Peer Review
Cwm Taf Health Board
Lung Cancer Multidisciplinary Teams – Prince Charles & Royal Glamorgan

MEETING ATTENDANCE
Peer Review Team

Name (Print)	Job Title	Organisation
Emrys Evans	Consultant in Respiratory Medicine	Abertawe Bro Morgannwg University Health Board
Chris Patterson	Clinical Nurse Specialist	Hywel Dda Health Board
Tom Crosby	Medical Director	South Wales Cancer Network
Debra Bennett	Information Manager and Service Improvement Lead	South Wales Cancer Network
Val Jones	Lay Reviewer	Healthcare Inspectorate Wales
Stephen Evans	Telemedicine Service Manager	South Wales Cancer Network
Gareth Brydon	Review Lead	Healthcare Inspectorate Wales

Network Title	**South Wales Cancer Network**	
Organisation Title	**Cwm Taf Health Board**	
Team title	**Royal Glamorgan Lung Cancer Multidisciplinary Team**	
Review Date	**25/03/2013**	
Name (Print)	**Job Title**	**Organisation**
Anita Pandit	Consultant in Respiratory Medicine / MDT Lead	Cwm Taf Health Board
Richard Winter	Consultant Radiologist / Cancer Lead	Cwm Taf Health Board
Phil Brumwell	Consultant Histopathologist	Cwm Taf Health Board
Ian Back	Consultant in Palliative Medicine	Cwm Taf Health Board
Louise Hanna	Consultant Oncologist	Velindre NHS Trust
Richard Quirk	Deputy Medical Director	Cwm Taf Health Board
Debra Townley	Cancer Co-ordinator	Cwm Taf Health Board
Yvette Evans	Cancer Nurse Specialist	Cwm Taf Health Board
Marie Evans	Strategy & Operational Planning Manager	Cwm Taf Health Board

Network Title	**South Wales Cancer Network**	
Organisation Title	**Cwm Taf Health Board**	
Team title	**Prince Charles Lung Cancer Multidisciplinary Team**	
Review Date	**25/03/2013**	
Name (Print)	**Job Title**	**Organisation**
Anthony Gibson	Consultant in Respiratory Medicine / MDT Lead	Cwm Taf Health Board
Richard Winter	Cancer Lead/Consultant Radiologist	Cwm Taf Health Board
Marie Evans	Strategy & Operational Planning Manager	Cwm Taf Health Board
Dana Knowles	Cancer Nurse Specialist	Cwm Taf Health Board
Hayley Jackson	Cancer Co-ordinator	Cwm Taf Health Board
Richard Quirk	Deputy Medical Director	Cwm Taf Health Board
Jake Tanguay	Consultant Oncologist	Velindre NHS Trust
Jason Shannon	Consultant Histopathologist	Cwm Taf Health Board

REVIEWERS REPORT

Key Themes

With reference to guidance on Key Themes in the evidence guides, please provide comments including details of strengths, areas for development and overall effectiveness of the team. Any specific issues of concern or good practice should also be noted in the following sections. It is important to demonstrate any measurable change in performance compared to previous assessments

1. Structure and Function of the Service

The Peer Review Team met with representative of the Cwm Taf Health Board and lung cancer MDTs on 25 March 2013. The meeting was well supported from an administrative point of view in terms of venue and space provided by the Health Board.

There are 2 MDTs within the Health Board one at Prince Charles Hospital (PCH), Merthyr and the other at The Royal Glamorgan Hospital (RGH), Llantrisant. The number of patients seen by the MDTs in the previous year were:

Prince Charles 112; Royal Glamorgan 131.

The 2 teams work largely independently of each other. Both practice according to an operational policy which was presented to the Peer Review Team. Whilst both have business meetings to audit and reflect on the processes and outcomes of the service, it was not clear in respect of the Royal Glamorgan MDT whether all members had been invited or attended these meetings.

All referrals in to the teams were assessed and patients placed in to the Rapid Access Clinics, twice weekly at Prince Charles and weekly at the Royal Glamorgan The radiology flagging system to cancer services in use at both hospitals appears to work well and helps to identify lung cancer patients early and expedite referral to the appropriate team member.

