

Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing

CLINICAL PROFESSIONAL RESOURCE





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British Association for the Study of the Liver

British Liver Nurses Association

British Liver Trust

British Liver Transplant Group

British Society of Gastroenterology – Liver Section

Children's Liver Disease Foundation

The Hepatitis C Trust

Liver4Life

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Publication

This is an RCN competence knowledge and skills framework to support personal development and career progression.

Description

The RCN recognises the importance and value of liver nurses and liver recipient transplant co-ordinators in clinical practice. These competencies have been revised to support practitioners in a clear, consistent and evidence-based format to reflect their specific, specialist knowledge and skills. The competencies can be employed in various roles across acute, primary, public health and community settings in the United Kingdom (UK) and the framework is inclusive for all practitioners working in the NHS, independent or voluntary sector.

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Foreword

The original ethos of *Caring for People with Liver Disease: a Competence Framework for Nursing* was to develop a set of competencies that all nurses could use regardless of their area of clinical practice. The framework aimed to equip the nurse to identify individuals at risk of liver disease, promote healthy livers and lifestyle as well as care for individuals with existing liver disease. Liver disease has been increasing and the full impact has not yet been felt; it was once a minority killer, however liver disease is now becoming commonplace and is the fifth biggest killer in the UK. Age is no barrier to liver disease and, as such, raising awareness of risk factors across the age spectrum is essential. There is a great need to reverse this growing problem and the promotion of a healthy liver as a way of life to this generation and the next is a key concept.

Nurses are integral to making an impact on liver disease; nurses can make every contact count by identifying risk factors for the three major types of liver disease – alcohol, hepatitis B and C and obesity leading to non-alcoholic fatty liver disease (NAFLD); and by offering health promotion and education to help individuals to make informed choices. Some nurses will also need to be able to offer care to patients with existing liver disease and this competence framework has been devised to support quality standards for care.

Liver patients can be challenging and can have a complexity that requires nurses to draw upon multiple skills and talents. In this edition, as well as the updated liver competencies, the inclusion of competencies specific to liver transplantation have been developed. These professional standards cover the continuum of referral, assessment and listing for transplant. They describe high quality care pre-, peri- and post-liver transplant, as well as staying healthy in the long term following liver transplantation. The liver transplant competencies can be used by nurses in referring hospitals who identify a potential candidate; by transplant co-ordinators who support the person through the assessment, listing and transplant process; and to nurses in both critical care environments and ward settings in liver transplant centres. The liver transplant competencies support the educational requirements set out by NHS England (2016) in their Liver Transplant Quality Indicators for liver transplant centres.

I hope that this publication will equip a nurse with the required skills and knowledge base to help make a difference for the individual with, or at risk, of liver disease or requiring liver transplantation by the delivery of effective quality care. *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing* aims to turn a little known and thought of disease into an everyday thought, which will help to encourage identification and prevention of liver disease development.

All nurses – regardless of clinical background – have the skills and talents to integrate liver health into the health care arena as a healthy liver is essential in maintaining a healthy life.

Michelle Clayton

Steering committee member, RCN
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The first orthotopic liver transplant was performed in 1968 at Addenbrookes Hospital, Cambridge. There are now seven liver transplant centres in the UK at the Royal Infirmary, Edinburgh; Freeman Hospital, Newcastle; St James's University Hospital, Leeds; Queen Elizabeth Hospital, Birmingham; Addenbrookes Hospital, Cambridge; Kings College Hospital, London and Royal Free Hospital, London.

Liver transplantation is now considered a common practice in the UK and around the world. Through the advances in technology and pharmacology the survival outcome post-liver transplant are greater the 90% at one year. There continues to be dynamic advances in technology and changes in law to increase the number of organ donors and liver transplants.

These competencies are designed to support the future of liver transplant nursing, promote consistency in caring for liver transplant patients in transplant centres and local hospitals during the assessment, waiting period and post-operative period. They provide professional standards, offer guidance and promote the delivery of high quality care.

Kate Jones

British Liver Transplant Group Nurse
representative

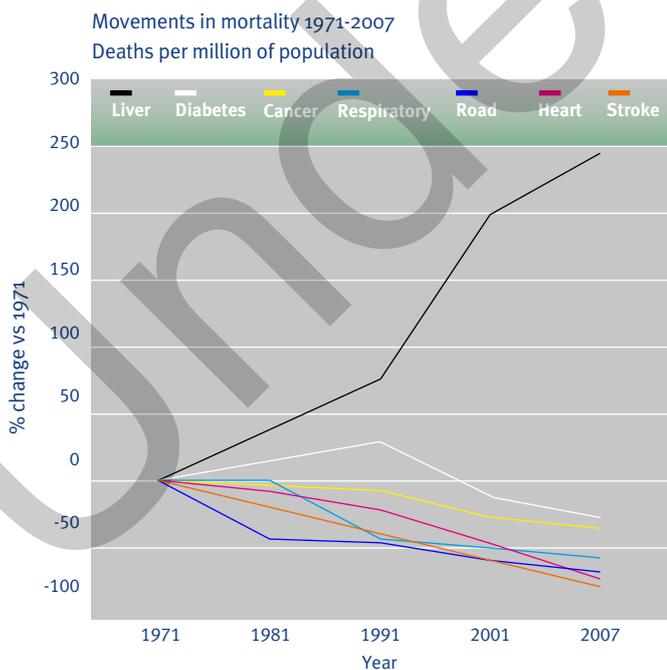
1. Introduction to the framework

This competence framework describes the professional standards expected of practitioners when caring for people with liver disease including liver transplantation.

Liver disease is now the fifth most common cause of death in the UK (Williams et al., 2014). What was once thought to be a rare disease is emerging to be a major killer and its prevalence has risen exponentially year on year in recent times, see Table 1. There are three major culprits that have led to this incredible rise: alcohol, viral hepatitis and obesity leading to non-alcoholic fatty liver disease (NAFLD). These three areas are essentially preventable causes and have been attributed to changes in lifestyle. One of the challenges in caring for patients is to raise awareness amongst all health care professionals in primary and secondary care as well as the general public. Public attention surrounding liver disease is not always positive due to its links to health inequalities and also the stigmatisation of this disease being 'self-inflicted'.

Table 1: England – liver disease mortality trend dramatic increase relative to other major disease groups

WHO/Europe, European HFA Database, January 2012



Nurses are key to the prevention of liver disease. Nurses in every area of clinical practice can identify individuals at risk of liver disease, for example, screening for hepatitis B and C, alcohol consumption and obesity, and help them to make informed choices through health promotion and education. The role of brief advice is a key component, whether in primary, secondary or tertiary care, and identification of risk factors, verbal and written information and signposting to support services can be invaluable in helping to reducing the risk of liver disease. Having a healthy liver should be just as important as a healthy heart, bones or teeth. Tackling obesity is already high on the public health agenda with campaigns to encourage and empower patients to make healthier choices in relation to eating, exercise and weight management (NICE, 2014). Some causes of liver disease, for example hepatitis B and C, are now highly treatable and can prevent liver disease from developing if detected early enough and individuals are referred for treatment (NICE, 2012). Whether in primary or secondary care, nurses who care for individuals with such conditions as diabetes and metabolic syndrome can also help to promote a healthy liver.

Age is no barrier to liver disease and as such, raising awareness of risk factors in the form of health education and promotion from an early age should be encouraged ie, obesity in children and safe limits for drinking alcohol in the older population. This is an extremely important public health role as there is a great need to reverse the growing problem that we have and to promote a healthy liver as a way of life to the next generation. Established liver disease is generally life-limiting and the treatment options available, such as liver transplantation, is a limited resource. Mortality rates from liver disease have increased 400% since 1970, and in people younger than 65 years have risen by almost five times (Williams et al., 2014). Liver patients are known to die younger than the general population and the majority die in a hospital setting (NCEPOD, 2013, PHE, 2019). This is the opposite of most major disease processes where dying in hospital is in the minority. Therefore end of life planning and subsequent care delivery is another important area in which nurses in both primary and secondary care settings have a key role.

In 2011, the National Liver Disease Strategy for England identified, with expert nurses working within the specialty, the need for a framework to ensure patients with liver diseases or risk factors to the disease were recognised. The subsequent document encapsulated the requirements and professional standards which would help nurses aspire to providing quality liver care and improving outcomes. The original document was a joint development between a selected group of liver nurses on behalf of the Department of Health, England and the Royal College of Nursing, Gastrointestinal Nurses Forum. An updated edition was published in 2015 by the Royal College of Nursing. In 2018, it was recognised that the competence framework should encompass the field of liver transplant nursing, thus offering professional standards across liver and liver transplant nursing.

The framework focuses on the needs of people with liver disease and is intended to be used with other local policies and pathways around the scope of practice undertaken by nurses working at all levels.

Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing is an essential document for all nurses whatever their clinical background and setting. The document has been produced to provide a framework on which skills, knowledge and understanding can be assessed. A survey of

nurses from the RCN Gastrointestinal Nurses forum, British Liver Nurses' Forum and British Association for the Study of Liver Disease Nurses Forum (2015) felt that the framework helped liver nurses plan their appraisals, identify development needs in their role, develop new roles and help to upskill ward teams. This joint working led to the development of a single liver nurse organisation, known as the British Liver Nurses' Association (BLNA). The competence framework should be seen as a flexible document that allows individual liver nurses to utilise those competencies that are specific to them and does not have to be undertaken as a whole. It is important to recognise that the competence levels do not translate to agenda for change banding and a nurse's competence level may vary in different competencies.

The competence document may also be useful for those health care professionals (HCPs) ie, GPs, social workers, dietitians and drug and alcohol workers who are also working with patients with or at risk of liver disease or liver transplantation in primary or secondary care and may be useful as part of their professional learning and development. The document can also be used by nursing students to improve their knowledge, understanding and skill acquisition of caring for people with, or at risk of, liver disease. For further description and information, see [page 9](#).

2. Context for developing the framework

The National Liver Disease Strategy for England (Department of Health, unpublished) aimed to transform the way health and social care services supported people with liver disease to deliver optimum outcomes. Those with liver disease would be identified earlier, diagnosed with improved accuracy and receive treatment that is equitable, responsive, high quality and effective with the overall aim of reducing premature mortality associated with liver disease. This should be from the right person, at the right time, in the right place, within evidence-based standards of care and treatment, ensuring dignity, respect and compassion are at the heart of the patient journey. It aimed to ensure that all communities had appropriate prevention strategies for liver disease that included improved partnership working to address major lifestyle drivers and programmes to identify those most at risk. Further work has been undertaken by the Lancet Commission for Liver Disease (Williams et al., 2014) which has made recommendations to address the premature mortality and health inequalities that exist for people with or at risk of liver disease.

The NHS is judged on its performance in reducing deaths from liver disease through the NHS Outcomes Framework. Through the NHS Outcomes Framework, the NHS Commissioning Board is held to account by the Secretary of State for making improvements to quality and outcomes in the public's health. The NHS Commissioning Board hold Clinical Commissioning Groups to account on the services they commission for their local populations. The services, treatment and care provided to those with liver disease is a vital part of this.

Public Health England is also judged on the contribution it makes to reducing the number of people developing liver disease and reducing deaths from liver disease, through the Public Health Outcomes Framework. All health care professionals working within the NHS – both in primary and secondary care – can help to contribute to improvements in the public's health, not just by treating those who already have liver disease, but also by helping to prevent it developing in those at risk.

In recognising the significant burden of liver disease, it is essential to ensure that a workforce is competent and confident to deliver high quality services to patients with a diagnosis of, or at risk, of developing liver disease is coherently

developed. Williams et al., (2014) made a number of recommendations on a robust and coherent workforce and appropriate hospital services to care for people with liver disease.

Liver nurse specialist roles are constantly changing to meet the needs of patients and their families to prevent re-admissions, to educate them about liver disease and its complications, giving them management tips to earlier recognise and treat complications. Patients and carers should have access to a named liver nurse to support them through all care options. The framework covers all aspects of liver care and is a resource for developing new roles and supporting those nurses in these roles. As a growing speciality it is recognised that the demographics of this workforce will be constantly changing and adapting to the change in liver disease provision.

Nurses who work in the arena of liver disease are a growing group and encompass expertise in a wide range of disease processes, from the more common areas of viral hepatitis, alcohol-related liver disease and non-alcoholic fatty liver disease (NAFLD) to those who cover general hepatology including autoimmune hepatitis, haemochromatosis and hepatocellular carcinoma. The Lancet Commission (Williams et al., 2014) recognises the important contribution that liver nurses play but has identified that there is a need for further access to liver specific education. There is also a small group of specialised nurses that care for patients pre- and post-liver transplant.

The British Liver Nurses' Association (BLNA) is the organisation that represents liver nurses of all specialties. It is affiliated to the British Association of the Study of the Liver (BASL). The RCN Gastrointestinal Nurses Forum also has a role representing nurses who care for people with liver disease.

This framework has been endorsed by the BLNA as the professional standards for all nurses irrespective of clinical background caring for people with or at risk of liver disease.

This revised edition of this framework includes the liver transplant competencies and was developed by the RCN Gastrointestinal Nurses Forum in conjunction with the British Liver Transplant Group (BLTG), liver recipient transplant co-ordinators, transplant nurses and specialist nurses in referral hospitals across all of the liver transplant units in the UK.

3. What is a competence framework?

For the purpose of this document competence can be defined as:

“The state of having the knowledge, judgement, skills, energy, experience and motivation required to respond adequately to the demands of one’s professional responsibilities.”
(Roach, 1992)

Competencies are the essential building blocks that shape nursing work in all clinical and practice settings. As practitioners acquire skills, knowledge, understanding and confidence in their field of liver practice they are able to demonstrate how they meet increasingly challenging levels of competence.

This document provides a resource for all grades of staff to enable learning and development around promoting healthy livers and lifestyles.

The framework aims to identify the competencies required to meet the specific needs of people with liver disease including liver transplantation, as well as provide support to registered nurses, health care assistants and associate nurses wishing to grow their expertise and progress their career in caring for this client group.

The competence framework is presented across bands 1-8 of the Skills for Health career

framework and therefore provides both a competence and career framework for those wishing to specialise in the care of people with liver disease.

The competencies are written from an outcome approach to competence, making clear the actions and activities expected in the workplace.

The Skills for Health career framework uses similar language and terminology to the NHS job evaluation (JE) scheme but they have different levels and meanings:

“The two systems are not interchangeable and the career framework should only be used to create career pathways for staff working in the NHS. The JE Scheme should only be used to measure the demands of jobs in order to give them a banding within the NHS pay scale.”
(NHS Employers, 2011)

The framework aims to integrate high quality liver care for all individuals and their family/carers. This care will be person-centred and encompassing the core values of the nursing practice.

4. The aim of this framework

The revised competence framework has been reformatted so that it reflects the Nursing and Midwifery Council (NMC), *The Code: Professional Standards of Practice and Behaviour for Nurses and Midwives* (2018). Each competency has been linked to the following:

NMC standards: Prioritise People, Practise Effectively, Preserve Safety and Promote Professionalism and Trust. NMC (2018)

Within the new framework the expectations of liver nurses are clear, consistent and evidence-based (wherever possible). The framework is inclusive for all practitioners (working in the NHS, independent or third sector), caring for people with, or at risk of, liver disease including liver transplantation across their lifespan, and across acute, primary and community settings in the UK. As a guideline, the document meets the requirements of the RCN Quality Framework.

Through not duplicating general competencies common to all client groups and settings, *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing* enables the unique aspects of the specialty to be accentuated for learning and development purposes as well as for making clear expectations of each level of the career pathway.

NICE guidelines, interventional procedures and appraisals in relation to people with liver disease (see www.nice.co.uk website for a wide range of guidance on liver conditions). Evidence-based guidelines and standards continue to be developed and refined and provide the most up-to-date and appraised evidence base to inform specific interventions. Relevant guidelines are identified in the context of the competence framework.

The competence framework, although making reference to highly specialised interventions such as liver transplantation and end of life care pathways. There is an expectation that any nurse working with people at risk or with liver disease should be able to identify specialist needs and can use the competence framework to signpost to the relevant care pathway.

The expected workload of senior registered practitioners differs between settings, depending

on local need, resources and infrastructure. This may include specialist nurses roles and also nurses managing patients in secondary care or primary care settings.

Within this document, levels of competence are as follows:

Table 2: The levels of competence and examples of roles

Levels 1-4	Non-registered practitioner/associate nurse: this level could relate to health care assistants or nursing students working in a drug or alcohol environment, on a gastroenterology ward or liver unit, with liver outpatients or related to hepatobiliary conditions.
Level 5	Graduate entry practitioner: this level could encompass any registered nurse who cares for a patient with liver disease or risk factors for liver disease in primary or secondary care and could relate to any clinical background or setting.
Level 6	Senior practitioner: this level could encompass nurses within drug and alcohol services, viral hepatitis, nurses with experience of caring for liver patients over a number of years, junior ward sister level or newly appointed specialist nurse.
Level 7	Advanced level practitioner: this level could encompass the experienced clinical nurse specialist, ward manager, practice development nurse and liver recipient transplant co-ordinator.
Level 8	Consultant practitioner: this level could encompass a nurse who may have developed or is leading a service, for example, nurse consultant in viral hepatitis or lead nurse for hepatology.

For each of the competencies, the performance indicators, knowledge, understanding and practical know-how are identified for levels 1-8 of the clinical career framework. Each level of the identified performance, knowledge, understanding, practical know-how and attitudes and behaviours builds on the previous level of expectations. Further discussion on these indicators can be found in section five of this document and section six gives examples of what evidence to collect. The framework recognises that there is a need for a range of competencies in every team as well as a range of practitioners operating at different levels.

The clinical career framework levels used within this competence framework do not reflect the Agenda for Change banding levels.

Therefore a staff nurse at band 5 (Agenda for Change) who has worked within the area of liver disease for a number of years may have varying levels of competence either at level 5, 6 or 7 within different competencies.

For example, for competence 7.2: nutrition and fluid management/hydration in patients with liver disease, the staff nurse may achieve level 6 as they have worked with liver patients for a number of years and can fulfil the performance and knowledge and understanding criteria.

Whereas a practice nurse may be a band 7 (Agenda for Change), but may achieve a level 5 in competence 5 (develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease) as the practice nurse may have a broad understanding of chronic diseases but not indepth liver disease knowledge.

The competence framework is designed to allow nurses from many clinical backgrounds to tailor their competence development in working with patients with varying degrees of liver health. This can be achieved by nurses (in conjunction with their manager) being able to choose some or all of the relevant competencies to demonstrate development of key skills, knowledge and understanding for this patient group. Successful demonstration of competence can be used as evidence of meeting professional development needs.

Practitioners will always need to be aware of local guidelines and protocols as well as working within the scope of professional practice when initiating treatment and interventions. Liver disease management is a dynamic and rapidly changing professional arena, therefore all health care professionals need to remain up-to-date and utilise contemporary evidence-based practice.

5. Using the framework

The framework is intended to support the learning and development needs of staff and health care organisations as well as enable career progression and role clarity, making clear the professional standards expected for patients and service users.

Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing includes a number of examples of how to use a competence in practice. The examples relate to different liver nursing roles such as senior staff nurse/junior sister, practice nurse, specialist nurse – see Appendix 1 (p. 82) onwards.

These are intended only as a guide in order to achieve an individual competence. There will be many other examples of liver nursing care that could be used as evidence to achieve the competence.

It would be envisaged that some of the competencies could be shared across a team of nurses working at the desired level; this may be used to support quality standards for care. The competence framework may be individually tailored to a specific liver nursing role. This may assist in the development of innovative liver nursing roles in the future.

It is not envisaged that all nurses working in primary and secondary care will need to meet all of the competencies. *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing* has been developed to allow nurses to select relevant competencies to their role and scope of practise. However as nurses progress through the career trajectory, there should be emphasis on attainment of all the levels and all relevant competencies that complement the higher role and scope of practice.

Organisations should be encouraged to use the framework to help identify any competence gaps in service provision. Individuals and teams should use it as a developmental framework both collectively and individually. Higher Education Institutes may draw on the framework for curriculum development. Commissioners of both services and education may also find this framework a useful tool.

With all competence documents there is specific terminology used. In relation to *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing* the following headings in table 3 are used.

Table 3: Definitions of the terminology used in the framework

Competence	Identifying the specific aspect of care.
Level	The levels used relate to Skills for Health career framework. Nurses using this document may be at different levels for different competencies.
Performance criteria	Describes the skills required for each competence. In order to achieve a higher level, the individual will have had to demonstrate achievement at the previous level for performance, knowledge and understanding, knows how to and attitudes and behaviours.
Knowledge and understanding	Describes specific areas that are pertinent to the competence.
Knows how to	Describes the tacit knowledge required in each competence.
Attitudes and behaviours	Each level has a number of required attitudes and behaviours to support the individual's competence development.
Contextual factors	Each competence contains a list of generic and specific resources.

It is important to recognise that each level is integral to the next and as such individuals need to demonstrate progression by achieving each level before moving on to the next.

Each competence is designed as a building block to develop performance, knowledge, understanding, attitudes and behaviours from a fundamental level through to specialist and/or advanced practice. As such each of these areas link together in order to build the individual's competence and contribute to their professional development.

In relation to individual competence, the performance indicators help to identify the

actions that would establish whether the competence is met but are also intended to be used flexibly in reviewing competence as they may be influenced by the context. The knowledge and understanding, as well as, the practical know-how required to achieve the performance indicators are identified in relation to each competence.

Assessment of competence would entail using a combination of methods, for example, self-assessment, observation of practice, structured reflection, peer review, document audit and clinical supervision. These methods are practice development tools that assist individuals and teams to achieve continuous development. However, developing a portfolio of multiple sources of evidence against competence standards may also be used to support both academic and professional accreditation.

How to implement the framework into practice

The framework is a flexible document that can be utilised in all areas working with people with, or at risk of, of liver disease. Sections of the framework can be selected to complete rather than undertaking the whole document. You and your team should identify the relevant competencies to your area and then identify the levels of competence that you and your staff wish to achieve. One tip would be to start small and build over time.

The framework could be embedded into the ward or team philosophy and can be used to identify learning needs for individuals or the team. It can also become part of the personal development plan/appraisal process where areas of competence can be identified to complement learning and development. The framework can be used to identify gaps in service provision.

This framework will help you to achieve some of the requirements for the revalidation process for nurses and midwives to practise (Nursing and Midwifery Council, 2015). For example, demonstrating up-to-date practice and professional development and reflecting on professional standards of practice and behaviors.

This framework can be used by those working within a clinical team including on wards, outpatients, ITU, endoscopy, A&E or as an individual. A suggested format for implementation is set out below.

Assess

- Identify key members of the team across all bands.
- Review competence framework and identify appropriate levels of competence for each band (see Table 2, page 9).
- Choose one competence to pilot over a number of different levels.
- Publicise what you are doing and how this will help your area of clinical practice.
- Consider how to embed into the ward/team philosophy.

