander populations, however, it was identified at the time of the audit in September 2020 that pathways lacked options in providing local referral pathways for this group. Subsequently this information has been included. The audit also suggested creating a page for doctors' health needs which has been actioned.

generally use it when I can't find something or it's a bit complicated, I'll use HealthPathways and see if there's any information there. – semi-structured interviews

I'd say I use HealthPathways maybe four days out of five. - Semi-structured interviews

I use [HealthPathways] at least a couple times a day. - semi-structured interviews

#### Was the information on HealthPathways locally relevant and evidence based?

### Finding 2: Information on HealthPathways was rapidly updated in alignment with the rapidly evolving national guidelines

Both the ACT & SNSW and Illawarra Shoalhaven HealthPathways sites were rapidly localised and updated during the bushfire and COVID-19 response periods. The HealthPathways teams also worked closely with specialist clinicians to swiftly generate new and updated content relevant to the bushfires and COVID-19 to ensure the content was relevant and evidence-based from the clinician's point of view.

The Joint Quality Assurance Audit highlighted that the relevant HealthPathways pages appeared to keep up to date with the rapidly evolving needs of these crises and aligned with national guidelines and best practice. The Google Analytics data also showed an overall increase in the number of events that occurred on each of the relevant pages. Events are the user interactions that occur on a page, similar to the number of user 'clicks' on a page. Please refer to the relevant timelines attached in the Appendix of this document (p. 30, 31).

It is also important to note that there was very limited evidence to draw upon during these periods as suggested by the Joint Quality Assurance Audit. Due to the unprecedented level of crises posed by the bushfires and COVID-19, it is fair to assume that existing clinical guidelines and evidence at the time were not fully adapted to the needs of these complex situations.

Finding 3: The rapid information influx related to the bushfires and COVID-19 from across multiple channels is likely to have reduced the need for other clinicians to use or rely upon HealthPathways

It is important to note that during these national periods of crises, clinicians were also receiving significant volumes of information from numerous other trusted clinical sources such as from RACGP, PHN Bulletins, CDC, RLO, Facebook groups and the NSW Health and Commonwealth Department of Health COVID-19 websites.

The interviews conducted for this evaluation as well as findings from the Streamliners report captured multiple anecdotes highlighting that there was no shortage of information during this period and the majority of messages were coming from trusted and reputable sources at the national and local levels.

In terms of the overall increase in usage (as discussed earlier) there is some contrasting evidence from the online survey findings indicating that some clinicians surveyed did not use HealthPathways during these periods. It is possible that the rapid influx of information could explain the lack of uptake by some clinicians during this period although some GPs are infrequent HealthPathways site users for various reasons, see Discussion point 2.

The good thing about [HealthPathways] is that they keep getting updated, they're pretty current in their suggestions and ideas.
- semi-structured interviews

We were bombarded with information – we had seminars, we had webinars and there was lot of information coming in emails.

- Semi-structured interviews

#### Was the information on HealthPathways locally relevant and evidence based?

Finding 4: Some clinicians did not locate COVID or bushfire related information on HealthPathways which could account for some of the less successful responses in the evaluation data

Although there was positive feedback on the localisation of pathways from the interviews, only 37.5% (n=8) survey respondents agreed that they were able to find locally relevant information on COVID-19 while only 12.5% (n=8) agreed when asked the same question about bushfire information.

According to the the Google Analytics and Joint Quality Assurance Audit, all key information had been localised rapidly. This could suggest that some survey participants experienced difficulties in finding the relevant localised pathways. The Monaro Region was specifically mentioned as one such example where pathways were not available, but in fact, these had been localised and were available.

It is unclear from the survey data whether the rest of the respondents actually attempted to find this information from the HealthPathways website. It is also likely that these respondents did not use HealthPathways regularly during this period.

Finding 5: The majority of clinicians who participated in this evaluation did not have direct contact with COVID-positive patients, or patients presenting with severe burns and respiratory issues.

It is important to note that few of the clinicians who participated in this evaluation interacted directly with COVID-19 positive patients and so the treatment guidelines were less relevant to them, which could explain findings indicating lower usage of these pages.

Similarly, few clinicians managed patients with severe respiratory distress related to the bushfires. One account noted that their patient was sent directly to emergency due to their level of respiratory distress.

It should be noted however that there was overall feedback from some clinicians to suggest that they still found this information useful to review, even if they did not need to action it directly.

I just wanted to say thank you for sending out the burns management health pathways before the extreme fire events. While we were spared in the ACT, it was really helpful to be able to review them before work that weekend."