Royal Glamorgan patients attend a weekly rapid access clinic on a Wednesday and have staging CT the same day. Patients may then be listed for bronchoscopy on the following Friday or CT guided biopsy Friday/Monday. At the following Tuesday's MDM, arrangements are made for any subsequent investigations such as EBUS or PET.

Prince Charles had same day CT scan availability aligned to the Rapid Access Clinics, CT guided biopsies are performed Monday and Thursday each week and bronchoscopies the following day after the rapid access clinic.

Both teams recognised late presentation of lung cancer patients as the key challenge and hoped the links with Primary Care would be improved through the Macmillan GP Facilitator project and help address this in the future.

The Royal Glamorgan MDT holds a meeting for radiology, respiratory medicine and thoracic surgery first thing on a Tuesday morning. There is then a further meeting with oncology, respiratory medicine, pathology and radiology at lunchtime. Therefore the surgical and oncology teams are never in the same meeting. Whilst communication was said to be good within the team, it was not clear how these communications were formally documented in case notes and information systems.

Some delays have been encountered with the Endobronchial Ultra Sound (EBUS) service provided by Cardiff & Vale LHB. However, the Royal Glamorgan team said this had improved recently whilst Prince Charles explained there could be up to a 4 week delay. Both teams expressed a willingness to see their own EBUS service developed and provided within the Health Board but it was felt that this was unlikely to be funded. There are plans to develop a medical thoracoscopy service in PCH within the next year.

Pathology had configured their services to enable 100% attendance at MDT meetings, generally with the same person in attendance at each meeting and a clinical pathway had been developed to ensure consistency in appropriate pathological tests such as EGFR mutation testing.

Thoracic surgery is provided by Cardiff and Vale Health Board and Clinical Oncology by Velindre NHS Trust. There were issues raised with regard to the adequacy of support for both these service across the Health Board. Despite this, the surgical resection rate in RGH is very good.

Patients are supported throughout treatment by designated specialist nurses. The specialist nurse in Prince Charles had developed innovative supported services such as nurse led follow up, independent prescribing and nurse directed radiology requesting. In Royal Glamorgan, the nurse was unable to see all patients at the point of delivering diagnosis and bad news due to supporting up to 3 doctors in one clinic, although all patients were contacted very soon afterwards. The nurse led follow up clinic had been a positive development. It was stated that work commitments limited annual leave.

The number of patients with small cell lung cancer receiving chemotherapy (53%) was below the national target in Royal Glamorgan. The Review Team also noted that only 6% of small cell lung cancer patients at Royal Glamorgan received treatment within 14 days of diagnosis and that the Wales Lung Cancer Data Report 2012 also highlighted the percentage of patients receiving chemotherapy within 10 days of the decision to treat (see Section 3c). The Team felt this may be a result of the patient pathway. It was noted that In Prince Charles Hospital, the specialist nurse coordinated appointments for the oncologist."

Both teams' patients accessed the Velindre out of hours triage telephone line whilst receiving chemotherapy.

The use of Canisc and the Multidisciplinary Module (MDM) module at Prince Charles has been seen to be very beneficial allowing all information to be in one place at any given time when making decisions. The team at the Royal Glamorgan Hospital are not currently using the MDM module

2. Patient Centred Care and Experience

The Health Board participated in the 2010 S E Wales Network Lung Cancer Survey, and in 2012 carried out its own Survey across both Teams, with 21 patients responding. Both teams said there was intent to carry out further surveys. Analysis of patient complaints and performance measures could also be used to assess if Cwm Taf Health Board was providing an appropriate service to patients with lung cancer.

Although CNSs in both teams see most of their patients during the pathway, (well above the national target), the Royal Glamorgan CNS was not always able to be present at the point of breaking bad news due to lack of sufficient CNS resource to support all consultants' clinics.

The review team noted that the Prince Charles CNS was able to provide a wider range of clinical practices than the CNS at Royal Glamorgan; this included non medical prescribing and radiology ordering. It was noted that the CNS in RGH was relatively new in post compared to the more experienced CNS at Prince Charles.

a. Evidence of Key worker

Review of the sample of case notes showed evidence of a Key Worker being allocated to each patient. This was documented in most of the patient notes and on Canisc for each of the case notes reviewed.

