

Punshon, G., Endacott, R., Aslett, P., Brocksom, J., Fleure, L., Howdle, F., . . . Trevatt, P. (2017). The Experiences of Specialist Nurses Working Within the Uro-oncology Multidisciplinary Team in the United Kingdom. *Clinical Nurse Specialist*, 31(4), 210-218

## **Introduction**

According to Cancer Research UK over the last 40 years' prostate cancer incidence rates in UK have more than tripled. There were 47,300 new cases of prostate cancer diagnosed in the UK in 2013. It is the second most common cause of cancer in the UK and more than half the cases (54%) are in men 70 years of age and older causing around 11,300 deaths in the UK in 2014. It has been estimated that worldwide more than 1.11 million men were diagnosed with prostate cancer resulting in more than 307,000 deaths in 2012<sup>1</sup>.

The National Cancer Patient Experience Survey (NCPES) in England has demonstrated that patients with cancer who have access to a Clinical Nurse Specialist (CNS), generally report better experiences and understanding of the disease<sup>2-5</sup>. Despite the known benefits of access to a specialist nurse the distribution of specialist nurses and incidence-to-nurse ratios vary enormously indicating that there is an inequity of access. Unlike other cancers, prostate cancer nursing care in the UK is rarely provided by a prostate CNS<sup>6,7</sup>. This is corroborated by the national cancer nursing census which shows that only 2% of the specialist nursing workforce in England are prostate specific, approximately the same number as a rare cancer like sarcoma<sup>8</sup>.

In the absence of a dedicated prostate cancer nursing workforce, prostate cancer care in the UK is provided by a variety of urology and uro-oncology nurses alongside specialists from other fields including bladder, kidney, testicular and penile cancer, as well as benign disease.

As a consequence, there are a variety of service arrangements and intersections with a number of multidisciplinary teams<sup>6,7</sup>.

Cancer care in the UK is delivered by collaborative multidisciplinary teams (MDT) consisting of a core set of professionals which includes oncologists, surgeons and clinical nurse specialists<sup>9</sup>. In the UK patients are not generally present at MDT meetings. As this study was carried out in the UK NHS all staff are salaried and do not receive a fee for service.

The national cancer peer review programme, launched in England in 2001, provided measurable standards to assess teams' adherence to the best practice guidance<sup>9,10</sup>. These standards reflect best practice drawn from a combination of research evidence, national consensus, and expert opinion and central to this approach was the multidisciplinary team. The MDT was promoted as best practice in cancer care as a means of achieving more holistic cancer care delivered in a timely way by a team of experts rather than isolated individuals<sup>11</sup>.

The impact of working in MDT on team members is not well understood<sup>12</sup> and the limited body of knowledge appears to be contradictory. In a national survey of team members carried out in the UK in 2014 (n=2054) most respondents (90%) agreed that working in multidisciplinary teams was beneficial to the wellbeing of members, and 81% agreed that it improves job satisfaction<sup>13</sup>. There is, however, anecdotal evidence of autocratic practice and hierarchical boundaries making teams dysfunctional and participation stressful<sup>14</sup>. Interviews with MDT members in primary care (n=121) identified sources of conflict and barriers to conflict resolution, alongside team and individual strategies to resolve conflict<sup>15</sup>. However, an intervention study conducted with teams in General Internal Medicine did not achieve improvements in communication or collaboration due to lack of senior staff support or positive role modelling<sup>16</sup>, whilst an observational study revealed hierarchical behaviours in

inter-professional teams, despite team leaders (physicians) espousing collaborative leadership values<sup>17</sup>. Much of the research is focussed on the MDT meeting and its function or validity. A study of 370 MDT meetings<sup>18</sup> which looked at different long term conditions including cancer found substantial diversity. This diversity existed in the purpose, structure, processes and content of MDT meetings. Greater multidisciplinary was not necessarily associated with more effective decision-making and MDT decisions (as measured by decision implementation). Decisions were also less likely to be implemented for patients living in more deprived areas<sup>18</sup>. There is little presented in the literature specifically about experiences of CNS in the multidisciplinary team however, the work of Taylor and Ramirez<sup>13</sup> for the National Cancer Action Team provided very detailed responses from cancer nurses as a subgroup. There appears to be no work on the experiences of specialist nurses working in uro-oncology who will also cover benign disease<sup>6</sup>.

