phn
MURRAY

An Australian Government Initiative

Needs Assessment 2016/17

Section 1 - Narrative

This section provides PHNs with the opportunity to provide brief narratives on the process and key issues relating to the Needs Assessment.

Process

A catchment wide needs and service analyses are underway as part of the commissioning cycle for Murray PHN. These analyses are informed by a foresight methodology (Voros, 2001) that moves from problem/gap identification through to options and opportunities that then informs the choice of strategic actions.

Key informants not only identify issues and needs, they subsequently become invested in generating strategic options and shared action. Murray PHN commenced this process in September 2015 and this document has been recently reviewed during October and November 2016, in readiness for the following year's prioritisation and planning process and includes general, mental health and alcohol and other drug assessments that are captured in this overall needs assessment.

The foresight process model that underpins the enquiry methodology and has involved staff working with their key stakeholders, colleagues and where possible, consumers to strengthen the broader Murray PHN needs assessment. The model addresses the following questions:

1. Scanning: What is happening?
Initial scan of data, policy settings and program priorities.

2. Analysis: What seems to be happening?
Assembly and presentation for further investigation in response to presenting and emerging needs and service system capability.

3. Assessment: What is really happening?
Deeper interpretation of the data with a range of key informants and lenses of equity, effectiveness and efficiency.

4. Prospection: What might happen?
Identifying the options based on evidence summaries and the desired outcomes.

5. Priority setting: What might we need to do?
Selected options supported by resource mapping based on strategic priorities.

6. Validation and planning: What will we do?
Triangulated evidence and knowledge base for each strategic priority, communicated between stakeholders and communities.

7. Strategy implementation: How do we do this?
Public release of annual work plan with key evidence, reporting and accountabilities through formal stakeholder commitments to collaborative actions.

Key issues

Since the initial assessment, Murray PHN has strengthened its future capability in knowledge management. The design and development of our population health knowledge base, known as Murray Exchange, has been a significant milestone in the assembly of quality health related information that is as contemporaneous as possible, as meaningful as possible, and as accessible as required for broad stakeholder and community consideration.

Throughout this document Murray Exchange is referenced as the link and the primary data source has been captured on the knowledge base. The development of other key functions on the knowledge base are underway and include community and consumer engagement, market analyses, library of relevant sites, sources and key documents, all of which will have interactive spaces for open and transparent engagement.

During this first year, a significant demographic data base has been assembled with a set of data cubes presenting the information. Data sets have been updated where there has been more recent releases, although most of the data sources remain as listed in the March 2016 version. It was determined at that time to use data sets that were no more than five years old, which was generally achieved, however this meant that some data was potentially relating to people and communities where considerable movement may have occurred within a five-year span. The lack of time series data as outlined in the next section has further limited the level of meaningful conclusions however a number of key indicators have since been configured to commence building time series data from hereon - see links to Murray Exchange for examples of this.

A number of profiles were commenced during 2016 to capture more localised knowledge where possible about priority areas. As proposed, broader sources of information such as grey literature focussed on specific regions, communities, and workforces as well as obtaining local action research and/or evaluations of particular service responses to identified needs for populations, cohorts or conditions have all been examined where possible. The result being that specific profiles for each Murray PHN region have been produced, as well as health status profiles on Aboriginal and Torres Strait Islander health and Aged Care. Initial market analyses has commenced on chronic disease conditions, the first being an in depth analysis on diabetes across the catchment.

GP data collected through specialised tools and software will yield considerable data and is currently being assembled for future planning and monitoring purposes. There is an increasing appreciation that developing health needs and service needs data over multiple years will better inform future decision making that so often needs more than a snapshot approach to assess the desired outcomes and degree of positive change. As it is for rural catchments, the numbers can be too small for sensible interpretation unless taken over time as time series data.

This revised needs assessment has focused on the priorities that were established by Murray PHN through its strategic review process late 2015, and that have been further developed in the Activity Work Plan. Where possible, an increased capability to produce localised data is being investigated through the development of dashboard indicators, particularly focusing on; childhood immunisation, avoidable hospital admissions specifically for chronic disease conditions (cardiac disease, Chronic Obstructive Pulmonary Disease (COPD) and diabetes), mental health, and cancer screening for breast, bowel and cervical cancers. Data monitoring through dashboard reports is planned for; Alcohol and other Drugs (AOD), childhood dental conditions, and after hours access.

Murray PHN welcomes the opportunity to work with stakeholders and communities within the catchment to collaborate on building better health outcomes for all Murray PHN residents.

Additional data needs and gaps

In determining the data sources, a number of factors influenced the selection, being:

- traditional suite of demographic data and a data set related to health status, health behaviours and health conditions
- access in a form that could provide a base line for future PHN catchment area needs
- opportunity for ongoing time series data to be developed
- opportunity for data to be integrated into discrete projects, communities and population needs
- data governance and integrity.

Whilst a significantly large selection has been compiled, there are gaps identified in the work to date. These indicate:

- identified data sets have limited usefulness for analysis specifically for the Aboriginal and Torres Strait Islander population and communities in the catchment because some key data is not as available by Indigenous status
- inability to conclude whether the population is getting better or worse because time series data are not presented
- inability to conclude whether Murray PHN is doing better or worse than like PHNs (same age structure/SES profile) because the comparator is either Victorian or Australian levels.

Finally, it is worth noting that significant findings are also limited or non-contextual because the data presents mostly as throughput measures, which doesn't inform about impact on health outcomes at a population health level. The PHN website provides helpful data, and over time Murray PHN expects to investigate specific data for more contextual and relational needs, such as planning for market diversity in outlying communities, and to work with the department to refine data needs. Murray PHN will continue to focus on strengthening the overall data picture by including qualitative evidence that is equally open to scrutiny as the quantitative sources, in order to ensure appropriate community context and service system capability is factored in to any analysis.

As part of the analysis, professional judgment of PHN staff, stakeholders and service providers has been taken into account and where possible, needs have been informally validated through feedback and multiple sources of perceived need that could be assessed as normative, felt, expressed, or comparative in their shared understanding. Significant volumes of data have been viewed in order to establish breadth of knowledge from key informants and provide some indication as to what is privileged through, or validated by, other funding drivers such as chronic disease management and service coordination as an example.

The establishment of the clinical and community advisory council structure has been completed. This provides each of the four regions with a regional clinical and a regional community advisory council, and through the Chairs of the eight councils, a catchment wide clinical and community advisory council that reports to the Board. The membership is 62 advisory members, supported by a Board sponsor in each region, with a regional coordinator. Across Murray PHN at any one time, there will be over 70 individuals actively engaged in clinical and community leadership in their communities, seeking and responding to localised needs and potential options around models of care and service system design and delivery.

This work will clearly inform Murray PHN about perceived impacts on health outcomes related to service system change and provide the Board with timely advice. The interim clinical council has been instrumental in assessing the critical themes for future consideration, particularly related to GPs, and will now transition to the new advisory structure. The imminent establishment of a catchment wide population health planning council to oversight the catchment's future population health and primary care systems knowledge management, and will also provide timely advice to the Board.

Through the initial needs assessment, a number of findings at the population health level informed the development of the Innovation Plan for 2016-18. These include: access as a recurring theme was significant and requires greater emphasis to understanding the soft (cultural) systems that impact rather than structural barriers only being considered. A specific project partnership with Women's Health services and Royal Flying Doctor Service will explore how women as health brokers in their families and communities experience lack of access and will take a co-design approach to localising solutions. A second project identified the need to understand access to primary care for aged care residents for whom the data indicates that there are avoidable hospital admissions occurring as identified in the needs assessment. A third project has emerged through the recognition that the Murray PHN catchment has a significant population of people who identify as Aboriginal and Torres Strait Islander, and whose health status continues to considerably lower than the general population. As a result of these findings, an Aboriginal Health Network has been jointly established with the Aboriginal Community Controlled Organisations (ACCOs) in the catchment. A final project that was identified through community forums (Campaspe) and dialogue with local industry/business leaders about the impact of drug use amongst its young people has resulted in an innovative approach to a public/private partnership to design and develop a new model of care for drug affected employees and their families.

Additional comments or feedback

Murray PHN has developed the 2016 Needs Assessment report as an initial provision of information captured thus far; and through this it has designed and developed a range of innovative projects that will build local and regional knowledge. Through this updated report Murray PHN continues to identify, collate and analyse relevant information that will inform planning activities for our commissioning and coordination role for a geographical region of rural Victoria, that previously was supported by five discrete Medicare Locals. Accordingly, Murray PHN has been working with key stakeholders to capture relevant information for this needs assessment and planning purposes since our commencement. As stated earlier, broadening scope to include case studies is designed to highlight qualitative as well as quantitative data, will be pursued and represents to our stakeholders the value placed on the collaborative approach Murray PHN will continue to foster.

The capture of data and information alone is inadequate to determine priority setting, systems change and resource mobilisation. The development of an evidence base for Murray PHN is ongoing and will be matured to become a robust, trusted source on which solid analysis can be based and interpreted in forms that a range of stakeholders, including communities and specific population groups, can use.

The design and development of the Murray PHNs approach to population health knowledge management has generated the following initiatives:

- a business process review and planned integration of current Murray PHN management information systems, including an appropriate information governance framework
- an enterprise wide population health planning framework and an online training module
- imminent launch of a catchment wide population health planning network
- a centralised information exchange that is:
  - enterprise wide and will embed a wide range of Murray PHN activities such as the community and clinical advisory councils
  - accessible to internal and external stakeholders
  - transparent by publishing key information that is evidence based about its commissioning activity that reflects:
    - market evidence and analysis about public, private and Not For Profit (NFP) service providers/partners
    - community residents of the community who use the service system
    - data evidence relating to demographics; health conditions, behaviours and status.

The centralised information and knowledge exchange (known as Murray Exchange) provides the platform from which all catchment and regional data is now accessed. Throughout this document, Murray Exchange has been cited and/or hyperlinked. For direct access go to exchange.murrayphn.org.au

In further understanding, both the health needs of our communities and opportunities to develop system improvements we focus on outcome and performance measures rather than outputs and utilisation statistics. Our first year of needs identification and assessment has relied heavily upon output and process measures and retrospective reviews of service systems. Future needs identification processes will be enhanced by the development of outcome performance measures, and opportunity for greater scope with predictive and trend analytics over time, as well as the anticipated increase in community participation through the advisory council structure.

Notwithstanding the current gaps in health data and information, and our progressive development in building capacity and opportunity to engage service providers, partners and communities in identifying needs and where possible, co-designing solutions that provide effective and responsive models of care. We will continue to consider the needs identification and assessment to be an ongoing and iterative process that is under ongoing development.

It is with this context that we submit this Needs Assessment report, acknowledging our progress towards responsible and responsive planning and delivery within the primary care sector across the Murray PHN catchment area.

Section 2 – Outcomes of the health needs analysis

This section summarises the findings of the health needs analysis to date, with a particular focus on priorities. As stated, the Needs Assessment summaries will continue to be developed in consultation with the service providers, communities and advisory structures. The summary is not presented as an exhaustive list or comprehensive evidence base, as it has sought to strategically build on existing local knowledge and professional judgment as to what matters most for the 2016/17 period.

