The Specialist Hepatobiliary (HPB) (Liver) Multidisciplinary Team (MDT) is a multi-professional group serving a population of 3 million people. It covers North Wales, Merseyside, Cheshire and the Isle of Man and is part of Merseyside and Cheshire Cancer Network. It specialises in providing a supra-regional service that deals with all aspects of benign and malignant diseases involving the liver and biliary tract. The centre also provides support to hospitals within and beyond the region for major liver trauma as well as acute biliary emergencies.

The MDT meets weekly on a Thursday at 08.15hrs in the Endoscopy Unit Seminar Room and lasts for approximately two hours. There is a fully constituted core and extended membership, compliant with the membership and attendance specifications set out within the Peer review measures.

The aim of the HPB (Liver) MDT is to ensure a coordinated approach to diagnosis, treatment and care services for all patients diagnosed with HPB (Liver) cancer.

The specialist HPB MDT has the combined function of diagnosis (to rapidly assess and achieve radiological+/−histopathological confirmation of cancer), treatment (discussing the management of all newly diagnosed cancers) and communication with the appropriate agencies (e.g. primary and secondary referring units, oncology, community teams including palliative care/hospice etc). Furthermore, the Specialist MDT is committed to achieving the highest standards of care and patient outcomes by:
- Providing comprehensive information to patients and their relatives
- The collection of high quality data
- The analysis of such data in audit cycles
- Involvement in local, national and international research studies
- Incorporating new research and best practice into patient care
- Involving patients in assessment and redesign of the services
There are 4 Clinical Nurse Specialists in post to support patients with a Liver / HPB Cancer diagnosis including surgical and non-surgical hepatocellular carcinoma, cholangio carcinoma and pancreatic carcinoma patients. All of the members of the Specialist HPB team are core members of the MDT and work collaboratively both internally across the Trust and externally with referring Trusts and specialist centres such as Clatterbridge Centre for Oncology.

There have been 1067 referrals to the HPB MDT during the period of April 2010-March 2011 and the overall compliance with the National Cancer Waiting times standards has been good.

During the reporting period, a total of 204 Liver resections were performed by the team, including CRLM & HCC, Gallbladder cancer, Cholangiocarcinoma and Complex biliary. In addition a total of 17 advanced laparoscopic surgical resections were performed and 5 vena cava resectional surgeries were also undertaken.

### Coordination of care/patient pathways

There are defined referral pathways into the Specialist Liver / HPB MDT which have been agreed at Network CNG level. There are also specific diagnostic, treatment and follow up guidelines on the management of Liver / HPB cancers which have also been agreed by the CNG.

Each patient has a designated consultant and key worker with a designated telephone advice line specific to each specialist nurse to provide a point of contact and support for patients and their families. Strong links have been established with tertiary centres across the region providing high quality and continuity of care and ensuring key worker responsibilities are met for all patients that are referred to the Specialist MDT at Aintree.

The implementation of a fast track service for patients referred with colorectal liver metastases, provides a prompt specialist review of patients before the MDT meeting to advise if further investigations are required in order to perform a full case review. This has reduced patient pathway time and enabled targets to be met.

The establishment of an enhanced recovery programme for major liver surgery has resulted in a reduction in patient length of stay. The thorough pre-operative and anaesthetic preparation of the patient and patient information about anticipated recovery targets has increased patient involvement in their own recovery and enabled earlier discharge.

From a diagnostic perspective the HPB (Liver) unit is equipped with 3 specialist HPB diagnostic radiologists and is one of only two UK units with specialist trained Gastroenterologists pioneering the use of per oral cholangioscopy (POC) for early detection of intra hepatic cholangiocarcinoma. There is also a specific ERCP/POC CNS co-ordinator who in conjunction with the HPB specialist nurses acts as a key worker for patients undergoing POC whilst they are inpatients at UHA.

The HPB / Liver MDT is actively involved with the Network Hepatobiliary and Colorectal CNG's and a representative of the MDT has been present at 100% of the HPB CNG meetings held during the reporting period. The team also has an excellent relationship with the Colorectal
CNG, with a representative having attended 3 out of 4 meetings thus resulting in excellent specialist team engagement at Network level.

