Lung Cancer Peer Review

Betsi Cadwaladr University Health Board

Ysbyty Glan Clwyd, Wrexham Maelor Hospital and Ysbyty Gwynedd

MEETING ATTENDANCE

Peer Review Team

Name (Print)	Job Title	Organisation
Ian Williamson	Consultant Respiratory Physician	Aneurin Bevan HB
Christine Patterson	Lung Cancer CNS	Hywel Dda HB
Urfi Urfi	Consultant Respiratory Physician	Hywel Dda HB
Tom Crosby	Consultant Clinical Oncologist	Velindre NHS Trust
Hywel Morgan	Network Director	South Wales Cancer Network
Mansel Thomas	Lay Reviewer	Healthcare Inspectorate Wales
Gareth Brydon	Lead Reviewer	Healthcare Inspectorate Wales
Delyth Lewis	Review Co-ordinator	South Wales Cancer Network

Network Title	**North Wales Cancer Network**	
Organisation Title	**Betsi Cadwaladr UHB**	
Team title	**Ysbyty Gwynedd Lung MDT**	
Review Date Title	**24 May 2013**	
Name (Print)	**Job Title**	**Organisation**
Damian McKeon	Consultant Respiratory Physician	Betsi Cadwaladr UHB
Grant Benfield	Consultant Respiratory Physician	Betsi Cadwaladr UHB
Andrew Owen	MDT Co-ordinator	Betsi Cadwaladr UHB

Cath Bale	Consultant Medical Oncologist	Betsi Cadwaladr UHB
Ghislaine Sayer	Consultant Radiologist	Betsi Cadwaladr UHB
Liz Williams	Palliative Care CNS	Betsi Cadwaladr UHB
Niladri Ghosal	Consultant Clinical Oncologist	Betsi Cadwaladr UHB
Sue Hughes	Cancer Services Co-ordinator	Betsi Cadwaladr UHB

Network Title	North Wales Cancer Network	
Organisation Title	Betsi Cadwaladr UHB	
Team title	Wrexham Maelor Lung MDT	
Review Date Title	24 May 2013	
Name (Print)	**Job Title**	**Organisation**
Neil McAndrew	Consultant Respiratory Physician	Betsi Cadwaladr UHB
Ann Gostage	Lung Cancer CNS	Betsi Cadwaladr UHB
Mark Steel	Consultant Respiratory Physician	Betsi Cadwaladr UHB
Gaynor Drury	Lung Cancer CNS	Betsi Cadwaladr UHB
Matt Makin	Consultant in Palliative Medicine / Chief of Staff - Cancer	Betsi Cadwaladr UHB
Angel Garcia	Consultant Clinical Oncologist	Betsi Cadwaladr UHB
Gemma Lewis	ST6 in Palliative Medicine	Betsi Cadwaladr UHB
Manon Jones	Palliative Care CNS	Betsi Cadwaladr UHB
Helen Lawrence	Cancer & Information Manager	Betsi Cadwaladr UHB

Network Title	**North Wales Cancer Network**	
Organisation Title	**Betsi Cadwaladr UHB**	
Team title	**Ysbyty Glan Clwyd Lung MDT**	
Review Date Title	**24 May 2013**	
Name (Print)	**Job Title**	**Organisation**
Nicholas Archard	**Consultant Radiologist**	**Betsi Cadwaladr UHB**
Sue Carroll	**MDT Co-ordinator**	**Betsi Cadwaladr UHB**
Sakkarai Ambalavanan	**Consultant Respiratory Physician**	**Betsi Cadwaladr UHB**
Daniel Menzies	**Consultant Respiratory Physician**	**Betsi Cadwaladr UHB**
N Hales	**Lung Cancer CNS**	**Betsi Cadwaladr UHB**
Siân Hall	**Lung Cancer CNS**	**Betsi Cadwaladr UHB**
Joanne Lewis	**Research Nurse**	**Betsi Cadwaladr UHB**
Katie Morris	**Cancer Services Team Leader**	**Betsi Cadwaladr UHB**
Angel Garcia	**Consultant Clinical Oncologist**	**Betsi Cadwaladr UHB**

Key Themes

1. Structure and Function of the Service

The Peer Review Team met with representatives of Betsi Cadwaladr Health Board and its lung cancer MDTs on 24 May 2013.

