

National Specialised Services Definitions Set

Specialised services for hepatology, hepatobiliary and pancreatic surgery, definition no. 19, (adult).

Introduction

The delivery of services to treat liver, biliary and pancreatic disease may take place in different locations. The services covered by this definition are all services that require a level of expertise which could not be available in all local hospitals. Work is currently underway to clarify the skills and facilities required for each activity. Some activities will be restricted to liver transplant centres and other treatments should only be carried out at liver units where the full range of multi-disciplinary support is available. Some district general hospitals have developed expertise in a particular treatment and could be recognised appropriately as a centre for that particular treatment. In order for patients to receive optimal care with good health outcomes, it is important that care takes place by appropriately skilled staff in appropriate settings.

Even though each service must be clear about the conditions it is recognised to treat, each service must function as part of a clinical network to achieve maximum effectiveness. In many cases advice from a specialist centre will be sufficient to enable local treatment to be progressed. Unless a robust clinical network is in place scarce skills and resources will not be used to maximum effect and patients will not receive optimal care. Those responsible for planning these services must take this into account.

1. General Description

This definition includes the following services:

1.1 Specialist services for the treatment of patients with viral hepatitis.

1.2 Specialist services for patients with acute liver failure and advanced complications of cirrhosis

1.3 Specialist services for patients with benign and malignant liver tumours and cancer of the intra-and extra-hepatic biliary tree (including pancreas).

1.4 Specialist hepatobiliary and pancreatic surgery.

- Hepatologists and gastroenterologists working in conjunction with specialist liver pathologists, surgeons, oncologists, anaesthetists, intensivists, infectious diseases consultants and radiologists will most frequently provide these services.
- Commissioning of the specialist services (1.1, 1.2, 1.3 above) from designated units will be undertaken in accordance with guidelines drawn up by the British Association for the Study of the Liver (BASL) and the Intensive Care Society in consultation with the Department of Health. These guidelines will recommend what a unit should have in place (or access to) to adequately deliver the specialist services listed. It is expected that some units will provide only some of the specialist services, e.g. services for the treatment of patients with viral hepatitis. The guidelines will also define clear mechanisms for referral and provide clarity of eligibility between District General Hospitals (DGHs), liver units and liver transplant centres.

- Liver transplantation is a supra-regional service funded through NSCAG.

2. Rationale for the service being on the specialised commissioning list

The above services should be regarded as specialised for one or more of the following reasons:

- 2.1 High degree of specialisation.** Recent advances in the investigation and management of viral hepatitis, complications of cirrhosis, acute liver failure and hepatobiliary malignancy, to give just a few examples, have led to Hepatology and Hepatopancreatobiliary (HPB) surgery becoming increasingly specialised disciplines. This requirement for specialisation seems likely to go on increasing with the emergence of new technologies and the need to ensure that expensive services are focused on the appropriate groups. As evidence of the increased specialisation in Hepatology, the British Association for the Study of the Liver (BASL), together with the Royal College of Physicians, is currently in the process of seeking recognition of Hepatology as a formal sub-specialty of Gastroenterology. Specific training requirements will include mandatory training in liver transplantation. Similarly in surgery, recommendations have been made particularly by the Association of Upper GI Surgeons, on the training and scope of Upper GI/HPB Surgeons.
- 2.2 Provision from relatively few centres.** Advances in the investigation and management of liver, biliary and pancreatic disease have recently led to the development of **multi-disciplinary teams** consisting of Hepatologists, HPB Surgeons, specialised Radiologists, specialised Liver Pathologists, Anaesthetists and Medical Oncologists concentrated in relatively few centres. The need for these highly specialised services occurs relatively infrequently within the population and they therefore require centralisation to maximise the likelihood of achieving the best outcomes by ensuring an appropriate volume of activity is undertaken. Recent Department of Health guidelines on the management of upper GI cancer suggest that pancreatic surgery should only be performed in centres serving populations of 2-4 million. Centralisation will have the added benefit of enabling the use of new and expensive forms of treatment to be formalised and monitored to ensure that national guidelines are being followed. The use of Interferon and Ribavirin in patients with chronic hepatitis C is an obvious example.
- 2.3 Use of emerging technology.** Over the last 5 years, the investigation and management of patients with liver, biliary and pancreatic disease has changed dramatically and is expected to continue for the foreseeable future. For example: the use of transjugular intrahepatic portosystemic shunts (TIPSS) has revolutionised the management of oesophageal varices, the emergence of molecular diagnostics has dramatically affected the diagnosis and management of inherited and viral liver diseases, while advances in radiological and surgical techniques have dramatically improved the treatment and prognosis of patients with liver and hepatobiliary tumours.

