

Decompensated Chronic Liver Disease

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Target Audience:	Clinicians looking after patients with Decompensated Chronic Liver Disease
Key Words:	Ascites, Spontaneous bacterial peritonitis, Encephalopathy, Paracentesis

Version Control Sheet

Version	Date	Author	Status	Comment
2.0	Nov 2010	Dr Suri, Dr Haidry		New guideline reviewed at CGC
3.0	March 2015	Dr Suri, Dr Hegde		Reviewed with amendments as below: 1.Added use of Rifaxamin in Hepatic Encephalopathy based on guidelines: Hepatic Encephalopathy in Chronic Liver Disease: 2014 EASL and AASLD Guidelines. 2.Added Decompensated Cirrhosis Care Bundle - First 24 Hours:as recommended by BSG.

➤ **Criteria for use**

1. Management of Ascities
2. Management of spontaneous bacterial peritonitis(SBP)
3. Management of Hepatic Encephalopathy(HE)
4. Management of Hepato-Renal syndrome(HRS)

➤ **Background/ introduction**

Patients with CLD and cirrhosis often remain asymptomatic but can decompensate with a mortality up to 20% over 5 years.

The main causes of CLD are:

- Alcoholic liver disease
- Hepatitis B and C
- Autoimmune liver disease
- Primary Biliary Cirrhosis
- Primary Sclerosing Cholangitis

This document provides guidance on how to best manage patients with decompensated CLD.

Decompensation is characterised by:

1. Ascites
2. Spontaneous bacterial peritonitis (SBP)
3. Hepatic encephalopathy
4. Variceal bleeding

➤ **Assessment of patients in whom you suspect acute decompensation**

A copy of the cirrhosis care bundle(see below) should be completed and filed in each patient's notes:

This checklist aims to provide a guide to help ensure that the necessary early investigations are completed in a timely manner and appropriate treatments are given at the earliest opportunity:

Clinical signs you may find in patients with chronic liver disease:

Palmar erythema

Spider naevi

Dupytren's contracture

Leuconychia and digital clubbing

Gynaecomastia

Jaundice

Ascites (shifting dullness)

Peripheral oedema

Encephalopathy

Flapping tremor (asterixis)

Prominent abdominal veins (Caput medusae)

Splenomegaly

Assess the severity and prognosis of cirrhosis with the Charles Pugh score:

Measure	1 point	2 points	3 points	units
Bilirubin (total)	<34	34-50	>50	µmol/l (mg/dl)
Serum albumin	>35	28-35	<28	g/l
INR	<1.7	1.71-2.20	> 2.20	no unit
Ascites	None	Suppressed with medication	Refractory	no unit
Hepatic encephalopathy	None	Grade I-II (or suppressed with medication)	Grade III-IV (or refractory)	no unit

- (A) Less than 7 points
- (B) 7 – 9 points
- (C) Greater than 9 points

Survival of cirrhosis (one year):

- (A) 84%
- (B) 62%
- (C) 42%

Hepatic Encephalopathy

Grading of Encephalopathy:

Grade I- drowsy, shortened attention span, anxiety

Grade II- drowsy, confused, inappropriate, disorientation to time and place

Grade III- very drowsy, gross disorientation

Grade IV - comatose, barely rousable

➤ **Investigations**

Blood tests:

FBC, U & E's, LFT's, group & save, clotting, phosphate. LFTs need not be repeated if performed recently.

