Submission to Inform the Development of:

The Australian Cancer Plan 2023–2033

Submitted by: Hepatitis Australia Inc.
Hepatitis Australia, incorporated in 1997, is the peak community organisation to progress national action on issues of importance to people affected by hepatitis B and hepatitis C. Our mission is to provide leadership and advocacy on viral hepatitis and support partnerships for action to ensure the needs of Australians affected by, or at risk of viral hepatitis, are met. Our members consist of the eight state and territory hepatitis organisations. Our vision is to see an end to viral hepatitis in Australia.

Contact: Carrie Fowlie – Chief Executive Officer
PO Box 716, Woden ACT 2606
admin@hepatitisaustralia.com
02 6232 4257

Executive Summary

Australia's liver cancer burden and the associated inequity in outcomes for marginalized people is growing:

- Liver cancer, predominantly caused by hepatitis, is Australia's fastest growing cause of cancer death and the third-deadliest cancer globally.
- Liver cancer defies the positive trends seen in other areas of cancer prevention and care in Australia; and highlights a growing area of inequity in cancer outcomes.
    - Liver cancer incidence is increasing faster than the increase in incidence of all cancers combined.
    - Compared with most other cancers, liver cancer has a low rate of survival five years post-diagnosis.
- As with hepatitis in general, liver cancer disproportionately and overwhelmingly affects vulnerable and often marginalized populations including Aboriginal and Torres Strait Islander people; culturally, ethnically and linguistically diverse people; people in detention settings and people with a history of injecting drug use.
- Liver cancer is largely preventable through sufficient action on hepatitis prevention, diagnosis and treatment. But greater effort is needed for this to be realised.
- Australia's commitment to eliminate hepatitis B and hepatitis C by 2030 provides a once in a generation opportunity to avert thousands of preventable cancer deaths.
- However, a sufficient national response to liver cancer and liver cancer prevention is needed within Australia's Cancer Plan for this goal to be realised.

The Australian Cancer Plan should include liver cancer as a priority focus area:

Hepatitis Australia is calling for the Australian Cancer Plan to identify liver cancer as a priority focus area. This requires the inclusion of relevant national strategies (i.e. the National Hepatitis B and Hepatitis C Strategies 2023-2030 and the National Aboriginal and Torres Strait Islander Bloodborne Viruses and Sexually Transmissible Infections Strategy 2023-2030) in a detailed national policy context, linkage between relevant national governance structures, and specific two, five and 10 year actions such as:

- Improving early detection of liver cancer through clinical care enhancements e.g:
    - in line with the Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections (MACBBVSTI) Hepatitis B Roundtable Recommendations,
    - Subsuming the Cancer Council's *Roadmap to Improved Liver Cancer Outcomes*), and
    - Informed by the Primary Care Collaborative Cancer Clinical (PC4) Trials Group *THE IC3 TRIAL: Identifying Cirrhosis and liver Cancer in primary Care*
- Supporting the implementation of universal screening for hepatitis B as demonstrated cost-effective cancer prevention.
- Ensuring consumer perspectives (i.e. from people impacted by liver cancer) are integrated into national cancer policy and clinical enhancement systems. Hepatitis Australia could assist.

- Enhancing the capacity of cancer support systems and palliative care to respond to the specific needs of people living with liver cancer, many of whom experience multi-faceted and compounding marginalisation.
- Increasing focus on liver cancer and prevention research including, for example, through the MRFF.

Introduction

Thank you for the opportunity to contribute to the development of the Australian Cancer Plan. As a peak body representing the interests of people living with hepatitis B and hepatitis C, Hepatitis Australia is acutely aware of the impacts of cancer. In the case of liver cancer, these impacts disproportionately affect vulnerable and often-marginalised population groups. We welcome the development of this important Plan and the opportunity to highlight and address an area of increasing unmet need. Achieving Australia's commitment to eliminate hepatitis B and hepatitis C by 2030 provides a once in a generation opportunity to avert thousands of preventable cancer deaths.

About Hepatitis Australia

Hepatitis Australia is the peak community organisation progressing national action on issues of importance to people affected by viral hepatitis. Our mission is to lead an effective national community response to hepatitis B and hepatitis C, representing the interests of an estimated 356,000 Australians chronically affected.

The inequities of liver cancer, health outcomes, and affected populations

Table 1 illustrates the inequities of liver cancer, health outcomes, and affected populations, with relevant data in five key domains including comparisons against 'all cancers combined' where available. These data highlight how liver cancer defies positive trends (such as increasing survival rates across most cancer types). With worsening outcomes for liver cancer front of mind, Hepatitis Australia is buoyed by intentions for the Australian Cancer Plan to be equity focused, striving for equitable cancer outcomes across all population groups.

