

**PART THREE**

**HAZELWOOD MINE**

**FIRE**

**HEA LTH**

**STUDY**

31

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

PART 3 HAZELWOOD MINE FIRE HEALTH STUDY

In 2014, prior to the conclusion of the 2014 Hazelwood Mine Fire Inquiry, the Department of Health (as it was then known) committed to undertake a long-term health study into the potential long-term effects of exposure to smoke and ash from the Hazelwood mine fire. Community consultations about the proposed study were held on 6 and 7 May 2014.

In his report to the Board for the 2014 Hazelwood Mine Fire Inquiry, Professor Donald Campbell,  
Professor of Medicine, School of Clinical Sciences at Monash University and Program Director, General Medicine, Monash Health, outlined a number of essential features of the proposed study. These included that it ‘be conducted under the governance of an independent Steering Committee’, which ‘should have  
an independent chair and include community representatives.’1 Professor Campbell gave evidence

in the 2014 Inquiry about the importance of ensuring that the Latrobe Valley community is involved in the proposed study as they are ‘very switched on and have a very good understanding of what are the important questions, and they need to be satisfied that those questions have been addressed and it hasn’t been captured by the researchers for their own purpose.’2

The Board of the 2014 Hazelwood Mine Fire Inquiry affirmed the proposed long-term health study and made Recommendation 10, namely that:

The State should continue the long-term health study, and:

•

•

extend the study to at least 20 years;

appoint an independent board, which includes Latrobe Valley community representatives, to govern the study; and

direct that the independent board publish regular progress reports.3

•

During the re-opened Inquiry, the Board received submissions and correspondence, and also heard evidence during its public hearings into Term of Reference 6 in September 2015, regarding the scope and progress of the now established Health Study, and raising concerns about its transparency and the level of community engagement undertaken.

Each of these matters is discussed in this Part.

**3.1 STRUCTURE AND GOVERNANCE OF THE HEALTH STUDY**

The State’s *Implementation and Monitoring Plan* published in October 2014, articulates its responses to the recommendations and other matters set out in the 2014 Hazelwood Mine Fire Inquiry Report.4   
In relation to Recommendation 10, the plan records that ‘[c]ommunity members have concerns about the potential for long-term impacts on their health as a result of the fire’ and that the ‘government is committed to monitoring health impacts and supporting the community’s health and wellbeing.’5

The *Implementation and Monitoring Plan* states that the Health Study will be informed by matters raised at community consultation sessions held in Morwell on 6 and 7 May 2014, and that it will be designed  
by the contractor and the Department of Health.6 The plan further states:

•

In undertaking the study, the contractor will be required to report regularly and engage with the community.

Periodic reports from the study will be made available through the website, and sent to a mailing list that members of the public will be able to subscribe to.

The final decision about when to conclude the study will be made on the basis of periodic reviews of the progress and findings, which will be completed as part of the study.7

•

•

32

**Part Three Hazelwood Mine Fire Health Study**

On 30 October 2014, the Department of Health commissioned Monash University to undertake the Health Study.8 The principal investigators for the Health Study are Professor Michael Abramson, Head

of Clinical Epidemiology and Deputy Head of the Department of Epidemiology and Preventative Medicine, School of Public Health and Preventive Medicine at Monash University; and Professor Judi Walker, Head of the Monash School of Rural Health.9 The Health Study will be undertaken in collaboration with the Monash School of Public Health and Preventive Medicine, Monash School of Rural Health, Federation University Australia, University of Tasmania, University of Adelaide and CSIRO.10

The Health Study is a long-term consideration of any health effects that may be caused by the Hazelwood mine fire, including cardiovascular and respiratory disease, low birth weight, psychological impacts,

and the development of cancer.11

It is intended that the Health Study will answer the following questions:

•

Is there evidence that people who were heavily exposed to smoke from the mine fire are more likely to have developed heart and lung conditions or to develop them in the future, when compared with another similar community with less exposure to the mine fire?

Is there evidence of any impact of smoke exposure during pregnancy or infancy on the health and development of children in the Latrobe Valley compared to otherwise similar infants and children with less exposure to the mine fire?

Is there evidence that people who were heavily exposed to smoke from the mine fire have a higher level of psychological distress than otherwise similar people with less exposure to the mine fire and is this associated with particular vulnerable groups?

Is there evidence that people who were heavily exposed to smoke from the mine fire are more likely to develop cancers over a long period of time than otherwise similar people with less exposure to the mine fire?12

•

•

•

The Health Study contract between the Department of Health and Monash University includes the following terms:

* Within four months of the contract commencing, Monash University must establish a Community Advisory Committee and reference groups and finalise the terms of reference (the structure of which is to be approved by the Department) for each, and the membership of each (with the Department consulted regarding the composition of the committee).13
* The contract is for three years with further options to extend for three periods of two years and one further period of one year. The options to extend are exercisable by the Department.14

The Board has been informed that the budget allocated by the Department to Monash University for the first ten years of the study is $26.5 million. The budget for the first three years is $9.2 million.15

The Health Study has established a Community Advisory Committee, to work in partnership with the community and to disseminate information, as well as a Clinical Reference Group, a Scientific Reference Group, and a Project Steering Committee (comprising each of the leaders of the research stream areas).16

The Community Advisory Committee, which meets quarterly, is described on the Health Study’s website as the ‘study’s peak advisory body’.17 Its role is to ensure that the community informs the Health Study, and that those undertaking the study work in partnership with the community.18 In a letter to the Board dated 27 October 2015, the State describes the Community Advisory Committee as ‘a forum for the community to raise any concerns, suggestions and ideas in relation to scope.’19 Monash University established the Community Advisory Committee in response to the Department of Health’s requirement that a mechanism exist in the Health Study to provide information to the community.20 There are three members of the local community on the Community Advisory Committee, along with representatives from the Department of Health and Human Services (DHHS), Federation University Australia, Latrobe City Council, Latrobe Community Health Service, Latrobe Regional Hospital, and the Victorian Chief Health Officer.21

33

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

In a written submission from Monash University to the Board, Professor Abramson advises that as the Health Study is necessarily an independent scientific study, the Community Advisory Committee could not be the primary governing body as recommended in the 2014 Hazelwood Mine Fire Inquiry Report. There is however, scope to restructure the Committee as a Community Advisory Board and appoint  
an independent Chairperson, in line with Recommendation 10.22

The Health Study’s Scientific Reference Group is comprised of experts in various scientific disciplines.

The Clinical Reference Group includes local clinicians who will be asked to provide input and advice

on the clinical operations of the project.23 Local residents, doctors and health professionals are involved  
in the Clinical Reference Group and the Scientific Reference Group.24

By virtue of these three committees or groups, the Health Study aims to provide a ‘two way communication process through regular and ongoing connections to the local community’ and to ensure that information arising from the study is ‘distributed broadly and taken up in the operations of local health and community service agencies.’25 Minutes of the meetings of the Scientific Reference Group held in 2015 have been published on the Health Study’s website.26

The Project Steering Committee is comprised of the leaders of each of the research streams.

In addition to the above committees and groups, DHHS has also established a Contract Steering Committee. Monthly meetings of this committee are generally chaired by the Acting Chief Health Officer from DHHS, with representatives from Monash University and DHHS in attendance.27 Minutes of the Contract Steering Committee, dated 28 July 2015, record that the committee received an email from

a local community group voicing concerns about the independence of the Health Study, by reason of the requirement that the content and format of annual progress reports be considered and agreed to by the Chief Health Officer. In answer to that concern, the minutes record that the independence of the study

is not compromised, as the contract entitles Monash University to publish its research to the public, without notifying or obtaining the consent of DHHS.28

At the public hearings in respect of Term of Reference 6,29 Professor Abramson stated to the Board that the Health Study had conducted community briefings, which he described as being reasonably attended and generating lively discussion. There are plans for further briefings to be held in the future. Direct contact has also been made with local community groups, and the plan is for those contacts to continue.30

In his submission to the Board after that hearing, Professor Abramson states that a presentation he made at these community briefings has been published on the Health Study’s website. Professor Abramson also states that he is prepared to publish full interim and annual reports on the Health Study’s website, subject to agreement from DHHS, and to publish minutes of all advisory committee meetings, subject to agreement of the members of each committee.31 The Board notes that the Health Study’s Annual Report, dated 13 November 2015, has been published on the website.32

**3.2 SCOPE OF THE HEALTH STUDY**

The Health Study is divided into multiple streams:33

•

Community Wellbeing Study—to commence in mid-2015. The area to be studied includes the whole Latrobe Valley.34

Latrobe Early Life Follow up Study—to commence in mid-2015. The area to be studied includes the whole Latrobe Valley. This study will assess mothers and babies (particularly those who were in the womb at the time of the fire) up to two years of age, to consider whether there is any difference in their health and development when compared to children who were not exposed to the mine fire.35

