

# Management of

## GALLSTONE Disease and GALLBLADDER Pathology

### December 2017

This policy applies to patients for whom the following Clinical Commissioning Groups are responsible:

- NHS South Worcestershire Clinical Commissioning Group (CCG)
- NHS Redditch & Bromsgrove Clinical Commissioning Group (CCG)
- NHS Wyre Forest Clinical Commissioning Group (CCG)

*Collectively referred to as the Worcestershire CCGs*

COMMISSIONING SUMMARY	
Nature of Gallstones	Policy Status
<p><b>Asymptomatic</b>                      (incidental finding or atypical presentation with an otherwise normal gallbladder and biliary tree on USS)</p>	<p>Surgical intervention is <b>NOT SUPPORTED</b> with the exception of patients with:</p> <ul style="list-style-type: none"> <li>• Haemolytic anaemias, including hereditary spherocytosis and sickle cell disease</li> <li>• Porcelain gallbladder</li> </ul> <p>Referral for <b>ADVICE AND GUIDANCE</b> is recommended for patients with <b>gallbladder polyps</b> (regardless of size). <i>The Upper Gastro-Intestinal Surgeons will determine an appropriate course of action for these patients.</i></p>
<p><b>Uncomplicated Symptomatic</b>                      (biliary colic pain without complications, see below)</p>	<p>Surgical intervention is <b>NOT SUPPORTED</b> unless:</p> <ul style="list-style-type: none"> <li>• Two or more episodes within 6 months requiring opiate analgesia and time off work or medical consultation ( i.e. GP, paramedics, A&amp;E, emergency surgical assessment).</li> </ul> <p><i>See section 6.2 for recommended management</i></p>
<p><b>Complicated Symptomatic</b>                      (cholecystitis, cholangitis and pancreatitis; as indicated by high fever, persistent (hours/days) right upper quadrant pain, nausea, vomiting, tenderness)</p>	<p>Referral and surgical intervention <b>SUPPORTED</b></p>
<p><b>Common Bile Duct Stones</b>                      (symptomatic, asymptomatic and where a stone has been passed; as indicated by deranged LFTs and dilated bile ducts/abnormal USS)</p>	<p>Referral and surgical intervention <b>SUPPORTED</b></p>
<p><b>Consider referral for “Advice and Guidance” or use of “Consultant Connect” (if available) where there is clinical uncertainty or concern</b></p>	
<p>See section 6 for further detail</p>	

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### Key individuals involved in developing the document:

Name	Designation	Version Reviewed
Fiona Bates	Medicines Management and Public Health Liaison	V1.0
Tanushree Bhakta	GP Registrar	V1.0
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### Circulated to the following individuals/groups for comments:

Name	Date	Version Reviewed
Clinical Commissioning Policy Collaborative, which includes: GPs, Commissioners, Medicines Commissioning, Public Health, Patient and Public Representatives	12/12/2017	V1.0 – final version. Previous draft iterations discussed at CCPC also

