

MDT IMPROVEMENT REPORT

Professor Muntzer Mughal
Consultant Upper GI Surgeon, UCLH
OG Cancer Pathway Director, *London Cancer*

Jacob Goodman
Project Manager, *London Cancer*

April 2017

CONTENTS

ACKNOWLEDGEMENTS	3
EXECUTIVE SUMMARY.....	5
INTRODUCTION.....	11
WORK PROGRAMME.....	17
MDT IMPROVEMENT WORKSHOP.....	17
MDT VISITS	19
QUESTIONNAIRE ANALYSIS	24
JOB DESCRIPTIONS FOR MDT LEADS AND MDT CO-ORDINATORS.....	29
MDT LEADS FORUM, NORTH MIDDLESEX HOSPITAL	29
VISIT TO THE UROLOGY MDT AT THE INSTITUTE GUSTAV ROUSSY, PARIS....	30
OTHER MEETINGS.....	31
DESIGNING AN ELECTRONIC REFERRAL PROFORMA	33
THE NCEL MDT SCHOOL & MDT IMPROVEMENT.....	33
RECOMMENDATIONS.....	34
REFERENCES.....	37
APPENDIX C. SAMPLE MDT REFERRAL PROFORMA	42
APPENDIX D. EXAMPLE OF MDT OPERATIONAL MEETING	44
APPENDIX E. MDT IMPROVEMENT QUESTIONIONNAIRE	45
APPENDIX F. MDT LEAD JOB DESCRIPTION	46
APPENDIX G. MDT COORDINATOR JOB DESCRIPTION.....	48
APPENDIX H. CRUK <i>'Improving the Effectiveness of Multidisciplinary Team Meetings in Cancer Services'</i> RECOMMENDATIONS	51
APPENDIX I. MDT CLINICAL INFORMATION LEAD ROLE DESCRIPTION.....	53

ACKNOWLEDGEMENTS

We would like to thank the many individuals and teams that have helped us in compiling this report. This includes the teams, leads and coordinators of the following cancer MDTs: Oesophagogastric, Brain and Spine oncology, TYA, Dermatology, Head and Neck, Urology, Gynaecological Oncology, and Haemoncology at UCLH; Breast at the Royal Free Hospital; Upper GI at Princess Alexandra Hospital; Gynaecological Oncology at North Middlesex Hospital; Testis at Barts Health; Colorectal at Homerton Hospital. We would also like to thank Mr David Stoker, Trust Cancer Lead of North Middlesex Hospital for allowing us to attend the MDT forum which he chairs, Alison Hill, chair of the nursing ERG, for facilitating our meeting with the cancer Clinical Nurse Specialist (CNS) group at UCLH and Professor Bernard Escudier for facilitating our visit to observe the Urology MDT at the Institut Gustave Roussy in Paris.

We are grateful to the UCLH Cancer Collaborative, part of the national Cancer Vanguard & NHS England's New Care Models programme, in providing the support for this work and for the the encouragement given to us by Professor Kathy Pritchard-Jones, CMO of *London Cancer* and the UCLH Cancer Collaborative.

About the UCLH Cancer Collaborative

The UCLH Cancer Collaborative (UCLHCC) brings together healthcare organisations across north central and north east London and west Essex to improve early cancer diagnosis, cancer outcomes and care for patients. We are part of the national Cancer Vanguard – a partnership between the UCLHCC, Greater Manchester Cancer Vanguard Innovation and Royal Marsden Partners. Together the Cancer Vanguard serves a population of 10.8 million. We are working to change the way cancer care is provided, to achieve world-leading patient outcomes and

experience for the populations we serve and develop models that are replicable across the NHS.

London Cancer became part of the UCLHCC in September 2016 where it is one of six work programmes that underpin the collaborative. Twenty one Tumour Pathway Boards and Expert Reference Groups work with patients, local hospitals, federated GP practices and community providers across the sector.

EXECUTIVE SUMMARY

Introduction

Multi-disciplinary team meetings (MDTs) are central to the management of patients with cancer. They were introduced over 20 years ago to reduce variation in decision-making and access to best care for patients with cancer and their carers. However, there is growing evidence that MDTs have not been working as effectively as they could. Against this background, we were set the task of reviewing MDT effectiveness within *London Cancer*, the integrated cancer system that includes all cancer providers in NCEL and West Essex, to determine how a variety of MDTs currently work, and make recommendations to improve MDT working and effectiveness.

Work Plan

The process started with an MDT workshop in June 2016 which brought together a wide range of stakeholders to explore the pertinent issues. This generated a large number of suggestions for improvement, and shaped the work programme for the subsequent eight months.

In this time we have:

- Developed generic job descriptions for MDT Leads and coordinators (Appx F and G)
- Visited eight specialist and five local MDTs
- Received 12 responses to questionnaires sent out to MDT Leads and 36 to MDT coordinators
- Carried out further investigations of MDT working such as observing the MDT Leads forum at North Middlesex Hospital, as well as visiting a centre of excellence outside of the NHS at the Institute Gustav Roussy in Paris

- We have presented our work plan to the *London Cancer* Radiology ERG and the UCLH CNS forum away day that provided us with a valuable insight into MDT working

Observations

We have observed variation in areas such as:

- referral to the MDT
- time and case load
- MDT agendas
- room layout, videoconferencing and IT systems
- attendance and attention
- Presentation, chairing and recording of outcomes
- MDT operational review meetings

Feedback from MDT Leads showed support for formalised job descriptions and the development of protocolised pathways. This work has resulted in 21 recommendations detailed below.

Alongside this work programme, the UCLHCC has launched the North Central and East London MDT School that aims to deliver modules and workshops to MDTs across *London Cancer* to enhance their effectiveness. The team will also provide mentorship and support to individual members and provide a mechanism to enable sector-wide review and development of MDTs.

RECOMMENDATIONS

LEADERSHIP, INFRASTRUCTURE and ATTENDANCE

1. Appointment of MDT Leads should be a formal process by application and interview.
2. MDT Lead and MDT coordinator should have explicit roles and responsibilities set out in a job description.
3. MDTs should be provided with appropriate infrastructure to ensure that they function efficiently, including IT and videoconferencing facilities.
4. MDTs should periodically review the time allotted for their meetings. It is essential that there is sufficient time to properly discuss the anticipated number of cases.
5. MDTs, in conjunction with their Trust Cancer Leads and/or Pathway Board Directors, should ensure that MDTs have at least 95% quoracy by discipline.
6. All core members should have adequate time in their job plans to not only attend the MDT meetings but also the operational meetings.
7. All attendees should be actively engaged in the cases being discussed and laptop/smart phone usage should be restricted to urgent clinical calls only, which should be answered without disrupting the meeting.

PROCESS

8. Referral of cases for discussion should be through a proforma that is structured to capture information about the patient's performance status, co-morbidity, preferences, Holistic Needs Assessment as well as essential information relating to the tumour and suitability for trials.

9. Each MDT should consider and draw up management protocols whereby certain cases can be put on a treatment pathway without the need for formal discussion by the full MDT.
10. Once protocolised pathways have been developed, it will be necessary for the MDT Lead to have a preparation meeting with the MDT coordinator and any other appropriate MDT member.
11. Apart from triaging cases for protocolised management, MDT planning meetings should provide the opportunity to structure the agenda so that more time is set aside for complex cases, and to ensure that the right information (about the patient and the tumour) is available for the meeting.
12. The MDT Lead or chair should ensure that the outcome of the discussion for each patient is summarized and captured in real time and that it is projected on a screen for the whole team to see.

GOVERNANCE and IMPROVEMENT

13. MDTs should carry out monthly audits of treatment related morbidity and 30-day mortality and review SACT data.
14. MDTs should have operational meetings at least once a year.
15. It is important that the MDT has administrative and IT support to enable recommendations 12 and 13.
16. MDTs should appoint a member to the role of Clinical Information Lead with a responsibility for ensuring that the necessary data on activity, performance and outcomes is collected regularly.
17. MDTs should review their activity, performance and outcomes regularly – at least annually.

18. MDTs should include, discuss and track improvement plans as a standing item on the agenda for operational meetings.
19. MDT Leads and coordinators should have annual appraisals to ensure that they are supported to deliver their roles.

SUPPORT

20. We would recommend a Trust MDT Leads Forum chaired by the Medical Director/Cancer Lead and supported by a senior cancer manager to discuss common issues which require attention and support.
21. An NCEL MDT Improvement team should be developed to support MDTs by providing specific training and mentorship.

INTRODUCTION

Multi-disciplinary team meetings (MDTs) are central to the management of patients with cancer. They were introduced over 20 years ago to reduce variation in decision-making and access to best care for patients with cancer and their carers. However, there is growing evidence that MDTs have not been working as effectively as they could.

Over the years, MDTs have come under increasing pressure due to increases in caseload, a change in case-mix including patients with greater comorbidities as a result of an ageing population and increasing number of treatment options. This increase in demand has not been matched by the capacity to discuss the increasing numbers of cases properly. In addition to this, MDT meetings are sometimes poorly attended, and inadequately supported in terms of information technology, data collection and infrastructure such as videoconferencing. The necessary information regarding the patient and their tumour is not always available to the MDT resulting in a delay in or poor decision-making. MDT meetings require adequate preparation, effective chairing with engagement and proactive involvement of MDT members to ensure proper discussion of the case and the ability of the chair to encapsulate the discussion into a clear outcome. There is evidence that there is a wide variation in MDT leadership such that this is not always achieved. All these pressures have been shown to result in poor decision-making (1,2).

