Signed on behalf of the Cwm Taf Health Board
Signed:
Designation:
Date:

Signed on behalf of Aneurin Bevan Health Board
Signed:
Designation:
Date:

Signed on behalf of Cardiff and Vale University Health Board
Signed:
Designation:
Date:

Signed on behalf of Velindre NHS Trust
Signed:
Designation:
Date:
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1. Background

The South East Wales oesophago-gastric cancer service is being established in response to NICE Improving Outcomes Guidance for Upper GI Cancers \(^1\) which states that the treatment for patients with oesophago-gastric cancers “…should be the responsibility of Specialist Oesophago-gastric Cancer Teams based in Cancer Units or Cancer Centres which normally service populations of more than a million”.

The South East Wales Cancer Network serves a population approaching 1.4 million over a relatively small, compact geographic area stretching from Abergavenny and Merthyr Tydfil in the North of the region across to Cowbridge and Chepstow in the West and East and Cardiff in the South. NHS care is provided by Aneurin Bevan, Cwm Taf and Cardiff and the Vale University Health Boards.

In 2005 Welsh Assembly Government National Standards for Upper Gastro-Intestinal Cancer Services were published and a review of the current service was commissioned by the South East Wales Cancer Network in 2007/2008. The Review recommendations, which were accepted by the Network Board, proposed the centralisation of specialist surgical services at the University Hospital of Wales, Cardiff and Vale University Health Board (formerly Cardiff and Vale NHS Trust).

Cardiff and Vale University Health Board already has a well established Upper GI clinical team, however becoming a Surgical Centre has required redesigned patient-pathways new operational procedures, more in-depth data collection, a robust Service Level Agreement and co-operation across a number of organisations. It is also seen as an opportunity to develop a better and more coordinated managed Network to improve the care of all patients with Upper GI Cancer.

Establishing the new service has been complex, and the process has taken many months. It is acknowledged that there are risks associated with establishing a service of this type and it is important, therefore, that effective ways of defining and measuring quality are established, and that systems are in place to redress poor quality should it arise. This document aims to provide a framework for assuring the quality of the new service, both during its establishment and into the future and as a result encompasses the clinical and operational guidelines that underpin the Network wide service.

Agreement on a clinical model to underpin the centralised service has been a key priority and the following key assumptions underpin the clinical model:

- Effective team working across all Health Boards and Trusts.
- Effective pre planning, staging and assessment to facilitate an improved and predictable patient pathway
- Well managed local and central MDT arrangements
• Effective planning and management of regular theatre lists that support continuity of patient care and provide flexibility for operating Consultants

• Effective mechanisms in place to facilitate improved planning of critical care and ward beds

• Enhanced ward care that meets Designed for Life: Quality Requirements, to support patients’ post operative course and allow early discharge from critical care where clinically indicated.

• An Enhanced Recovery After Surgery Programme established at Cardiff and Vale Health Board.

• Development of a Cardiff and Vale Rapid Response Services to ensure delivery of an outreach service from critical care.

The agreed Clinical model is outlined below:
2. MULTI DISCIPLINARY TEAMS (MDTS)

2.1 Local MDT

There will be three local MDTs one based in each of the Health Board Trusts: Aneurin Bevan, Cwm Taf and Cardiff and Vale. Management of the diagnostic and palliative needs of the patient will be led from here, with referral to the central Upper GI MDT for those patients where curative intent is identified.

Below are details of the Local MDTs:

**Aneurin Bevan Health Board**

**Lead Clinician:** Dr M Czajkowski

The Aneurin Bevan Upper GI Multidisciplinary team meeting is held weekly on a Thursday at 12.30 in the Anaesthetic Seminar Room, Royal Gwent Hospital. The deadline for submitting patients to be discussed at the Local Upper GI MDM is Tuesday 12.00md.

**Cardiff and Vale University Health Board**

**Lead Clinician:** Mr W Lewis

The Cardiff and Vale Upper GI Multidisciplinary team meeting is held weekly on a Tuesday at 12.00md in the MDT Meeting Room, University Hospital of Wales. The deadline for submitting patients to be discussed at the Local Upper GI MDM is Friday 2.00pm.

