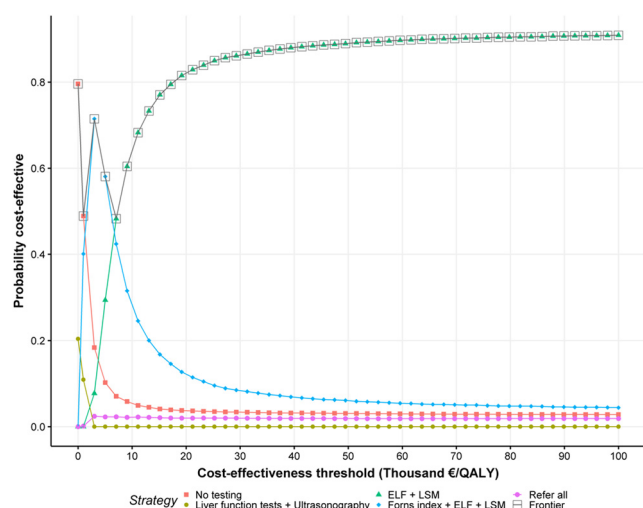


POSTER PRESENTATIONS

robust to probabilistic sensitivity analysis. The Forns-index followed by ELF and LSM had the best positive predictive value and the lowest incremental cost-effectiveness ratio (€1,005 per QALY gained), but a lower negative predictive value and resulted in worse patient outcomes over the lifetime according to our model. The strategy of referring all to LSM had the best negative predicted value, but lower effectiveness and higher costs. Standard-of-care had lower effectiveness and higher incremental cost-effectiveness ratio.



Conclusion: Primary care based screening for advanced alcoholic fibrosis is likely a cost-effective intervention. The optimal strategy was serial testing with the ELF test, followed by liver stiffness measurement if positives, while the cheapest strategy included adding Forns test first in the sequence.

THU-430

Changing prevalence of aetiological factors among Australians hospitalized for cirrhosis

Patricia Valery¹, Richard Skoien², Tony Rahman³, Paul Clark⁴, James O'beirne⁵, Gunter Hartel¹, Katherine Stuart⁶, Steven Mcphail⁷, Rohit Gupta⁸, Elizabeth Powell⁶. ¹QIMR Berghofer Medical Research Institute, Brisbane, Australia; ²Royal Brisbane and Women's Hospital, Brisbane, Australia; ³The Prince Charles Hospital, Brisbane, Australia; ⁴Mater Hospitals, Brisbane, Australia; ⁵Sunshine Coast University Hospital, Sunshine Coast, Australia; ⁶Princess Alexandra Hospital, Brisbane, Australia; ⁷Queensland University of Technology, Brisbane, Australia; ⁸Logan Hospital, Logan, Australia
Email: patricia.valery@qimrberghofer.edu.au

Background and aims: Cirrhosis is a major global public health problem, due largely to obesity-related non-alcoholic fatty liver disease (NAFLD), hazardous alcohol consumption and chronic viral hepatitis B (HBV) and C (HCV). In the past two decades, important preventive and treatment strategies have been put in place in many countries to halt transmission HBV and HCV. However, decreases in the number of new cases of cirrhosis due to these causes may be offset by increasing levels of obesity and its metabolic complications, and sustained alcohol consumption in many countries. In a population-based study of patients with cirrhosis, we examined changes in aetiology of liver disease leading to hospital admission over the 9-year period.

Method: Hospital data on all patient admissions during 2008-2016 in the state of Queensland were obtained. We identified 30,327 hospital admissions for cirrhosis in 10,254 adult patients.

Results: The commonest aetiology was alcohol-related cirrhosis (49.5%), followed by cryptogenic cirrhosis (28.5%), HCV (14.6%), NAFLD/NASH (4.8%) and HBV (3.3%). Males were most commonly admitted than females apart from in NAFLD/NASH cirrhosis (55.9%).