Blood cultures

Blood tests to determine aetiology: If not done previously then

- Viral serology- Hepatitis B Ag & Hepatitis A IgM, Hepatitis C. Serology need not be repeated if performed in recent past and no new risk factors are present.
- Plasma caeruloplasmin- if <40 yrs
- Autoantibodies (Anti-nuclear antibody/Anti-mitochondrial antibody/Smooth muscle antibody)
- Immunoglobulins
- Ferritin
- Alpha-feto protein

USS (liver) and Doppler of vessels:

To assess portal vein patency, hepatic veins, any ascites, hepatic outline, spleen size

➤ Performing a diagnostic paracentesis

- diagnostic paracentesis is **mandatory** for all patients admitted with cirrhosis and ascites.
- Since bleeding is sufficiently uncommon, the routine prophylactic use of FFP or platelets before paracentesis is not recommended.
- Strict sterile conditions should be maintained. The commonest site is 15cm lateral to the umbilicus or where there is maximum dullness. Avoid vascular structures on the skin
- Informed consent should be obtained and documented in the notes
- 50ml of fluid should be withdrawn using a blue or green needle after local anaesthetic (lignocaine 1 or 2%) has been infiltrated to the peritoneum.

Fluid should be placed into:

- A white topped container for a white cell count to Microbiology. A white cell count (WCC) $> 500/\text{mm}^3$ or Neutrophil count $> 250/\text{mm}^3$ is diagnostic of spontaneous bacterial peritonitis (SBP).
- A white topped container for biochemistry – albumin to obtain the serum albumin-ascites gradient (SAAG) ($>11\text{g/l}$ = ascites due to portal hypertension)
- A third sterile container should be filled if there is suspicion that the diagnosis may be a cause other than SBP. It should not be routinely sent for analysis unless the neutrophil count is $> 250/\text{mm}^3$. It should then be analysed for LDH, amylase and a Gram stain performed.
- Consider sending another sample for cytology if malignancy is suspected
- A set of Blood culture bottles to increase the diagnostic yield.

Complications are rare

- Infection and inflammation around the site
- Abdominal wall haematomas ~ 1% 8
- Perforated bowel/ haemoperitoneum $<1/1000$ 9

Relative contraindications (either)

- Platelet counts of $<40 \times 10^9$
- INR > 2

Therapeutic paracentesis is reserved for the following patients:

- 1) Diuretic refractory ascites
- 2) Tense ascites causing significant discomfort, including respiratory impairment
- 3) Ascites with the onset of renal impairment

A Bananno catheter should be inserted using aseptic technique. During paracentesis all patients should be monitored for haemodynamic compromise. On average for every 2 litres of ascites removed, albumin replacement with 50mls 20% Human Albumin Solution should take place. The drain must never remain in situ for more than 12 hours due to the risk of introducing infection.

➤ Management of Ascites

Moderate ascites:

-Refer to Dietician: Moderate restriction of salt intake (intake of sodium of 80–120 mmol/day, which corresponds to 4.6–6.9 g of salt/day). This is generally equivalent to a no added salt diet with avoidance of pre-prepared meals.

-There is insufficient evidence to recommend bed rest as part of the treatment of ascites.

-There are no data to support the use of fluid restriction in patients with ascites with normal

serum sodium concentration.

- Fluid restrict to 1 litre if Sodium (Na) <125 mmol/L .

Diuretics:

- **Spirolactone** 100mg/day od orally- can be increased to 400mg od. Increase dose by 100mg every 7 days.

- If the Ascites does not improve, as defined by a reduction of body weight of less than 2kg/week or if hyperkalemia, then **Furosemide** 40mg od orally initially. This can be increased to 160mg daily with close monitoring of U&E's.

-The recommended weight loss during diuretic therapy should be **0.5kg/day in patients without oedema and 1kg/day in patients with oedema.**

-All diuretics should be **discontinued** if there is severe hyponatremia, progressive renal failure, worsening hepatic encephalopathy or incapacitating muscle cramps.

-The goal of long-term treatment is to maintain patients free of ascites with the minimum dose of diuretics. Thus, once the ascites has largely resolved, the dose of diuretics should be reduced and discontinued later, whenever possible.