Outcomes of the health needs analysis: key areas

- Population health
- Aboriginal and Torres Strait Islander health
- Aged care
- Mental health
- Child and adolescent mental health
- Suicide prevention
- Alcohol and other drugs (AOD)
- Oral health
- Childhood immunisations
- Cancer screenings
- Chronic disease conditions: diabetes and cardic related admissions

Population health

Key issues

- Need for increased access to services, and need for improved access for young people with a disability to supported care.
  - Options for access to after hours support including improved awareness of supports available Ageing in Place – care in the home models
  - Access to specialist service providers and greater flexibility for better models of coordinated care.
  - Discharge planning processes from metro and regional hospitals and improved after care services required and needing GP coordination.
- Health data establishes that four preventable chronic conditions, being: cardiovascular disease, diabetes, cancer and mental illness are the most significant direct contributors to the life expectancy gap between Aboriginal and non-Aboriginal Victorians.
- In some communities, particularly rural local government areas, such as the Shires of Gannawarra and the Shire of Strathbogie, people aged over 65 years represent more than one quarter of the total local government area population.
- Increased number of people and proportion of the population over 65 years and over 85 years means all services need to take more account of the needs of the old and the very old.
- A further analysis of the Australian Institute of Health and Welfare (AIHW) indicators shows that for certain conditions and service use activity, there are a number, for Murray PHN, which fall detrimentally outside of AIHW comparative data.
- Potentially preventable hospitalisations for COPD and complications arising from diabetes are significantly higher across the PHN with the highest numbers per standardised population rate in Central Victoria and Goulburn Valley regions *(AIHW 2016)*.
- Limited public dental clinics available throughout many rural areas.
- Major transport issues: access, timetabling, small towns into regional centres/services, costs as identified in local transport plans and reports.

Description of evidence

- Murray PHN had a total population of approximately 593,065 persons in 2014 and is projected to grow across the catchment steadily over the next ten years. In round figures, Central Victoria and North East have similar populations around 200,000, Goulburn Valley about 135,000, and North West reflecting around 80,000.
- Approximately 11,000 persons identify as Aboriginal and Torres Strait Islander (1.9%) with significant proportions residing in Swan Hill 4.3%, Mildura 3.6%, and Greater Shepparton 3.4%.
- 55 of the 68 Statistical Area 2s in the Murray PHN catchment have Socio-Economic Indexes for Areas (SEIFA) scores less favourable than the Victorian average.
- Specific communities of significant disadvantage include California Gully - Eaglehawk (903), Cobram (904), Seymour (899), Upper Yarra Valley (846) and Robinvale (872).
- In 2014, Murray PHN's catchment population was noticeably more likely to receive the Centrelink income support payments, age pension, disability support payment or the sole parent payment (females only) compared to the Victorian average. North West had the highest proportion of population receiving any three of these Centrelink income support payments *(Social Health Atlas of Australia 2015, Murray Exchange)*.
- 95,300 people aged over 65 years reside within the catchment representing 18% of the total catchment population.
- Avoidable mortality (0-74years):
  - Central Victoria five of six LGAs well above
  - Goulburn Valley all five LGAs above, notably with Murrindindi at 276.4 is more than double the Victorian rate
  - North East has five of eight LGAs above
  - North West has all three LGAs above the Victorian rate per 1,000.
- Those receiving disability support payments: approximately 30,000 persons (16 – 64 years) across the catchment represents 7.9% of the population.
- For those receiving instances of assistance through Home and Community Care (HACC): two areas have significant variance to the Victorian population rate, for Gannawarra it is more than double at 372, and for Loddon it is 560 against Victorian rate of 142.
- For all causes of premature mortality, excluding cerebrovascular diseases, Murray PHN has higher premature mortality than for all conditions in metropolitan Melbourne.

Aboriginal and Torres Strait Islander health

Summary points

- Approximately 11,000 persons identify as Aboriginal and Torres Strait Islander (1.9%) with significant proportions residing in Swan Hill 4.3%, Mildura 3.6%, and Greater Shepparton 3.4%.
- Over representation of Aboriginal and Torres Strait Islander people in the hospital separation data: Hospital separations by Indigenous status show Indigenous rates in the North West region to be nearly twice the average rate recorded for Victoria. *(VAED 2011/12 to 2013/14, Murray Exchange).*
- Aboriginal and Torres Strait Islander People experience a 76% higher Emergency Departments (ED) presentations for psychiatric illness than non-indigenous Australians.

Key issues

- Unacceptably high rates of morbidity and chronic disease across the Murray PHN Aboriginal and Torres Strait Islander population.
- Lower life expectancy and increased disadvantage.
- Higher ED presentation rates overall compared to the Victorian Aboriginal population rate.
- Need to work in close partnership with Aboriginal health services and community organisations to identify needs and provide screening, assessment and early intervention programs more collaboratively, especially in chronic disease management, smoking cessation and pain management (Australian Government 2013).
- Increased risk factors for social determinants of health, increased family violence, increased complexity and chronicity, and a lack of acknowledgment of the importance of culture within models of care - Increasing need for assistance for older community members: health literacy issues, transport needs.
- Need for Aboriginal children and families to participate in special activities aimed at teaching and celebrating their culture (AIHW 2014).
- Aboriginal children are over represented in out of home care and through child protection data, with increasing concern about levels of risk.
- Concern about dental health conditions for young Aboriginal children and over representation in some communities for children with dental conditions in avoidable hospital admission data.

Description of evidence

- Hospital separations for Indigenous population in the North West is notably higher, with a difference from the general population rate of 89%, and for Goulburn Valley it is 30%.
- Difference in ED presentation rates between general and Indigenous populations are 89% higher for Goulburn Valley, 52% more in North West, 44 % for North East and 18% difference in Central Victoria *(VAED data (2011/12, 2013/14), Murray Exchange).*
- Indigenous ED presentation rates for respiratory system illness (2011/12 to 2013/14 are higher in all areas of Murray PHN than Victoria. The difference between Indigenous and total population is especially high in Goulburn Valley (130% compared with 81%).
- Hospital separations by Indigenous status show Indigenous rates in the North West region to be nearly twice the average rate recorded for Victoria *(VAED 2011/12 to 2013/14, Murray Exchange).*
- Indigenous population hospital separation rates for respiratory system diseases and disorders were higher for the Murray PHN catchment than the Victorian average (19.6 compared to 15.9 per 100,000) *(VAED data 2011/12 to 13/14, Murray Exchange).*
- Core activity need for assistance by Indigenous status (2011) Indigenous population, higher in Goulburn Valley and North West than Victoria.
- HACC clients - (2012/13) Indigenous clients as a percentage of Indigenous population are higher in Central Victoria and Goulburn Valley than Victoria *(Social Health Atlas of Australia 2015, Murray Exchange).*
- Aboriginal and Torres Strait Islander people experience a 76% higher ED presentations for psychiatric illness than non-Indigenous Australians.
- Emergency department presentations for psychiatric illness by Indigenous status are 1.5 times higher in North West than for the Murray PHN total catchment. *(VEMD data 2011/12 to 13/14, Murray Exchange).*

Key issues

Description of evidence

- Public hospital separations for intentional self-harm injuries by Indigenous status show Indigenous rates are slightly higher in Goulburn Valley than Victoria *(VISU 2015, Murray Exchange).*
- In Albury, the admission rates (2012/13) for mental health related conditions for Aboriginal persons are more than double the Victorian Aboriginal persons rate *(PHIDU ATSI Social Health Atlas of Australia, 2016).*
- Admissions for circulatory system diseases are double the Victorian rate for Aboriginal persons in Swan Hill *(source PHIDU ATSI Social Health Atlas of Australia, 2016).*
- GP data *(PEN CAT September 2016)* primary diagnoses for Aboriginal and Torres Strait Islander persons are depression, asthma, osteoarthritis and anxiety.
- Antenatal visits in the first trimester for Aboriginal and Torres Strait Islander women, 2010–2011 were significantly less than the population average. *(AIHW report 2016, Murray Exchange).*
- Aboriginal and Torres Strait Islander people experience a 76% higher ED presentations for psychiatric illness than non-Indigenous Australians. The highest rate of presentations experienced in North West *(DHHS, VEMD public hospital data 2011/12 to 2013/14, Murray Exchange).*
- There are 44% more people who are registered mental health clients in the Murray PHN catchment area than the Victorian average (15.7 clients per 1,000 population) with higher rates experienced noticeably in Mildura (25.5) and Benalla (24.3). Rates were also substantially higher in Alpine, Wangaratta, Wodonga, Greater Bendigo, Greater Shepparton, Indigo and Swan Hill. North West had rates above the state average two out of three LGAs.

Aged care

Summary points

- The aged population across the PHN 65+ years (range 17-19%) is higher than the Victorian average of 14.8%.
- Five LGAs have 25% of their population above 65 years compared to the Victorian average of 15%.
- In some communities, particularly rural local government areas, such as the Shires of Gannawarra and Strathbogie, people aged over 65 years represent more than one quarter of the total local government area population.
- Generally lower rates of annual health assessments by GPs for persons 75 and over (2009/10) with LGAs Moira, Indigo, Towong, and Wodonga having significantly lower rates.
- Ambulance call out rate of 53% to Residential Aged Care Facilities in Bendigo were classified as Emergency Hospitalisation for external injuries caused by falls.

Key issues

- Need a broader primary health focus to support community and aged care resident needs (including social and lifestyle measures/interventions).
- Need to support general practice to accommodate types of patient care required by older persons such as; simple structured assessment and attention to underlying frailties i.e. mobility, undernutrition, pain, incontinence, and cognitive and sensory impairments that limit ability and independence.
- Lack of communication between patients, staff and relatives in aged care with regards to health and care needs.
- Need to ensure health issues in the elderly are identified in a timely way and appropriate care is accessible.
- Improved transport options, especially for those living in isolated areas.
- Need for consistent, safe medications management strategy.
- Early assessment and intervention in functional decline and complex care coordination.
- Need to reduce avoidable emergency department presentations through improving and promoting access to primary health care.
- Need to understand the implications of:
    - o significant increase in the number of older people
    - o increasing incidence of age-associated disability and disease (e.g. dementia, stroke, COPD, diabetes), along with complex morbidities.

Description of evidence

- All regions have considerably higher proportions of population than Victorian population for persons 65 and above. Central Victoria and Goulburn Valley have 19%, North East has 19.29%, and North West has 17.9% – against the Victorian percentage of 14.8. *(Australian Bureau of Statics 2014, Murray Exchange).*
- 2015 ABS population estimates (released August 2016), indicate there are now five LGAs in the Murray PHN catchment with more than 25% of the population being people aged 65+ (Victorian average 15%) *(Australian Bureau of Statics 2014, Murray Exchange).*
- Number of high level care places in residential aged care available across regions; Central Victoria; 955, Goulburn Valley; 669, North East; 887, and North West; 351 *(Social Health Atlas of Australia 2015, Murray Exchange).*
- Number of low level care places in residential aged care available across regions; Central Victoria; 1234, Goulburn Valley; 870, North East; 874, and North West; 446 *(Social Health Atlas of Australia 2015, Murray Exchange).*
- Number of community places in residential aged care available across regions: Central Victoria: 431; Goulburn Valley: 585; North East: 472; and North West: 356 *(Social Health Atlas of Australia 2015, Murray Exchange).*
- For annual health assessments by GPs for persons 75 and over (2009/10), areas where the rate per population was lower than Victoria include; Gannawarra, Loddon, Mt Alexander, Mitchell, Benalla, Albury, Mansfield, and Mildura, with the following having significantly lower rates; Moira, Indigo, Towong, and Wodonga *(Social Health Atlas of Australia 2015, Murray Exchange).*
- Rural Ambulance Victoria data reveals that in 2015, only 53% of call outs to Residential Aged Care Facilities in Bendigo were classified as Emergency Hospitalisation for external injuries caused by falls for person over 65 years of all fall hospitalisations (2011/12- 2013/14) indicates that the catchment has an overall average higher than the Victorian percentage, and Central Victoria, North East and North West are individually higher *(Rural Ambulance Victoria 2015).*

Mental health

Summary points

- Rates of depression across Murray PHN are 6.5% higher over a lifetime compared to their Victorian counterparts.
- 42% of communities across Murray PHN experience levels of psychological distress that are above the rural Victorian average.
- Aboriginal and Torres Strait Islander people experience 75% higher ED presentations for psychiatric illness.
- Only 8% of Mental Health (MH) Treatment Plan activities were for a review of the plan.
- Review of the uptake low intensity mental health interventions is required.
- There are 44% more registered mental health clients in Murray PHN than the Victorian average.