Whilst the prevalence of alcohol-related cirrhosis remained stable over the 9-year period ($p = 0.410$), there were increases in the prevalence of HCV, HBV, NAFLD/NASH and cryptogenic for men and women (see Figure for men), and the proportion of patients allocated two or more aetiological factors increased from 17.1% in 2008-2010 to 30.0% in 2014-2016 ($p < 0.001$). The average prevalence of chronic HCV nearly doubled between 2008 and 2010 (11.2%) and 2014-2016 (21.4%; $p < 0.001$), that of cryptogenic was 26% higher in 2014-2016 (25.8% vs. 32.6%, $p < 0.001$) and the prevalence of chronic HBV and NAFLD/NASH were about 60% higher (2.6% vs. 4.1% for HBV, $p = 0.003$ and 3.8% vs. 6.0% for NAFLD/NASH, $p < 0.001$). The prevalence of patients not allocated to any aetiology decreased during this time-period (21.3% vs 16.3%, $p < 0.001$).

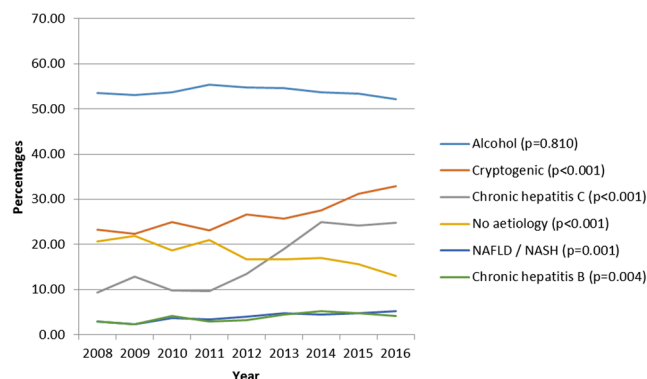


Figure: Trends in prevalence of selected aetiology among men

Conclusion: Our data highlights the increasing importance of HCV and cryptogenic/NAFLD/NASH, and to a lesser extent HBV, as contributing factor for cirrhosis. Strategies to prevent cirrhosis should be a major public health priority. The large number of cryptogenic cirrhosis suggests that more diagnostic support and specialist input may be important to help refine diagnosis for patients and to better understand the epidemiology of liver disease.

THU-431

The burgeoning growth in cirrhosis-related hospitalization in Australia, 2008-2016

Elizabeth Powell¹, Richard Skoien², Tony Rahman³, Paul Clark⁴, James O'beirne⁵, Gunter Hartel⁶, Katherine Stuart¹, Steven Mcphail⁷, Rohit Gupta⁸, Peter Boyd⁹, Patricia Valery¹⁰. ¹Princess Alexandra Hospital, Brisbane, Australia; ²Royal Brisbane and Women's Hospital, Brisbane, Australia; ³The Prince Charles Hospital, Brisbane, Australia; ⁴Mater Hospitals, Brisbane, Australia; ⁵Sunshine Coast University Hospital, Sunshine Coast, Australia; ⁶QIMR Berghofer Medical Research Institute, Brisbane, Australia; ⁷Queensland University of Technology, Brisbane, Australia; ⁸Logan Hospital, Logan, Australia; ⁹Cairns Base Hospital, Cairns, Australia; ¹⁰QIMR Berghofer Medical Research Institute, Population Health, Brisbane, Australia
Email: patricia.valery@qimrberghofer.edu.au

Background and aims: While chronic liver disease is a major global public health problem, it has not been recognized as a National Health Priority Area in Australia. A population-based study using hospital admission data for cirrhosis in the large state of Queensland, Australia during 2008-2016 was performed.

Method: Hospital data on all patient admissions (public and private) and deaths during 2008-2016 in the state of Queensland were obtained. Queensland is a large state in the north-east of Australia with a population of 4.9 million. We identified all hospital admissions for cirrhosis for patients aged 20 years or older. We reported age-standardized hospitalization rates/10,000 person-years by gender and per calendar year, in-hospital case fatality rate among these admissions ($n = 30,327$) and examined the factors associated with hospital deaths.