3. Links to other services on the specialised commissioning list

- 3.1 Cancer Services (Definition 1).** Involvement of Oncology Services is vital in the management of patients with liver, hepatobiliary and pancreatic cancer.
- 3.2 Haemophilia and other related bleeding disorders (Definition 3).** A large proportion of haemophilia patients have HCV infection and require anti-viral therapy and some need treatment for hepatocellular cancer.
- 3.3 HIV/AIDS treatment and care and associated services (Definition 14).** As for (3.2)
- 3.4 Mental Health (Definition 22).** Liaison with Drug and Alcohol Services is vital in view of the high frequency of viral and alcohol-related liver disease in patients presenting to these services and *vice versa*.
- 3.5 Renal Services (Definition 11).** Renal dialysis is frequently required in patients with acute liver failure and occasionally in patients with decompensated chronic liver disease (hepatorenal syndrome).
- 3.6 Specialised Pathology Services (not yet defined)** will include:
- Specialised liver histopathology for diagnosis and treatment monitoring
 - Virology for diagnosis and treatment monitoring
 - Accurate diagnosis of uncommon benign and malignant liver and biliary tumours.
- 3.7 Infectious diseases (Definition 18)**
For HIV and HCV co-infected patients and where local treatment pathways involve infectious disease physicians, patients should be managed by infectious disease physicians working in conjunction with liver services, locally or at a distance, to ensure optimal management of the complications of cirrhosis.

4. Detailed description of specialised activity

4.1 Specialist services for the treatment of patients with viral hepatitis

The overall aim of a specialist service for the management of patients with viral hepatitis is to provide diagnosis, treatment and structured follow-up of patients with acute and chronic hepatitis due to hepatitis viruses - A, B, C, D and E. Essential elements of the service will include hepatologists, specialist hepatitis nurses/nurse consultants, dedicated liver histopathology services and appropriate virology services. In some parts of the country clinicians trained in one of the infection related disciplines may play a major role in treating these conditions. The principal role of the service relates to the provision of care for patients with chronic hepatitis B and C. The specific roles of the service ideally include:

- **Selection of patients for treatment** according to established guidelines through evaluation of the nature of the infecting virus and the severity of the liver disease by virology and histology respectively.

- **Treatment of patients** fulfilling established criteria with antiviral drugs and appropriate monitoring during treatment for response and side-effects.
- **Collection of data** on patients with viral hepatitis in the area, monitoring outcomes in treated and untreated patients and provision of screening for early detection of liver cancer in patients with chronic hepatitis B and HCV cirrhosis.
- **Participation in clinical trials** of new antiviral agents.