**Cwm Taf Health Board**

**Lead Clinician:** Mr X Escofet

The Cwm Taf Upper GI Multidisciplinary team meeting is held weekly on a Monday at 12.00md in Rooms 3 & 4 Post Graduate Centre, Royal Glamorgan Hospital. The deadline for submitting patients to be discussed at the Local Upper GI MDM is Friday 3.00pm.

Patients can be referred to the local MDT in the following ways:

- GP referrals to any of the core MDT Consultants;
- From diagnostics;
- From consultant to consultant;
- From histopathology;
- To Clinical Nurse Specialist from community team;
- From Clinical Nurse Specialist to consultant;

Any of the core members of the team can bring existing patients to the meeting if there is a need to discuss their plan of care.
Patients will be referred from primary care to the Local MDT in line with NICE Referral Guidelines for Upper Gastrointestinal Cancers (Appendix 1)

**Identifying Patients for Discussion**

It is intended that local MDTs will review all new UGI cancer patients and refer to the Network MDT for potential surgery or specialised/complex palliative intervention.

Patients should only be referred to Network MDT following a decision to refer at local MDT. Patients should then be referred via the agreed referral form (email/CANISC) to the Network MDT Coordinator and should be booked into the MDM module within CANISC as per guidelines. The Network MDT Coordinator will then list patients for discussion.

Patients with high-grade dysplasia in Barrett's oesophagus and/or such patients being considered for definitive treatment will also be discussed at Network MDT, following discussion at local MDT.

**GP Notification, documentation of key worker and contact details**

For all new patients once they have a confirmed diagnosis and been informed of this, the GP will be notified within one working day. This is the responsibility of the local Upper GI team. This information must include the name of the patient's key worker and contact details. A copy of this should be filed in the patient's notes and will be audited. The Upper GI CNS should be present if possible when patients are informed of their diagnosis. The patient is given the key workers details at this time along with appropriate patient information leaflets, including contact details and the way in which they can access members of the MDT to discuss problems or concerns if required. The MDT will provide information to referring general practitioners on the appropriateness of urgent suspected cancer GP referrals.

**Minimum Data Set Requirements**

All new patients must be entered onto the CANISC database via the MDT Coordinator/Cancer Services at the local Hospital via the MDM module. However, the Network MDT Coordinator will be responsible for entering information regarding potentially curative treatment such as surgery or chemo/radiotherapy onto CANISC for all patients.

**Documentation of Outcomes**

Treatment decision will be documented in the following ways:

- The primary clinician at the local unit is responsible for documenting the outcomes of the Local MDT Patient Management record. This must also include the key worker name.
- All patients should be seen by their local Upper GI Cancer Nurse Specialist prior to referral to the Surgical Centre in order for treatment co-ordination and future patient support to be facilitated between the Surgical Centre and the local hospital in accordance with IOG and related cancer policies.
2.2 Network MDT

The role and purpose of the Network MDT is detailed in the Operational Policy at Appendix 5.

- New patients with Upper GI malignancy will be discussed at their local (Unit) MDT meeting.
- If the patients are suitable for referral as per agreed referral protocol to the Surgical Centre for consideration of surgery then their case will be discussed at the weekly held Network MDT.
- It is expected that all new patients discussed at the Network MDT will have been seen by a Surgical Unit MDT member to present their case and inform the Network MDT of the patients’ ability to undertake any proposed treatment.
- A letter documenting the Network MDT decision will be produced and faxed/emailed to the GP and referring Unit’s primary clinician within 24 hours.
- The minutes of all the MDT decisions will be written and validated by the Network MDT in real time and will be available on CANISC immediately.
ANEURIN BEVAN HEALTH BOARD
(North – Nevill Hall Hospital)
OESOPHAGEAL CANCER PATHWAY

Referral with ALARM FEATURES
Dysphagia
Unintentional weight loss >3kg
Epigastric mass
Melena or Haematemesis
Persistant vomiting
Anaemia, low MCV
Hb<9 g in male
OR
Hb<11 g in non-menstruating female
Age>55yrs, new onset of unexplained and persistant dyspepsia
Suspicious Radiological barium meal or CT

OPEN ACCESS ENDOSCOPY
Suspicious Abnormality

Urgent Upper GI Endoscopy

Malignancy Confirmed (histologically or suspicious abnormality)