There are three lung cancer MDTs in the Health Board, based at Ysbyty Gwynedd, Bangor, Ysbyty Glan Clwyd and Wrexham Maelor Hospital. The number of patients discussed by each of the MDTs in the previous year were:

Ysbyty Glan Clwyd: 198. Ysbyty Gwynedd: 111. Wrexham Maelor Hospital: 194.

Respiratory Medicine services, both in-patient and out-patients, are provided on all 3 DGH sites in the health board.

The three teams work largely independently of each other with different pathways and protocols in use at each site. Some services are provided on a North Wales wide basis such as EBUS at Wrexham.

Although there was evidence of initiatives to improve early referral and diagnosis with Primary Care, particularly from Glan Clwyd and Wrexham, and close links with the North Wales Centre for Primary Care Research, the Review Team did not see evidence of a common engagement process across all MDTs in the health board.

All MDTs reported that they had rapid access pathways in place. The Ysbyty Gwynedd team had recently reviewed their pathway and introduced CT scanning prior to first appointment. A CT Scan was normally carried out within 10 days. Bronchoscopies were either undertaken on the same day as the rapid access clinic, or within a couple of days. The Review Team welcomed the initiative to undertake CT prior to clinical assessment and noted that, although there had been problems with compliance with the 62 day target, there was evidence that this was improving as a result of actions taken to review the pathway.

Some patients at Glan Clwyd receive a CT prior to the rapid access clinic but there are also CT slots available after the clinic. For the latter patients, there is an informal review meeting to assess the results, and the Clinical Nurse Specialist (CNS) then contacts the patient to discuss the next steps. The Glan Clwyd Team stated that decisions relating to progressing patient through the pathway were made during the week to minimise delays, and the purpose of the MDT meeting was to confirm the management plan and adjust it where necessary. The Review Team noted that patients may be discussed by the MDT on two or three separate occasions.

Wrexham Urgent Suspected Cancer patients are booked into a weekly clinic which follows on from the MDT meeting. Radiology is discussed prior to the clinic;

however there is no opportunity for a formal radiology meeting. If a bronchoscopy is required this can often be carried out on the same day as the clinic or on the following day, as can EBUS. If CT is required, then this can take longer to arrange. All patients are discussed at the next MDT following the clinic.

Even though EBUS is only carried out at Wrexham, all teams reported that they had good access to the service and all patients were normally seen within one week.

There was variation in access to pleural services, with thoracoscopy at Wrexham and Glan Clwyd (also serving Ysbyty Gwynedd). The Review Team felt there was a strong thoracoscopy service at Wrexham. However, the service at Glan Clwyd was under pressure from increasing activity and there was a limited pleural service at Ysbyty Gwynedd e.g. no dedicated ward based pleural ultrasound. It was noted that there had been some discussion regarding a pleural nurse to work across both the Glan Clwyd and Ysbyty Gwynedd teams.

Non-surgical oncology services for Wrexham and Glan Clwyd were provided by Clinical and medical oncologists based at the North Wales Cancer Treatment Centre (NWCTC) at Glan Clwyd, whilst Bangor received radiotherapy support from clinical oncologists based at the NWCTC and medical oncology services from medical oncologists based at Ysbyty Gwynedd. The teams reported that the level of oncology support to each MDT was largely the result of the historical structure of services. The CNSs at Wrexham and Glan Clwyd were able to fast-track access to chemotherapy for small cell lung cancer patients.

The radiotherapy centre at Glan Clwyd is undertaking 4D planning where appropriate. Currently they refer patients for stereotactic radiotherapy into England, but they are looking to deliver that service locally.

Each MDT has a designated pathologist, although unfortunately they were not represented at the Peer review meetings, so the Review team were not able to follow up some of the points raised. All teams reported concerns regarding the future provision of pathology services, as there were discussions underway about centralising all pathology services for BCUHB on one site.

The Ysbyty Gwynedd team reported that the hospital had gone from 3 to 2 pathologists; they were not certain if there would be a replacement. The pathologist was unable to attend the whole MDT, so they tried to ensure that they clustered those cases they felt needed pathology input together. There were also difficulties in ensuring pathology attendance at the Glan Clwyd MDT because of lack of resources. There was also lack of depth in cytology services, with one lead cytopathologist across the area, although the HB reported that they were looking to recruit an additional cytopathologist, and that also centralisation of pathology would strengthen the service.