Older People Study—to commence in May 2015.36

Schools Study—to commence July 2015. The group to be studied includes children in schools throughout the Latrobe Valley. The study will address whether the smoke exposure and disruption that was associated with the Hazelwood mine fire has had an effect on children’s ultimate educational endpoint.37

•

•

•

34

**Part Three Hazelwood Mine Fire Health Study**

•

Adult Study—anticipated to commence in late-2015. All adults who were living in Morwell during the Hazelwood mine fire will be invited to participate in the Adult Survey, which aims to survey 7,500 people. The comparison community for the Adult Survey is Sale, where is it hoped 4,000 people will participate. Sale was selected as a comparison community after modelling conducted by CSIRO demonstrated that Sale was not likely to have been subject to the smoke effects of the mine fire.38

Follow-up health and psychological assessment—anticipated to commence in 2017.39

Linkage to health records including hospital, ambulance and cancer—to commence in 2016.40

•

•

SCOPE OF THE ADULT SURVEY

The ‘Adult Survey’ is the largest study stream and will include an assessment of the impact of the Hazelwood mine fire on respiratory and cardiovascular functions of adults residing in Morwell during the mine fire.41 The Adult Survey will not include any persons who worked in Morwell during the fire (including emergency responders) who reside outside Morwell.42

Professor Abramson told the Board that he had received correspondence indicating that some emergency responders who are not residents of Morwell are interested in participating in the Health Study.43 The Board is aware of the following:

•

In May 2014, the Acting Chief Officer of the Metropolitan Fire and Emergency Services Board  
(MFB) emailed the then Chief Health Officer, DHHS, about the possibility of either linking the health monitoring of firefighters by the MFB to the scope of the Health Study or including the firefighters  
as a subset of Health Study.44

On 5 June 2015, the details of 115 Environment Protection Authority (EPA) staff were provided to Monash University for potential inclusion in the Health Study.45 None of the EPA staff were residents of Morwell during the fire.46

By letter dated 16 June 2015 to Monash University, Victoria Police specifically requested involvement in the Health Study and indicated that ‘it would not be viable for Victoria Police to do a comparative internal investigation.’47

With respect to these emergency responders, an internal DHHS email dated 25 June 2015 notes that MFB and Country Fire Authority (CFA) employees are part of a voluntary monitoring program, and that the EPA and Victoria Police should be referring members who are not residents of Morwell to their internal occupational health and safety areas. The email confirms that the Health Study does not include funding for these emergency responders to be incorporated.48

•

•

•

The Board received correspondence from the Victorian Government Solicitor’s Office (VGSO), on behalf of the State, that suggests that the majority of emergency responders to the mine fire are not residents  
of Morwell and are, therefore, not able to be included in the Adult Survey. Approximately 10 of the 2209 firefighters who attended the mine fire live in Morwell. Approximately 40 per cent of police stationed in Morwell during the mine fire are not residents of Morwell.49

At the Term of Reference 6 public hearings, in answer to questions about involving emergency responders in the Health Study, Ms Linda Cristine, Director, Inquiry Response Team, DHHS, gave evidence that firefighters and other emergency responders have their own programs and studies that  
are monitoring the health impacts of the fire.50 Ms Cristine also stated that DHHS considers there to be significant methodological issues in including non-resident emergency responders in the study.51 Ms Cristine did not know if there had been any discussions with Monash University about whether any such difficulties could be overcome.52

A letter dated 28 August 2015 from the VGSO to the Board, states that DHHS has carefully considered the scope of the Health Study, which was informed by community consultations undertaken in May 2014.53 However, in a letter to the Board dated 15 October 2015, the VGSO, on behalf of the State, indicates that

Monash University is best placed to consider the methodological limitations of the study.54 The letter further states that MFB and CFA employees have access to voluntary health monitoring programs, however these programs are not long-term studies and are not comparable to the Health Study.55

35

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

Professor Abramson gave evidence that it would be possible to include emergency responders who were not residents of Morwell during the fire in the Health Study.56 In his submission to the Board, Professor Abramson states that expanding the study to include emergency responders would be feasible but it would need to be separately funded. He indicates that there would be ‘considerable scientific value’

in including emergency responders in the Health Study.57

The Board was also advised of concerns that residents in other parts of the Latrobe Valley are not included in the Adult Survey, despite working in Morwell or otherwise being exposed to the mine fire.58 The Board heard evidence during the Term of Reference 6 public hearings that there were comparable

PM levels in Traralgon and Morwell East during the mine fire.59 Non-emergency responders who were

2.5

working, but not resident, in Morwell at the time of the mine fire, including over 200 Latrobe City Council employees, are not included in the Health Study.60 The Latrobe City Council estimates that only 25 per cent of its employees are residents of Morwell.61

During the Health Improvement Forums hosted by the Board in September 2015, Councillor Dale Harriman, Mayor of Latrobe City Council (at the time of this forum), stated that this issue ‘continually comes up and is something that is of major concern to the whole community’.62

In its submission to the Board, the Construction, Forestry, Mining and Energy Union (CFMEU) states that many people exposed to the Hazelwood mine fire, both its members and others who continued to work in businesses located near the Hazelwood mine, do not reside in Morwell and therefore fall outside the scope of the Adult Study. The CFMEU states that of 351 members who worked at the Hazelwood mine site during the mine fire, 283 are not residents of Morwell.63 The CFMEU suggests that the study be broadened to include these people.64

In its written submission, Doctors for the Environment Australia advocates that the Health Study should track the health outcomes of everyone in the vicinity of the mine fire for a period of at least 20 years.

The submission also suggests that monitoring the health of firefighters should be a particular focus of the Health Study, given their direct exposure to smoke.65

The scope of the Health Study was a topic of discussion in meetings of the Contract Steering Committee on 24 June and 25 August 2015, when results from community briefing sessions were also discussed.66   
In a submission from Monash University, Professor Abramson states that the scope of the study will

be listed as a discussion issue for the next meeting of the Community Advisory Committee.67 However, Professor Abramson maintains there will be feasibility issues associated with including residents of other parts of the Latrobe Valley in the Adult Study:

It is simply not feasible to include all Latrobe Valley residents in the Adult Study. The potential number of participants in Morwell is already about 11,000, and 4,500 in Sale. Data collection will already take at least a year. However, this does not mean that the study cannot say anything about the health of residents who were living in other parts of the Latrobe Valley. With the CSIRO air quality modelling, we are able to estimate exposures in other parts of the Valley and use the results from Morwell to extrapolate any health effects to other parts of the Valley. Our best chance of finding a signal is to look at those most exposed to smoke from the fire. From the CSIRO modelling presented to the Inquiry, this was clearly the population of Morwell.68

The documents considered by the Board in relation to the Health Study are listed in Appendix D.

36

**Part Three Hazelwood Mine Fire Health Study**

**3.3 BOARD’S CONSIDERATION AND PROPOSALS**

Recommendation 10 of the 2014 Hazelwood Mine Fire Inquiry recommends that the Health Study should:

•

•

•

be conducted for at least 20 years

have a governing independent board that includes Latrobe Valley community representatives publish regular progress reports.

The Board notes that the State has gone some way to implementing this recommendation, but that there are more steps that could be taken to ensure that the Health Study provides the appropriate level of community access without foregoing scientific rigour.

The Board notes that the contract with Monash University is for three years with options to extend it for a maximum of 10 years. The Board reiterates its recommendation that the Health Study be run for a minimum of 20 years.

The Board accepts the evidence of Professor Abramson that the Health Study is an independent scientific study. The Board further recognises the expertise of Professor Abramson and Professor Walker, and the associated universities conducting the Health Study. The Board notes that, in line with Recommendation 10, there is community involvement in some of the committees and reference groups of the Health Study. However, the Board also notes that the Contract Steering Committee has no community participants.

The Board reiterates that the Health Study should be governed, so far as it can be, independently from the State and with appropriate levels of community representation to provide guidance on the issues that matter to the local community.

The Board notes that the Annual Report dated 13 November 2015, together with minutes of meetings of the Scientific Advisory Group and the Community Advisory Committee, are now available on the Health Study website. However, there are currently no reports or other information available to the public with respect to the progress of the Health Study from the Clinical Reference Group, the Project Steering Committee or the DHHS Contract Steering Committee. The Board considers that community members should have access, to the extent possible, to interim reports and monthly progress reports of the Health Study produced by those committees.