- Google Analytics Report

To what extent did HealthPathways enable rapid access to locally relevant and evidence-based information?

Finding 1: The rapid updates made to HealthPathways made this information easily accessible to users, particularly for those who were already familiar with the website

The information provided relating to the Bushfires and COVID-19 was made available on the ACT & SNSW and Illawarra Shoalhaven HealthPathways sites as soon as they were developed.

Evidence from the interviews and the Joint Quality Assurance Audit suggest that information was generally easy to navigate using the left panel/menu on the website, particularly for users who were already familiar with using HealthPathways.

The Google Analytics report also suggests that users were able to easily access the information that they required. Based on the data, there were no searches for key words directly or indirectly relating to the bushfires and COVID-19 which could indicate that users were generally able to navigate to this information based on the existing website navigation structure.

The good thing about this Pathways is that they keep getting updated every now and then, so they're pretty current involved in their suggestion, and their ideas.

- semi-structured interviews

I quite like the grouping by specialty on the left-hand side, I find that reasonably easy to navigate, - semi-structured interviews

#### To what extent did HealthPathways enable rapid access to locally relevant and evidence-based information?

Finding 2: Newsletters were an effective channel to distribute important communications about the bushfires and COVID-19

Both the CHN and COORDINARE newsletters and email campaigns played an important role in informing newsletter subscribers of new and updated content during the bushfire and COVID-19 response periods.

The user engagement data from email newsletters in ACT & Southern NSW HealthPathways pages shows users were often re-engaging with the information. The data collected on newsletter engagement showed approximately twice as many total views as unique views for the ACT & SNSW HealthPathways newsletters.

Campaign Monitor data from the specific ACT & SNSW HealthPathways newsletter confirms users were accessing relevant pathways links through the newsletters. In the January 2020 Newsletter, the most clicked pathway link was Burns Injury Pathway. In the March newsletter the highest clicked pathway link was COVID-19 Initial Assessment and Management, with 298 click throughs recorded. In the June newsletter the most clicked on link was COVID-19 Recent Changes and a link provided from services Australia for health professionals supporting those affected by the bushfires was clicked 54 times.

Newsletter data from the 26 February 2020 COORDINARE *In The Loop* newsletter showed the COVID-19 Information pathway was viewed 32 times from 26-28 February 2020. The Psychology and Counselling pathway link was accessed on 13 occasions and Adult Psychology and Counselling pathway link was accessed on 14 occasions.

As Google Analytics data did not show a reliance on using the search function for COVID-19 related pathways, and considering the high page views for these pathways, it is assumed that users located the pages via direct links in newsletters and information emails or by navigating from the HealthPathways home pages where COVID alerts were placed. A COVID 'Helping you prepare and respond to COVID-19' video was prominent and/or noticing the COVID pathways listed at the top of the table of contents.

The search facility is easy to use and a variety of key words were linked into COVID pathways so users could type an array of search terms that would land on a listing of COVID related pathways.

Searching was not necessary given the promotion and the presence of COVID links via the homepage.

I [had] been looking up the updates that are emailed through frequently, especially about COVID-19.
- semi-structured interviews

#### To what extent did HealthPathways enable rapid access to locally relevant and evidence-based information?

### Finding 3: There is evidence to suggest that further efforts to enable rapid access to information could have been considered

Methods for raising awareness of updated information included HealthPathways specific and PHN general newsletters, HealthPathways home pages, however, some evaluation findings suggested that some groups of users were still unfamiliar with HealthPathways.

Several of the respondents surveyed were not frequent HealthPathways users. A handful of respondents noted that they either had not heard of the website or did not think to access it for disaster management and COVID-19 response information. The Streamliners interview also found that at least two participants thought HealthPathways only provided static information.

Some interview and survey participants also agreed that more promotion and awareness of the new and updated pathways was needed during the bushfire and COVID-19 response periods.

Some of the resources I didn't know about... Perhaps promotion of new resources would be worthwhile.
- survey respondent

I didn't use it much for covid or bushfires... - survey respondent

### Finding 4: The website structure could be improved to support more rapid access to important information

While some clinicians find it easy to access information through the HealthPathways website, there is evidence across the various findings that the user and usability experience of the website could be improved.

When survey respondents were asked to provide reasons for not using HealthPathways, a couple of respondents noted that they felt "overloaded" with information and that the website was hard to navigate. Feedback from the Join Quality Assurance Report highlighted several key usability gaps on the relevant pathways such as some information being too detailed, missing links to pathways and relevant information, unintuitive content and labelling structures and repetition of information.