Plan

- Identify training needs that arise from the chosen competence.
- Identify an appropriate timeframe.
- Preparation of materials for ward/individuals that will meet NMC requirements for portfolio, for example download the document and reproduce the chosen competence.
- Consider what evidence is needed and how will it be assessed.

Implement

- Working with identified mentor/practice educator/supervisor/ward sister, etc.
- Collect, demonstrate and/or show evidence for each competence identified.
- Ensure that evidence which shows the competence has been met is signed and dated and kept by the ward/individual.

Evaluate

- Meeting with mentor/practice educator/supervisor/ward sister to review progress and evidence collected.

- Identify any gaps in learning.
- Competence can be used to complement PDP/appraisal processes.
- Reflect on the process. Consider sustainability and use of a yearly audit to review progress.

Examples in practice

Example 1

As part of the trust alcohol team you work in A&E delivering brief interventions. As part of raising awareness about alcohol and the use of brief advice you want to roll out the Alcohol Use Disorders Identification Test (AUDIT) tool in your trust. You target A&E and your assessment unit to start and start training sessions:

Teaching includes what the AUDIT score means:

Risk category	AUDIT score
Abstainer	0
Lower risk	1-7
Increasing risk	8-15
Higher risk	16-19
Possible dependence	20-40

Adapted from Barbor et al., 2001

Teaching reveals an increase in AUDIT scoring by 76% and this improves again at six months to 81%. This results in more referrals to the alcohol team and a reduction in A&E referrals by GPs.

This would fit competence 2 (supports patients (families and carers) in their understanding of their condition through patient education and health promotion). The evidence produced would be able to be used to support levels five and six.

Example 2

You manage a nursing team on a busy GI ward with a large liver population and you have a large number of new staff who are new to caring for patients with liver disease. This is a good opportunity to implement the competence framework. You put together a working group of ward staff from different bands to look at how to implement the framework.

As a team you identify what is expected from a:

- health care assistant
- nurse associate
- band five staff nurse
- band six
- band seven ward manager.

Once the competencies required are identified your team can start delivering teaching on the competencies.

You may not need all of them and in this example you could use competence 3 (undertakes a comprehensive clinical assessment of the liver patient) as well as competence 7 (provides specific diagnostic/treatment options safely). You will have identified at what level you will expect each member of the team to achieve and demonstrate in your planning. Both competencies include specific nursing care that would include managing:

- a variceal bleed
- a jaundiced patient
- a patient who is malnourished
- a patient with ascites.

This identifies the learning needs (identifying and managing the complications of chronic liver disease). Once education has been delivered then the nurse can start to develop the skills, knowledge and understanding needed to demonstrate competence and attain the appropriate evidence.

Evidence sheets can be found in Appendix 2 (p. 85).

6. How to produce evidence to demonstrate competence

You are responsible for developing your own portfolio of evidence for each competence in order to demonstrate that you have achieved it at the identified/desirable level.

How to produce evidence to demonstrate competence

Forms of evidence that you can use include case histories, self-appraisal via a reflective diary, 360-degree feedback, verification of practice and structured observation of practice. So, when you gather evidence it is important to consider the following:

- ensure that you understand what the competence statement is asking of you
- review any existing work that could be used
- identify whether the existing evidence is appropriate
- consider what else you may need to do in developing evidence; for example, are you familiar with a reflective model?

Will someone be giving you feedback on your practice? Do you have further development needs and have you considered how you might address them? Think about using evidence that covers several competencies; for example, one case study may demonstrate that you have used a variety of knowledge and skills in treating a patient and in this instance you should be able to triangulate evidence against several competencies.

For example, if you attend a study day in preparation for carrying out a particular intervention but you have not practised the skill in a clinical setting, your certificate of attendance is not evidence of competence and you will have to consider making arrangements for supervised practice. However, if you have undergone training and have evidence of supervised practice and use new knowledge and skills on a regular basis the evidence should be enough, consider what else you may need to do in developing evidence, such as feedback on your practice; if you have further development needs, are they recorded in a personal development plan?

How do I get started?

You will need to look at the competence statements, and decide where you fit on the career trajectory in terms of development and what you already do. Table 2 on [page 9](#) may help you to clarify where you fit in the career trajectory.

What is evidence?

There is a variety of material that you can collect to capture evidence of competence. This may include:

- evidence of supervised practice such as signed observation of undertaking a procedure
- projects
- practice developments/changes in practice
- critical incidents
- assessments and appraisals
- publications and presentations
- audits
- teaching packages
- posters
- certificates of attendance with reflections on learning
- evidence of group work
- policy and protocol development
- evidence of membership of advisory groups
- research and evidence-based reviews
- witness statements, when focused and well structured.

The strength of the competence framework lends itself to the assessment of nursing practice at a local level in partnership with multidisciplinary colleagues. However, assessment may also take place through higher education university courses, and formal examination. Practitioners who carry out the assessments should have adequate expertise and training in the assessment and mentoring process, together with a higher level knowledge of aesthetic practice.

See [Appendix 1 \(p.82\)](#) for examples of how to use evidence to support attainment of the competence.

7. Anticipated benefits of the framework

The competence framework aims to benefit practitioners, their employers, patients and the public by providing a foundation on which to develop quality, safety and effectiveness of liver and liver transplant practice. The framework provides clarity for organisations regarding what they may expect from liver and liver transplant practitioners; and can also be used as a benchmark for organisations to use in staff recruitment, development, appraisal and individual performance management. It is relevant to all practitioners now and in the future, who are directly involved in the care of liver and liver transplant patients across the lifespan. The framework can also be used to develop curricula for the education of liver and transplant nurses so that education programmes can support the development of specialist skills and knowledge.

Benefits for practitioners

The framework aims to provide guidance in the following areas:

- delivery of high standards of evidence-based care
- continuing professional development (CPD), identification of education and training needs in relation to the levels of skills, behaviours and knowledge required resulting in structured professional development
- appraisal and revalidation (graduate professionals) and for career progression in relation to liver and transplant practice.

Benefits for employers

The framework aims to provide guidance in the following areas:

- Expected levels of knowledge, skills and behaviours for practitioners.
- Appraisal processes for individual practitioners and identification of workforce learning and development needs.
- Workforce planning to support delivery of quality liver and liver transplant nursing services including recruitment and selection of staff.
- The framework can be used to support evidence of a quality liver nursing workforce to meet the Improving Quality in Liver Services (IQILS) standards.

Benefits for the patients and public

- Providing assurance to patients and the public that practitioner competence is assessed and validated using the framework and learning and training needs are addressed through individual and workforce development.
- Minimising variation in standards of competence, between providers of liver and liver transplant services.

8. Overview of *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing*

Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing is structured around 16 competencies. The first nine competencies are related to liver care for all patients with or at risk of liver disease. The seven liver transplant competencies are only for patients being considered for liver transplantation. These are not placed in any hierarchical order as they are

interdependent. However, they do start with a person-centred approach where there is a high regard for the person with liver disease as someone with expertise about themselves; then move through the assessment, intervention and evaluation processes; concluding with a key nursing function – care pathway co-ordination and management.

The nine liver care competencies:

1. Collaboratively works with the liver patient (and their family/carer) to manage their liver disease.
2. Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion.
3. Undertakes a comprehensive clinical assessment of the liver patient.
4. Assesses, in collaboration with the patient, their diverse health care needs.
5. Develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease.
6. Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition.
7. Provides specific diagnostic/treatment options safely:
 - 7.1. undertaking phlebotomy and cannulation in the patient with difficult access associated with their liver disease
 - 7.2. nutrition and fluid management/hydration in patients with liver disease
 - 7.3. pharmacological treatment and side effects
 - 7.4. non-invasive diagnostics and treatment options
 - 7.5. invasive diagnostics and treatment options.
8. Uses early warning tools/approaches to identify the patient's changing and deteriorating condition, and takes appropriate action.
9. Actively improves and promotes liver services across the appropriate care pathway.

The seven liver transplant competencies:

10. Referral for transplantation
 - 10.1. Referral for consideration of liver transplantation
 - 10.2. Understanding the prerequisites for liver transplantation
11. Pre-transplant phase
 - 11.1. Assessing suitability for liver transplantation
 - 11.2. Impacting factors on suitability for liver transplantation
 - 11.3. Listing for liver transplant and informed consent
 - 11.4. Options for those not suitable for liver transplantation
 - 11.5. Keeping well whilst waiting
12. Transplant phase
 - 12.1. Facilitating the requirements the National Organ Retrieval Service (NORS)
 - 12.2.1. Admission for liver transplant – transplant co-ordinator
 - 12.2.2. Admission for liver transplant – ward nurses
 - 12.3.1. The role of the transplant co-ordinator peri-liver transplant
 - 12.3.2. Ensuring organ safety – transplant co-ordinator
 - 12.4. Care of family peri-liver transplant – transplant co-ordinator
 - 12.5. Early post-liver transplant care
 - 12.6. Early post-liver transplant complications
 - 12.7. Psychological care – post-liver transplant
 - 12.8. Promoting independence and support discharge
13. Promotes specific interventions safely with regards to life-long immunosuppression and other post-liver transplant medications and side effects
14. Healthy living post transplant
 - 14.1. Promoting a healthy life style post-liver transplant
 - 14.2. Health surveillance post-liver transplant
 - 14.3. Recognising the increased health risks post-liver transplant
15. Understand the importance of developing a robust liver outreach service
16. Organ donation
 - 16.1. Organ donation and innovations
 - 16.2. Understand the importance of law in organ donation and transplantation

1. Collaboratively works with the liver patient (and their family/carer) to manage their liver disease

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
1-4	Collaboratively works with the liver patient (and their family/carer) to manage their liver disease.	<ul style="list-style-type: none"> a. Asks questions and actively listens. b. Establishes the patient's preferences and boundaries for sharing personal health information, for example protecting their privacy and confidentiality. c. Personalises care. d. Respects and acknowledges a patient or family member/carer as an expert in their own condition, particularly if they have chronic liver disease. e. Empathises with and is responsive to the needs of patients with acute and chronic liver disease. f. Recognises that patients with chronic liver disease may have mental health issues and changes in mood due to hepatic encephalopathy or for example Wernicke's encephalopathy/Korsakoff's psychosis/alcohol withdrawal. 	<ul style="list-style-type: none"> • the Principles of nursing practice • the Department of Health (DH) guidance on the Expert Patient • the challenges posed when caring for people with chronic liver disease and the impact on the family/carer • the impact of hepatic encephalopathy on mental health, mood, personality, memory and understanding of their disease. 	<ul style="list-style-type: none"> • Aware of role limitations and when to obtain help. • Person centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Confidential. • Pride in work. • Respectful. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS 2nd Atlas of Variation: <i>Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).
5	Collaboratively works with the liver patient (and their family/carer) to manage their liver disease.	<ul style="list-style-type: none"> a. Discusses care/treatment options and offers choices to reach joint and informed decision making. b. Co-develops, implements and evaluates personal care plans, treating the patient as an individual. c. Encourages feedback from the patient, their family and carers. d. Works collaboratively with other members of the interdisciplinary team to provide a seamless service. e. Acts to ensure that the voice of patients and carers, particularly those who are vulnerable due to their condition, their needs and views are heard and acted on. 	<ul style="list-style-type: none"> • the Nursing and Midwifery Council (NMC) Nursing Code of Conduct • local protocols, standards and guidelines for patient care in relation to acute and chronic liver disease, including treatment • the differences between acute and chronic liver disease • patients' own understanding of the impact of co-morbidities on themselves eg, alcohol and obesity together, viral hepatitis and alcohol use; alcohol and depression • principles of the expert patient philosophy • role and contributions of each member of the interdisciplinary team. <p>Knows how to:</p> <ul style="list-style-type: none"> • be responsive to patient feedback and address concerns appropriately. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Empowering. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<ul style="list-style-type: none"> • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS 2nd Atlas of Variation: <i>Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

1. Collaboratively works with the liver patient (and their family/carer) to manage their liver disease (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Collaboratively works with the liver patient (and their family/carer) to manage their liver disease.	<p>a. Supports team members to co-develop, implement and evaluate personal care plans.</p> <p>b. Acts as a role model to ensure that team members enable the patients' voice to be heard and acted on.</p>	<ul style="list-style-type: none"> advocacy needs for those who are less able to act for themselves due to their liver condition leading to challenging behaviour, depression or inability to articulate their needs due to hepatic encephalopathy or other cognitive impairment acute and long-term complications related to liver disease strategies patients can use for managing co-morbidities local and national strategy for patients with liver disease and how to contribute measures of patient experience and risk assessment matrix. <p>Knows how to:</p> <ul style="list-style-type: none"> build and foster an equitable nurse-patient relationship work with patients with challenging behaviour and collaboratively develop care plans diffuse anger and challenging behaviour develop care plans in conjunction with local guidelines. 	<ul style="list-style-type: none"> Models best practice. Actively promotes better health for patients. Challenges others. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> British Liver Trust Children's Liver Disease Foundation Alcohol Change UK The Hepatitis C Trust The Hepatitis B Positive Trust UK Haemochromatosis Society Wilson's Disease Support Group (UK) PBC Foundation Rare Diseases UK PSC Support Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists British Society of Gastroenterology (BSG) - liver section British Association for the Study of the Liver (BASL) European Association for the Study of the Liver (EASL) American Association for the Study of Liver Diseases (AASLD) British Association of Parenteral and Enteral Nutrition (BAPEN) <p>Specific</p> <ul style="list-style-type: none"> NHS England The Information Standard British National Formulary (BNF). NHS 2017 Expert Patient.
7	Collaboratively works with the liver patient (and their family/carer) to manage their liver disease.	<p>a. If appropriate, invites the patient to share their experience as a resource for teaching nurses and others.</p> <p>b. Develops patient pathways in collaboration with patients and user groups.</p> <p>c. Oversees and monitors the quality of care.</p>	<ul style="list-style-type: none"> local user networks and teaching opportunities clinical indicators relevant NHS policies. 	<ul style="list-style-type: none"> Role model. Provides strong leadership. Challenges assumptions and taken for granted ways of working. Champions person-centred approaches. 	<p>Specific</p> <ul style="list-style-type: none"> NHS 2017 Expert Patient.

2 Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
1-4	Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion.	a. Signposts patients, families and carers to further information and organisations.	<ul style="list-style-type: none"> range of approved information sources available in local area organisations and agencies providing support when to alert registered nurses about information requested and provided to enable follow through. <p>Knows how to:</p> <ul style="list-style-type: none"> access further supplies of health literature recognise own boundaries, competence and responsibility. 	<ul style="list-style-type: none"> Aware of role limitations and when to obtain help. Person centred and compassionate. Listens. Understanding. Welcoming. Open to receiving feedback. Confidential. Pride in work. Respectful. 	<p>Generic</p> <ul style="list-style-type: none"> NMC documents and guidance. Royal College of Nursing documents and guidance. RCN Gastrointestinal Nursing Forum. British Liver Nurses Association (BLNA). NHS England. DH (2009) <i>Making a Difference</i>. Public Health England. Gold Standards Framework for people nearing the end of life. British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019).
5	Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion.	<p>a. Assesses knowledge and understanding of patient's and carer's own condition, causes, risk factors and consequences.</p> <p>b. Provides tailored education to patient and family/carers on condition, treatments and side effects.</p> <p>c. Provides information about lifestyle factors, consequences and services available to support lifestyle changes.</p> <p>d. Refer to other appropriate health care professionals if required.</p>	<ul style="list-style-type: none"> risk factors, such as, drugs, obesity, alcohol information, such as, DH Drinkwise, education and support resources, services and specialist staff available different communication and engagement approaches to providing education and information health promotion, sexual health strategies and e-learning resources positive lifestyle approaches and advice how to give brief advice and interventions for patients with alcohol misuse, and people who inject drugs (PWID). <p>Knows how to:</p> <ul style="list-style-type: none"> tailor information and education to the person obtain educational information or direct patients/families/carers to available resources, services and staff, including the voluntary sector work within their level of competence. 	<ul style="list-style-type: none"> Aware of role limitations. Recognises own level of competence, able to identify learning needs. Accountable. Empathetic. Encouraging. Supportive. Works in partnership with others. Willing to reflect on and learn from own practice. Flexible. Non-judgmental. Passionate about patient care. 	<ul style="list-style-type: none"> NICE liver guidance. Mental Capacity Act 2005. NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) DH Reference guide to consent for examination or treatment 2009. Data Protection Act 2018. NHS Choices. NHS Institute for Innovation and Improvement. Quality Outcome Measures, such as CQUINS. Improving Quality in Liver Services (IQILS). The Lancet Liver Commission. NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. NHS IQ (Improving quality). Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. NHS <i>2nd Atlas of Variation: Liver</i> (2017). National Clinical Guidelines Centre. BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

2 Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
	See above.	See above.	See above.	See above.	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF).

2 Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion.	<p>a. Recognises patients individual treatment choices.</p> <p>b. Supports patients sensitively and empathetically when:</p> <ul style="list-style-type: none"> - undergoing risk profiling - receiving their results and diagnosis, which may include giving bad news, taking into account whether the patient is an adult or a young person. <p>c. Provides culturally sensitive patient and carer information about condition, local and national information, support groups and charities.</p>	<ul style="list-style-type: none"> • local guidance and referral pathways • adopting positive lifestyle approaches and modifications • requirements for good information standards and the quality assurance and review processes for patient information documentation • health education skills • knowledge of information sources - websites, leaflets, charities, kite-marked information • local and national charities • determinants of health, such as, poverty, culture, religion etc • cultural and social risk factors such as Khat chewing, herbal and Chinese medications, specific nutritional supplements and other substances used to boost physical performance that may cause liver disease • pharmacological side effects of treatments. <p>Knows how to:</p> <ul style="list-style-type: none"> • recognise and use patient/service user information that is quality assured • use brief interventions and motivational interviewing around drugs, alcohol, weight management, depression and liver disease • develop collaborative agreements around commitment to health related behaviours • signpost support services such as Weight Watchers, Alcoholics Anonymous, The Hepatitis C Trust and others • refer to specialist services. 	<ul style="list-style-type: none"> • Empowering. • Models best practice. • Actively promotes better health for patients. 	<p>Specific</p> <ul style="list-style-type: none"> • Drinkwise. • Weight Watchers. • Alcoholic Anonymous. • Alcohol Policy UK. • Guidelines for the diagnosis and treatment of cholangiocarcinoma. • European Association for the Study of The Liver Guidelines Ascites, SBP, HE and HRS. • American Association for the Study of Liver Diseases, Guidelines for liver diseases. • NICE clinical guidelines 141 (2012) Acute upper gastrointestinal bleeding: management. • NICE Guidance on Obesity, Alcohol, Cirrhosis and NAFLD. • Public Health England All our health (2015)

2 Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion.	<p>a. Interprets complex investigation results and procedures and explains these to patients.</p> <p>b. Ensures patient (and family/carers where relevant) understands risk profiling implications and results, and discusses options available.</p> <p>c. Works with specialists including specialist counsellors, palliative care experts where appropriate.</p> <p>d. Ensures timely referral to other clinical care providers where appropriate, and follow up.</p> <p>e. Contributes to quality assurance and accreditation processes around patient information.</p>	<ul style="list-style-type: none"> • risk profiling tests available, their implications and results • national standards and local guidelines • new or emerging therapies • complex treatment groups, such as, co-infection, multiple aetiologies, and pre-transplant and post-transplant issues • available resources and support services locally, regionally and nationally and their accreditation • and quality assurance processes. <p>Knows how to:</p> <ul style="list-style-type: none"> • refer to specialist counselling and palliative care services • quality assure and accredit patient information literature. 	<ul style="list-style-type: none"> • Role model. • Provides strong leadership. • Challenges assumptions and taken for granted ways of working. • Champions person-centred approaches. 	See above.

3 Undertakes a comprehensive clinical assessment of the liver patient

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
1-4	Undertakes a comprehensive clinical assessment of the liver patient.	a. Undertakes and records nursing observations. b. Measures and records weight accurately. c. Takes appropriate action including when recordings fall outside agreed parameters.	<ul style="list-style-type: none"> the normal parameters of nursing observations for patients with liver disease. <p>Knows how to:</p> <ul style="list-style-type: none"> record nursing observations and take appropriate action/referral for abnormal results the importance of reporting and recording signs and symptoms such as nausea, vomiting, pruritus and altered mental state recognise deterioration and report to appropriate registered practitioner and need for possible end of life care. 	<ul style="list-style-type: none"> Aware of role limitations and when to obtain help. Person centred and compassionate. Listens. Understanding. Welcoming. Open to receiving feedback. Confidential. Pride in work. Respectful. 	<p>Generic</p> <ul style="list-style-type: none"> NMC documents and guidance. Royal College of Nursing documents and guidance. RCN Gastrointestinal Nursing Forum. British Liver Nurses Association (BLNA). NHS England. DH (2009) <i>Making a Difference</i>. Public Health England. Gold Standards Framework for people nearing the end of life. British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). NICE liver guidance. Mental Capacity Act 2005. NHS England Safeguarding Vulnerable People in the NHS - Accountability and Assurance Framework (2015) DH Reference guide to consent for examination or treatment 2009. Data Protection Act 2018. NHS Choices. NHS Institute for Innovation and Improvement. Quality Outcome Measures, such as CQUINS. Improving Quality in Liver Services (IQILS). The Lancet Liver Commission. NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. NHS IQ (Improving quality). Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. NHS <i>2nd Atlas of Variation: Liver</i> (2017). National Clinical Guidelines Centre. BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

3 Undertakes a comprehensive clinical assessment of the liver patient (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Undertakes a comprehensive clinical assessment of the liver patient.	<p>a. Undertakes and records nursing assessment and history taking.</p> <p>b. Identifies signs of liver disease in stools, urine and skin.</p> <p>c. Identifies individuals at risk, such as, drugs, alcohol, obesity, co-morbidities, depression.</p> <p>d. Assesses nutritional status.</p> <p>e. Identifies signs and symptoms of altered mental state including cerebral oedema for acute liver failure.</p> <p>f. Acts on findings of nursing assessment.</p> <p>g. Explains relevant investigations to patients and service users.</p> <p>h. Uses local guidelines for the care of people with liver disease.</p> <p>i. Use of infection prevention and control policies when caring for patients.</p> <p>j. Refers to appropriate specialist team.</p> <p>k. Directs the patient to specialist help.</p> <p>l. Carries out investigations related to risk profiling under local guidance.</p>	<ul style="list-style-type: none"> • functions of the liver • normal and abnormal liver anatomy and physiology • changes to the stools, urine and skin in liver disease eg, jaundice, bruising, scratch marks, palmar erythema, ascites, liver flap (asterixis) • some of the effects of drugs metabolised by the liver • effect of liver disease on other body systems, such as, mental function, cardiovascular and renal function • specific acute and chronic complications and their management including: <ul style="list-style-type: none"> - pruritus - skin rashes as side effects of drug treatments - hypotension due to drug related reasons, such as, betablocker, and non-drug related reasons such as decompensated liver disease - jaundice - biliary complications, such as, cholecystitis and/or cholangitis - portal hypertension and oesophageal varices - ascites/spontaneous bacterial peritonitis - hepatorenal failure - hepatic encephalopathy - risk of cerebral oedema in acute liver failure - sepsis which often precipitates variceal bleeding or hepatic encephalopathy - cardiovascular and respiratory complications - coagulopathy - recognise the signs and symptoms of alcohol and/or drug withdrawal • altered pathophysiology and different management of decompensated liver disease and acute on chronic liver disease and their complications • altered pathophysiology in acute liver failure and its management and significance of deterioration • importance of nutrition in chronic liver disease. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Starts to demonstrate attention to detail. • Active in own learning. • Open to receiving feedback. • Open minded. • Reflective. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF). <p>Specific</p> <ul style="list-style-type: none"> • Local protocols and guidelines • Standards for clinical practice and training (joint statements) from: <ul style="list-style-type: none"> - Royal College of Anaesthetists - Royal College of Physicians - The Intensive Care Society - The Resuscitation Council • NICE Guidance on Alcohol • NICE Guidance on Liver • NHS Blood and Transplant Policies • Liver Transplant: selection criteria and recipient registration • NICE (2013) Quality standard end of life care. • RCN Advanced level nursing practice competencies (2018). • Gold Standards Framework for people nearing the end of life • NICE (2014) Safe staffing for nursing in adult inpatient wards in acute hospitals.