4.2 Specialist services for patients with acute liver failure and advanced complications of cirrhosis.

- Acute liver failure is uncommon and requires specialist management in designated liver centres with the required level of hepatological, renal and intensive care expertise. Patients may also require input from many other specialist services - for example pathology, radiology, oncology. A proportion of patients with acute liver failure will fulfill the criteria for the diagnosis of fulminant liver failure and thus be eligible for emergency liver transplantation. The care of these patients should always be co-ordinated with a supraregional liver transplant centre.
- Most early complications of chronic liver disease will be managed by locally commissioned services, however, more advanced or complex cases require specialist multidisciplinary expertise involving hepatologists, HPB surgeons, pathologists and radiologists. Care for these patients should be provided in co-ordination with specialist liver centres commissioned at regional level. Referral patterns for patients with complications of cirrhosis may depend in part on local expertise and the case mix may thus vary between referring services. Importantly, specialist referral will be more dependent upon disease severity than the underlying diagnosis.
- Patients with advanced complications of cirrhosis who in most cases will require transfer to a specialist centres include:
 - (a) Patients with severe or recurrent variceal haemorrhage. These patients frequently require specialist liver support in a liver HDU or ITUs experienced in management of such patients. Treatment options available exclusively in specialist centres include radiological management (TIPSS) and surgical management;
 - (b) Patients with intractable ascites are also candidates for TIPSS and surgical shunting;
 - (c) Patients with hepatorenal syndrome. These patients frequently require joint input from specialist liver and renal services in a centre experienced in both acute liver and renal support.
- While the majority of patients with alcoholic hepatitis will be managed locally, the care of those who are both likely to stop drinking and have factors predictive of high mortality (Maddrey's discriminant function >32) should be co-ordinated with a specialist liver centre. Patients may require transfer for specialist assessment (including trans-jugular liver biopsy) and treatment.
- In addition, in many cases specialist input will be needed to diagnose and treat uncommon liver diseases for example cases of acute sero-negative hepatitis,

autoimmune hepatitis, Budd Chiari syndrome and other rarer liver diseases (for example Wilson's disease and metabolic liver disease).

- While liver transplantation surgery is NSCAG commissioned, in future more of the initial baseline assessment and follow-up of patients is likely to be performed in accessible regionally distributed liver centres with hepatologists who have received training in Transplant Centres (see 4.2(a) above).

4.3 Specialist services for patients with benign and malignant liver tumours and cancer of the intra-and extra-hepatic biliary tree and pancreas.

The overall aim of a specialist service for the management of patients with HPB tumours is to provide accurate diagnosis and staging and appropriate individually tailored treatment. Ideally this should be delivered by an integrated multidisciplinary team consisting of HPB surgeons, hepatologist(s), radiologists, oncologists, radiotherapists, anaesthetists, intensivists and dedicated liver pathologists experienced in the management of these patients. This approach accords with the recently published Department of Health guidelines on the management of upper GI Cancer. The principal role of the service relates to the provision of care for patients with primary and secondary liver cancer, malignant gall bladder and bile duct cancer and pancreatic tumours. The specific roles of the service include:

- **Assessment of patients with suspected liver/hepatobiliary/pancreatic tumours.** This involves a combination of imaging modalities, pathology and cytology services and specialised surgical and medical expertise. Imaging modalities required include:
 - (a) ultrasound ;
 - (b) cross-sectional techniques, (for lower bile duct/pancreatic lesions) and MR scanning (for upper bile duct lesions and benign tumours);
 - (d) interventional vascular and biliary techniques and image guided biopsy.

Some of these techniques are used to facilitate the procurement of tissue for diagnostic purposes (e.g. ultrasound, CT, ERCP), while ultrasound is increasingly used to assist in laparoscopic staging and assessment. Specialised histopathology and cytology services (for bile duct tumours) are required for accurate diagnosis and staging. While some of these imaging modalities (e.g. ultrasound, CT, ERCP) will be available in many district services, new modalities such as endoscopic and laparoscopic ultrasound, MRCP and interventional radiology require special expertise and should be provided and supported in specialist centres.

- **Assessment of patients with HPB tumours.** Treatment options for these patients include:
 - (a) Surgical management (curative resections, cryotherapy, palliative bypass surgery or liver transplantation in selected cases);
 - (b) Radiological management of liver tumours (percutaneous ethanol injection, radiofrequency ablation, focussed ultrasound, chemoembolisation);
 - (c) Endoscopic stenting of biliary/pancreatic tumours;
 - (d) Chemotherapy;
 - (e) Radiotherapy (bile duct tumours).

Careful case selection for these modalities, ideally according to nationally agreed protocols, is required to achieve optimal results and is best done by the multidisciplinary team described above. Although palliative endoscopic stenting will continue to be provided by many locally commissioned services this should only be performed after the patient's suitability for other forms of therapy has been fully assessed at or in conjunction with a regional centre. The assessment of new treatment modalities and the subsequent refinement of protocols is an additional vital role of this service.