Each MDT had radiology as a core member, with named cover. All investigations were available locally except for PET, where patients are referred to The Christie. The Teams reported this was good quality service but turn-around times were increasing but were being monitored.

There is no formal system of 'red flagging' abnormal chest x-rays directly to the chest physicians, instead reports are sent back to the GP for them to make a USC referral, however Wrexham reported that abnormal Chest X-Rays are notified to the co-ordinator who checks that a subsequent referral has been received.

Thoracic Surgery support for the MDTs is provided by surgeons from the Liverpool Heart and Chest Hospital; all surgery was undertaken at Liverpool. There was variation in the thoracic service to each of the MDTs and there were problems in ensuring attendance at all MDT meetings, particularly in Glan Clwyd (See Section 3). Organising cross border video-conferencing (VC) links had been a major obstacle, but this had been overcome. The MDTs reported that the surgeons provided a high-quality, responsive service, there were fortnightly out-reach clinics at Glan Clwyd & Wrexham but, if urgent, patients could be seen in Liverpool rather than delay.

There were Acute Oncology Services at all three hospitals, although the model differed on each site. There is a 24 hour help line at the Cancer Centre, at Glan Clwyd, for patients undergoing chemotherapy at Glan Clwyd and Wrexham and patients at Ysbyty Gwynedd have a 24 hour help line at the Alaw Unit in Bangor.

2. Patient Centred Care and Experience

It was noted that CNS Support varied across the MDTs. There was a single CNS at Ysbyty Gwynedd with no cover. As a result of the lack of resources, the MDT felt that CNS input at Ysbyty Gwynedd was poor especially in the pre-diagnostic stage and one of the Lung Physicians reported that the CNS was able to attend fewer than half of his out-patient clinics. Currently the Gwynedd CNS was on sick-leave, and clinic nurses in conjunction with some other staff were trying to provide a basic support service for patients. The evidence presented to the Peer Review Team indicated that CNS support to the other two MDTs was better resourced and more robust.

The Review Team were pleased to note a number of innovative developments such as a nurse led biologic clinic, and telephone clinic for patients at the end of treatment at Wrexham; the CNSs at Wrexham and Glan Clwyd being able to pre-book small cell lung cancer patients directly into chemotherapy clinics. However, there was no single cross-health board Lung CNS forum where CNSs from the three MDTs could come together and share best practice, agree common guidelines etc. One of the Lung Cancer CNSs at Glan Clwyd had won a Health Board award as Cancer Nurse of the Year.

Evidence was provided of patient satisfaction surveys undertaken by the CNSs in the Glan Clwyd and Wrexham teams

a. Evidence of Key worker

The Review Team were unable to find a record of Key Worker in the sample of case notes from Ysbyty Gwynedd, although it was clearly recorded on Canisc for

those patients. The Wrexham case notes sampled had Key worker recorded, although it was missing on the Canisc file in two cases. Key worker was recorded on both the case note and Canisc for the Glan Clwyd notes sampled.

3. Service Quality and Delivery

a. MDT Service Support

Maintaining a full Pathology presence at MDT meetings was a problem with the speciality not represented at Glan Clwyd on 28/51 occasions, Ysbyty Gwynedd 7/52, and Wrexham 6/52. There were a number of long-term vacancies. It was noted that the Health Board was reviewing the configuration of pathology services.

There was also lack of depth in cytology services, with one lead cytopathologist across the area, although it was reported that the Health board were looking to recruit an additional cytopathologist, and that also centralisation of pathology would strengthen the service.

Cross-cover for oncology varied between the three teams, with Wrexham having particular problems; the Chief of Staff for the Cancer Clinical Programme Group reported that they had just advertised for an additional clinical oncologist to increase capacity.

Although radiology support and attendance at MDTs was very good, the teams reported that there was a lack of dedicated time in job plans across the health board for preparation for the MDT meeting putting pressure on the radiologists. Not all radiologists had attendance at the MDT in their job plan, and none had recognised time for preparation for the MDT.

Thoracic Surgery was not represented at 13/51 MDT meetings at Glan Clwyd, 10/52 meetings at Ysbyty Gwynedd and at 8/52 meetings at Wrexham. Ysbyty Gwynedd used to have no thoracic input to the MDT input but now had a surgeon linking in via VC. Glan Clwyd had fortnightly on-site presence from a surgeon at the MDT, but annual leave etc had meant that this cover was further eroded. They had now tried to link in via VC on the alternate weeks with the surgeon who supported the Wrexham team, but the MDT agreed this was not robust. The Review Team raised the issue of consistency given that two separate surgeons were supporting the team, attending alternately.