The impacts of these are likely to cause users to spend more time and cognitive load to read and process the information provided. Repetition of similar but slightly different information in multiple locations can also contribute to uncertainty for users about whether the information they are reading is the most up to date, and whether they have found all the necessary details they require.

It is acknowledged that the HealthPathways Community has since established systems and clinical networks to publish, update and share pathways that are required in a rapidly changing COVID-19 pandemic.

The information is on the HealthPathways website but I do not think it is as accessible as it should be.
- semi-structured interviews

[The HealthPathways website] is hard to navigate, it doesn't [always] tell me who I can refer to. - survey respondent

#### Did HealthPathways support the integration (and coordination) of care during COVID-19 and Bushfire?

Finding 1: Overall, the majority of information required to support the integration of care was provided on HealthPathways and there is evidence to indicate that this was being accessed by clinicians

Rated 4.5 out of 5 by the Joint Quality Assurance Audit for their alignment with the World Health Organisation's (WHO) principles of integrated care. The information required to address each of the clinical scenarios was identified in the relevant HealthPathways pages.

The Google Analytics data also suggests that HealthPathways was used as an important source of reference. Overall, there was a 66% increase in page views for Illawarra Shoalhaven and a 14% increase for ACT & SNSW. The data for the top 10 exited pathways also shows a high number of users exiting the relevant pathways which could indicate that many users were finding the information they needed on these pages.

Interview participants also highlighted using HealthPathways to find information about COVID-19 testing centres, asthma, Chronic Obstructive Pulmonary Disease (COPD), and telehealth services particularly for mental health.

Yes, testing options, definitely, just where to go because people wanting to know if they needed to be tested out.
- semi-structured interviews

We were looking at the telehealth. I know we looked at it a lot just to make sure that we could still keep our patient safe and things during that time.

- semi-structured interviews

Finding 2: Further linking of referral pathways, particularly for services at the community-based level, could have been useful.

The Joint Quality Assurance Audit identified several missing links and gaps in the pathways based on the relevant HealthPathways pages.

Some examples and suggestions cited in the Joint Quality Assurance Audit include:

- The Illawarra Shoalhaven pathway linked to a general Palliative Care pathway rather than the more appropriate COVID-19 End of Life Care.
- Include services tailored to populations at risk of poorer health outcomes on the request/referral pages (e.g. Aboriginal Community Controlled Health Organisation's (ACCHO) and access to Aboriginal Health Workers)
- The ACT & SNSW page did not link to the appropriate Bereavement,
   Grief and Loss referral page, just the general Psychology, Social Work and Counselling page.

There were instances where improved referencing between pages would have enhanced usability.

- Joint QA Audit

#### Did HealthPathways support the integration (and coordination) of care during COVID-19 and Bushfire?

Finding 3: Content was tailored to the needs of populations at risk of poorer health outcomes such as Aboriginal and Torres Strait Islander people

The Joint QA Audit highlights that there are detailed references to the needs of vulnerable populations such as Aboriginal and Torres Strait Islander patients, as well as others at high risk of serious illness from COVID-19. The inclusion of these at risk groups contributed to the audit's overall 4.5 out of 5 rating for their alignment with the WHO's Principles of Integrated Care.

One clinician interviewed also noted using HealthPathways to find a COVID-19 testing site for a patient who was homeless as they had been turned away from a drive-thru testing site. Clinicians also highlighted using HealthPathways to support patients experiencing mental health issues (refer to next page).

My patient attempted to get tested at EPIC (drive-thru testing), but was turned away because they didn't arrive in a car even though they were homeless and access to a car was not something that was easy for them.

- semi-structured interviews

I think sometimes that mental
health situations, they can be very
different circumstances and
sometimes it can be difficult to
work out the next step for a
patient... I find that
HealthPathways gives quite good
comprehensive overall information
- semi-structured interviews

Finding 4: There is feedback to suggest the need to further strengthen information for populations at risk of poorer health outcomes and to target a broader range of vulnerabilities

The Joint Quality Assurance Audit recommends including other helpful services on the request/referral pages such as information regarding local Aboriginal Community Controlled Health Organisation's (ACCHO) and what services they are able to provide in the context of COVID-19, how to access support from Aboriginal Health Workers and cultural liaisons, or accessing specialised medical services.