4.4.1 Specialist hepatobiliary surgery

- Clearly much of the work of a specialist hepatobiliary surgical service will be concerned with the diagnosis and management of tumors of the biliary tree covered in Section 4.3. This type of service should only be undertaken in designated centres.
- The other major area of specialised hepatobiliary surgery is the interventional management of bile duct strictures including iatrogenic. The complex reconstructive surgery required for these patients requires extensive specialist experience and should only be undertaken in designated centres.
- ~~Liver and pancreatic trauma services are needed in an emergency situation and are usually provided in the trauma centre by General Surgeons working where possible with hepatobiliary surgeons.~~
- Liver and pancreatic trauma presents at District General Hospitals as an "abdominal injury" and is usually diagnosed only on imaging or at laparotomy. The role of early imaging in suspected intra-abdominal imaging cannot be over emphasized and is usually possible whilst resuscitation is being performed. Recent reports suggest ultrasound scanning is inferior to infusion CT scanning in assessing intra-abdominal trauma. Patients with liver or pancreatic trauma can often be stabilised and laparotomy may be avoidable. Communication with the regional centre at this stage for advice regarding further management or possible transfer is recommended. Unstable patients who need urgent laparotomy due to bleeding and who are found to have a major liver injury can usually be controlled with packing. They should then be immediately referred to the regional centre. Patients with blunt pancreatic trauma can often be managed conservatively but those with transection of the gland or associated duodenal injury require transfer to a specialised centre.

4.4.2 Specialist pancreatic surgery services

- As for specialist hepatobiliary surgery, much of the work of a specialist pancreatic surgical service will be concerned with the diagnosis and management of pancreatic tumors covered in Section 4.3. It is recognised that surgery for pancreatic cancer produces the best outcome in specialist centers, and that "occasional" pancreatic surgery carries a significantly higher operative mortality (Department of Health Guidelines on the management of upper GI cancer, January 2001). This effect is, in part, due to the availability of specialised radiology, endoscopy, anaesthetic and ITU services in addition to the increased surgical expertise related to the volume of work.

- These principles also apply to the management of severe acute pancreatitis, which requires a multidisciplinary approach, and to the surgery of chronic pancreatitis (e.g., total pancreatectomy , radical lymph node dissection, and Whipple procedure .

5. Recommended units of currency/ approach to costing

	Service	Proposed currencies	Note
5.1	Specialist services for the treatment of patients with viral hepatitis	Outpatient attendance	
		Package of care including biopsy without drugs	
		Package of care for full treatment including drugs	
5.2	Specialist services for patients with acute liver failure and advanced complications of cirrhosis	Outpatient attendance	Will include the cost of replacing equipment and support service costs e.g. imaging *
		Inpatient FCE with ITU	
		Inpatient FCE without ITU	
5.3	Specialist services for patients with benign and malignant liver cancer and cancer of the intra- and extra-hepatic biliary tree (including pancreas).	Outpatient attendance	*
		Inpatient FCE ITU	
		Inpatient FCE without ITU	
5.4	Specialist hepatobiliary and pancreatic surgery	Outpatient attendance	*
		Inpatient FCE with ITU	
		Inpatient FCE without ITU	

*Some working group members expressed a preference for beddays to be used as the standard currency but finance and information staff who were consulted felt that an FCE based currency would be simplest and most appropriate for this service.

6. Approach to identifying activity in information systems

It is proposed that all currencies are driven by ICD10/OPCS codes until HRGs can be more specific. There are currently overlaps between categories using HRGs. Please see appendix 1 for the list of codes that should be used to identify the specialised services covered by this definition. This section will be updated within the next couple of weeks with further guidance on the use of these codes to identify the specialised activity, e.g. relative position of diagnostic and procedure codes.

7. National Standards, Guidelines and Protocols

- Guidance on the use of Ribavirin and Interferon Alpha for Hepatitis C (Technology Appraisal Guidance No14) was published by NICE in October 2000 and is available on the NICE website (www.nice.org.uk). This guidance will be reviewed in October 2003
- The British Association for study of the Liver/BSG Liver Section have already produced/are in the process of developing guidelines for the management of acute liver failure, the various advanced complications of cirrhosis, hepatocellular cancer and cholangiocarcinoma.
- The Department of Health has recently produced Improving Outcomes guidelines on the management of patients with upper GI Cancer including hepatobiliary and pancreatic cancer.