Table 1: The inequities of liver cancer

<table>
<tr><td colspan="2">Incidence
Incidence refers to the number of new cases diagnosed each year. Liver cancer incidence is increasing faster than the increase in incidence of all cancers combined.</td></tr>
<tr><td>The number of new cases of liver cancer is estimated to be 2,599 in 2019. This represents:
- a 25% increase from 2,079 in 2015, and
- a 51% increase from 1,549 in 2010.</td><td>The number of cases of all cancers combined is estimated to be 144,713 in 2019. This represents:
- a 10% increase from 131,452 in 2015, and
- a 21% increase from 119,472 in 2010.</td></tr>
<tr><td colspan="2">Age-standardised incidence
Age-standardised incidence refers to the number of new cases diagnosed each year, presented as age-standardised rates (to remove the influence of age for comparing different populations). Age-standardised incidence of liver cancer is increasing faster than all cancers combined. Liver cancer impacts men significantly more than women and is also disproportionally distributed (per capita) in areas of low socio-economic status and remote/very remote regions.</td></tr>
</table>

The age-standardised incidence rate of **liver cancer** is estimated to be 8.6 cases per 100,000 persons in 2019. This represents: - a 13% increase from 7.6 in 2015, and - a 32% increase from 6.5 in 2010.	The incidence of **all cancers** combined in Australia is changing over time. From 1982 to 2015, the age–standardised incidence rate increased by 21% (from 383.5 to 486.9 per 100,000). However, this includes a slight improvement (of 2.6%) in rate from 2010 to 2015, when the age-standardised incidence rate decreased from 499.7 to 486.9 per 100,000 persons.
In the period 2010-2014, stratified by socio-economic status (SES), the highest age-standardised rate of **liver cancer** (per 100,000 persons) occurred in the lowest quintile (SES 1) where it was 58% higher than the highest quintile (SES 5): - SES 1 (Men) 13.9 - SES 1 (Women) 4.5 - SES 5 (Men) 8.5 - SES 5 (Women) 3.2 - Australia (Men) 10.8 - Australia (Women) 3.6	In the period 2010-2014, for **all cancers** the age-standardised incidence rate was highest in the lowest SES quintile.
In the period 2010-2014, the age-standardised incidence rate of **liver cancer** was 16% higher in remote/very remote regions than major cities: - Remote/very remote (Men) 11.5 - Remote/very remote (Women) 5.1 - Australia (Men) 10.8 - Australia (Women) 3.6	In the period 2010-2014, for **all cancers** (and in contrast with the case for liver cancer) the age-standardised incidence rate was lowest in remote/very remote regions. - Remote/very remote (Men) 530.6 - Remote/very remote (Women) 410.6 - Australia (Men) 581.7 - Australia (Women) 422.4
Aboriginal and Torres Strait Islander people experienced higher age-standardised liver cancer incidence rates than non-Indigenous persons. In 2009-2013, age-standardised **liver cancer** incidence rates were 142% higher in Aboriginal and Torres Strait Islander people (15.5 per 100,000) than non-Indigenous Australians (6.4 per 100,000).	In 2009–2013, age-standardised incidence rates for **all cancers** combined (excluding non-melanoma cancers of the skin) were 14% higher in Aboriginal and Torres Strait Islander people (501.4 per 100,000) than non-Indigenous Australians (438.6 per 100,000).
In Australia, more than 50% of people with hepatocellular carcinoma (HCC) were born overseas. HCC is the major cause of liver cancer morbidity and mortality and hepatitis B (22%) and hepatitis C (41%) are significant contributors.	