3 Undertakes a comprehensive clinical assessment of the liver patient (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	See above.	See above.	<ul style="list-style-type: none"> • impact of pruritus on well being and sleep patterns • the lifestyle risk factors that may influence disease • severity eg, smoking, alcohol, obesity, depression • types of investigation eg, liver biopsy, ultrasound scanning, how to interpret results, appropriate treatment options and local guidelines • when to refer to specialist liver team • altered body image • end of life care in relation to patients with chronic liver disease. <p>Knows how to:</p> <ul style="list-style-type: none"> • undertake a comprehensive clinical assessment of patients with liver disease • identify signs of liver disease in stools and urine • communicate the purpose, results and meaning of relevant investigations • communicate to patients, family/carers and staff the need for infection prevention and control • recognise signs of liver disease and implement appropriate actions and/or referral to specialist teams. 	See above.	See above.

3 Undertakes a comprehensive clinical assessment of the liver patient (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Undertakes a comprehensive clinical assessment of the liver patient.	<p>a. Undertakes a comprehensive physical assessment and patient risk profiling including the early detection of other diseases and the identification of co-morbidities.</p> <p>b. Provides expert care and inter-professional collaborative practice and consultation to individual patients and service users across specific patient pathways based on holistic assessment, national guidelines, specialist competencies and best practice, documenting this care as an accountable practitioner.</p> <p>c. Discusses with patients and family/carer the significance of medical investigations, test results, prognosis and treatment options.</p> <p>d. Monitors and advises on nutritional intake and supplements in collaboration with dietitian to provide optimal nutrition.</p> <p>e. Implements and documents an appropriate management plan.</p> <p>f. Establishes patient concordance with treatment and recognises patient's individual treatment choices.</p> <p>g. Keeps up to date with best practice for specific patient pathways through national specialist forums, journals and networking.</p>	<ul style="list-style-type: none"> • relevant NICE guidelines and standards • early signs and symptoms of other major diseases, such as diabetes, heart disease and endocrine disease • impact of pregnancy on the liver • signs of liver disease and the impact of co-morbidities • interpreting changes to blood chemistry in liver disease, such as liver enzymes, synthetic functions such as INR/prothrombin times and albumin • investigations such as Doppler scan, endoscopy, endoscopic retrograde cholangiopancreatography (ERCP), magnetic resonance imaging (MRI) • in depth understanding of altered pathophysiology, such as ammonia levels in hepatic encephalopathy and effects of splanchnic circulation on portal hypertension and relevance to current management strategies • knowledge of precipitating factors of hepatic encephalopathy and preventative measures • patient compliance, adherence and concordance • measurements of severity and survival based on blood results, such as UKELD, MELD, Childs Pugh score and other physical factors such as ascites and hepatic encephalopathy including early referral for consideration for liver transplantation • end of life care and its management. <p>Knows how to:</p> <ul style="list-style-type: none"> • undertake a detailed, comprehensive physical assessment in accordance with local guidelines • recognise signs and symptoms and implement appropriate actions for complications of liver disease • interpret a range of blood results • communicate to patients the impact of co-morbidities on their liver disease • differentiate between hepatic encephalopathy and alcohol withdrawal • assess for signs and symptoms of acute alcohol withdrawal utilising a validated severity scale • identify pre and post morbid mental health issues • monitor optimal nutritional status • act as a mentor to others. 	<ul style="list-style-type: none"> • Values learning. • Works in partnership. • Empowering. • Embraces different perspectives. • Analytical. • Attention to detail. • Models best practice. 	

3 Undertakes a comprehensive clinical assessment of the liver patient (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Undertakes a comprehensive clinical assessment of the liver patient.	<p>a. Assesses, diagnoses and treats people with on-going living disease and its complications.</p> <p>b. Undertakes a medical history, completes a detailed physical and nursing examination, formulates a diagnosis, initiates investigations and/or treatments and refers to specialist teams as appropriate.</p> <p>c. Diagnoses new or worsening complications of acute and chronic liver disease.</p> <p>d. Identifies early signs of other diseases.</p> <p>e. Provides the patient with information on how to manage and monitor specific symptoms.</p> <p>f. Implements end of life care for the patient and their family, provides support and refers to the appropriate health professionals.</p>	<ul style="list-style-type: none"> • all causes of liver disease including those related to occupation and travel • complications of acute and chronic liver disease • design, implement and evaluate a management plan that included the specific signs and symptoms or side effects: such as: <ul style="list-style-type: none"> - pruritus - skin rashes as side effects of drug treatments - hypotension due to drug related reasons, such as betablocker, and non-drug related reasons such as decompensated liver disease - jaundice - biliary complications such as cholecystitis and/or cholangitis - portal hypertension and oesophageal varices - ascites/spontaneous bacterial peritonitis - hepatorenal failure - hepatic encephalopathy - risk of cerebral oedema in acute liver failure - sepsis which often precipitates variceal bleeding or hepatic encephalopathy - cardiovascular and respiratory complications - coagulopathy - recognise the signs and symptoms of alcohol and/or drug withdrawal • treatment regimes, including eligibility and suitability criteria for different liver diseases • options following failure of treatment, such as early referral for liver transplantation assessment in chronic liver disease (See competence 10.1 Referral for consideration of liver transplantation) • palliation of symptoms such as chemoembolisation or paracentesis and planning for end of life care. <p>Knows how to:</p> <ul style="list-style-type: none"> • undertake a detailed clinical and nursing assessment • undertake an abdominal assessment and other systems as appropriate. • explain significance of any investigations to patients • initiate investigations appropriately • act on investigations and interpret results including liver screen • formulate an appropriate management plan including, where appropriate, end of life care • identify acute alcohol withdrawal and safely provide pharmacological management of symptoms during an episode of acute alcohol withdrawal • administer treatment within their specialist role as a non-medical prescriber • recognise, manage and refer patients in relation to their co-morbidities • assess competence of nurses undertaking clinical assessments • act as a role model. 	<ul style="list-style-type: none"> • Role model. • Interprofessional working. • Collaborative. • Inclusive. • Strong clinical leadership. • Challenges assumptions. • Champions person-centred approaches. • Challenges assumption and taken for granted ways of working. • Actively promotes better health for patients. 	

4 Assesses, in collaboration with the patient, their diverse health care needs

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Assesses, in collaboration with the patient, their diverse health care needs.	<ul style="list-style-type: none"> a. Undertakes a holistic health care needs assessment. b. Identifies patients at risk from liver disease. c. Explores the patient's current lifestyle, hopes and expectations. d. Discusses the patient's cultural/family/ethnic background and identifies personal preferences. e. Identifies vulnerable individuals. f. Maintains confidentiality in relation to patient information and data. g. Documents comprehensive assessment. h. Uses all available resources to provide information and to ascertain the patient understands their illness/ treatment options in their preferred language. i. Establishes patient concordance with treatment and recognises patient's individual treatment choices. 	<ul style="list-style-type: none"> • the implications of different life stages, lifestyles and risk factors on the development and progression of acute and chronic liver conditions and at end of life • different cultures and faiths and the potential impact of these upon the patient's personal beliefs and viewpoints • the range of resources for information and support where the patient could be referred • obtaining consent from the patient • legal and ethical aspects of consent. <p>Knows how to:</p> <ul style="list-style-type: none"> • undertake holistic assessment including lifestyle, sexual health, social and mental health needs • use alcohol screening tool • consults, communicates and refers to appropriate support • recognise vulnerability across the age spectrum • access expertise in relation to caring for vulnerable individuals • access an interpreter/cultural mediator. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

4 Assesses, in collaboration with the patient, their diverse health care needs (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Assesses, in collaboration with the patient, their diverse health care needs.	a. Explores the impact of the patient's agreement or resistance to treatment options on their liver condition with regard to their cultural and ethnic background and life choices.	<ul style="list-style-type: none"> • culture, religion and ethnicity on health beliefs • lifestyle impact on liver health including chaotic lifestyle, drugs, alcohol and obesity • impact of liver disease on life style and sexual health • clinical governance • the causes of vulnerability across the age range. <p>Knows how to:</p> <ul style="list-style-type: none"> • assess lifestyle factors in collaboration with the patient • how to assess drinking history and use tools to assess risks to patient compliance and safety • manage refusal of care/treatment by patient, family or carers, and refer to a health care professional where appropriate. 	<ul style="list-style-type: none"> • Models best practice. • Builds relationship with peers. • Shares ideas. • Facilitates involvement of stakeholders. • Works in partnership. • Empowering. • Embraces different perspectives. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> – British Liver Trust – Children's Liver Disease Foundation – Alcohol Change UK – The Hepatitis C Trust – The Hepatitis B Positive Trust UK – Haemochromatosis Society – Wilson's Disease Support Group (UK) – PBC Foundation – Rare Diseases UK – PSC Support – Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists – British Society of Gastroenterology (BSG) – liver section – British Association for the Study of the Liver (BASL) – European Association for the Study of the Liver (EASL) – American Association for the Study of Liver Diseases (AASLD) – British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF). <p>Specific</p> <ul style="list-style-type: none"> • Equality impact assessments. • MIND. • NHS Public Health England – sexual health. • NICE CG 100 Alcohol-use disorders: physical complications www.guidance.nice.org.uk/CG100. • NICE CG 115 Alcohol use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence www.guidance.nice.org.uk/CG115. • NICE PH 24 Alcohol-use disorders – preventing the development of hazardous and harmful drinking. www.guidance.nice.org.uk/PH24.
7	Assesses, in collaboration with the patient, their diverse health care needs.	<p>a. Assess, diagnose and treat patients with on-going liver disease.</p> <p>b. Manage and monitor complications.</p> <p>c. Assesses patients returning for on-going follow-up.</p> <p>d. Refers patients to other members of the multi-disciplinary team when appropriate.</p> <p>e. Audits assessment documentation in collaboration with the multi-disciplinary team.</p> <p>f. Participates in multi-disciplinary patient conferences.</p> <p>g. Keeps patients' general practitioners, and community teams/services informed of on-going consultation, health care needs and assessment progress.</p>	<ul style="list-style-type: none"> • referral systems and communication systems with general practitioners, community teams and school nurses • the local transitional arrangements for young people moving into adult care. <p>Knows how to:</p> <ul style="list-style-type: none"> • set up, organise and run nurse-led clinics • establish telephone support and counselling systems. 	<ul style="list-style-type: none"> • Role model. • Collaborative. • Inclusive. • Participative. • Challenges assumptions. • Champions person-centred approaches. • Challenges assumption and taken for granted ways of working. • Actively promotes better health for patients. 	

5 Develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Develops and evaluates a selfmanagement plan with the patient who has predisposing factors to liver disease.	<p>a. Assessment of patient risk factors for liver disease.</p> <p>b. Discusses with the patient their risk factors.</p> <p>c. Develops and records a self-management plan with the patient/family/carers.</p> <p>d. Uses patient-held record/diaries/liver health passport.</p> <p>e. Implements appropriate brief advice and interventions.</p> <p>f. Documents interventions and shares information with the multi-disciplinary team, as appropriate.</p> <p>g. Evaluates self management plan and goals set.</p> <p>h. Demonstrates skills in mediation, conflict resolution and advocacy.</p>	<ul style="list-style-type: none"> the needs of patients who have predisposing factors to liver disease such as alcohol, viral, obesity, genetic predisposition, diabetes, sexual health available resources and where and how to access them how cultural, ethnic and religious backgrounds influence lifestyle choices the impact of living with a chronic condition in relation to self-management and adherence timely discussion of end of life care. <p>Knows how to:</p> <ul style="list-style-type: none"> work collaboratively with the patient develop and maintain a self-management plan that achieves the potential of the individual and maintains their motivation and confidence develop goals collaboratively that are SMART (specific, measurable, achievable, realistic and time-specific) benchmark around the activities of daily living and improvement strategies how and where to confidentially record and report information, the electronic record and databases, and data that can support quality improvement through sharing and peer review refer to palliative care services and keep GP practice and related community teams informed. 	<ul style="list-style-type: none"> Aware of role limitations. Recognises own level of competence, able to identify learning needs. Accountable. Works in partnership. Supportive. Encouraging. Provides choices. Willing to reflect on and learn from own practice. Flexible. Non-judgmental. Passionate about patient care. 	<p>Generic</p> <ul style="list-style-type: none"> NMC documents and guidance. Royal College of Nursing documents and guidance. RCN Gastrointestinal Nursing Forum. British Liver Nurses Association (BLNA). NHS England. DH (2009) <i>Making a Difference</i>. Public Health England. Gold Standards Framework for people nearing the end of life. British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). NICE liver guidance. Mental Capacity Act 2005. NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) DH Reference guide to consent for examination or treatment 2009. Data Protection Act 2018. NHS Choices. NHS Institute for Innovation and Improvement. Quality Outcome Measures, such as CQUINS. Improving Quality in Liver Services (IQILS). The Lancet Liver Commission. NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. NHS IQ (Improving quality). Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. NHS 2nd Atlas of Variation: Liver (2017). National Clinical Guidelines Centre. BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

5 Develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease.	<p>a. Works collaboratively with the patient and/or carers to assess their level of understanding of their condition.</p> <p>b. Identifies in collaboration with the patient and/or family/carers, who have predisposing factors for liver disease, their needs and gives appropriate advice.</p> <p>c. Discusses various lifestyle choices with the patient and possible implications for their immediate and long-term health.</p> <p>d. Identifies agreed patient goals that can be evaluated and reviewed periodically.</p> <p>e. Agrees appropriate risk profiling and investigations as part of the patient's selfmanagement plan.</p> <p>f. Integrates support strategies for patients with deteriorating health.</p> <p>g. Helps patient to navigate their way through the health care system to achieve the most appropriate care.</p>	<ul style="list-style-type: none"> the barriers to continuity of care and how they can be overcome local networks in the hospital and the community, and knowledge of how to build good relationships long-term complications and risk profiling approaches deterioration and recognition of chronic liver disease and its impact on the patient and family/carers key outcomes that can be measured and monitored support strategies for those with deteriorating health. <p>Knows how to:</p> <ul style="list-style-type: none"> evaluate the outcomes of care for individuals and client groups in relation to both clinical outcomes and the patient's experience initiates end of life discussions with patient in collaboration with multidisciplinary team. 	<ul style="list-style-type: none"> Models best practice. Empowering. Collaborative. Inclusive. Honest and open. Works in partnership. Embraces different perspectives. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> British Liver Trust Children's Liver Disease Foundation Alcohol Change UK The Hepatitis C Trust The Hepatitis B Positive Trust UK Haemochromatosis Society Wilson's Disease Support Group (UK) PBC Foundation Rare Diseases UK PSC Support Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists British Society of Gastroenterology (BSG) - liver section British Association for the Study of the Liver (BASL) European Association for the Study of the Liver (EASL) American Association for the Study of Liver Diseases (AASLD) British Association of Parenteral and Enteral Nutrition (BAPEN) NHS England The Information Standard British National Formulary (BNF). <p>Specific</p> <ul style="list-style-type: none"> National Service Frameworks - Obesity. NICE (2014-5) Guidance on obesity. NHS (2017) Expert Patient. RCN (2010) Principles of Nursing Practice.

5 Develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Develops and evaluates a self-management plan with the patient who has predisposing factors to liver disease.	<p>a. Enables continuity of care for those patients with complex health needs to implement their self-management plan.</p> <p>b. Works collaboratively to manage the patient's symptoms such as ascites, hepatic encephalopathy between primary and secondary care.</p> <p>c. Recognises early need for discussion about patients preferences in end of life planning and care.</p> <p>d. Develops a collaborative plan of care with patient and family for managing end-stage liver disease, palliation and symptom control for end of life care.</p>	<ul style="list-style-type: none"> the principles of care in respect to complex health needs long-term and chronic disease delivery care pathways including end of life care choices available to the patient for end of life care including home, hospice and hospital. <p>Knows how to:</p> <ul style="list-style-type: none"> plan, deliver and evaluate care for people with predisposing factors of liver disease build and strengthen primary and secondary care relationships to create seamless services innovate and improve services to enhance health-related quality of life recognises when end of life care needs to be discussed and planned for lead patient conferences and peer review engage with patient to explore end of life choices work with the multidisciplinary team and primary care to plan end of life care. 	<ul style="list-style-type: none"> Role model. Interprofessional working. Champions person-centred approaches. Challenges assumptions and taken for granted ways of working. Actively promotes better health for patients. Strong clinical leadership. Visible in practice settings. 	See above.

6 Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
1-4	Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition.	<ul style="list-style-type: none"> a. Provides support and encouragement by familiarising the patient with the ward or clinic environment (such as toilet location, meal times, visiting times). b. Communicates treatment plans clearly and recognises that hospitalisation is a major stress factor for patients. c. Listens and empathises with the patient, documents information and discusses with all involved in the care, and takes appropriate action. d. Seeks support from colleagues in response to distressing conversations. 	<ul style="list-style-type: none"> • verbal and non-verbal communication including paralinguistics such as silence, sighs, clicking of the tongue and other non-verbal utterances. 	<ul style="list-style-type: none"> • Aware of role limitations and when to obtain help. • Person centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Confidential. • Pride in work. • Respectful. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019).
5	Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition.	<ul style="list-style-type: none"> a. Identifies verbal and non-verbal signs of distress, supports the patient, discusses with the medical teams and refers to the psychology team or local psychology service. b. Assesses patient and identifies social problems that require support. c. Identifies social issues, including education, employment, housing and welfare, and makes appropriate referral to social workers or non-health agencies. d. Provides support and identifies psychological and social needs in relation to the impact of the condition in general eg, stigma related to chronic liver disease. e. Initiates communication during assessment and during the patient's journey using open/closed questions and provides an environment for effective communication. f. Identifies communication problems within family relationships and/or partner relationships. g. Raises concerns to appropriate members of the MDT in primary or secondary care. 	<ul style="list-style-type: none"> • signs and symptoms of altered mental state, memory loss • cultural expressions/ways of expressing distress and pain • cultural variations in ways of communication • different communication strategies • psychological support services or other resources available such as bilingual health advocates • how to support patients to concord with treatment • how to enable patients to manage expectations • manage young people's and adults need for long-term care • the impact of safe sexual health on relationships • the needs of homeless people and awareness of local homeless care pathways • managing the stigma and public assumptions around chronic liver disease eg, jaundice and ascites • the social impact of altered mental state in relation to relationships, employment, self care • the roles of psychologists and social workers within the multidisciplinary team • the psychological impact of alcohol and/or drug misuse. <p>Knows how to:</p> <ul style="list-style-type: none"> • assess social support and mental health. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Empowering. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<ul style="list-style-type: none"> • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. <p>continued...</p>

6 Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition.	<p>a. Assesses patient and identifies potential or actual psychological problems.</p> <p>b. Identifies strengths and weakness, and an individual's coping strategies when this has been called into question; reassures the individual and makes an appropriate referral to the psychology team or local psychology/psychiatry service.</p> <p>c. Creates and evaluates a care plan based on achievable goals, strengths and weaknesses, coping strategies, family and social support.</p> <p>d. Identifies individuals with long-term complications affecting mental capacity such as cerebral atrophy, chronic hepatic encephalopathy, Wernicke's encephalopathy or Korsakoff's psychosis.</p> <p>e. Demonstrates the ability to investigate personal background and identify family dynamics that might have an impact on health.</p> <p>f. Identifies communication problems within family relationships and/or partner relationships and takes appropriate action.</p> <p>g. Advises, supports and signposts patient and family/carers to community services available.</p> <p>h. Makes referrals where appropriate.</p>	<p>Knowledge and understanding of:</p> <ul style="list-style-type: none"> signs and symptoms of altered mental state, memory loss and thresholds for referral to psychology team or local mental health service the criteria and thresholds for referral to psychiatry services complexity of psychological needs of young people and adults in relation to long term care strategies used to support and meet the needs and/or expectations of homeless people the impact of family dynamics, work, relationships, etc. <p>Knows how to:</p> <ul style="list-style-type: none"> identify and manage external factors eg, family dynamics. 	<ul style="list-style-type: none"> Models best practice. Partnership. Inclusive. Embraces different perspectives. Values others. Develops trust. Willing to learn from own practice. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> NHS <i>2nd Atlas of Variation: Liver</i> (2017). National Clinical Guidelines Centre. BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017). Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> British Liver Trust Children's Liver Disease Foundation Alcohol Change UK The Hepatitis C Trust The Hepatitis B Positive Trust UK Haemochromatosis Society Wilson's Disease Support Group (UK) PBC Foundation Rare Diseases UK PSC Support Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists British Society of Gastroenterology (BSG) - liver section British Association for the Study of the Liver (BASL) European Association for the Study of the Liver (EASL) American Association for the Study of Liver Diseases (AASLD) British Association of Parenteral and Enteral Nutrition (BAPEN) NHS England The Information Standard British National Formulary (BNF).