UPPER GI SURGICAL OPD
review and discuss local MDT
KEYWORKER M Hurley

Definitive Cancer

Patient unfit for curative treatment

PALLIATIVE TREATMENT
Palliative chemotherapy
Stent
Best Supporting Care

Possible Cancer

Repeat OGG + CT

Negative

Positive

Patient potentially for for curative treatment

Tumour Staging
CT (G3)
EUS (G3)
PET (G3)
Staging laparoscopy (for junctional)

Physiology assessment
ECG, PFT, Echocardiogram, CPX

OPD Review

Need for further assessment e.g biopsy

REGIONAL SPECIALIST UPPER GI MDM
Management Decision + Ref Glant

OPD Review
discuss treatment options with patient

DEFINITIVE CHEMO/ RADIOTHERAPY
(VELINDRE) SCOPE

NEOADJUVANT CHEMOTHERAPY
VELINDRE OEds

SURGERY
Centralised Surgical Unit
(UHW)

REGIONAL SPECIALIST UPPER GI MDM
Re-imaging as appropriate

SURGERY
Centralised Surgical Unit
(UHW)

REGIONAL SPECIALIST UPPER GI MDM
Re-imaging as appropriate

REGIONAL SPECIALIST UPPER GI MDM
Discuss Histology

Follow Up as per Protocol

Follow Up as per Protocol

Non UGC Day 0

Day 31
Day 62
OESOPHAGEAL CANCER PATHWAY

**CWM TAF HEALTH BOARD**

**Referral with ALARM FEATURES**
- Dysphagia
- Unintentional weight loss > 3kg
- Epigastric mass
- Melena or Haematemesis
- Persistent vomiting
- Anaemia, low MCV: Hb < 11g in male
- OR: Hb < 10g in non-menstruating female
- Age > 55yrs, new onset of unexplained persistent dyspepsia
- Suspicious Radiological barium meal or CT

- Urgent Upper GI Endoscopy

- Possible Cancer
  - Repeat ODG + A CT
    - Negative
    - Positive
      - Patient potentially for for curative treatment
  - OPD Review
    - Need for further assessment eg biopsy
      - REGIONAL SPECIALIST UPPER GI MDM
        - Management Decision
          - OPD Review
            - discuss treatment options with patient

- OPEN ACCESS ENDOSCOPY
  - Suspicious Abnormality

- Malignancy Confirmed (histologically or suspicious abnormality)

- UPPER GI SURGICAL OPD
  - review and discuss local MDT
  - KEYWORKER: R Bowen

- Definitive Cancer
  - Patient unfit for curative treatment
  - PALLIATIVE TREATMENT
    - Palliative chemoRT
    - Stent
    - Best Supporting Care

- Tumour Staging
  - CT (2D)
  - EUS (2D)
  - PET (2D)
  - Staging laparoscopy (for junctional)
  - Physiology assessment
    - ECG, PFT, Electrocardiogram, CPX

- REGIONAL SPECIALIST UPPER GI MDM
  - Re-imaging as appropriate

- DEFINITIVE CHEMO RADIOTHERAPY
  - VELINORE ORDS

- REGIONAL SPECIALIST UPPER GI MDM
  - Re-imaging as appropriate

- NEoadjuvant CHEMOTHERAPY
  - VELINORE ORDS

- SURGERY
  - Centralised Surgical Unit (UHW)
    - Discuss Histology
  - Follow Up as per Protocol

- Follow Up as per Protocol

**Day 31**

**Day 42**

**Non USC**

**USC**

**Day 0**
GASTRIC CANCER PATHWAY

CWM TAF HEALTH BOARD

Referral with ALARM FEATURES
- Dysphagia
- Unintentional weight loss >3kg
- Epigastric mass
- Melena or Haematemesis
- Persistent vomiting
- Anaemia, low MCV, Hb<11g in male
- CR, Hb<10g in non-menstruating female
- Age>65yrs, new onset of unexplained and persistent dyspepsia
- Suspicious Radiological barium meal or CT

**Urgent Upper GI Endoscopy**

OPEN ACCESS ENDOSCOPY
- Suspicious Abnormality

Malignancy Confirmed (histologically or suspicious abnormality)

Definitive Cancer

Possible Cancer

Repeat ODG+CT

Positive

Patient potentially for for curative treatment

Tumour Staging
- **CT (2/6/2)**
- EUS (for proximal gastric (2/6/2)
- Staging laparoscopy (for junctional)
- Physiology assessment
- ECG, PFT, CXR