8. Issues to be noted regarding this service / definition

There are currently no guidelines for the management of primary and secondary liver tumours. It is recommended that BASL/ BSG Liver Section co-ordinates a process involving the appropriate professionals to develop these.

Cases that should be referred to a specialist centre are detailed in appendix 1.

Primary tumours guidelines virtually complete, secondary guidelines recently commissioned by BSG Liver Section

In view of the expense of many of the treatments listed above (e.g. therapy for HCV infection £7000-£12000 per patient), a case identification and audit system, similar to that used for renal services, will be needed. Most liver units have databases of current specialist liver work and these could be made uniform and linked. Most liver pathologists maintain biopsy-based databases of cases and these could be made uniform and linked to the public health system.

With respect to HCV, the recent National Institute of Clinical Excellence (NICE) report on the management of hepatitis C (Technology Appraisal Guidance No 14 October 2000) recommends that treatment plans are recorded for each patient receiving therapy and audit systems are in place to monitor the quantity and quality of care against the recommended standards.

Diagnostic virology labs could be used to identify cases of viral hepatitis in a reporting network linked to the public health system.

This definition has been endorsed by:

Appendix 1 – This list was produced by BASL and is endorsed by the Chairman of the BSG Liver Section.

Summary of cases that should be referred to a specialist centre

- **Patients with persistent HBV and HCV infection.** Liver biopsy can be undertaken in the referring unit or in the Specialist Centers dependent on expertise. Case selection for therapy would be done in the specialist center based on histology score, viral genotype and viral titre and long term management will involve shared care with local providers. The intra-venous drug user (IVDU) HCV infected patient will require shared care management with Drug Addiction Centers after initial assessment in Liver Centers.
- **Patients with primary or secondary carcinoma of liver, biliary tree and pancreas**
- **Patients with uncommon benign liver tumours.**
- **Patients with uncommon liver diseases,** where evaluation/diagnosis and management plans are needed.
- **Patients with acute liver failure**
- **Patients with advanced complications of cirrhosis** (e.g. recurrent variceal hemorrhage, resistant ascites, hepatorenal syndrome or uncontrolled hepatic encephalopathy).
- **Patients requiring “other” specialist forms of hepatobiliary surgery** e.g. hepatic resections and reconstruction of biliary tree.
- **Patients with complications of severe acute and chronic pancreatitis,** or requiring operative management of pancreatic tumours.
- **Patients with liver trauma** require cross linkage with designated trauma centres.

Appendix 2: Diagnosis codes (ICD 10) and procedure codes (OPCS4) to identify specialised activity – to be confirmed by the Information Authority

Specialist services for the treatment of patients with viral hepatitis.