Further, the Board considers that the Health Study should provide the community with information about the health status of the population and the health effects of the mine fire on an ongoing basis, so that action can be taken by individuals relating to their own health. As stated by Professor Abramson, the research into health effects suffered by Morwell residents can be extrapolated to the wider community, and the Board considers that such information should be made regularly available and accessible to the study participants, the community and to local health practitioners. Reports and information should be provided in a variety of forms and not just on websites, to ensure accessibility for the community.

The Board also considers that there should be further discussions between those funding the study (DHHS) and those with expertise in designing it (Monash University), about expanding the scope of the Adult Survey in light of the concerns of the community and at least some emergency responders.

The Board’s recommendations with respect to the Hazelwood Mine Fire Health Study are below.

PROCEDURAL FAIRNESS

The Board is entitled to acquire information in accordance with the Inquiry’s Term of Reference 13(a), which empowers the Board to:

conduct [its] inquiry as [it] considers appropriate, subject to the requirements of procedural fairness, including by adopting any informal and flexible procedures to: engage with the relevant local communities; ascertain the relevant facts as directly and effectively as possible; and avoid unnecessary cost or delay

In this Inquiry, the Board received public submissions relating to both Terms of Reference 6 and 7, which raised concerns about the scope and governance of the Health Study. Those matters were similarly raised in community consultations and the Health Improvement Forums held by the Board.

37



**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

The Board conducted public hearings in relation to Term of Reference 6 in September and October 2015. That term of reference required the Board to consider whether the Hazelwood mine fire contributed to an increase in deaths in the Latrobe Valley. Some of the evidence in those hearings related to whether or not the Health Study would consider if the mine fire had contributed to an increase in deaths in the Latrobe Valley. Professor Abramson was called to give evidence in relation to the Health Study’s scope and governance. During his evidence, it became apparent to the Board that the scope of the Health Study required further consideration.

In order to further inform itself about issues relating to the scope of the Health Study, the Board sought information from Monash University, CFA, MFB, United Firefighters Union, Victoria Police, CFMEU, DHHS, Latrobe City Council and the Hazelwood Mine Fire Implementation Monitor. Following receipt of information and documents from these organisations, Counsel Assisting prepared and circulated submissions relevant to the Health Study, dated 23 October 2015, to the parties who were represented at the Term of Reference 6 public hearings, and invited responses by way of further submissions.

Counsel Assisting’s submissions were also provided to Monash University and to the Implementation Monitor, with an invitation to each to provide any comments or submissions.

In response to Counsel Assisting’s submissions about the Health Study, Dr Rosemary Lester (a party to the Inquiry’s Term of Reference 6 public hearings) submitted that if the Board intended to provide an opinion or recommendation about the limitations of the scope of the Health Study, then procedural fairness was not accorded to her because:

•

Dr Lester was not asked questions during the Inquiry’s public hearings in relation to Term of Reference 6, or subsequently about the decision to limit the scope of the Health Study.

Dr Lester did not give permission for Counsel Assisting to refer to her views on the Health Study, or to refer to email correspondence sent and received by her which related to the Health Study,  
in closing submissions for Term of Reference 6.

The matters relied upon by Counsel Assisting in their closing submissions relating to the Health Study were not in evidence.69

•

•

The Board considers that the process that has been adopted has been in accordance with the Inquiry’s Term of Reference 13(a) and that procedural fairness has been accorded to each party, including Dr Lester. The additional information provided after the Term of Reference 6 public hearings has been of assistance to the Board in ascertaining the relevant facts. The Board considers that the scope of the Health Study is of significant relevance to Term of Reference 7 and that the manner in which it obtained the relevant information was procedurally fair.

**The Board recommends that the State review the scope and structure of the Hazelwood Mine Fire Health Study.**

The State should:

•

Review the scope of the Hazelwood Mine Fire Health Study to consider whether the Adult Survey can include additional cohorts who do not reside in Morwell, including emergency responders to the Hazelwood mine fire.

Reaffirm its commitment to a 20 year study and the importance of having a strong governance structure which ensures that the interests of the Latrobe Valley community are foremost in the short, medium and longer-term.

Establish a process whereby key health information obtained through the Health Study about the health status of the population and the effects from the Hazelwood mine fire is provided to the study participants, the community, local health practitioners and the Latrobe Valley Health Assembly.

Establish a process whereby policy-relevant health information obtained through the Health Study is considered by the State for action to improve the health of the Latrobe Valley and other populations in Victoria.

•

•

•

38

39



**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

40





**PART FOUR**

**STRENGTHENING**

**HEA LTH**

**SERVICES**

41

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

PART 4 STRENGTHENING HEALTH SERVICES

Part 4 considers how health services in the Latrobe Valley could be strengthened in order to improve health outcomes.

This Part is informed by public submissions, community consultations, and the discussion and feedback of four of the expert panels that contributed to the Health Improvement Forums.

These expert panels provided advice to the Board about the need to re-design health services, and  
to innovate and coordinate healthcare to manage the burden of chronic and complex conditions more

effectively. The panellists considered areas including consumer-led care, screening and early detection of chronic disease, the health workforce in the Latrobe Valley, and the infrastructure required

to support health service delivery.

The expert panels that considered how health services could be strengthened were:

•

Chronic disease management: Dr Stephen Ah-Kion from Latrobe Regional Hospital; Professor Donald Campbell, Professor of Medicine, School of Clinical Sciences at Monash University and Program Director, General Medicine, Monash Health; Ms Marg Bogart from the Gippsland Primary Health Network; Associate Professor John Rasa from Networking Health Victoria; Ms Petra Bovery-Spencer from Latrobe Community Health Service; and Ms Sylvia Barry from the Department of Health and Human Services (DHHS).

Mental health: Ms Robyn Humphries from DHHS; Dr Cayte Hoppner from Latrobe Regional Hospital; Professor David Clarke Professor of Psychological Medicine, Department of Psychiatry, Monash University, and Medical Director of the Mental Health Program at Monash Health; Ms Irene Verins from the Victorian Health Promotion Foundation (VicHealth); Mr Steve Tong from Latrobe City Council; Ms Jo Huggins from Relationships Australia; and Ms Kerry Scanlon from Latrobe Community Health Service.

Early detection and high risk screening: Professor Clarke; Professor Andrew Tonkin, a cardiologist from Monash University; Ms Heather Scott, a registered nurse from Latrobe Community Health Service, Dr Alistair Wright, a general physician from Latrobe Regional Hospital; and Dr Daniel Steinfort, a respiratory physician from Royal Melbourne Hospital.

Health workforce: Ms Pip Carew from the Australian Nursing and Midwifery Federation; Professor Campbell; Ms Marianne Shearer from the Gippsland Primary Health Network; Dr Simon Fraser from Latrobe Regional Hospital; Ms Amanda Cameron from Latrobe Regional Hospital; Mr Dean Raven from DHHS; Ms Katherine Walsh from the Australian Medical Association, Victoria; and Ms Anne Coxall from Latrobe Community Health Service.

•

•

•

The expert panel on children and youth also raised issues relevant to strengthening health services in the Latrobe Valley. The views of this panel are discussed in more detail in Part 5 of this report.

**4.1 CHRONIC DISEASE AND MENTAL HEALTH CONDITIONS**

CHRONIC DISEASE

The World Health Organization describes ‘chronic’ diseases as those that ‘are of long duration and generally slow progression.’1 Chronic disease generally refers to one of four conditions: cardiovascular diseases (such as heart attacks and stroke), cancer, chronic respiratory diseases (including asthma and chronic obstructive pulmonary disease), and diabetes.2

Associate Professor John Rasa from Networking Health Victoria, and a member of the expert panel

on chronic disease management, advised the Board that it is typical for Australians to have up to seven co-morbidities relating to chronic disease by the time they are 80 years old.3 He noted that this presents a challenge for the current health service system, in particular in relation to the care coordination of clients with multiple health conditions.4 He told the Board that general practitioners are increasingly having to refer clients to multiple specialists, however each specialist service tends to work in a silo, which can create difficulties for the coordination of care.5

42

**Part Four Strengthening Health Services**

Chronic disease and its impact on the health system have particular relevance for the Latrobe Valley. As outlined in Part 2 of this report, the Latrobe Valley experiences higher rates of chronic disease compared to most other parts of Victoria. The 2014 Hazelwood Mine Fire Inquiry heard that people with pre-existing health conditions, including asthma, chronic obstructive pulmonary disease, ischaemic heart disease and congestive heart failure, were at increased risk from exposure to smoke and ash from the Hazelwood mine fire.6

During the re-opened Inquiry, the community voiced ongoing concerns about the health status of the Latrobe Valley and increased demands on health services.