A detailed survey of the specialist uro-oncology nursing workforce<sup>6</sup> was undertaken in 2014 to look at many facets of the role and gather demographic information about the workforce providing care to men with prostate cancer in the UK. Specific questions about the experience of working in the MDT were included in the survey and respondents were offered the opportunity to share their experiences of MDT working through a free text option where respondents could add detail and depth to their responses. The original survey revealed a rich dataset of experiences of working within the MDT and these have been subjected to secondary analysis by the research team.

## **Methods**

A cross sectional survey was undertaken using a census of the workforce similar to that used in the specialist cancer workforce<sup>19,20</sup>. A secondary analysis of a subset of the original data relating to experience of working in an MDT was then carried out.

## **Sample**

This is a whole population sample study. The available population of specialist nurses working in uro-oncology was determined by the British Association of Urological Nurses (BAUN) membership and the previous national census<sup>8</sup> to be between 300-350 by headcount.

## **Data collection methods**

A 24-item survey questionnaire, exploring demographic data, caseload and workload and experience of MDT working was developed for this population by consensus using clinical, patient and academic experts<sup>7</sup>. The questionnaire was designed to gather data on activity and complexity of specialist nursing services provided including work left undone and used a format similar to the national optimum caseload modelling project<sup>21</sup>. This was transferred to an online survey tool (administered using a Survey Monkey secure account). Ethical approval was sought and granted by Plymouth University ethics committee. The survey was developed during April and May 2014 and pilot tested with a small sample from the study population. The survey link was distributed through formal and informal networks, mailing lists, the nursing press, targeted interest groups such as BAUN, NHS Contact, Help, Advice and Information Network (CHAIN), the UK Oncology Nursing Society (UKONS) and social

media (Twitter) during June and July of 2014. Participants could only submit a single response from each computer. Analysis of the survey took place in November 2014-January 2015. The secondary analysis of the original data<sup>7</sup> used in this study took place in Autumn/Winter 2015.

The survey presented a number of consensus statements. The respondents could choose to 'agree' or not with each of the 24 statements.. Thirteen of the 24 survey items related to the respondents' experience working in an MDT and are listed in Box 1.

Box 1: The statements presented as options in the survey.

- I work in a functional and efficient MDT
- I work in a dysfunctional MDT where views are not respected
- The MDT meeting pays attention only to medical issues
- I am not always told of new patients by members of the MDT
- Attending the MDT meeting is not applicable to my role
- I do not attend the MDT meeting
- I would constructively challenge all members of the MDT in the meeting
- I would constructively challenge some members of the MDT in the meeting but not others
- I would constructively challenge members of the MDT after the meeting/separately in private
- I wait until after the meeting to challenge because there is not enough time during the meeting
- There are some members of the team I feel uncomfortable challenging in or outside the meeting
- I do not feel it's my role to challenge other members of the MDT
- I find the MDT meeting intimidating

The responses were examined overall and in addition by length of time in prostate cancer care and by pay band. Open, free text, questions were also included to allow participants to provide additional information on areas such as education, workload or any other issues they felt relevant

## **Data analysis**

Data were exported into Excel and modelled using descriptive statistics for example demographics, payband and length of service. Free text comments were analysed using thematic content analysis<sup>22</sup>. Thematic content analysis is the approach best suited to free text questions in an otherwise quantitative questionnaire as it does not rely on interpretation of data but instead reflects a 'low hovering over the data'<sup>22</sup>. Each comment was coded and themes emerged from the codes. Data excerpts are included below alongside quantitative findings, to provide context. Excerpts are annotated according to job title and pay band (e.g. CNS/band 6). The secondary analysis presented here is confined to the subsection of the survey which examined the experience of working in the MDT. In order to determine if responses were equal across different sectors of the workforce, responses were broken down by pay band and by years of experience. These are reported below.

## **Results**

There were 302 respondents in total. After cleaning, the data from 285 respondents were used. 17 records were removed as they were incomplete submissions or submissions from countries outside of the UK. Assuming the higher total of CNS working in uro-oncology in the UK to be 350 this suggests a response rate of 81% after data cleaning. The most common job title was Clinical Nurse Specialist (n= 185). The responses were further broken down by the 'Agenda for Change' payband of their post. 'Agenda for Change' is the process in the NHS by which nursing roles are allocated to one of nine pay bands on the basis of the knowledge, responsibility, skills and effort required for the post following a job evaluation. In general, the higher banding requires greater knowledge, responsibility and skills<sup>23</sup>. The

most common band was Agenda for Change band seven (n= 174). However, in Scotland 50% of the respondents stated that they were paid on band six. Over half the respondents (n=158) had worked in prostate cancer care for more than 10 years. Few (n=48) had come into specialist posts from a specific specialist nurse development role.