Need for further assessment ag biopsy

REGIONAL SPECIALIST UPPER GI MDM
- Management Decision

OPD Review
- discuss treatment options with patient

DEFINITIVE SURGERY (UHW)

PERIOPERATIVE CHEMOTHERAPY
- SURGERY
  - (Valindre and UHW)
  - S103ECAX (MAGIC)

REGIONAL SPECIALIST UPPER GI MDM
- Reimaging as appropriate

Follow up as per Protocol

PALLIATIVE TREATMENT
- Palliative chemo/Rt
- Stent
- Best Supporting Care

Non USC
- Day 0

Usc
- Day 0

Day 31

Day 62

12
2.4 Referral guidelines to Network MDT

Prior to MDT:

First seen Trust should (FST):
- Enter patient journey onto CANISC to date following histological diagnosis.
- Fax/email completed referral form (see appendix 10) to Network MDT Coordinator within 24 hours of local MDT decision to refer and ensure patient is booked into the MDM module complete appropriate form on CANISC.
- Arrange for radiological imaging to be made available to the Network MDT PACS.
- Circulate the patient list to local members immediately following receipt from Network MDT Coordinator.
- Arrange EUS where EUS has been deemed necessary prior to Network MDT discussion (or where EUS has been requested at a previous Network MDT discussion).

Treating Trust (i.e. Surgical Centre) should:
- List patients for Network MDT discussion following receipt of referral. Where EUS result is required prior discussion, Network MDT Coordinator will liaise with EUS department regarding availability of results and tracking of EUS films to the surgical centre prior to listing patient for MDT discussion.
- Circulate patient list to local MDT Coordinators and Network MDT team
- Set up any available PACs images for review during MDT
- In instances where a patient representative is not available locally, arrange for a Network MDT member to have sight of notes prior to MDT discussion

Following MDT:

Network MDT should:
- Minute all Network MDT decisions. These should be validated during the meeting and will be immediately available to Network MDT members and local MDT Coordinators.
- Ensure surgical patients are added patient management system to ensure they are tracked and reviewed appropriately and to enable surgical team to arrange suitable surgery dates (e.g. following neo-adjuvant chemotherapy).
- The Network MDT Coordinator will document decisions on Cancer Management plan page within Canisc
- Ensure patients are relisted for discussion as appropriate (i.e. following investigations such as EUS, PET CT, CPEX and post chemo CT’s).

First seen Trust should:
- Ensure decision of the Network MDT is documented within the casenotes.
- Organise recommendations of the Network MDT once in receipt of Surgical Centre Network MDT minutes (to include referral for EUS, PET CT, exercise testing, pre op assessment tests and post chemo CT’s etc).
- Remain responsible for those patients who are not proceeding to surgery at the Surgical Centre.
- The first seen Trust will undertake the initial pre operative investigations ensuring the results of which are filed within the patient case notes, on CANISC and available for review at pre operative assessment.
- Assist Network MDT Coordinator with appropriate information where possible in updating roll call.
- Prior to pre operative assessment, a unified assessment should be completed within the First Seen Trust, the results of which must be communicated to the Nurse Practitioner and CNS at the Surgical Centre.
- Ensure patients are seen by their local Upper GI Cancer Nurse Specialist prior to referral to the Surgical Centre in order for treatment coordination and future patient support to be facilitated between the Surgical Centre and the local hospital in accordance with IOG and related cancer policies.

**Post – surgery:**
*Treating Trust (i.e. Surgical Centre) should:*
- Enter all surgical data onto CANISC database.
- Ensure patient notes are tracked back to FST promptly following surgical episode.
- Ensure that discharge summary, operative notes and post operative histology are faxed back to FST following surgery (Nurse Practitioner at the surgical centre to fax to key worker at the local unit).

**How the information should be communicated**
- Referral form: via fax
- Network MDT patient list, minutes and roll call: via email
- Minimum dataset: via CANISC database
- X-ray images: all digital images should be transferred to PACS used by Network MDT.
- Patient notes: to be transferred via internal mail system
- MDT outcome sheets: via email/CANISC
3. SURGICAL TREATMENT

3.1 Pre-operative Assessment

Once a patient has been identified for curative intent, referral will be made by the lead surgeon for anaesthetic pre-assessment. This will be undertaken locally by the Anaesthetist who will be involved in the operation. Following this assessment a referral will be generated to the Critical Care team stating whether the patient will require a level 2 or 3 bed post operatively.