### Version Control:

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## 1. Definitions

- 1.1 **Exceptional clinical circumstances** are clinical circumstances pertaining to a particular patient, which can properly be described as exceptional, when compared to the clinical circumstances of other patients with the same clinical condition and at the same stage of development of that condition (i.e. similar patients). A patient with **exceptional clinical circumstances** will have clinical features or characteristics which differentiate that patient from other patients in that cohort and result in that patient being likely to obtain significantly greater clinical benefit (than those other patients) from the intervention for which funding is sought.
- 1.2 A **Similar Patient** is a patient who is likely to be in the same or similar clinical circumstances as the requesting patient and who could reasonably be expected to benefit from the requested treatment to the same or a similar degree. The existence of more than one similar patients indicates that a decision regarding the commissioning of a **service development** or commissioning policy is required of the Commissioner.
- 1.3 An **individual funding request (IFR)** is a request received from a provider or a patient with explicit support from a clinician, which seeks exceptional funding for a single identified patient for a specific treatment.
- 1.4 An **in-year service development** is any aspect of healthcare, other than one which is the subject of a successful individual funding request, which the Commissioner agrees to fund outside of the annual commissioning round. Such unplanned investment decisions should only be made in exceptional circumstances because, unless they can be funded through disinvestment, they will have to be funded as a result of either delaying or aborting other planned developments.
- 1.5 **Biliary colic**, also known as a gallbladder or gallstone attack, is when pain occurs due to a gallstone temporarily blocking the bile duct. Typically the pain is in the right upper part of the abdomen and it can radiate to the shoulder. Pain usually lasts from one to a few hours and it occurs after eating a heavy meal or during the night. Biliary colic can occur in the absence of gallstones, particularly in young women.
- 1.6 **Cholecystectomy** is the surgical procedure used to remove the gall bladder. This is not usually indicated in patients with asymptomatic gallstones.
- 1.7 **Cholecystitis** is inflammation of the gallbladder that develops over hours, usually because a gallstone obstructs the cystic duct. Symptoms include right upper abdominal pain and tenderness, nausea, vomiting, and occasionally fever.
- 1.8 **Cholangitis** is an infection of the bile ducts, the tubes that carry bile from the liver to the gallbladder and intestines. Bile is a liquid made by the liver that helps digest food.
- 1.9 **Gallstones** (cholelithiasis) are small stones, usually made of cholesterol (but can also be pigmented and mixed stones). These stones form in the gall bladder. In most cases they do not cause any symptoms (i.e. they are asymptomatic). When gallstones occur in the common bile duct (CBD) it is known as choledocholithiasis.
- 1.10 **Pancreatitis** occurs when the pancreas becomes inflamed, causing pain in the abdomen (or tummy) which can be very severe. There are two types of pancreatitis, acute pancreatitis, where the pancreas becomes inflamed but usually gets better within a few days and chronic pancreatitis, where inflammation remains for many years, causing more and more damage. Chronic pancreatitis can develop after many episodes of acute pancreatitis.

## 2. Scope of policy

- 2.1 This policy is part of a suite of locally endorsed Commissioning Policies. Copies of these Commissioning Policies are available on the following website address:  
<http://www.redditchandbromsgroveccg.nhs.uk/about-us/strategies-policies-and-procedures/commissioning-ifr/>
- 2.2 This policy applies to all patients for whom the Worcestershire CCGs have responsibility including:
- People provided with primary medical services by GP practices which are members of any one of the CCGs and
  - People usually resident in any of the areas covered by the CCG's and not provided with primary medical services by any CCG.
- 2.3 This policy applies to adults (over the age of 18 years) with biliary colic and suspected or known gallstones.
- 2.4 Where a patient's clinical presentation does not clearly meet the requirements for secondary care referral within the context of this policy, and where a GP is uncertain or concerned about the appropriate treatment/management pathway, referral for Advice & Guidance should be considered as an alternative to a referral for clinical assessment.
- 2.5 There may be occasions when a GP referral is made for specialist assessment which appears to meet the policy requirements, but which on specialist clinical examination either does not meet the clinical criteria for surgery or is not considered clinically suitable for surgery. Such patients should be discharged without surgery.
- 2.6 For patients who do not fall within the eligibility criteria set out in the policy but where there is demonstrable evidence that the patient has exceptional clinical circumstances, an Individual Funding Request may be submitted for consideration. The referring clinician should consult the Commissioner's "Operational Policy for Individual Funding Requests" document for further guidance on this process.

For a definition of the term "exceptional clinical circumstances", please refer to the Definitions section of this document.

## 3. Background

- 3.1. The NHS Constitution, which details the principles and values that guide the NHS, has been applied in the agreement of this policy.
- 3.2. NHS Redditch & Bromsgrove Clinical Commissioning Group, NHS South Worcestershire Clinical Commissioning Group and NHS Wyre Forest Clinical Commissioning Group consider all lives of all patients whom they serve to be of equal value and, in making decisions about funding treatment for patients, will seek not to discriminate on the grounds of sex, age, sexual orientation, ethnicity, educational level, employment, marital status, religion or disability except where a difference in the treatment options made available to patients is directly related a particular patient's clinical condition or is related to the anticipated benefits to be derived from a proposed form of treatment.
- 3.3. This policy document outlines the arrangements for funding of this treatment for patients where local Clinical Commissioning Groups directly commissions this service.
- 3.4. Symptoms and complications of gallstones occur when the stones obstruct the cystic and/or bile ducts. The most common presentation is biliary colic, which consists of pain in

the right upper quadrant (RUQ) and sometimes epigastric region of the abdomen, in the absence of pyrexia. This is due to a transient obstruction of the cystic duct. The pain can last a varying length of time, anything from thirty minutes to 24 hours, and usually subsides spontaneously. May also be post-prandial in nature, and can include nausea and vomiting (N&V).