**Patient experience**

A patient satisfaction survey using the Merseyside & Cheshire Cancer network survey has been completed and feedback was delivered to HPB MDT members at a meeting held in August of this year. The Trust also participated in the National cancer Patient Experience Survey during 2010, where a total of 16 U.G.I patients (including Liver / HPB) participated in the survey. The findings of the National survey overall were very positive, however some areas were highlighted as requiring improvement, namely the provision of written information, information on support for patients with cancer (support group available, welfare benefits advice etc) and pain control and privacy. A Trust action plan has been formulated and a number of initiatives are in place or are planned to address the concerns identified. It is intended to repeat the local survey and also participate in the next national survey during 2012.

A series of patient focused research studies using interviews with patients, carers and bereaved carer's to identify key aspects of what contributes to a quality HPB (Liver) Service have been undertaken and results of this can be found within the evidence folders . (Section 11, evidence file).

The recent introduction of the Enhanced Recovery pathway for Liver surgery has included the development of an in-patient pathway (devised by patients, carers and HCP's) and a rehabilitation post discharge pathway with an emphasis on patient information enhancing patient autonomy. (Section 10, evidence file)

The Liver / HPB MDT also utilises the resources of the recently opened Macmillan Information and Support centres within the Trust and will also participate in the roll out of the Cancer patient information prescriptions project which is due to start later this year.

**Clinical outcomes/indicators**

We are a high volume, non-transplant HB unit that performs in excess of 200 complex Hepatobiliary procedures per year. Our major liver (more than 3 segments) resection rate is 66% with an in-hospital mortality rate of 1.1%. Our median hospital stay is 5 days.

Our multi-disciplinary team considers clinical trials, where appropriate, in all patients. We have a large and varied portfolio of clinical trials and recruitment is facilitated through attendance at the HPB MDT by both the HPB Oncologists and the Research practitioner. A combined total of 98 patients have been recruited into clinical trials during the reporting period across Aintree, RLBHT and CCO for trials relating to colorectal and U.G.I cancer groups.

The clinical trials action plan of 2010 has been implemented through the recording of all patients considered for trials at MDT. Evidence of trial consideration, entry +/- reason for non-entry
which now enables entry rates to be fully audited (i.e. the proportion of eligible patients that were recruited) can be found in sections 19 & 27 of the evidence file.

We have a prospectively maintained database and currently have several publications in preparation that audit our experience. The specialist HPB / Liver MDT continues to participate in the Network agreed HPB CNG audits (further details can be found in the annual report) and other local audits including the Enhanced recovery Programme. Results of the Network audits were presented at the HPB Clinical Network Audit Day on May 11th 2010.

### Good Practice

#### Good Practice/Significant Achievements

This is a high volume unit that is at the forefront in the management of benign and malignant hepatobiliary disease.

We have incorporated a robust pre-operative assessment and enhanced recovery pathway into our practice that has resulted in a low operative mortality rate and hospital stay. Furthermore we have a low incidence of hospital acquired infections in patients undergoing resection.

Our unit has invested time and effort into educational support of referring clinicians. As well as performing a number of "road shows" at regional meetings we have published a bi-annual news letter that is aimed at educating both primary health clinicians as well as our hospital colleagues about complex hepatobiliary pathology and referral pathways.

Research is an important aspect of this unit. Over the last 3 years we have developed a prospectively maintained patient dataset. We also have been able to appoint a research fellow who is currently undertaking a PhD. Furthermore, over the past year we have been successful in obtaining a further PhD student through a cancer research uk grant application as well a further deanery post through a competitive process. All these individuals are undertaking basic scientific research with Liverpool university.

### Concerns

#### Immediate Risks

#### Serious Concerns

#### Concerns

None identified
General Comments

The specialist HPB / Liver MDT is an excellent, well co-ordinated team who continuously strive to further develop and enhance service delivery for patients and are one of the leading Hepatobiliary centres both Nationally and Internationally.

The team have the required 3 key documents in place (Operational Policy, Annual report and work plan), which have been fully updated. The work plan is comprehensive and details the actions to be undertaken over the next 12 months.

Organisational Statement

I, Mr Hassan Malik (Lead Clinician) on behalf of AINTREE UNIVERSITY HOSPITALS agree this is an honest and accurate assessment of the Stand Alone Liver Resection MDT.