6 Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Works alongside and with the patient (and families/carers) to address the psychological and social impact of their condition.	<p>a. Assesses anxiety and depression using risk profiling tools coping strategies; implements care and carries out an evaluation based on the problems identified.</p> <p>b. Undertakes assessment that includes mental health; identifies mental health issues and psycho-social issues and makes appropriate referral(s).</p> <p>c. Refers to and works closely with social services.</p> <p>d. Recognises the needs of family/carers who care for the patient with liver disease, offers support and signposts them to appropriate agencies.</p>	<ul style="list-style-type: none"> the emotional/psycho-social impact of chronic disease manifestation potential impact of social deprivation on health status and liver health collaborative working with psychosocial specialists to deliver care risk profiling tools for depression and anxiety such as PhQ9 (recommended by NSG 91, NICE), CORE and HADS questionnaires interventions, eg, cognitive behavioural therapy (CBT) motivational techniques risk assessment for lone worker/setting. <p>Knows how to:</p> <ul style="list-style-type: none"> take a full comprehensive history, identify actual and potential problems and take appropriate action undertake mental health and depression/anxiety assessments and use assessment tools maintain close relationships with psychosocial specialists and social care services. 	<ul style="list-style-type: none"> Role model. Collaborative. Challenges assumptions and taken for granted ways of working. Active promotes better health for patients. Values learning. Strong clinical leadership. 	<p>Specific</p> <ul style="list-style-type: none"> NHS England (2019) Adult Improving Access to Psychological Therapies (IAPT). NHS England 5 year forward view for mental health. NICE Guidance on anxiety and depression. Government guidance on advanced decisions and statements.

7 Provides specific diagnostic/treatment options safely:

7.1 Undertaking phlebotomy and cannulation in the patient with difficult access associated with their liver disease

It is recognised that in some organisations phlebotomy and cannulations may be undertaken by Competence Level 1 -5. This competence specifically relates to liver patients with difficult access.

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Provides specific diagnostic/treatment options safely with regards to: undertaking phlebotomy and cannulation in the patient with difficult access associated with their liver disease.	<p>a. Assesses the clinical need for venepuncture/cannulation taking into consideration that patients with liver disease may be immunocompromised or have altered coagulopathy/peripheral oedema.</p> <p>b. Listens and responds to the patient's and their carer/family's suggestions and is sensitive to family/carer concerns (particularly when the patient is a young person) and acknowledges the adult as an expert patient.</p> <p>c. Collaborates with the patient to identify points of venous access.</p> <p>d. Identifies alternative approaches for patients with 'poor access' and oedema, and identifies strategies for patients to take their own blood.</p> <p>e. Selects vein informed by a range of factors, eg, with regards to pain and asepsis.</p> <p>f. Prepares patient using comforting and distracting strategies, eg, use of topical anaesthetic cream or spray, distraction and comfort.</p> <p>g. Agrees with the patient what to do if difficulty taking bloods or with cannulation, eg, number of times to try.</p> <p>h. Undertakes blood investigations/cannulation safely and identifies the patient verbally or via patient identification bracelet.</p> <p>i. Records, observes and monitors cannula site.</p> <p>j. Supports the patient who regularly takes their own blood.</p> <p>k. Where applicable trains and supervises others in cannulation/phlebotomy techniques and care.</p> <p>l. Undertakes cannulation/phlebotomy using ultrasound techniques or vein illumination.</p>	<ul style="list-style-type: none"> patient safety and consent local guidance and policies anatomy and physiology of arteries and veins different types of cannulation/butterflies or needle sizes needle stick guidance/policies the impact of continued access to veins distraction techniques when it is appropriate for the patient to take their own blood the increased risk of keloid/scarring/infection/psychological distress possible complications aids to dilate venous access alternatives to cannulations for patients with poor access needle phobias relating to the patient's past medical history the treatment and management of iron overload diseases theoretical knowledge required to undertake ultrasound and use vein illumination devices criteria, techniques and hazards when using femoral/jugular stabs for blood taking own scope of practice and limitations. <p>Knows how to:</p> <ul style="list-style-type: none"> recognise, manage and deal with needle phobias, its impact on families and carers refer to specialist help when relevant recognise and act on complications and with emergency situations. 	<ul style="list-style-type: none"> Aware of role limitations. Recognises own level of competence, able to identify learning needs. Accountable. Patient centred and compassionate. Listens. Understanding. Non-judgmental. Welcoming. Open to receiving feedback. Confidential. Works in partnership with others. Person-centred approach. Thinks creatively. Develops trust. Provides choices. Willing to reflect on and learn from own practice. Values others. Provides high support and high challenge. Embraces different perspectives. Models best practice. 	<p>Generic</p> <ul style="list-style-type: none"> NMC documents and guidance. Royal College of Nursing documents and guidance. RCN Gastrointestinal Nursing Forum. British Liver Nurses Association (BLNA). NHS England. DH (2009) <i>Making a Difference</i>. Public Health England. Gold Standards Framework for people nearing the end of life. British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). NICE liver guidance. Mental Capacity Act 2005. NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) DH Reference guide to consent for examination or treatment 2009. Data Protection Act 2018. NHS Choices. NHS Institute for Innovation and Improvement. Quality Outcome Measures, such as CQUINS. Improving Quality in Liver Services (IQILS). The Lancet Liver Commission. NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. NHS IQ (Improving quality). Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. NHS 2nd Atlas of Variation: Liver (2017). National Clinical Guidelines Centre. BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

7 Provides specific diagnostic/treatment options safely (continued):

7.1 Undertaking phlebotomy and cannulation in the patient with difficult access associated with their liver disease (continued)

It is recognised that in some organisations phlebotomy and cannulations may be undertaken by competence level 1-5. This competence specifically relates to liver patients with difficult access.

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Provides specific diagnostic/treatment options safely with regards to: undertaking phlebotomy and cannulation in the patient with difficult access associated with their liver disease.	<ul style="list-style-type: none"> a. Accepts referrals of complex/chaotic patients if appropriate. b. Gains informed consent in the complex/chaotic patient. c. Undertakes and interprets a risk assessment for the patient. d. Undertakes jugular and femoral venepuncture safely if appropriate according to local policy. e. Maintains own competence in these procedures in line with local and national guidance. f. Trains, educates and assesses other health care professionals in ultrasound and use of vein illumination devices. g. Undertakes audit and service evaluation such as complications and infection rates or patient experience. 	<ul style="list-style-type: none"> • appropriate assessment skills underpinned by relevant anatomy and physiology • when it is appropriate to use jugular or femoral routes for venepuncture • the complex issues that patients may present with • protocol and service development. <p>Knows how to:</p> <ul style="list-style-type: none"> • cannulate a patient safely via jugular or femoral venepuncture and possible complications • interpret risk assessment and involves other health care professionals if appropriate. 	<ul style="list-style-type: none"> • Champions patient-centred approach. • Role model. • Values learning. • Collaborative working across services. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF).

7 Provides specific diagnostic/treatment options safely (continued):

7.2. Nutrition and fluid management/hydration in patients with liver disease

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
1-4	Provides specific interventions safely with regards to: nutrition and fluid management/hydration in patients with liver disease	<ul style="list-style-type: none"> a. Measures and records weight accurately. b. Undertakes regular observation of fluid balance and blood sugar. c. Records accurately fluid balance and nutritional input. d. Observes and records input and output. e. Reports on abnormal measures to senior staff member. f. Recognises importance of fluid management/hydration and nutrition. g. Helps patients to eat and drink. h. Documents all observations and actions accurately. 	<ul style="list-style-type: none"> • weight and BMI • vulnerability to weight and muscle loss because of liver disease • patient difficulties in meeting nutritional requirements due to symptoms such as early satiety, nausea and changes in taste • need to monitor urine output. • oral fluid and nutritional intake targets/restrictions • when to report failure to meet nutritional requirements and who to report to. <p>Knows how to:</p> <ul style="list-style-type: none"> • maintain fluid balance charts • calculate fluid balance on input and output fluid balance. 	<ul style="list-style-type: none"> • Aware of role limitations and when to obtain help. • Person centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Confidential. • Pride in work. • Respectful. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

7 Provides specific diagnostic/treatment options safely (continued): 7.2. Nutrition and fluid management/hydration in patients with liver disease (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Provides specific interventions safely with regards to: nutrition and fluid management/hydration in patients with liver disease	<ul style="list-style-type: none"> a. Undertakes regular nutritional screening using appropriate nutritional tool ie, MUST or other local guideline. b. Documents and reviews nutrition and hydration status on a regular basis. c. Commences a food chart/diary when appropriate. d. Monitors and acts on effectiveness of nutritional interventions. e. Assesses whether the patient is able to hydrate themselves or not (considers patient for intravenous or nasogastric fluids). f. Educates the patient and family about inappropriate high salt foods that should not be eaten in patients with ascites. g. Assesses potential for refeeding syndrome. h. Maintains vigilance when patients are selfcaring (looking after themselves). i. Refers to dietitian in a timely manner and is able to give the relevant nutritional/medical history required for the referral. 	<ul style="list-style-type: none"> • nutritional guidelines and local screening tools • nutritional needs in patients with liver disease • recognition that weight/BMI may not reflect the patients nutritional status eg, may still be malnourished • awareness of inappropriate dietary restrictions such as low fat or low protein diets • foods high in salt • the importance of daily weight for people with ascites and external biliary drains • understanding of rationale for use of intravenous fluid eg, not using saline solutions for people with ascites • weight and weight loss if on diuretics • altered taste • reduced appetite due to ascites and/or jaundice and GI disturbance • why a stool chart may be used and be aware of changes in bowels habits associated with liver diseases • appropriate food types and the role of small and regular meals (six per day) • special dietary and hydration requirements such as no added salt diet, sip feeds, vitamin supplementation, use of fluid restriction eg, hyponatraemia, late evening snacks • refeeding syndrome • awareness that if patient detoxifying at risk of malnutrition. <p>Knows how to</p> <ul style="list-style-type: none"> • identify the patient at risk of refeeding syndrome. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF).

7 Provides specific diagnostic/treatment options safely (continued):

7.2. Nutrition and fluid management/hydration in patients with liver disease (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Provides specific interventions safely with regards to: nutrition and fluid management/hydration in patients with liver disease	<ul style="list-style-type: none"> a. Recognises the deteriorating nutritional state of the liver patient. b. Assesses and manages the patient at risk of refeeding syndrome. c. Works closely with other MDT members such as dietician, diabetes specialist nurse. d. Estimates dry weight. e. Works with patient and family/carer to implement and improve nutritional intake with goal setting. f. Uses and evaluates a range of nutritional and hydration strategies. g. Works with the patient/family to help them understand the importance for enteral feeding despite reluctance. h. Instigates enteral feeding as prescribed. i. Supports the patient and family/carer with home enteral feeding if required as a long term nutritional goal. 	<ul style="list-style-type: none"> • protein energy malnutrition and effects on liver patients • strategies to reduce protein energy malnutrition such as late evening snacks, high fat supplements ie, high calorie shots • vitamin supplementation to address/avoid such as osteoporosis, peripheral neuropathy • steatorrhoea and its effects on weight loss • dry weight and its importance for recognising malnutrition • types of enteral feeding such as nasogastric, nasojejunal tube if appropriate. 	<ul style="list-style-type: none"> • Empowering. • Developing trust. • Values others. • Values learning. • Reflect on and learn from own practice. • Models best practice. • Thinks creatively. 	<p>Specific</p> <ul style="list-style-type: none"> • EASL (2108) Clinical Practice guidelines on nutrition in chronic liver disease. • MUST tool. • ESPEN guidelines.
7	Provides specific interventions safely with regards to: nutrition and fluid management/hydration in patients with liver disease	<ul style="list-style-type: none"> a. Undertakes a nutritional needs reassessment. b. Recognises and acts upon deteriorating nutritional status eg, patient with end stage chronic liver disease. c. Supports patient and family/carer with meeting and evaluating their nutritional and hydration needs. d. Investigate if required for other causes of weight loss. 	<ul style="list-style-type: none"> • complexity of nutritional needs for patients with impinging factors such as use of corticosteroids causing labile blood sugars; weight loss during Hepatitis B treatment. <p>Knows how to:</p> <ul style="list-style-type: none"> • communicate effectively with the MDT and primary care • monitor patients on home enteral feeding and goal achievement • have complex discussions with patients wishing to discontinue enteral feeding • support the patient regarding stigma related to having a long term nasogastric tube in situ. 	<ul style="list-style-type: none"> • Role model. • Visible in practice settings. • Champions patient-centred approach. • Collaborative working across services. • Strong clinical leadership. 	

7 Provides specific diagnostic/treatment options safely (continued):

7.3. Pharmacological treatment and side effects

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Provides specific interventions safely with regards to: pharmacological treatment and side effects.	<p>a. Assesses patient’s knowledge and understanding of their medication and its effects.</p> <p>b. Provides patient information about medications and their side effects.</p> <p>c. Ensures patient is safe at all times by observing, monitoring and recording all identified side effects and taking appropriate actions.</p> <p>d. Is alert to medications that should not be used with people with liver disease.</p> <p>e. Documents adherence with medications within medical and nursing notes.</p> <p>f. Ensures primary or secondary care providers receive patient medication information.</p>	<ul style="list-style-type: none"> pharmacological therapies used in acute and chronic liver disease including: <ul style="list-style-type: none"> dose regime contraindications eg, contraception drug interactions side effects management/monitoring core medication used such as spironolactone, lactulose, propranolol, azathioprine, prednisolone and rifaximin awareness of medications used in the prophylaxis/secondary prevention of complications of cirrhosis (such as GI bleed, SBP and hepatic encephalopathy) such as propranolol, ciprofloxacin, rifaximin in line with local antibiotic policy medications that are contraindicated in liver disease eg, NSAIDs, aspirin impact of analgesia on constipation that can lead to hepatic encephalopathy medications that lead to over-diuresis eg, diuretics causing renal impairment /electrolyte imbalance and hepatic encephalopathy safe alcohol withdrawal regime medications that can precipitate hepatic encephalopathy; sedatives such as barbiturates or benzodiazepines. <p>Knows how to:</p> <ul style="list-style-type: none"> recognise potential effects on the patient of adherence such as development of hepatic encephalopathy, increase in ascites, gastrointestinal bleeding. 	<ul style="list-style-type: none"> Aware of role limitations. Recognises own level of competence, able to identify learning needs. Accountable. Works in partnership. Supportive. Encouraging. Provides choices. Gives and receives feedback. Willing to reflect on and learn from own practice. Flexible. Non-judgmental. Passionate about patient care. 	<p>Generic</p> <ul style="list-style-type: none"> NMC documents and guidance. Royal College of Nursing documents and guidance. RCN Gastrointestinal Nursing Forum. British Liver Nurses Association (BLNA). NHS England. DH (2009) <i>Making a Difference</i>. Public Health England. Gold Standards Framework for people nearing the end of life. British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). NICE liver guidance. Mental Capacity Act 2005. NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) DH Reference guide to consent for examination or treatment 2009. Data Protection Act 2018. NHS Choices. NHS Institute for Innovation and Improvement. Quality Outcome Measures, such as CQUINS. Improving Quality in Liver Services (IQILS). The Lancet Liver Commission. NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. NHS IQ (Improving quality). Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. NHS <i>2nd Atlas of Variation: Liver</i> (2017). National Clinical Guidelines Centre. BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).
6	Provides specific interventions safely with regards to: pharmacological treatment and side effects.	<p>a. Reviews and builds on understanding of the patient and family/carer and also other staff members with regard to medication and the side effects.</p> <p>b. Works with the pharmacist to provide appropriate information and guidance to patients and family/carer and also staff.</p> <p>c. Investigates and addresses reasons for non compliance and refers to appropriate MDT members.</p> <p>d. Co-ordinates and acts as a point of contact regarding initial medication enquiries.</p>	<ul style="list-style-type: none"> how the medication works in relation to underlying pathophysiology eg, aldosterone antagonistic properties of spironolactone reasons why patients may not adhere and who to refer to the indication of individual medications, when to continue or discontinue use and communicate with appropriate MDT member eg, prevention of antibiotic resistance, prevention of Wernicke’s encephalopathy. <p>Knows how to:</p> <ul style="list-style-type: none"> communicate with the patient risks and benefits of possible treatment regimes. 	<ul style="list-style-type: none"> Models best practice. Empowering. Works in partnership with others. Open to receiving feedback. Challenges others to maintain patient safety. 	

7 Provides specific diagnostic/treatment options safely (continued):

7.3. Pharmacological treatment and side effects (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Provides specific interventions safely with regards to: pharmacological treatment and side effects.	<p>a. Is an independent/supplementary non-medical prescriber (NMP).</p> <p>b. Undertakes a full comprehensive assessment and history and initiates treatment according to local guidance or protocol.</p> <p>c. Obtains informed consent from patient and carer to prescribe as a NMP.</p> <p>d. Monitors and assesses the patient's progress as appropriate to the patient's condition and the medicines prescribed by the non-medical prescriber whom he/she has assessed for care during the patient episode.</p> <p>e. Communicates with primary and secondary care teams about initiation or changes in medications.</p> <p>f. Ensures patients/carer aware of how medications work, possible side effects and duration of treatment.</p> <p>g. Keeps up to date with local trust updates for own prescribing practice.</p> <p>h. Prescribes for people with liver disease within dedicated clinical management plans in conjunction with consultant leads as an independent and supplementary non-medical prescriber.</p> <p>i. Works with trust clinical lead for non-medical prescribing and pharmacist to develop relevant pathways for prescribing for patients with liver disease.</p> <p>j. Audits prescribing decisions and presents yearly data to clinical forums.</p> <p>k. Prescribes for patients with liver disease within local, national and international guidelines.</p>	<ul style="list-style-type: none"> independent/supplementary prescribing and related roles and responsibilities improving patient care without compromising patient safety making it easier for patients to get the medication they need increase patient choice in accessing medicines making better use of the skills of other health professionals contribute to the introduction of more flexible team working across the NHS consequences of non-adherence with medication for patients with viral Hepatitis eg, possible future resistance to drugs local and national prescribing guidelines relevant to role roles and responsibilities of the NMP in relation to their own prescribing practice within their role eg, a non-medical prescriber can only order a drug for a patient whom he/she has assessed for care during the patient episode. that independent prescribers must not prescribe any medicine for themselves. Neither should they prescribe a medicine for anyone with whom they have a close personal or emotional relationship, other than in an exceptional circumstance. legal and ethical aspects of prescribing. <p>Knows how to:</p> <ul style="list-style-type: none"> obtain up to date knowledge about safety of medicines prescribe safely and within the bounds of individual NMP role recognise his or her own limitations/competencies and to refer to the appropriate medical doctor for assessment or prescribing outside his/her level of practice or expertise notify the Medicines and Health Care Products Regulatory Agency via the ADR Reporting Scheme in the event of any adverse reaction to medication. 	<ul style="list-style-type: none"> Attention to detail. Role model. Challenges others. Learning from own practice. Active learner. Develops trust. Actively promotes better health for patients. Challenges assumptions and taken for granted ways of working. Vigilance. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> British Liver Trust Children's Liver Disease Foundation Alcohol Change UK The Hepatitis C Trust The Hepatitis B Positive Trust UK Haemochromatosis Society Wilson's Disease Support Group (UK) PBC Foundation Rare Diseases UK PSC Support Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists British Society of Gastroenterology (BSG) - liver section British Association for the Study of the Liver (BASL) European Association for the Study of the Liver (EASL) American Association for the Study of Liver Diseases (AASLD) British Association of Parenteral and Enteral Nutrition (BAPEN) NHS England The Information Standard British National Formulary (BNF).

7 Provides specific diagnostic/treatment options safely (continued): 7.3. Pharmacological treatment and side effects (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
8	Provides specific interventions safely with regards to: pharmacological treatment and side effects.	<ul style="list-style-type: none"> a. Is an independent/supplementary nonmedical prescriber. b. Prescribes for patients with liver disease and a range of clinical problems, such as diabetes and hypertension. c. Provides clinical supervision to new NMP. d. Identifies gaps in the service where NMP will improve patient quality. e. Works across sectors and develop outreach services. f. Develops and leads implementation of NMP to improve patient access to a quality service. 	<ul style="list-style-type: none"> • the impact of a range of clinical problems, such as diabetes and hypertension on prescribing practice • managing the patient with complex co-morbidities. <p>Knows how to:</p> <ul style="list-style-type: none"> • prescribe safely for people with liver disease and associated clinical problems. 	<ul style="list-style-type: none"> • Strong clinical leadership. • Collaborative working across services. • Champions person-centred approach. • Passionate about patient safety. 	<p>Specific</p> <ul style="list-style-type: none"> • NMC (2018) The Code: professional standards of practice and behaviour for nurses and midwives . • NICE Guidance for Hepatitis B and C Treatment. • Local guidelines and protocols. • Non-medical prescribing. • University of Liverpool Centre for Drug Safety and Science <ul style="list-style-type: none"> - MHRA website alerting service - General Pharmaceutical Council (2012) The standards, ethics and performance - NICE medicines and prescribing - Department of Health (April 2006) Improving Patients' Access to Medicines: A Guide to Implementing Nurse and Pharmacist Independent Prescribing within the NHS In England (archived but available).

7 Provides specific diagnostic/treatment options safely (continued):

7.4. Non-invasive diagnostics and treatment options

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<ul style="list-style-type: none"> a. Communicates effectively with the individual regarding the need for non-invasive liver screen (NILS) testing. b. Explains to patients other non-invasive approaches that may be used. c. Prepares patients and their families for noninvasive diagnostics and what to expect. d. Ensures follow up in place with lead clinician or GP for discussion of results. e. Documents clear and accurate information relating to investigations requested in line with local policy. 	<ul style="list-style-type: none"> • non-invasive liver screening such as blood analysis, ultrasound scanning and Fibroscan • understands the range of blood tests within a non-invasive liver screen • demonstrates knowledge of basic liver conditions and key specialist interventions • normal parameters of a non-invasive liver screen. <p>Knows how to:</p> <ul style="list-style-type: none"> • access further support and expertise to allay patients fears and anxieties. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Patient centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Confidential. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).
6	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<ul style="list-style-type: none"> a. Explains the outcomes of non-invasive diagnostics to patients and families. b. Acts upon results and initiates, implements and evaluates selected interventions, eg, health advice regarding NAFLD. c. Refers to appropriate health care personnel. d. Establishes rapport and is able to support the patient with complex and potentially stressful diagnosis and treatments in a range of situations. e. Discusses potential differential diagnoses. 	<ul style="list-style-type: none"> • limitations of NILS and advises on the possibility of future tests • liver conditions, key specialist interventions and therapies appropriate to the liver patient • normal and abnormal results • differential diagnoses • local care pathways. <p>Knows how to:</p> <ul style="list-style-type: none"> • refer to relevant health care professionals such as liver specialist teams, dietitian, alcohol services • access other interfacing services such as diabetes, cardiology. 	<ul style="list-style-type: none"> • Models best practice. • Empowering. • Works in partnership with others. • Open to receiving feedback. • Challenges others to maintain patient safety. 	