The Victorian branch of the Australian Nursing and Midwifery Federation notes in its submission to the Board that:

the population [of the Latrobe Valley] includes an ageing population, people suffering lung cancer and chronic disease, [A]boriginal people who generally suffer poorer health outcomes, people with a high incidence of asbestos related disease and people requiring disability assistance.7

Diabetes Victoria states in its submission that ‘[t]he postcode of Morwell is classified as [a] “very high” diabetes prevalence area.’8

Quit Victoria advises in its submission to the Board that the Latrobe Valley community potentially has  
an imminent and existing large-scale respiratory health problem, due to the combination of exposure to environmental air pollution together with a high prevalence of smoking.9 In her written submission to the

Board, Latrobe Valley resident Ms Wendy Farmer states: ‘We know that [the] Latrobe Valley suffers some of the highest rates of cancers and respiratory diseases yet we don’t have specialists in these areas, and if we do have a medical specialist there is an extremely long wait.’10

MENTAL HEALTH

The Board heard from organisations that work across the ‘spectrum’ of action to improve mental health and wellbeing, namely, treatment, rehabilitation, early intervention or early identification of mental illness, as well as action that aims to prevent mental illness from occurring in the first place and promote mental wellbeing. While these efforts are interrelated, for clarity this report uses the term ‘mental health’ when referring to treatment, identification or intervention in mental illness, and the term ‘mental wellbeing’ when referring to prevention and promotion efforts.

The Board heard that the poor mental health of the Latrobe Valley community is a growing concern.11 The panel on mental health highlighted that external factors, such as employment and social connection with family and peers, are underlying determinants of mental health and wellbeing.12 These issues are considered further in Part 5 of this report. The Board was also advised that, whilst there are differences between mental health conditions and chronic disease, self-management is a goal for improving health outcomes in both of these areas.13

Dr Cayte Hoppner of Latrobe Regional Hospital and a member of the mental health expert panel, advised that people in the Latrobe Valley experience higher rates of suicide and greater barriers to accessing mental healthcare. She noted that ‘there’s no health without mental health’; that is, there are strong links between mental health and physical health.14

In their expert report to the Board, Professor Donald Campbell Professor of Medicine, School of Clinical Sciences at Monash University and Program Director, General Medicine, Monash Health and Professor David Clarke Professor of Psychological Medicine, Department of Psychiatry, Monash University, and Medical Director of the Mental Health Program at Monash Health, advise that mental health issues occur on a continuum, from those of short duration in the context of life stress, through to long-term, persistent and disabling conditions. They note that long-term mental health conditions are complex and often complicated by work, family and relationship difficulties, along with drug use and physical health problems.15

43

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

In her submission to the Board, Ms Christine Hamilton of Dromana raises concerns that the mine fire has had an adverse impact on the mental health of members of the Latrobe Valley community.16 The Victorian Council of Social Service (VCOSS) also states in its submission that:

Participants from mental health organisations advised that there were significant ongoing, emerging and new mental health issues as a result of the mine fire. During and after the fire, people with pre-existing mental health issues experienced stress and trauma, in some cases exacerbating their condition significantly. Other people with no history of mental health issues presented as new clients.17

During the 2014 Hazelwood Mine Fire Inquiry, the Board heard similar evidence that increased ‘levels of anxiety and depression’ could be attributed to the mine fire.18

The expert panel on mental health advised that, in order to improve future mental health outcomes in the Latrobe Valley, there is a need to first acknowledge the trauma that has been experienced by the community as a consequence of the mine fire.19 In comparison, in its written submission to the Board following the Health Improvement Forums, GDF Suez Australian Energy (GDF Suez) stated that:

such a suggestion runs counter to the extensive evidence that members of the community are looking to move on from the Mine Fire and focus on “good news” rather than continually being confronted with the past (and in particular an event that occurred 18 months ago)…20

GDF Suez suggests that a number of events, such as this Inquiry, the 2014 Hazelwood Mine Fire Inquiry, and GDF Suez’s *Revive Morwell* program, have already given the community opportunity to engage with GDF Suez representatives and have their concerns about the impacts of the mine fire acknowledged.21

Organisations including Healthy Futures and Voices of the Valley submitted to the Board that additional resources should be dedicated to improving mental health in the Latrobe Valley.22 Professor Campbell and Professor Clarke note in their expert report that the coordination and integration of health services  
is particularly important for people with mental illness, who find negotiating and engaging with services especially difficult.23

The principles of self-management and the current and potential capacity of chronic disease and mental health services in the Latrobe Valley are considered in section 4.2 below.

**4.2 RE-DESIGNING HEALTH SERVICES**

The Board was told that one of the objectives of health services is to support people with chronic disease to become better at self-managing their health.24 The expert panel on chronic disease discussed how

the design and resourcing of health services can therefore be informed by the different levels of support required by different groups of clients, and their capacity to self-manage health issues.

Expert panel member Ms Petra Bovery-Spencer from Latrobe Community Health Service described four categories of primary health service users for the Board:

•

Self-managers, who are able to independently manage their chronic disease and access specific services when and where they are needed.

Collaborative self-managers, who need some help navigating health services, but once they have better understood their disease and established a routine, they are able to work towards self- management.

Supported self-managers, who will often have co-morbidities and complex social situations, however when linked to services they can work towards self-managing some aspects of their disease over time.

Super users, who have complex health and related issues—such as mental health issues, experience of family violence or carer responsibilities—that hinder their ability to engage with self- management strategies.25

•

•

•

Ms Bovery-Spencer informed the Board that super users are often not assisted by chronic disease services, but are instead referred to other specialist agencies better equipped to support people with such complex issues.26

44

**Part Four Strengthening Health Services**

Professor Campbell endorsed the idea of re-thinking approaches to health service design in order to better assist people with multiple co-morbidities.27 He provided an example to the Board of a situation where health agencies have pooled resources in New Zealand (called ‘alliance contracting’) to deliver specific projects. As no one health service provider is paid until an initiative is delivered, significant cooperation and trust is fostered amongst the providers involved.28

Associate Professor Rasa noted that the commissioning role of the new Primary Health Networks could fit in well with this type of approach, and that other reforms being considered by the Commonwealth, such as blended payment systems for people with chronic disease, may also be options to consider.29 Ms Sylvia Barry of DHHS noted that the *Hospital Admission Risk Program* works with super users, and that the State is developing the *HealthLinks* program to encourage hospitals to use existing funding more flexibly to achieve better outcomes for this group.30

The expert panel on chronic disease management considered whether partnerships that currently exist within the Latrobe Valley could better support people with chronic disease in the short, medium and long- term. Ms Marg Bogart of the Gippsland Primary Health Network, provided an example that she believes demonstrates that the requisite capacity does exist within the Latrobe Valley.31

This example was the *Dementia Gippsland* project, which is led by the Gippsland regional office of DHHS and involves relevant health and related organisations. The *Gippsland Dementia Plan 2011–2014* was developed to facilitate the provision of services to meet the needs of people living with dementia, together with their families and carers. The specific objectives of the plan are recorded as providing

‘direction to dementia policy and practice in Gippsland’, improving ‘coordination and access to services for people living with dementia and their carers’, and creating ‘client-focused services that go beyond program boundaries.’32 The *Dementia Gippsland* website provides information about:

•

•

•

understanding memory loss and dementia dementia support services

reducing risk factors for dementia.33

Ms Bogart suggested that lessons learned from the approach used to develop *Dementia Gippsland*

could be applied to any number of health conditions, such as diabetes, and that a significant amount

of work has already been undertaken around referral and diagnostic pathways for diabetes in Gippsland. Ms Barry noted that this approach is most effective when trusted relationships already exist between service providers.34

The need for more and better-resourced health services was a common theme in written submissions  
to the Board.35 Professor Campbell and Professor Clarke state in their expert report to the Board that ‘Australia’s healthcare arrangements [are] not working very well for those with complex care needs,  
we are currently poorly equipped to meet anticipated increases in demand.’36

The Victorian Healthcare Association states in its written submission that the health service system in the Latrobe Valley is less equipped when compared to other regions in Victoria.37 In particular, the region has:

•

•

•

•

•

•

fewer general practitioners (GPs) per 1,000 population; fewer GP attendances per 1,000 population;

fewer specialist medical practitioners, pharmacists and physiotherapists per 1,000 population; lower percentage of persons with private health insurance;

fewer aged care places per 12,000 population;

higher emergency department presentations per 1,000 population, including more primary care type ED presentations.38

The Victorian Healthcare Association submits that these indicators are indicative of the community’s difficulty accessing healthcare and are aligned with poorer health outcomes in the Latrobe Valley. It suggests that a ‘system-wide approach’ to health service design is required.39 In their expert report, Professor Campbell and Professor Clarke also advise the Board that ‘innovation and change in healthcare delivery models will be required, with a focus on support for the patient and their informal caregivers.’40

45

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

In its submission, the Victorian branch of the Heart Foundation states that increased access to cardiac rehabilitation services should be available post-hospital discharge:

The Victorian Government should boost access to cardiac rehabilitation in the Latrobe Valley to help patients recover from heart attack…Better access to cardiac rehabilitation is needed because recovery from heart attack is compromised because not enough people are referred to cardiac rehabilitation when they are discharged from hospital.41

The Asbestos Council of Victoria recommends that a respiratory unit, staffed by doctors who specialise in lung and respiratory issues, be established in the Latrobe Valley.42

The expert panel on mental health advised the Board that there is also a need to transform the mental health services system in order to improve health in the Latrobe Valley.43

Professor Campbell cited a Scottish study that shows that ‘people with three or more co-morbidities have a 60 per cent chance of having an extra mental health co-morbidity, be it anxiety, depression or other, by virtue of having multiple co-morbidities’.44 Professor Campbell told the Board that the interplay between chronic disease and mental health means that eligibility for chronic disease management services should not be determined according to factors such as age.45

In its submission to the Board, beyondblue recommends a ‘stepped-care’ approach that integrates mental and physical healthcare and matches support services to need.46

Mechanisms to support the redesign of health services within the Latrobe Valley are considered in Part 8 of this report.