Several interview participants also noted having patients with drug and alcohol issues however it was difficult to find information to support such patients during the bushfires and COVID-19 periods. They also did not mention referring to the Drug and Alcohol pathways on HealthPathways. It should be noted however that the Google Analytics data showed the Drug & Alcohol pages were accessed by some clinicians with 104 page views. The Lactation pathway was also cited by one interview participant as important to include where relevant to the bushfire and COVID-19 contexts.

Please add the Lactation
Consultants of Australia and New
Zealand (LCANZ) 'Find a Lactation
Consultant for women and
breastfeeding infants', this is a
very vulnerable population and
requires specific emergency
planning and support.
- survey respondent

one of the big services that we're referring patients to, that got stopped, was the detox unit. We had quite a few patients with alcohol use disorders, they were waiting on a bed in detox and for a while there, I wasn't sure if [the detox units] were closed down or for how long they might close down [for]. Patients were also seeing us to ask about home detox.

- semi-structured interviews

#### To what extent did the pathways support health professionals in their response to bushfire/COVID?

Finding 1: HealthPathways was used more often by practices as a preparation guide for delivering safe and high quality healthcare services, rather than for accessing clinical treatment guidelines.

There is evidence to suggest that most clinicians would prefer to access clinical information directly from the relevant guidelines, rather than using HealthPathways for such information. It is important to note however that some users were still accessing links to such external guidelines through HealthPathways.

One survey respondent gave the examples of Diabetes Australia and the Therapeutic Guidelines. The Joint Quality Assurance Audit also mentioned their preference for referring directly to clinical guidelines in response to the scenario provided where a patient has an ongoing cough due to the bushfires. There were also findings from both the interviews and surveys that clinicians mostly used HealthPathways as a resource to cross-reference procedure guidelines for topics such as infection control and prevention when developing protocols for their respective practices.

I think mainly for the testing options, not so much for quarantine, not so much for PPE but I was looking at the number of different sources in terms of PPE suggestions.
- semi-structured interviews

I'm the pandemic leader in my practice. I used HealthPathways to check that we weren't missing anything as we wrote the protocols and guidelines for our practice. - semi-structured interviews

Finding 2: There is evidence to suggest that mental health related pathways were valuable to clinicians and may have benefited from more promotion to raise awareness for the content

The evaluation findings that indicate clinicians valued information about local mental health services, especially because such information was not as widely addressed on other public health websites. One interview participant noted that HealthPathways did well to provide comprehensive information to support and refer patients who are experiencing mental health issues in a variety of circumstances. They also noted that other doctors from their practice used these resources to refer patients from regional areas to Canberra-based mental health services.

The Google Analytics data shows there was some increased usage of the mental Non-urgent Adult Mental Health page from February to June 2020 there was a 41% increase in pageviews for ACT & SNSW HealthPathways and a 131% increase for Illawarra and Shoalhaven HealthPathways.

The Joint Quality Assurance Audit suggests including a red flag to significant mental health issues in patients as well as a page to support the mental and physical health of doctors and other frontline clinical workers.

Certainly from the mental health point of view, we did use HealthPathways quite frequently.

- semi-structured interviews

I did [use HealthPathways] during the bushfires, primarily, for information on additional mental health services.

- semi-structured interviews

#### To what extent did the pathways support health professionals in their response to bushfire/COVID?

Finding 3: There may be a need to explore other opportunities for HealthPathways to support health professionals for future disaster management

When asked what HealthPathways could do to better support healthcare professionals during the survey, there was some feedback provided that extended beyond HealthPathways' primary role and purpose at that time (ie. as a primary referral platform). This feedback suggested that HealthPathways could look into playing a more involved and active role in coordination and management of crisis response.

Some of the examples captured from the survey included:

- · Improve communication between NSW health and local GPs
- Train GPs in disaster management and coordination
- Write a local guideline [for disaster management]
- Take advice from the Nepean & Blue Mountains model and RACGP Disaster management group.

Finding 4: HealthPathways was used as a landing page to access important external sources of information

In the COORDINARE newsletter *In the Loop* three of the top ten links accessed were local and newly developed resources in response to the bushfires. These included emerging minds, the chief medical update on masks and bushfire smoke and an RACGP resource on emergency response planning.

The analytics data for the HealthPathways sites also shows that 26 out of the top 30 website links accessed during this period related to COVID-19 linking to information sources such as ACT Health, NSW Health, RACGP, MBS Online and Australian Department of Health.

The data for the top 10 hyperlinks accessed also suggests that clinicians often opened pdf documents. Some of these pdfs included Minor Burn and Blister Management from ACI Health NSW and the Novel Coronavirus GP fax-out.