The results of the study are reported in full elsewhere<sup>6,7</sup> and the results that specifically address working in the MDT are reported here. The MDT is a key component of cancer care delivery and is enshrined in English cancer policy<sup>24</sup> however increasing workload and cultural differences appear to present barriers for effective MDT working. The breakdown of respondents by country is shown in Table 1.

INSERT TABLE 1 HERE

**Table 1:** Number of respondents by country.

### **Overall responses to the survey**

The overall response to the survey can be seen in Figure 1. Two themes emerged from the results: firstly the functionality and operation of the MDT and secondly the confidence or ability of the respondents to constructively challenge other members of the MDT.

Quantitative findings are presented below in relation to these two themes; data excerpts from the free text responses are provided alongside the quantitative data.

INSERT FIGURE 1 HERE

**Figure 1:** Agreed statements about MDT meeting (number equals number of respondents out of 285 agreeing with the statement).

### *Functionality and operation of the MDT*

Less than half of respondents (n=128, 45%) agreed that they worked in a functional and efficient MDT. Respondents agreed that they worked in a dysfunctional MDT where views were not respected in 12% (n =35) of responses and 14% (n=40) agreed that the MDT meeting only paid attention to medical issues while 27% (n=76) agreed that they were not always told of new patients by members of the MDT.

The free-text comments (n=42) were most extensive in the questionnaire, with most comments expressing concerns about conduct of the MDT meeting. Common areas of concern relate the lack of interest in non-medical concerns:

*“I don’t feel my views are valued at the MDT; they certainly don’t ask for a nursing opinion” (CNS, band 7)*

*“The MDT is driven by medical diagnosis, due to the number of patients we have to discuss” (CNS, band 7)*

The most common issue expressed by the respondents is a lack of time – large numbers of patients are commonly discussed and problems such as *‘the consultant sometimes goes off-script’* or *‘sometimes it can get quite heated’* were seen to contribute to the ineffective working of the MDT. The lack of buy-in at organisational level was reflected in one comment:

*[The MDT meeting is] often disorganised, poorly attended at consultant level. No team cohesion with clerical staff/management. Management do not respect the importance of MDT often double book the consultants which forces poor attendance*  
(CNS, band 6)



The changes to cancer care delivery and multisite MDT meetings also presented challenges- for example:

*“While our local MDT works well, there are conflicts and issues within the larger MDT which includes [name of hospitals] Hospitals. I would rarely speak up in these teleconference meetings. With the NHS changes and changes to the Cancer Networks the momentum for change and progress has been compromised” (Specialist Nurse, Band 6)*

When reviewed by pay band (see Table 2), the percentage of respondents agreeing that they worked in a functional and efficient MDT increased for each pay band (20% at Band 5, 35% at Band 6, 49% at Band 7, 54% at Band 8a and 80% at Band 8b). The percentage of respondents agreeing that they worked in a dysfunctional MDT was relatively constant as was those who agreed that the MDT paid attention only to medical issues.

INSERT TABLE 2 HERE

**Table 2:** Agreed statements about MDT meeting by pay band. Percentages relate to the percentage of respondents at each band who agreed with the relevant statement.

To see if responses were affected by the number of years’ experience the respondents have the responses were broken down into five categories by length of experience (Less than one year, 1 to 3 years, 4 to 6 years, 7 to 10 years and over 10 years) (see Table 3) There were only 11 responses from nurses with less than a year’s experience so it was difficult to draw any conclusions from this group.

INSERT TABLE 3 HERE

**Table 3:** Agreed statements about MDT meeting by years’ experience. Percentages relate to the percentage of respondents at each experience level who agreed with the relevant statement.

The percentage of nurses who agreed they worked in a functional and efficient MDT varied from the 57% for the 1 to 3, 37% for the 4 to 6, 47% for the 7 to 10 and 48% for the 10 years plus experience groups. However, looking at the number of nurses who agreed that they worked in a dysfunctional MDT there was a higher response (37%) from those with 4 to 6 years' experience than those with 1 to 3 years (10%), 7 to 10 years (9%) and 10 years plus (10%).