Key issues	Description of evidence
• There are number of communities across Murray PHN that experience poorer mental health than the general Victorian population.	• Residents in Murray PHN experience 6.5% more depression and anxiety over a lifetime than their Victorian counterparts. *(Victorian Women's Health Atlas 2011)*. • WorkSafe claims for mental disorders in Murray PHN are 27% higher than the Victorian average. In 2008-13, there were 1,718 WorkSafe claims for mental disorder injuries for persons who working in the Murray PHN catchment. This was notably higher than the Victorian average. The highest rate was recorded in the Central Victoria region. *(Worksafe Victoria 2014, Murray Exchange)*. • Despite having 27% higher rates for WorkSafe claims, only four LGAs recorded rates above the Victorian average for number of days totally unable to work, study or manage day-to-day activities due to psychological distress while only three LGAs reported higher than state level averages for having to cut down on work study or manage day-to-day activities due to psychological distress *(Victorian Population Health Survey 2011-12, Murray Exchange)*. • 42% of communities across Murray PHN report a high degree of psychological distress which is higher than the Rural Victorian percentage. Mildura, Benalla, Shepparton, Mount Alexander, Greater Bendigo, Wodonga, Moira, Mansfield, Wangaratta and Campaspe (in order of rate from highest) have rates of high or very high psychological distress above the Victorian rate of 11.6% (aged standardised modelled estimates).
• There are low numbers of MH Treatment Plan reviews being undertaken following the initial plan development. • 8% of MH Treatment Plan activities were for a review of the plan (MBS data 2015/16) *(Victorian Population Health Survey 2011-12, Murray Exchange)*.	• 40% of MH Treatment Plan activities were for patient attendance. • 52% of MH Treatment Plan activity were for preparation (by both MH trained GPs and not trained). • Overall, the Murray PHN catchment population was more likely to have visited a health professional due to psychological distress compared to the Victorian average. LGAs with the highest rates of not seeing a health professional were Indigo, Moira, Towong, Alpine, Wodonga, Mansfield, and Loddon. *(Victorian Population Health Survey 2011-12, Murray Exchange)*.
• Episodes of care for ATAPS suggests that the increased availability of lower intensity services may be needed.	• 79% of registered clients received no more than five sessions per episode of care, 8% received six sessions and 13% received seven or more sessions (MDS 2015/16). • In 2014-2015 Murray PHN residents spent $10,492,751 on Medicare fees for Allied Mental Health Services. *(Medicare Benefits Schedule data 2014-15, Murray Exchange)*.

Mental health continued...

Key issues	Description of evidence
• There are more people who are registered mental health clients in Murray PHN compared with the Victorian average.	• There are 44% more registered mental health clients in Murray PHN than the Victorian average. *(Victorian population Health Survey 2011-12, Murray Exchange).* • The rate of mental health clients per 1,000 population was higher than the Victorian average (15.7) for all Murray PHN LGAs except Macedon Ranges and Buloke. Within the region, Mildura Regional City (RC) (25.5) and Benalla (24.3) had rates that were more than twice the Victorian average. Rates were also substantially higher in Alpine, Wangaratta, Wodonga, Greater Bendigo, Greater Shepparton, Indigo and Swan Hill. *(DHS LGA Profile Data 2014, Murray Exchange).*
• Aboriginal and Torres Strait Islander People experience poorer mental health than the non-Indigenous population.	• Aboriginal and Torres Strait Islander people experience 76% higher ED presentations for psychiatric illness than non-Indigenous Australians. The highest rate of presentations was experienced in the North West *(DHHS, VEMD public hospital data 2011/12 to 2013/14, Murray Exchange).*
• Burden on hospitals and EDs.	• In 2011-12 to 2013-14, the rate of emergency department presentations for the psychiatric illness Major Diagnostic Category (MDC) was slightly higher than the Victorian average in the Murray PHN catchment, while it was notably higher in the catchment's North West region. *(Victorian population Health Survey 2011-12, Murray Exchange).* • In 2011-12 to 2013-14, the rate of emergency department presentations for Indigenous persons for the psychiatric illness MDC was notably higher than the total population rates in each of the catchment's regions. *(Victorian Population Health Survey 2011-12, Murray Exchange).* • The number of bed days as a percentage of populations for bipolar, schizophrenia and depressive episodes were +1.3% to +3.2% above AIHW comparative data. Schizophrenia bed days were significantly higher across all Murray PHN regions (+2.6% to + 3.2%) *(AIHW report 2016, Murray Exchange).*
• Overall physical health status for people with enduring mental illness is poorer than the general population. • Local Partners in Recovery (PIR) consumer and carer consultations have confirmed physical health as a priority area of need for people with severe and persistent mental illness.	• Estimates are that 20% of the Australian (aged 18 to 85) population will experience mental ill health, this equates to approximately 116,000 people across the Murray PHN catchment - of these, estimates indicate 1,565 people will have severe and persistent mental illness with complex needs. • During the 2014/15 financial year, 86,898 MBS item numbers associated with General Practice mental health care plans were recorded across Medicare Local areas now within the catchment. • 89,608 allied mental health MBS item numbers claimed during 2014/15. • Local data from Murray PHN's PIR programs confirm unmet physical health needs as being the highest unmet need for people with a severe and persistent mental illness and complex needs out of a total of 25 domains of need recorded by the use of the Camberwell Assessment of Need Short Assessment Scale (CANSAS).

Key issues

Description of evidence

- In 2011-13, all Murray PHN catchment LGAs except Macedon Ranges had a higher estimated rate of population with mental/behavioural problems than the Victorian average. Rates for females were higher than males in all LGAs. *(Victorian Population Health Survey 2011-12, Murray PHN).*
- Estimated percentage of the population with mental health/behavioural problems for the Victorian average is 12.7%, and LGAs with higher prevalence are:
  - Campaspe 14.1%
  - Greater Bendigo 14.2%
  - Loddon 14.4%
  - Mount Alexander 14%
  - Greater Shepparton 13.5%
  - Mitchell 13.1%
  - Moira 14.1%
  - Strathbogie 13.5%
  - Albury 14.2%
  - Alpine 13.4%
  - Benalla 14.8%
  - Wangaratta 14.3%
  - Wodonga 15.2%
  - Mildura 14.6%
  - Swan Hill 13.2%.
- The *Equally Well* report identifies that nationally, three out of every five (60%) people living with a mental illness have a co-existing physical illness.
- Certain indicators showing service use activity, fall detrimentally outside of AIHW comparative data. *(AIHW data, Murray Exchange).*

Child and adolescent mental health

Summary points

- One in seven (13.9%) of 4 – 17 year olds were assessed as having mental disorders in the previous 12 months
- Almost one third (30.0% or 4.2% of all 4-17year-olds) of children and adolescents with a disorder had two or more mental disorders at some time in the previous 12 months
- School based mental health services provided 40.2% of services
- 7.2% of all people accessing headspace services were young people from CALD communities
- Teenage pregnancy rate is 17.9 per 1000 as opposed to the Victorian average of 10.4 per 1000 = 75% difference

Key issues	Description of evidence
• Increasing support for GPs to meet mental health needs of children and young people (all regions). • Develop better access to mental health promotion for children and adolescents (all regions). • Improve coordinated planning across sectors and service systems – complex service environment (all regions). • Review of approach to culturally and linguistically diverse groups as CALD groups are underrepresented in the data (all regions). • Increase mental health service access rates for Aboriginal and Torres Strait Islander youths (4-17yrs) in the Central Victoria and Goulburn Valley regions	• Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing (June, 2015) o Almost one in seven (13.9%) 4-17 year-olds were assessed as having mental disorders in the previous 12 months. This is equivalent to 560,000 Australian children and adolescents o Males were more likely than females to have experienced mental disorders in the 12 months prior to the survey (16.3% compared with 11.5%) o ADHD was the most common mental disorder in children and adolescents (7.4%), followed by anxiety disorders (6.9%), major depressive disorder (2.8%) and conduct disorder (2.1%) o Based on these prevalence rates it is estimated that in the previous 12 months 298,000 Australian children and adolescents aged 4-17 years would have had ADHD, 278,000 had anxiety disorders, 112,000 had major depressive disorder and 83,600 had conduct disorder o Almost one third (30.0% or 4.2% of all 4-17year-olds) of children and adolescents with a disorder had two or more mental disorders at some time in the previous 12months • Schools provided services to 40.2% of the children and adolescents with mental disorders who attended them: 28.4% received individual counselling; 9.2% attended a group counselling or support program; 13.1% used a special class or school; 5.6% had seen a school nurse; and 17.1% received other school services • headspace services in Murray PHN report seeing a higher percentage of young people in the 12 -17 age group categories than the national totals. *(Annual report headspace data)* • headspace services report seeing a younger cohort of people in Murray PHN *(Annual Report headspace data)*
• More Aboriginal and Torres Strait Islander young people are accessing services than their non-Indigenous peers	• Aboriginal and Torres Strait Islander young people are accessing headspace at rates higher than the local Indigenous population in a number of centres within Murray PHN. *(Annual Report headspace data)* • Aboriginal and Torres Strait Islander young people are accessing headspace centres in the North West and North East at a higher rate than the national average. *(Annual Report headspace data)*
• Lack of services for CALD children and young people	• 7.2% of all people accessing headspace services were young people from CALD communities *(Annual Report headspace data)*

Key issues	Description of evidence
	• Culturally and linguistically diverse young people received fewer services at headspace within Murray PHN compared with the national figures. *(Annual Report headspace data)*
• Higher than state average rates of teenage pregnancy	• The rate of teenage pregnancy across Murray PHN of 17.9 is significantly higher than the Victorian rate of 10.4 births/1000 females with hot spots across the whole catchment, North West (25.9) being the most significant hot spot. *(education.vic.gov.au/about/research/Pages/vcams.aspx) *Rate of births per 1,000 female ERP aged 15-19yrs #excluding Albury*
• Bullying is a frequently reported issue for young people across Murray PHN	• Whilst adolescents from all LGAs have reported being bullied with a higher than rural Victorian rate of 20.8%, rates are higher in Mitchell (29.4%), Wodonga (25.7%) and Swan Hill (25.7%). Three-fifths (62.8%) of young people with a major depressive disorder had been bullied in the previous 12 months and were bullied more often. *(health.vic.gov.au, LGA tables)*
• Across Murray PHN there are communities of children who are particularly vulnerable and at risk of poorer mental health outcomes as a result.	• Rate of substantiated child abuse is higher than the rural Victorian average rate of 9.5 per 1000 population in Benalla (14.10) Wodonga and Mildura (both 13.2) *(Victorian Department of Health 2013, Local Government Area Profiles)*. • Rate of children on child protection orders is higher than the rural Victorian average rate of 8.8 per 1000. Population in Swan Hill (16.1/1000) ranked 3rd in the state), Mildura (15/1000) and Benalla (14.4/1000). (*Victorian Department of Health 2013, Local Government Area Profiles*). • Benalla has the highest and double the Rural Victorian rate of children in out of home care per 1000. Population at 14.4, followed by Swan Hill at 10.8, both of which are above the Rural Victorian state average of 7.7. *(Victorian Department of Health 2013, Local Government Area Profiles)*. • Percentage of children with emotional or behavioural problems at school entry in Benalla is the highest in the state (10.8%) and is close to double the rural Victorian rate of 5.6%, Wodonga is also high at 8.1% and ranks third in the state. *(Victorian Department of Health 2013, Local Government Area Profiles)*.