Consideration at this stage will be given to pre-operative Nutritional support and this will again be undertaken locally at outpatient clinic by the Lead Dietician for the Service.

One to two weeks prior to operation, patients will attend a designated Pre-Operative Clinic (POC) at the central hospital for clerking with a Nurse Practitioner. This will include nurse assessment, clinical examination and booking of tests, as well as allowing for baseline blood screens and ECGs to be undertaken. It will ensure the appropriate documentation is in place prior to admission.

At the same clinic, all oesophagectomy patients will undergo a pre-operative physiotherapy assessment, and all high risk gastrectomy patients will be reviewed if indicated following Anaesthetic pre-assessment.

Attending the PAC will also provide an opportunity for patients and carers to visit and familiarise themselves with the hospital prior to admission.

3.2 Admission and Pre-operative Care

All elective sections will be booked via the surgical secretaries, two weeks in advance using a standard referral letter which includes requirements for predicted level of immediate post operative care required.

On admission all patient will commence the Integrated Care Pathway 1, 2 or 3 (appendix ...).

Patients will be admitted 08.00 hours on the day before surgery to a bed that will be protected for return following their surgery. Patients will be assessed by the FP1 or FP2 team with support of the Nurse Practitioner who will coordinate all test results for surgical review. Final informed consent will be obtained by the lead operating consultant. Bowel preparations will commence.

All patients will be seen by the Lead Dietician on admission for reassessment. Patients will receive ‘carbohydrate loading’ orally if able to take oral fluids, if not via a nasoenteral feeding tube if practical. Pre-operative starvation will be no more than 4 hours prior to surgery. Unless in exceptional circumstances. Predicted date of discharge will be documented, if enteral nutrition is envisaged at home, planning will be commenced.

Joint operating between visiting consultants and UHW consultants will be encouraged for more complex cases or if laparoscopic resections are developed.
The junior surgical team at UHW will be available to provide assistance for all operating lists, optimising training opportunities and the continuity of post operative care for patients. This team comprises a year 6 SpR in upper GI surgery, a year 3/4 surgical SpR and a Clinical Fellow in Upper GI Surgery.

The Surgical Nurse Practitioner will support the surgical team in caring for Upper GI patients on the ward, as well as leading and coordinating the Pre-assessment clinic activity.

One oesophagectomy or a maximum of two gastrectomies can be scheduled on any full day operating list.

Patients are expected to have a feeding jejunostomy placed at the time of surgery (subtotal gastrectomy at the consultant’s discretion).

Biopsies will be undertaken and sent to histopathology for analysis and reporting. This can frequently include complex and specialist investigations including immunohistochemistry and molecular analysis such as cytogenetic investigation of HER2 status.

3.3 Critical Care Pre-admission Arrangements

Patients requiring critical care admission will require consultant to consultant referral well in advance of the day of surgery, or hospital admission. The challenges presented by such patients in the peri-operative period are such that anaesthetic pre-assessment would be required, and this might be a suitable point at which referral to consultant intensivists would take place using a critical care booking form.

For booked patients, on the day prior to surgery and before hospital admission, the critical care team will confirm the availability of suitable Critical Care capacity; this communication would take the form of consultant to consultant. The purpose of this is to avoid admission to hospital of patients who have no prospect of surgery due to unusually high critical care activity. Such events would be recorded as critical incidents and work during implementation is required to address how these patients surgery can then be expedited. Once admitted to hospital booked patients surgery will proceed as planned.

A process is being developed by the Critical Care Directorate for this purpose. Theatre scheduling that ensures the earliest possible completion of surgery, should be aided by this.

Appropriate theatre recovery care with prompt transfer to critical care of patients requiring Level 2 care, should create capacity in recovery. Those patients who require enhanced (Level 1) surgical ward dependency post-operatively may require rather longer stays in theatre recovery to ensure appropriate stabilisation under anaesthetic supervision prior to ward transfer.
3.4 Enhanced (Level 1) Surgical Ward Provision

The Critical Care component of the pathway is enabled by significant changes in provision of ward care for this patient group that is described below.