There was variation across the Health Board in whether MDT commitments were recognised in Job Plans, e.g. the Ysbyty Gwynedd team reported they did not have designated time, while the Glan Clwyd MDT stated that they had 0.5 sessions.

Glan Clwyd are the only MDT using the MDM Module in real-time, and stated in their evidence that they believed it is leading to better quality clinical data, as it is validated ‘live’ at the MDT meeting

b. Service Outcome Data

Collated responses For the Information Section of Peer review

Met Target

Key:

X - No data provided

	BCU - Bangor	BCU - YGC	BCU - YW	National Target	Best LHB Wales
Number of Non-small Cell Lung Cancer (NSCLC) patients having a resection.	6= 10%	15 = 15%	14 = 9%	14%	HD- WGH 22%
Number of USC referrals treated within 62 days.	31 = 79%	42	58 = 98%	95%	BCU- 98%
Number of non-USC referrals treated within 31 days.	71 = 100%	131	92=100%	98%	BCU- YG, BCU YMW, C&V, HD-BGH, HD-GGH 100%
Number of patient with pre-treatment stage recorded.	102 = 91%	178= 96%	189= 97%	85%	CT-RGH, HD-BGH, HD-GGH 100%
Histological / cytological confirmation rate.	76= 68%	131= 70%	144= 74%	75%	ABMU-NPT 83%
Number of patients receiving active treatment for lung cancer.	65= 59%	106= 57%	118= 61%	60%	HD-WGH 77%
Number of small cell lung cancer patients receiving chemotherapy at any stage.	7= 63%	15=75%	21= 84%	65%	HD-BGH 100%
Number of small cell lung cancer patients receiving treatment within 14 days of diagnosis.	4= 57%	13= 65%	11		ABMU - NPT 86%
Number seen by specialist nurse at diagnosis.	100%	X	X	100%	
Percentage of patients with 30 day post treatment mortality for:					
a) Chemotherapy;	X	7%	1		
b) Surgery.	X	0%	0		

Number of patients entered into clinical trials.	X	16	10	10%	
Number of patients donating tissue to the Wales Cancer Bank.	3%	1%	0%	20% by 2016	

c. The following information was noted from the Wales Lung Cancer Data Report 2012 (2009 & 2010 data)

- Low level of completeness of staging, performance status and treatment data fields in Canisc Low percentage of patients having a CT Scan before bronchoscopy in Ysbyty Gwynedd (see Section 1 above)
- Variation in PET rates with Wrexham significantly above the Welsh average and Glan Clwyd below.
- Low resection rates for all NSCLC at Ysbyty Gwynedd, more than 2 standard deviations from the mean.
- Significant variation in percentage of NSCLC cases with Stage 1 or 2 disease between the three teams.

d. <u>Key audits projects and outcomes</u>

All teams participated in the National Lung Cancer Audit. On the Review day, each team presented a detailed file of evidence including information about local audits, including details of finding and any subsequent actions. This showed that all three teams had a comprehensive local audit programme. The Review Team were however disappointed that this excellent level of evidence had not been available to them at the pre-visit stage, with only the titles of audits being provided.

<u>General Observations</u>

The Peer Review Team noted that Resection rates at Ysbyty Gwynedd were low and had fallen in 2011 at Wrexham. The Ysbyty Gwynedd MDT reported that there had been a decline in rates since 2008-9, which was disappointing. The MDT felt there was now much greater use of PET and suggested that there may be greater use of radiotherapy. The Wrexham team felt that the decline in their resection rate was part of the normal annual variation. The North Wales Network Lung group were auditing resection rates for 2012 across the Health Board.

All MDTs reported that they monitored and reviewed deaths within 30 days. The 30 day post chemotherapy mortality at Ysbyty Glan Clwyd was reported as 7% and the MDT may wish to monitor this rate closely. No figure for the Ysbyty Gwynedd Team had been submitted in the Peer Review evidence but the oncologist reported that this was an omission and that they held monthly mortality/morbidity reviews.

The Review Team were concerned that surgical mortality data was not provided for Ysbyty Gwynedd and suggested that the Health Board formally ask for a

regular report from the Liverpool Chest and Heart Hospital, together with details of their mortality/morbidity reviews.