CONSUMER-LED CARE

The Health 2040 Summit has produced the following principle in relation to consumer-led care:

We need to move to person-centred and person-directed care, valuing and respecting patients and their preferences, taking into account the whole person and what is important to the individual. We also need to address disparities in access and outcomes for individuals and communities across the state.47

The expert panel on chronic disease management noted that consumers should be at the centre of all health service improvement efforts.48 Consumer-led care was also raised by the expert panel on mental health. Dr Hoppner described the *Optimal Health* program, which is a consumer-led, person-centred and recovery-focused program that supports people to self-manage their mental health. The program has been developed from work in chronic disease self-management and has been implemented over a number of years in the broader mental health system, including at Latrobe Regional Hospital. It focuses on a number of factors that impact on mental wellbeing, including partnerships and connectedness, health promotion, and stress management. It aims to help participants reduce health crises and acute hospital presentations and improve their long-term wellbeing. Dr Hoppner recommended building on the program to improve the community’s capacity to manage its recovery (following the mine fire).49

Consistent with a number of other expert panels, the expert panel on mental health discussed the need  
for community engagement when designing health services and programs. The panel told the Board that whilst many programs to support mental health are implemented, they do not necessarily align with what the community and consumers say they need.50

Mr Steve Tong, from Latrobe City Council and a member of the expert panel on mental health, referred  
to the community engagement process recently undertaken by Latrobe City Council (outlined by Ms Sara Rhodes-Ward in Part 5 of this report) as a successful example of how community engagement in health service re-design might be implemented.51

Mr Tong also recounted work he has undertaken with disadvantaged young people in the Latrobe Valley and reinforced the principle: ‘don’t do it to me, do it with me’.52 He submitted that including the community in the process of designing health initiatives creates the level of community ownership required for people

to take responsibility for their own mental health, and is preferable to imposing a system upon them.53

Engaging consumers in the design of health initiatives and services is discussed further in Part 7 of this report.

46

**Part Four Strengthening Health Services**

INTEGRATED CARE COORDINATION

In its submission to the Board, the Royal Australasian College of Physicians makes the following suggestion for alleviating pressures on the current health system:

The responsiveness of the health system in the Latrobe Valley can be further strengthened by improving links between the regional hospital and community health facilities, primarily GPs.  
A highly able GP liaison officer would be instrumental in directing patients to the appropriate medical specialist in a timely manner, which would avoid unnecessary Emergency Department presentations. Likewise, a GP liaison officer would be able to facilitate communication and services to patients with complex medical issues being transitioned home.54

The Board was referred to recent work that raises a similar point—better health outcomes are achieved when patient healthcare is coordinated.55 In their expert report, Professor Campbell and Professor Clarke explain that the Primary Health Networks have recently been established out of the previous Medicare Locals structure to ensure that those at risk of poor health outcomes have access to effective services.

Primary Health Networks also aim to improve coordination of patient care. These objectives will be achieved by working with healthcare providers, including general practitioners, secondary care providers and hospitals.56

Panel member Ms Marianne Shearer, of the Gippsland Primary Health Network, outlined for the Board how the Gippsland Primary Health Network is in the process of developing ‘care pathways’ with and for local doctors in relation to assessment, management, referral and treatment for a broad range of health issues.57

Panellist Ms Petra Bovery-Spencer from the Latrobe Community Health Service, told the Board that a good example of current care coordination in the Latrobe Valley is the podiatry-led high-risk foot clinic.58 This initiative was introduced after it was identified that some clients who had been referred to Monash Health in Dandenong, had not attended follow up appointments. The initiative involves moving to a multi-disciplinary clinic model and establishing tele-medicine support from the Dandenong specialist clinic as required. These changes mean that clients do not have to travel long distances to receive specialist healthcare.59

The expert panel on children and youth discussed a program the *Pathways to Good Health* program. *Pathways to Good Health* focuses on children in out-of-home care and involves a multi-disciplinary assessment that provides a snapshot of the child’s current health and enables planning for ongoing care.60 Under the program, a child can be seen by multiple people in one location, rather than having to wait between referrals to different practitioners.61

The expert panel on children and youth also suggested that the development of a health manual could  
be useful in ensuring that medical practitioners coming into the Latrobe Valley are aware of the particular health issues for children in the region, such as respiratory conditions and heightened anxiety following  
the mine fire.62

Professor Clarke suggested to the Board that it consider recommending the full integration of community mental health services with general community health services. He provided an example of how this might work in practice, describing how a community nurse attending to a person with a chronic condition, such as diabetes, may also be able to screen for a mental health condition, such as depression.63

The expert panel on health workforce also discussed the opportunity for nurse practitioners with enhanced scope of practice to ‘fill the gaps’ in client care and work with doctors to provide ongoing support to people within the community environment.64 There was much discussion of the Buurtzorg model,65 which Professor Campbell and Professor Clarke describe in their expert report to the Board.66 The model is a new approach to care coordination that uses self-governing teams of nurses in a flat organisational structure. Nurses are allocated to specific neighbourhoods, with between 10 and 12 nurses responsible for 50–60 patients, and work to maximise patients’ self-management of chronic conditions. Under the model, nurses are supported by coaches and technology, rather than reporting  
up to managers.67 An evaluation of the model found that:

47

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

Buurtzorg’s patients required care for less time, regained autonomy quicker, had fewer emergency hospital admissions, and shorter lengths-of-stay after admission than those cared for by other home-care providers. In addition, the company had lower overhead costs and less than half the average incidence of sick leave and employee turnover.68

By allocating a group of patients to a nursing team, the Buurtzorg model also allows staff members

of the team to share care responsibilities, which results in greater continuity of care for patients if staff come and go from the team.69 The expert panel on health workforce advised the Board that adopting a Buurtzorg-type model could be a health improvement initiative to be developed in the medium-term. The expert panel suggested that in the short-term, nurse practitioners could be utilised in general medical practices as respiratory nurses, diabetes educators and care coordinators.70

Professor Campbell also noted that the concept of ‘health coaching’ was emerging as a ‘promising area for innovation’.71 He explained that coaching is a broad concept that can include medical practitioners coaching a patient or their family, or coaching a healthcare team to perform better in delivering health services.72

In relation to coordination of mental healthcare, the Board heard that whilst good services are available, there is scope for these services to be better integrated, particularly across service providers.73 The expert panel on mental health suggested that the way forward starts with mapping services across the mental health system to see what funding streams and networks already exist, and to bring together leaders in the sector. The panel advised that this work should involve community leaders, and that there should be  
a focus on early-intervention.74

**4.3 SCREENING AND EARLY DETECTION OF CHRONIC CONDITIONS** Screening refers to a variety of processes and tools aimed at identifying early signs of chronic disease (such as raised blood pressure, high cholesterol and decreased lung function) to prevent further disease progression. Professor Andrew Tonkin, a cardiologist from Monash University, and a member of the expert

panel on early detection and high risk screening, advised the Board that when considering the usefulness of screening, the burden of disease within a community must first be taken into account. He advised that screening is most beneficial where there is a high burden of chronic disease in a population, as there is in the Latrobe Valley.75 Screening enables the detection of risk factors, ideally without invasive testing, such as an angiogram.76

A significant number of written submissions received by the Board highlight the importance of early detection of chronic disease. Two themes were prominent across many of the submissions—the need for specialist screening processes to assist in the early identification of chronic disease, and the need for community education on the symptoms of chronic disease to increase uptake of screening.77