Large ascites:

Large-volume paracentesis (LVP) is the first-line therapy in patients with large ascites (grade 3 ascites). LVP should be completed in a single session LVP should be performed together with the administration of albumin (8 g/L of ascitic fluid removed) to prevent circulatory dysfunction after LVP. In patients undergoing LVP of **greater than 5 L** of ascites, the use of plasma expanders other than albumin is not recommended because they are less effective in the prevention of post-paracentesis circulatory dysfunction. In patients undergoing LVP of **less than 5 L** of ascites, the risk of developing post-paracentesis circulatory dysfunction is low. However, it is generally agreed that these patients should still be treated with albumin because of concerns about use of alternative plasma expanders. After LVP, patients should receive the minimum dose of diuretics necessary to prevent the re-accumulation of ascites.

Refractory ascites:

Repeated large-volume paracentesis plus albumin (8 g/L of ascites removed) is the first line of treatment for refractory ascites. Diuretics should be discontinued in patients with refractory ascites who do not excrete >30 mmol/day of sodium under diuretic treatment.

TIPS is effective in the management of refractory ascites but is associated with a high risk of hepatic encephalopathy. TIPS should be considered in patients with very frequent requirement of large-volume paracentesis, or in those in whom paracentesis is ineffective (e.g. due to the presence of loculated ascites). Resolution of ascites after TIPS is slow and most patients require continued administration of diuretics and salt restriction

-Hyponatraemia:

- Patients with established Cirrhosis will often be chronically hyponatraemic, managing their fluid balance is complex :

126-135 mmol/L - continue diuretic therapy

121-125 mmol/L - stop diuretic therapy

<121 mmol/L - stop diuretic & consider volume expansion with colloid or sodium chloride 0.9%

- Consider 24 hour sodium collection.

- Vaptans are effective but currently not licensed in the UK.

Drugs to avoid in ascites:

-NSAIDs are contraindicated with ascites because of the risk of renal failure. ACE inhibitors and angiotensin II antagonists should generally be avoided.

Aminoglycosides are also best avoided. Contrast media should be used with caution and general preventive measures of renal impairment is recommended.

➤ Management of Spontaneous Bacterial Peritonitis(SBP):

-A diagnostic paracentesis should be carried out in all patients with cirrhosis and ascites at hospital admission to rule out SBP.

-A diagnostic paracentesis should also be performed in patients with gastrointestinal bleeding, shock, fever, or other signs of systemic inflammation, gastrointestinal symptoms, as well as in patients with worsening liver and/or renal function, and hepatic encephalopathy.

-The diagnosis of SBP is based on neutrophil count in ascitic fluid of $>250/\text{mm}^3$ as determined by microscopy.

-Ascitic fluid culture is frequently negative even if performed in blood culture bottles, but it is important to guide antibiotic therapy.

-Blood cultures should be performed in all patients with suspected SBP before starting antibiotic treatment

-Some patients may have an ascitic neutrophil count less than $250/\text{mm}^3$ but with a positive ascitic fluid culture. This condition is known as bacterascites. If the patient exhibits signs of systemic inflammation or infection, the patient should be treated with antibiotics. Otherwise, the patient should undergo a second paracentesis.

-Empirical antibiotics should be started immediately following the diagnosis of SBP.

-Since the most common causative organisms of SBP are Gram-negative aerobic bacteria, such as *E. coli*, the first line antibiotic treatment are third-generation cephalosporins. Ceftriaxone 2g should be given IV od 14 for 5 days, OR

Ciprofloxacin 500mg bd PO or 200mg bd IV may be used if penicillin allergic

-SBP resolves with antibiotic therapy in approximately 90% of patients. Resolution of SBP should be proven by demonstrating a decrease of ascitic neutrophil count to $<250/\text{mm}^3$

and sterile cultures of ascitic fluid, if positive at diagnosis. A second paracentesis after 48 h of start of treatment may help guide the effect of antibiotic therapy.

-The gastroenterology team should be made aware of all patients diagnosed with SBP.