3. Service Quality and Delivery

a. MDT Service Support

The majority of core multidisciplinary team members are in place, with the exception of:-

Royal Glamorgan Hospital – No thoracic surgical input to the main MDT meeting plus no cross cover. 'The oncology consultant was often not present or arrived late to MDT meetings because of overrunning clinics immediately prior to the meeting, also there was no cross-cover. The palliative care consultant attends every other meeting plus no cross-cover. There is no cross-cover for lung cancer CNS.

Prince Charles Hospital – Thoracic surgery input is variable plus no cross-cover. There is no cross-cover for lung cancer CNS or oncology consultant. There could not be any cross-cover between MDTs as the MDT meeting times were different.

Although there was no surgical input to the Royal Glamorgan Hospital MDT meeting, attempts are made to overcome this, through other communication channels.

b. Service Outcome Data

Collated responses For the Information Section of Peer review

Key:

X - No data provided

Met Target

	CT - PCH	CT - RGH	National Target	Best LHB Wales
Number of Non-small Cell Lung Cancer (NSCLC) patients having a resection.	8/59 (13.5%)	17/90 (19%)	14%	**HD- WGH 22%**
Number of USC referrals treated within 62 days.	34	29/32 (91%)	95%	**BCU- 98%**
Number of non-USC referrals treated within 31 days.	75	88/90 (98%)	98%	**BCU- YG, BCU YMW, C&V, HD-BGH, HD-GGH 100%**
Number of patient with pre-treatment stage recorded.	111/112 (99%)	134/135 (100%)	85%	**CT-RGH, HD-BGH, HD-GGH 100%**
Histological / cytological confirmation rate.	80/ 112 (71%)	109/135 (80%)	75%	**ABMU-NPT 83%**
Number of patients receiving active treatment for lung cancer.	75/112 (67%)	96/135 (71%)	60%	**HD-WGH 77%**
Number of small cell lung cancer patients receiving chemotherapy at any stage.	11/13 (85%)	9/17 (53%)	65%	**HD-BGH 100%**
Number of small cell lung cancer patients receiving treatment within 14 days of diagnosis.	11/13 (85%)	1/17 (6%)	100%	**ABMU - NPT 86%**
Number seen by specialist nurse at diagnosis.	(88%) sample audit of 30 patients	109 / 136 (80%)	100%	
Percentage of patients with 30 day post treatment mortality for:				
a) Chemotherapy;	0	X		
b) Surgery.	0	X		
Number of patients entered into clinical trials.	2/112 = 2%	0	10%	

Number of patients donating tissue to the Wales Cancer Bank.	0	X	20% by 2016	

During discussions with the RGH team, it became clear data was available by hospital and clinician for the 30 day mortality figures. However, these figures were not available ahead of Peer Review visit. Whilst these rates appeared to be high the Prince Charles team suggested that the use of tyrosine kinase inhibitors towards end of life could skew these figures.

c. The following information was noted from the Wales Lung Cancer Data Report 2012

The CT-PET rates at the Royal Glamorgan were significantly higher than the Wales average. An audit of whether patients were fit for active therapy following PET had not been carried out to validate the appropriateness of referrals.

Resection rates for all non small cell lung cancer (NSCLC) patients at Prince Charles hospital were more than 3 Standard deviations below the Wales mean.

Active treatment rates for all lung cancer patients, and for all NSCLC, are significantly above (> 3 Standard deviations) the Wales mean for the Royal Glamorgan team. Figures for Prince Charles Hospital are also above the Wales mean for both measures.

Chemotherapy rates for all NSCLC patients and for those with Stage 3&4 NSCLC at Prince Charles were low in comparison with the Wales mean.

The percentage of patients with small cell lung cancer (SCLC) patients commencing chemotherapy within 10 days of the decision to treat at Royal Glamorgan was relatively poor in comparison with the best performing MDTs in Wales.

d. General Observations

Both MDTs had a designated lead clinician and good working relationships within the team. Communication appears to be a strong point between each of the teams although many patient discussions within the RGH team were not recorded as they occurred in a less formal and coordinated fashion.