- 3.5. Risk factors for developing gallstones include: Obesity, high calorie diet, ethnicity, female sex, increasing age, smoking, weight cycling, family history and a history of haemolytic diseases.
- 3.6. Diagnosis is usually done by a careful history, risk assessment and examination, blood tests including liver function tests (LFTs) and referring for an abdominal ultrasound scan (USS). Further investigations can be carried out by Upper GI specialists if deemed appropriate.<sup>7</sup>
- 3.7. There is evidence that around 55% of patients who first present with biliary colic will have no further episodes over a 14 year period<sup>8</sup>. Although a history of biliary colic is reported to convey a 50% risk per year of developing further episodes of biliary colic, thus increasing the risk of complications.<sup>6</sup>
- 3.8. Complications of gallstones include cholecystitis (infection of the gallbladder). Major complications include cholangitis (infection of the bile duct) and pancreatitis (inflammation of the pancreas)<sup>4</sup>; they can be life threatening and require hospital admission.
- 3.9. Management of gallstones often depends on its location, whether they are symptomatic or causing complications. When indicated, definitive management of gallstones is by removal of the gallbladder. Currently the standard approach is by laparoscopic cholecystectomy, preferably as a day case procedure.<sup>7</sup>

## 4. Relevant National Guidance and Facts

- 4.1 The following documents have been used to inform the development of this guideline:
  - a. NICE Clinical Guideline 188 - Gallstone disease: diagnosis and management<sup>7</sup> (2014)
  - b. The Royal College of Surgeons (RCS) and the Association of Upper GI Surgeons (AUGIS) Commissioning Guide: Gallstone disease (2016)<sup>6</sup>
  - c. BMJ Best Practice guidelines (2016)<sup>4</sup>
- 4.2 In the UK, approximately 10 to 15% of the adult population (>18 years) have gallstones, with the annual incidence being approximately 1 in 200 adults.<sup>1,2</sup> Gallstones are generally asymptomatic in 80% of people.<sup>3,4</sup> Approximately 10 to 25% of these people will become symptomatic.<sup>5</sup>

## 5. Evidence Review

5.1 A review<sup>9</sup> undertaken as part of the development of this policy found a lack of randomised controlled trials (RCTs) and good quality evidence in this area, however, there have been several Cochrane meta-analyses looking into various aspects of gallstone disease and its management. The following is a summary of the relevant findings:

### Asymptomatic Gallstones

5.2 There is no evidence to recommend surgery for patients with **asymptomatic gallstones** with an otherwise normal gallbladder and biliary tree.

5.3 It has been shown that the following groups present a significant increased risk for development of gallstone complications or cancer:

- Gallbladder polyps  $\geq$  10mm size
- Haemolytic anaemias, including hereditary spherocytosis and sickle cell disease
- Porcelain gallbladder

5.4 The overall risk in relation to gallbladder polyps (informed by recent evidence) is multifactorial, requiring consideration of age, family history, size, changes and polyp type. Management of patients' needs to be tailored to this risk and should be determined by Upper Gastro-Intestinal Surgeons.

### Uncomplicated Symptomatic Gallstones

5.5 There is no good quality evidence to comparing conservative management with surgical intervention as first line treatment for uncomplicated symptomatic gallstones or to establish the benefit of early vs delayed laparoscopic surgery. There is better evidence demonstrating no significant difference between daycase and overnight laparoscopic surgery which supports the current practice of day-case surgery.

5.6 A UK multi-centre RCT is underway comparing surgical intervention with watchful waiting; this trial demonstrates the uncertainty regarding primary management of patients with uncomplicated symptomatic gallstones and will provide further clarity for future management.

### Complicated Biliary Colic (Symptomatic Gallstones)

5.7 All guidance supports early intervention for patients presenting with acute cholecystitis following resolution of the acute presentation. This is evidenced by a Cochrane review in 2006 identifying no significant difference in primary outcomes between early (within 1 week) and delayed (within 6 weeks) laparoscopic surgery. An economic analysis suggests that early intervention results in better quality of life and may shorten the hospital stay.

5.8 Evidence has shown that in cases of **major complications arising from gallstones**, such as acute cholecystitis and pancreatitis, there were no significant differences between complication rates in patients who had early (within three days of onset of symptoms) and delayed laparoscopic cholecystectomy (beyond three days). It showed that hospital stay was shorter in the early group and that the majority of patients recovered completely without developing complications.