-Consider long term prophylaxis with **norfloxacin (400 mg/day):**

-if previous SBP

-patients with severe liver disease with ascitic fluid protein lower than 15 g/L and without prior SBP



Please see Whittington Health Guideline:

<http://whittnet/document.ashx?id=1995>

'GI Antibiotics Usage' and Guidelines for Antimicrobial use in Gastro

➤ Management of Hepato-Renal Syndrome:

Criteria for diagnosis of hepatorenal syndrome in cirrhosis.

1. Cirrhosis with ascites
2. Serum creatinine >1.5 mg/dl (133 μ mol/L)
3. Absence of shock
4. Absence of hypovolemia as defined by no sustained improvement of renal function (creatinine decreasing to <133 μ mol/L) following at least 2 days of diuretic withdrawal (if on diuretics), and volume expansion with albumin at 1 g/kg/day up to a maximum of 100 g/day.
5. No current or recent treatment with nephrotoxic drugs
6. Absence of parenchymal renal disease as defined by proteinuria <0.5 g/day, no microhaematuria (<50 red cells/high powered field), and normal renal ultrasonography

-It is important to make the diagnosis of HRS or identify other known causes of renal failure in cirrhosis as early as possible.

-Parameters to be monitored include urine output, fluid balance, and arterial pressure, as well as standard vital signs. Ideally central venous pressure should be monitored to help with the management of fluid balance and prevent volume overload. Patients are generally better managed in an intensive care or semi-intensive care unit

Drug therapy for hepatorenal syndrome:

Terlipressin (1 mg/4–6 h intravenous bolus) in combination with albumin

should be considered the first line therapeutic agent for HRS. The aim of therapy is to improve renal function sufficiently to decrease serum creatinine to less than 133 μ mol/L (1.5 mg/dl) (complete response). If serum creatinine does not decrease at least 25% after 3 days, the dose of terlipressin should be increased in a stepwise manner up to a maximum of 2 mg/4 h. For patients with partial response

(serum creatinine does not decrease $<133 \mu\text{mol/L}$) or in those patients without reduction of serum creatinine treatment should be discontinued within 14 days

- Contraindications to terlipressin therapy include ischemic cardiovascular diseases. Patients on terlipressin should be carefully monitored for development of cardiac arrhythmias or signs of splanchnic or digital ischemia, and fluid overload, and treatment modified or stopped accordingly. Recurrence of HRS after discontinuation of terlipressin therapy is relatively uncommon. Treatment with terlipressin should be repeated and is frequently successful.

Non-pharmacological therapy of hepatorenal syndrome:

-Insertion of TIPS may improve renal function in some patients, there are insufficient data to support the use of TIPS as a treatment of patients with type 1 HRS.

-Renal replacement therapy may be useful in patients who do not respond to vasoconstrictor therapy, and who fulfill criteria for renal support.

-Liver transplantation is the best treatment for HRS.

Prevention of hepatorenal syndrome:

Patients who present with SBP should be treated with intravenous albumin since this has been shown to decrease the incidence of HRS and improve survival

➤ **Management of Hepatic Encephalopathy(HE):**

-HE produces a wide spectrum of neurological or psychiatric abnormalities ranging from subclinical alterations to coma.

-90% can be treated with just correction of the precipitating factor and is the cornerstone of management. Precipitating factors in decreasing frequency in episodic HE are:

Infections, GI bleeding, Diuretic overdose, Electrolyte disorder, Constipation

-The diagnosis of HE is by exclusion of other causes of brain dysfunction. The differential diagnosis included: hypoglycaemia, alcohol intoxication, drugs, electrolyte disorders and intracranial bleeding and stroke. A diagnostic workup is required.

-A CT scan or MRI brain does not contribute to diagnosis of HE but is usually part of the work up as intracerebral haemorrhage risk is fivefold higher in this patient group.

-High blood ammonia levels do not add to the diagnosis or prognosis. However in case it is checked and is normal, the diagnosis of HE is in question.

- If GCS is low (less than 8) involve ITU early for airway management.

- A nasogastric tube (NGT) should be considered

- Lactulose- It is used as initial treatment of HE. Start with 20 – 30 ml TDS until 2-3 soft stools. Larger doses do not help and could cause complications.