ICD10	Description
A06.4	Amebic Liver Abscess
B15.0	Hepatitis A With Hepatic Coma
B15.9	Hepatitis A Without Hepatic Coma
B16.0	Acute Hepatitis B With Delta-Agent (Coinfection) With Hepatic Coma
B16.1	Acute Hepatitis B With Delta-Agent (Coinfection) Without Hepatic Coma
B16.2	Acute Hepatitis B Without Delta-Agent With Hepatic Coma
B16.9	Acute Hepatitis B Without Delta-Agent And Without Hepatic Coma
B17.0	Acute Delta-(Super) Infection Of Hepatitis B Carrier
B17.1	Acute Hepatitis C
B17.2	Acute Hepatitis E
B17.8	Other Specified Acute Viral Hepatitis
B18.8	Other Chronic Viral Hepatitis
B19.0	Unspecified Viral Hepatitis With Coma
B19.9	Unspecified Viral Hepatitis Without Coma
B25.1	Cytomegaloviral Hepatitis
B58.1	Toxoplasma Hepatitis
B67.0	Echinococcus Granulosus Infection Of Liver
B67.5	Echinococcus Multilocularis Infection Of Liver
B67.8	Echinococcosis, Unspecified, Of Liver
K70.0	Alcoholic Fatty Liver
K70.1	Alcoholic Hepatitis
K70.2	Alcoholic Fibrosis And Sclerosis Of Liver
K70.3	Alcoholic Cirrhosis Of Liver
K70.4	Alcoholic Hepatic Failure
K70.9	Alcoholic Liver Disease, Unspecified
K71.0	Toxic Liver Disease With Cholestasis
K71.1	Toxic Liver Disease With Hepatic Necrosis
K71.2	Toxic Liver Disease With Acute Hepatitis
K71.3	Toxic Liver Disease With Chronic Persistent Hepatitis
K71.4	Toxic Liver Disease With Chronic Lobular Hepatitis
K71.5	Toxic Liver Disease With Chronic Active Hepatitis
K71.6	Toxic Liver Disease With Hepatitis, Not Elsewhere Classified
K71.7	Toxic Liver Disease With Fibrosis And Cirrhosis Of Liver
K71.8	Toxic Liver Disease With Other Disorders Of Liver
K71.9	Toxic Liver Disease, Unspecified
K72.0	Acute And Subacute Hepatic Failure
K72.1	Chronic Hepatic Failure
K72.9	Hepatic Failure, Unspecified
K73.0	Chronic Persistent Hepatitis, Not Elsewhere Classified
K73.1	Chronic Lobular Hepatitis, Not Elsewhere Classified
K73.2	Chronic Active Hepatitis, Not Elsewhere Classified
K73.8	Other Chronic Hepatitis, Not Elsewhere Classified
K73.9	Chronic Hepatitis, Unspecified

- K74.0 Hepatic Fibrosis
- K74.1 Hepatic Sclerosis
- K74.2 Hepatic Fibrosis With Hepatic Sclerosis
- K74.3 Primary Biliary Cirrhosis
- K74.4 Secondary Biliary Cirrhosis
- K74.5 Biliary Cirrhosis, Unspecified
- K74.6 Other And Unspecified Cirrhosis Of Liver
- K75.0 Abscess Of Liver
- K75.2 Nonspecific Reactive Hepatitis
- K75.3 Granulomatous Hepatitis, Not Elsewhere Classified
- K75.8 Other Specified Inflammatory Liver Diseases
- K75.9 Inflammatory Liver Disease, Unspecified
- K76.0 Fatty (Change Of) Liver, Not Elsewhere Classified
- K76.1 Chronic Passive Congestion Of Liver
- K76.2 Central Hemorrhagic Necrosis Of Liver
- K76.3 Infarction Of Liver
- K76.4 Peliosis Hepatis
- K76.5 Hepatic Veno-Occlusive Disease
- K76.7 Hepatorenal Syndrome
- K76.8 Other Specified Diseases Of Liver
- K76.9 Liver Disease, Unspecified
- K80.3 Calculus Of Bile Duct With Cholangitis
- K80.4 Calculus Of Bile Duct With Cholecystitis
- K80.5 Calculus Of Bile Duct Without Cholangitis Or Cholecystitis
- K83.1 Obstruction Of Bile Duct
- K83.2 Perforation Of Bile Duct
- K83.3 Fistula Of Bile Duct
- K83.5 Biliary Cyst
- K83.8 Other Specified Diseases Of Biliary Tract
- K83.9 Disease Of Biliary Tract, Unspecified
- O98.4 Viral Hepatitis Complicating Pregnancy, Childbirth, And The Puerperium
- Q26.6 Portal Vein-Hepatic Artery Fistula
- Q27.0 Congenital Absence And Hypoplasia Of Umbilical Artery
- Q44.2 Atresia Of Bile Ducts
- Q44.3 Congenital Stenosis And Stricture Of Bile Ducts
- Q44.5 Other Congenital Malformations Of Bile Ducts
- Q44.6 Cystic Disease Of Liver
- Q44.7 Other Congenital Malformations Of Liver
- R16.0 Hepatomegaly, Not Elsewhere Classified
- R16.2 Hepatomegaly With Splenomegaly, Not Elsewhere Classified
- R93.2 Abnormal Findings On Diagnostic Imaging Of Liver And Biliary Tract
- R94.5 Abnormal Results Of Liver Function Studies