The additional nurses at ward level will provide one extra nurse per shift 7 days a week, to allow a 24/7 capability of such nursing care. This will ensure an increased level of care for these patients typically for 48 hours post operatively plus increased observational care after this time as required during their post operative stay until discharge. These posts are essential in prevention and early detection of post operative complications that studies have shown have a potential to develop at day 5-6.

The Surgical ward nursing team will be supported by the nurse led Critical Care Outreach team who will provide ongoing training and support to ward based nurses in the care of these patients together with clinical advice to the surgical ward team about individual patient care problems. The nurse led Critical Care Outreach team will be provided 7 days a week, as a daytime and evening service.

Enhanced ward care is referring to Level 1 Ward Care as described in the Design for Life Quality Standards and will be delivered within any bed area within the designated ward, rather than a specified location within the ward. This model is preferred by medical and nursing staff because it allows maximum flexibility within the ward area by reducing the need to move patients as their dependency changes. This is an important flexibility because it subsequently reduces the risk of critical care discharge being delayed because a ward ‘Enhanced Care’ unit is full.

3.5 Operative Protocols

3.5.1 Middle Third of Oesophagus

If this is for resection it will normally require a three-stage oesophagectomy. The patients will require one lung anaesthesia and an epidural catheter. A right thoracotomy will be the first intervention to mobilise the oesophagus and to assess operability.

Gastric mobilisation will be done either at open laparotomy or by a laparoscopic technique if appropriate and if technically feasible. This may be done with concomitant neck dissection with two teams, if two are available. The anastomosis will be done in the neck. There will be a two-field lymph node dissection. The mediastinum will be cleared to achieve radial clearance wherever possible. If the patient has been entered into the OEO5 trial, the clearance will be as per protocol. The anastomotic technique will be at the discretion of the surgeon.

The exact level of the tumour may allow for a 2-stage resection.
3.5.2 Lower Third of Oesophagus and Cardia

This will normally require an Ivor Lewis (Lewis Tanner) resection with abdominal gastric mobilisation and a Right thoracotomy with intrathoracic anastomosis. The gastric mobilisation may be done laparoscopically if appropriate and if technically feasible. The patients will require one lung anaesthesia and an epidural catheter. There will be a two-field lymph node dissection. If there is attachment of the tumour to the diaphragm, a rim of diaphragm will be taken with the specimen. The mediastinal radial clearance will be to achieve clear margins, or if the patient has been entered into the OEO5 trial, will be as per protocol. The anastomotic technique will be at the discretion of the surgeon.

3.5.3 Total Gastrectomy

This resection is done transabdominally. It will require an epidural catheter and two-lung anaesthesia. The surgical resection will include the greater omentum and lymph node stations appropriate to the site of the tumour. The resection will not include the spleen or the tail of the pancreas unless there is direct extension rendering preservation of these organs oncologically unsafe. Reconstruction will be with a Roux loop. It is optional to construct a pouch at the distal end of the loop (to enhance post-operative nutritional recovery). The Roux loop will normally have a 50cms gap between the oesophageal anastomosis and the reattachment of the proximal jejunum.

3.5.4 Laparoscopic Mobilisation

This is an established technique outside the UK, and is gaining acceptance within the UK. Any laparoscopic procedures will be subject to rigorous scrutiny and audit. It is suggested that there should be data entry into a national database for audit purposes. This is an ideal opportunity for a comparative trial of techniques subject to ethical committee approval.

It is further suggested that all laparoscopic procedures should involve two surgeons in order to provide maximum benefit to the patient.

3.6 Expected Post-operative Pathways

All patients require appropriate individualised care. However for the purposes of developing the clinical model three expected pathways are envisaged.

Gastrectomy patients who are pain free and not requiring cardio-vascular monitoring will return to enhanced (Level 1) surgical ward beds, after an appropriate period in recovery. In addition to this care, these patients will receive a mid evening joint surgical and critical care outreach review, in order to agree an individualised overnight management plan in conjunction with the consultant surgeon.

All oesophagectomy patients who remain intubated post-operatively will be transferred directly from the operating theatre to Critical Care, for overnight Level 3 care (or shorter period when indicated). Following extubation these patients will
then receive an appropriate period of Level 2 care before returning to their protected ward bed to receive enhanced (Level 1) surgical ward care.