The expert panel on early detection and high risk screening discussed screening in the Latrobe Valley for risk factors of common chronic diseases such as cardiovascular disease, diabetes, pulmonary disease,  
and chronic depression and anxiety.78 Professor Clarke submitted that screening for mental health should  
be incorporated into screening for chronic disease.79 Professor Clarke submitted that there is a strong case to screen for anxiety and depression where people present with an acute cardiovascular event, such as a heart attack, or chronic physical health conditions like diabetes and arthritis.80 He suggested that the case could be made to screen young people for mental health issues given the high rates of youth suicide in the Latrobe Valley.81

Professor Tonkin emphasised that for early detection to make a difference to health outcomes, effective, low cost interventions need to be available to change the trajectory of the disease: ‘If you can’t intervene after you have detected, there is really little to be said for screening.’82 Consistent with this, Dr Daniel Steinfort, a respiratory physician from the Royal Melbourne Hospital, advised the Board that that there

is a limited role for screening for chronic obstructive pulmonary disease, such as emphysema, as there is currently limited effective treatment for this condition.83

Professor Tonkin explained that screening usually occurs within a general medical practice,84 although he noted that people may prefer to be screened in a community setting ‘outside the usual medical framework.’85 He told the Board that there is an opportunity for the Latrobe Valley to provide learnings about screening and disease prevention that might be of benefit across Australia.86

48

**Part Four Strengthening Health Services**

The Victorian Chronic Disease Prevention Alliance (VCDPA) states in its submission that ‘[m]any high risk individuals are unaware of their risk status and are therefore unlikely to undergo comprehensive, absolute risk assessment in an unprompted manner in primary care.’87

The VCDPA submitted that a consistent approach should be introduced for assessment and management of people at high risk of vascular disease. It recommends:

•

Establishing risk awareness and promotion programs in community settings (including in pharmacies and the workplace), to increase the number of people over 45 years of age who attend their GP for a health assessment.

Encouraging programs and policies that facilitate the use of an integrated health check

(for cardiovascular disease, chronic kidney disease and diabetes) in the primary care setting.

Establishing and implementing integrated community-based risk reduction for people at risk of vascular disease.88

•

•

The Victorian branch of the Heart Foundation recommends a number of measures to improve cardiac health in the Latrobe Valley, including educating people on the warning signs of a heart attack.89

The Victorian branch of the Australian Nursing and Midwifery Federation suggests that programs ‘should be implemented across all points of contact in the community including schools, health services, community services, community groups.’90

Dr Steinfort reported that there is emerging international evidence that screening individuals at high risk  
of lung cancer may lead to improved survival rates.91 He advised that Australian pilot projects about early detection of lung cancer are currently underway, and that in the short-term a project could be developed  
to identify the risk profile of the Latrobe Valley community.92 Dr Steinfort and Dr Alistair Wright, a general physician from Latrobe Regional Hospital, advised the Board that they have already commenced discussions about working together to understand the risk profile for lung cancer in the Latrobe Valley.93

Professor Campbell and Professor Clarke also state in their expert report to the Board that ‘screening high-risk individuals for lung cancer with low dose CT scans (LDCT) can save lives,’ and that such screening is particularly relevant for the Latrobe Valley community, given the community’s exposure to asbestos and the high rate of smoking. Whilst acknowledging the gap in international evidence about the optimal frequency and duration of screening for lung cancer, Professors Campbell and Clarke also suggest that the Latrobe Valley be included in a study on early detection of lung cancer.94

Ms Heather Scott, from the Latrobe Community Health Service, and Professor Tonkin both commented  
that one-off health assessments for people aged 45–49 years are under-utilised.95 Ms Scott noted that  
these assessments can be an important mechanism for assessing and identifying risk factors for disease.96 Professor Tonkin also noted an additional existing risk assessment guideline—the *National Vascular Disease Prevention Alliance* tool—for assessing the risk of coronary heart disease, including stroke.97

Professor Tonkin referred the Board to international evidence, also relevant to the Australian context, which shows that the application of risk assessment guidelines is a highly cost-effective approach—cost effectiveness modelling showed that risk assessment costs approximately $6,000 for every disability adjusted life year it saves. As a comparator, Professor Tonkin advised that the ‘cost-effectiveness bar’ for new drugs being considered for listing under the Pharmaceutical Benefits Scheme is about $30,000.98

The expert panel on early detection and high risk screening submitted that there was a potentially valuable role for the nursing workforce in supporting screening. Ms Scott outlined her experience of how nurses currently support general practitioners in delivering screening services. The panel suggested that community liaison officers, who can promote screening to particularly disadvantaged members of the community, would be an invaluable resource.99 The panel also suggested that a liaison officer who could facilitate communication between general practitioners and hospitals would be of value.100

The expert panel recommended a community screening day as a way forward in highlighting the importance of screening, and also as a way of regaining trust and giving back to the community in the short-term.101 A community screening day in the Latrobe Valley would involve a broad range of

stakeholders, including health professionals, community groups and non-government organisations.102

49

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

Professor Clarke noted that a screening day needs to be more than a one-off event,103 and Professor Tonkin noted that a screening day cannot occur in isolation, but that thinking needs to go into what happens to people who, once screened, are identified as being at high risk of chronic disease.104

Dr Wright cautioned that screening days may only reach those who are already likely to be screened and may miss those who need it most.105 Ms Kellie O’Callaghan, chair of the Board of Latrobe Regional Hospital, committee member of Regional Development Australia Gippsland, and Councillor of Latrobe City Council, committed to progress the idea of a screening day in the Latrobe Valley.106

The expert panel suggested that the most cost-effective intervention for improving respiratory health in the Latrobe Valley is smoking cessation programs.107 Professor Campbell and Professor Clarke also

recommend this in their expert report.108 Smoking cessation programs are considered in Part 5 of this report.

**4.4 HEALTH WORKFORCE CHALLENGES**

The Board heard of the need to increase the number and availability of health professionals (such as doctors and nurses) in the Latrobe Valley in order to achieve health improvements.

The Royal Australasian College of Physicians states in its submission that:

there has been a lack of strong local public health leadership and systems including public health physicians permanently positioned in regional Victorian public health units. Victoria lags behind other states in employing public health physicians and trainees within local public health units.109

In its written submission to the Board, the Australian Nursing and Midwifery Federation (Victorian branch) states that its ‘[m]embers report the [Latrobe Valley] community is disadvantaged by the limited access to medical services in particular the availability of medical specialists, and as a result of the regular turnover of general practitioners in the community.’110

In its submission, the Victorian Healthcare Association notes that the Latrobe Valley has fewer general practitioners, specialist medical practitioners, pharmacists and physiotherapists per 1,000 population than the Victorian average, and that projections indicate ‘significant shortages of nurses and moderate shortages of doctors in the coming years.’111

The Commonwealth Government’s white paper on roles and responsibilities in health notes that, among other factors, the growing burden of chronic disease is increasing the demand for health services.

Further, that both state and Commonwealth governments are facing workforce pressures, particularly in rural and regional areas.112

The expert panel on the health workforce provided an overview to the Board of nursing recruitment in the Latrobe Valley. Latrobe Regional Hospital is currently able to fill available nursing positions, largely due to its proximity to a tertiary provider of nursing training located in Churchill.113 Ms Amanda Cameron from Latrobe Regional Hospital advised the Board that there is likely to be an under-supply of qualified nurses in the future, as health workforce modelling shows that the population is ageing and nursing shortages are projected.114 Ms Cameron indicated that shortages will be exacerbated in the Latrobe Valley, particularly in midwifery, as the Churchill training provider has advised that they will cease training in midwifery in the foreseeable future.115 Ms Cameron also noted that it would be beneficial to have mental health training for nurses delivered locally.116

Ms Cameron advised that Latrobe Regional Hospital also has difficulty recruiting allied health professionals due to the lack of undergraduate allied health training available in the Latrobe Valley, with significant consequences for health service delivery.117 For example, a shortage of sonographers in the Latrobe Valley who provide a 24-hour diagnostic ultrasound service, means that patients requiring this service may need to wait in the emergency department of the hospital overnight, with flow-on pressures  
for the hospital staff.118

Ms Pip Carew of the Australian Nursing and Midwifery Federation (Victorian branch) advised that there is a current shortfall in mental health and drug and alcohol trained nurses in the Latrobe Valley, and further

opportunities for postgraduate training to enable nurses to work in these areas should be locally available.119

50

**Part Four Strengthening Health Services**

Dr Simon Fraser, also from Latrobe Regional Hospital and a member of the health workforce expert panel, confirmed that recruitment of senior doctors at Latrobe Regional Hospital has been easier in the previous few years, though areas of speciality remain under represented, such as mental health, and to a lesser degree obstetrics, anaesthetics and emergency department doctors.120 However, the

