

**Introduction:** Hepatocellular carcinoma (HCC) surveillance is recommended by the National Institute for Health and Care Excellence (NICE) for at-risk patients with 6-monthly liver ultrasound scans (USS). A nurse-led surveillance pathway was introduced at Surrey and Sussex Healthcare NHS Trust (SaSH) in April 2021 to manage patients eligible for surveillance. This study aims to identify the scale of the demand on this service, and scope for improvement.

**Methods:** Patients eligible for surveillance were identified from the existing database. A search of electronic patient records via Discern Reporting Portal in Cerner identified patients who had USS requested from April 2021 to November 2023 under Gastroenterology and Hepatology. Keywords used for search were 'HCC, liver lesions, liver cancer, Hepatoma'. Suspected or confirmed cases of HCC were obtained from regional multidisciplinary meeting (MDM) records. Liver surveillance nurse had access to a dedicated mobile phone which allowed easy access to patient and arranged patients' appointments. A random selection of 30 patients who failed to attend their last ultrasound or clinic appointments were contacted via phone to understand reasons for non-attendance.

**Results:** In total 344, 381, and 441 patients on the database were for eligible for HCC screening in 2021, 2022 and 2023 respectively. In 2021, 376 USS were requested of which 296 (78.7%) were completed. In 2022, 464 requested and 361 completed (77.8%). In 2023, 690 were requested, and 428 completed so far. From 2021 to 2023, scan requests increased by 83.5%. In 2021 there was 1 case of suspected HCC, 10 in 2022 and 21 in 2023. There were 4 confirmed cases of HCC in 2022 and 9 (7 are Barcelona Clinic Liver Cancer stage 0/A, and 2 stage D) in 2023. 30 selected patients who were contacted via phone for non-attendance had underlying Alcohol-related liver disease (ArLD) or Hepatitis C. 22 of 30 patients attended their appointments after the phone contact. It was highlighted that single hospital visit allowing for same day scan, clinic review with blood tests may improve patient compliance. We recognise some limitations in the nurse-led surveillance pathway. The service requires a high level of data management and patient contact. A dedicated staff to manage patient booking and patients having easy access to liver team via phone has shown better patient engagement.

**Conclusions:** Since introduction of nurse-led surveillance, there has been an annual increase in the number of scan requests, completed scans, and detection of liver cancer. Patients with ArLD and hepatitis C are more likely to not attend for USS, and requires higher engagement with the team to maintain compliance. There is an increased demand on the service which requires adequate staffing.