### Common Bile Duct Stones

5.8 The risk of developing serious complications with CBD stones is high; the risk of developing acute pancreatitis is thought to be between 33 to 50%.

**Other Relevant Evidence**

- 5.9 **Primary Prevention** - while some of the modifiable risk factors such as obesity, diet and physical activity may help overall health status, there is no current evidence to suggest they reduce the incidence of gallstones. In patients with known conditions that can predispose them to forming gallstones, such as the haemolytic diseases or malabsorption conditions, these should be appropriately managed to prevent the formation of gallstones.
- 5.10 **Secondary Prevention** - Further episodes of biliary colic can be prevented in approximately 30% of patients by adopting a low fat diet and avoiding the food and drink that triggers symptoms. There is no evidence to suggest that adopting a low fat diet will prevent complications of gallstones and thus reduce the need for surgical management.
- 5.11 **Alternative Surgical Intervention** – There is no evidence<sup>2</sup> to show any benefits of:
- Natural Orifice Translumenal Endoscopic Surgery (NOTES)
  - Single Incision Laparoscopic Surgery (SILS)
  - Robotic Surgery
- 5.12 **Alternative Management Options** – this includes:
- Extracorporeal shockwave lithotripsy (ESWL) offers a low rate of cure with only 55% of carefully selected patients being stone free after treatment.
  - Ursodeoxycholic acid (UDCA) offers an even lower cure rate with only 27% of patients having dissolution of stones. There was no significant difference in either the number of people who remained colic free (for 3 months) after treatment with UDCA compared with placebo or gallstone complication rates compared with no treatment.
- The rate of recurrence is high for both these interventions with more than 40% having recurrence within 4 years.
- 5.13 **Post Cholecystectomy Diarrhoea** – A number have studies have validated this reported side effect of gallstone surgery. A large analysis of 3388 cholecystectomies identifies a prevalence rate of 9.1%; of these patients 65.5% had bile acid malabsorption<sup>10</sup>.
- 5.14 **Non Resolution of Symptoms Post Surgery** – around one third of patients are reported to have ongoing symptoms despite surgical intervention<sup>11</sup>.

## 6. Patient Eligibility

6.1 Patient eligibility for referral and intervention is dependent on the presentation. The table outlines the policy status for gallstone surgery:

Nature of Gallstones	Policy Status
<p><b>Asymptomatic</b> (incidental finding or atypical presentation with an otherwise normal gallbladder and biliary tree on USS)</p>	<p>Surgical intervention is <b>NOT SUPPORTED</b> with the exception of patients with:</p> <ul style="list-style-type: none"> <li>• Haemolytic anaemias, including hereditary spherocytosis and sickle cell disease</li> <li>• Porcelain gallbladder</li> </ul> <p>Referral for <b>ADVICE AND GUIDANCE</b> is recommended for patients with <b>gallbladder polyps</b> (regardless of size). <i>The Upper Gastro-Intestinal Surgeons will determine an appropriate course of action for these patients.</i></p>
<p><b>Uncomplicated Symptomatic</b> (biliary colic pain without complications, see below)</p>	<p>Surgical intervention is <b>NOT SUPPORTED</b> unless:</p> <ul style="list-style-type: none"> <li>• Two or more episodes within 6 months requiring opiate analgesia and time off work or medical consultation (i.e. GP, paramedics, A&amp;E, emergency surgical assessment).</li> </ul> <p><i>See below for recommended management</i></p>
<p><b>Complicated Symptomatic</b> (cholecystitis, cholangitis and pancreatitis; as indicated by high fever, persistent (hours/days) right upper quadrant pain, nausea, vomiting, tenderness)</p>	<p>Referral and surgical intervention <b>SUPPORTED</b></p>
<p><b>Common Bile Duct Stones</b> (symptomatic, asymptomatic and where a stone has been passed; as indicated by deranged LFTs and dilated bile ducts/abnormal USS)</p>	<p>Referral and surgical intervention <b>SUPPORTED</b></p>
<p><b>Consider referral for “Advice and Guidance” or use of “Consultant Connect” (if available) where there is clinical uncertainty or concern</b></p>	