As regards the MDT paying attention only to medical issues there was a relatively constant response between the experience groups (11% to 19%). When looking at respondents being told of new patients by members of the MDT there appears to be a divide between nurses with 1 to 3 or 4 to 6 years' experience (33% and 32% respectively) being less likely to be informed of new patients compared to those with 7 to 10 or 10 years plus years' experience (24% and 25% respectively). Positive responses to attending the MDT meeting not being part of their role and not attending the MDT meeting were very similar over all experience groups.

### *Freedom to challenge*

Looking at the ability to constructively challenge other members of the MDT during the meeting 34% (n=97) respondents felt able to constructively challenge all members of the MDT during the meeting. While 23% (n=66) felt able to constructively challenge some members of the MDT in the meeting but not others in 20% of responses they (n=57) agreed that there were some members of the team they felt uncomfortable challenging in or out of the meeting and 4% (n=10) found the meeting intimidating. Only 2% (n=6) agreed that it was not their role to challenge other members of the MDT. As regards challenging after the meeting 21% (n=61) agreed that they would constructively challenge members of the MDT

after the meeting or separately in private while 10% (n=30) agreed that they would wait until after the meeting as there was not enough time in the meeting.

Another theme that emerged from the free text responses was the ability to constructively challenge decisions or views within the MDT meeting

*“MDT can be difficult, I would usually challenge during the MDT, but don't always get heard, either due to the general discussion (sometimes quite heated) I feel ignored though sometimes, I don't have access to all MDT members to challenge outside the MDT meeting. Within the meeting however, I think I have more of a voice than the other nurse members, I suspect they challenge some individuals outside the meeting. I believe I am there to advocate on behalf of patients and hope if ever I needed discussed in an MDT the CNS would speak up for me” (CNS, band 7)*

*“It would depend on who was at the MDT as dynamics change when certain members are not there” (CNS, Band 6)*

Finally, 9% (n=25) agreed that attending the MDT meeting was not applicable to their role while 11% (n=34) did not attend the MDT meeting.

Responses were reviewed by pay band (see Table 2). Looking at the ability to constructively challenge all members of the MDT in the meeting there is an increase in the percentage agreeing with this statement with increasing band after 6 (20% at Band 5, 20% at Band 6, 37% at Band 7, 46% at Band 8a and 100% at Band 8b) while the percentage of respondents agreeing that there are some members of the team they feel uncomfortable challenging is

relatively constant across bands 5 to 8a (20% at Band 5, 20% at Band 6, 22% at Band 7 and 14% at Band 8a) (see Table 2).

Responses were also reviewed by years of experience (see table 3). There is again an observed difference between those with 1 to 3 or 3 to 6 years' experience (24% and 18% respectively) and those with 7 to 10 or 10 years plus experience (34% and 42% respectively) with the longer service band feeling abler to challenge. Those with 1 to 3 or 4 to 6 years' experience were more likely to agree that they would challenge some members of the MDT in the meeting but not others (33% and 34% respectively) compared to those with 7 to 10 or 10 years plus experience (23% and 20% respectively). The rate of agreeing that there were some members of the team they felt uncomfortable challenging in or out of the meeting was consistent among the 1 to 3, 4 to 6 and 7 to 10 years' experience groups (28%, 26% and 24%) and slightly reduced in the 10 years plus group (15%). The responses to not feeling it was part of their role to challenge in the MDT meeting and finding the MDT meeting intimidating were similar across all experience groups.

## **Discussion**

The results obtained in this study demonstrate that there is a variety of perceptions of the experience of working in MDT across urology nurses in the UK. As the MDT is a cancer standard in England with a proscribed membership the MDT meetings are often large and many patients are reviewed. A number of studies have been carried out into the effectiveness of MDT meetings and the contribution of nurses to the MDT meeting since MDT were introduced.

Atwal and Caldwell<sup>25</sup> looked at nurse's perceptions of MDT work in acute health care. They reported that three barriers hindered teamwork: (i) differing perceptions of teamwork (ii) different levels of skills acquisitions to function as a team member and (iii) the dominance of medical power that influenced interaction in teams.