5-year relative survival Relative survival refers to the probability of being alive for a given amount of time after diagnosis, compared with the experience of the general population. The measure '5-year relative survival at diagnosis' refers to the probability that a person will survive their cancer for five years after a cancer diagnosis. Compared with most other cancers, liver cancer has a low rate of survival five years post-diagnosis.	
In the period 2012-2016, 5-year survival was lowest for: - pancreatic cancer (11%) - lung cancer (19%) - **liver cancer** (19.5%)	In the period 2012–2016, 5-year survival was 69% for **all cancers** combined.
Mortality Cancer mortality data refer to the number of deaths in a calendar year for which the underlying cause is cancer. Whilst the age-standardised rate of mortality from all cancers has decreased over time, deaths from liver cancer have increased exponentially.	
In the years from 1968 to 2016, as the Australian population doubled (from 12 million to 24 million): - deaths from **liver cancer** increased 16-fold from 117 (1968) to 1,864 (2016), and - the age-standardised **liver cancer** mortality rate increased from 1.3 deaths per 100,000 persons (in 1968) to 6.6 deaths per 100,000 (in 2016). In 2019 it is estimated that deaths from **liver cancer** total 2,161 with an age-standardised mortality rate of 7.0 deaths per 100,000 persons.	In the years from 1968 to 2016, the age-standardised mortality rate for **all cancers** combined has decreased over time: - 199.1 deaths per 100,000 persons in 1968 - 160.0 deaths per 100,000 persons in 2016. In 2019 it is estimated that the age-standardised mortality rate from **all cancers** is 159.0 deaths per 100,000 persons.
Mortality-to-incidence ratio (MIR) The MIR is calculated by dividing the number of deaths from certain cancers in a given year by the number of newly diagnosed cases in the same year. It is a high-level comparative measure to identify inequities in cancer outcomes, including identifying population groups with poorer survival outcomes (such as liver cancer) warranting further investigation.	
In 2016 MIRs were highest (indicating shorter survival) for: - oesophageal cancer (0.90) - **liver cancer** (0.87), - pancreatic cancer (0.86).	In 2016, the MIR for **all cancers** combined in Australia was 0.34.

Liver cancer impacts a diverse range of people however certain population groups are disproportionally affected. There is considerable overlap with Hepatitis Australia's communities of interest (i.e. priority populations of the National Hepatitis B and Hepatitis C Strategies) including:

- People living with hepatitis B and hepatitis C
- Aboriginal and Torres Strait Islander people
- People from culturally, ethnically and linguistically diverse backgrounds
- People in detention settings, and
- People with a history of injecting drug use.

Consultation Question One: What would you like to see the Australian Cancer Plan achieve?

Hepatitis Australia welcomes the outcomes of the Ministerial Roundtable held in April 2021. Whilst event capacity did not enable Hepatitis Australia to attend, the Roundtable outcomes informing the development of the Australian Cancer Plan resonate strongly and have key areas of alignment for the needs of people at risk of and living with liver cancer. Hepatitis Australia would like to see a strong focus on prevention and:

- Scope to cater for the unique needs of specific cancer types and population groups [particularly those where generally-positive trends are not observed]
- Reducing inequities (i.e. equitable cancer outcomes across all population groups),
- Ensuring greatest impact, including by increasing cancer screening rates nationally (particularly in populations and areas where cancer screening participation is low or where disparities exist).

In accordance with the Roundtable outcomes Hepatitis Australia calls for the Plan to:

- Specifically highlight liver cancer (amongst the areas of greatest inequity and affected populations defying more positive trends) as a priority focus area
- Highlight Australia's commitment to eliminating hepatitis B and hepatitis C by 2030 as a key cancer prevention opportunity
- Include a detailed policy context including the National Hepatitis B and Hepatitis C Strategies 2023-2030 and the National Aboriginal and Torres Strait Islander Bloodborne Viruses and Sexually Transmissible Infections Strategy 2023-2030
- Link national cancer governance structures with those of viral hepatitis (i.e. the Blood Borne Viruses and Sexually Transmissible Infections Standing Committee (BBVSS) and the Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections (MACBBVSTI)).

Consultation Question Two: What are the opportunities with the greatest potential to realise your vision?

The current National Hepatitis B and Hepatitis C Strategies reference the links between hepatitis and liver cancer yet contain no specific actions focused in this area. Hepatitis Australia is determined to advocate for the next iteration of National Strategies (2023-2030) to:

- Incorporate specific actions focused on liver cancer (ideally in line with the Australian Cancer Plan), and
- Enshrine Australia's commitment to achieving the Global Hepatitis Elimination Goals including, by 2030, to reduce mortality from hepatitis B and hepatitis C by 65%.

Hepatitis Australia is calling for the Australian Cancer Plan to identify liver cancer as a priority focus area with relevant and specific two, five and 10 year actions such as:

- Improving early detection of liver cancer through clinical care enhancements e.g:
    - in line with the Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections (MACBBVSTI) Hepatitis B Roundtable Recommendations,
    - Subsuming the Cancer Council's *Roadmap to Improved Liver Cancer Outcomes*), and
    - Informed by the Primary Care Collaborative Cancer Clinical (PC4) Trials Group *THE IC3 TRIAL: Identifying Cirrhosis and liver Cancer in primary Care*.
- Supporting the implementation of universal screening for hepatitis B as demonstrated cost-effective cancer prevention.
- Ensuring consumer perspectives (i.e. from people impacted by liver cancer) are integrated into national cancer policy and clinical enhancement systems. Hepatitis Australia could assist.
- Enhancing the capacity of cancer support systems and palliative care to respond to the specific needs of people living with liver cancer, many of whom experience multi-faceted and compounding marginalisation.
- Increasing focus on liver cancer and prevention research including, for example, through the MRFF

Consultation Question Three: What examples and learnings can we build on as we develop the Australian Cancer Plan?