-Rifaximin at 550mgs BD has been found to be superior to other antibiotics and can be used as long term cyclical therapy over 3-6 months in recurrent HE as add-on to lactulose.

-Metronidazole or neomycin is an alternative choice for treatment of HE.

- NG tube for nutritional care. Nutrition is paramount in these patients and aids with early recovery. Refer to Dietician in these cases.

- Consider need for pabrinex/thiamine and vitamin B compound supplements.

-Secondary prophylaxis after an episode of HE is recommended treatment is usually longterm.Lactulose and rifaximin combination is the best documented agent for secondary prevention of HE.



Please see Whittington Health Guideline:

Upper GI Haemorrhage: Please see a separate guideline
Whittington Health intranet.

<http://whittnet/document.ashx?id=4899>

Contacts(Inside and outside the trust including out-of-hours)

- Please see Whittington Health Guideline:
- In Hours: GI SpR(3036/3013)
- Out of hours: DMR(Bleep 3300)
- For advice: On call team at Royal Free Hospital

Compliance monitoring

Regular audits with results to be presented at departmental meetings

References:

1. Hepatic Encephalopathy in Chronic Liver Disease: 2014 EASL and AASLD Guidelines.
2. EASL clinical practice guidelines on the management of ascites, spontaneous bacterial peritonitis, and hepatorenal syndrome in cirrhosis: Hepatology 2010 vol. 53,397-417.
3. Moore KP, Aithal GP. Guidelines on the management of ascites in cirrhosis. Gut. 2006;55:1-12. www.bsg.org.uk
4. Oxford Handbook of Acute Medicine

Patient details



Decompensated Cirrhosis Care Bundle - First 24 Hours

Decompensated cirrhosis is a medical emergency with a high mortality. Effective early interventions can save lives and reduce hospital stay. This checklist should be completed for all patients admitted with decompensated cirrhosis within the first 6 hours of admission.

1. Investigations								
a)	NEWS <input type="checkbox"/>	FBC <input type="checkbox"/>	U/E <input type="checkbox"/>	LFT <input type="checkbox"/>	Coag <input type="checkbox"/>	Gluc <input type="checkbox"/>	Ca/PO ₄ /Mg <input type="checkbox"/>	
b)	Blood cultures <input type="checkbox"/>			Urine Dip/MSU <input type="checkbox"/>	CXR <input type="checkbox"/>	Request USS abdo <input type="checkbox"/>	CRP <input type="checkbox"/>	
c)	Perform ascitic tap in all patients with ascites using green needle irrespective of clotting parameters and send for ascitic PMN/WCC, culture and fluid albumin						Done Y N	N/A <input type="checkbox"/>
d)	Record recent daily alcohol intake			 Units			
2. Alcohol - if the patient has a history of current excess alcohol consumption (>8 units/day Males or >6 units/day Females)								
							N/A <input type="checkbox"/>	
a)	Give IV Pabrinex (2 pairs of vials three times daily)					Y	N	
b)	Commence CIWA score if evidence of alcohol withdrawal					Y	N N/A	
3. Infections - if sepsis or infection is suspected								
							N/A <input type="checkbox"/>	
a)	What was the suspected source?.....							
b)	Treat with antibiotics in accordance with Trust protocol						Y	N
c)	If the ascitic neutrophils >0.25 x 10 ⁹ /L (>250/mm ³)(i.e. SBP) then give:						Y	N
	i)	Treat with antibiotics as per trust protocol					Y	N NA
	ii)	IV albumin (20% Human Albumin solution) 1.5g/kg (20g of albumin in 100ml of 20% Human Albumin Solution)					Y	N NA
4. Acute kidney injury and/or hyponatraemia (Na <125 mmol/L)								
							N/A <input type="checkbox"/>	
AKI defined by modified RIFLE criteria		1: Increase in serum creatinine ≥ 26µmol/L within 48hrs <i>or</i>						
		2: ≥50% rise in serum creatinine over the last 7 days <i>or</i>						
		3: Urine output (UO) <0.5mls/kg/hr for more than 6 hrs based on dry weight <i>or</i>						
		4: Clinically dehydrated						
a)	Suspend all diuretics and nephrotoxic drugs					Y	N NA	
b)	Fluid resuscitate with 5% Human Albumin Solution or 0.9% Sodium Chloride (250ml boluses with regular reassessment: 1-2L will correct most losses)					Y	N	
c)	Initiate fluid balance chart/daily weights					Y	N	
d)	Aim for MAP>80mmHg to achieve UO>0.5ml/kg/hr based on dry weight					Y	N	
e)	At 6 hrs, if target not achieved or EWS worsening then consider escalation to higher level of care					Y	N NA	
5. GI bleeding – if the patient has evidence of GI bleeding and varices are suspected								
							N/A <input type="checkbox"/>	
a)	Fluid resuscitate according to BP, pulse and venous pressure (aim MAP >65 mmHg)					Y	N	
b)	Prescribe IV terlipressin 2mg four times daily (caution if known ischaemic heart disease or peripheral vascular disease; perform ECG in >65yrs)					Y	N NA	
c)	Prescribe prophylactic antibiotics as per Trust protocol (cefuroxime unless contraindicated)					Y	N	