A study by Fosker and Dodwell looked at attendances, time spent on the MDT meeting and the number of patients discussed in the MDT for 14 cancer MDT over a single week. The results obtained showed that an average of 10 consultants, less than one junior doctor (0.7/meeting) and 3 'others' (nurses, pharmacy staff, radiographers and clerical) attended each meeting. An average of 31 patients were discussed at each MDT and the average time allocated was 2.14 hours (around 4 minutes per patient). The time spent did not include preparation time<sup>26</sup>.

Lamb et al analysed the contributions of surgeons, oncologists, radiologists, pathologists and clinical nurse to MDT and reported that surgeons and radiologists had above average contributions compared to histopathologists and nurses which were rated below average<sup>27</sup>.

Other studies have found that the CNS is often the team member assessing the holistic needs of the patient and acting as the key worker<sup>28</sup> and the same group reported that nurse's contributions to MDT meetings may be limited<sup>27</sup>.

Patient involvement in treatment decisions is central to UK health policy and a key part of the NHS constitution with the phrase 'No decision about me without me' being used to describe the importance of the patient viewpoint. Taylor and Green carried out a qualitative interview study looking at 'No decision about me without me' in the context of MDT

meetings. The researchers conducted semi-structured interviews with 9 current cancer care patients and 12 MDT members from the teams managing their care. Findings showed that most MDT members felt the patients had a limited understanding about the MDT and that at most they might understand that recommendations for treatment were the result of an MDT discussion between groups of different health professionals. Three patients in the study recalled being given information about the MDT verbally by the CNS and members of the MDT described the importance of the CNS in relation to information giving due to their level of contact with the patient. The study also reported instances where patients were presented at the MDT without team members having prior knowledge of them and suggested that if nobody in the MDT knows the patient it was more likely that the treatment plan would not be correct<sup>29</sup>.

Eigenmann, in a personal view, suggests that crucial decisions are often made in the MDT without seeing the patient and suggests that the MDT should always include an advocate for the patient such as the patient's general practitioner or a hospital generalist. He further states that the opinion of the patient through his or her advocate should carry the same weight as specialist opinion<sup>30</sup>.

MDT working should facilitate excellence through collaborative working and be the cornerstone for patient centred care. However, the poor experience of MDT working and meetings reported by many nurses in this study is very concerning with less than half of the respondents agreeing that they worked in a functional and efficient MDT. Lack of time, disorganisation and the high numbers of patients to be discussed were all reported as barriers to efficient MDT working. The ability of nurses to challenge in the MDT meeting is

also very important as all members of the MDT team should feel able to challenge in the meeting if appropriate but again our findings give cause for concern. All members of the MDT should feel able to challenge in the meeting if appropriate yet around a quarter of nurses reported that there were some members of the MDT they felt uncomfortable challenging in or out of the meeting.

Patient advocacy is a significant part of the role of CNS and many prostate CNS are instrumental in helping patients come to decisions regarding their treatment options as well as managing the after effects of these treatments. The American Association of Critical-Care Nursing Scope and Standards of Professional Standards for the Acute and Critical Care Nurse Specialist Practice report recommends that advocacy, communication and responding to diversity are key roles of the CNS<sup>31</sup> and this is emphasised by Gurzick and Kesten who looked at the impact of CNS on clinical pathways with regard to the application of evidence based practice<sup>32</sup>.

Therapies for prostate cancer often result in significant quality of life issues which can impact on their survivorship long after treatment has ended. In addition, men with relapsing or progressing illness often have very significant physical, psychological and social issues which need to be taken into account in treatment paths. Several studies have demonstrated the vital role the CNS can play to identify these issues<sup>33</sup> and ensuring that they are addressed when formulating care plans. Another area in which the CNS can have an important impact is in facilitating family intervention for prostate cancer patients as many of the issues facing men with prostate cancer impact on spouses as well as the patient<sup>34</sup>.

Again, the results of this study suggest that there is a need for these issues to be taken into account and that this may not always be the case at present with 14% of the respondents

agreeing that the MDT only took account of medical issues and 27% agreeing that they were not always told of new patients before the MDT. This may make it difficult to present non-medical issues even though the CNS is often the most appropriate member of the team to do this.