Finding 5: There was a higher than expected increase in views of Domestic and Family Violence Support Services pathway

The site analytics data shows an increase in views of the Domestic and Family Violence Support Services pathway during the COVID-19 period for the ACT&SNSW HealthPathways site. According to the data collected, there were 206 page views from 43 users representing a 390% increase in page views for this pathway.



### Recommendations

#### Prioritise information to help practices adhere to changing guidelines and navigate local referral pathways

HealthPathways' main value proposition is in providing referral information and practical guides to support clinicians, especially during a time of public health crisis. While diagnosis/treatment guidelines are relevant and important to support healthcare providers during the crises, the evaluation findings also showed that clinicians valued the practice-specific guidelines and resources available on HealthPathways. Such information distinguished HealthPathways from other public health websites which were equally active in promoting clinical guidelines during this period.

#### Continue building pathways for populations at risk of poorer health outcomes

Clinicians valued the information provided on HealthPathways relating to at risk communities such as people experiencing mental health issues and domestic violence. Such information may not have been as easily accessible on other public health websites and HealthPathways could play an important role in bridging this gap, particularly when it comes to extending relationships and referral pathways to community-based services such Aboriginal Health Services, and drug and alcohol services. Breastfeeding women were also mentioned as an overlooked vulnerable cohort.

#### Improve awareness and promotion of new content

While email newsletters and campaigns showed success in promoting the new and updated content, other methods of engaging clinicians to promote HealthPathways should be considered to expand reach. Some examples provided during the evaluation included using social media as a tool for more rapid and real-time engagement and use of local GP liaisons.

#### Continually improve the presentation and location of information

The COVID-19 pandemic has continued since this evaluation period and the International HealthPathways Community has constantly improved page layouts given the extensive networking and sharing of new and emerging COVID-19 related pathways. This report supports the need for ongoing improvements to the HealthPathways homepage and pathways layout to help improve the users' ability to navigate and process information on the sites. This will ensure the content is streamlined and reduces repetition and cognitive overload.



### **Discussion**

#### 1. Survey participation rates

A limitation of this evaluation is the low clinician response rate. Due to the low response to the initial interviews, a survey was created to enable additional input, but this also achieved a low response. Overall, through both methodologies there was a total of 10 GPs contributing, 2 practice nurses, a practice manager and an allied health respondent. Response from general practice is an ongoing challenge with GPs being a highly surveyed professional group, and in particular during the period of the evaluation when increased general practice staff time was consumed by the response to the pandemic and the COVID vaccination roll out. Somewhat reassuringly, a national HealthPathways survey conducted just earlier than this evaluation was only able to achieve 9 respondents. It is important to note that despite the low response rate, considerable feedback was received through the individual interviews. In addition to the qualitative data, the quantitative site usage data is very robust, and the audit findings provide further insight into pathway quality and utility.

#### 2. HealthPathways usage

Some surveyed respondents as detailed in Question 1b, finding 3, were not frequent HealthPathways users. HealthPathways like any technology has an adoption lifecycle with some innovators commencing platform use earlier than others. Over time the usefulness of the HealthPathways platform has increased as the number of clinical and referral pathways has grown. HealthPathways user numbers have also increased over time but usage of the platform is difficult to assess at an individual clinician level. Prior to May 2018 the ACT&SNSW HP program required individuals to register for site access so usage was identifiable. From this data it was determined that in the ACT 60% of GPs were accessing HealthPathways and in SNSW 74% of GPs were accessing HealthPathways. 73% of registered site users were GPs and GP registrars and 11% were practice nurses. While the exact percentage of GPs currently using HealthPathways is not precisely known it is estimated that the majority of GPs are aware of and use the program, and that frequency of usage varies by individual preference, with a skew towards less experienced GPs using it more frequently. Promotion of HP in both regions continues to new and existing GPs and registrars, to remind and support ongoing use. Lastly, since launch both HealthPathways programs have had user numbers rise consistently. suggesting that while individual clinician frequency of use varies, the platform is a trusted clinical resource.

### **Discussion**

### 3. Improving HealthPathways usability and user experience

As outlined in Section 1b Finding 4, surveyed responses found that user experience and usability of the HealthPathways platform could be improved. HP was first created in Canterbury NZ in 2008 by NZ company Streamliners and has expanded since then to over 40 sites in 3 countries. Streamliners is the provider of the platform which supports regional localisation, but the company has proprietary control and actively restricts site variation in order to maintain structural similarity to display a consistent and familiar platform. Therefore, the ability of individual programs to amend or improve database searchability or structure is limited. User feedback and evaluations such as this one provides evidence for programs to push for Streamliners to invest in platform improvement. In the interim, the findings of this evaluation support each program to continue to find new and engaging ways to educate and demonstrate platform utility to healthcare professionals.

