

Morbidity and mortality associated with viral hepatitis in Victoria

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www.doherty.edu.au/whoccvh



A joint venture between The University of Melbourne and The Royal Melbourne Hospital

Disclosure of interest

- I receive no funding or support of any kind from any pharmaceutical or for-profit health care related industry.

Introduction

- There are approximately 100,000 people living with viral hepatitis in Victoria ¹
- Impact of viral hepatitis infection in Australia is not currently available for all jurisdictions
- Liver cancer prevention: linking viral hepatitis diagnosis, treatment, and outcomes
 - What is the burden of disease attributable to hepatitis B and C in Victoria?
 - What are the predictors and outcomes of engagement with health care for Victorians living with hepatitis B and C?
 - How does engagement in care for hepatitis B and C impact on these adverse outcomes, and is the impact different for some population groups?

¹ MacLachlan, 2018

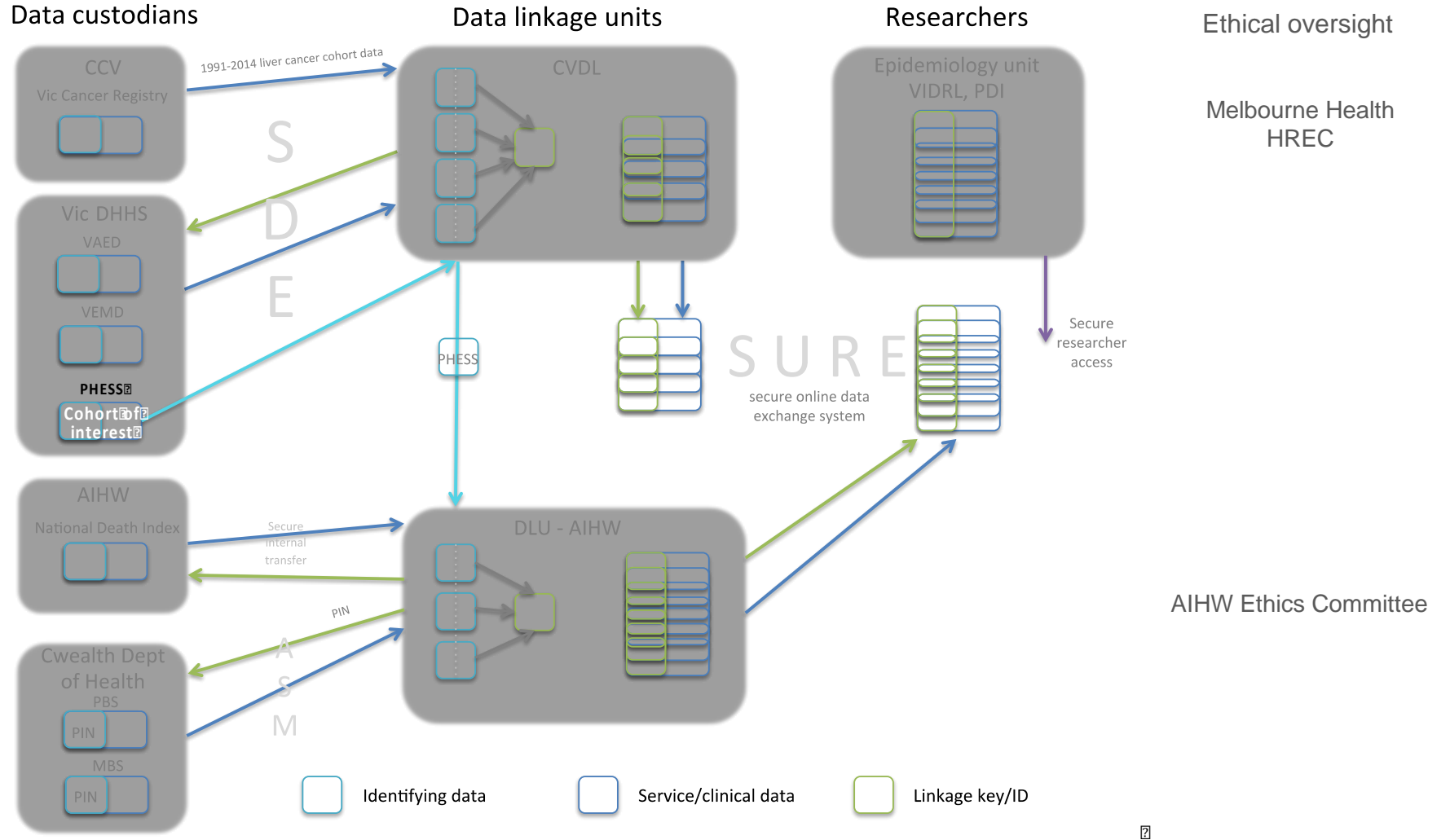
Liver cancer prevention linkage study

What is the burden of disease attributable to hepatitis B and C in Victoria?