Initials:
Time:

Initials:
Time:

Initials:
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Initials:
Time:

Initials:
Time:

d)	If prothrombin time (PT) prolonged give IV vitamin K 10mg stat	Y	N	NA
e)	If PT > 20 seconds (or INR >2.0) – give FFP (2-4 units)	Y	N	NA
f)	If platelets <50 – give IV platelets	Y	N	NA
g)	Transfuse blood if Hb <7.0g/L or massive bleeding (aim for Hb >8g/L)	Y	N	NA
h)	Early endoscopy after resuscitation (ideally within 12 hours)	Y	N	
6.Encephalopathy				N/A <input type="checkbox"/>
a)	Look for precipitant (GI bleed, constipation, dehydration, sepsis etc.)	Y	N	
b)	Encephalopathy – lactulose 20-30ml QDS or phosphate enema (aiming for 2 soft stools/day)	Y	N	
c)	If in clinical doubt in a confused patient request CT head to exclude subdural haematoma	Y	N	N/A
7.Other				
a)	Venous thromboembolism prophylaxis – prescribe prophylactic LMWH (patients with liver disease are at a high risk of thromboembolism even with a prolonged prothrombin time; withhold if patient is actively bleeding or platelets <50)	Y	N	NA
b)	GI/Liver review at earliest opportunity (ideally within 24 hrs)			<input type="checkbox"/>

Initials:
Time:

Initials:
Time:

Name.....Grade.....Date.....Time.....

Decompensated Cirrhosis Care Bundle - First 24 Hours

Admission with decompensated cirrhosis is a common medical presentation and carries a high mortality (10-20% in hospital mortality). Early intervention with evidence-based treatments for patients with the complications of cirrhosis can save lives. This checklist aims to provide a guide to help ensure that the necessary early investigations are completed in a timely manner and appropriate treatments are given at the earliest opportunity. Decompensated cirrhosis is defined as a patient with cirrhosis who presents with an acute deterioration in liver function that can manifest with the following symptoms:

- Jaundice
- Increasing ascites
- Hepatic encephalopathy
- Renal impairment
- GI bleeding
- Signs of sepsis/hypovolaemia
- Frequently there is a precipitant that leads to the decompensation of cirrhosis. Common causes are:
 - GI bleeding (variceal and non-variceal)
 - Infection/sepsis (spontaneous bacterial peritonitis, urine, chest, cholangitis etc)
 - Alcoholic hepatitis
 - Acute portal vein thrombosis or Development of hepatocellular carcinoma
 - Drugs (Alcohol, opiates, NSAIDs etc)
 - Ischaemic liver injury (sepsis or hypotension)
 - Dehydration
 - Constipation