### 4. HealthPathways supporting mental health service referral

Many survey respondents reported HealthPathways provided helpful information to support clinicians linking patients to community based mental health services during the bushfire crisis and COVID-19 pandemic. See Q1a, finding 1; Q2, findings 1 &3, and Q3, finding 2. Given the current high clinical need for mental health support, the importance of mental health care to HP funders as well as the large number of physical and online services available, mental health pathways warrant ongoing priority attention by HealthPathways teams. HealthPathways is a unique resource that brings together all mental health information available across different health settings and service providers, to support healthcare professionals with concise and relevant referral information.

### 5. HealthPathways provides insight into current and emerging clinical needs

As outlined in Q3 finding 5, HealthPathways Google Analytics (GA) data showed an increase in views of the Domestic and Family Violence Support Services pathway, particularly in ACT&SNSW. This data was observed ahead of the media and national campaigns reporting and addressing an increase in domestic and family violence relating to the COVID-19 lockdowns. This finding could indicate that GA tracking of the HealthPathways websites has the potential to detect trends and issues based on the types of clinical pages and service information users are accessing. It is suggested both programs could set up processes to routinely share and examine GA search data and provide internal PHN advice in order to develop appropriate responses including educational or clinical supports to clinicians. For example, the surge in Domestic and Family Violence Support services data, together with the media and local service utilisation reporting, lead Capital Health Network to undertake an online interactive event for GPs with a domestic violence specialist clinician.

### **Discussion**

#### 6. HealthPathways and disaster preparedness and response

Environmental disasters are predicted to occur with increased frequency due to climate change therefore, the requirement for primary care clinicians to support people after disasters is likely to increase. HealthPathways will therefore need to be responsive and agile to provide relevant clinical and practice information to support primary care preparedness for disasters as well as post disaster clinical and social care. Certain populations and specific individuals are more vulnerable during disasters, for example lactating mothers as reported by one survey respondent, other individuals include people who use electricity and battery-dependent medical devices. In light of this, HP needs to consider populations at risk of poorer health in the provision of clinical and service information. A good example of adaptability is demonstrated by the Illawarra Shoalhaven HP program which has now published an Environmental Adversity Support Services page that lists government response and program assistance, telephone and e-Health support and toolkits, and other environmental adversity related support. The page can rapidly display support information in response to local environmental disasters. The responsiveness and adaptability of the HP platform to enable collaboration across regions by sharing information across pathway sites as well as responding to local environmental adversity, will support general practice during and after disasters.

#### 7. Collaboration builds knowledge and generates improvement

The final discussion point is to acknowledge the usefulness of this collaborative evaluation for the participating HP program teams. There are structural and geographical differences between each of the HP programs which are barriers to collaboration. This collaborative evaluation has come about due to the shared experience of the regions with bushfires and the COVID pandemic which were somewhat unique to this region due to the intensity and impact of the bushfires, and the cross jurisdictional management requirements of the pandemic. This HP collaborative approach was able to work with a focus on supporting the needs of the population and was not restricted by funding restraints. Each of the program teams has found value in the collaboration and will generate program improvements in order to provide timely and appropriate information to local primary care teams for the healthcare of their local communities.



### Conclusion

In conclusion, the evaluation data indicates a positive increase in overall use of the HealthPathways websites for ACT & SNSW and the Illawarra Shoalhaven regions during the general time periods for the bushfire and the initial COVID-19 response. Although clinicians were being inundated with significant volumes of health information across various sources, many were still using HealthPathways as a reliable and trusted source of information.