The peer review team were told of a survey of the lung cancer pathology NOS rates which had been surprisingly high. It was concluded that this was the result of reporting incomplete data that had been entered in to Canisc. This was an example of where data had not been examined sufficiently, prior to clinical sign off for a National audit/review process.

Surgical resection rates for the RGH team are higher than average and compared with the PCH. It is possible that a review of the diagnostic and management pathways may improve these figures further. The lower resection rates in PCH were felt to relate to a different patient population and late presentation.

4. Review of Clinical Information in the Clinical Notes and Canisc

Review of a sample of case notes showed evidence of a Key Worker being allocated to each patient. Notification of the GP being informed of diagnosis within 24hrs was not so clear. The Review team understands that an MDT letter is generated after the MDT and faxed to the GP, but couldn't find evidence of the fax being sent in all cases in their review of a sample of notes. They were unable to find evidence in Canisc. All other items were present.

5. Engagement with Management

The management structure within Cwm Taf Health Board and communication between departments had consequently changed in the previous 12 months. This is evident through the change in membership of the Strategy and Steering Groups. It was not clear that the issue of lack of support from thoracic surgical services had been escalated to the Health Board level. Evidence of the challenges to effective communication became apparent as there was a lack of agreement as to what defines a hospice and whether patients in the south had equal access. At the peer review meeting it was confirmed that patients did have equal access.

6. Culture of the Teams

There appears to be good team working within both MDTs but this is not necessarily the case across the Health Board. There is no evidence of standardisation of protocols, pathways and practices across the whole Health Board.

Job plans for the Lead Clinicians appear to differ greatly. The lead at Royal Glamorgan reported a difference of opinion with management over the adequacy of time being allocated to leading and delivering the lung cancer service. The Prince Charles lead has time in his job plan to allow for administration and audit etc and this appeared to be reflected in the data supplied to the review team. A feeling of ownership of the data and the service permeated through all Prince Charles team members. This was not the same within the Royal Glamorgan team, who submitted many documents at the time of the peer review visit which did not allow adequate time for review.

Both teams had held, and plan to increase the number of business meetings for the MDTs. The team at PCH aim to hold them on alternate months.

Whilst both teams demonstrated good team working, it was clear that the Prince Charles team had had improved over the past 2-3 years and had benefitted from strong leadership at a nursing and physician level. Across this team, all members appeared particularly enthusiastic and engaged with the whole service and how to improve it.

The Royal Glamorgan team suffered from what appeared to be a disjointed patient pathway. Although good interpersonal communications appear to make this pathway work, the ad hoc emails and conversations required are not recorded. Additionally, holding 2 meetings on a Tuesday morning, one with surgery and some members of the MDT, prior to the main MDT meant there was no opportunity to have direct surgical/oncological interaction.

GOOD PRACTICE
Identify any areas of good practice

Good Practice/Significant Achievements:

- The use of the Rapid Access Clinics
- The early warning system used in the Radiology system in Royal Glamorgan
- Good interpersonal communications
- The delivery of a single pathway for pathology
- Strong clinical and nursing leadership in the Prince Charles Hospital MDT.

CONCERNS
These should be brought to the attention of the team and a response from the LHB regarding its plans to remedy these concerns should be made

- Surgical attendance at both MDT meetings
- Lack of cover at MDTs for disciplines including thoracic surgery, oncology and lung cancer CNS
- Lack of clinical leadership and coordination in the Royal Glamorgan MDT although this may be as a result of the lack of dedicated time in job plans for lung cancer and for clinical leadership of the MDT.

SERIOUS CONCERNS
These should be brought to the attention of the team and a response from the LHB regarding its plans to remedy these concerns should be made.