7 Provides specific diagnostic/treatment options safely (continued):

7.4. Non-invasive diagnostics and treatment options (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<ul style="list-style-type: none"> a. Provides and receives highly complex, sensitive or contentious information. b. Communicates very sensitive, complex condition related information to patients, relatives with empathy and reassurance. c. Refers appropriately following diagnosis, for further haematological, biochemical, virology and genetic testing across a range of liver disorders such as abdominal ultrasound, computerised tomography/magnetic resonance scan within own scope of professional practice. d. Initiates timely and appropriate consultation, referrals and collaboration with other health care providers. e. Accepts direct referrals/develops care pathways across primary/secondary care. 	<ul style="list-style-type: none"> • clinical pathways for treatment eg, hepatitis C, hepatitis B, alcohol, obesity • initiation and monitoring of specific treatments • communicating complex and potentially sensitive information • a range of liver diseases at a highly developed level that incorporates evidence base and experience • the role of non medical prescribing to deliver quality care in both primary and secondary setting. <p>Knows how to:</p> <ul style="list-style-type: none"> • interpret complex results and investigations. 	<ul style="list-style-type: none"> • Attention to detail. • Role model. • Challenges others. • Learning from own practice. • Active learner. • Develops trust. • Actively promotes better health for patients. • Challenges assumptions and taken for granted ways of working. • Vigilance. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF).
8	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<ul style="list-style-type: none"> a. Co-ordinates and delivers seamless care and providing appropriate short and long term follow up following non-invasive diagnostics and treatments. b. Able to work independently as the clinical lead in either primary or secondary care. c. Initiates audit to review patient and carers experience of specific inventions, pathways and services. d. Works with commissioners to identify local and strategic needs for developing care pathways within liver services. 	<ul style="list-style-type: none"> • audit and research • contemporary evidence base • local commissioning arrangements • new treatment options for liver disease • working in an outreach role to deliver liver services. 	<ul style="list-style-type: none"> • Strong clinical leadership. • Collaborative working across services. • Champions person centred approach. • Passionate about patient safety. 	

7 Provides specific diagnostic/treatment options safely (continued):

7.5 Invasive diagnostics and treatment options

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<p>a. Explains to patient the different invasive approaches, possible side effects and complications.</p> <p>b. Answers patients questions or if unable to then access information from appropriate others.</p> <p>c. Prepares patients for invasive procedures.</p> <p>d. Monitors patients following invasive procedures for side effects or complications.</p> <p>e. Documents all observations and actions accurately.</p>	<ul style="list-style-type: none"> • normal anatomy and physiology of the liver and biliary system • invasive approaches to liver investigations and treatments, including: <ul style="list-style-type: none"> – endoscopy – endoscopic retrograde cholangiopancreatography (ERCP) – external biliary drain – endoscopic ultrasound – liver biopsy – paracentesis – transjugular intrahepatic portosystemic shunt (TIPS) – transarterial chemoembolisation (TACE) radio frequency ablation (RFA) – the general side effects of invasive interventions such as hypovolaemic shock, pain, sepsis, acute kidney injury – pleurex drains. <p>Knows how to:</p> <ul style="list-style-type: none"> • recognise and act on complications following the above procedures. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Patient centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Confidential. • Patient safety. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).
6	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<p>a. Explains to patient and carers treatment criteria and protocols.</p> <p>b. Develops and evaluates appropriate care management plan following therapeutic intervention.</p> <p>c. Gives patient and carers advice on follow up and ongoing and future care requirements.</p> <p>d. Signposts patients and carers to other care options such as community palliative care.</p> <p>e. Develops, in conjunction with other health care professionals, a management plan for refusal of treatment.</p>	<ul style="list-style-type: none"> • biliary complications and cholangitis • liver disease, co-morbidities and the impact on treatment outcomes eg, cirrhosis/fibrosis • fluid replacement protocols in paracentesis • rationale for TIPS in emergency and therapeutic situations • possible complications of TIPS and managements options • different therapeutic options their strengths, weaknesses and side effects • side effects of treatments such as transarterial chemoembolisation (TACE), radio frequency ablation (RFA), other new treatments being used in different liver centres. <p>Knows how to:</p> <ul style="list-style-type: none"> • interpret results in conjunction with other health care professionals • give relevant information and advice following treatment intervention • involve relevant primary care health professionals. 	<ul style="list-style-type: none"> • Models best practice. • Empowering. • Works in partnership with others. • Open to receiving feedback. • Challenges others to maintain patient safety. 	<ul style="list-style-type: none"> • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

7 Provides specific diagnostic/treatment options safely (continued): 7.5 Invasive diagnostics and treatment options (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<ul style="list-style-type: none"> a. Reviews with the patient and carer possible therapeutic options. b. Assesses effectiveness of the treatment options. c. Provides indepth information to patient and carers about therapeutic treatments and options. d. Evaluates effectiveness of the care management plan. e. Works with other health care professional to provide ongoing follow up and care. f. Discusses relevant treatment options with patient and carers such as referral to palliative care services. g. Works across primary and secondary care to co-ordinate appropriate/ specific care pathway. 	<ul style="list-style-type: none"> • purpose and criteria for each intervention • side effects/complications and how they should be managed of: <ul style="list-style-type: none"> - endoscopy - ERCP - external biliary drain - endoscopic ultrasound - liver biopsy - paracentesis - transjugular intrahepatic portosystemic shunt (TIPS) - TACE/RFA • criteria for invasive liver risk profiling and whether the results will change patient management eg, management of Non Alcoholic Fatty Liver Disease (NAFLD) in primary and secondary care • role of invasive risk profiling in relation to making a diagnosis or assessment for treatment such as liver transplant. <p>Knows how to:</p> <ul style="list-style-type: none"> • interpret complex results and investigations • refer to relevant specialist. 	<ul style="list-style-type: none"> • Patient safety. • Attention to detail. • Role model. • Challenges others. • Learning from own practice. • Active learner. • Develops trust. • Actively promotes better health for patients. • Challenges assumptions and taken for granted ways of working. • Vigilance. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF).

7 Provides specific diagnostic/treatment options safely (continued):

7.5 Invasive diagnostics and treatment options (continued)

Nurses operating at this level will need to have received appropriate interventional training and assessed competence as defined by their organisation.

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
8	Provides specific interventions safely with regards to: non-invasive diagnostics and treatment options.	<p>a. Undertakes a full comprehensive assessment and history and initiates treatment according to local guidance or protocol.</p> <p>b. Ensures clinical justification of the examination request and appropriate indication for procedure, assessing any contraindications.</p> <p>c. Undertakes the following procedures safely within agreed competence limits and organisational protocols:</p> <ul style="list-style-type: none"> - paracentesis - liver biopsy. <p>d. Evaluate the effectiveness of the intervention and need for further intervention.</p> <p>e. Takes appropriate action in the event of complications and liaises with medical team as required.</p> <p>f. Ensures safe discharge of the patient with agreed follow up for discussion of results.</p> <p>g. Provides advice on need for future treatment options.</p> <p>h. Liaises with appropriate medical team or other health care professionals.</p>	<ul style="list-style-type: none"> • indepth anatomy, physiology and pathology in relation to the therapeutic option: <ul style="list-style-type: none"> - paracentesis - liver biopsy. • boundaries of competence and how to keep this up to date • informed consent and legal implications • morbidity and mortality risks associated with the above procedures and how these can be minimised and recognised. <p>Knows how to:</p> <ul style="list-style-type: none"> • obtain informed consent • ensure patient parameters prior to procedures are within agreed limits • safely operate ultrasound machine in line with local policies • recognise abnormal anatomy such as biliary obstruction and focal abnormalities. • undertake procedures safely and according to protocols • recognises and act on side effects and complications • interpret results and communicates to others • document procedures correctly and communicates to patient and general practitioner • participate in peer review. 	<ul style="list-style-type: none"> • Strong clinical leadership. • Collaborative working across services. • Champions person-centred approach. • Passionate about patient safety. 	<p>Specific</p> <ul style="list-style-type: none"> • Local protocols and patient pathways. • BSG Guidance on Liver Biopsy (2004). • AASLD guidelines: ascites due to cirrhosis and date (2012) and liver biopsy (2014). • EASL clinical practice guidelines on the management of ascites, spontaneous bacterial peritonitis and hepatorenal syndrome in cirrhosis. • Joint Advisory Group for GI Endoscopy. • RCN (2012) Advanced Nurse practitioner and RCN Guide to advanced nursing practice, advanced nurse practitioner and programme accreditation. • NICE guidance on liver conditions and treatments.

8 Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition and takes appropriate action

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
1-4	Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition, and takes appropriate action.	<ul style="list-style-type: none"> a. Assesses patient's wellbeing. b. Undertakes clinical observations and documents in appropriate place. c. Uses early warning tools to pick up changes and deterioration. d. Reports all findings to qualified nursing staff. e. Responds appropriately to concerns raised. 	<ul style="list-style-type: none"> • the significance of performing clinical observations on patients with liver disease • early warning tools (basic knowledge) • who to raise concerns with eg, when receiving verbal complaints or any physical changes in condition or other incidents. <p>Knows how to:</p> <ul style="list-style-type: none"> • report any changes in the patient that might lead to deterioration in their condition. 	<ul style="list-style-type: none"> • Aware of role limitations and when to obtain help. • Person-centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Confidential. • Pride in work. • Respectful. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS – Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).
5	Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition, and takes appropriate action.	<ul style="list-style-type: none"> a. Uses the local early warning tool to ascertain changes in vital signs and other indicators of deterioration from complications of liver disease or following invasive procedures and/or transplantation. b. Assesses the patient for the above complications. c. Documents, monitors and acts on findings, and makes appropriate referral. d. Educates unregistered nursing team on the significance and importance of taking regular clinical observations. 	<ul style="list-style-type: none"> • the local critical care outreach team • the importance of interpreting vital signs in relation to liver disease and following invasive procedures • signs and symptoms of deterioration, and early warning tools for complications, including: <ul style="list-style-type: none"> - side effects of drug treatments - hypotension due to drug related reasons eg, betablocker, and non-drug related reasons eg, decompensated liver disease - jaundice as an indicator of deteriorating liver disease ie, rise in bilirubin - biliary complications, ie, cholecystitis and/or cholangitis or biliary obstruction - portal hypertension and oesophageal varices - ascites - hepatorenal failure - acute kidney injury - hepatic encephalopathy - sepsis which often precipitates variceal bleeding or hepatic encephalopathy - cardiovascular and respiratory complications - coagulopathy - acute liver failure including risk of cerebral oedema • unrecognised alcohol withdrawal. <p>Know how to:</p> <ul style="list-style-type: none"> • contact and refer to the local critical care outreach team. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<p>(Continued from previous row)</p>

8 Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition and takes appropriate action (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition, and takes appropriate action.	<p>a. Investigates the cause of early signs of deterioration and takes appropriate action.</p> <p>b. Documents all findings and liaises with the medical teams.</p> <p>c. Role models and emphasise to others the importance of being alert to changes in vital signs.</p>	<ul style="list-style-type: none"> related pathophysiological changes that can occur suddenly or gradually, resulting in rapid deterioration or death different early warning tools and their use and contradictions in patients with liver disease eg, poor reliability of Glasgow Coma Scale in patients with acute liver failure difficulty of using some tools with patients with chronic liver disease because of hypotension and poor renal function, etc. <p>Knows how to:</p> <ul style="list-style-type: none"> order and undertake appropriate investigations and interpret results; identify acute complications and make appropriate plan of care and referral to specialist team undertake, record and act on nursing observations. 	<ul style="list-style-type: none"> Empowering. Values learning. Willing to reflect on and learn from own practice. Works in partnership. Embraces different perspectives. Analytical. Attention to detail. Models best practice. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> British Liver Trust Children's Liver Disease Foundation Alcohol Change UK The Hepatitis C Trust The Hepatitis B Positive Trust UK Haemochromatosis Society Wilson's Disease Support Group (UK) PBC Foundation Rare Diseases UK PSC Support Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists British Society of Gastroenterology (BSG) - liver section British Association for the Study of the Liver (BASL) European Association for the Study of the Liver (EASL) American Association for the Study of Liver Diseases (AASLD) British Association of Parenteral and Enteral Nutrition (BAPEN) NHS England The Information Standard British National Formulary (BNF).

8 Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition and takes appropriate action (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition, and takes appropriate action.	<p>a. Undertakes a full comprehensive assessment and history and initiates treatment according to local guidance or protocol.</p> <p>b. Documents in the nursing and medical notes, and reports to specialist team or medics.</p> <p>c. Educates other nurses and medical teams on the sudden or gradual changes in patient condition.</p> <p>d. Educates other health care professionals on the major complications of liver disease and signs and symptoms.</p>	<ul style="list-style-type: none"> the pathophysiology and the context of sudden onset of deterioration precipitated by the disease process and other precipitating factors. <p>Knows how to:</p> <ul style="list-style-type: none"> assess and identify significant signs and symptoms, including the following: <ul style="list-style-type: none"> side effects of drug treatments hypotension due to drug related reasons eg, betablocker, and non-drug related reasons eg, decompensated liver disease jaundice as an indicator of deteriorating liver disease ie, rise in bilirubin biliary complications, ie, cholecystitis and/or cholangitis or biliary obstruction portal hypertension and oesophageal varices hepato-renal failure acute kidney injury hepatic encephalopathy sepsis which often precipitates variceal bleeding or hepatic encephalopathy cardiovascular and respiratory complications coagulopathy acute liver failure including risk of cerebral oedema unrecognised alcohol withdrawal work within the local guidelines or protocol, and the scope of practice when initiating treatment. 	<ul style="list-style-type: none"> Role model. Inter-professional working. Collaborative. Inclusive. Strong clinical leadership. Champions person-centred approaches. Challenges assumptions and taken for granted ways of working. Actively promotes better health for patients. 	<p>Specific</p> <ul style="list-style-type: none"> National Early Warning Score. Local guidelines and protocols. The Resuscitation Council. Standards for clinical practice and training (joint statements) from: <ul style="list-style-type: none"> Royal College of Anaesthetists Royal College of Physicians The Intensive Care Society. RCN (2012) Advanced Nurse practitioner and RCN Guide to advanced nursing practice, advanced nurse practitioner and programme accreditation.

8 Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition and takes appropriate action (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
8	Uses early warning tools/approaches (such as red alert) to identify the patient's changing and deteriorating condition, and takes appropriate action.	<p>a. Contributes to organisation's strategy and policies for managing deteriorating patients.</p> <p>b. Provides expert review of patients who have deteriorated due to liver conditions across own organisation and other organisations.</p> <p>c. Collaborates in research programmes that address deteriorating patients with liver conditions and their management.</p>	<ul style="list-style-type: none"> the deteriorating liver patient and optimising treatment options to prevent further deterioration referral to other health care professionals or from other organisations strategic aims in relation to liver patients and outreach service clinical trials and recruitment to trials where appropriate. <p>Knows how to:</p> <ul style="list-style-type: none"> recognise in a timely manner the acute liver failure patient recognise the patient with ongoing variceal bleeding and consider suitable treatment options with colleagues support staff to identify the deteriorating liver patient. 	<ul style="list-style-type: none"> Strong aspirational leadership. Collaborative working across services. Passionate about patient safety. 	See above.

9 Actively improves and promotes liver services across the appropriate care pathway

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Actively improves and promotes services across the care pathway.	<p>a. Provides clinical leadership for nurses and health care professionals involved with care of those with acute and chronic liver disease.</p> <p>b. Writes and updates protocols for care pathways.</p> <p>c. Ensures smooth transfer and documentation of patients entering into and leaving local services.</p> <p>d. Undertakes regular service reviews/audits and takes appropriate action to improve service.</p> <p>e. Organises feedback from patients, their families/ carers and makes appropriate changes to ensure services meet patients' needs.</p> <p>f. Communicates effectively and in a timely way with other health care practitioners to enable consistent standards of care to be implemented.</p> <p>g. Provides staff training and assessment for nurses working with patients with liver disease, eg, training of A&E staff to recognise symptoms.</p> <p>h. Keeps up to date with medical/nursing research so that new developments are adopted.</p> <p>i. Ensures that care pathways are seamless for patients by engaging with own institution (eg, A&E) and other service providers, including:</p> <ul style="list-style-type: none"> - outpatients - hepatology/transplant - other specialist services (eg, drug and alcohol, cardiac, psychological) - primary care (including community and practice nurses) - other hospitals - education, including school nurses and university staff - social services, housing and benefits advisers - voluntary sector and local support networks. <p>j. Works in conjunction with liver charities and support groups.</p> <p>k. Works with other health care professionals to run nurse-led clinics and services.</p> <p>l. Co-ordinates transition so that young people can move confidently and seamlessly from paediatric to adult services.</p> <p>m. Develops and evaluates liver outreach services.</p> <p>n. Leads, manages and appraises staff across the service.</p> <p>o. Develops local and regional networks to support excellence in nursing for people with liver disease.</p> <p>p. Promotes, role models and coaches others in health and well being around minimising liver disease.</p> <p>q. Undertakes teaching in relevant postregistration courses.</p>	<ul style="list-style-type: none"> • relevant NICE guidelines • health and well being strategies for healthy livers and lifestyles • clinical governance • appraisal and staff development • assessing competence • clinical supervision and mentoring • ethics • barriers to continuity and the strategies to overcome these barriers • resource implications in relation to funding of therapies • measures of patient experience and risk assessment matrix. <p>Knows how to:</p> <ul style="list-style-type: none"> • submit protocols for approval according to local guidance • conduct research according to local ethics and governance guidance • undertake audit and undertake quality reviews • enable all grades of staff with their learning and development around promoting healthy livers and lifestyles. 	<ul style="list-style-type: none"> • Recognises own level of competence, able to identify learning needs. • Accountable. • Supportive. • Encouraging. • Empowering. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Patient centred and compassionate. • Listens. • Understanding. • Welcoming. • Open to receiving feedback. • Respects confidentiality. • Works in partnership with others. • Role models healthy living. • Interprofessional working. • Embraces different perspectives. • Attention to detail. • Models best practice. 	<p>Generic</p> <ul style="list-style-type: none"> • NMC documents and guidance. • Royal College of Nursing documents and guidance. • RCN Gastrointestinal Nursing Forum. • British Liver Nurses Association (BLNA). • NHS England. • DH (2009) <i>Making a Difference</i>. • Public Health England. • Gold Standards Framework for people nearing the end of life. • British Association for the Study of the Liver (BASL) special interest group (SIG) position statement on palliative and supportive care in patients with chronic liver disease (2019). • NICE liver guidance. • Mental Capacity Act 2005. • NHS England Safeguarding Vulnerable People in the NHS - Accountability and Assurance Framework (2015) • DH Reference guide to consent for examination or treatment 2009. • Data Protection Act 2018. • NHS Choices. • NHS Institute for Innovation and Improvement. • Quality Outcome Measures, such as CQUINS. • Improving Quality in Liver Services (IQILS). • The Lancet Liver Commission. • NECPOD 2013 <i>Measuring the units: a review of patients who died with alcohol-related liver disease</i>, London, NCEPOD. • NHS IQ (Improving quality). • Nursing Times Learning Unit. <i>Liver Disease: Risk factors and treatment</i>. • NHS <i>2nd Atlas of Variation: Liver</i> (2017). • National Clinical Guidelines Centre. • BASL/BSG: <i>Decompensated Cirrhosis care Bundle: First 24 hours BSG Guidelines on the management of abnormal liver blood tests</i> (2017).

9 Actively improves and promotes liver services across the appropriate care pathway (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
8	Actively improves and promotes liver services across the appropriate care pathway.	<ul style="list-style-type: none"> a. Contributes to quality accounts, CQUIN activity and direction. b. Engages with other parts of the organisation concerning the whole care pathway so that care is seamless for patients. c. Ensures smooth and safe working across the service and organisation. d. Advocates for patients and influences commissioning. e. Ensures relevant clinical data are confidentially collected, audited and evaluated to support and improve patient care across organisational boundaries. f. Delivers workshops/conferences. g. Implements nurse-led clinics and services that address the health needs of patients with liver disease. h. Continuously identifies gaps in service, develops innovative solutions and monitors outcomes. i. Leads, manages and appraises staff across the organisation, developing the leadership potential of all. j. Negotiates and influences key stakeholders towards excellence in nursing of patients with liver disease. k. Ensures good clinical governance and accountability across the service and organisation. l. Undertakes research and publishes. m. Identifies learning needs of hepatology/transplant nurses including non-medical prescribing, outreach clinics, nurse-led clinics. 	<ul style="list-style-type: none"> • working at a strategic level within own organisation • local networks • primary care services • the services offered by the voluntary sector • the services offered by the statutory sector (including local schools, local housing departments and local social services departments) • standards and policies • quality accounts, Commissioning for Quality and Innovation (CQUIN) and Quality, Innovation, Prevention and Productivity QIPP • developments and innovations • the consequences of poor practice • best indicators • leadership 'champion' skills • change/development skills • the skills needed to build good relationships with professional colleagues in other departments and services the prevalence rate of liver diseases in local populations. • information systems for sharing information across boundaries • evaluation, professional standards and measurement and the relationship between them • different research approaches to developing knowledge of safe, effective and person-centred care • senior management team and role within it. <p>Knows how to:</p> <ul style="list-style-type: none"> • utilise patient information systems • maintain patient records in compliance with standards at local level and across the NHS quality improvement and practice development strategies • share good practice • evaluate care, assess effectiveness and use audit tools • embed a CQUIN in everyday practice • develop a culture of effectiveness in the workplace. 	<ul style="list-style-type: none"> • Strong clinical leadership. • Collaborative working across services. • Champions person centred approach. • Inclusive. • Challenges assumptions and taken for granted ways of working. • Analytical. • Champions patient safety. 	<p>Generic (continued)</p> <ul style="list-style-type: none"> • Key quality assured patient and carer information and support from key charities and organisations, such as: <ul style="list-style-type: none"> - British Liver Trust - Children's Liver Disease Foundation - Alcohol Change UK - The Hepatitis C Trust - The Hepatitis B Positive Trust UK - Haemochromatosis Society - Wilson's Disease Support Group (UK) - PBC Foundation - Rare Diseases UK - PSC Support - Royal Colleges, such as, Physicians, General Practitioners, Surgeons, Anaesthetists - British Society of Gastroenterology (BSG) - liver section - British Association for the Study of the Liver (BASL) - European Association for the Study of the Liver (EASL) - American Association for the Study of Liver Diseases (AASLD) - British Association of Parenteral and Enteral Nutrition (BAPEN) • NHS England The Information Standard • British National Formulary (BNF).