Datasets

- Viral hepatitis disease notifications
 - All deidentified records of hepatitis B and/or C notification in Victoria between 1991 and 2016
 - ◆ approximately 114,000 individual records
- ED presentations & hospital admissions - Victorian hospital datasets
- Cancer diagnosis - Victorian cancer registry
- Deaths - National Death Index
- Episodes of care and medications prescribed - MBS/PBS

Linkage

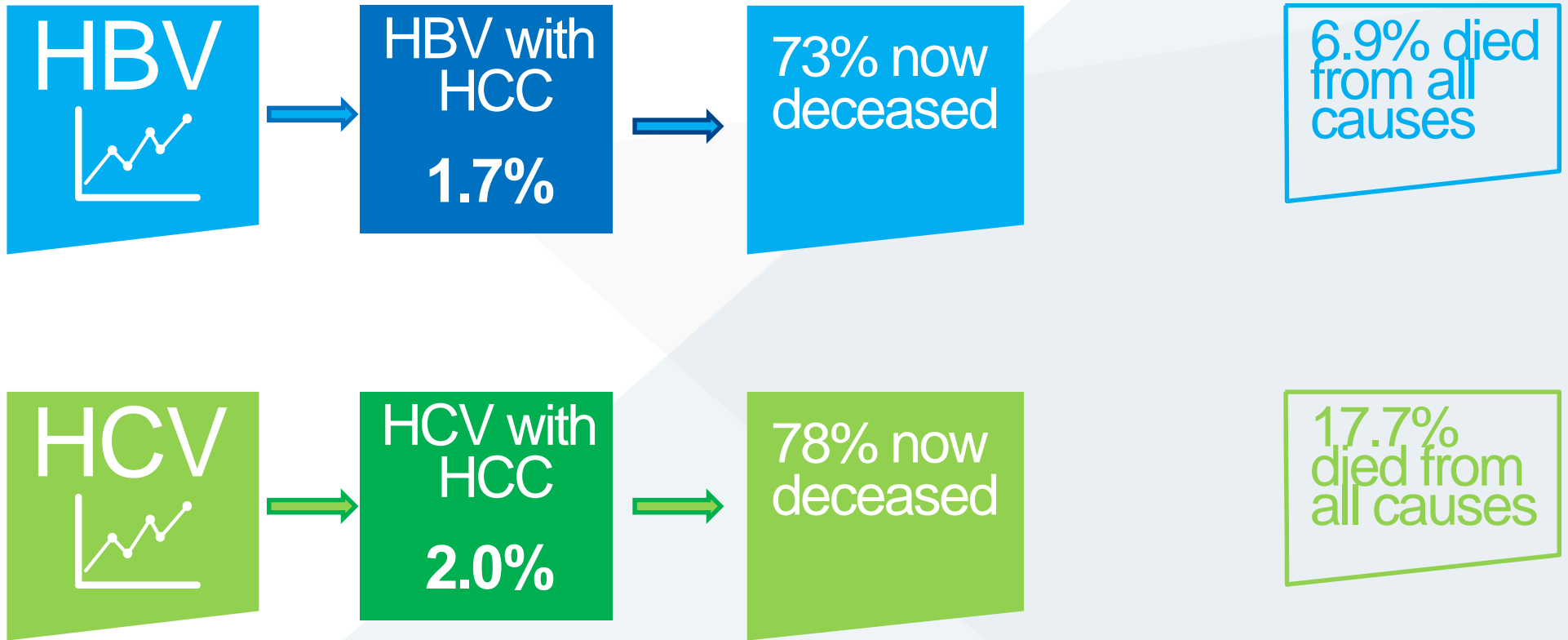


Demographics