In addition to meetings to discuss cases, MDTs are required to hold annual meetings to review MDT working which include operational issues, caseload, performance and outcomes including morbidity and mortality. These meetings are essential to take stock of MDT working and to make improvements. The Independent National Cancer Task Force report further recommends a monthly audit of patients who have died within 30 days of active treatment to determine whether lessons can be learnt about patient safety or avoiding

superfluous treatment (3). This requires additional time commitment and administrative support which is a further pressure.

The National Cancer Action Team (NCAT) commissioned a survey of MDT members' views on MDT working the results of which were published in 2009 (4). The survey was designed to determine MDT members' views regarding the essential domains for effective MDT working and how to measure MDT effectiveness. The analysis from over 2000 MDT members surveyed identified four main domains for effective MDT working: structure, clinical decision-making, team governance and professional development and education of team members. The NCAT went on to build on these views to describe effective MDT working (5). Professor Raine's group from UCL has also studied MDT effectiveness across a range of MDTs including cancer and have come up with recommendations on the purpose and functioning of MDT meetings, the MDT meeting process, content of discussion and the role of the patient in MDT meetings (6).

Two recent important reports have recommended changes in MDT working. Amongst other recommendations, the report of the Independent Cancer Taskforce has recommended that NHS England should encourage providers to streamline MDT processes such that specialist time is focused on complex cancer cases with other patients being discussed more briefly (3). The recently published report from Cancer Research UK has also made a strong recommendation to identify pathways for protocolised treatment for the straightforward cases, leaving more time for discussion of complex cases (7). The report also recommends the development of proforma templates to ensure that all the necessary information about the patient, the performance status and the comorbidity is included in the referral (Appendix H). The development and mandation of the Centre Outcomes and Service Dataset (COSD) means that MDTs are responsible for the collection and quality assurance of a range of key data items to allow for the monitoring of activity, performance and patient outcomes.

Against this background, we were set the task of reviewing MDT effectiveness within *London Cancer*, the integrated cancer system that includes all cancer providers in NCEL and West Essex, to determine how a variety of MDTs currently work, and make recommendations to improve MDT working and effectiveness. The process started with convening an MDT workshop in June 2016 which brought together a wide range of stakeholders to exploring the pertinent issues. This generated a large number of suggestions regarding further work and ideas about improvements. Based on this, we decided on the following work programme:

- Develop a job description for the MDT Lead and MDT coordinator
- Visit a number of specialist and local MDTs within *London Cancer* to observe the meeting and meet the MDT coordinator and MDT Lead
- Send questionnaires to MDT Leads and coordinators of all the MDTs across *London Cancer* with questions on pertinent issues
- Visit MDTs in centres of excellence external to our system
- Analyse the information gained from our work and produce recommendations

In the eight months since the MDT workshop was convened, the authors have visited eight specialists and five local MDTs throughout *London Cancer*. We undertook these visits bringing the perspective of an experienced MDT chair (15 years) and experienced MDT coordinator for a specialist MDT. We did not select the MDTs for any particular reason other than to ensure that we had adequate variety in terms of tumour group, caseload, a mixture of local and specialist MDTs and geographical location within *London Cancer*, and the type of hospital. In all, we spent twenty hours observing the 13 MDT meetings and taking notes. We also separately spoke to a number of MDT Leads and coordinators for their views on the pressures they faced and ideas about improvement and sent questionnaires to others and analysed the responses. We also visited the Urology specialist MDT at the Institut Gustav

Roussy in Paris to observe how they manage complex cases from a wide referral base. We attended the MDT Leads Forum under the chairmanship of Mr David Stoker at the North Middlesex Hospital to present our work, and seek the views of the MDT Leads and the chair of the forum. We also presented our work to the Radiology Expert Reference Group of *London Cancer* and the cancer Clinical Nurse Specialist (CNS) forum at UCLH and sought their views and comments.

This is not an exhaustive and systematic analysis of MDT working in *London Cancer* as we have not visited every single MDT and we realise that observation of a single meeting may not necessarily reflect how that MDT works most of the time. However, we do feel that we have been able to get a reasonably accurate ‘temperature’ of MDT working within *London Cancer* because our observations are in line with the published findings of MDT working by the National Cancer Action Team. We have carefully studied the reports by Cancer Research UK and the Independent Cancer Task Force and our recommendations are aligned with those from these bodies.

We would welcome comments on this report and our recommendations. We hope that MDTs within the Cancer Vanguard will take up the challenge of putting some of these into place and study the results. This will require strong support from the cancer leadership team within each Trust as many recommendations will require improvements in infrastructure, IT support and an increase in time commitment from some members of the MDTs to enable better preparation and discussion of the cases.

A question we have been commonly asked when we have presented our work is whether the recommendations can be put into place in the context of a hard-pressed NHS with mounting financial pressures. Although some recommendations require extra time and resources we believe that once the investment has been made, better MDT working will release capacity and resources elsewhere. Most importantly, it is widely acknowledged that

across the country MDTs are not working as well as they should. We owe it to our cancer patients to ensure that MDTs discuss every case in a timely fashion, with all the necessary information about their wishes, condition and tumour, without time constraints limiting the discussion, and with clear outcomes describing the management options.



Professor Muntzer Mughal
Consultant Upper GI Surgeon, UCLH
OG Cancer Pathway Director, *London Cancer*

A handwritten signature in black ink, appearing to read "Muntzer Mughal". The signature is written in a cursive style with a long horizontal stroke at the end.



Jacob Goodman
Project Manager, *London Cancer*

A handwritten signature in black ink, appearing to read "Jacob Goodman". The signature is written in a cursive style with a long horizontal stroke at the end.

WORK PROGRAMME

MDT IMPROVEMENT WORKSHOP

The MDT improvement workshop was held on 6 July 2016. The format was a number of presentations to setting out the issues including input from Rose Gray, policy adviser at Cancer Research UK who shared early insights from analyses on the evaluation of MDT working nationally. The workshop was attended by 31 delegates from around *London Cancer*, in addition to the presenters. They included MDT Leads, cancer managers, MDT coordinators, MDT members and IT managers. The presentations were followed by a discussion around a number of important themes. The agenda and output of the discussion is set out in Appendix A and B but the key messages are as follows:

MDT chair

- The chair should have adequate time to prepare for the MDT
- There should be training and support for chairs so they can provide strong leadership and clinical oversight
- There should be a job description, person specification and a recruitment process
- There should be an appraisal process for the chair

Preparation, attendance and process

- Development of a proforma to include performance status, holistic information, and patient wishes
- Adequate pre-MDT preparation time to separate complex from straightforward cases
- Ensuring meetings start on time and that key decision-makers are present

- MDT decision to be captured live for the whole team to see and ensure consensus is reached
- Mechanisms for the collection and quality assurance of key data items that contribute to the Cancer Outcomes and Service Dataset (COSD) should be in place.
- Develop protocolised pathways and ensure they are subject to audit and governance

Dynamics of specialist and local MDTs

- Better communications and information flows
- Strategy for interfacing IT cancer systems to improve information sharing

Primary care and the MDT

- Involving the GP at the start of the pathway including the determination of patient wishes and the holistic needs assessment
- Manage ongoing care in the primary sector if appropriate, with the involvement of Macmillan
- Keeping the GP informed of changes in management

Finance

- An effective MDT can improve patient management and save time and money elsewhere
- The hidden benefits of the MDT, e.g. education and involvement in clinical trials should be factored into assessment of the cost-effectiveness of the MDT

Cancer Research UK and Peer Review

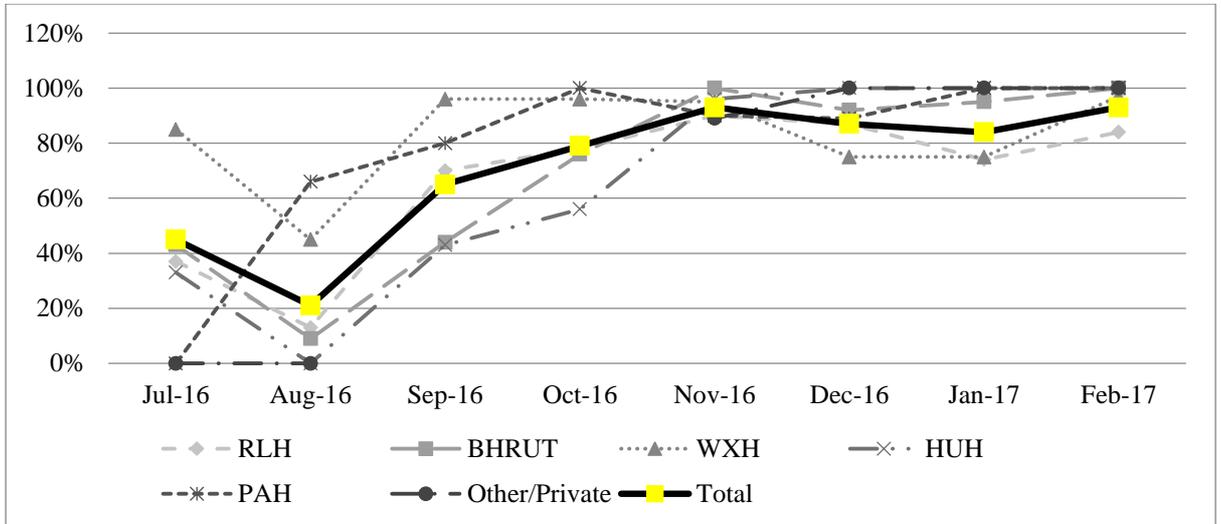
- There is evidence that MDTs have a positive impact on survival and uptake of treatments
- The constraints of the Peer Review such as minimum attendance and discussion of all cases at the MDT meeting were acknowledged
- The likelihood that quality indicators will replace some Peer Review measures

MDT VISITS

We visited eight specialist and five local MDTs and have set out our observations as follows:

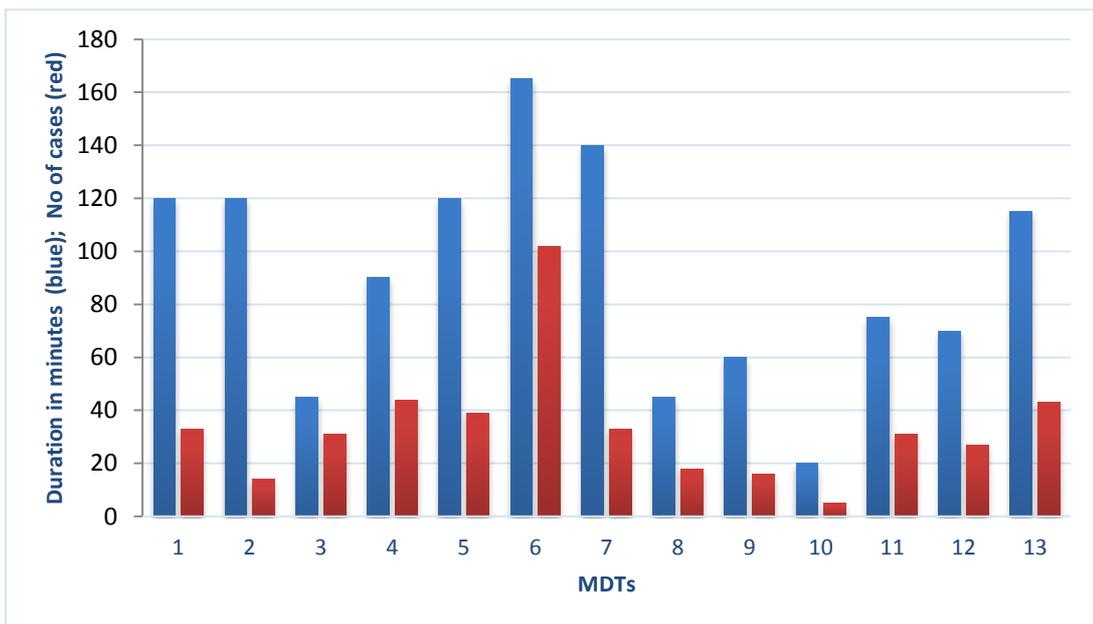
Referral to MDT

In many cases this was by email to the MDT coordinator and less than half the MDTs used a proforma. All the MDT Leads and coordinators that we spoke to expressed a preference for referral by a proforma which ensured that all the necessary information, including performance status and comorbidity was submitted as a mandatory requirement in addition to the minimum dataset for the tumour (see Appendix C for an example). Some had trialled such a proforma but abandoned it due to poor compliance resulting in patients not being discussed in a timely fashion as some information was missing. On the other hand, one MDT has successfully introduced a proforma after giving referrers a three-month grace period before enforcing the rule that no case would be discussed unless the proforma was fully completed. They audited the outcomes of this policy and found that it was possible to ensure a high compliance which was sustained. The results of the audit are depicted in the following chart.



Time and case load

The time taken for the meetings we observed ranged between 20 and 165 minutes and the caseload between 5 and 102 cases. In two of the meetings that we observed, several patients were not discussed either because a key member had to leave before the end of the meeting or the meeting had run out of time. The chart below shows the meeting time and caseload for the 13 meetings.



The average discussion time was 3.4 minutes ranging from 1.6 to 8.6 minutes.

The MDT agenda

Almost all MDTs had an agenda stratified in a variety of ways including separation of new and follow-up cases, cases clustered by the need for either the pathologist or the radiologist to be present, or cases listed according to the timeslot for video linking to local MDTs.

We did not see any examples of cases stratified according to complexity and nor did we see any evidence of protocolised whole management pathways, e.g. the use of an algorithm to assign the next step in staging or of proceeding to management that was clear from the information already available.

The amount of detail included for each patient varied between and within MDTs. Basic information about the performance status and comorbidity of the patient was inconsistently recorded and it was uncommon to see clearly on the agenda what question was being asked of the MDT.

Eligibility for trials was only discussed at three MDT meetings. In one of these, trials were systematically considered for every case discussed.

Some MDTs considered benign cases as well although this was rare.

Room layout, videoconferencing and IT systems

In 11 of the MDT meetings we observed, the layout of the room was with rows of seats facing the screens with the MDT chair either sitting in the front row with their back to the rest of the team or at a desk on the side where the MDT coordinator, pathologist and/or radiologist sat at computer terminals.

In one small local MDT, the team sat round a table and in one large MDT the chairs were arranged in a circle such that the MDT chair was able to see every member and engage with them directly.

Videoconferencing was used in seven of the MDTs visited. The quality of the link was variable. In four cases the video link was established promptly and was of a high enough quality to allow for the images to be interrogated properly. There were some issues with both the quality and the stability of the link in the other three cases.

Outcomes were entered on Word documents in six, Inflex in five and Somerset in two MDT meetings.

Attendance & attention

The maximum number of members present at each of the MDT meetings we observed ranged between 5 and 38. In some meetings, reflecting the way they were stratified in terms of the need for different members such as pathologists or radiologists, people came only to contribute to a particular section of the agenda. Occasionally, clinicians from other teams came to present patients. In six meetings, just less than half, more than 75% of the team were present at the start of the meeting. We realise, of course, that we cannot generalize about attendance on the basis of observing a single meeting for a particular tumour group.

By and large, most members were attentive during the presentation and discussion of cases even if they did not directly interact. It was however quite common to observe some members working on their laptops and smartphones during the meeting. We sometimes observed instances where a question requiring input from an MDT member had to be repeated because of their lack of attention.

Presentation, chairing and recording of outcomes

There was a wide variation in the presentation of cases. In the local MDTs, patients were usually presented by either clinicians, CNSs or other Allied Health Professionals (AHPs) such as stoma care nurses who had met and knew the patient. In many of the specialist MDTs patients were presented either by the chair, SpR, CNS or a mixture of these and other AHPs.

In all except two MDTs, the MDT Lead was also the chair. In one MDT, the chair rotated every week. We saw a variety of chairing styles with some chairs actively engaging members of the team to encourage them to contribute to the discussion. More commonly this did not take place and then only three or four people took part in the discussion. Chairs also varied in how well they controlled and stimulated discussion as well as seeking and establishing consensus and clearly summarising this for it to be recorded.

The outcome was recorded by a clinical member of the MDT in four meetings. In the rest the outcome was recorded by the MDT coordinators, seemingly summarising the discussion by themselves in six meetings and by dictation from a clinical member or the MDT Lead in three meetings. In ten of the meetings we attended, the outcomes were recorded live and projected on the screens for the entire MDT to see.

MDT operational meetings

It is a Peer Review requirement that each MDT holds an annual operational meeting to consider MDT working including attendance, guidelines and outcomes. Most MDTs found it difficult to find the time to convene such a meeting which requires considerable organisation and administrative support apart from members having to take off time from their normal work. Yet these meetings are essential if the MDT is to have time to pause and reflect on its effectiveness when it is not discussing a large number of cases under enormous

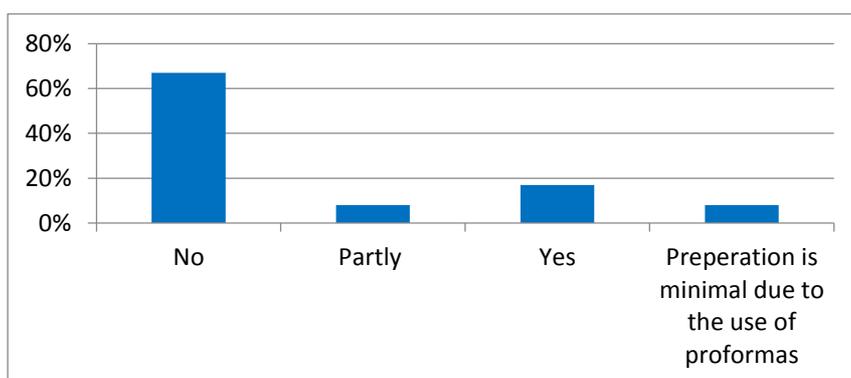
time pressure. However, we found an exemplary example of such a meeting from the Testis MDT at Barts Health. The abridged minutes of this meeting are in Appendix D. The agenda was comprehensive, covering issues related to the MDT working, a review of the overall workload, changes in presentation staging and management of tumours, trials update, morbidity and mortality as well as an invited speaker from a centre of excellence abroad. It fulfills all the criteria of an operational meeting including being an excellent educational meeting. There is now an expectation for MDTs to review morbidity and mortality, including SACT (Systemic Anti-Cancer Therapy) data. We did not see any examples of this.

QUESTIONNAIRE ANALYSIS

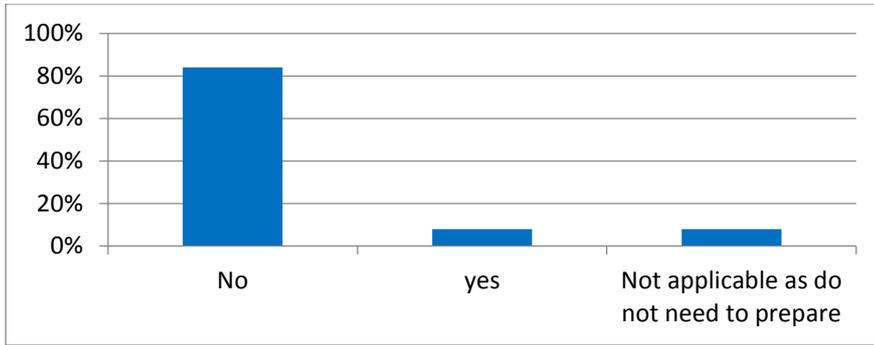
We sent out the questionnaire in Appendix E to 34 MDT Leads and all MDT coordinators within the *London Cancer* network.