## **Conclusion**

It is apparent that many of the issues raised by previous studies which repeatedly arise into the experience of nurses at MDT and their contribution to the MDT still need to be addressed. It is recommended that all teams review the time allocated for MDT to ensure there is adequate dedicated time both to present each patient and for preparation. As regards preparation all cases to be discussed at the MDT should have the appropriate information collected and collated prior to the MDT, perhaps in the form of a proforma which would include information such as the patient demographics, their diagnosis, suggested treatment regimes, the patients' individual preferences and any co-morbidities. This information should be distributed to all members of the MDT prior to the meeting. This time for presentation and preparation should be protected for all members of the MDT. The wider body of evidence cited here indicates that this needs to be addressed at organisational level, as well as by the local teams.

The structure of meetings should also be reviewed to ensure that all members' contributions are heard and valued. More emphasis needs to be given to patient's non-medical needs to ensure that 'No decision about me without me without me' becomes a reality rather than a catch-phrase and it is believed by the authors of this study that the CNS is the most appropriate person to represent the patient's views in the MDT given that they tend to have the most contact with the patient. This would have a significant impact on



patient care and experience and also utilise the skills and abilities of the CNS increasing their job satisfaction. The increased emphasis on inter-professional learning includes teamwork as a key theme; our findings suggest that this needs to move beyond undergraduate curricula and become embedded into mandatory training and education<sup>35</sup>. This is also a fruitful area for future research.

## References

1. Cancer Research United Kingdom. Prostate Cancer Statistics. Web site. <http://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer/incidence>. Accessed October 21 2016.
2. Department of Health. National Cancer Patient Experience Survey Programme. Web site. <https://www.gov.uk/government/publications/national-cancer-patient-experience-survey-programme-2010-national-survey-report>. Accessed October 09 2014.
3. Department of Health. National Cancer Patient Experience Survey. Web site. <http://tinyurl.com/crpdaxx>. Accessed October 09 2014.
4. National Health Service England. Cancer Patient Experience Survey 2012-13. Web site. <http://tinyurl.com/ntxeh52>. Accessed October 23 2014.
5. NHS England. Cancer patient experience survey 2014. Web site. <http://tinyurl.com/oz96j68>. Accessed October 23 2014.
6. Prostate Cancer UK. The specialist nursing workforce caring for men with prostate cancer in the UK. Web site. [http://prostatecanceruk.org/media/2491517/2631-urology-nurse-workforce-research-report\\_\\_web.pdf](http://prostatecanceruk.org/media/2491517/2631-urology-nurse-workforce-research-report__web.pdf). Accessed December 15 2015.
7. Leary A, Brocksom J, Endacott R, et al. The specialist nursing workforce caring for men with prostate cancer in the UK. *International Journal of Urological Nursing*. 2016;10(1):5-13.
8. Macmillan Cancer Support. Census of the Specialist Cancer Nursing Workforce (England). Web site. <http://www.macmillan.org.uk/Documents/AboutUs/Research/Researchandevaluationreports/Macmillan-Census-Report-England.pdf>. Accessed November 04 2015.
9. Department of Health. The Manual for Cancer Services. Web site. [http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4135597.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4135597.pdf). Accessed October 23 2014.
10. Department of Health. The cancer reform strategy. Web site. [http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Healthcare/Cancer/DH\\_091120](http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Healthcare/Cancer/DH_091120). Accessed October 10 2014.
11. National Cancer Action Team. Excellence in Cancer Care: The Contribution of the Clinical Nurse Specialist. Web site. <http://webarchive.nationalarchives.gov.uk/20130513211237/http://www.ncat.nhs.uk/sites/default/files/work-docs/Excellence%20in%20Cancer%20Care.pdf>. Accessed January 10 2016.
12. Taylor C, Munro AJ, Glynne-Jones R, et al. Multidisciplinary team working in cancer: What is the evidence? *BMJ (Clinical research ed.)*. 2010;340