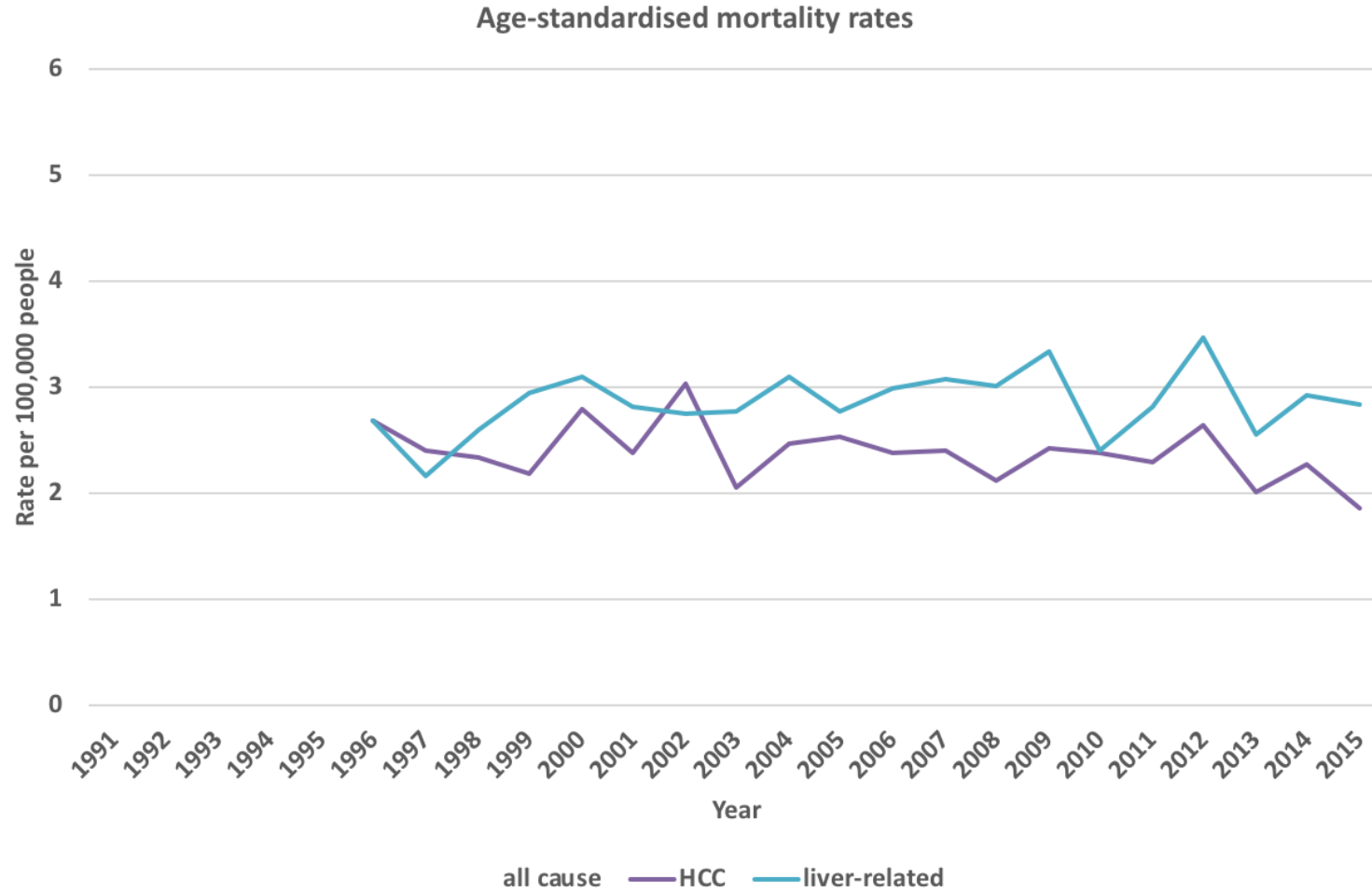
Viral hepatitis notifications between 1991 and 2016 in Victoria

Demographics	HBV	HCV
Individuals with notifications	43,646	72,063
1 notification	92%	90%
Number of notifications	1-4	1-6
Indigenous ever	0.6%	5%
50%+ records	0.3%	2.6%
Female	44%	36%
Age at notification	34.5yrs	34.7yrs
Age range	0-96.5yrs	0-100yrs
Country of Birth	20% Australia, 19% Vietnam 7% China, 3% Greece	69% Australia, 6% Vietnam, 2% Italy, 2% England