Suicide prevention

Summary points

- Avoidable deaths for suicide and self-inflicted injuries in Murray PHN were 40% above the state average *(Victorian Health Atlas).*
- Females account for 69% of all self-harm injury hospital admissions.
- The rate of self-harm injury for Aboriginal and Torres Strait Islander people is appoximately 50% more than the total Murray PHN rate.

Key issues	Description of evidence
• Above average suicide rates experienced in Murray PHN regions of North West and Goulburn Valley, with significantly high rates of ambulance attendance of suicide attempts in these regions.	• Annual frequency, overall frequency and average annual rates of suicide by LGA indicate that Benalla, Mansfield, Indigo and Mt Alexander are the highest. There is an increasing trend in Benalla and Mt Alexander in the years 2009–2015. *(Coroners Court of Victoria 2013–15).* • Avoidable deaths for suicide and self-inflicted injuries in the Murray PHN catchment area were 40.2% above the state average. *(Social Health Atlas of Australia 2015, Murray Exchange).* • Females accounted for 69% of all Murray PHN catchment hospital separations for self-harm injuries. *(VISU 2015, Murray Exchange).* • Compared to the Victorian average, many Murray PHN LGAs have a higher rate of avoidable deaths from suicide and self-inflicted injuries. Murrindindi had the highest rate, followed by Mount Alexander then Albury, Gannawarra, Macedon Ranges and Wangaratta. *(PHIDU 2015, Murray Exchange).*
• Rates of hospital separations for intentional self-harm is high compared to the state average in two of four regions within Murray PHN.	• North West region of Murray PHN experienced the highest rate of public hospital separations for intentional self-harm which is 13% higher than the state average. The next highest region was Goulburn Valley which is also above the state average. *(VISU 2015, Murray Exchange).*
• The rate of hospital separations for intentional self-harm for Aboriginal and Torres Strait Islander people is significantly higher than the non-Indigenous population.	• The rate of hospital separations for self-harm injuries for Murray PHN's Indigenous population (203.4) is approximately double the total Murray PHN rate (99.0). Murray PHN rate was only marginally above the Victorian rate (98.3) *(VISU 2015, Murray Exchange) *excluding Albury.* • Across Murray PHN, Aboriginal and Torres Strait Islander communities have a rate of separations which is 127% higher than the non-Indigenous population. Particular communities of concern that experience the highest rate are within Goulburn Valley (131%), Central Victoria (127%) and North West (79%). *(VISU 2015, Murray Exchange) *excluding Albury.*

Alcohol and other drugs (AOD)

Summary points

- Murray PHN had rates for smoking (above 18yrs) at 21.7% above the state average.
- Alcohol consumption for short term risk/high risk is 14% above the state average.
- Alcohol consumption for long term risk/high risk is 32% above the state average.
- The North West region has 50% more than the average number of alcohol related assaults.
- Access to services can be delayed through intake and assessment.

Key issues

- Smoking rates for Murray PHN are considerably higher than the Victorian average.
- The rates of alcohol consumption and related harm indicate an enduring need to be comprehensive in the strategic effort and cognisant of rural community culture, and subsequent impacts.
- Trends in illicit drug use, especially involving amphetamine use, require further planning of a comprehensive, catchment wide approach with focus on the North West and Goulburn Valley regions.
- Goulburn Valley region however shows the highest rate in the catchment for specifically drug dealing and trafficking.
- Community perceived damaging increase in the use of ice across the catchment by especially younger age groups.
- In providing current AOD needs data and priority issues, it is viewed that the category has intrinsic overlap with related and broader priority issues; especially mental health.

Description of evidence

- Murray PHN had rates for smoking for those over 18 years that were 21.7% above the Victorian average.
- Murray PHN LGAs, except Shepparton show higher rates for alcohol consumption at risk/high risk levels than the Victorian average, with particular concerns for short term risk of alcohol related harm. On average, Murray PHN had rates for short term risk/high risk that were 14% above the state average and long term risk/high risk is 32% above the state average. *(Victorian Population Health Survey 2011-12, Murray Exchange).*
- Murray PHN reported 1,651 alcohol related ambulance attendances in 2012-2013 *(Turning Point 2015, Murray Exchange)* .
- In Murray PHN there were 635 alcohol related serious road injuries in 2011-2014. This is 24% above the Victorian average. The rate of alcohol-related serious road accidents was also higher for Murray PHN's population than the Victorian average. Alcohol-related serious road injuries are higher in all regions except for Central Victoria (at approximately 14% lower) compared to Goulburn Valley at 87 % higher. *(Turning Point 2015, Murray Exchange).*
- There were 974 alcohol related assaults which is 26% above the Victorian average. The rate of alcohol-related assaults in the Murray PHN catchment population - including in each of its four regions - was higher than the Victorian average. The highest rate (more than double the Victorian average) was seen in North West *(Turning Point 2015, Murray Exchange).*
- The rate of alcohol-related deaths in the Murray PHN catchment, including in each of its four regions, was higher than the Victorian average. The highest rate was recorded in Goulburn Valley (50%) higher), followed by Central Victoria. *(Turning Point 2015, Murray Exchange).*
- Compared to the Victorian average rate of 430.2, the rate of Alcohol and Drug episodes of care for alcohol-related problems was notably higher for the Murray PHN catchment (572.6), including each of its four regions. The North West region had the highest rate, followed by Goulburn Valley, and both were substantially higher than the Victorian average. *(Turning Point 2015, Murray Exchange).*
- The rate of AOD episodes of care for illicit drug related problems was notably higher for the catchment, with North West having a substantially higher rate than the Victorian average *(Turning Point 2015, Murray Exchange).*

Alcohol and other drugs (AOD) continued...

Key issues

Description of evidence

- Compared to the Victorian average, rates for drug use and possession crime are especially high in the North West region and above the average in Goulburn Valley. These two regions also show higher rates for cultivating and manufacturing drugs.
- 989 illicit drug related ambulance attendances 2011-12/2013-14. *(Turning Point 2015, Murray Exchange).*
- 565 drug dealing and trafficking offences across the catchment which is 10% above the state average. The Goulburn Valley region however shows the highest rate in the catchment for drug dealing and trafficking. *(Turning Point 2015, Murray Exchange).*
- The rate of drug use and possession and cultivate or manufacture criminal offences were above the Victorian average in Goulburn Valley and North West. *(Crime Statistics Agency 2016, Murray Exchange)*.
- Emergency department presentations for co-occurring AOD and mental health disorders is much higher than the Victorian average, particularly for the North West region, which is distinct from the lower rates of the other Murray PHN regions. *(Department of Health and Human Services 2011/12 to 2013-14, Murray Exchange)*.
- The rate of hospital separations for alcohol/drug use and alcohol/drug use induced organic mental disorders is at or below the Victorian average in all Murray PHN regions. *(Department of Health and Human Services 2011/12 to 2013-14, Murray Exchange).*

Oral health

Summary points

- 14 of the 21 LGAs within Murray PHN have higher rates of people delaying visits to dental professionals due to cost.
- Ambulatory care sensitive conditions for dental conditions was higher for approximately half Murray PHN LGAs, with Mildura Gannawarra and Buloke having the highest.
- Towns currently without fluoridation exist across Murray PHN including Cohuna, Cobram, Numurkah, Myrtleford, Tatura, Bright, Woodend, Broadford, Mansfield and Alexandra.

Key issues

- Access to public dental health services is very limited in many rural communities, and private dental service may also be quite limited.
- Financial burden is acknowledged as a reason for not attending or seeking dental care.
- Number of potentially preventable hospital admissions related to children with caries needing extractions points to lack of oral health literacy, barriers such as cost, and access to providers.

Description of evidence

- Further investigation required to understand catchment level data however Ambulatory Care Sensitive Conditions data indicates that: hospital rates for dental conditions were higher than the Victorian rate in 4 of 6 areas in Central Victoria; 1 of 5 in Goulburn Valley; 3 of 7 in North East; and all 3 of North West (2013/14).
- Across catchment, 14 of 21 LGAs report higher rates of persons delaying visiting a dental professional due to cost (2011/12) and every area indicates a lower than Victorian percentage of persons visiting a dental professional in the previous 12 months (2011/12). *(Victorian Population Health Survey 2011-12, Murray Exchange).*
- Approximately half of the Murray PHN LGAs had populations that described their dental health as fair or poor. Within the catchment, Murrindindi, Swan Hill Rural City, Gannawarra, Mount Alexander, Benalla and Mitchell all had a notably higher rate compared to the Victorian average. *(Victorian Population Health Survey 2011-12, Murray Exchange).*
- Compared to the Victorian average, all Murray PHN LGA populations were less likely to have visited a dental professional in the last 12 months. The lowest proportion was seen in Gannawarra, followed by Campaspe then Moira. *(Victorian Population Health Survey 2011-12, Murray Exchange).*
- The ambulatory care sensitive condition rate for dental conditions was higher than the Victorian average in approximately half of the Murray PHN catchment LGAs. Mildura Rural City had the highest rate, followed by Gannawarra then Buloke. *(Victorian Health Information Surveillance System 2013-14, Murray Exchange).*
- The number of people who saw a dentist, hygenist or dental specialist in the proceeding 12 months were comparable to other regional peer groups, however rates were 5% lower in the Loddon Mallee Murray Medicare Local catchment than a metropolitan peer group comparitor. *(AIHW report, Murray Exchange).*
- Towns without fluoridation in our catchment include Cohuna, Cobram, Numurkah, Tatura, Myrtleford, Bright, Woodend, Broadford, Mansfield and Alexandra (10). Many others are using tank water as their primary water source.
- Percentage of persons consuming sugar sweetened soft drink was higher across central Victoria, Mitchell, Moira, Strathbogie, Alpine, Benalla, Towong, Wangaratta, Wodonga, Buloke and Swan Hill *(Victorian Population Health Survey 2011-12, Murray Exchange).*
- Children from low socio-economic areas are 70% more likely to have poor oral health than children in higher socio-economic area *(National Oral Health Care Plan 2015).*

Oral health continued...