MDT Leads

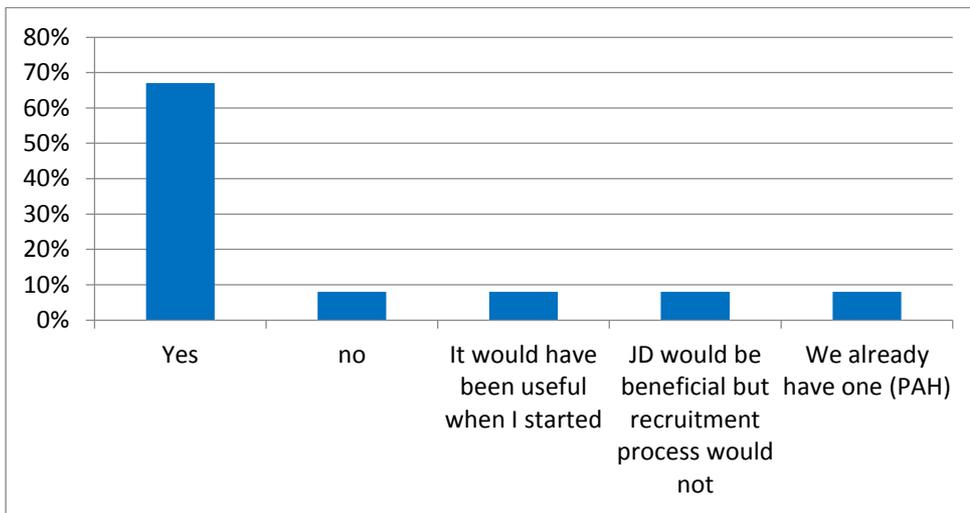
We received completed questionnaires from 12 MDT Leads (37.5%). The analysis of their responses was as follows:



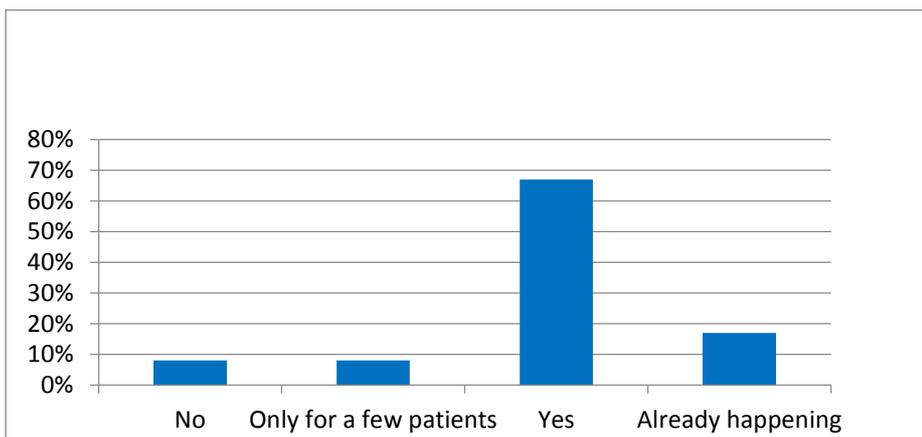
Q. *Do you feel you have enough time to prepare for your MDT?*



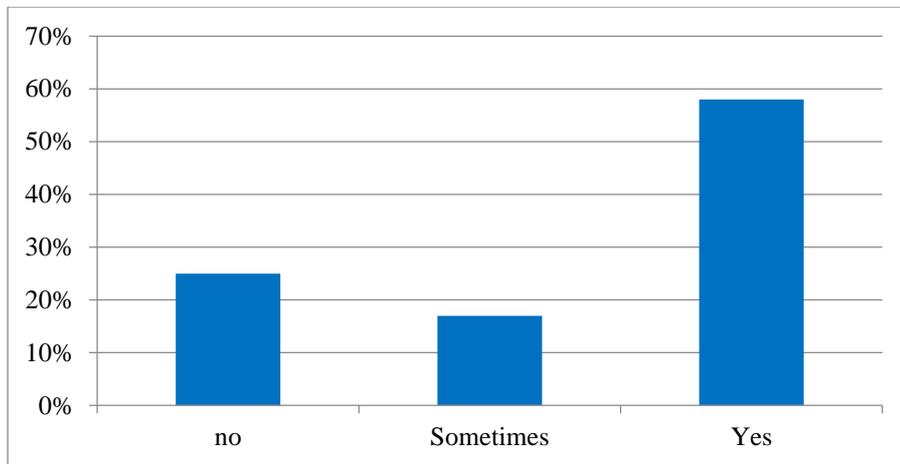
Q. Does your job plan allow time for MDT preparation?



Q. Do you feel your role as MDT Lead would benefit from a structured job description and recruitment process?



Q Do you feel, within your MDT, there is an opportunity to stratify pathways for straightforward cases allowing more time to be spent discussing complex cases?

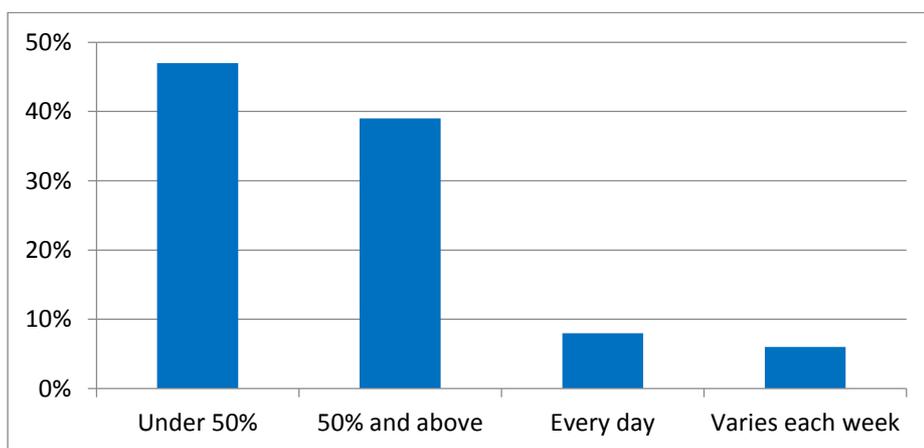


Q. Do you feel there is adequate sign-off and follow up of MDT outcomes to ensure actions are complete?

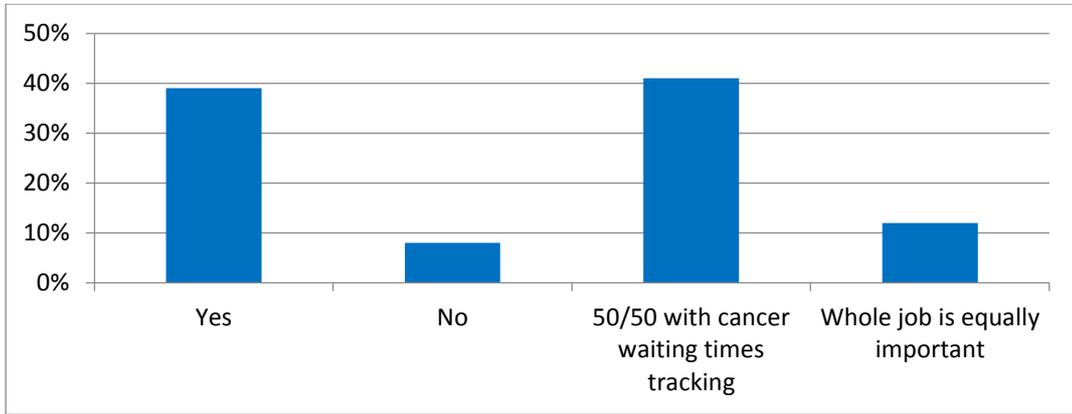
Although there was a poor return of the questionnaires from the MDT Leads, it is clear that most felt that there should be a job description for the MDT Lead and that there should be sufficient time built into their job plan for effectively leading the MDT and preparing for the meetings. There was also support for developing protocolised pathways.

MDT COORDINATORS

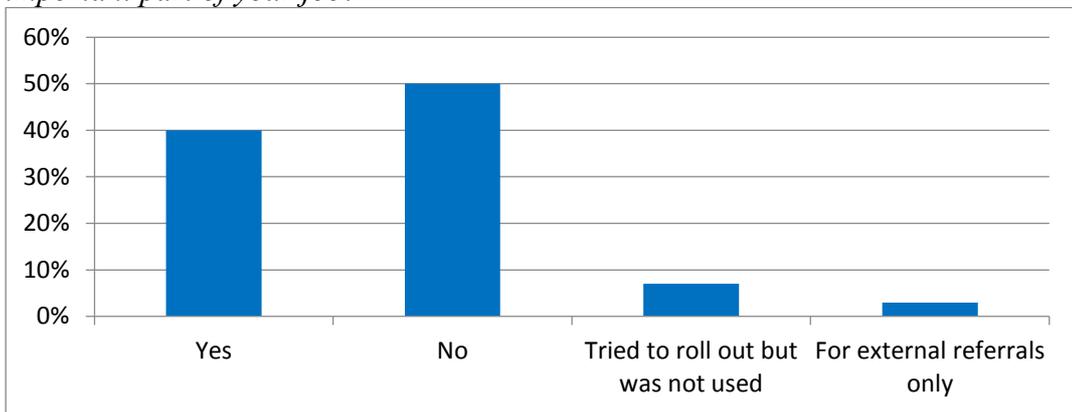
We received replies from 36 MDT coordinators and an analysis of these is as follows:



