

# SCRIPT HCC – rates and patterns of screening for hepatocellular carcinoma in patients in the Hastings Macleay region

## BACKGROUND

Hepatocellular Carcinoma is the fifth most common cause of cancer in the world and evidence suggests surveillance can reduce mortality by 37%, even if adherence is poor. Screening for HCC reduces mortality and morbidity in patients with liver disease through early detection and by increasing options for appropriate interventions. Early detection via surveillance have been reported to lead to cost-savings of approximately AUD\$68,000 per year of life saved. Integrated care for patients with cirrhosis is necessary to provide a continuum of care between services, thereby decreasing HCC and general liver related deaths (European Association for the Study of the Liver, 2018).

The aim of SCRIPT HCC is to determine the current screening rates and patterns for patients attending the Hastings Macleay Liver Clinic with cirrhosis or with Hepatitis B risk factors for the development of HCC.

## METHOD

This study was a two-year retrospective descriptive epidemiological investigation of the existing rates and patterns of surveillance for liver cancer by the Hastings Macleay Liver Clinic. Demographic and clinical data were retrieved from patient medical records using an audit tool designed for collection of variables associated with rates and patterns of screening for hepatocellular carcinoma. Data were analysed using descriptive and comparative statistical analysis in Microsoft excel and STATA.

## RESULTS

HCC surveillance screening rates in the Hastings Macleay Liver Clinic exceeded recommended timeframes with a significant decrease in number screened from first to fourth recorded ultrasound (31% vs. 2%,  $p=0.016$ ). Seventy percent of participants were male, and alcohol (84%) and hepatitis C virus (87%) were the highest aetiological cause of cirrhosis..

## DISCUSSION AND IMPLICATIONS

Systems to improve HCC surveillance programs are needed to ensure best clinical outcomes for patients living in regional New South Wales. Specific recall systems within the service coupled with national or state registries for people living with cirrhosis could provide a foundation for improving care for this population. A follow-up study investigating barriers to screening in a local context is recommended with the aim of improving existing screening rates. Although the rates are low (31% at first interval) studies have shown that even with adherence rates as low as 33% mortality can be reduced by early detection of HCC.

**Keywords:** Hepatocellular Carcinoma, Liver Cancer, Ultrasound, Screening.



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Alex is the CNC Hepatology at the Hastings Macleay Liver Clinic She is dedicated to embedding collaborative recall systems at a regional level, and national or state registries for people living with cirrhosis as a foundation for improving care for this vulnerable population. A follow-up study investigating barriers to screening in a rural and regional context is on Alex's wish list because even small increases in early detection of HCC have been shown to reduce mortality.

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