Key issues

Description of evidence

- Adults who are socially disadvantaged or on low incomes have more than double the rate of poor oral health than those on higher incomes *(National Oral Health Care Plan 2015).*
- Aboriginal and Torres Strait Islander people experience poor oral health earlier in their lifespan and in greater severity and prevalence than the rest of the population *(National Oral Health Care Plan 2015).*
- Aboriginal and Torres Strait Islander people are also less likely to receive treatment to prevent or address poor oral health, resulting in oral health care which often takes place in the form of emergency treatment *(National Oral Health Care Plan 2015).*

Childhood immunisation rates

Summary Points

- Immunisation rates across Murray PHN generally are above the 'herd' immunisation rate of 90%.
- Data should be viewed with caution as actual numbers of participants in each location may be low.

Key issues

- Coverage rate is above the 90% indicator, but specific populations and communities are below: need better targeted interventions as this indicates decrease in timeliness of immunisations and impacts on increasing reported cases of pertussis.
- Potential impact of implementing 'no jab, no pay' strategy on families regarding income and child care supports.
- Whole of life approach implementation needs to include:
  - Residential Aged Care Facilities immunisations for residents and staff
  - Immunisation programs for over 65s
  - State funded activity for Aboriginal children
  - Chronic disease high risk groups
  - Pregnant women
  - Hospital staff immunisation
  - Staff of childcare facilities.

Description of evidence

- Time series data available catchment wide *(The Australian Immunisation Register report March 2016 Murray Exchange):*
  - 12<15-month year old full immunisation rates fell slightly below either Victorian or Australian averages in Buloke, Mildura, Gannawarra, Mt Alexander, Macedon Ranges, Mitchell, Benalla and Towong LGAs
  - 24<27-month year old full immunisation rates fell slightly below either Victorian or Australian averages in Swan Hill, Buloke, Macedon Ranges, Mount Alexander, Campaspe, Mitchell, Moira, Yarra Ranges, Murrindindi, Greater Shepparton, Alpine and Mansfield LGAs
  - 60<63-month year old full immunisation rates fell slightly below either Victorian or Australian averages in Swan Hill, Gannawarra, Macedon Ranges, Mt Alexander, Yarra Ranges, Murrindindi, Albury, Benalla, Wangaratta and Towong LGAs.

Cancer screening rates

Summary points

- Victorians living in regional and remote locations have a poorer cancer survival expectancy - 4% lower survival rate than those who live in Melbourne.
- Over 50% of LGAs within Murray PHN have cancer screening participation rates that are lower for either breast, cervical and bowel cancer compared to the Victorian average.
- PENCAT data will be used in the future to assess cancer screening participation rates.

Key issues

- Although cancer is a chronic disease, many health services including secondary and primary health services don't utilise existing chronic disease systems to support this patient population.
- Data obtained from peak bodies is often delayed. There is a need for more current data on a regular basis.
- There is a need to develop systems to record cancer survivorship.

Description of evidence

- Across the Loddon Mallee region, on average over the past five years, the cancer that killed most people was prostate cancer (17.1%), bowel cancer (14.4%) and breast cancer (11.6%).
- Current research about residents of the Loddon-Mallee region indicates a 4% lower five-year survival rate (65%) than those in Melbourne (69%) *(Victorian Cancer Registry, Cancer Council Victoria 2015)*.
- Cervical cancer screening by location (2013-2014) lower proportion in Gannawarra, Loddon (Central Victoria), Greater Shepparton, Mitchell, Moira, Murrindindi (Goulburn Valley) than Victoria.
- Bowel cancer screening (2013) lower proportion in Loddon (Central Victoria), Mildura, Swan Hill (North West) than Victoria.
- Breast Cancer screening (2013) lower in Loddon (Central Victoria), Alpine, Indigo, Towong, Wodonga (North East) than Victoria.
- PATCAT software currently being deployed across general practices will enable regular reports for the following on a three monthly basis:
    - Pap SmearMammogramFOBT
    - Health Checks – MBS Items 715, 45 – 49 years and 75+.

Chronic disease conditions

Summary points

Diabetes

- Diabetes and related complications, are listed in the top 10 presentations for ambulatory care sensitive conditions.
- General practitioners do not review care plans as frequently as required by best practice principles.

Cardiac related admissions

- Cardiac related admissions (including hypertension, congestive heart failure and angina) account for approximately 26% of all Ambulatory Care Sensitive Condition (ACSC) separations within hospital services.
- 50% of all LGA areas are assessed to be in the highest risk category of heart health.

Key issues

Diabetes

- Opportunity to enhance practice capacity to better identify patients at risk of, or with chronic disease and to strengthen the multidisciplinary coordination of care of patients in a way that fits with patient needs and contexts.
- Improve the integration between discharge planning services from hospital services into primary care settings in a way that connects patients to general practice, allied health and community support structures will be important to mitigate readmission.

Cardiac related admissions

- Cardiac related admissions (including hypertension, congestive heart failure and angina) account for approximately 26% of all ACSC separations within hospital services.
- The number of cardiac related presentations has increased each year since 2012/2013.
- 50% of all LGAs are assessed to be in the highest risk category of heart health.

Description of evidence

Diabetes

- Prevalence is highest in the Shire of Gannawarra, with National Disability Insurance Scheme (NDIS) reporting prevalence of 7.5% (against National average of 5.3% and PHN average of 5.7%).
- Complications arising from diabetes is the largest ACSC presenting within hospital services across the Murray PHN catchment area (20.8 % of all separations); increasing each year for the past three years.
- Despite this, MBS activity associated with GP management planning and review (MBS item numbers 721, 723, 729 and 731) have remained relatively constant, and in some instances declined, over the same period.
- Preliminary GP clinical audit tools suggest opportunity to improve practice quality specific areas to better identify and manage patients with diabetes. Specific areas of focus include:
  - Recording of HbA1c results; with 23% of patients diagnosed with diabetes having HbA1c results recorded.
  - Cholesterol results are not recorded in 20% of patients with diabetes.
  - Recording of foot exam at 6 and 12 months.

Cardiac related admissions

- VAED data has been sourced from Victorian public hospital information and does not include private hospital admissions. Specific characteristics include:
  - More than half of all admissions enter via Emergency Department (52.8%). LGA areas of significant emergency department points of interest are Swan Hill (66.4%), Mildura (63%) and Wangaratta (56%)
  - 83% of admissions are aged over 60 years
  - 43% of patients have no referral or support services arranged before discharge.
- Early, indicative evidence from clinical audit tools within general practice identify that 11.6% of patients are diagnosed with hypertension.

Section 3 – Outcomes of the service needs analysis

This section summarises the findings of the service needs analysis.

Outcomes of the service needs analysis

- Understanding our catchment profile
- Access to GPs or primary care providers
- Mental health services
- Suicide prevention
- Alcohol and other drugs services (AOD)
- Access to allied health practitioners
- Access issues for aged population
- Service coordination
- Referral
- Effective and efficient chronic disease management systems:
  - Diabetes
  - Cancer
  - Heart related conditions
- After hours
- Potentially preventable hospital admissions
- Patient/client information management systems and eHealth
- Health workforce

Understanding our catchment profile

Key issues	Description of evidence
• *Central Victoria:* six local government areas being Loddon, Campaspe, City of Greater Bendigo, Gannawarra, Mt Alexander, and shares the Macedon LGA with North Melbourne PHN and Western Victoria PHN - total population is approximately 225,834 with a total land mass of 21,221 square kms.	• Central Victoria region has 66 general practices, one large regional health service, 13 small rural health services and two bush nursing hospitals. The Central Victoria office is located in Bendigo.
• *North East:* eight local government areas being Albury, Alpine, Benalla, Indigo, Mansfield, Towong, Wangaratta and Wodonga - total population is approximately 170,780 with a total land mass of 24,080 square kms.	• North East region has 47 general practices, three regional and rural health services, and a range of small rural health services. The North East office is located in Albury.
• *Goulburn Valley:* five local government areas being Moira, Greater Shepparton, Strathbogie, Mitchell and Murrindindi - total population is approximately 151,237 with a total land mass of 16,522 square kms.	• Goulburn Valley region consists of approximately 42 general practices, a large regional health service, an Aboriginal Community Controlled Health Organisation, 11 small rural health services and nine community health services. The Goulburn Valley office is located in Shepparton.
• *North West:* three local government areas being Buloke, Mildura and Swan Hill - total population is approximately 67,729 with a total land mass of 34,066 square kms.	• North West region has 34 general practices, one large regional health service and a range of small rural health services. It also includes two Primary Care Partnership (PCP) regions. The North West office is located in Mildura. • Within the catchment there are significant settlement programs of recent arrivals in Swan Hill, Bendigo, Shepparton and Wodonga.

Access to GPs and primary care providers

Key issues

- Need for GPs in rural areas with impact of shortage in identified communities:
  - Increased use of Urgent Care Centres (UCC) and Emergency Departments (ED) in hospitals
  - Need for and impact of access to GP after hours for smaller communities and RACF and implications when GP has no admitting rights to hospital
  - Need for and impact of lack of 'in hours' GP services in smaller rural communities
  - Impact on GPs now that local government no longer undertakes child immunisation programs (Albury).
  - Need and impact of access for patients with complex care needs such as: requiring bariatric support, access to interpreter services, and respite care/aged care
  - GP fatigue regarding after hours - refer to after hours section.
- Financial burden with paying for health care.
- Need for adequate and appropriate local orientation support to International Medical Graduates (IMGs), junior and graduate doctors of local service systems. Referral pathways will improve service coordination, shared care planning and continuity of care.
- GPs not familiar enough with aged care MBS items.
- Extremely complex patients need shared care approach from primary and secondary health services but access to these services can be limited.
- Inadequate secondary services discharge planning.
- Lack of collaborative care across the treatment continuum, namely in discharge from acute mental health services into community, and poor feedback and collaborative care between GP's and specialist services (psychological services and mental health service providers).

Description of evidence

- Distinct districts of General Practice Workforce Shortage (RWAV) 2015: Mildura, Ouyen, Murrayville, Boort, Wedderburn, Rushworth, Yea, Numurkah, Mayhu, Corryong, Wangaratta, Bethargo.
- 84% of people saw a GP in the previous 12 months (rank 10 of 31 PHNs).
- 14% of people in Murray PHN saw a GP in the previous 12 months for urgent medical care (ranked 5 of 31 PHNs).
- Compared to the Victorian average, more than half of Murray PHNs LGA populations were more likely to report they had not visited a GP in the last 12 months. *(Victorian Population Health Survey 2014, Murray Exchange).*
- 81.8% of GP attendances were bulk billed, compared with 84.3% nationally. *(AIHW, MBS statistics 2014/15).*
- 15% of people were admitted to hospital in preceding 12 months (Murray PHN, ranked 5 of 31 PHNs).
- Low use of after hours GP services with 5% of people seeing a GP after hours (Murray PHN ranked 25 of 31 PHNs).
- 15 out of 22 LGAs within the Murray PHN catchment reported experience with transport limitation in the last 12 months *(LGA profiles data 2013, Murray Exchange*).
- All three LGAs in the North West region recorded rates of fair or poor self-assessed health that were higher than the state average. *(Social Health Atlas of Australia, 2015, Murray Exchange).*
- In 2011-12, 18 out of 21 Victorian LGAs in the Murray PHN catchment had a higher proportion of population that assessed their health as fair or poor. Within the catchment, Mildura, followed by Loddon then Greater Shepparton and Swan Hill, had the highest proportion of persons who assessed their health as fair or poor. *(Social Health Atlas of Australia, 2015, Murray Exchange).*

Access to specialist providers

Key issues

- Excessively long wait lists and extended waiting times reaching into years for some specialties.
- There are complexities and barriers to accessible, informed referral to specialist clinics.
- Specific specialties identified as having relative impacts across most of the catchment are: rheumatology, gerontology, dermatology, endocrinology, speech pathology, pain management specialists and psychiatry:
  - Paediatric care, access to specialist services for paediatricians - long waiting lists (years)
  - Paediatric diabetes, with transition to adult diabetes services
  - Mental health related services to support children 10-14yrs with medium to severe behaviours - mental health issue or paediatric issue
  - Rehabilitation services for pulmonary care in Benalla and transport options
  - Need for increased access through telehealth to specialists and addressing problems around financial burden and transport barriers, especially with non-bulk billing facilities.