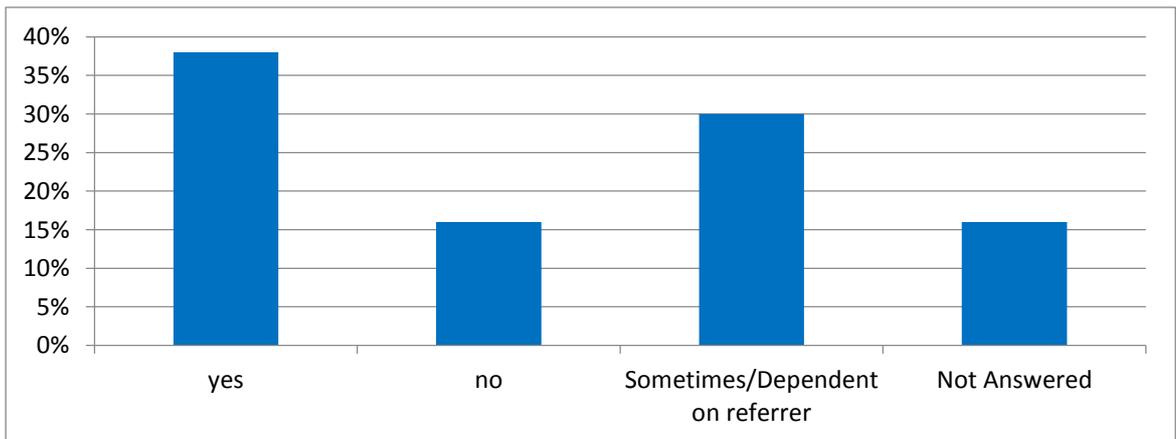
Q. How much time do you spend each week on MDT preparation?



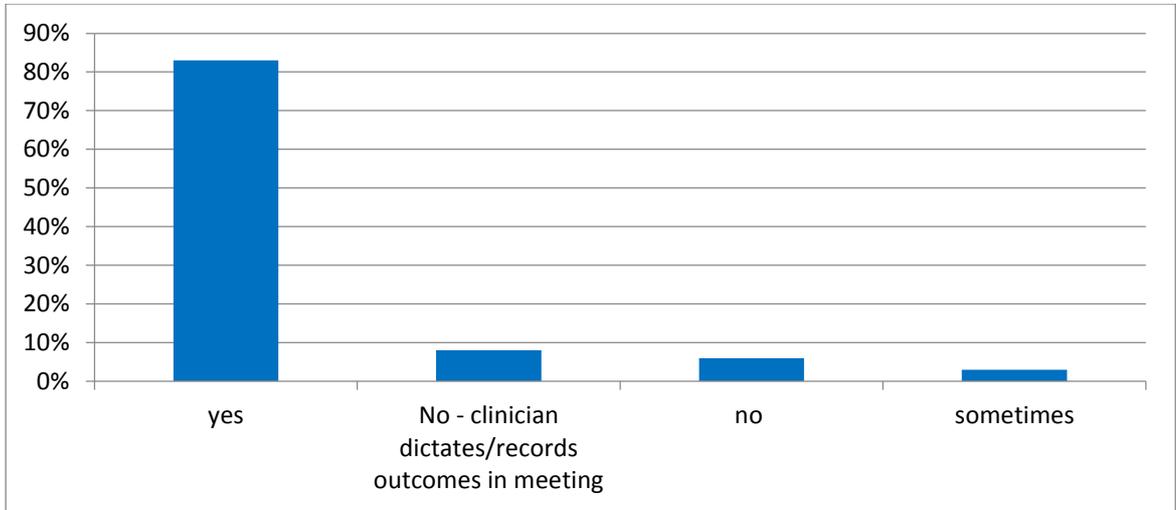
Q. Do you consider the organization and running of the MDT to be the most important part of your job?



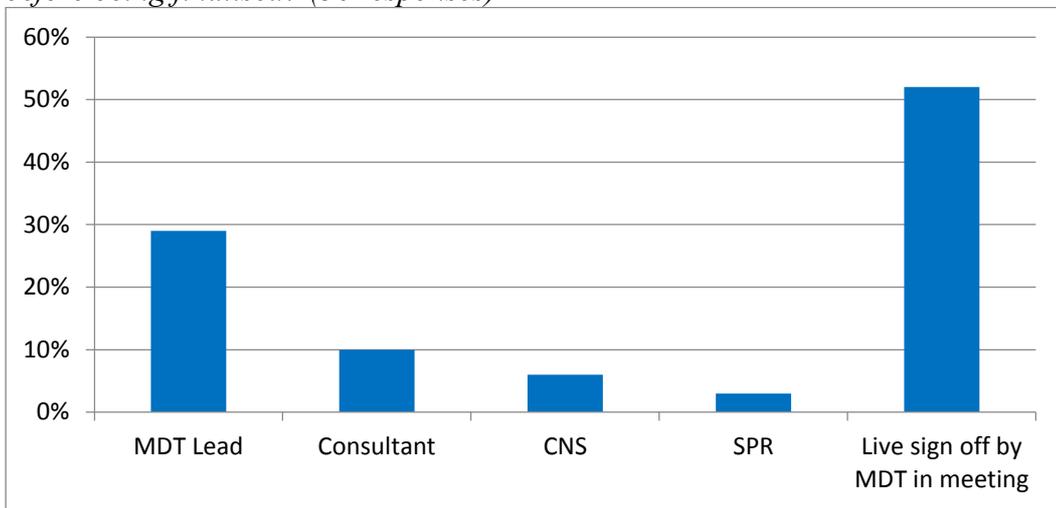
Q. Is a Proforma used to refer to MDT? (30 responses)



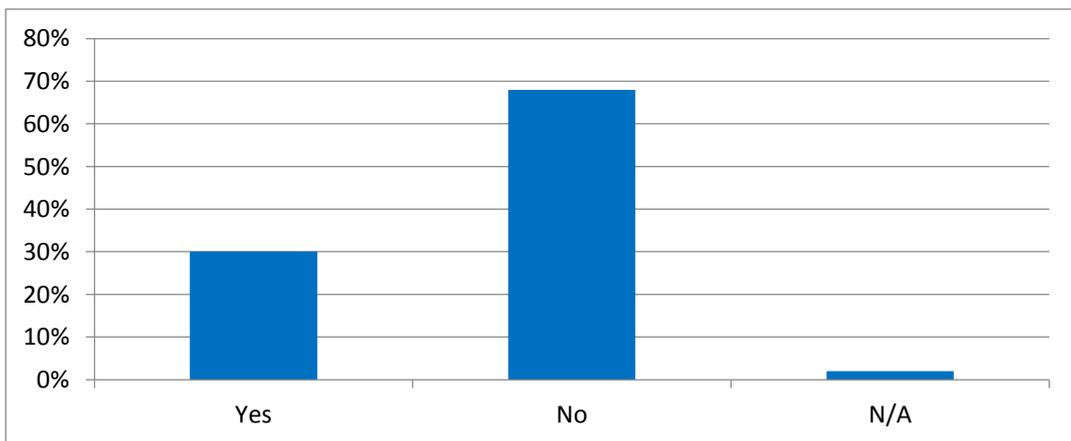
Q. Is this regularly completed? (13 responses)



Q. Are all MDT decisions and outcomes checked by a clinical member of the team before being finalised? (36 responses)



Q. If so, who by? (31 responses)



Q. Does a clinician attend any of your weekly PTL/CWT meetings? (37 responses)

About half of the respondents were mainly employed as MDT coordinators and another half also worked on cancer tracking and waiting times.

JOB DESCRIPTIONS FOR MDT LEADS AND MDT CO-ORDINATORS

Based on the recommendations in the Manual of Cancer Services, our discussions with MDT Leads and coordinators as well as an analysis of the returns from the questionnaire, we have developed job descriptions for the MDT Lead and the MDT coordinator.

MDT Lead and coordinator roles dovetail with each other and they need to work effectively in supporting each other and ensuring that the preparation, conduct and output of the MDT meeting is efficient and effective. The job descriptions are set out in Appendices F and G with an additional document indicating how the two roles complement each other (Appendix H). The MDT Lead job description is generic setting out what we believe are the key roles and responsibilities. There may be some differences between tumour groups as well as the time commitment required since the caseload varies between MDT. We expect that the job description will be modified to suit each MDT.

MDT LEADS FORUM, NORTH MIDDLESEX HOSPITAL

We visited this forum on 12 December 2016 at the invitation of Mr David Stoker, Trust Cancer Lead at the North Middlesex Hospital. He informed us that the forum had been set up a few months ago and had met three times. Its purpose was to bring together all the cancer MDT Leads at the North Middlesex Hospital to discuss both common and MDT specific issues. This included a review of MDT working and sharing of information that the MDT Leads or representatives brought back from the *London Cancer* tumour Pathway Boards.

Six MDT Leads attended the meeting. We presented the MDT improvement work plan and invited suggestions and comments. The MDT Leads were unanimous in their support for our work. There was also support, particularly from the Breast MDT Lead, for protocolised pathways for more straightforward cases.

We felt that the concept of the MDT forum, in bringing together all the MDT Leads to share their experience and highlight problems, is to be commended. It provides an opportunity to learn from each other and for cross-cutting organisational issues such as IT and videoconferencing which may affect a number of MDTs to be brought to the attention of the Medical Director and the management.

VISIT TO THE UROLOGY MDT AT THE INSTITUTE GUSTAV ROUSSY, PARIS

In order to study MDT working in a centre of excellence outside the UK, we visited the Institut Gustav Roussy in Paris on 29 November 2016. It is France's largest cancer centre, an international referral centre for oncology, and an integrated centre for patient care, research, and teaching.

We attended the Urology MDT chaired by Prof Bernard Escudier. This is a tertiary level MDT for patients from all around France, many of whom had already sought and obtained specialist opinions from other MDTs or clinicians in private practice. Patients were invited to the MDT clinic where they were seen by surgeons and oncologists before the MDT gathered to discuss the cases.