Specialist services for patients with acute liver failure and advanced complications of cirrhosis

- C22.0 Liver Cell Carcinoma
- C22.1 Intrahepatic Bile Duct Carcinoma
- C22.2 Hepatoblastoma
- C22.3 Angiosarcoma Of Liver
- C22.4 Other Sarcomas Of Liver
- C22.7 Other Specified Carcinomas Of Liver
- C22.9 Liver, Unspecified
- C24.0 Extrahepatic Bile Duct
- C24.8 Overlapping Lesion Of Biliary Tract
- C24.9 Biliary Tract, Unspecified
- C78.7 Secondary Malignant Neoplasm Of Liver

Specialist Services for the treatment of patients with benign and malignant liver cancer and cancer of the intra- and extra- hepatic biliary tree (including pancreas)

ICD10 codes:

- C22 Malignant neoplasm of liver and intrahepatic bile ducts
- C24 Malignant neoplasm of other and unspecified parts of biliary tree
- C25 Malignant neoplasm of pancreas
- C78.7 Secondary malignant neoplasm of liver
- D13.4 Benign neoplasm of liver
- D13.5 Benign neoplasm of extrahepatic bile ducts
- D13.6 Benign neoplasm of pancreas
- D37.6 Neoplasm of uncertain behaviour of liver, gallbladder and bile ducts
- D37.7 Neoplasm of uncertain behaviour of other digestive organs (including pancreas)

OPCS4 code:

- J47.1 Percutaneous insertion of tubal prosthesis into both hepatic ducts
- J47.2 Percutaneous insertion of tubal prosthesis into right hepatic duct nec
- J47.3 Percutaneous insertion of tubal prosthesis into left hepatic duct nec
- J47.4 Percutaneous insertion of tubal prosthesis into hepatic duct nec
- J47.5 Percutaneous insertion of tubal prosthesis into common bile duct

- J02.1 Right hemihepatectomy
- J02.2 Left hemihepatectomy
- J02.3 Resection of segment of liver
- J02.9 Unspecified partial excision of liver
- J03.2 Destruction of lesion of liver

Specialist hepatobiliary and pancreatic surgery

ICD10 codes:

- C25 Malignant neoplasm of pancreas
- D37.6 Neoplasm of uncertain behaviour of liver, gallbladder and bile ducts
- D37.7 Neoplasm of uncertain behaviour of other digestive organs (including pancreas)
- K85 Acute Pancreatitis
- K86.0 Alcohol-induced chronic pancreatitis
- K86.1 Other chronic pancreatitis
- K86.2 Cyst of pancreas
- K86.8 Other specified diseases of pancreas
- K83.1 Obstruction of bile duct

OPCS4 codes:

- J55.1 Total pancreatectomy and excision of surrounding tissue
- J55.2 Total pancreatectomy nec
- J55.8 Other specified total excision of pancreas
- J55.9 Unspecified total excision of pancreas
- J56.1 Pancreaticoduodenectomy and excision of surrounding tissue
- J56.2 Pancreaticoduodenectomy and resection of antrum of stomach
- J56.3 Pancreaticoduodenectomy nec
- J56.8 Other specified excision of head of pancreas
- J56.9 Unspecified excision of head of pancreas
- J57.1 Subtotal pancreatectomy
- J57.2 Left pancreatectomy and drainage of pancreatic duct
- J57.3 Left pancreatectomy nec
- J57.4 Excision of tail of pancreas and drainage of pancreatic duct
- J57.5 Excision of tail of pancreas nec
- J57.8 Other specified partial excision of pancreas
- J57.9 Unspecified partial excision of pancreas
- J58.2 Excision of lesion of pancreas nec
- J58.8 Other specified extirpation of lesion of pancreas
- J58.9 Unspecified extirpation of lesion of pancreas
- J29.2 Anastomosis of hepatic duct to jejunum nec
- J29.9 Unspecified connection of hepatic duct
- J32.1 Reconstruction of bile duct
- J32.2 Reanastomosis of bile duct
- J32.8 Other specified repair of bile duct
- J32.9 Unspecified repair of bile duct