Description of evidence

- Rate of referral to medical specialists rose from 5.6 per 100 problems managed in 2005-06 to 6.2 per 100 in 2014-15.
- Average number of specialist attendances per person is lower than the National average. (ABS, 2013-14).
- According to the DHHS performance monitoring website there is clear evidence of an up to two year wait to be seen by a specialist (e.g. Urology, ENT, orthopaedics).
- There is almost 170 medical specialists and 25 allied health professionals providing some level of outreach service through specialist clinics within the catchment.

Mental health

Key issues	Description of evidence
Consumers and carers experience • Mechanisms to support greater and more effective consumer and carer participation at an individual and systemic level across the continuum of need. • A lack of consultative mechanisms for gaining feedback and input from mental health consumers and carers who use the primary mental health service system. • Stigma impacts negatively upon the health and wellbeing of people who experience mental illness within the catchment, including stigma from providers of mental health services.	• Partners In Recovery (PIR) needs assessment (through a consultative process with consumers, carers and feedback from PIR clients). • Contributing Lives, Thriving Communities - Review of Mental Health Programmes and Services: National Mental Health Commission (2015). • PIR consumer and carer feedback and consultations from regions. Feedback from GP workforce engagement events. • Engagement with identified consumer and career groups across the Murray PHN catchment identified: o Lack of service response in acute circumstances o Frustration with discharge and re-entry processes at the specialist mental health level o Frustration with lack of information sharing between care team and consumers and carers o The system is difficult to navigate.
Rural and remote communities • There continues to be a lack of access to services for those living in rural and remote communities.	• Engagement with key stakeholders including service providers identified: o Access to private psychiatry is limited o Lack of transport is a barrier to service access o Outreach is limited and some communities have absence of local service provision o Access to bulking billing GPs is limited in some areas.
Access • Lack of access to care coordination for people with severe mental illness being managed in a primary care setting. • Potential service access limitations associated with mental health nurses located within specific general practices. • Access to psychological therapy services and state funded mental health services is limited in some smaller regional areas. • Access to early identification, intervention and care options for children and adolescents is limited.	• Refer to geo-mapping of Mental Health Nurse Incentive Program Services across the Murray PHN catchment area. • Refer to geo-mapping of ATAPS/MHSRRA services across Murray PHN catchment area. • Latrobe University PIR report 'Where do I start? Mental Health service access in small rural communities in the Southern Mallee Catchment' *(Kenny et al, 2015).* • Summary of findings: o Stigmatising attitudes are evident in small rural communities o Barriers to service access included a lack of understanding of mental illness amongst community members, health professionals and emergency service staff o Participants stated that the only way they could get help was in a crisis situation o A lack of discharge planning and inadequate service coordination o Perceptions of being excluded from care were consistent amongst family members. • Distance and transport issues in rural and remote areas still pose significant barriers to access to services for client and families.

Key issues	Description of evidence
Services for people who experience severe mental illness • Significant barriers for people with severe and persistent mental illness in accessing the community, resulting in social exclusion and lack of participation. • Dual diagnosis is poorly understood. • Poor transition and integration across multiple sectors with limited coordination. • Lack of available longer term case management. • Shortage of skilled workforce. • Missing those who fall through the gap between primary care and specialist mental health services.	• Local Camberwell Assessment of Need Short Assessment Scale (CANSAS) data from Murray PHN's PIR programs confirm unmet needs: o Daytime Activities and Company are consistently within the top four highest areas of unmet needs in both programs from 2013-2016 *(CANSAS).* • `Pathways Through the Jungle' PIR Project Report - Hume PIR. • Client file notes, client plans, use of flexible and brokerage funds - Northwest (PIR and Mental Heath Community Support Services (MHCSS) and Loddon Mallee Murray and Hume PIR regions). • Timely discharge from inpatient units is compromised due to lack of supported accommodation options in rural communities.
Child and Young Persons Mental Health (CYMS) • There is a lack of services for children and young person's mental health.	• Engagement with key stakeholders including service providers identified: o Gap in services for eating disorders o Lack of collaboration between services means that the potential benefits of headspace is not realised. Lack of outreach limits the accessibility to the youth community o Lack of skilled clinicians o Lack of targeted services in some areas including specialist mental health, primary mental health and school based services o There is a missing middle between current primacy care services and CYMS for complex presentations.
CALD communities • Barriers in accessing support and intervention for people from culturally and linguistically diverse communities.	• Feedback to Hume PIR from local migrant communities in Wangaratta. • Goulburn Valley Mental Health Community Support Services Catchment Plan. • Lower utilisation of translation services associated with provision of ATAPS/MHSSRA and MHNIP services in communities with high CALD populations.
Aboriginal health services • Intensive work is required to engage and maintain contact with Aboriginal and Torres Strait Islander (ATSI) people for follow up of primary mental health. • The risk to not invest time and effort in engaging and applying culturally safe practices results in poorer health outcomes for this group and higher demand on emergency and the primary health care system. • Accessing mainstream services that are not culturally safe, many service lack cultural awareness. • Shortage of ATSI health workers. • ACCOS report that people often present to Aboriginal Community Controlled Health Organisations (ACCHOs) in crisis; need for service coordination. • Lack of targeted services for young people. • Limited access to dual diagnosis services. • Conflict within community can make service access difficult.	• PIR client files (Hume) • Engagement with Aboriginal health services and workforce.

Suicide prevention

Key issues

- Limited access to integrated suicide prevention services across the catchment area.
- Prevention services exist in some areas but are not well integrated or known.
- Identifying the at-risk person is inconsistent and often missed.
- Training in risk assessment and safety planning is indicated.
- Poor discharge practices.
- Communities and front line worker need awareness raising and training.
- Referral processes are poor.
- Lack of targeted services for minority groups such as Lesbian, Gay, Bisexual, Transgender and Intersex Community (LGBTI) people and people from CALD backgrounds.

Description of evidence

- Relative Risk Profile - Department of Health and Ageing 2011.
- Turning Point - Self Harm and Mental Health Related Ambulance Attendances in Australia - 2013 data.
- Above average suicide rates experienced in Murray PHNs regions of North West and Goulburn Valley, with significantly high rates of Ambulance attendance of suicide attempts in these regions.

Alcohol and other drugs services (AOD)

Key issues	Description of evidence
Generally there is: • An absence of platforms for meaningful and effective consumer and carer engagement across the catchment area. • Low uptake of technological treatment and support options in rural areas - largely influenced by gaps in telecommunication coverage and internet bandwidth. • A lack of appropriate responses for the complexities of methamphetamine use that include social, clinical and environmental considerations. • Access to appropriate, safe and affordable housing.	• AOD catchment plans. • Independent Review of New Arrangements for the delivery of Mental Health Community Support Services and Drug Treatment Services: o Access to services in rural communities limited due to availability of skilled clinicians and service options - communities are underserviced o Poor use of technology to support service access o Lack of family support services o Lack of funding within services to respond to crisis situations o Lack of tracking with clients between intake, assessment and treatment o Homelessness and lack of crisis accommodation has subsequent impact on treatment options o Lack of funding and activity in prevention and early intervention o Appropriate facilities to deliver services difficult to access due to perceptions and stereotypes o Lack of transport and/or cost, limited options to reach services.
Coordination and integration • Service system is fragmented with multiple entry points for various treatment service types. • Inadequate support and treatment options for people who experience co-morbid mental illness and substance misuse. • Shared-care arrangements are variable, whilst there are pockets of good practice, coordination and mechanisms to support shared care are generally lacking. • General increased demand, and increased need for access to opioid replacement treatment programs • Not all communities across the catchment have access to bulk billing GPs. • Access to brief intervention, residential rehabilitation and family support services is limited.	• PHN consultation with AOD treatment services and other key stakeholders indicated some themes: o Difficulty in navigating system (including central intake via contracted service provider)- reluctance to make referrals o Assessment/intake is complex and disengages clients. o Due to central intake, treating agencies often need to undertake an additional (second) assessment o A sense that since central intake commenced referrals have dropped o No common data system - lack of central data or client management system for dual diagnosis clients can impact care coordination, impeded by less than strong professional relationships o Limited outreach results in people not being treated earlier o Coordination of care is not funded o Roles of services in treatment can be poorly defined o GPs are often the starting point for system entry but engagement and relationships less developed where previously direct referral capacity from GP strengthened GP/AOD worker relationships o Discharge notifications from ED and mental health inconsistent.
Treatment services • Limited access to bed-based withdrawal. • Availability of targeted youth services is disparate across the Murray PHN catchment area.	• Service system mapping indicates that access to specialist services such as Aboriginal and Torres Strait Islander specific, youth and withdrawal is largely determined upon place of residence. • HARM Reduction Victoria - consultations.

Alcohol and other drugs services (AOD) continued...

Key issues

Workforce development

- Lack of professional development opportunities in rural areas for AOD workforce, including general practice.
- Need to support GPs in managing AOD, particularly opioid and ice related issues.

Aboriginal and Torres Strait Islander people

- Families lack support.
- Lack of wrap around service provision.
- Lack of culturally safe service provision outside of indigenous services.
- Poor understanding of mental health, AOD and dual diagnosis amongst the community.
- Lack of accessible and appropriate rehabilitation and detoxification services for ice and poly drug use.
- Psychiatric services lacking the capacity to respond to drug-related mental health problems.
- Lack of systematic alcohol and drug awareness education in schools.
- AOD sector workforce and organisational capacity constraints.

Description of evidence

- Sources include: consultation with AOD service providers and other key stakeholders, AOD catchment plans:
  - Access to professional development and education for workers - metro courses are prohibitive to attend.

- Consultations with ACCHOs and other key stakeholders.
- Consultation with Victorian Aboriginal Community Controlled Health Organisation (VACCHO).

Access to allied health practitioners

Key issues

- Increased demand for and lack of access to exercise physiology.
- Increased demand for high risk foot services (increasing diabetes rates with diabetes complications).
- Improved continuity of service required, especially for when MBS visits have been used up.
- Bulk billed allied health care not widespread.
- Lack of public funded allied health for lower income persons.
- Lack of access to primary dental care.
- Need for extended hours for allied health and dialysis services.
- Opportunity for increased, supported telehealth services.
- Need for market development and incentives in some rural communities for allied health providers.