10 Referral for transplantation:

10.1 Referral for consideration of liver transplantation

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6 or 7 dependent on clinical experience	Referral for consideration of liver transplantation.	<p>a. Undertakes a comprehensive physical assessment and risk profiling including the early detection of other diseases and the identification of co-morbidities.</p> <p>b. Provides expert care and inter-professional collaborative practice and consultation to individual patients and service users across specific patient pathways based on holistic assessment, national guidelines, specialist competencies and best practice, documenting this care as an accountable practitioner.</p> <p>c. Discusses with patients and family/carer the significance of medical investigations, test results, prognosis and treatment options.</p> <p>d. Monitors and advises on nutritional intake and supplements in collaboration with dietitian to provide optimal nutrition.</p> <p>e. Recognition of nutrition as a predictive factor in positive transplant outcomes eg, frailty</p> <p>f. Implements and documents an appropriate management plan.</p>	<ul style="list-style-type: none"> relevant NICE guidelines and standards early signs and symptoms of other major diseases, such as diabetes, heart disease and endocrine diseases. a range of liver diseases and co-morbidities, and their impact recognise the need to optimise patients and are aware that some patients may require other disease management services and refer as appropriate eg, diabetes signs of liver disease and the impact of co-morbidities interpreting changes to blood chemistry in liver disease, such as liver enzymes, synthetic functions such as INR/prothrombin time, albumin and renal function investigations such as ultrasound doppler scan, endoscopy, endoscopic retrograde cholangiopancreatography (ERCP), magnetic resonance imaging (MRI), CT scan in depth understanding of altered pathophysiology, such as ammonia levels in hepatic encephalopathy (HE) and effects of splanchnic circulation on portal hypertension and relevance to current management strategies. 	<ul style="list-style-type: none"> Patient centred and ensure safety and compassion. Aware of own limitations. Educates. Supportive. Collaborative working across services. Non-judgemental. Acts as a patient advocate. Welcoming and understanding. Respectful. Recognises own limitations and seeks help when required. Accountable. Supportive and encouraging Provides choices. Challenges peers, patients and their families. Willing to undertake difficult conversations. Empowering. Provides good accurate documentation. 	<ul style="list-style-type: none"> NHS Blood and Transplant www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure Liver transplantation - https://easl.eu/publication/liver-transplantation Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> British Liver Trust www.britishlivertrust.org.uk Children's Liver Disease Foundation https://childliverdisease.org Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc.

10 Referral for transplantation:

10.1 Referral for consideration of liver transplantation (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6 or 7 dependent on clinical experience	Referral for consideration of liver transplantation.	<p>g. Establishes patient adherence with treatment and recognises patient's individual treatment choices.</p> <p>h. Keeps up to date with best practice for specific patient pathways through national specialist forums, journals and networking.</p> <p>i. Able to undertake a comprehensive alcohol history, including amount, frequency, impact.</p> <p>j. Comprehensive review of medication to ensure all treatment options have been explored eg, diuretic optimisation, Hepatic encephalopathy (HE) therapies</p> <p>k. Able to explore over the counter, herbal or illicit drug use including psychosocial referral where appropriate.</p> <p>l. Able to undertake difficult conversations to ensure patient understanding of prognosis and care options.</p> <p>m. Able to develop seamless pathways for care.</p>	<ul style="list-style-type: none"> • knowledge of precipitating factors of hepatic encephalopathy (HE) and preventative measures • patient adherence and concordance • measurements of severity and survival based on blood results, such as UKELD, MELD, Childs Pugh score and other physical factors such as ascites and hepatic encephalopathy and escalate as appropriate • end of life care and its management • blood investigations which reveal deterioration, non response or failed medical management of underlying disease • interpreting results in relation to the patient's condition which may deem them suitable for referral such as hepatocellular carcinoma • indications for transplant and advocate for early referral • importance of ascites, encephalopathy and other physical symptoms that would suggest deteriorating or non improvement of liver function • impact of lifestyle on liver health such as obesity, alcohol, exercise, smoking, their reduction/abstinence and engagement in healthy lifestyle behaviours • recognise the impact of emotional wellbeing and its effect on the individual • difficult conversation ie, end of life care. <p>Knows how to:</p> <ul style="list-style-type: none"> • undertake a detailed, comprehensive physical assessment in accordance with local guidelines • perform a comprehensive alcohol history including detoxification episode, rehabilitation and triggers for relapse • differentiate between hepatic encephalopathy and alcohol withdrawal • recognise signs and symptoms and implement appropriate actions for complications of liver disease • interpret a range of blood results • calculate UKELD score and escalate as appropriate • communicate to patients the impact of co-morbidities on their liver disease • refer to the wider MDT such as psychosocial services, disease management services such as diabetes, palliative care • sensitively impart prognostic information and assesses the patient's and family/carer's understanding • refer to local palliative services for support. 	See above.	See above.

10 Referral for transplantation:

10.2 Understanding prerequisites for liver transplantation

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6 or 7 depended on clinical experience	Understanding prerequisites for liver transplantation.	<ul style="list-style-type: none"> a. Ability to interpret the alcohol history and make referrals as appropriate. b. Optimise and continue to advocate lifestyle management despite no impact on liver disease eg, exercise, nutrition, smoking cessation. c. Refer to other members of the MDT as appropriate. d. Able to request in timely manner diagnostic tests. e. Ensures timely and holistic co-ordinated care in preparation for referral. f. Establishes local pathways that ensures equity for all patients. g. Advocates for patients, their families/ carers to ensure their voice is heard and acted upon. h. Assesses psychological and emotional needs and signposts to appropriate services. i. Works collaboratively with other members of the multidisciplinary team to provide a seamless service. 	<ul style="list-style-type: none"> • the commitment of transplant process for both patient and HCPs • national guidance on suitability for liver transplantation • communication barriers that might impact on transplant journey such as literacy, language, capacity, etc • alcohol cessation/substance use strategies and maintaining abstinence • the importance of stability in substitute prescribing • the benefits/requirements of smoking cessation • the criteria that precludes referral for liver transplantation such as HCC size and number, cholangiocarcinoma, ongoing alcohol use, behavioural factors • the diagnostic tests required for transplant assessment, such as echocardiogram, spirometry, ECG, etc • local provision of services eg, palliative care, diabetes, smoking cessation • available resources and support services locally, regionally and nationally; their accreditation and quality assurance processes. <p>Knows how to:</p> <ul style="list-style-type: none"> • develop collaborative agreements around commitment to health related behaviours • seek professional advise regarding diagnostic test results • manage patient and family/carer expectations of the potential outcomes • refer/signpost to appropriate services. 	<ul style="list-style-type: none"> • Collaborative working between services. • Provide support and compassion. • Strong clinical leadership. • Work collaboratively across relative services. • Person-centred and holistic care approach. • Respects and includes patient wishes. • Good communication. • Listens. • Respects privacy and dignity and always maintains confidentiality. • Passionate about patient safety. • Works closely with the patient, relatives or carers. • Aware of own limitations and when to seek help. • Ability to build a good patient rapport. • Good time management. • Accountability. • Continuous good-health promotion. • Ability to follow up-to-date evidence based practice. • Supportive care. • Empowering. • Willing to accept feedback and reflect on own work in order to maintain or change best practice. • Acts as an advocate. • Challenges health behaviours • Provides patient with choice/options. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis <p>• BSG/BLTG guidelines in print</p> <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc.

11 Pre-transplant phase:

11.1 Assessing suitability for liver transplantation

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Assessing suitability for liver transplant.	<ul style="list-style-type: none"> a. Undertakes a holistic assessment of suitability for liver transplantation. b. Explores the impact of the disease process on the individual. c. Explores the patient's understanding of their illness. d. Competently performs the transplant assessment as per local policy. e. Accurate documentation and interpretation of blood results and other investigations. f. Refers patients to other members of the MDT when appropriate. g. Participates in MDT meetings and advocates to ensure the patients voice is heard. h. Audits assessment documentation in collaboration with the MDT. i. Participates in outreach clinics (if appropriate). j. Summarise the expectations of the transplant journey and the impact on the individual. h. Identify barriers through risk profiling. i. Liaises/communicates with referring centre to ensure contemporary information is shared. 	<ul style="list-style-type: none"> • past medical history – duration of illness, complications of illness, current and previous medications • lifestyle impact on liver health including chaotic lifestyle, drugs, alcohol and obesity • impact of smoking with regard to increased risk peri- and post-transplantation • nutritional needs in liver disease • the social support the patient has and refers to appropriate services • past and current patterns of adherence behaviour • range of blood tests and other investigations. <p>Knows how to:</p> <ul style="list-style-type: none"> • identify/explore difficulties from past medical history using a full range of health care professionals to build a comprehensive picture of health behaviour • assess lifestyle factors in collaboration with the patient • work with patients with challenging backgrounds • assess social situation and refers appropriately • signpost/refer for financial advise and support • refer to appropriate members of the MDT. 	<ul style="list-style-type: none"> • Aware of role limitations. • Challenges behaviours. • Welcoming and understanding. • Provides patient with choices/options. • Compassionate and patient centred. • Supportive and empowering. • Learns from practice. • Works with the MDT and recognises role limitations. • Acts as an advocate. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc.

11 Pre-transplant phase:

11.2 Impacting factors on suitability for liver transplantation

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Impacting factors on suitability for liver transplantation.	<ul style="list-style-type: none"> a. Assessment of nutritional status, body mass index (BMI), cardiovascular risk, mobility, etc. b. Able to screen for drug, alcohol and smoking in all patients referred. c. Interpreting results from screening tools used and further actions required. d. Estimates dry weight. e. Initiates nutritional support in conjunction with dietetic services. f. Recognises and acts upon deteriorating nutritional status. g. Works in conjunction with other HCP's with regard to preventing frailty or further deterioration of physical condition. h. Encourages exercise plans as appropriate. i. Evaluation of impact of intervention. j. Escalation where appropriate. k. Maintain ongoing surveillance impacting factors such as HCC, portal vein, CV risk. l. Timely reassessment following imaging. m. Communication of prognostic information in relation to too early/too late for transplant. n. Contemporary and accurate documentation. o. Audit of referrals and outcomes. 	<ul style="list-style-type: none"> • nutritional guidelines and validated screening tools such as Royal Free global, PHQ9 • limitations in using BMI and MUST • protein energy malnutrition, the effects on liver patients • Strategies to reduce protein energy malnutrition such as late evening snacks, high fat supplements ie, high calorie shots • vitamin supplementation to address/avoid symptoms of vitamin deficiency such as osteoporosis, peripheral neuropathy • impact of frailty – physically, psychologically and socioeconomically • effect on cognition on HE eg, driving, occupational hazards • professional responsibility and legal requirements re informing DVLA • impact of drinking alcohol in those with a non-ARLD diagnosis • downsizing criteria used for HCC eg, Milan, Barcelona. <p>Knows how to:</p> <ul style="list-style-type: none"> • communicate effectively with the MDT and primary care • use validated screening tools such as MUST, PH9, etc • refer to appropriate health care professionals • communicate effectively with MDT and transplant centre • have complex discussions with individuals. 	<p>Collaborative working between services:</p> <ul style="list-style-type: none"> • Provide support and compassion. • Strong clinical leadership. • Work collaboratively across relative services. • Person-centred and holistic care approach. • Respects and includes patient wishes. • Good communication. • Listens. • Respects privacy and dignity and always maintains confidentiality. • Passionate about patient safety. • Works closely with the patient relatives or carers. • Aware of own limitations and when to seek help. • Ability to build a good patient rapport. • Good time management. • Accountability. • Continuous good-health promotion. • Ability to follow up-to-date evidence based practice. • Supportive care. • Empowering. • Willing to accept feedback and reflect on own work in order to maintain or change best practice. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc.

11 Pre-transplant phase:

11.3 Listing for liver transplant and informed consent

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Listing for liver transplant and informed consent.	<p>a. Give appropriate information both verbally and written to the patient and family/carer to gain informed consent.</p> <p>b. Undertake the listing process of a patient (adult or child as appropriate) with chronic liver disease or variant for the elective waiting list in conjunction with NHSBT guidelines.</p> <p>c. Undertake the listing process of a patient (adult or child) with acute liver failure for the super urgent waiting list in conjunction with NHSBT guidelines.</p> <p>d. Undertake the listing process of a patient (adult or child) who requires combined liver and kidney or liver and other solid organ registration in conjunction with NHSBT guidelines.</p> <p>e. Effectively communicate guidelines to other health care professionals eg, referring centre, GP, etc. involved with the patient the outcome of the listing meeting.</p> <p>f. Able to competently use relevant databases and has appropriate IT skills.</p>	<ul style="list-style-type: none"> • what informed consent is, including patient preference/suitability re types of grafts from organ donors ie, DCD, Split, LRD • national and local waiting lists and organ allocation, such as transplant benefit score (TBS); tumour growth; decompensation requiring admission • UKELD and how to calculate • HCC criteria and who to contact in line with local policy if the tumour becomes out of criteria • variant syndromes • no alcohol for life agreements • types of donor organs, their risks and benefits eg, high risk/marginal donor • data collection required • criteria for registration on the elective and super urgent transplant waiting list • the appeals process for both elective and super urgent patients. <p>Knows how to:</p> <ul style="list-style-type: none"> • access and maintain accurate and timely documentation • maintain national transplant waiting list data • take appropriate action on receipt of a positive alcohol/drug toxicology result • support the patient who becomes 'out of criteria (HCC)' or is no longer suitable for transplantation • interpret ongoing blood results • complete nationally required documentation for effective waiting list management eg, NHSBT • register a patient on the following waiting lists: <ul style="list-style-type: none"> - elective - super urgent - combined liver and kidney or liver and other solid organ. 	<ul style="list-style-type: none"> • Effective communicator. • Models best practice. • Recognises own level of competence and able to identify learning needs. • Accountable. • Supportive. • Encouraging. • Empowering. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Nonjudgemental. • Challenges others. • Confidential. • Aware of limitations and when to obtain help. • Champions patient centred approaches. • Actively promotes better health to patients. • Collaborative. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc. • Live Life, Give Life https://livelifegivelife.org.uk • Transplant Sport http://transplantsport.org.uk

11 Pre-transplant phase:

11.4 Options for those not suitable for liver transplantation

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Options for those not suitable for liver transplantation.	<ul style="list-style-type: none"> a. Discusses with patients and family/carer the significance of medical investigations, test results, prognosis and treatment options. b. Able to undertake difficult conversations to ensure patient understanding of prognosis and care options. c. Develops a management plan if not suitable for transplant. d. Referral to other members of the MDT/HCPs as appropriate. e. Ensures timely and holistic co-ordinated care. f. Effectively communicates through verbal and written information. g. Demonstrates contemporaneous and accurate documentation. h. Provides the patient and family/carer with the physical, psychological, emotional support. i. Effective liaison with referral centre. j. Refers to local support services/palliative care . 	<ul style="list-style-type: none"> • medical management options eg, Transjugular intrahepatic portosystemic shunt (TIPS), embolisation etc. • radiological/oncology interventions eg, Transarterial chemoembolization (TACE), Radio frequency ablation (RFA) • palliative/supportive care options • alternative therapies such as nasobiliary drain, plasma exchange, pleurex drain, alfpump* • minimum listing criteria • forward referral to multi visceral centre or for a second opinion • awareness of local provision of services. <p>Knows how to:</p> <ul style="list-style-type: none"> • refer to appropriate HCPs • communicate and feedback management plan and offer support • facilitate forward referral for multivisceral assessment or second opinion. • offer support to both the patient and their carer/ family. 	<ul style="list-style-type: none"> • Collaborative working with other services. • Empathy/support. • Education. • Aware of role limitations. • Passionate about patient care. • Supportive. • Encouraging. • Empowering. • Provides choices. • Health education. • Provide strong leadership. • Models best practice. • Understanding. • Compassionate. • Demonstrate attention to detail. • Inter-professional working. • Inclusive. • Willing to reflect on and learn from own practice. • Respects confidentiality. • Embraces different perspectives. • Analytical. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc.

11 Pre-transplant phase:

11.5 Keeping well whilst waiting

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Keeping well whilst waiting.	<ul style="list-style-type: none"> a. Timely review of patients within clinic including medications, investigations, changes in condition with close liaison with transplant centre. b. Identify when waiting list patient requires further MDT input. c. Liaises with transplant centre to arrange timely review. d. Demonstrate the ability to deal with difficult situations e.g suspending or admitting the patient. e. Signpost the patient to local and national support groups. f. Offer advice in relation to maintaining and improving health, such as nutrition and exercise. g. Recognise the impact of waiting for a transplant and offering appropriate support to both patient and family/carer. h. Ensure accurate and contemporaneous documentation. 	<ul style="list-style-type: none"> • recognition of the deteriorating patient and when to admit to acute care • specific criteria for suspension such as SBP, nutrition, hyponatraemia – how and when to liaise with transplant centre • impact of medication, review of undesirable effects, including efficacy and adherence • vaccinations such as HAV, HBV and seasonal vaccines • non-hepatic health surveillance and monitoring; health promotion • HCC surveillance, imaging and impact of new finding or progression of tumour • NHSBT requirements for suspension from the liver transplant waiting list • keeping well whilst the patient is on holiday. The rules regarding taking a holiday whilst active on the liver transplant waiting list • end of life planning. <p>Knows how to:</p> <ul style="list-style-type: none"> • refer to psychosocial services • liaise with any changes in clinical condition with transplant MDT • inform NHSBT regarding changing condition eg, tumour occurrence, removal from list • suspend a patient both locally and with NHSBT • refer to palliative care when appropriate. 	<ul style="list-style-type: none"> • Models best practice. • Accountable. • Supportive. • Encouraging. • Empowering. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non judgemental. • Challenges others. • Confidential. • Aware of limitations and when to obtain help. • Champions patient centred approaches. • Actively promotes better health to patients. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Other disease specific charities such as PBC, PSC, AIH, Hep C, Hep B, Haemochromatosis, Wilson's, etc.

12 Transplant phase:

12.1 Facilitating the requirements of the National Organ Retrieval Service (NORS)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Facilitating the requirement of the National Organ Retrieval Service (NORS).	<p>a. Demonstrates effective communication with multiple agencies and local NORS team.</p> <p>b. Demonstrates a range of negotiation skills with multiple agencies.</p> <p>c. Manages expectations of a number of people at any one time.</p> <p>d. Able to problem solve unexpected issues.</p> <p>e. Ability to challenge decisions for others if required.</p> <p>f. Able to successfully mobilise the NORS team including:</p> <ul style="list-style-type: none"> Liaison with NHS Blood and Transplant (NHSBT) hub Liaison with the Specialist Nurse in Organ Donation (SN-OD) Transport company NORS team. <p>g. Ensures the safety of the retrieval team ie, adverse weather.</p> <p>h. Ensures accurate retrieval and timely documentation.</p> <p>i. Offers emotional support to the team.</p> <p>j. Recognises the impact of the NORS team on the donor hospital team.</p> <p>k. Has an understanding of the documentation requirements during the organ donation process.</p>	<ul style="list-style-type: none"> NHSBT requirements and timings NHSBT geographical policy understand the logistical requirements for team mobilisation abdominal and cardiothoracic retrieval processes including research eg, QUOD different requirements for certain types of retrieval eg, multi visceral understands the Human Tissue Authority (HTA) paperwork and other paperwork required during the retrieval. <p>Knows how to:</p> <ul style="list-style-type: none"> make contact with the NORS team gain permissions that are required in relation to financial aspects, such as hiring a plane escalate a concern or issue both in the transplant hospital and with NHSBT access organ resuscitation equipment and appropriate personnel. 	<ul style="list-style-type: none"> Collaborative working across a range of organisations. Challenges others. Supportive. Understanding. Confidential. Accountable. 	<ul style="list-style-type: none"> NHS Blood and Transplant – www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) – www.odt.nhs.uk Human Tissue Authority – www.hta.gov.uk British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) – www.basl.org.uk British Transplantation Society – https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation – www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure Liver transplantation – https://easl.eu/publication/liver-transplantation Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> British Liver Trust – www.britishlivertrust.org.uk Children's Liver Disease Foundation https://childliverdisease.org Live Life, Give Life – https://lifelivegivelife.org.uk Transplant Sport – http://transplantsport.org.uk <p>Specific</p> <ul style="list-style-type: none"> National Organ retrieval standards – NHSBT NHS Blood and Transplant – www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) – www.odt.nhs.uk Human Tissue Authority – www.hta.gov.uk British Transplantation Society – https://bts.org.uk Liver transplantation https://easl.eu/publication/liver-transplantation BSG/BLTG guidelines in print

12 Transplant phase:

12.2.1 Admission for liver transplant – transplant co-ordinator

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Admission for liver transplant – transplant co-ordinator	<p>a. Review of donor information via electronic offering system (EOS) and communication to enable the acceptance or decline of an organ.</p> <p>b. Safely admit recipient to hospital for orthotopic liver transplantation in a timely manner, utilising local escalation policies as required.</p> <p>c. Effective negotiation skills with allied health professionals, clinicians and management teams.</p> <p>d. Set up for transplant, including transportation requirements.</p> <p>e. Ensuring safety of recipient, clinical changes, fitness to proceed, ordering of blood products, administrative checks (as per local checklists).</p> <p>f. Complete theatre checklists if required.</p> <p>g. Communicate information accurately and concisely within NHSBT guidelines/SABTO guidelines.</p> <p>h. Demonstrate ability to break bad news in a sensitive and supportive manner.</p>	<ul style="list-style-type: none"> access EOS and medical and social history (MASH) and core donor data interpret information/complex investigation results to collate an accurate clinical picture of the donor identify high risk factors which may affect recipient understanding of local/national waiting list to identify a suitable recipient. admit the recipient to hospital and what threats might impact on ability for surgery to take place such as fitness for surgery, low serum sodium level and positive blood alcohol level reviewing recipient results/complete theatre history knowledge of nutritional requirements pre-operatively nil by mouth (NBM), diabetes, etc.) preparing the patient for theatre, including alcohol screening as per centre policy accurate and contemporaneous documentation. <p>Knows how to:</p> <ul style="list-style-type: none"> access support if there are concerns with the transplant process support the patient receiving bad news report an adverse finding to colleagues, patient, family and NHSBT fast track an organ. identify potential logistical issues <ul style="list-style-type: none"> - Transplant activity - Clinical issues affecting quality of organ eg, CIT/Transportation issues how to contact transport/potential recipients if there is a change of plan arrange admission in timely fashion support for patient eg, treatment may not proceed/unsuitable/donor types transfer the patient to theatre including review of checklist, EOS and consent. 	<ul style="list-style-type: none"> Analytical. Attention to detail. Works in partnership with others. Collaborative. Inclusive. Inter-professional working. Accountable. Provides choices. Confidential. Listens. Understanding. Open to receiving feedback. Respectful. Pride in work. Models best practice. Flexible. Empathetic. Organised. Supportive. 	<ul style="list-style-type: none"> NHS Blood and Transplant www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk Human Tissue Authority www.hta.gov.uk British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG)) www.basl.org.uk British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure Liver transplantation – https://easl.eu/publication/liver-transplantation Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis <p>• BSG/BLTG guidelines in print</p> <p>Charities</p> <ul style="list-style-type: none"> British Liver Trust www.britishlivertrust.org.uk Children's Liver Disease Foundation https://childliverdisease.org Live Life, Give Life https://lifelife.org.uk Transplant Sport http://transplantsport.org.uk