The clinic was set out in a suite containing five or six consulting rooms which were occupied by different members of the team. Typically, a patient would see a surgeon and then go across to see an oncologist in another room. The clinic had been well prepared with clinicians having access to all the necessary information on a desktop computer. At the end of each consultation, the clinician dictated the notes which were transcribed immediately by a

secretariat working from a separate room in the campus and added to the digital notes. There appeared to be no pressure of time as each clinician saw between three and four patients in a two-hour clinic.

When the clinic had finished, there was a break. In the afternoon, the MDT met with about ten trial coordinators over a period of 45 minutes to go through suitable cases for trials and received an update from the trial coordinators about any trial violations and signed the necessary paperwork. Following this, the MDT convened in one room to discuss the cases that had been seen in the morning, review their images, which were presented by two radiologists and come to a consensus regarding management. The outcome was dictated by the chair, Professor Escudier, and immediately transcribed remotely and sent to each of the MDT members digitally.

Once the meeting had concluded, each clinician dictated letters to the patients he had seen in the morning, summarising the MDT discussion and outcome.

We felt that the meeting was extremely well organized, with excellent IT and administrative support. Furthermore, there was no pressure of time as a relatively few complex patients were seen by five or six clinicians.

Clearly our model is different with a larger caseload of newly diagnosed patients but our MDTs would run much more efficiently if we had the same level of IT and administrative support.

OTHER MEETINGS

CCSG

We have presented progress in our work at the monthly Cancer Clinical Steering Group meeting at UCLH. The meeting is chaired by Prof Geoff Bellingan, Medical Director for cancer and GI surgery, and has wide representation from the UCHCC including a patient

representative and Macmillan. In particular, we have been able to discuss the MDT Lead and coordinator job descriptions and have incorporated suggestions.

Although this group has supported and encouraged this work, they have not influenced the recommendations which are based on our observations and analysis.

RADIOLOGY ERG

We presented our work plan to the Radiology ERG meeting on 15 March 2017. There was considerable discussion and widespread support for our aim to improve MDT working. There was a plea from the group to ensure that the report needed to highlight the need for sufficient preparation time for radiologists who are key members of the MDTs.

CNS GROUP

We attended part of the of the UCLH cancer CNS forum away-day at the invitation of Alison Hill on 29 March 2017. It provided us an opportunity to present our MDT improvement work and take soundings from the 42 CNSs who attended. They were asked to provide their comments after discussing the issues in groups after the presentation. The following is a summary of their comments and suggestions:

- To consider appointing MDT Leads who are not clinicians and avail them of the necessary training and development
- They reported a considerable variation in the ability of the MDT chair to lead, control, stimulate discussion and summarise the outcome
- They highlighted the importance of defining the role of the MDT coordinator who often has other look roles that detract from their work with the MDT
- They supported the development of MDT referral proformas to include important information about the wishes and performance status of the patient

- They supported protocolised pathways for straightforward cases
- They supported the need for sufficient time to discuss all the cases
- They supported live recording of MDT outcomes for all to see

DESIGNING AN ELECTRONIC REFERRAL PROFORMA

We met with Dr Navin Ramachandran, Consultant Radiologist at UCLH, who is leading an IT project in this area. He and his team are working to develop an eMDT platform to receive electronic referrals that will facilitate referrals being made with complete information, improving the efficiency of preparation and quality of discussion at the MDT meeting.

THE NCEL MDT School & MDT IMPROVEMENT

The UCLHCC has launched an ambitious programme to improve cancer care which includes the Centre for Cancer Outcomes and the NCEL MDT School. MDT working and effectiveness will be part of the schools in the MDT School. A curriculum is being developed with modules aligned to various aspects of MDT working including chairing skills and team working. The MDT school will assemble and develop faculty representing the skill sets of MDTs including CNS and MDT Leads. They will deliver modules and workshops to MDTs across *London Cancer* to enhance their effectiveness. The team will also provide mentorship and support to individual members and could develop and provide a mechanism for providing sector-wide review and development of MDTs.

RECOMMENDATIONS

LEADERSHIP, INFRASTRUCTURE and ATTENDANCE

1. Appointment of MDT Leads should be a formal process by application and interview.
2. MDT Lead and MDT coordinator should have explicit roles and responsibilities set out in a job description. Their job plan must include the estimated time commitment to deliver the responsibilities of the role. For the MDT Lead, the time commitment should form part of the job plan.
3. MDTs should be provided with appropriate infrastructure to ensure that they function efficiently, including IT and videoconferencing facilities.
4. MDTs should periodically review the time allotted for their meetings. It is essential that there is sufficient time to properly discuss the anticipated number of cases. Discussion should not be limited by the time available for the meeting and cases should not be deferred due to lack of time.
5. MDTs, in conjunction with their Trust Cancer Leads and/or Pathway Board Directors, should ensure that MDTs have at least 95% quoracy by discipline.
6. All core members should have adequate time in their job plans to not only attend the MDT meetings but also the operational meetings.
7. All attendees should be actively engaged in the cases being discussed and laptop/smart phone usage should be restricted to urgent clinical calls only which should be answered without disrupting the meeting.

PROCESS

8. Referral of cases for discussion should be through a proforma that is structured to capture information about the patient's performance status, co-

morbidity, preferences, Holistic Needs Assessment as well as essential information relating to the tumour and suitability for trials.

9. Each MDT should consider and draw up management protocols whereby certain cases can be put on a treatment pathway without the need for formal discussion by the full MDT.
10. Once protocolised pathways have been developed, it will be necessary for the MDT Lead to have a preparation meeting with the MDT coordinator and any other appropriate MDT member, e.g. radiologist or pathologist, to go through the referred cases to triage them for protocolised management.
11. Apart from triaging cases for protocolised management, MDT planning meetings should provide the opportunity to structure the agenda so that more time is set aside for complex cases, and to ensure that the right information (about the patient and the tumour) is available for the meeting.
12. The MDT Lead or chair should ensure that the outcome of the discussion for each patient is summarized and captured in real time and that it is projected on a screen for the whole team to see.

GOVERNANCE and IMPROVEMENT

13. MDTs should carry out monthly audits of treatment related morbidity and 30-day mortality and review SACT data. Learning from this should be used to review and refresh treatment pathways.
14. MDTs should have operational meetings at least once a year. These should review the MDT workload, morbidity and mortality, patient experience, trial recruitment and incorporate learning by combining this with presentations on relevant areas such as new treatments and guidelines.

15. It is important that the MDT has administrative and IT support to enable recommendations 12 and 13.
16. MDTs should appoint a member to the role of Clinical Information Lead with a responsibility for gathering data on workload and outcomes. This role should have adequate administrative and IT support. (The roles and responsibilities of this position are attached as Appendix I).
17. MDTs should review their activity, performance and outcomes regularly – at least annually. If there is a trend for increasing workload year on year, the team should consider how to deal with this including lengthening the time for the meeting.
18. MDTs should include, discuss and track improvement plans as a standing item on the agenda for operational meetings.
19. MDT Leads and coordinators should have annual appraisals to ensure that they are supported to deliver their roles.

SUPPORT

20. We would recommend a Trust MDT Leads Forum chaired by the Medical Director/Cancer Lead and supported by a senior cancer manager to discuss common issues which require attention and support. This could also provide an opportunity to consider MDT improvement initiatives that can be rolled out uniformly within the Trust.
21. The MDT Improvement team in the NCEL MDT School should develop a team to support MDTs by providing training and mentorship. This could be through a rolling programme of modules on different aspects of the work of the MDTs such as chairing skills. The MDT School team could also provide

mentorship to MDT Leads and run bespoke 'refresher training' at the request of a MDT.

REFERENCES

1. Quality of care management decisions by multidisciplinary cancer teams: a systematic review. B.W. Lamb, K.F. Brown, K. Nagpal, C. Vincent, J.S. Green and N. Sevdalis, *Ann. Surg. Oncol.* 2011, 18, 2116.
2. Soukup T, Petrides KV, Lamb BW et al. The anatomy of clinical decision-making in multidisciplinary cancer meetings. A cross-sectional observational study of teams in a natural context. *Medicine* (2016) 95:24;1-8.
3. Achieving world-class cancer outcomes: a strategy for England section 5.5.1. The Independent Cancer Taskforce, July 2015
4. Multidisciplinary team members' views about MDT working: Results from a survey commissioned by the National Cancer Action Team. September 2009.
5. The Characteristics of an Effective Multidisciplinary Team – National Cancer Action Team, February 2010.
6. Raine R, Wallace I, Nic a' Bháird C, et al. Improving the effectiveness of multidisciplinary team meetings for patients with chronic diseases: a prospective observational study. *Health Serv Deliv Res* 2014;2(37)
7. Meeting patients' needs. Improving the effectiveness of multidisciplinary team meetings in cancer services. *Cancer Research UK*. March 2017 (*recommendations are listed in Appendix H*)



MDT Improvement Workshop

Wednesday 6th July 2016 3-6pm

Venue:, Room-Roberts 110, TORRINGTON PLACE, LONDON, WC1E 7JE University College London Hospital

Maps: <https://www.google.co.uk/maps/Torrington+Pl,+London+WC1E>

Chair: Prof Muntzer Mughal

AGENDA

Time	Item	Presenter
5 min	Introduction and welcome	Professor Muntzer Mughal, Consultant Surgeon and Head of Upper Gastrointestinal Services, UCLH
15 min	Cancer pathways: new targets & common reasons for delays	Sandra Arnold, Corporate Cancer Manager, UCLH
15 min	Imaging: access and quality through the cancer pathway	Hugh Jelly, Divisional Manager, UCLH
15 min	Current review of MDTs at the national level	Mr James Green, Consultant Urologist, Barts Health
20 min	Break	
15 min	Evaluating the performance of MDTs in NHS cancer services	Rose Gray, Policy Adviser, CRUK
15 min	Reducing treatment delays: examples from the Prostate Cancer SMDT	Mr John Hines, Consultant Urologist, Barts Health
45 min	Discussion	All
10 min	Summary and consensus on the way forward	Professor Muntzer Mughal