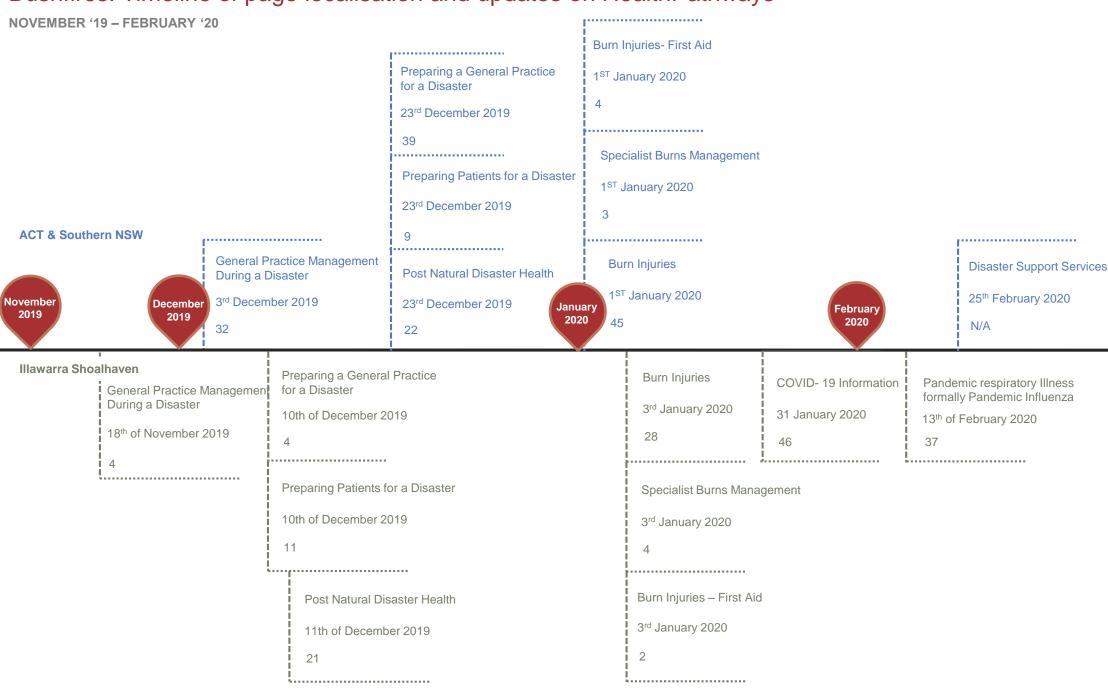
Despite the time pressures to rollout new and updated content during these crisis periods, the respective HealthPathways teams worked rapidly to engage clinical specialists to provide healthcare professionals with locally relevant and evidence-based content. The content was also delivered in a manner that complied overall with the WHO's guidelines for integrated care.

Email newsletters and campaigns were reasonably successful in promoting the new and updated HealthPathways content, particularly for clinicians and practices who subscribe to these regular updates. However, the survey responses suggest there are still healthcare professionals who lacked awareness of this content and HealthPathways more generally. This suggests that further consideration for promoting HealthPathways is required.

Ongoing usability improvements to the homepage and pages need to be considered for clinicians to improve the user experience, especially during a health related crisis when there is time pressure. Prioritising referral information, especially that which is not easily found on other websites, and linking to other reputable websites where information is constantly updated (e.g. LHD COVID-19 testing sites), will assist clinicians. The evidence also suggests that quick reference guidelines such as downloadable pdf documents are valuable to clinicians.