12 Transplant phase: 12.2.2 Admission for liver transplant – ward nurses

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5 or 6 dependent on clinical experience	Admission for liver transplant – ward nurses.	<ul style="list-style-type: none"> a. Comprehensively prepare the patient for surgery following local protocols and nursing assessment. b. Accurate and timely documentation of vital signs, and nursing assessment. c. Ensure admission bloods and other investigations such as ECG, breathalyser if appropriate, etc. have been completed. d. Support of the patient and family/carer whilst waiting. e. Adheres to infection prevention and control policies. f. Manage expectations of the patient and family/carers. g. Ensure safety by accurately completing the theatre checklist. h. Accompanies the patient to theatre, providing psychological support to the patient and their family/carer. 	<ul style="list-style-type: none"> • different types of liver grafts and likelihood of preceding to transplant • blood and investigation results that might impact on the transplant proceeding such as low serum sodium, positive alcohol reading • confidential nature of organ donor information • local transplant protocols such as HBV immunoglobulin; sliding scale insulin, etc. <p>Knows how to:</p> <ul style="list-style-type: none"> • contact the liver transplant co-ordinators • escalate any concerns regarding investigations or other issues • find accommodation for families (if available) • keeps in contact with the family as per local policy. 	<ul style="list-style-type: none"> • Analytical. • Attention to detail. • Works in partnership with others. • Collaborative. • Inclusive. • Inter-professional working. • Accountable. • Confidential. • Listens. • Open to receiving feedback. • Models best practice. • Flexible. • Organised. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelife.org.uk • Transplant Sport http://transplantsport.org.uk

12 Transplant phase:

12.3.1 The role of the transplant co-ordinator peri-liver transplant

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	The role of the transplant co-ordinator peri-liver transplant.	<p>a. Keeps in touch with all people involved in the transplant process.</p> <p>b. Can respond effectively to changes in treatment plans such as inability to split, organ damage, recipient issue.</p> <p>c. Fast track the liver out in accordance with NHSBT requirements.</p> <p>d. Ensure procedures for organ transfer are followed.</p> <p>e. Undertake the listing process of a patient (adult or child) with an acute transplant-related complication such as primary non-function, hepatic artery thrombosis for the superurgent waiting list in conjunction with NHSBT guidelines.</p> <p>f. Disposes of an unused organ in accordance with local and NHSBT policy.</p> <p>g. Establish (if a death occurs) who will speak with the family.</p> <p>h. Ensure local policy with regards to last offices is followed correctly.</p> <p>i. Provides the family with initial bereavement support.</p>	<ul style="list-style-type: none"> transplant surgical procedure and critical points within the procedure NHSBT policy for: <ul style="list-style-type: none"> - offering organs - superurgent listing - organ for research - organ for disposal. packaging of organ for transfer/disposal documentation required if organ is transferred or disposed of safe place for organ collection local procedures following a death of a patient. <p>Knows how to:</p> <ul style="list-style-type: none"> superurgently list for regraft fast track out a liver following an issue pack an organ for transfer, research or disposal change a recipient at short notice. 	<ul style="list-style-type: none"> Attention to detail. Works in partnership with others. Collaborative. Inclusive. Inter-professional working. Accountable. Confidential. Listens. Respectful. Models best practice. Flexible. Empathetic. Organised. Effective communicator. 	<ul style="list-style-type: none"> NHS Blood and Transplant www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk Human Tissue Authority www.hta.gov.uk British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG)) www.basl.org.uk British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure Liver transplantation - https://easl.eu/publication/liver-transplantation Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis <p>• BSG/BLTG guidelines in print</p> <p>Charities</p> <ul style="list-style-type: none"> British Liver Trust www.britishlivertrust.org.uk Children's Liver Disease Foundation https://childliverdisease.org Live Life, Give Life https://lifelifegivelife.org.uk

12 Transplant phase: 12.3.2 Ensuring organ safety – transplant co-ordinator

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Ensuring organ safety – transplant co-ordinator.	<ul style="list-style-type: none"> a. Able to co-ordinate the need for further investigation of the donor organ eg, biopsy. b. Able to communicate the results of the ability to use an organ. c. Fast track an organ. d. Able to dispose of an unused organ in line with human tissue authority (HTA) requirements. e. Complete accurate and timely document. f. Able to use Electronic offering system (EOS). g. Able to complete HTA B form. 	<ul style="list-style-type: none"> • how organs are disposed of • the legal requirements surrounding organ donation • what documentation is required, how it is completed and where it is submitted • the fast track system • accurate report of why organs are not used. • results which affect the ability to use organs – pathology/biopsy results • local and national policy and procedures in relation to best use of the donor organ. <p>Knows how to:</p> <ul style="list-style-type: none"> • fast track an organ • reporting structures both locally and nationally • access histopathology services • complete timely and accurate documentation. 	<ul style="list-style-type: none"> • Analytical. • Attention to detail. • Works in partnership with others. • Collaborative. • Inclusive. • Inter-professional working. • Accountable. • Confidential. • Respectful. • Models best practice. • Flexible. • Organised. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelifegivelife.org.uk • Transplant Sport http://transplantsport.org.uk

12 Transplant phase:

12.4 Care of family peri-liver transplant – transplant co-ordinator

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Care of family peri-liver transplant – transplant co-ordinator.	<ul style="list-style-type: none"> a. Maintain effective communication with family members. b. Responsive and sensitive care of families should things go wrong. c. Management of the family when donor organ unable/or unsuitable for transplant. d. Able to manage challenging conversations, including family behaviours and beliefs. e. Communicates with referring centre regarding the outcome of transplant process. f. Management of immediate and long term expectations should the transplant not go ahead/not successful. g. Liaises with referral centre/GP in a timely fashion to ensure contemporary information shared or if there is an adverse event. h. Maintain effective communication with family if an adverse event occurs. 	<ul style="list-style-type: none"> • understanding the anxieties felt by patient's families/carers at the time of transplant • challenging behaviours with family/carers • keeping the family up to date with information in timely fashion • recognises issues with families on arrival at a transplant unit re: financial, psycho-social, religious issues, including social work, accommodation, support groups • the importance of contact with families throughout the transplant process to alleviate anxiety and provide up to date information. • safeguarding issues • aware of family dynamics that can affect the transplant process • supportive organisations • managing adverse events – if the transplant does not go ahead, transplant fails (death/super urgent relisting/serious adverse events). <p>Knows how to:</p> <ul style="list-style-type: none"> • access help for issues raised with the family • communicate with the family the results affecting the ability to transplant safely • signpost to supportive organisations. 	<ul style="list-style-type: none"> • Empathy and support. • Recognises own limitations. • Analytical. • Attention to detail. • Works in partnership with others. • Collaborative. • Inclusive. • Inter professional working. • Accountable. • Provides choices. • Confidential. • Listens. • Understanding. • Open to receiving feedback. • Respectful. • Pride in work. • Models best practice. • Flexible. • Empathetic. • Organised. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://livelifegivelife.org.uk

12 Transplant phase:

12.5 Early post-liver transplant care (please refer to the relevant section for your clinical area)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5 or 6 dependent on level of experience	Early post-liver transplant care.	<p>ICU</p> <ol style="list-style-type: none"> Undertakes a comprehensive assessment of patient including haemodynamic/fluid and renal status and review with the medical team. Demonstrates care of drains, wounds, invasive devices Undertakes close monitoring of fluid balance post transplant to identify complications such as renal dysfunction. Ensures timely administration of appropriate immunosuppressive regimen. Ensures pain management is reflective of local policy and ensures effective delivery. Following extubation assessment for chest physiotherapy, encouragement of deep breathing and coughing to prevent infection. Administers anticoagulant therapy if prescribed to prevent hepatic artery thrombosis (HAT). Anticoagulant status. Offer support to relatives. Prepare for transfer to ward. 	<ul style="list-style-type: none"> post-operative liver transplant care in the appropriate clinical area early post-operative complications such as bleeding, primary non function, HAT, bile leaks haemodynamic and renal function and actions that need to be taken in response to an abnormal reading principles of accelerated recovery post-transplant impact of the donor virological testing on the recipient the role of the physiotherapist and dietitian in post-liver transplant care the need for immunosuppressive medication and the importance of timely administration the impact on recovery of suboptimal pain management. <p>Knows how to:</p> <ul style="list-style-type: none"> act on donor information received post-transplant (transplant co-ordinator only) liaise with NHSBT and other centres as required (transplant co-ordinator only) escalate the deteriorating patient contact pain management team remove drains and invasive devices manage surgical wound and escalate to appropriate healthcare professional ie, surgeon, tissue viability. 	<ul style="list-style-type: none"> Aware of role limitations. Recognises own level of competence, able to identify learning needs. Accountable. Empathetic. Encouraging. Supportive. Works in partnership with others. Willing to reflect on and learn from own practice. Flexible. Non-judgmental. Passionate about patient care. Models best practice. Shares ideas. Facilitates involvement of stakeholders. Works in partnership. Empowering. Embraces different perspectives. 	<ul style="list-style-type: none"> NHS Blood and Transplant www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk Human Tissue Authority www.hta.gov.uk British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure Liver transplantation – https://easl.eu/publication/liver-transplantation Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> British Liver Trust www.britishlivertrust.org.uk Children's Liver Disease Foundation https://childliverdisease.org Live Life, Give Life https://lifelivegivelife.org.uk Transplant Sport http://transplantsport.org.uk
7		<p>Transplant co-ordinators</p> <ol style="list-style-type: none"> Ensures virology donor/recipient status (as appropriate) is readily available. Contemporaneous documentation of required information to NHSBT. Interpret bloods to assess graft function. 			
5 or 6 dependent on level of experience		<p>Ward</p> <ol style="list-style-type: none"> Undertakes a comprehensive assessment of patient including haemodynamic/fluid and renal status and review with the medical team. Demonstrates care of drains, wounds and invasive devices. Undertakes close monitoring of fluid balance post transplant to identify complications such as renal dysfunction. Ensures timely administration of appropriate immunosuppressive regimen. Ensures pain management is reflective of local policy and ensures effective delivery. Encouragement of deep breathing and coughing exercises to prevent infection. Ensures early mobilisation to reduce complications such as chest infection, deep vein thrombosis. Assesses nutritional status of the patient, ensures food chart is completed (if required), refers to dietitian and encourages nutritional supplements as prescribed. Offers support to patient and relatives. 			

12 Transplant phase:

12.6 Early post-liver transplant complications

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5, 6 or 7 dependent on clinical experience	Early post-liver transplant complications. (Can be undertaken in ICU or ward area)	<p>a. Liaise with other MDT members</p> <p>b. Undertake superurgent registration and inform NHSBT (transplant co-ordinator only).</p> <p>c. Inform and support patient/family/carers of the decision and process.</p> <p>d. Managing expectations arising from great risk.</p> <p>e. Liaise with other departments eg, imaging.</p> <p>f. Ensure appropriate discussion within the MDT.</p> <p>g. Continued support of patient/ family/ carers.</p> <p>h. Support and information for colleagues and nursing team.</p> <p>i. Management as per local policy.</p> <p>j. Liaise with other MDT members.</p> <p>k. Inform and support patient/family/carers of the decision and process.</p> <p>l. De novo diabetes:</p> <ul style="list-style-type: none"> - Refer to diabetes specialist nurses - Support patient and family/carers with new diagnosis. - Support and reinforce education. <p>m. CMV</p> <ul style="list-style-type: none"> - Ensure documentation of donor/ recipient CMV status - Awareness of local CMV protocol - Support and educate the patient/family/ carers. 	<p>Transplant co-ordinators only</p> <ul style="list-style-type: none"> • interpreting blood results - primary non function (PNF) - hepatic artery thrombosis (HAT) - national guidance for superurgent registration post-transplant - CT angiography for HAT - appeals process for superurgent patients. <p>ICU/Ward</p> <ul style="list-style-type: none"> • rejection • infection • surgical complications post-transplant such as biliary, bleeding and wound dehiscence • treatment/diagnostic options • recognise deterioration • escalate concerns • reasons why diabetes occurs post transplant • CMV – signs and symptoms • renal dysfunction – AKI, CNI toxicity • monitor and administer immunosuppressive drugs in line with local policy. <p>Knows how to:</p> <p>Transplant co-ordinators</p> <ul style="list-style-type: none"> • register patient on superurgent list • undertake an appeal and the processes • donor derived diseases – how to escalate • find out CMV status. <p>Knows how to:</p> <p>ICU/WARD</p> <ul style="list-style-type: none"> • recognise deterioration • escalate concerns. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Empathetic. • Encouraging. • Supportive. • Works in partnership with others. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Models best practice. • Builds relationship with peers. • Shares ideas. • Facilitates involvement of stakeholders. • Works in partnership. • Empowering. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelifegivelife.org.uk • Transplant Sport http://transplantsport.org.uk

12 Transplant phase: 12.7 Psychological care – post-liver transplant

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5 or 6 dependent on clinical experience	Psychological care – post-liver transplant.	<p>Elective</p> <ul style="list-style-type: none"> a. Provide psychological care to the patient, the family/carers. b. Support of colleagues, especially during challenging situations. c. Providing support and education about donor details if they wish. 	<ul style="list-style-type: none"> • the individual’s support systems and family dynamics • safeguarding principles and local policy • local debriefing services • changes in body image post transplant • transition/loss of carer to spouse again • awareness of local services and transition of care back to referring hospital. <p>Knows how to:</p> <ul style="list-style-type: none"> • engage the appropriate personnel to support the person • escalates concerns in a timely manner • undertaking safeguarding referral • how to contact debriefing services • awareness of local services and referral of care back to local hospital. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Empathetic. • Encouraging. • Supportive. • Works in partnership with others. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Models best practice. • Builds relationship with peers. • Shares ideas. • Facilitates involvement of stakeholders. • Works in partnership. • Empowering. • Embraces different perspectives. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses’ Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children’s Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelifegivelife.org.uk • Transplant Sport http://transplantsport.org.uk
		<p>Superurgent</p> <ul style="list-style-type: none"> a. Refer to psychosocial services. b. Offer support to patient and family/carers. c. Recognise the immediacy of transplant and how they may have not received information pre transplant. d. Introduces education at an appropriate time and tailored to their needs. 			
		<p>Generic</p> <ul style="list-style-type: none"> a. Provides support and identifies psychological and social needs in relation to the impact of the condition. b. Identifies strengths and weakness, and an individual’s coping strategies. c. Reassures the individual and makes an appropriate referral to the psychology team or local psychology/psychiatry service. d. Demonstrates the ability to investigate personal background and identify family dynamics that might have an impact on health. e. Identifies communication problems within family relationships and/or partner relationships and takes appropriate action. f. Advises, supports and signposts patient and family/carers to community services available. g. Makes referrals where appropriate. 			

12 Transplant phase:

12.8 Promoting independence and support discharge

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5 or 6 dependent on clinical experience	Promoting independence and support discharge.	<p>Ward</p> <ul style="list-style-type: none"> a. Supports the patient to become competence in self medication. b. Liaises with pharmacist if there are concerns with regards to ability to self medicate to find an alternate eg, dosette box. c. Encourages patient to discuss foods that are appropriate to eat post transplant ie, avoid grapefruit. d. Encourages patient to become more active and participate in discharge planning. e. Ensures appropriate wound care management as per local policy and refers to district nurse as per local policy. <p>Transplant co-ordinators</p> <ul style="list-style-type: none"> a. Educates and supports the patient to develop competence in self medication. b. Communicates discharge processes and encourages more independence. c. Involves family/carers in working towards discharge. d. Communicates with local referral centre progress post transplant and approximate discharge date. <p>Discharge planning - ward and transplant co-ordinator</p> <ul style="list-style-type: none"> a. Supports the patient to safely administer their medication. b. Ensures the patient can discuss type of medication, dosage, timing, side effects and any special requirements, for example delay tacrolimus on clinic days. c. Ensures the patient knows who to contact following discharge. d. Can discuss what to do in an emergency situation eg, unwell due to infection, jaundice, etc. 	<ul style="list-style-type: none"> • understand barriers to self medication • specific requirements re immunosuppressive medication eg, trough levels • early post transplant complications • the benefits and challenges of self medication • common immunosuppressive medication and their side effects • nutritional requirements initially post-transplant • healthy eating and weight management once initial nutritional needs have been reviewed by the dietitian • follow up post-discharge • health behaviours that may impact on the new organ, for example smoking or drinking alcohol. <p>Knows how to:</p> <ul style="list-style-type: none"> • contact other members of the MDT • refer for district nurse/practice services for wound management. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Empathetic. • Encouraging. • Supportive. • Works in partnership with others. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Models best practice. • Builds relationship with peers. • Shares ideas. • Facilitates involvement of stakeholders. • Works in partnership. • Empowering. • Embraces different perspectives. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelife.org.uk • Transplant Sport http://transplantsport.org.uk

13. Promotes specific interventions safely with regards to life-long immunosuppression and other post-liver transplant medications and side effects

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Provides specific interventions safely with regards to: life long immunosuppression, other post-liver transplant medications and side effects.	<ul style="list-style-type: none"> a. Assesses patient's knowledge and understanding of their life-long medication and its effects. b. Provides patient information about medications and their side effects. c. Ensures patient is safe at all times by observing, monitoring and recording all identified side effects and taking appropriate actions. d. Is alert to medications that should not be used following liver transplantation. e. Documents adherence with medications within medical and nursing notes. f. Ensures primary or secondary care providers receive patient medication information about life-long medication post transplant. 	<ul style="list-style-type: none"> • pharmacological therapies used post-transplantation including: <ul style="list-style-type: none"> - dose regime - contraindications eg, contraception - drug interactions - side effects - management/monitoring • core medication used such as immunosuppressants • medications that require close monitoring for potential interactions ie, clarithromycin • impact of analgesia on constipation post operatively • appropriate use of anti-coagulant, anti-biotics, anti-fungals and anti-virals. <p>Knows how to:</p> <ul style="list-style-type: none"> • recognise potential effects on the patient of non compliance such increasing liver function tests. • identification and recognising risks ie rejection, infection, bleeding. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelife.org.uk • Transplant Sport http://transplantsport.org.uk
6	Provides specific interventions safely with regards to: life long immunosuppression, other post-liver transplant medications and side effects.	<ul style="list-style-type: none"> a. Reviews and builds on understanding of the patient and family/carer and also other staff members with regard to medication and the side effects. b. Works with the pharmacist to provide appropriate information and guidance to patients and family/carer and also staff. c. Investigates and addresses reasons for non-adherence and refers to appropriate MDT members. d. Co-ordinates and acts as a point of contact regarding initial medication enquiries. 	<ul style="list-style-type: none"> • how the medication works in relation to prevention of rejection. • reasons why patients may be non-compliant and who to refer to • the indication of individual medications, when to continue or discontinue use and communicate with appropriate MDT member ie, tremor inappropriate behaviour, fitting, confusion and renal dysfunction. <p>Knows how to:</p> <ul style="list-style-type: none"> • communicate with the patient risks and benefits of possible treatment regimes. 	<ul style="list-style-type: none"> • Models best practice. • Empowering. • Works in partnership with others. • Open to receiving feedback. • Challenges others to maintain patient safety. 	

14. Healthy living post-transplant:

14.1 Promoting a healthy lifestyle post-liver transplant

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Promoting a healthy lifestyle post-liver transplant.	<p>a. Explores the concept of healthy liver and lifestyle.</p> <p>b. Supporting the patient and their families to return to a normal lifestyle</p> <p>c. Support patients and their families through and worries or barriers to achieving this.</p> <p>d. Provides information about lifestyle factors, consequences and services available to support lifestyle changes such as weight management.</p> <p>e. Works collaboratively with the patient and/or carers to assess their level of understanding of their post-liver transplant.</p> <p>f. Discusses various lifestyle choices with the patient and possible implications for their immediate and long-term health such as smoking.</p> <p>g. Identifies agreed patient goals that can be evaluated and reviewed periodically.</p> <p>h. Agrees appropriate risk profiling and investigations as part of the patient's self management plan.</p> <p>i. Supports the patient to re-engage with family (including sexual relationships) and work life.</p> <p>j. Encourages the patient to explore exercise as an adjunct to maintaining a healthy weight and mental wellbeing.</p> <p>k. Ensures patient understands the importance and rationale of being of sunsmart post-transplant.</p>	<ul style="list-style-type: none"> reducing the impact of immunosuppressive side effects strategies for patients to manage their risks of side effects from medications family planning counselling in relation to a planned pregnancy and changes in immunosuppression to facilitate this available resources and where and how to access them how cultural, ethnic and religious backgrounds influence lifestyle choices. <p>Knows how to</p> <ul style="list-style-type: none"> how to access help in identifying early complications post-liver transplant signpost patients and families to charities, social services to assist with a normal healthy lifestyle work collaboratively with the patient refer to counselling services. 	<ul style="list-style-type: none"> Aware of role limitations. Recognises own level of competence, able to identify learning needs. Accountable. Works in partnership. Supportive. Encouraging. Provides choices. Gives and receives feedback. Willing to reflect on and learn from own practice. Flexible. Non-judgmental. Passionate about patient care. Models best practice. Empowering. Collaborative. Inclusive. Honest and open. Works in partnership. Embraces different perspectives. 	<ul style="list-style-type: none"> NHS Blood and Transplant www.nhsbt.nhs.uk NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk Human Tissue Authority www.hta.gov.uk British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure Liver transplantation - https://easl.eu/publication/liver-transplantation Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> British Liver Trust www.britishlivertrust.org.uk Children's Liver Disease Foundation https://childliverdisease.org Live Life, Give Life https://lifelife.org.uk Transplant Sport http://transplantsport.org.uk

14. Healthy living post-transplant:

14.2 Health surveillance post-liver transplant

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Health surveillance post-liver transplant.	<ul style="list-style-type: none"> a. Undertakes a holistic health care needs assessment. b. Identifies patients at risk from osteoporosis, diabetes, hypertension, renal impairment, skin cancer, obesity, cerebral vascular risk factors, and need for vaccinations. c. Explores the patient's current lifestyle, hopes and expectations. d. Discusses the patient's cultural/family/ethnic background and identifies personal preferences. e. Identifies vulnerable individuals. f. Maintains confidentiality in relation to patient information and data. g. Documents comprehensive assessment. h. Uses all available resources to provide information and to ascertain the patient understands their illness/treatment options in their preferred language. i. Establishes patient concordance with treatment and recognises patient's individual treatment choices. 	<ul style="list-style-type: none"> • recognise the long-term health complications secondary to liver transplantation and medications that may affect physical and mental health • tools required to identify potential risks to health ie using sun screen to prevent skin cancer, dexa scan for bone health, regular hospital visits for blood tests to identify renal impairment or diabetes. • the implications of different life stages, lifestyles and risk factors on the transplanted liver • different cultures and faiths and the potential impact of these upon the patient's personal beliefs and viewpoints • the range of resources for information and support where the patient could be referred • obtaining consent from the patient • legal and ethical aspects of consent. <p>Knows how to:</p> <ul style="list-style-type: none"> • undertake holistic assessment including lifestyle, sexual health, social and mental health needs • consults, communicates and refers to appropriate support • recognise vulnerability across the age spectrum • access expertise in relation to caring for vulnerable individuals • access an interpreter/cultural mediator. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Works in partnership. • Supportive. • Encouraging. • Provides choices. • Gives and receives feedback. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelife.org.uk • Transplant Sport http://transplantsport.org.uk