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

The Review Team reviewed a sample of Case Notes and Canisc notes for 12 patients across the three teams. Information regarding recording of Key Worker is detailed in Section 2a above.

They were unable to find evidence of Notification of Diagnosis to GP within 24 hours in the Ysbyty Gwynedd notes and it was not present in all of the notes sampled from the other two sites. There did not appear to be a record of this in Canisc at any site.

Care Plans and evidence of an agreed Cancer Management Plan were clearly recorded in case notes and on Canisc for all MDTs. Co-morbidities were recorded in all case notes, and also on Canisc for all except the Wrexham notes sampled. Evidence that the patient was seen by a CNS was present in most of the Canisc records, but was less apparent in the case notes.

5. Engagement with Management

The structure of Lung Cancer Services in Betsi Cadwaladr appears to reflect the historic management structure of the NHS in North Wales e.g. Lung Cancer CNS are part of the Medicine Clinical Programme Group (CPG) at Glan Clwyd, but part of the Cancer CPG at Wrexham. This could lead to problems in developing a common approach to service development with some of the teams, reported lack of clarity over which CPG they needed to approach to discuss issues regarding services, future plans, etc

There was good senior management engagement from the Cancer Clinical Programme Group (CPG). However, there was a variation in the how much teams felt part of the overall management structure of the health board, with a growing sense of isolation as you moved west across the region. There was the suggestion that, again, this was a reflection of the former NHS structure in North Wales.

All MDTs reported that they had been fully involved in the Peer Review Process, including the evidence gathering and data submission. The Peer Review team felt that the evidence files provided by the three MDTs on the day of the visit were excellent, but questioned why this level of information had not been submitted at the pre-visit stage.

6. Culture of the Teams

Whilst all three teams were well functioning and committed to providing good quality services, the leadership within the Wrexham MDT and the dynamic team spirit and of the Glan Clwyd MDT stood out.

All teams had recently taken forward service improvement initiatives, but there was no evidence that these were routinely shared across the teams, which appeared to work largely in isolation from each other. The varying management structures did not support cross health board working, and there was no one person identified as having the authority and power to review and organise lung cancer services on a health board basis. The Health Board may wish to consider whether it wants three largely independent lung cancer services, or a unified service working on three sites.

GOOD PRACTICE

Identify any areas of good practice

Good Practice/Significant Achievements:

- CNS led service developments at Wrexham, including biological therapies clinic
- Cross Health Board EBUS service and thoracoscopy services at Wrexham and Glan Clwyd
- Cancer trial recruitment at Glan Clwyd
- Comprehensive local audit programmes across all teams
- Strong CNS service at Wrexham & Glan Clwyd – One of the Lung Cancer Nurses was awarded the Health Board's Cancer Nurse of the Year Award

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

- Lack of adequate CNS input to the Ysbyty Gwynedd team
- No CNS support at Ysbyty Gwynedd at time of review because of lack of cover for sick leave
- Pathology support to all three MDTs including specialist cytology
- Oncology cross cover at Wrexham
- Lack of robust pleural service for Ysbyty Gwynedd patients, leading to pressure on Glan Clwyd service
- Thoracic surgery attendance at MDT meetings for all teams, especially 'alternating surgeon model' at y Glan Clwyd MDT
- Lack recognition of time for MDT in all job plans (including preparation time for radiology and pathology)
- Low cancer trial activity at Ysbyty Gwynedd and Wrexham

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

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 weeks

NONE

Glossary : Lung Cancer Peer Review

BCU	. Betsi Cadwaladr University 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.
Continuous Hyper Fractionated Accelerated Radiotherapy **(CHART)**	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.
Computerised Tomography **(CT)**	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.
Endobronchial Ultrasound **(EBUS)**	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.
Intensity Modulated Radiotherapy **(IMRT)**	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.
Multi Disciplinary Meeting **(MDM)**	A meeting made up of a variety of expert health care professionals.
Multi Disciplinary Team **(MDT)**	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.
Non Small Cell Lung Carcinoma	NSCLC is any type of epithelial lung cancer other than small cell lung carcinoma (SCLC). As a class, NSCLCs

(NSCLC)	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.
Positron Emission Tomography **(PET)**	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.
Radiotherapy Treatment **(RT)**	Radiotherapy Treatment is the use of high energy x-rays and similar rays (such as electrons) to treat cancer.
Stereotactic Body Radiation Therapy **(SBRT)**	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.