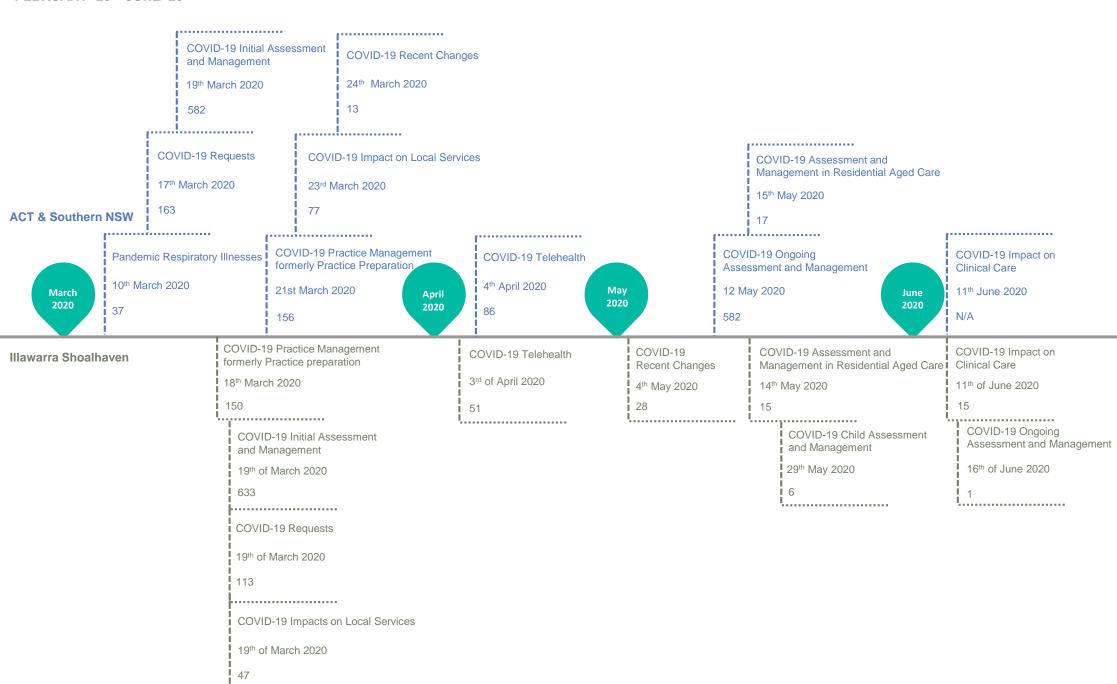


### Bushfires: Timeline of page localisation and updates on HealthPathways



#### COVID-19: Timeline of page localisation and updates on HealthPathways

FEBRUARY '20 - JUNE '20



### Analysis Rubric

Evaluation	Evaluation indicators and data sources							
Questions	Google Analytics	Joint QA Audit	Semi-structured interviews	Survey responses				
1a. Was the information on HealthPathways locally relevant and evidence based?	<ul> <li>% Increase in page views compared to the same period in the previous year</li> <li>% Increase in sessions compared to the same period in the previous year</li> <li>% Increase in users compared to the same period in the previous year</li> <li>% Entries to related pages</li> <li>% Exits from related pages</li> <li>Number of events (clicks) on relevant pages</li> </ul>	<ul> <li>Audit COVID-19 and bushfire related pages to provide an assessment on the utility of the pathways and to ensure that information presented on the site is current, useful, and locally relevant</li> </ul>	<ul> <li>Utility and frequency</li> <li>Relevance</li> <li>Timely access to information</li> </ul>	<ul> <li>Utility and frequency</li> <li>Relevance</li> <li>Ability to find trusted information o HealthPathways</li> </ul>				
1b. To what extent did HealthPathways enable rapid access to locally relevant and evidence - based information?	<ul> <li>Date when first page initially went live – for data on initial engagement</li> <li>Dates each individual localised pathway went live – to demonstrate quick response and early provision of information</li> <li>HealthPathways newsletter engagement stats (CHN)</li> <li>In the loop newsletter stats (COORDINARE)</li> </ul>	<ul> <li>Audit COVID-19 and bushfire related pages to provide an assessment on the utility of the pathways and to ensure that information presented on the site is current, useful, and locally relevant</li> </ul>	<ul> <li>Utility and frequency</li> <li>Relevance</li> <li>Timely access to information</li> </ul>	<ul> <li>Utility and frequency</li> <li>Relevance</li> <li>Timely access to information</li> <li>Ability to find locally relevant information</li> <li>Reasons for not using HealthPathways</li> </ul>				
2. Did HealthPathways support the integration (and coordination) of care during COVID-19 and Bushfire?	Total Pageviews of related pages (including referral pages)	<ul> <li>Summary of information provided on relevant COVID 19 and bushfire relevant pages to support integration and engagement statistics</li> <li>Audit COVID and bushfire related pathways and rate their alignment with WHO's principles of integrated care (on a scale of 1 to 5)</li> </ul>	<ul> <li>Referrals</li> <li>Awareness/link with external information sources</li> <li>Communication</li> <li>Overall experience</li> <li>Support for populations at risk of poorer health outcomes</li> </ul>	<ul> <li>Awareness/link with external information sources</li> <li>Ability to find tailored information f populations at risk of poorer health outcomes</li> <li>Open response to survey question "In what other ways did HealthPathways support you durin bushfires and/or COVID-19 pandemic?"</li> </ul>				
3. To what extend did the pathway support health professionals in their response to bushfire/ COVID-19?	<ul> <li>Average time spent by users on top pages</li> <li>Top 10 clicks on external website links</li> <li>Top 10 clicks on pdf hyperlinks</li> </ul>		<ul> <li>Examples for both COVID-19 and Bushfire: (How /ways HP is used)</li> <li>What scenarios is HealthPathways used</li> <li>Influence /equipped with information/ tools</li> <li>Linking patients to community-based mental health services</li> </ul>	<ul> <li>Information to help practices prepared for bushfire and COVID (eg. PPE, changes to guidelines etc.)</li> <li>Information on Telehealth implementation and MBS-related items</li> </ul>				