*Rationale:*

- a. *Asymptomatic stones may cause no further problems; surgical intervention in contrast may result in undesirable side effects and symptoms.*
- b. *The identified patient groups with asymptomatic gallstones have a significantly higher risk of developing gallstone complications or cancer.*
- c. *A significant proportion (55%) of patients with symptomatic disease will not experience further episodes over a 14 year period. It is therefore reasonable for*

*patients with an initial episode of biliary colic to await a recurrent attack to before referring for surgical intervention.*

- d. Where a stone is sufficiently small to pass through the CBD and out of the body there will always be multiple small stones which pose a high risk of complications; referral and surgery is indicated for these patients.*

6.2 Recommended Management of **Uncomplicated Symptomatic Gallstone Disease**; all patients should have a clear history of Right Upper Quadrant (RUQ) symptoms/pain indicative of gallstones:

Presentation	Management	Investigations	Refer when*:
1 <sup>st</sup> occurrence, symptomatic	Pain relief Low fat diet Observation	Liver function tests Abdominal USS	Abnormal USS with dilated CBD > 7mm Elevated LFTs, in the absence of other causes
Repeat occurrence	Pain relief Low fat diet	Repeat LFTs	Within 6 months of 1 <sup>st</sup> occurrence Elevated LFTs Gallstones on USS Failure of conservative management
<b>Consider referral for "Advice and Guidance" or use of "Consultant Connect" (if available) where there is clinical uncertainty or concern</b>			

\* These parameters are suggestive of CBD stones or development of Complicated Symptomatic disease and should be managed in accordance with Section 6.1. See also 6.4 Pathway for Management.

*Rationale:*

- The best predictors of CBD stones are jaundice ie. bilirubin >21µmol/l and dilated CBD (> 7mm) on USS. Alkaline phosphatase more than 3 times the upper limit of normal may also be indicative.*
- Other causes of elevated LFTs should be excluded, particularly medicine related ie. antibiotics.*
- A significant proportion (55%) of patients with symptomatic disease will not experience further episodes over a 14 year period. It is therefore reasonable for patients with an initial episode of biliary colic to await a recurrent attack before referring for surgical intervention.*

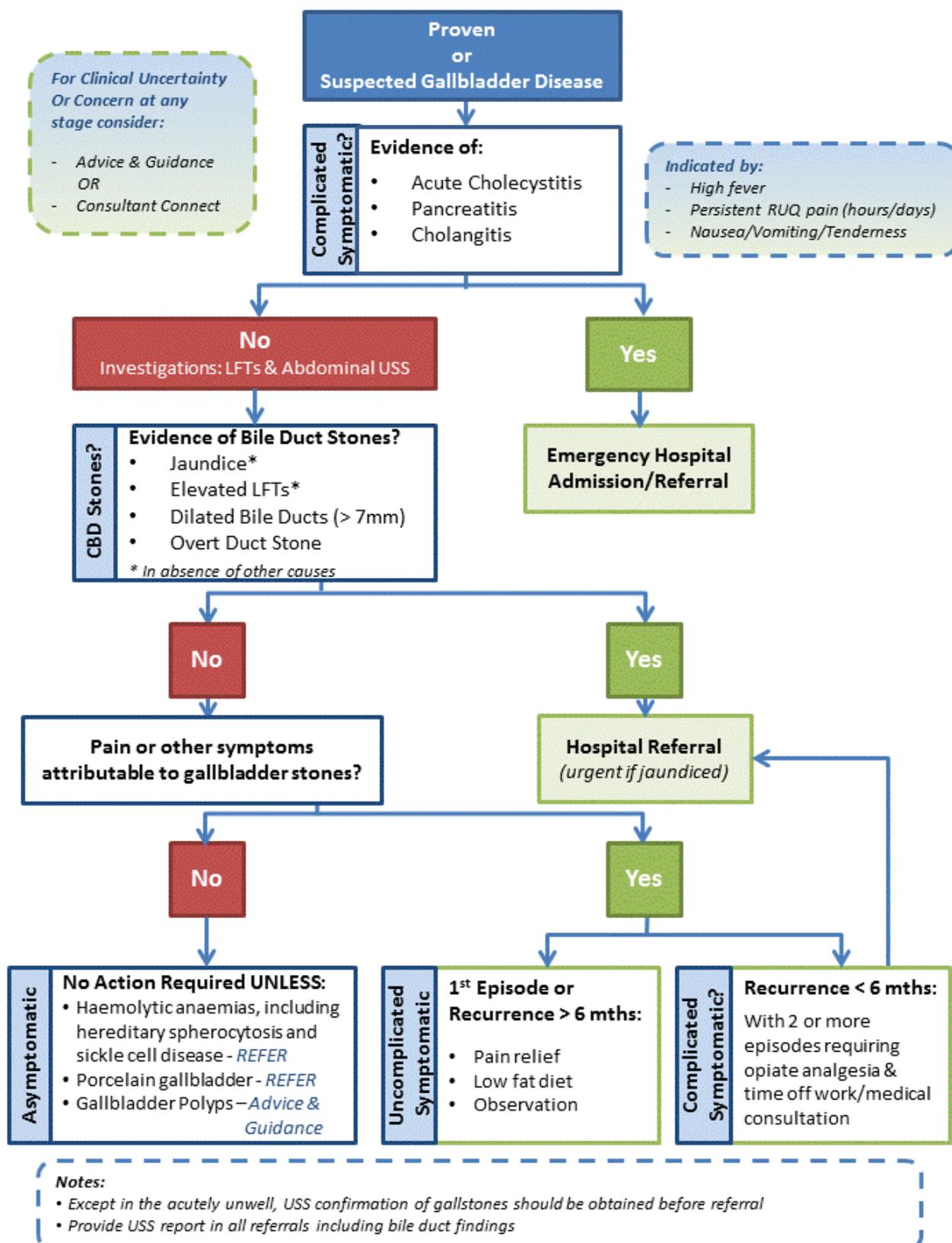
6.3 The following interventions are NOT SUPPORTED:

Extracorporeal shockwave lithotripsy (ESWL)  
Ursodeoxycholic acid (UDCA)  
Natural Orifice Translumenal Endoscopic Surgery (NOTES)  
Single Incision Laparoscopic Surgery (SILS)  
Robotic Surgery

*Rationale:*

- The efficacy of ESWL and UDCA is limited and recurrence rates are high*
- There is no evidence of benefit for NOTES or SILS*
- The case for robotic surgery has not been made<sup>2</sup>*

### 6.4 Primary Care Management Pathway for Gallstone Disease and Gallbladder Pathology



Based on AUGIS Commissioning Guide Care Pathway 2016

## 7. Supporting Documents

- Worcestershire CCGs: Operational Policy for Individual Funding Requests
  - Worcestershire CCGs: Prioritisation Framework for the Commissioning of Healthcare Services
  - NHS England: Ethical Framework for Priority Setting Resource Allocation
  - NHS England: Individual Funding Requests
  - NHS Constitution, updated 27<sup>th</sup> July 2015
1. Gurusamy K.S, Samraj K. Early versus delayed laparoscopic cholecystectomy for acute cholecystitis. Cochrane Database Syst Rev. 2006 Oct 18;(4):CD005440
  2. Royal College of Surgeons and Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland. Commissioning Guide: Gallstone Disease. Nov 2016
  3. Deihl AK. Epidemiology and natural history of gallstone disease. Gastroenterol Clin North Am. 1991 Mar; 20(1):1-19
  4. <http://bestpractice.bmj.com/best-practice/monograph/873.html>
  5. Sakorafas G.H, Milingos D, Peros G; Asymptomatic cholelithiasis: is cholecystectomy really needed? A critical reappraisal 15 years after the introduction of laparoscopic cholecystectomy. Dig Dis Sci. 2007 May 52(5):1313-25.
  6. Royal College of Surgeons and Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland. Commissioning Guide: Gallstone Disease. Nov 2016
  7. NICE Clinical Guideline 188. Gallstone Disease: Diagnosis and Management. Oct 2014: <http://www.nice.org.uk/guidance/cg188/resources/guidance-gallstone-disease-pdf>
  8. Brazzelli et al. Health Technology Assessment 2014: 18(55):1-101, v-vi. <https://www.ncbi.nlm.nih.gov/pubmed/25164349>
  9. Worcestershire Clinical Commissioning Policy Collaborative: Surgery for Gallstones. February 2017.
  10. Farahmander et al. Surgical Science 2012: 3, 332-338
  11. <https://www.abdn.ac.uk/news/9848/>