Preventing and treating viral hepatitis (hepatitis B and hepatitis C) is liver cancer prevention

Despite being preventable and treatable, viral hepatitis is the primary risk factor for liver cancer incidence and mortality in Australia, accounting for 65% of cases. As such, a significant proportion of Australia's liver cancer burden can be prevented. This requires adequate primary prevention (strategies to reduce or eliminate transmission) and secondary prevention (strategies and treatment to reduce the proportion of people living with viral hepatitis developing liver cirrhosis and cancer.

The risk of developing liver cancer is up to 20 times higher in people with chronic hepatitis infection than among the general population. Australia can therefore reverse the trend of increasing liver cancer incidence and mortality with improved prevention and treatment. Relevant further hepatitis B and hepatitis C data are included at Attachment A.

Australia has endorsed the global goal of eliminating viral hepatitis by 2030. When achieved, the elimination of viral hepatitis could be Australia's next biggest cancer prevention success, saving thousands of preventable cancer deaths by 2030.

Universal screening for hepatitis B

Increasing cancer screening rates nationally (particularly in populations and areas where cancer screening participation is low or where disparities exist) can be achieved in-part by the implementation of universal screening for hepatitis B. Implementing universal screening for hepatitis B is cost effective and de-stigmatising and has huge promise in reducing the liver cirrhosis and cancer burden from hepatitis B.

Hepatitis Australia and the Doherty Institute (see Attachment B) are advocating for the adoption of universal screening for hepatitis B, noting that Australia's current risk based screening approach is complex (with 16 indications and 14 risk groups that should be considered for testing), unwieldy, not well implemented in primary care, and does not serve well the marginalised culturally, ethnically and linguistically diverse communities disproportionally affected by hepatitis B.

Australia's National Hepatitis B Strategy sets targets for diagnosis. The number of people receiving antiviral treatment for hepatitis B is barely half of the National Strategy (2022) target. It has been estimated that achieving the treatment uptake target in 2022 would prevent an estimated 1,700 deaths by 2030. Improving diagnosis is key.

Improving hepatocellular carcinoma diagnosis by increasing cirrhosis detection and HCC surveillance in primary care.

A major limitation preventing the early diagnosis of hepatocellular carcinoma (HCC) is the lack of awareness of cirrhosis (the principal risk factor for HCC development). Cirrhosis is present in 85-95% of HCC patients but recognized in less than half. When diagnosed, cirrhosis patients benefit from an effective surveillance program of 6-monthly liver ultrasound with serum alpha-fetoprotein levels which increases early HCC diagnosis, curative treatment options and survival.

In an Australia-wide trial, the Primary Care Collaborative Cancer Clinical (PC4) Trials Group will implement validated accurate diagnostic tools for cirrhosis (which are in routine clinical use in tertiary settings) in rural and urban primary care settings to improve HCC surveillance rates and detection of early HCC.

Co-ordinated by PC4 and utilising the established general practice research networks and the MRFF funded Australian TeleTrials Consortium, a multi-centre randomised controlled trial enrolling 2,800 individuals over a 20 month period aims to:

1. Compare the impact of a cirrhosis detection pathway versus usual care on the rate of HCC surveillance and early HCC incidence
2. Determine the optimal cirrhosis pathway leading to HCC surveillance, and
3. Determine the cost-effectiveness and patient reported outcomes associated with a cirrhosis detection pathway compared to usual care.

The research project team (including academic General Practitioners with expertise in cancer screening, leading Hepatologists, Clinical trialists, biostatistician, and health economist coupled with partnering from consumers, industry and government) demonstrates a very high likelihood of success and rapid incorporation into clinical pathways and implementation into clinical care to reduce HCC mortality.

In Closing

Hepatitis Australia thanks Cancer Australia for undertaking the development of the Australian Cancer Plan 2023-2033, and for providing this meaningful opportunity to contribute. Should you require additional information from Hepatitis Australia, please contact our office on 02 6232 4257 or via email to the CEO, Carrie Fowlie, at admin@hepatitisaustralia.com

Sincerely,

Carrie Fowlie
Chief Executive Officer
Hepatitis Australia
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