Description of evidence

- Bettering the Evaluation and Care of Health (BEACH) survey: GP rate of referral to allied health services increased from 2.0 per 100 problems managed in 2005-06 to 3.3 in 2014-15. Referrals to psychologists rose four-fold and those to podiatrists doubled. Shortages of access to specific practitioners or specialists related to Chronic Disease Management (CDM) identified through regional consultations:
  - pain management specialist services (all regions)
  - dietetic services, especially for young people (North East)
  - occupational therapists (North West)
  - ophthalmologist (Robinvale)
  - endocrinologist (Robinvale, Buloke, Gannawarra)
  - general physician (Robinvale)
  - counsellors (North West)
  - physiotherapist (Sealake, Seymour, Alexandra)
  - neurological physiotherapist (Lower Hume)
  - paediatricians (all regions)
  - exercise physiologists (Kerang, Sealake)
  - dentist - public (Gannawarra, Buloke, Murrindindi)
  - podiatrists – public (Kerang, Gannawarra)
  - high risk foot clinics – all areas access issues
  - diabetes educator (Buloke, Sealake, Seymour, Kinglake)
  - mental health practitioners (all regions)
  - dermatologist (Goulburn Valley).
- 2-3 month waiting period for appointments with a dietician, podiatrist or physiotherapist in parts of the catchment. Longer waiting periods for Speech Pathology in some areas. (especially with regards to paediatric needs).
- ACSC data shows very high admission rates for dental conditions. This can be interpreted in part to a lack of access to primary dental care. *(ACSC 2014/15, Murray Exchange).*
- High ED presentation and admission rates for cellulitis - this is often preventable with sufficient access to allied health.
- Gangrene causes the highest number of bed days in Goulburn Valley and North West regions. This is highly preventable with adequate access to primary care services *(ACSC 2014/15, Murray Exchange).*

Access issues for aged population

Key issues

- Ageing rural populations exist across the Murray PHN region placing increasing pressure on access to health resources.
- The ageing workforce has resulted in reduced hours of work.
- Transport limitation present barriers to access and lead to inappropriate ED presentations.
- GPs not familiar enough with aged care MBS items.
- Limited access to geriatricians in aged care.
- Limited access to technology for the elderly.
- GPs and general practices may not manage patients in an aged care facility or provide home visits.
- Expected relative decline in the number of informal carers.
- Access to other health care services, including allied health and pharmacy.

Description of evidence

- BEACH: aged 65+ years accounted for an increasing proportion of GPs' workload (from 27% to 31% of encounters). This change affected all aspects of general practice as older patients are more likely to have multiple issues, particularly chronic conditions and are more likely to have co-morbidities.
- 60% of adults in the Murray PHN region, report having long term health conditions *(AIHW patient experience survey 13/14).*
- Hospitalisations for external injuries that occurred in an aged care residential facility (2011-12 to 2013-14) show significantly higher rates in Central Victoria than Victoria, whilst Goulburn Valley, North East and North West are lower than Victorian average.
- The rate of persons aged 75 years and over who have annual GP assessments is lower than the Victorian average for many LGAs within Murray PHN, including most North East region LGAs. The lowest rates were recorded for Towong (one quarter of the Victorian average) and Indigo, Wodonga, Mount Alexander (all less than half the Victorian average). *(Social health atlas of Australia 2015, Murray Exchanage).*
- 15 out of 22 LGAs within the Murray PHN catchment area reported experience with transport limitation in the last 12 months *(LGA profiles data 2013, Murray Exchange).*
- Number of bulk billed GP attendances is lower in the Murray PHN region than the national average *(AIHW 2014-15).*
- GP attendances in aged care homes *(AIHW 2014-15)* lower in Murray PHN than the national average.
- The rate of high level - residential aged care places per population aged 70 years and over was higher than the Victorian average in the North East region; while the rate for low level - residential aged care places was higher in Goulburn Valley, Central Victoria and North West regions. The rate of community places was higher in the Goulburn Valley and North West regions *(Social Health Atlas of Australia 2015, Murray Exchange).*
- Rates of Home and Community Care (HACC) service delivery to clients aged 70 years and over were higher for all Murray PHN LGAs except Greater Shepparton and Mitchell. The highest rates were recorded at Gannawarra, Loddon and Buloke and this reflects the very high proportion of older population living in these locations. regions *(Social Health Atlas of Australia 2015, Murray Exchange).*

Service coordination

Key issues

- Discharge, planning, admission processes and acute stay periods need better alignment and coordination.
- Significant number of children living out of home, with a high number being from Aboriginal and Torres Strait Islander background.
- The future transition to the Commonwealth Home Support Program (CHSP) has the potential to adversely impact isolated communities.
- Lack of resourcing for community development in rural areas.

Description of evidence

- Victorian DHHS Service Coordination Survey 2015 - indicates that a considerable number of agencies across the catchment have used eReferral to:
  - increasingly to support referral and shared care
  - use a range of secure messaging/communications systems that interact to varying capabilities with organisational client/patient information management systems.
- Shared Care planning was supported in DHHS Loddon Mallee region through local agreements between three or more service providers in 66% of respondents; and in DHHS Hume region 55%.
- Communications with GP was less developed/ implemented, occurring in approximately half of these arrangements.
- Information conveyed was primarily patient/consumer information.
- There is significant involvement of multiple providers, but consistent lack of service coordination for this at risk vulnerable population.

Referral

Key issues

- Lack of inter-operability between health services systems.
- Number of legacy systems that don't engage patient or consumers in their own care.
- Improvements required to enhance eMessaging systems and secure messaging systems performance.
- Lack of workforce knowledge regarding referral systems to domestic violence services including:
  - Childrens services
  - District nursing services
  - Diagnostics services.
- Need to improve health professionals understanding of the billing eligibilities and constraints around diagnostic services:
  - For example, specialist orders an MRI for health care card holder, it is bulk billed but if the specialist requests the GP to order an MRI for the patient, can result in out of pocket cost of $200.
- Improvements required in regards to communication of changes to service provision between agencies (day, frequency, eligibility, referral method).
- Timely and accurate information provision about costs and service eligibility not effectively communicated.
- Significant variances across referral pathways and processes within and between service providers.

Description of evidence

- MBS evidence identifies increase of 18% of GPs utilising the telehealth, overall contributing to a 37% growth in telehealth consultations.
- Episodic use of telehealth to support discharge planning and shared care arrangements within the areas of cancer survivorship, dermatology and cardiology has been reported.
- Telehealth referrals have increased over the last three years with higher utilisation of the MBS financial incentives.
- Delays through redirected triage and timeframe reflected was 6-8 weeks.
- The demand for podiatry services was particularly high, (waiting times can be as great as four months and in some instances criteria and method to access the service has been reviewed to manage the demand – level of complexity and acuity continues to increase, impacting on waiting times).

Effective and efficient chronic disease management systems

Key issues

- There is a need for systematic approaches to the diagnosis, care planning and service coordination of chronic diseases across each region of Murray PHN.
- Requirement for a planned approach to improvements in individual service system inefficiencies (identified through evidence).

Description of evidence

- BEACH: Consultation rates - as a proportion of all MBS/DVA-claimable recorded consultations; short surgery consultations, chronic disease management items, health assessments, and GP mental health care all increased significantly while standard surgery consultations decreased significantly.
- Over the last 10 years, the most frequently managed GP consultations were for hypertension, check-ups and upper respiratory tract infection.
- Significant increases occurred in management rates for general check-ups, depression, back complaints, prescriptions, gastro-oesophageal reflux disease, anxiety, test results, administrative procedures, vitamin/nutritional deficiency, and atrial fibrillation.
- Management rate for chronic conditions in 2014-15 did not differ from the rate in 2005-06 and most commonly managed conditions were non-gestational hypertension, depressive disorder, non-gestational diabetes, chronic arthritis and lipid disorders.
- Increased management rates occurred for depressive disorders, oesophageal disease, atrial fibrillation/flutter, chronic back pain and unspecified chronic pain.

Required notable flexible service possible responses

- Multidisciplinary clinics: to support good patient care for with coordinated care specialist, allied health, nursing, prosthetics, counselling.
- Local government exploring opportunity of foot care nurses/allied health assistants.
- Foot care teams including a podiatrist, foot care nurse, and allied health assistants and referral from GP for podiatrist's assessment and for ongoing team care including patient education/self-management (Kerang).
- Local health and community services use video conferencing for case management *(Mallee Track).*
- Need to increase patient knowledge about physical activity and diabetes management in rural communities.
- Identification of barriers to physical activity in rural communities and the available options for older adults.
- Exploration of applicability of group based sessions.

- Opportunities to be pursued to build evidence through project funding and collaborations with service providers across the care continuum.

Challenges in provision and coordination of outreach and visiting services

- Services in rural and outlying communities are limited.
- Address the challenges of maintaining programs with limited resources, community interest, in smaller communities with less facilities.
- Address identified inefficiencies and duplication of services and the lack of coordination (3 dieticians from 3 different services that visit community).
- Need for GPs to assess and refer patients to a range of allied health services and or for multiple treatments within the one GP consultation.
- Improvement to communication between service providers and the public regarding changes to a service.
- Address workforce capacity needs to maintain appropriate service levels.
- Transport limitations are a barrier to access.

- Albury has a higher percentage of amputation - above the state average - this may, in part, be attributed to lack of diabetes care.
- All users of electronic data base systems are generally underutilised thus reducing the capability to support shared care.

Diabetes

Key issues

- *Loddon Mallee Region Diabetes Pathways* identifies twenty health disciplines, of which an average of nine of these professionals may be included in the cycle of care for a person with diabetes.
- *Diabetes Service System Analysis* across Buloke, Gannawarra and Swan Hill identifies where service provision is and is not available.
- There are predominantly fewer services as identified in the *Loddon Mallee Region Diabetes Pathways* as being required in the diabetes cycle of care available in the Buloke LGA than Swan Hill and Gannawarra.
- All services identified in the *Loddon Mallee Region Diabetes Pathways* are available in Swan Hill city including public and private providers and with specialist services attending on a cyclic basis.
- All regions within Murray PHN report a lack of access to Endocrinology services.

Description of evidence

- Potentially preventable hospitalisations by condition, (2013-14) - higher rate of diabetes complications in Murray PHN than Australia.
- Estimated population aged 18 years and over with diabetes mellitus, (2011-13) rates in all LGAs of Murray PHN lower or same as Victoria (positive).
- Potentially preventable hospitalisations for diabetes (2013-14) higher rates in Bendigo, Loddon-Elmore, Wangaratta-Benalla, Wodonga-Alpine, Murray River-Swan Hill, Moira, Murray PHN than Australia.
- Avoidable deaths from diabetes, persons aged 0 to 74 years (2009-12) higher rates in Campaspe, Gannawarra Greater Bendigo, Loddon, Mount Alexander (Central Victoria), Greater Shepparton, Mitchell, Moira (Goulburn Valley), Albury, Wangaratta, Wodonga (North East), Mildura, Swan Hill (North West) than Victoria.

Cancer

Key issues

- This disadvantage may be explained by poorer access to cancer services and community support structures.
- Data is currently lacking on cancer staging and treatments.
- This is anecdotally supported by health and community agencies across the Southern Mallee and Northern Loddon regions who report lack of health service capacity and patient access as key barriers to achieving quality cancer survivorship care.