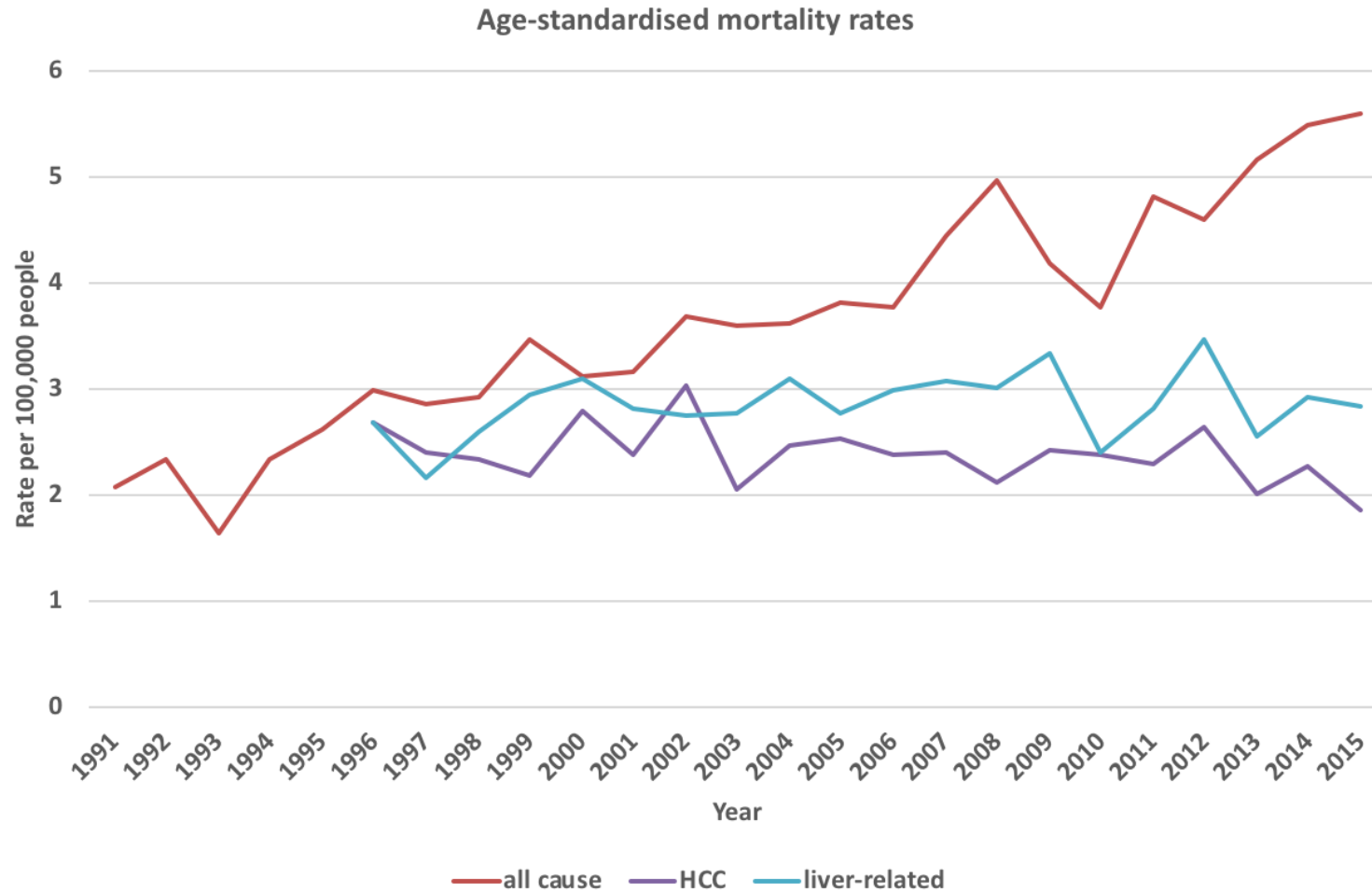
Preliminary statistics, 1991-2016, Victoria