All oesophagectomy patients extubated at the end of the operative procedure, will remain in theatre recovery to ensure appropriate stabilisation under anaesthetic supervision prior to transfer to Critical Care. Similarly complex gastrectomy patients identified as requiring a period of post operative critical care will follow the same pathway. Such patients will the receive overnight Level 2 care before returning to their protected ward bed to receive enhanced (Level 1) surgical ward care.

3.7 Post operative Care

The operating consultant will be available for the first 72 hours post operative period in case of an emergency requiring urgent intervention. The operating consultant and consultant anaesthetist will be expected to visit the patient on the morning of the first post-operative day and subsequently at their discretion. Mr Lewis will oversee the post operative care of Cwm Taf patients and Mr Clark will oversee the post operative care of Aneurin Bevan patients.

It is expected that if further surgery is required, that the UHW anaesthetic team will be responsible for the anaesthesia, but the operating surgeon will perform the operation. Agreed shared care protocols will be in place to cover the day-to-day assessment during the post-operative period, but it is expected that the UHW surgeons will take nominal responsibility for troubleshooting. This will take the form of identifying and assessing the urgency of any problems if they should arise.

The junior surgical team will undertake a morning round on all patients on Mondays to Fridays. They will provide routine post operative care and organise all post operative tests. The team will undertake the removal of abdominal and chest drains as necessary. A gastrograffin swallow will be scheduled for 7 days post op for oesophagectomy and total gastrectomy patients.

Pain control will be overseen by the pain team and patients will receive a minimum of once daily visits, supported by additional input when clinically indicated which could be up to one hour, dependent on patient need.

The Lead Dietitian will review the patient daily for the first 7-10 days. The Dietitian will liaise with the junior doctors to ensure adequate fluid management and biochemical monitoring and correction is taking place. Feed rate and volume will be increased as tolerated by the patient. This will be on an individual basis to a patient centred approach.

The Dietician will monitor the jejunostomy stoma site and discuss with colleagues any concerns to prevent the need to stop enteral feeding. Oral fluids and food will be introduced after discussion with the Consultant Surgeon, as per Enhanced Recovery Pathway 1, 2 or 3 (see appendix 3).

Post-op Physiotherapy Management for Oesophagectomies will include a baseline post-op assessment and commencement of chest care following surgery. Day 1-5 patients will be seen at least twice a day for assessment, chest care and
mobilisation as appropriate. The focus will be on early mobilisation with patients sitting out of bed/mobilising from Day 1 as CVS and pain allows. Shoulder exercises for Ivor Lewis patients to commence Day 1. Aim to mobilise ½ length of ward and back by Day 3. Days 6 – Discharge - To be seen daily to progress. Mobility and ex-tolerance stair assessment to be completed and advice provided pre-discharge.

Post-op physiotherapy Management for Gastrectomy patients will include review following surgery for high risk patients only to receive input (as per oesophagectomy). Day 1-3 Patients will receive Baseline post-op assessment performed Day 1 and will be seen at least twice a day for assessment, chest care and mobilisation as appropriate. Focus will be on early mobilisation with patients sitting out of bed/ mobilising from Day 1 as CVS and pain allow. Aim to mobilise ½ length of ward and back by Day 3. Days 4 – Discharge, patients will be seen daily to progress mobility and ex-tolerance. Stair assessment to be completed and advice provided pre-discharge.

All patients will receive a visit on the ward from the Specialist nurse who will offer and provide information on the ‘Oesophageal Patients Association’ and local Support Groups as appropriate. She will assess the patient to determine how much involvement is needed over the next few weeks. Arrangements will be made to contact the patient at home following discharge, by their clinical nurse specialist, (and before their next clinic appointment). Patients and their relatives will have a discussion with the medical team regarding the final histology report prior to their discharge/follow up appointment.

It is expected that the patients will stay in UHW until discharge. If there are complications that cause a delay in discharge to home, patients may be discharged back to their local hospital, following full multidisciplinary assessment and in line with discharge policy.

Discharge notification and the prescribing of take home medications will be undertaken by the junior surgical team. It will be the operating consultant’s responsibility to undertake or delegate appropriately the formal discharge letter which will be typed by the UHW unit secretaries. Follow up should take place at the referring hospital location.