APPENDIX B. MDT IMPROVEMENT WORKSHOP

The Chair

- Is there something to be gained in having a Chair, who isn't the main protagonist and appointing someone who has the skills to chair and manage a meeting?
- Should this role have protected time to adequately prepare the MDT list beforehand, to include streamlining simple pathways
- Job plans need to reflect the additional workload associated with chairing the MDT
- There should be training and support for Chairs, in order that they can provide strong leadership and clinical oversight
- There should be a JD and recruitment process, in order that the Chair has necessary skills
- Appraisal process for the Chair
- Roles and responsibilities/TOR for the MDT

Streamlining processes

- Defining which pathways are straightforward and which are complex, in order to think about streamlining the MDT
- Who will do this?
- Can we organise the MDT so that key people are present only when needed and then they can leave. A suggestion was that certain sub-groups – radiology and pathology - could meet before the MDT, in order to prepare a report for the MDT/have the histological discussion beforehand (there would be a protocol to determine what information is needed)

Prepping the MDT

- It was agreed that thorough preparation is needed
- Who should do this? SpR? Will they have the experience to streamline patients? A clear protocol for streamlining patients is needed
- Be mindful of the QA and governance issues with streamlining
- It was agreed that a **proforma**, which included holistic information, would be useful for each patient at the MDT and to include:
 - Performance score (ECOG), fragility scores etc.
 - A minimum dataset of information must be available, in order to be able to discuss the patient and an outcome produced
 - How do bring in the patient wishes?
 - Adequate information to be able to profile patients early in the pathway to predict most likely outcome
 - Staging

Tertiary centres and DGHs (SMDT v MDT)

- It was noted that the SMDT can't make decisions in every instance and that local teams need to interpret SMDT advice, keeping the patient in mind
- Better communication and information flows between trusts
- IT systems must be able to support what the MDT is doing
- Real-time data collection
- Can't custom design Somerset, whereas you can with Infoflex
- No ICD code for eye cancer and the general ICD codes are inadequate
- Adequate resources to be able to collect the data
- Ensuring that all the correct paperwork is at the meeting
- Strategy for interfacing IT cancer systems to improve information sharing

Patient tracking

- It was noted that many of the targets set were set in batches of 7 days, which doesn't reflect how the patient actually moves through the pathway and there is a need to move away from this thinking
- Scrutinise and move patients along the pathway daily and not weekly
- Plan the MDT to take place before the specialist clinic and the PTL meeting for after the MDT (WX Urology)
- There needs to be adequate investment and resource in order that this can happen

The MDT meeting

- MDT minutes to be typed 'live' and should be seen/heard by all
- There should be consensus on outcome
- Videoconferencing – major problem
- The MDT should start on time, with key decision makers present. Rotate members and link in with on-call arrangements
- Protocolised pathways need improved governance and audit processes

MDT clinic

- The decision is best made with the patient and is harder to understand the patient's wishes and needs inside the MDT alone. An example was given by Moorfields, who have a protocolised 1-stop pathway, where everything is done in clinic, ahead of the MDT. This includes the holistic needs of the patient
- A good MDT discussion and post-MDT meeting can raise the quality of the outpatient appointment

Primary care and MDT

- With regards to holistic input, it was suggested that CNSs could be more involved in the diagnostic part of the process

- It was also suggested that the HNA is carried out after diagnosis, but this could be started earlier
- Involving and utilising GPs at the start of the pathway
- Use MDTs to identify stable patients to have care in the community and HNA
- Use MDTs to get patients out of the system and into primary care – is this an area the Macmillan Primary Care Project Manager can focus on?
- GPs can inform patients that they are entering a cancer pathway

Finance

- Capacity release - the MDT can save time elsewhere
- The hidden benefits of the MDT: education and discussing clinical trials
- The impact of current MDT system, given the current financial climate. Can we afford them?

CRUK and Peer Review

- there is some evidence that MDTs have a positive impact on survival and uptake of treatments
- The constraints of Peer Review regulations were acknowledged and CRUK are publishing their MDT report later this summer and are working with the national team
- Quality Indicators are replacing Peer Review measures and are just about to be rolled out
- National Programme for Peer Review will continue with target visits and these are at the request of specialised commissioners

APPENDIX C. SAMPLE MDT REFERRAL PROFORMA

Please complete **all** sections as fully as possible or the referral will be returned to you.

Completed forms to be submitted to sherrice.weekes@bartshealth.nhs.uk

Referrer					
Reason for MDT discussion					
Name and Contact of Referrer					
Referring Consultant					
Source Hospital					
Patient Details					
Patient Name				MRN	
				NHS	
Age				DOB	
Primary Language				Status (new/fu)	
Clinical TNM (if known)	M	T	N	Patient aware of diagnosis?	
Clinical Presentation/ History					
Examination findings including flexi scope					
Difficult Airway? (give details)					
Performance Status	0	1	2	3	4
PMH					
Medication (inc anticoagulants)					
Baseline Tests (FBC/U&E/ECG etc...)					
Previous H&N Ca Diagnosis?	<i>Date:</i>	<i>Subsite:</i>	<i>Stage:</i>	<i>Treatment</i>	
Risk Factors	<i>Smoking:</i>	<i>S</i> <i>ever</i>	<i>urrent</i> <i>x</i>	<i>lcohol</i>	<i>A</i> <i>nits/wk</i> <i>U</i>
	<i>Pack yrs:</i>				<i>Other (Betel etc)</i>
Psychosocial Issues					
Nutritional state	<i>BMI:</i>			<i>Weight loss:</i>	
Functional Problems (swallow/voice/breathing etc)					
Dental Referral Status	<i>Not applicable</i>		<i>Completed</i>		<i>Pending</i>
Other notable					

details					
MDT Recommendation – To be completed after MDT discussion					
<u>Discussion</u>					
<u>Outcome</u>					
Complex Workup Needed	Y/N	Echo:	CPEX	Lung Function: Y/N	Dental Referral:
	Other:				
<u>Treatment Plan</u>					
Eligible for Trial(s)					
MDT Discussion Updates					
Outcome (to be completed by MDT co-ordinator)					
Breach Date					
Next Appointment Details					

APPENDIX D. EXAMPLE OF MDT OPERATIONAL MEETING**AGCCCG 2016 Meeting Minutes**

Meeting held Gordon Museum, Guy's Hospital - 24/6/16

Attendees

List of attendees from Addenbrookes, Barts Health, Guys and St Thomas', UCLH, Norfolk & Norwich, Ipswich, Southend and the Dana Faber Cancer Institute, Boston

Welcome & Introductions***Minutes from 2015 reviewed and accepted******Accrual data***

Including a discussion of changes in presentation

10 year Overview

Discussion of workload, administrative support, changes in staging and treatment modalities

Analysis of outcomes compared to published outcomes (IGCCCG 1997)

Translational pathology update***Robotic RPLND******Guest Speaker: Dana Faber Cancer Institute******Review of mortality cases******Audit of Liver metastases******Advanced Fertility techniques in GCT patients******Trials update******Any other business***

APPENDX E. MDT IMPROVEMENT QUESTIONIONNAIRE**MDT Lead**

1. Do you feel you have enough time to prepare for the MDT meeting?
2. Does your job plan allow time for MDT preparation?
3. Do you feel your role as MDT Lead would benefit from a structured Job Description and recruitment process?
4. How much involvement do you have with cancer waiting times?
5. Do you feel, within your specific MDT there is opportunity to stratify pathways for 'straightforward' cases allowing more time to be spent discussing complex cases?
6. Do you feel there is adequate 'sign off' and follow up of MDT outcomes that ensure actions are completed?
7. Can you suggest any improvements that could be made to your MDT?

MDT Coordinator

1. How much time do you spend each week on MDT preparation?
2. What support is given to you from clinicians/management to ensure each MDM is adequately prepared?
3. Do you consider the organisation and running of the MDT to be the most important part of your job?
4. What other responsibilities/tasks does your job entail?
5. Who, within your MDT is responsible for ensuring all MDT outcomes are actioned?
6. Are all MDT decisions and outcomes checked by a clinical member of the team before being finalised? If so who by?
7. Does a clinician attend any of your weekly PTL meetings?
8. Can you suggest any improvements that could be made to your MDT?

APPENDIX F. MDT LEAD JOB DESCRIPTIONResponsibilities of MDT Lead

- a. Ensure that the team members work effectively together such that decisions regarding all aspects of diagnosis, treatment and care of individual patients and decisions regarding the team's operational policies are multidisciplinary decisions;
- b. ensure that care is given according to the agreed OG Cancer guidelines (including guidelines for onward referrals) with appropriate information being collected to inform clinical decision making and to support clinical governance/audit;
- c. ensure mechanisms are in place to support entry of eligible patients into clinical trials, subject to patients giving fully informed consent;
- d. overall responsibility for ensuring that the MDT meetings and team meet Peer Review quality measures;
- e. ensure attendance levels of core members are maintained, in line with quality measures;
- f. provide the link to the OG Cancer Pathway Board either by attendance at meetings or by nominating another MDT member to attend;
- g. ensure MDT's activities are audited and results documented;
- h. ensure that the outcomes of the meeting are clearly recorded, clinically validated and that appropriate data collection is supported.

Qualities of MDT chair:

- a. The chair needs to be able to engage everyone in the meeting, ensuring that one group/person doesn't dominate.
- b. Mediation of different opinions.