Description of evidence

- Avoidable deaths from cancers, persons aged 0 to 74 years (2009-12) shows higher rates in Campaspe, Greater Bendigo, Loddon, Mount Alexander (Central Victoria), Greater Shepparton, Mitchell, Strathbogie (Goulburn Valley), Albury, Benalla, Indigo, Wodonga (North East), Buloke (North West) than Victoria.
- The rate of new cancer cases in 2007-11 was higher than the Victorian average in all Murray PHN regions. The highest rate was in Central Victoria and North West regions. The rate of new cancer cases is notably higher for males than females. This rate is likely to have been influenced by age structure of the population as it has not been age standardised (*exchange.murrayphn.org.au/north-west-victoria/85-general-health-and-wellbeing/646-cv-lifetime-prevalence-of-self-reported-doctor-diagnosed-stroke-2011-12-9*).

Heart related conditions

Key issues

- Hospital admissions for heart attack are higher in many parts of the catchment than the Victorian average, and very high in some areas.
- Bendigo Health report that 60% of patients who have been previously admitted for heart-related activity will be readmitted within a three year period.
- Lifestyle risk factors, including smoking and obesity, can be more systematically managed with primary care providers, through using clinical audit tools and improvement to practice workflows and systems, recognising that:
  - Smoking is higher in 12 of our local government areas than the Victorian average
  - Obesity is higher in 17 of our local government areas than the Victorian average.

Description of evidence

- Potentially preventable hospitalisations by condition, (2013-14) rates for angina, congestive heart failure and rheumatic heart disease are lower in the Murray PHN region than Australia (positive) but higher for hypertension (negative).
- Potentially preventable hospitalisations for congestive cardiac failure (2013-14) shows higher rates in Albury, Bendigo, Upper Goulburn Valley, Wangaratta-Benalla, Murray River-Swan Hill, Campaspe, Moira than the total Murray PHN.
- Avoidable deaths age 0 to 74 years due to ischaemic heart disease (2009-12) higher rates in all LGAs compared to the Victorian average (except Macedon Ranges and Wangaratta).
- Management of patients at risk of poor heart health can be better managed within primary and community health settings.

After hours

Key issues

- Difficulties in recruiting to isolated GP practices with younger graduates preferring a different lifestyle to that offered by small towns.
- Still a number of GP practices not in collaborative after-hours arrangements.
- Increasing community expectations of care on demand for non-urgent conditions.
- Opportunity to expand the use of Rural and Isolated Practice Endorsed Registered Nurses (RIPERN) for after-hours support at Urgent Care Centres.
- Average number of after-hours GP attendances per person in Shepparton SA3 is above the national average.
- Poor 'in hours access' and patients disengaged from GP presenting 'out of hours' to UCC or ED.
- New models of care and service delivery to support specific populations e.g. Urban fringe or dormitory towns and palliative care support after hours.
- Need for new models to include after hours support for carers.
- Availability of video conferencing technology to support remote consultation in after hours - improved support for rural communities with limited GP access.
- Aboriginal and Torres Strait Islander community over-represented in ED presentations (Goulburn Valley, Mildura Base and Albury Wodonga) as a consequence of poor understanding of health management, poor engagement with GPs resulting in use of EDs for health management.
- Demands and pressures of significant seasonal changes and/or major events to population numbers during peak tourist seasons (Yarrawonga, Mount Beauty, Mount Hotham, Echuca) puts significant strain on local practices and need for additional locum staffing and rosters to meet demand during peak seasons and events.
- Access to psychological services, particularly for populations unable to access in business hours.
- Access to pharmacies after hours for dispensing of medication in smaller towns and rural areas.

Description of evidence

- Difficulties in recruiting to isolated GP practices with younger graduates preferring a different lifestyle to that offered by small towns (ie: Mallee Track Health in Ouyen struggling for 12 months to recruit a permanent doctor) (*sunraysiadaily.com.au/story/2944134/ouyen-battles-to-find-doctor).*
- Evidenced by meetings with some practices where collaborative after hours arrangements across small towns had broken down.
- Evidenced by Kyneton District Health Service reports that for 2015/16 82% of presentations were categorised a 'seen by nurse only' compared to an average of 40% for Victorian Rural Hospital EDs.
- Data provided by ambulance victoria for the 2015 calendar year for ambulance callouts to residential aged care facilities in Bendigo indicates that only 53% of the 1,247 cases were classified as emergency.
- Based on a recent review of six small rural hospitals in which four of the six were not using their RIPERN staff effectively or wanted to recruit or train more (4 of the 6 were in the Murray PHN catchment area).
- Refer to *My Healthy Communities* report on Murray Exchange pages 51 and 375.
- Five month Heathcote RIPERN trial which targeted frequent presenters to improved supports and access to In hours services and thereby diverted 31 potential UCC presentations, saved an estimated 86 bed days and 14 ambulance transfers and the Hospital Board have agreed to continue the approach within their existing resources.
- Evidence from Cobaw Community Health that 46% of Kyneton and Woodend residents work outside the shire increasing the demand for extended hours and after hours services.
- Evidence from Sunraysia Community Health Services is that 70% of clients die in hospital despite many stating preference to die at home. New after horus palliative models are currently being trialed across the Murray PHN catchment area.
- A recent report prepared for the *Loddon Mallee Regional Palliative Care Consortium* indicated that just under 60% of carers that responded to their survey were 65 years or older *(Loddon Mallee Regional Palliative Care Consortium Scoping Project Report - final August 2016).*
- St Anthony's Medical Group telehealth trial has commenced at Boort.

Potentially avoidable hospitalisations

Key issues

- Relationship to lack of access to after hours GP services and lack of support for isolated GPs.
- Relationship to absolute GP shortages in some localities (eg Buloke/Mildura LGAs).
- Lack of communication regarding discharge planning and return to community services.
- Further work for the North East region regarding discharge planning processes, admission process and acute length of stay period to understand patient admissions to ED and/or acute.
- Need to increase development and review of care plans for chronic diseases.
- Lack of public dental services in Buloke and Gannawarra result in admissions for dental conditions/ extractions (especially for children).
- Relationship of health literacy levels to potentially preventable hositalisations.
- Link to transport issues.
- Link to ageing population and comorbidities (ageing population rates in regional areas are above state average).
- Reduced access to Endocrinology services relationship to admissions for diabetes complications.
- Relationship between reduced access to high risk foot services and diabetes complications, cellulitis and gangrene admissions.
- Link between Aboriginal and Torres Strait Islander population and potentially preventable hospitalisations (PPH).

Description of evidence

Potentially Preventable Hospitalisations (PPH), 2013-14 Murray PHN. Rates are per 100,000 people, age-standardised. (*National Health Performance Authority MDS 2013-14 and ABS population 2013)*:

- The overall rate of PPH for Murray PHN is in line with the national PHN rate
- By SA3 region, the Murray River - Swan Hill and Loddon - Elmore areas are higher than the national average *(rate per 100,000, AIHW 2013-14)*
- The highest rates of total PPH within Murray PHN by SA3s are Murray River-Swan Hill, Loddon-Elmore and Moira
- The rate of PPH for chronic conditions is significantly higher than National comparisons, especially in Murray River - Swan Hill and Loddon - Elmore areas and to a lesser extent in Upper Murray, Moira, Shepparton, Bendigo, Lower Murray, Campaspe, Upper Goulburn Valley and Wangaratta - Benalla
- Cellulitis PPH rates are similar to national averages, however COPD rates of PPH are more than double the National rate in the Loddon-Elmore area and high in other areas within the Murray PHN region
- The rate of PPH for COPD is significantly higher in the Murray PHN region than national averages (308 compared to 239 per 100,000
- The rate of PPH for diabetes complications is slightly higher overall for the Murray PHN region with 177, compared to 166 per 100,000
- However, the PPH rate for diabetes complications by SA3s within Murray PHN is more than double the national rate in Loddon-Elmore. The rate is also high in Moira, Wangaratta-Benalla, Bendigo, Lower Murray and slightly higher than average in the Murray River - Swan Hill SA3
- The rate of PPH for acute and vaccine preventable conditions is lower than the national average rate
- Congestive cardiac failure rates are on par with national rates
- Rates of PPH for kidney and UTIs are lower in the Murray PHN region
- Estimated population aged 18 years and over with diabetes mellitus, (2011-13) rates in all LGAs of Murray PHN is lower or same as Victoria (positive)
- Potentially avoidable deaths (per 100,000) 2011-13 were significantly higher in the Loddon-Elmore and Lower Murray and also higher than average in Moira, Upper Murray, Murray River – Swan Hill, Albury, Shepparton, Mildura and Wangaratta- Benalla, Upper Goulburn Valley, Campaspe, Bendigo areas within the Murray PHN region
- 20% of adults within Murray PHN reported needing to see a GP, but did not (2013-14 ABS, patient experience survey)
- 37% of adults stated they could not access their preferred GP in the preceding 12 months (2013-14)
- 17% of people visited hospital ED in preceding 12 months (Murray PHN ranked eighth).

eHealth

Key issues

- General lack of education, understanding and uptake of eHealth, including private allied health practitioners
- A belief amongst some health practitioners that eHealth is problematic and that they won't use it until there is an effective system that communicates with the hospital, GP and pharmacy systems.
- Electronic discharge summaries from medical, nursing and allied health.
- Knowledge gap between what the consumer expectations are around the ehealth record and the reality of how some GPs and specialists are 'using' the record. Patients think consent has been given and that their information is automatically uploaded and available (misperception).

Description of evidence

- Almost all general practices (97%) have in place the clinical and business software systems that support safe and efficient information exchange between health services and analysis of population health needs and patterns.
- Currently 178 general practices (96% of all practices) within Murray PHN receive the ePIP. These are the essential building blocks that will support improvements in patient care.
- While 72% of all general practices were receiving ePIP payments in 2013 - 2014, only 16% were uploading clinical information to the system.
- Opportunity to scale up supporting implementation and improvement in quality of care across the Murray PHN catchment area and strengthen GP integration with pharmacy and allied health services.

Health workforce

Key issues

Key issues raised elsewhere in needs assessment include:

- Existing labour shortages across a range of professions and disciplines.
- Skill shortages for emerging and growing needs such as aged care, dual diagnoses, patient and consumer engagement, digital health care, information management systems and evidence led practice.
- Access needs are outlined and future models of care need to be considered with the quantum, availability and capacity of specialists to meet demand.
- Specific challenges for rural communities in attracting, training and retaining skilled workforce, especially for residential aged care.
- Training opportunities in rural and regional settings and analytics about workforce supply and demand issues at a regional level.

Description of evidence

- There is limited regional health workforce data collection and analytics. It is more often historically reported and not as informative about demand and supply issues with the focus being more often being on general practitioners and not whole health workforce.
- A focus on strategic engagement of key players is planned, to collaborate on workforce strategies that redevelop and support an accessible and sustainable primary health system.
- In 2011 data, the catchment had 13% of its workforce employed in the health care and social assistance industries. For the Indigenous population the percentage was higher at almost 19%.
- Need for significantly more nurses and personal care workers with enhanced skills *(Australian Health and Hospitals Association, 2015)*.
- Distinct districts of General Practice Workforce Shortage (RWAV 2015): Mildura, Ouyen, Murrayville, Boort, Wedderburn, Rushworth, Yea, Numurkah, Mayhu, Corryong, Wangaratta, Bethargo.
- Movement toward larger practices continued, with decreased proportions of GP participants working in solo practice (13% to 9%), and in practices of 2–4 individual GPs (35% to 21%) The proportion of practices with 10 or more GPs more than doubled, from 13% to 29%.
- Proportion of practices using medical deputising services for some or all of their after hours patient care increased from 51% to 57%.