- None

Immediate Risks Identified? ☐ **Yes** ☒ **No**

These should be brought to the attention of the team and a response from the LHB regarding its plans to remedy these concerns should be made within 1 week

- None

Glossary : Lung Cancer Peer Review

Cwm Taf HB	Cwm Taf Health Board.
Bronchoscopy	This is a technique of visualizing the inside of the airways for diagnostic and therapeutic purposes. An instrument (bronchoscope) is inserted into the airways, usually through the nose or mouth, or occasionally through a tracheostomy. This allows the practitioner to examine the patient's airways for abnormalities such as foreign bodies, bleeding, tumours, or inflammation. Specimens may be taken from inside the lungs. The construction of bronchoscopes ranges from rigid metal tubes with attached lighting devices to flexible optical fiber instruments with realtime video equipment.
CHART (Continuous Hyper Fractionated Accelerated Radiotherapy)	Hyperfractionated means giving more than one treatment (fraction) of radiotherapy per day. One type of hyperfractionated radiotherapy is called CHART. It stands for Continuous Hyperfractionated Accelerated Radiotherapy. The whole dose of radiation is about the same that would be applied for cancer with standard radiotherapy. The difference is that treatment is administered every day over 12 days instead of over several weeks. It requires a stay in hospital because as many as 3 treatments are administered every day.
CNS	Clinical Nurse Specialist.
CT (Computerised Tomography)	X-ray computed tomography, also computed tomography (CT scan) or computed axial tomography (CAT scan), is a medical imaging procedure that utilizes computer-processed X-rays to produce tomographic images or 'slices' of specific areas of the body. These cross-sectional images are used for diagnostic and therapeutic purposes in various medical disciplines.
CXR	Chest x-ray
DGH	District General Hospital.

EBUS (Endobronchial Ultrasound)	An endobronchial ultrasound (EBUS) is a procedure that may be performed during a bronchoscopy, to provide further information to diagnose or determine the stage of a lung cancer. This relatively new technique allows viewing of regions of the lungs and surrounding chest area that have traditionally required more invasive surgical procedures to evaluate.
GP	A General Practitioner.
HIW	Healthcare Inspectorate Wales.
IMRT (Intensity Modulated Radiotherapy)	This is an advanced mode of high-precision radiotherapy that uses computer-controlled linear accelerators to deliver precise radiation doses to a malignant tumour or specific areas within the tumour. IMRT allows for the radiation dose to conform more precisely to the three-dimensional (3-D) shape of the tumour by modulating—or controlling—the intensity of the radiation beam in multiple small volumes. IMRT also allows higher radiation doses to be focused to regions within the tumour while minimizing the dose to surrounding normal critical structures.
LHB	Local Health Board.
MDM (Multi Disciplinary Meeting)	A meeting made up of a variety of expert health care professionals.
MDT (Multi Disciplinary Team)	Multi-disciplinary teams (MDTs) are made up of expert health care professionals who have specialised knowledge and training in specific cancers. The teams meet regularly to discuss individual cases and to plan the best course of treatment for the patient. MDTs improve communication and decision making, waiting times and patient care.
NSCLC (Non Small Cell Lung Carcinoma)	NSCLC is any type of epithelial lung cancer other than small cell lung carcinoma (SCLC). As a class, NSCLCs are relatively insensitive to chemotherapy, compared to small cell carcinoma. When possible, they are primarily treated by surgical resection with curative intent, although chemotherapy is increasingly being used both pre-operatively (neoadjuvant chemotherapy)

	and post-operatively (adjuvant chemotherapy). The most common types of NSCLC are squamous cell carcinoma, large cell carcinoma, and adenocarcinoma, but there are several other types that occur less frequently, and all types can occur in unusual histologic variants and as mixed cell-type combinations.
PET (Positron Emission Tomography)	PET is a nuclear medical imaging technique that produces a three-dimensional image or picture of functional processes in the body. The system detects pairs of gamma rays emitted indirectly by a positron-emitting radionuclide (tracer), which is introduced into the body on a biologically active molecule. Three-dimensional images of tracer concentration within the body are then constructed by computer analysis. In modern scanners, three dimensional imaging is often accomplished with the aid of a CT X-ray scan performed on the patient during the same session, in the same machine.
RT (Radiotherapy Treatment)	Radiotherapy Treatment is the use of high energy x-rays and similar rays (such as electrons) to treat cancer.
SBRT (Stereotactic Body Radiation Therapy)	Stereotactic body radiation therapy (SBRT) is a technique that utilizes precisely targeted radiation to a tumour while minimizing radiation to adjacent normal tissue. This targeting allows treatment of small- or moderate-sized tumours in either a single or limited number of dose fractions.
VC	Video Conference facilities.