## 8. Equality Impact Assessment

Organisation	Worcestershire Clinical Commissioning Groups		
Department	Contracting & Public Health Liaison	Name of lead person	Fiona Bates and Helen Bryant
Piece of work being assessed	Commissioning Policy for NHS funded surgery for gallstones		
Aims of this piece of work	To provide agreed guidance to GPs, Patients and Surgeons on the correct treatment options for patients with gallstones		
Date of EIA	02/08/2017	Other partners/stakeholders involved	Worcestershire Clinical Commissioning Policy Collaborative Dr Tanushree Bhakta, GP Registrar on Public Health Rotation
Who will be affected by this piece of work?	Patients with gallstones		

Single Equality Scheme Strand	Baseline data and research on the population that this piece of work will affect. What is available? E.g. population data, service user data. What does it show? Are there any gaps? Use both quantitative data and qualitative data where possible. <b>Include consultation with service users wherever possible</b>	Is there likely to be a differential impact? Yes, no, unknown
<b>Gender</b>	Gallstones are very common with an estimated 1 in 10 adults in the UK having them. However only a minority of people develop symptoms. An individual is more at risk of developing gallstones if they are female, particularly if they have had children, are taking the combined Pill, or are undergoing high-dose oestrogen therapy. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore an individual's gender would not feature within clinical decision making.	No
<b>Race</b>	Cholesterol gallstone prevalence varies widely, from extremely low (<5%) in Asian and African populations, to intermediate (10-30%) in European and Northern American populations, and to extremely high (30-70%) in populations of Native American ancestry. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore an individual's race would not feature within clinical decision making.	No

<b>Single Equality Scheme Strand</b>	<b>Baseline data and research on the population that this piece of work will affect.</b> What is available? E.g. population data, service user data. What does it show? Are there any gaps? Use both quantitative data and qualitative data where possible. <b>Include consultation with service users wherever possible</b>	<b>Is there likely to be a differential impact?</b> Yes, no, unknown
<b>Disability</b>	Regular exercise, in addition to facilitating weight control, alone or in combination with dieting, improves several metabolic abnormalities related to both obesity and cholesterol gallstones. In contrast, sedentary behaviour, is positively associated with the risk of cholecystectomy. People with diabetes generally have high levels of fatty acids called triglycerides. These fatty acids may increase the risk of gallstones. Gallbladder function is impaired in the presence of diabetic neuropathy, and regulation of hyperglycaemia with insulin seems to raise the lithogenic index.[24] A lack of melatonin could significantly contribute to gallbladder stones, as melatonin inhibits cholesterol secretion from the gallbladder, enhances the conversion of cholesterol to bile, and is an antioxidant, which is able to reduce oxidative stress to the gallbladder. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore an individual's disability would not feature within clinical decision making.	No
<b>Religion/ belief</b>	There is no information available to determine whether an individual's religion or belief system would have an effect on the formation of gall stones. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore an individual's religion or belief system would not feature within clinical decision making.	No
<b>Sexual orientation</b>	There is no information available to determine whether an individual's sexual orientation would have an effect on the formation of gallstones, other than the risks associated with females noted in the Gender section above. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore an individual's sexual orientation would not feature within clinical decision making.	No
<b>Age</b>	An individual is more at risk of developing gallstones if they are aged 40 or more with the risk increasing as they get older. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore an individual's age would not feature within clinical decision making.	No
<b>Social deprivation</b>	An individual is more at risk of developing gallstones if they are overweight or obese, have recently lost weight (from dieting or weight loss surgery) or have a condition that affects the flow of bile. For example, cirrhosis (scarring of the liver), primary sclerosing cholangitis or obstetric cholestasis. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore the area in which an individual lived or was brought up would not feature within clinical decision making.	No

<b>Single Equality Scheme Strand</b>	<b>Baseline data and research on the population that this piece of work will affect.</b> What is available? E.g. population data, service user data. What does it show? Are there any gaps? Use both quantitative data and qualitative data where possible. <b>Include consultation with service users wherever possible</b>	<b>Is there likely to be a differential impact?</b> Yes, no, unknown
<b>Carers</b>	There is no information available to determine whether an individual's is a carer would have an effect on the formation of gall stones. However, the policy provides guidance on treatment pathways based on specific clinical presentation alone, therefore whether an individual is a carer or not would not feature within clinical decision making.	No
<b>Human rights</b>	This commissioning policy is intended to provide clear guidelines on treatment options and does not seek to interfere with an individual's human rights.	No

### Equality Impact Assessment Action Plan

Strand	Issue	Action required	How will you measure the outcome/impact	Timescale	Lead