14. Healthy living post-transplant:

14.3 Recognising the increased health risks post-liver transplant

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Recognising increased health risks post-liver transplant.	<p>a. Recognises patients individual treatment choices.</p> <p>b. Supports patients sensitively and empathetically when:</p> <ul style="list-style-type: none"> - undergoing risk profiling - receiving their results and diagnosis, which may include giving bad news, taking into account whether the patient is an adult or a young person. <p>c. Provides culturally sensitive patient and carer information about condition, local and national information, support groups and charities.</p> <p>d. Explores the impact of the patient's agreement or resistance to treatment options on their liver condition with regard to their cultural and ethnic background and life choices.</p>	<ul style="list-style-type: none"> • risk factors, such as, drugs, obesity, alcohol • information, such as, DH Drinkwise, education and support resources, services and specialist staff available • different communication and engagement approaches to providing education and information • health promotion, sexual health strategies and e-learning resources • positive lifestyle approaches and advice requirements for good information standards and the quality assurance and review processes for patient information documentation • knowledge of information sources – websites, leaflets, charities, kite-marked information • local and national charities • cultural and social risk factors such as Khat chewing, herbal and Chinese medications, specific nutritional supplements and other substances used to boost physical performance that may cause harm to the transplanted liver • culture, religion and ethnicity on health beliefs • lifestyle impact on liver transplant health including chaotic lifestyle, drugs, alcohol and obesity. <p>Knows how to:</p> <ul style="list-style-type: none"> • tailor information and education to the person • obtain educational information or direct patients/families/carers to available resources, services and staff, including the voluntary sector • work within their level of competence • recognise and use patient/service user information that is quality assured • use brief interventions and motivational interviewing around weight management, depression • develop collaborative agreements around commitment to health related behaviours • signpost support services such as weight watchers • refer to specialist nurses, transplant co-ordinators, palliative care and social services as needed • assess lifestyle factors in collaboration with the patient • manage refusal of care/treatment by patient, family or carers, and refer to a health care professional where appropriate. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Empathetic. • Encouraging. • Supportive. • Works in partnership with others. • Willing to reflect on and learn from own practice. • Flexible. • Non-judgmental. • Passionate about patient care. • Models best practice. • Builds relationship with peers. • Shares ideas. • Facilitates involvement of stakeholders. • Medico-legal implication. • Works in partnership. • Empowering. • Embraces different perspectives. 	<ul style="list-style-type: none"> • NHS Blood and Transplant – www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) – www.odt.nhs.uk • Human Tissue Authority– www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG)- www.basl.org.uk • British Transplantation Society – https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC – https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF – http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation – https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis – https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis <p>• BSG/BLTG guidelines in print</p> <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust – www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life – https://lifelivegivelife.org.uk • Transplant Sport – http://transplantsport.org.uk <p>Specific</p> <ul style="list-style-type: none"> • Drinkwise • Weight Watchers • PHE Alcohol Learning Resources • NICE – advances directives • End of life pathways • ICU support • Local palliative care pathways

14. Healthy living post-transplant:

14.3 Recognising the increased health risks post-liver transplant (continued)

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Recognising increased health risks post-liver transplant.	<ul style="list-style-type: none"> a. Interprets complex investigation results and procedures and explains these to patients. b. Ensures patient (and family/carers where relevant) understands risk profiling implications and results, and discusses options available. c. Works with specialists including specialist counsellors, palliative care experts where appropriate. d. Ensures timely referral to other clinical care providers where appropriate, and follow up. e. Contributes to quality assurance and accreditation processes around patient information. f. Manage and monitor complications. g. Assesses patients returning for ongoing follow-up. h. Refers patients to other members of the multidisciplinary team when appropriate. i. Audits assessment documentation in collaboration with the multidisciplinary team. j. Participates in multidisciplinary patient conferences. k. Keeps patients' GP, and community teams/services informed of ongoing consultation, health care needs and assessment progress. 	<ul style="list-style-type: none"> • risk profiling tests available, their implications and results • national standards and local guidelines • new or emerging therapies • complex treatment groups, such as co-infection, multiple aetiologies, and pre-transplant and post transplant issues • available resources and support services locally, regionally and nationally and their accreditation and quality assurance processes • referral systems and communication systems with general practitioners, community teams and school nurses. <p>Knows how to:</p> <ul style="list-style-type: none"> • refer to specialist counselling and palliative care services • quality assure and accredit patient information literature. • set-up, organise and run nurse-led clinics • establish telephone support and counselling systems. 	<ul style="list-style-type: none"> • Provides strong leadership. • Challenges assumptions and taken for granted ways of working. • Champions person-centred approaches. • Role model. • Collaborative. • Inclusive. • Participative. • Actively promotes better health for patients. 	See above.

15. Understand the importance of developing a robust liver outreach service

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6 or 7 depending on experience	Understand the importance of developing a robust liver outreach service.	<ul style="list-style-type: none"> a. Demonstrates collaboration between referral centre and tertiary centre. b. Undertakes pre-transplant shared assessments where required, alternate monitoring between sites as per local protocol. c. Communicates admission of patient to specific staff groups eg, specialist nurses, doctors, etc. in either the referral or tertiary centre as appropriate. d. Undertakes pre- and post-transplant shared care, as per local protocol. e. Early notification of changes to medications, treatment plans and follow up to all involved within care (GP, secondary, tertiary services). f. Effective and timely communication between sites. 	<ul style="list-style-type: none"> • understanding liver transplant process and procedure • understanding liver disease and the need for transplant • recognising deteriorating patients pre- and post-transplant, late rejection, infection, biliary complications, CMV • contacting and liaising with tertiary centre. • immunosuppressive therapy and its complications • increased psychological support required whilst waiting for a liver transplant and initial post-transplant phase • investigations and monitoring requirements whilst pre/post-transplant in a timely manner • transfer of images across different hospitals • ways of maintaining better health whilst waiting for a liver transplant ie, regular exercise and good nutrition • pre- and post-transplant surveillance. <p>Knows how to:</p> <ul style="list-style-type: none"> • manage the patient who is sick, deteriorating or becoming too unwell to transplant • communicate effectively with MDT • manage patient expectations • refer to specialist counseling and palliative care services. 	<ul style="list-style-type: none"> • Empowering. • Actively promotes better health for patients. • Partnership working. • Supportive. • Encouraging. • Flexible. • Good listening skills. • Non-judgemental. • Collaborative. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG)) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>EASL Clinical Practice Guidelines</p> <ul style="list-style-type: none"> • HCC - https://easl.eu/publication/easl-clinical-practice-guidelines-management-of-hepatocellular-carcinoma • ALF - http://www.easl.eu/research/our-contributions/clinical-practice-guidelines/detail/management-of-acute-fulminant-liver-failure • Liver transplantation - https://easl.eu/publication/liver-transplantation • Decompensated cirrhosis - https://easl.eu/publication/management-of-patients-with-decompensated-cirrhosis • BSG/BLTG guidelines in print www.britishlivertrust.org.uk

16. Organ donation:

16.1 Organ donation and innovations

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Organ donation and innovations.	<ul style="list-style-type: none"> a. Able to offer information and education on organ donation and signpost to available resources. b. Discuss the different types of organ donation, including the risk and benefits. c. Able to offer information on types of consent. d. Discusses the risks and benefits of organ donation and transplantation. e. Offers psychological support. f. Able to manage expectations of others. g. Accurately disseminates information to local teams. 	<ul style="list-style-type: none"> • types of donors – DCD, DBD, live • contra indicators to organ donation • high risk donor and potential impact if organs used • use of the electronic offering system (EOS), etc • national allocation for both local and national offering • confidentiality • eligibility for transplant • types of grafts – split, marginal, domino • likelihood of transplant going ahead • impact of cold ischaemic time (CIT), warm ischaemic time (WIT) on the donor organ • donor and recipient factors involved in the calculation of the Transplant benefit score (TBS) • patient-centered safety such as blood group, WHO safe surgical checklist • law with regard to human tissue and organ donation • presumed consent • a range of preservation machines and how they work • future technologies such as 3D printing and cellular matrix innovations. <p>Knows how to:</p> <ul style="list-style-type: none"> • refer people interested in live donation to the appropriate service. 	<ul style="list-style-type: none"> • Collaborative working across a range of organisations. • Challenges others. • Strong clinical leadership. • Supportive. • Understanding. • Confidential. • Accountable. • Patient-centred safety. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelife.org.uk • Transplant Sport http://transplantsport.org.uk

16. Organ donation:

16.2 Understands the importance of law in organ donation and transplantation

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6 or 7 depending on experience	Understands the importance of law in organ donation and transplantation.	<p>a. Provides expert knowledge and inter-professional collaborative practice and consultation to individual patients and service users across specific patient pathways based on holistic assessment, national guidelines, specialist competencies and best practice, documenting this care as an accountable practitioner.</p> <p>b. Discusses with patients and family/ carer the significance of risks and complications associated with liver transplant and the consent process.</p> <p>c. Has an understanding of the laws surrounding organ donation including Organ Donation (deemed consent) Act 2019 (Max and Keira's law) and existing organ donation law in Wales.</p> <p>d. Understands to importance of donor/ recipient confidentiality.</p> <p>e. Understands the requirements regarding the Human Tissue Authority (HTA)</p> <p>f. Keeps up to date with best practice for specific patient pathways through national specialist forums, journals and networking.</p>	<ul style="list-style-type: none"> • relevant HTA requirements • relevant NHSBT guidelines. <p>Knows how to:</p> <ul style="list-style-type: none"> • ensure confidentiality about donor and recipient are maintained • communicates risks and complications with recipient and family in regards to consent • promote organ donation and explain opt out system. 	<ul style="list-style-type: none"> • Works in partnership. • Empowering. • Embraces different perspectives. • Analytical. • Attention to detail. • Models best practice. 	<ul style="list-style-type: none"> • NHS Blood and Transplant www.nhsbt.nhs.uk • NHS Blood and Transplant Organ Donation and Transplantation (ODT Clinical) www.odt.nhs.uk • Human Tissue Authority www.hta.gov.uk • British Association of the Study of the Liver (including British Liver Nurses' Association (BLNA) and British Liver Transplant Group (BLTG) www.basl.org.uk • British Transplantation Society https://bts.org.uk <p>NICE</p> <ul style="list-style-type: none"> • NICE Interventional Procedures guidance (IPG) 535 Living-Donor Liver Transplantation www.nice.org.uk/guidance/ipg535 <p>Charities</p> <ul style="list-style-type: none"> • British Liver Trust www.britishlivertrust.org.uk • Children's Liver Disease Foundation https://childliverdisease.org • Live Life, Give Life https://lifelife.org.uk • Transplant Sport http://transplantsport.org.uk <p>Specific</p> <ul style="list-style-type: none"> • Keeping up to date with changes in the law.

Appendix 1: Examples of evidence to meet *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing**

Examples of evidence

Senior staff nurse/junior sister role

Competence number 1 - Collaboratively works with the liver patient (and their family/carer) to manage their liver disease

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
6	Collaboratively works with the liver patient (and their family/carer) to manage their liver disease.	a. Supports team members to co-develop, implement and evaluate personal care plans. b. Acts as a role models to ensure that team members enable the patient's voice to be heard and acted on.	<ul style="list-style-type: none"> advocacy needs for those who are less able to act for themselves due to their liver condition leading to challenging behaviour, depression or inability to articulate their needs due to hepatic encephalopathy or other cognitive impairment acute and long-term complications related to liver disease strategies patients can use for managing co-morbidities local and national strategy for patients with liver disease and how to contribute measures of patient experience and risk assessment matrix. <p>Knows how to:</p> <ul style="list-style-type: none"> build and foster an equitable nurse-patient relationship work with patients with challenging behaviour and collaboratively develop care plans diffuse anger and challenging behaviour develop care plans in conjunction with local guidelines. 	<ul style="list-style-type: none"> Models best practice. Actively promotes better health for patients. Challenges others. 	<ul style="list-style-type: none"> Plans, implements and evaluates an agreed care plan with the patient and/or their carers. Can demonstrate understanding of patient's care needs and advocates for the patient on the ward round or at relevant MDT meetings. Gives appropriate information to patients or their carers and sign posts them to other sources of information such as the British Liver Trust. Able to write a reflective account of an episode of care that may be challenging for their own personal and professional development. Is able to support junior nurses in assessing and implementing a care plan that focuses on an aspect of care such as hepatic encephalopathy, continued alcohol dependence and/or depression. Is able to undertake or contribute to relevant liver nursing audits, disseminate outcomes and change practice where relevant. Identify own learning needs to support these patients such as a formal liver education at a higher education institute; local and national liver related study days or local course such as conflict resolution or specific management and leadership courses.

* These are intended only as a guide in order to achieve an individual competence. There may be other examples of liver nursing care that could be used as evidence to achieve the competence.

Practice nurse role

Competence number 2 – Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion

Examples of evidence

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
5	Supports patients (and family/carers) in their understanding of their condition through patient education and health promotion.	<ul style="list-style-type: none"> a. Assesses knowledge and understanding of patient's and carer's own condition, causes, risk factors and consequences. b. Provides tailored education to patient and family/carers on condition, treatments and side effects. c. Provides information about lifestyle factors, consequences and services available to support lifestyle changes. d. Refers to other appropriate health care professionals if required. 	<ul style="list-style-type: none"> • risk factors, such as drugs, obesity, alcohol • information, such as DH Drinkwise, education and support resources, services and specialist staff available • different communication and engagement approaches to providing education and information • health promotion, sexual health strategies and e-learning resources • positive lifestyle approaches and advice • how to give brief advice and interventions for patients with alcohol misuse, and people who inject drugs (PWID). <p>Knows how to:</p> <ul style="list-style-type: none"> • tailor information and education to the person • obtain educational information or direct patients/families/carers to available resources, services and staff, including the voluntary sector • work within their level of competence. 	<ul style="list-style-type: none"> • Aware of role limitations. • Recognises own level of competence, able to identify learning needs. • Accountable. • Empathetic. • Encouraging. • Supportive. • Non-judgmental. • Works in partnership with others. • Willing to reflect on and learn from own practice. • Flexible. • Passionate about patient care. 	<ul style="list-style-type: none"> • Attends accredited local updates on liver disease. • Local education through e-learning. • Develops with the practice lead a screening and health education programme that incorporates issues around liver health such as alcohol, risk factors for viral hepatitis, family history of liver disease, obesity, previous blood transfusions, tattoos or piercings, recent overseas travel and sexual health. • Develops awareness of links to other chronic disease groups such as diabetes, metabolic syndrome, heart disease. • Has attended relevant course or updates in areas such as motivational interviewing, brief advice or intervention related to alcohol. • Understands and develops a pathway for referral of patients with possible liver disease to relevant service such as drugs and alcohol or local viral hepatitis services. • Demonstrates awareness of available liver resources such as websites and charities.

* These are intended only as a guide in order to achieve an individual competence. There may be other examples of liver nursing care that could be used as evidence to achieve the competence.

Clinical nurse specialist role

Competence number 3 - Undertakes a comprehensive clinical assessment of the liver patient

Examples of evidence

Level	Competence	Performance criteria	Knowledge and understanding of:	Attitudes and behaviours	Contextual factors
7	Undertakes a comprehensive clinical assessment of the liver patient.	<p>a. Assesses, diagnoses and treats people with on-going living disease and its complications.</p> <p>b. Undertakes a medical history, completes a detailed physical and nursing examination, formulates a diagnosis, initiates investigations and/or treatments and refers to specialist teams as appropriate.</p> <p>c. Diagnoses new or worsening complications of acute and chronic liver disease.</p> <p>d. Identifies early signs of other diseases.</p> <p>e. Provides the patient with information on how to manage and monitor specific symptoms.</p> <p>f. Implements end of life care for the patient and their family, provides support and refers to the appropriate health professionals.</p>	<ul style="list-style-type: none"> all causes of liver disease including those related to occupation and travel complications of acute and chronic liver disease design, implement and evaluate a management plan that included the specific signs and symptoms or side effects: such as: <ul style="list-style-type: none"> pruritus skin rashes as side effects of drug treatments hypotension due to drug related reasons, such as betablocker, and non-drug related reasons such as decompensated liver disease jaundice biliary complications such as cholecystitis and/or cholangitis portal hypertension and oesophageal varices ascites/spontaneous bacterial peritonitis hepatorenal failure hepatic encephalopathy risk of cerebral oedema in acute liver failure sepsis which often precipitates variceal bleeding or hepatic encephalopathy cardiovascular and respiratory complications coagulopathy recognise the signs and symptoms of alcohol and /or drug withdrawal treatment regimes, including eligibility and suitability criteria for different liver diseases options following failure of treatment, such as early referral for liver transplantation assessment in chronic liver disease (See competence 10.1 Referral for consideration of liver transplantation) palliation of symptoms such as chemoembolisation or paracentesis and planning for end of life care. <p>Knows how to:</p> <ul style="list-style-type: none"> undertake a detailed clinical and nursing assessment undertake an abdominal assessment and other systems as appropriate. explain significance of any investigations to patients initiate investigations appropriately act on investigations and interpret results including liver screen formulate an appropriate management plan including, where appropriate, end of life care identify acute alcohol withdrawal and safely provide pharmacological management of symptoms during an episode of acute alcohol withdrawal administer treatment within their specialist role as a non-medical prescriber recognise, manage and refer patients in relation to their co-morbidities assess competence of nurses undertaking clinical assessments act as a role model. 	<ul style="list-style-type: none"> Role model. Inter-professional working. Collaborative. Inclusive. Strong clinical leadership. Champions person-centred approaches. Challenges assumptions and accepted ways of working. Actively promotes better health for patients. 	<ul style="list-style-type: none"> Demonstrates a wide range of knowledge and experience of managing patients with acute and chronic liver disease. Advanced assessment skill course at degree or masters level. Formal liver education at degree or masters level. Independent prescribing course at degree or masters level. Presents patients and care plans to multidisciplinary team. Keeps up-to-date with new and changing treatments through study days such as: <ul style="list-style-type: none"> RCN Gastrointestinal Nursing Forum British Liver Nurses' Association (BLNA), Or relevant medical conferences such as: <ul style="list-style-type: none"> British Society of Gastroenterology (BSG) British Association for the Study of the Liver (BASL) European Association for the Study of the Liver (EASL) American Association for the Study of Liver Diseases (AASLD). Relevant advanced clinical practice documents to support clinical role. Presenting work at conferences. Writing local and national guidelines. Publishing articles in nursing and/or medical journals. Demonstrating leadership and initiating change. Focused on patient outcomes, working with the patient or specific groups eg, viral hepatitis, alcohol related liver disease and NAFLD.

* These are intended only as a guide in order to achieve an individual competence. There may be other examples of liver nursing care that could be used as evidence to achieve the competence.

Appendix 2: Blank competence sheet to produce own evidence for *Caring for People with Liver Disease including Liver Transplantation: a Competence Framework for Nursing*

Name _____ Role _____ Hospital _____

Level	Competence	Evidence to achieve competence

Has the competence been achieved? YES NO

Please make comments and if any further planning required:

Nurse signature

Assessor signature

Date

Appendix 3: References

- Babor T, Higgins-Biddle J, Saunders J, Monteiro M (2011) *AUDIT The Alcohol Use Disorders Identification Test Guidelines for use in primary care 2nd edition*, WHO.
- Benner P (1982) From novice to expert. *American Journal of Nursing*, 82(3), pp.402-407.
- National Confidential Enquiry into Patient Outcome and Death (NCEPOD) (2013) *Alcohol-related liver disease: measuring the units*. Available at: www.ncepod.org.uk [accessed 21 August 2019].
- NHS Employers (2011) Agenda for change pay. Available at: www.nhsemployers.org/yourworkforce/pay-and-reward/pay/agenda-for-change-pay [accessed 6 August 2019].
- NICE (2012) *Hepatitis B & C - ways to promote and offer testing*, PH43. NICE: London.
- NICE (2014) *Obesity identification, assessment and management of overweight and obesity in children, young people and adults*, CG 189. NICE: London. Available at: www.nice.org.uk/guidance/cg189 [accessed 6 August 2019].
- NMC (2015) Revalidation (online). Available at: www.nmc.org.uk/standards/revalidation [accessed 6 August 2019].
- Nursing and Midwifery Council (2018) *The Code: Professional standards of practice and behaviour for nurses and midwives*, NMC: London. Available at: www.nmc.org.uk/standards/code/read-the-code-online [accessed 6 August 2019].
- Public Health England (2019) *Palliative and end of life care: hospital deaths 2006-2017*, PHE: London. Available at: www.gov.uk/government/publications/palliative-and-end-of-life-care-hospital-deaths-2006-to-2017 (accessed 21 August 2019)
- Royal College of Nursing (2010) *Principles of Nursing Practice*, RCN: London. Available at: www.rcn.org.uk/publications [accessed 21 August 2019].
- Roach M S (1992) *The human act of caring*. Ottawa Canadian Hospitals Association.
- Skills for Health Career Framework. Available at: www.skillsforhealth.org.uk/workforce-transformation/customised-career-frameworks-services [accessed 6 August 2019].
- Williams R., Aspinall R., Bellis M., et al Addressing Liver Disease in the UK: a blueprint for attaining excellence in healthcare and reducing premature mortality from lifestyle issues of excess consumption of alcohol, obesity and viral hepatitis, *Lancet* 2014, 38:1953-97. Available at: [www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)61838-9/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61838-9/fulltext) [accessed 21 August 2019].

Appendix 4: Useful contacts

Alcohol Change UK

<https://alcoholchange.org.uk>

American Association for the Study of Liver Disease (AASLD)

www.aasld.org/publications/practice-guidelines

Autoimmune patient support group

www.autoimmunehepatitis.org.uk

British Liver Nurses' Association

www.basl.org.uk/index.cfm/content/page/cid/4

British Society of Gastroenterology (BSG)

www.bsg.org.uk

British Association of the Study of the Liver (BASL)

www.basl.org.uk

British Liver Trust (BLT)

www.britishlivertrust.org.uk

Children's Liver Disease Foundation (CLDF)

www.childliverdisease.org

Critical Care Networks – Specialist competencies Liver

www.cc3n.org.uk/uploads/9/8/4/2/98425184/liver_comps_final_aug_2019.pdf

European Association for the Study of Liver Disease (EASL)

www.easl.eu/discover

Haemochromatosis UK

<https://haemochromatosis.org.uk>

The Hepatitis B Positive Trust

www.hepbpositive.org.uk

The Hepatitis C Trust

www.hepctrust.org.uk

Liver4life

www.liver4life.org.uk

PBC Foundation

www.pbcfoundation.org.uk

PSC Support

www.pscsupport.org.uk

Rare Diseases UK

www.raredisease.org.uk

Royal College of Nursing Gastrointestinal Nursing Forum

www.rcn.org.uk/get-involved/forums/gastrointestinal-nursing-forum

Wilson's Disease Support Group UK

www.wilsonsdisease.org.uk/WDSG-P0.asp



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