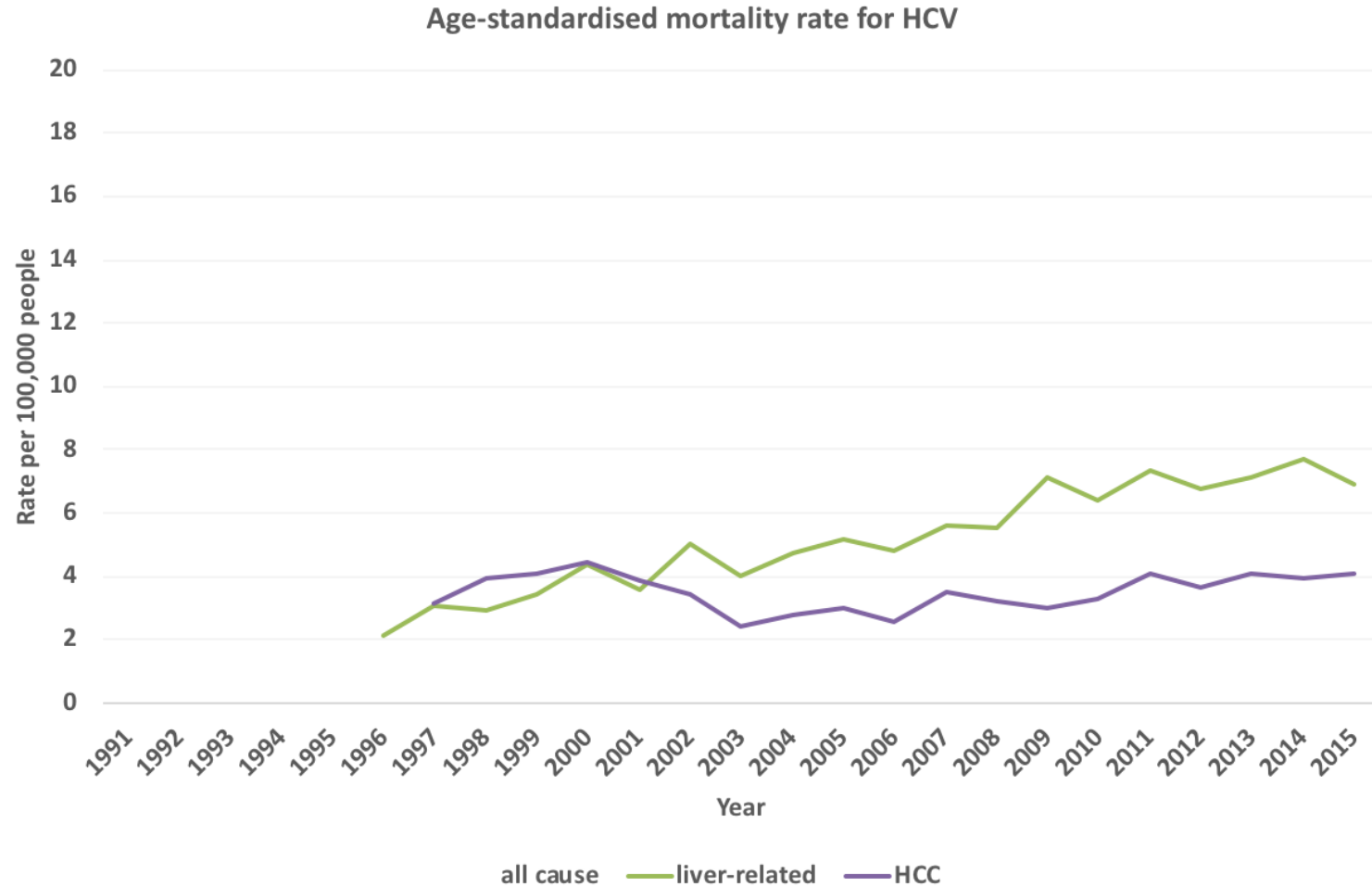
Trends over time HBV



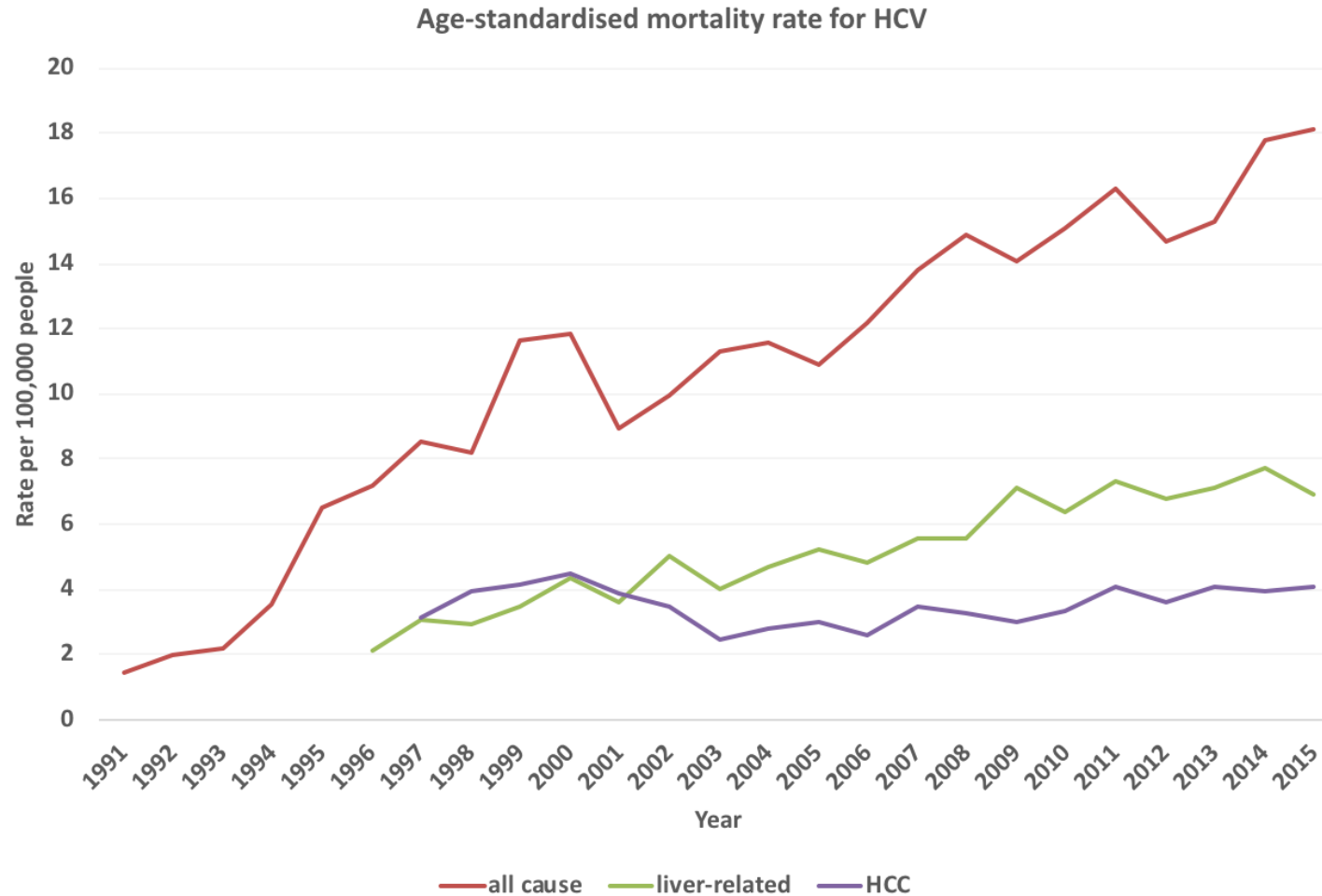
Trends over time HBV



Trends over time HCV

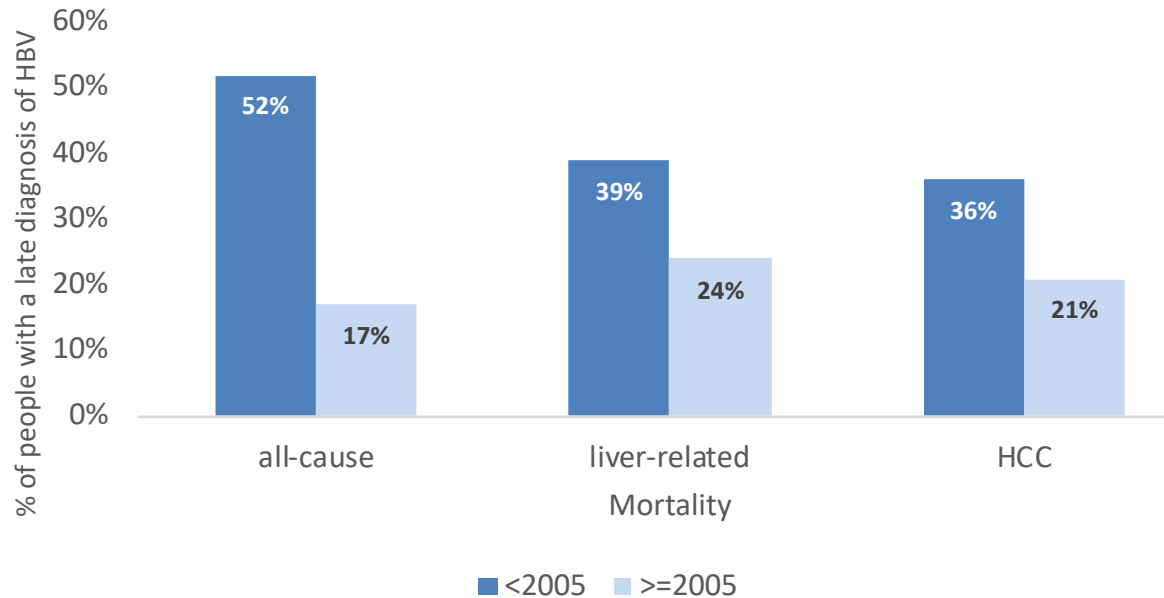


Trends over time HCV

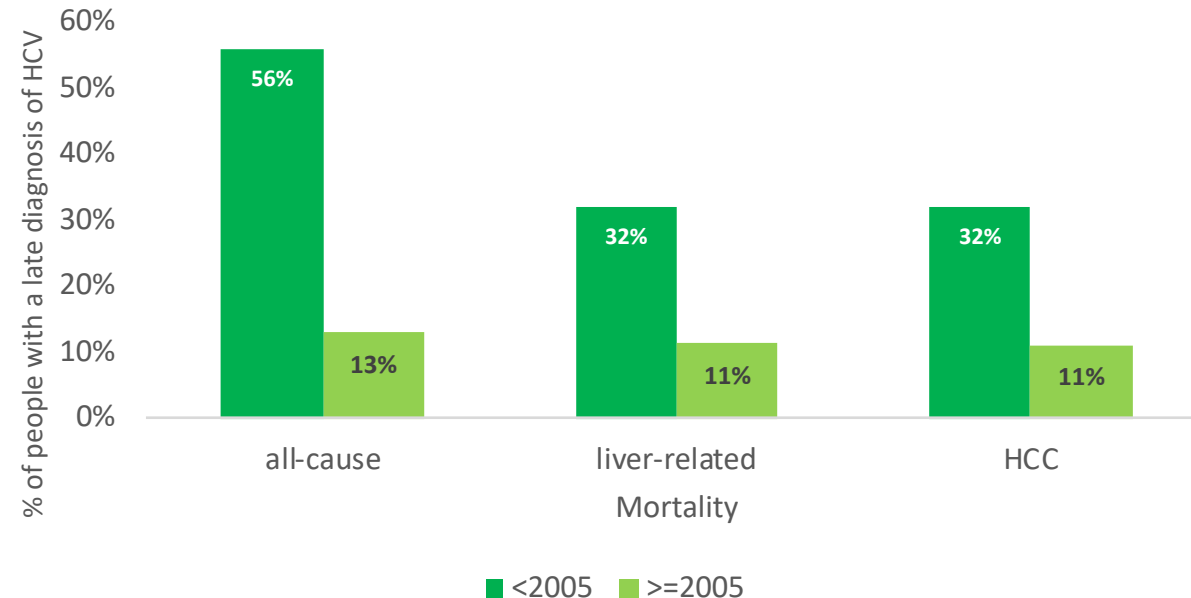


Late diagnosis of viral hepatitis

Late diagnosis of HBV (<=2 years)



Late diagnosis of HCV (<=2 years)



Summary and next steps

Summary

- Linkage takes a long time!
- HBV liver-related mortality rates stable, all cause mortality has continued to increase
- HCV liver-related mortality rates gradually increasing as has all cause mortality
- Late diagnosis has improved, but a long way to go yet

Next steps

- Awaiting linked national datasets from AIHW – MBS/PBS
- Explore engagement in care
- Identify priority populations
- Further inform cascade of care and mathematical model

Acknowledgements

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People living with viral hepatitis

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Data custodians

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Data Integration Services Centre

Australian Institute of Health and Welfare

WHO Collaborating Centre for Viral
Hepatitis Epidemiology and Public Health
Research Advisory Group



Australian Government
Australian Institute of Health and Welfare



National best practice guidelines
for data linkage activities relating to
Aboriginal and Torres Strait Islander people

2012