13. Taylor C, Ramirez AJ. Multidisciplinary Team Members' Views about MDT Working: Results from a Survey Commissioned by the National Cancer Action Team. Web site. [www.ncin.org.uk/view?rid=137](http://www.ncin.org.uk/view?rid=137). Accessed October 23 2014.
14. Kagan AR. The multidisciplinary clinic. *Int J Radiat Oncol Biol Phys*. 2005;61(4):967-968.
15. Brown J, Lewis L, Ellis K, Stewart M, Freeman TR, Kasperski MJ. Conflict on interprofessional primary health care teams—can it be resolved?. *Journal of interprofessional care*. 2011 Jan 1;25(1):4-10.
16. Rice K, Zwarenstein M, Conn LG, Kenaszchuk C, Russell A, Reeves S. An intervention to improve interprofessional collaboration and communications: A comparative qualitative study. *Journal of interprofessional care*. 2010 Jul 1;24(4):350-61.
17. Lingard L, Vanstone M, Durrant M, Fleming-Carroll B, Lowe M, Rashotte J, Sinclair L, Tallett S. Conflicting messages: examining the dynamics of leadership on interprofessional teams. *Academic Medicine*. 2012 Dec 1;87(12):1762-7.
18. 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 Services and Delivery Research*. 2014;2(37):1-172.
19. National Cancer Action Team. Quality in Nursing. Clinical Nurse Specialists in Cancer Care; Provision, Proportion and Performance. A census of the cancer specialist nurse workforce in England 2010. Web site. <http://alisonleary.co.uk/docs/Clinical%20Nurse%20Specialistsin%20Cancer%20Care%20Provision,.pdf> Accessed January 10<sup>th</sup> 2016.
20. Trevatt P and Leary A. Commissioning the specialist cancer nursing workforce. *Cancer Nursing Practice* 2010 9: 5, 23 -26.
21. National Cancer Action Team. Alexa Caseload Tool: User Guide. Web site. <http://journals.rcni.com/doi/abs/10.7748/cnp2013.02.12.1.5.p10456?journalCode=cnp> Accessed January 10<sup>th</sup> 2016.
22. Anderson R. Thematic content analysis (TCA). Descriptive Presentation of Qualitative data. California: Institute of Transpersonal psychology. 1997.
23. NHS Employers. How Agenda for Change Works. Web site. <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/agenda-for-change-pay/how-agenda-for-change-works>. Accessed 20<sup>th</sup> December 2016.
24. Department of Health. Improving Outcomes: A Strategy for Cancer. Web site. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213785/dh\\_123394.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213785/dh_123394.pdf). Accessed October 23 2014.
25. Atwal A, Caldwell K. Nurses' Perceptions of Multidisciplinary Team Work in Acute Health-care. *Int J Nurs Pract*. 2006;12(6):359-365.

26. Fosker CJ, Dodwell D. The Cost of the MDT. Web Site. <http://www.bmj.com/rapid-response/2011/11/02/cost-mdt>. Accessed October 23 2014.
27. Lamb BW, Wong HW, Vincent C, Green JS, Sevdalis N. Teamwork and team performance in multidisciplinary cancer teams: Development and Evaluation of an Observational Assessment Tool. *BMJ Qual Saf*. 2011;20(10):849-856.
28. Lamb BW, Sevdalis N, Arora S, Pinto A, Vincent C, Green JS. Teamwork and Team Decision-making at Multidisciplinary Cancer Conferences: Barriers, Facilitators, and Opportunities for Improvement. *World J Surg*. 2011;35(9):1970-1976.
29. Taylor C, Finnegan-John J, Green JS. "No decision about me without me" in the Context of Cancer Multidisciplinary Team Meetings: A Qualitative Interview Study. *BMC Health Services Research*. 2014;14(1).
30. Eigenmann F. Multidisciplinary Team Meetings Encourage Overtreatment. *BMJ (Clinical research ed.)*. 2015;351:h4630.
31. American Association of Critical-Care Nurses. AACN Scope and Standards for Acute Care Specialist Nurse Clinical Practice. Web site. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213785/dh\\_123394.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213785/dh_123394.pdf). Accessed October 21 2016.
32. Gurzick M, Kesten KS. The impact of clinical nurse specialists on clinical pathways in the application of evidence-based practice. *J Prof Nurs*. 2010;26(1):42-48.
33. Giesler RB, Given B, Given CW, et al. Improving the quality of life of patients with prostate carcinoma: A randomized trial testing the efficacy of a nurse-driven intervention. *Cancer*. 2005;104(4):752-762.
34. Northouse LL, Mood DW, Schafenacker A, et al. Randomized clinical trial of a family intervention for prostate cancer patients and their spouses. *Cancer*. 2007;110(12):2809-2818.
35. Thistlethwaite J, Moran M. Learning outcomes for interprofessional education (IPE): Literature review and synthesis. *Journal of Interprofessional Care*. 2010;24 (5):503-13