*Gippsland Rural Intern Training* program, which supplies doctors to the hospital, is growing, and the *Rural Generalist Pathway* program is encouraging general practitioners to diversify and expand their training into anaesthetics and obstetrics.121

Dr Fraser advised that the greater issue now is retaining senior doctors at the hospital, and attracting and retaining general practitioners.122 The expert panel on health workforce referred to key challenges relevant to recruiting and retaining doctors:

•

•

Ensuring appropriate employment for doctors’ partners and schooling for their children.123

Providing networks with metropolitan centres to allow opportunities for progression into specialty training pathways.124

Recruiting the next generation of doctors from rural areas.125

•

Professor Campbell also noted that retaining doctors and their families does not just increase service delivery resources, but also contributes social capital through doctors investing in and building their understanding of the local community.126

In its written submission to the Board, the Victorian Healthcare Association recommends that measures should be taken to ‘promote pathways for students to enter the nursing, medical and allied health professions and work in the Gippsland region.’127 The Association also suggests that the State has a continuing role to play in attracting and retaining a skilled health workforce in the Latrobe Valley.128

The health workforce expert panel also discussed the need to expand vocational training within Gippsland. The panel suggested to the Board that this might include expanding the *Gippsland Rural Intern Training* model into other specialties that are particularly in demand.129 Ms Cameron described the *Maternity Connect* program as an example of the effectiveness of a local training approach to ensuring a robust health workforce in the Latrobe Valley.130 The *Maternity Connect* program enables midwives from smaller health services to undertake placements in larger facilities, such as Latrobe Regional Hospital, to gain experience in managing higher risk patients. Staff are also sent to tertiary centres in Melbourne to gain experience in a tertiary environment. This program enables staff to be based in a rural area, such as Gippsland, for the bulk of their training, while still gaining higher level clinical experience.131

Professor Campbell suggested that another short-term option is to progress collaboration between Monash Health and Latrobe Regional Hospital on a regional advanced trainee program for general physicians, and he indicated he would progress this initiative.132

Another central theme discussed by the expert panel was the need for the local health workforce to

be aware of and suitably trained to address the particular health needs of the Latrobe Valley community.   
A number of written submissions to the Board note that community members perceive a lack of expertise amongst health service providers in the region, particularly in relation to health problems associated with the Hazelwood mine fire.133

The expert panel on children and youth also discussed this issue in response to a question from the Board about strengthening general practice in the Latrobe Valley as it related to child-friendly attitudes  
and practices. The panel suggested identifying local general practitioners with an interest in child health, and providing access to the support and training already available to hospital medical staff working in paediatrics.134 Panellists also recommended extending the services of paediatric general practitioners  
after hours, when access is most required. A further point of discussion for the panel was the value of  
co-locating services—having general practitioners and maternal and child health services operating alongside kindergarten programs and early intervention programs.135

The expert panel observed that the ‘care pathways’ to be developed by the Gippsland Primary Health Network will go some way towards providing information and expertise on appropriate treatment regimes.136 The Board was advised that improvements in tele-medicine (discussed below) might assist  
in ensuring that doctors in the region are appropriately skilled.

51

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

TELE-MEDICINE

During community consultations and in written submissions, community members frequently told the Board about the imposition of travelling to Melbourne to see medical specialists.137

Tele-medicine, also referred to as tele-health, was discussed by a number of expert panels as an option for increasing community access to medical specialists and enabling medical tests to be carried out in  
the home.

The World Health Organization defines tele-medicine as:

the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communications technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.138

In short, tele-medicine is the use of technology to assist in medical care. This assistance may be by way  
of supporting further education for health professionals or seeking second opinions from specialists in other locations; and it may extend to the use of machines to monitor patients in their own home where the results can be accessed by general practitioners or hospitals.139

Professor Campbell noted that the foot clinic example (discussed under the integrated care coordination section above) demonstrates the benefits of empowering local practitioners with the tools to treat clients and providing support through tele-medicine.140

Associate Professor Rasa endorsed tele-medicine as a model that can facilitate local care, particularly when clients have good support from their general practitioner. He noted that one of the challenges with tele-medicine is enabling payment for specialists, but that the current Commonwealth review of the Medicare Benefits Schedule offers an opportunity to ensure they are appropriately remunerated. Associate Professor Rasa also noted that further discussions with the Commonwealth may provide options for trials of new models of service using tele-medicine, in regional centres such as the Latrobe Valley.141

The health workforce expert panel and the children and youth expert panel also reported that tele- medicine can play a role in assisting with workforce training and retention.142 It was noted that some equipment already exists at Latrobe Regional Hospital to allow for this, but that assistance is required to coordinate meetings and facilitate the technical aspects of the tools, so that the systems are more reliable.143 The panel submitted that tele-medicine could be used to connect local practitioners with specialists who are not located locally, and also to connect specialists to clients in their own homes.144

INFRASTRUCTURE TO SUPPORT HEALTH SERVICE DELIVERY

Infrastructure to support health service delivery was identified by the community and expert panels as an issue for consideration.

In her written submission to the Board, Ms Grace FitzGerald, a Monash University medical student, expresses concern about the existing health infrastructure within the Latrobe Valley, and how this affects the community’s access to healthcare.145 In her submission, Latrobe Valley resident Ms Wendy Farmer mentions the need for specialist scanning equipment.146 The Asbestos Council of Victoria recommends  
a specialist respiratory unit.147

The expert panel on chronic disease management brought the Board’s attention to the forthcoming

re-development of Latrobe Regional Hospital, which is part of a longer-term master plan for the hospital. The Board was advised that $73 million has been earmarked for this re-development—significantly less than the more than $600 million available for the new Bendigo Hospital.148 The expert panel on health workforce emphasised the ‘need to see a commitment to the further development of Latrobe Regional Hospital as a regional hospital for the people of the Latrobe Valley and the wider Gippsland area, and a commitment for that to continue.’149

52

**Part Four Strengthening Health Services**

The expert panel on children and youth discussed a number of issues relating to the forthcoming re- development of Latrobe Regional Hospital. Of immediate concern were the high levels of aggressive behaviour that children currently encounter in the mixed waiting room in the existing Emergency Department.150 The panel recommended that this be addressed in the context of the re-development, where children should be separated from the general adult population in the triage, waiting and treatment areas.151 A further option brought to the Board’s attention was that of a general practitioner-led clinic, staffed by paediatric nurses, which could provide a quicker and more appropriate emergency department alternative to families and children.152

The expert panel on children and youth reported to the Board that the number of special care nursery beds in West Gippsland (including the Latrobe Valley region)—10 beds for the approximate 2,000 births per year—is below that of other regional areas. The panel advised that this has a significant impact on families, as they are away from home for lengthy periods.153

Health service facilities specific to the Latrobe Valley Aboriginal community are discussed in Part 6 of this report.

**4.5 BOARD’S CONSIDERATION AND PROPOSALS**

RE-DESIGNING HEALTH SERVICES

The Board considers that acknowledgment— by both Latrobe Valley residents and expert panel members— that the healthcare system needs to change shows a readiness for change in the Latrobe Valley. The poorer physical and mental health status of Latrobe Valley residents makes improvements to the health system for this community a priority.

The Board accepts that one of the overwhelming themes through the public submissions, community consultations and Health Improvement Forums was that the current health system needs to be

re-designed and tailored for the particular requirements of the Latrobe Valley community. One of the key issues discussed in this respect was ensuring that the health system is accessible, understandable and easy to navigate. Other key themes included the desire for people to be able to self-manage where possible so as to take the strain off the health system, and for health practitioners to work more in partnership or otherwise adopt a coordinated approach.

The Board received support for the concept of the Latrobe Valley being designated as a special health zone to bring about improvements to health. The Board’s considerations and recommendations with respect to the concept of a health zone are discussed in Part 8 this report.

The Board proposes that funds be prioritised for innovative health initiatives and trials of new approaches to health system design. The Board is of the view that this will lead to improved health outcomes for clients with chronic disease and mental ill health in the Latrobe Valley in the short, medium and long-term.

MENTAL HEALTH

The Board recognises that ensuring all members of the community understand mental health and know how to support people at risk of or experiencing mental health problems, is essential to supporting good mental health in the Latrobe Valley.

The Board accepts the evidence of Professor Campbell and Professor Clarke that mental illness is complex and can lead to persistent and disabling conditions. The Board notes that mental illness is often associated with other illnesses and linked to social and economic factors. The Board accepts that the Latrobe Valley experiences a higher rate of mental illness than other parts of Victoria. The Board also accepts that it is possible that the rates of mental illness in the Latrobe Valley have increased since the Hazelwood mine fire, although the evidence to demonstrate this is anecdotal. The Board considers that mental illness is an important issue that must be addressed, in the short to medium-term.