When assessing patients who present with decompensated cirrhosis please look for the precipitating causes and treat accordingly. The checklist shown overleaf gives a guide on the necessary investigations and early management of these patients admitted with decompensated cirrhosis and should be completed on all patients who present with this condition. The checklist is designed to optimize a patient's management in the first 24 hours when specialist liver/gastro input might not be available. Please arrange for a review of the patient by the gastro/liver team at the earliest opportunity. Escalation of care to higher level should be considered in patients not responding to treatment when reviewed after 6 hours, particularly in those with first presentation and those with good underlying performance status prior to the recent illness.

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval

		Yes/No	Comments
1.	Does the procedural document affect one group less or more favourably than another on the basis of:		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
	• Disability - learning disabilities, physical disability, sensory impairment and mental health problems	No	
2.	Is there any evidence that some groups are affected differently?	No	
3.	If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?	No	
4.	Is the impact of the procedural document likely to be negative?	No	
5.	If so can the impact be avoided?	N/A	
6.	What alternatives are there to achieving the procedural document without the impact?	N/A	
7.	Can we reduce the impact by taking different action?	N/A	

If you have identified a potential discriminatory impact of this procedural document, please refer it to the Director of Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact the Director of Human Resources.

Checklist for the Review and Approval of Procedural Document

To be completed and attached to any procedural document when submitted to the relevant committee for consideration and approval.

	Title of document being reviewed:	Yes/No	Comments
1.	Title		
	Is the title clear and unambiguous?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	Rationale		
	Are reasons for development of the document stated?	Yes	
3.	Development Process		
	Is it clear that the relevant people/groups have been involved in the development of the document?	Yes	
	Are people involved in the development?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	
4.	Content		
	Is the objective of the document clear?	Yes	
	Is the target population clear and unambiguous?	Yes	
	Are the intended outcomes described?	Yes	
5.	Evidence Base		
	Are key references cited in full?	N/A	
	Are supporting documents referenced?	N/A	
6.	Approval		
	Does the document identify which committee/group will approve it?	Yes	
7.	Dissemination and Implementation		
	Is there an outline/plan to identify how this will be done?	Yes	
8.	Document Control		
	Does the document identify where it will be held?	Yes	
9.	Process to Monitor Compliance and Effectiveness		
	Are there measurable standards or KPIs to support the monitoring of compliance with and effectiveness of the document?	Yes	

	Title of document being reviewed:	Yes/No	Comments
	Is there a plan to review or audit compliance with the document?	Yes	
10.	Review Date		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	Overall Responsibility for the Document		
	Is it clear who will be responsible for co-ordinating the dissemination, implementation and review of the document?	Yes	

Executive Sponsor Approval			
If you approve the document, please sign and date it and forward to the author. Procedural documents will not be forwarded for ratification without Executive Sponsor Approval			
Name		Date	
Signature			
Relevant Committee Approval			
The Director of Nursing and Patient Experience's signature below confirms that this procedural document was ratified by the appropriate Governance Committee.			
Name		Date	
Signature			
Responsible Committee Approval – only applies to reviewed procedural documents with minor changes			
The Committee Chair's signature below confirms that this procedural document was ratified by the responsible Committee			
Name		Date	
Name of Committee		Name & role of Committee Chair	
Signature			

Tool to Develop Monitoring Arrangements for Policies and guidelines

What key element(s) need(s) monitoring as per local approved policy or guidance?	Who will lead on this aspect of monitoring? Name the lead and what is the role of the multidisciplinary team or others if any.	What tool will be used to monitor/check/observe/Assess/inspect/ authenticate that everything is working according to this key element from the approved policy?	How often is the need to monitor each element? How often is the need complete a report ? How often is the need to share the report?	What committee will the completed report go to?
Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
Filing of completed decompensated cirrhosis care bundle in first 24 hours	Dr Suri	Regular audits	6 monthly	Via Audit Dept.