Running the MDT meeting:

- a. Managing the workload of each meeting.
- b. Ensuring good room layout to facilitate engagement and avoid people sitting at the back, or carrying on unrelated conversations.
- c. Delegation of roles throughout the MDT members (summarise, staging, actions to be followed through).
- d. Projecting outcomes of MDT decision in real time so all can see.

Time commitment:

- a. Preparation of MDM with MDT coordinator and signing off outcomes (2-3 hrs per week).
- b. Reviewing and updating guidelines, work plans, etc.
- c. Reviewing/entering data for local, network and national audits.
- d. Preparing for Peer Reviews.
- e. Carrying out service review meetings annually.
- f. Attending meetings of MDT chairs and network group.

Terms of appointment:

Three years with annual appraisal for the role.

Support:

MDT coordinator

Data clerk

APPENDIX G. MDT COORDINATOR JOB DESCRIPTION

Responsibilities of the MDT coordinator

MDT meeting

- Responsible for the timely preparation of MDT meetings and working with the MDT Lead to ensure the MDT process is structured for the benefit of all involved
- Work with the MDT Lead to adequately prepare for the MDT ensuring all relevant information is available to ensure the best possible discussion. This may include supporting the MDT Lead in a 'pre-MDT triage' meeting.
- Provide administrative support to the MDT meeting
- Support the MDT in capturing MDT outcomes and ensuring all actions are sent to the relevant member of the team.
- Supporting the MDT to ensure data collection for all national data sets and audits through the MDT.
- Support with data collection for peer review.
- Provide support to MDT Lead to ensure all MDT activities are audited and results are documented.

Cancer waiting times

- Responsible to ensure all cancer tracking is up to date.
- Provide support to administrative staff to ensure smooth transition for patients through pathway in a timely manner
- Work with service management to ensure all breach reports are completed on a monthly basis
- Support clinical and operational management on cancer performance improvements.
- Act as a point of contact for any external communications regarding cancer target patients with other trusts

Qualities of MDT Coordinator

- High level of administrative experience and the ability to work within an office environment
- Communication skills to ensure the ability to converse with various MDT stakeholders and levels of management
- Understanding of basic medical terminology
- Understanding of cancer waiting times and MDTs.
- Ability to provide basic data analytical support.
- Understanding the importance of this data collection in driving service/pathway improvements.
- Work within a multi-disciplinary team as a full member of the team.

MDT LEAD	MDT COORDINATOR
Ensuring all decisions made in a patients pathway are made using a multidisciplinary approach and follow the local operational policy	Responsible for the timely preparation of MDT meetings and working with the MDT Lead to ensure the MDT process is structured for the benefit of all involved
Ensure MDT activities are audited and results documented	
Ensure data collection to inform clinical decisions and to support audits/governance	Support the MDT to ensure data collection for national data sets and audits through the MDT
Review 30-day mortality for all patients on cancer pathway	Support MDT Clinical Data Lead in ensuring a review of all 30 day mortality patients on a cancer pathway
Ensure mechanisms are in place to support entry for eligible patients into clinical trials.	
Ensure that the outcomes of the meeting are clearly recorded, clinically validated and that appropriate data collection is supported.	Support the MDT in capturing MDT outcomes and ensuring all actions are sent to the relevant member of the team.
Ensure attendance levels of core members are maintained	Keep the attendance record for each MDT up to date.
Ensure that oversight of all data collection is validated by the MDT as a whole	
Ensuring good room layout to facilitate engagement and avoid people sitting at the back, or carrying on unrelated conversations.	Facilitating appropriate room bookings and ensuring the room is ready for the start of the MDT to maximise MDT time efficiency.
Projecting outcomes of MDT decision in real time/during the meeting so all can see.	Providing support for the MDT to ensure a free flowing meeting with relevant information being shown at the correct time
Managing the workload of each meeting in conjunction with the MDT coordinator	Work with the MDT Lead to adequately prepare for the MDT ensuring all relevant information is available to ensure the best possible discussion. This may include supporting the MDT Lead in a 'pre-MDT triage' meeting.
Delegation of roles throughout the MDT members (summarise, staging, actions to be followed through).	Support each MDT member to enable them to complete roles delegated to them by the chair.

APPENDIX H. Complementary roles of MDT LEAD & CO-ORDINATOR**MDT Governance**

MDT Lead	MDT Coordinator
Ensure care is given according to agreed <i>London Cancer</i> guidelines	
Exercise overall responsibility for ensuring the MDT meetings and team meet peer review measures.	Support with data collection for peer review.
Provide the link to the network cancer pathway board either by attendance at meetings or by nominating another MDT member to attend	
Develop and review balanced score cards with the MDT	
Convene operational meetings three/four times a year to review the service. Ensure that the patient voice and experience of service is incorporated in the review	Provide support to MDT Lead to ensure all MDT activities are audited and results are documented.
Develop and review annual business plan	
Represent the MDT at forums, as required, within the Trust	Represent the MDT at MDT coordinator forums within the trust and network

Cancer Waiting Times

MDT Lead	MDT Coordinator
Review clinical harm for breach reports	Work with service management to ensure all breach reports are completed on a monthly basis
Attend or nominate another clinical member of the MDT to attend weekly PTL/CWT meetings	Responsible to ensure all cancer tracking is up to date
	Provide support to administrative staff to ensure smooth transition for patients through pathway in a timely manner
	Support clinical and operational management on cancer performance improvements.
	Act as a point of contact for any external communications regarding cancer target patients with other trusts

APPENDIX H. CRUK *'Improving the Effectiveness of Multidisciplinary Team Meetings in Cancer Services'* Recommendations

Recommendation 1: The UK's health services should work with NICEⁱ and SIGNⁱⁱ to identify where a protocolised treatment pathway could be applied and develop a set of treatment recommendations for each of these, to be implemented across the UK. Every Cancer Alliance or devolved cancer network should develop their own approach based on these central recommendations. These treatment protocols should be reviewed regularly.

Recommendation 2: MDTs for tumour types for which a protocolised approach has been developed should agree and document their approach to administering protocols. This could include a 'pre-MDT triage meeting'. The implementation and outcomes of these protocols should be audited and reviewed by the full MDT in an operational meeting.

Recommendation 3: National requirements for individual minimum attendance should be reviewed and amended where necessary, with an emphasis on ensuring all required specialties are present at a meeting. NHS England should run a series of pilots to determine optimal percentage attendance requirements. The success of these pilots should be evaluated and national guidance changed as appropriate.

Recommendation 4: The UK's health services should lead the development of national proforma templates, to be refined by MDTs. MDTs should require incoming cases and referrals to have a completed proforma with all information ready before discussion at a meeting.

The proforma could include:

- Patient demographics;
- Diagnostic information
- Patient fitness and co-morbidities, history of previous malignancies;
- Results from a Holistic Needs Assessment (if available);
- The patient's preferences (if known);
- The rationale for requiring MDT discussion;
- Whether there were known treatment protocols for the specific tumour type;
- Whether the patient is suitable for any current clinical trials.

The MDT should have the power to bypass this requirement in exceptional circumstances.

Recommendation 5: MDTs should use a database or proforma to enable documentation of recommendations in real time. Ideally this should be projected so that it is visible to team members; if this is not possible there should be a named clinical individual responsible for ensuring the information is accurate. Hospital Trusts and boards should ensure that MDTs are given sufficient resource to do this.

Recommendation 6: Each MDT should ensure that they have a mortality and morbidity process to ensure all adverse outcomes can be discussed by the whole MDT and learned from, rather than discussed in silos. The primary time for this to take place should be a quarterly or biannual operational meeting. Time for quarterly operational meetings should be included in attendees' job plans. There should be oversight from national MDT assessment programmes.

APPENDIX I. MDT CLINICAL INFORMATION LEAD ROLE DESCRIPTION**University College London Hospitals Cancer Collaborative****MDT Clinical Data lead****Background**

High quality data, and the intelligence that can be derived from it, is central to our ability to drive up standards and equity of care, to ensure value for money and to underpin research. The range of cancer data in England now becoming available is wide and the potential for its effective use is huge. However, data quality and completeness remain poor in many contexts and without this, any attempts to use it effectively will be significantly limited.

Some data can be collected more or less mechanically but much that is clinically relevant (e.g. stage, performance status, whether the patient has seen a CNS, etc.) requires expert clinical validation and the MDT is the obvious place where this should take place. Clinicians cannot complain about the poor quality of the reports that they receive if they take no responsibility for the oversight of the collection and quality of the underlying data. Within UCLHCC it is our proposal that every MDT designates a Clinical Data Lead.

Role description

Their role is NOT to personally collect the data (though all clinicians may have some limited requirement to do this), rather to serve the following functions:

- 1) To champion the cause of the collection of high quality data within their own service and MDT and across the pathway of care in their speciality;
- 2) to champion its use in driving up the quality and outcomes of care and promote its use in research;
- 3) to understand the ways in which data are collected and flow into the IT collection systems and are then subsequently uploaded into national systems;

4) to know how to access reports on data completeness and quality – particularly those forming part of the national COSD (Cancer Outcomes and Services Dataset; e.g. via CancerStats);

5) to support the MDT chair and MDT co-ordinator to ensure that the entire MDT is regularly informed of their data completeness and quality, as held in NCRAS, of key indicators such as stage and performance status;

5) to know how to liaise with NCRAS (the National Cancer Registration and Analysis Service) to influence the completeness of the data on our services that they hold;

5) to feedback to the MDT on issues of data quality and completeness;

6) in collaboration with other members of their MDT and the relevant system-level tumour pathway board, to support the design of relevant reports on activity performance and outcomes.

Prof. Mick Peake

Version 2. 18.4.17