53

**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

The Board strongly suggests that the issue of improving access to mental health support be considered in the short-term and that it be a priority of health initiatives to be implemented by or through the State. The Board proposes that future initiatives relating to mental health be considered in association with healthcare initiatives for other chronic disease management, to ensure that those affected can clearly navigate a coordinated health system.

Other programs to support the health of children and promote mental wellbeing are considered in Part 5 of this report.

CONSUMER-LED CARE

The Board has heard through public submissions, community consultations and the Health Improvement Forums that the community wants to be involved in generating solutions for the improvement of the health of the Latrobe Valley. The Board considers that engaging with the community affected by the issues

will likely lead to a better health outcome for the Latrobe Valley. The Board endorses suggestions and recommendations by the mental health expert panel and the chronic disease management panel that involving the community will also likely lead to the community taking more responsibility for their own and their community’s health.

The Board affirms the State’s proposal to move towards a ‘person-centred’ healthcare system with equitable access, as documented in the Health 2040 Summit discussion paper.154 The Board considers this proposal has great merit and ought to be implemented.

The Board also notes that there are existing programs, such as the *Optimal Health* program run by the Latrobe Regional Hospital for mental health, that demonstrate the success of initiatives for those accessing health services to self-manage their care.

As discussed later in this report, the importance of community engagement in the design and implementation of initiatives relating to the community was repeated in relation to most aspects of

the health system. The Board acknowledges that community engagement is a critical step in ensuring that the community feels listened to, and it is likely to lead to better outcomes for all.

INTEGRATED CARE COORDINATION

The Board notes that both the expert panel on chronic disease management and the expert panel on mental health emphasised the importance of coordination and integration of care. The Board considers that this is a crucial aspect of improving health and that integration of care should be a key part of the underlying framework for developing health initiatives in the Latrobe Valley.

The Board proposes that consideration be given, in the medium-term, to nurses and nurse practitioners taking on a case management role in the care of people with chronic conditions, particularly those at high risk, to ensure a ‘one system’ approach from primary care through to tertiary care. The Board considers that the coordinated approach already taken in relation to some programs in the Latrobe Valley, such as the community health high-risk foot clinic and the State’s *Children & Youth Pathways to Good Health*, demonstrate that care coordination is possible and can be highly successful.

In developing such an approach, the Board suggests drawing on the experience of the Buurtzorg model. Care coordinators should also be considered for medical services provided to Aboriginal people, although the Board notes that Aboriginal Health Workers, rather than nurses, may be better placed to undertake this role, and that effective case management should be determined in consultation with the Latrobe Valley Aboriginal community. Aboriginal health is discussed further in Part 6 of this report.

The Board affirms the commitment of the Gippsland Primary Health Network to develop ‘care pathways’ to assist general practitioners in the management of complex conditions. The Board suggests that these be developed in partnership with the other principal stakeholder organisations for health in the Latrobe Valley, particularly in relation to chronic cardiovascular and respiratory conditions, diabetes, anxiety and depression.

54



**Part Four Strengthening Health Services**

**The Board recommends that an initial health improvement program is focused on innovative ways to deliver integrated care for people with chronic diseases, especially those with related mental health conditions.**

SCREENING AND EARLY DETECTION

The Board endorses the view of the Victorian Chronic Disease Prevention Alliance in relation to screening and early detection, and considers that there are health benefits to be gained by developing a consistent approach to the use of an integrated screening tool across the Latrobe Valley, in combination with risk awareness programs. In particular, the Board notes the cost benefits of screening. The Board considers that screening will be an important complement to the work of promoting healthy living (discussed in

Part 5 of this report).

The Board suggests that consideration be given in the medium-term to establishing a purposeful outreach screening program for chronic disease, utilising a common screening tool that involves general practitioners, community health nurses and Aboriginal medical services, to proactively screen for risk

of diabetes, cardiovascular disease, pulmonary disease, anxiety and depression.

In the short-term, the Board proposes that agencies reconsider the use of current centre-based community nursing resources and consider re-directing these towards a community outreach model as a first step.

The Board affirms the commitment of Ms Kellie O’Callaghan, chair of the Board of Latrobe Regional Hospital, committee member of Regional Development Australia Gippsland, and Councillor of Latrobe City Council to progress a community screening day, in partnership with the community and other major health services. This day could be approached as the ‘launch’ of a new outreach screening program

to support chronic disease prevention.

The Board considers that the development of ‘care pathways’ should be directed, as a priority, towards screening for common risk factors of chronic disease, and that a screening program launch should not occur until these pathways are in place and understood across the healthcare system, to ensure that follow-up care is provided for those identified as at high risk.

The Board proposes that in the medium-term, a Latrobe Valley screening protocol should be developed that covers clinical pathways from assessment to management, referral and treatment for cardiovascular disease, diabetes, pulmonary disease, and chronic depression and anxiety. The Board considers that in the development of a screening protocol as proposed, consideration should be given to the merits of

the Latrobe Valley participating in the national lung cancer screening trial.

The Board affirms the intention of Dr Alistair Wright, general physician from Latrobe Regional Hospital and Dr Daniel Steinfort, respiratory physician from the Royal Melbourne Hospital, to work together to understand the risk profile in the Latrobe Valley relevant to lung cancer, and the implications of this for a possible lung cancer screening program.

HEALTH WORKFORCE

The Board is concerned about existing difficulties recruiting health practitioners in some health workforce areas, and the projected significant shortages in the future, in particular in the nursing and medical workforces. The Board recognises that such shortages have the potential to be of detriment to the health of the people of the Latrobe Valley. The Board agrees that it is important to plan carefully to ensure

that there is a sufficiently trained workforce in place over the coming years to improve the health of the Latrobe Valley community.

The Board accepts that effective long-term recruitment and retention will most likely be achieved through strategies that promote the development of young people from the Latrobe Valley, combined with training opportunities for people located in the Latrobe Valley. The Board also notes, from information presented in Part 5 of this report, ‘growing your own’ is an important part of creating local jobs into the future.

55



**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

With regards to nursing and allied health training, the Board proposes that a strong university presence be maintained in the Latrobe Valley so that the future health workforce can be sourced from the local community.

With regards to medical training, the Board commends the work of the *Gippsland Rural Intern Training Program* and affirms the intention of Monash Health and Latrobe Regional Hospital to consider the development of an advanced physician trainee program for general physicians in the short-term.

In the long-term, the Board considers that the State should support Latrobe Regional Hospital to have a more self-sufficient medical workforce. This involves considering the establishment of private facilities in future hospital re-developments to attract specialists, and co-locating a clinical medical school on the hospital campus.

The Board also notes the health improvements recommended in Part 7 of this report, the objectives of which are to restore pride in the Latrobe Valley and to enhance the region’s ability to attract and retain a strong health workforce.

TELE-MEDICINE

The Board recognises the valuable role that tele-medicine could play in improving access to health specialists and in providing a greater range of opportunities for workforce development to assist in the retention of medical staff in the Latrobe Valley. Given the broad ranging ways in which tele-medicine can support patients, and health services and staff, the Board considers it should be prioritised as an area for action when implementing health initiatives in the Latrobe Valley.

The Board proposes that a tele-medicine suite, with experienced tele-medicine providers, be established in the Latrobe Valley with priority given:

•

In the short-term, to enabling tele-medicine consultations between medical staff in the Latrobe Valley and specialists in Melbourne.

In the medium-term, to establishing the capacity for patient home monitoring to assist in supporting self-management of chronic conditions.

In the long-term, to consider further expanding the Latrobe Valley tele-medicine capacity to involve general practitioners in hospital consultations.

•

•

The Board notes that making better use of technology is one of the principles for the future of the health system proposed by the State.

**The Board recommends that an initial health improvement program is focused on innovative ways to deliver tele-medicine services to reduce the barriers of access to medical specialists and other health practitioners.**

INFRASTRUCTURE TO SUPPORT HEALTH SERVICE DELIVERY

The Board considers that infrastructure to support health service delivery is an important area for further consideration in the medium and long-term. The Board affirms the commitment of Latrobe Regional Hospital to continue to develop as a regional hospital for the people of the Latrobe Valley and the wider Gippsland area. The Board considers that the State should give serious consideration to ensuring that future investment in this facility is at least equitable with other regional areas in Victoria.

The Board was concerned to hear of the high levels of aggressive behaviour from adults in the presence of children in the Emergency Department waiting room at Latrobe Regional Hospital. The Board proposes that Latrobe Regional Hospital Board give immediate consideration to separating children from the general adult population in the current hospital Emergency Department, and that separation of children from the general adult population in triage, waiting and treatment areas be a priority for the forthcoming re-development of the hospital.

56



**Hazelwood Mine Fire Inquiry Report 2015/2016 Volume 3**

58