3.8 Long-Term Management

Post treatment follow up:

- A follow-up appointment will be given for 2 weeks.
- The patients will be advised to contact the ward or Specialist Nurse should any unexpected problems occur early on, following discharge.
- The Specialist Nurse will be available for continued support. Involvement from other services is assessed at each contact, with referrals being expedited as appropriate

Follow up guidelines:

All patients undergoing surgery for oesophageal and gastric cancer will be followed up according to the following protocol.
• 2 – 4 weeks following discharge in the local outpatient clinic.
• 3 months after operation local outpatient clinic
• 6 months after operation local outpatient clinic
• 12 months after operation local outpatient clinic
• Annual follow up thereafter until 5 years locally

Follow up appointments to be performed by Upper G I cancer team (consultants, registrars or specialist nurses)

• The surgical centre will ensure that local hospitals have full information about operation, pathology and other relevant details.
• It may be appropriate for joint follow-up with oncology if post-operative treatment is required.
• Patients concerned about their symptoms should contact their local specialist nurse, GP or their referring clinician’s secretary for assessment / advice
• No routine imaging, but if symptomatic, investigations may be arranged/advice sought from specialist (Network) MDTM or direct liaison with operating surgeon.

Oncology Long term Follow Up:

For patient diagnosed with Squamous Cell Carcinoma, and deemed fit for surgery, but chose not to have surgery, may have definitive radiotherapy and will require ODG and CT.

Recurrence

All patients who relapse but are suitable for salvage curative treatment should be referred to the Network MDM for management.
4. QUALITY ASSURANCE AND AUDIT

4.1 Quality Assurance Indicators

- Numbers patients having curative radiotherapy, surgery and chemo radiation;
- Morbidity and mortality for patients who receive curative radiotherapy, surgery and chemo radiation;
- Patient satisfaction every 3 years;
- Number of patients going into clinical trials, randomized and non randomized and track these numbers back to health boards;
- Nodes at surgery;
- Correlation of pre-op stage to post op stage in surgical patients every 3 years
- Waiting times for USC and non USC patients tracked back to health boards, and proportions of each

4.2 Clinical Indicators to support Clinical Lines of Enquiry

- Median number of 15 lymph nodes examined for all resected stomach cancers (minimum: 85%, target: 95%)
- Median number of 10 lymph nodes examined for all resected oesophageal cancers (minimum: 85%, target: 95%)
- Resection rate stomach
- Resection rate oesophagus
- % of patients offered entry into clinical trials (target: >17% into trials)
- % of patients having final pre treatment stage as agreed by the multi disciplinary team for all oesophago-gastric cancers (minimum: 85%, target 95%)
- % of patients discussed by a multi disciplinary meeting (minimum: 85%, target: 95%)
- Year survival for curatively treated oesophago-gastric patients, stratified by stage and grade

4.3 Network Multidisciplinary Team Meetings

The MDM will hold 3 meeting per year; 2 audit meeting and 1 research meeting.
5. PATIENT AND PUBLIC INVOLVEMENT

Oesophageal Patients Group, South Wales

This support group has been running for approximately 7 years at a local level now regionally. The group is for patients and their carers who have undergone oesophago-gastric surgery, or are about to undergo the surgery. The patient group comprises of patients who have had surgery, pre op chemotherapy with surgery and those who have had pre op chemo/radiotherapy and surgery.

The aim of the group is to provide support and advice from people who have experience in dealing with these patients, as well as the patients and carer’s experience that can be drawn upon. We have a number of patients who are available to speak to patients prior to their surgery if they need any additional support.

The group meets 4 times a year for a coffee morning, there are regular speakers ie, dietetics, social services as well as a reflexologist who provides therapies on the day. We also try to arrange a bus trip and a Christmas night out. The cost of these activities are mainly met by the group, as we are a charity we rely on donations or fund raising events to keep the money readily available.

The group is audited to ensure the patients are receiving the support and service they feel they need and they also give feedback on the regional information leaflets.

The group has an elected committee Chairman, Secretary, Treasurer and a Specialist Nurse. These people can be contact easily via telephone; their numbers are on the website www.opgsouthwales.org.uk

The website is updated regularly with the details of forthcoming events; however it remains the responsibility of the Specialist Nurse in each area to direct patients to the group.

The group is an affiliated member of the Oesophageal Patients Association (UK).