

Evaluation of the oncology physiotherapy service

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Introduction

In 1987 the World Health Organisation (WHO) first stressed the importance of oncology rehabilitation. This idea was explored further in the Calman Hine Report (DOH 1995) with the recommendation that rehabilitation should become an integral part of care from diagnosis onwards (NCHSPCS August 2000). More recently government proposals have been published for improved service provision to cancer patients. The government is driving forward the NHS cancer plan to improve service provision, where rehabilitation will be a key component in the strategy (NCHSPCS November 2000). This is pertinent with the publication of the National Institute of Clinical Excellence (NICE) guidelines on supportive and palliative care (2004) where chapter ten outlines the importance of rehabilitation in this specialist area and highlights physiotherapists as core members of the multi-disciplinary team.

Background

The oncology directorate at Poole hospital comprises of two inpatient wards with 41 beds, a 14-bed day care unit and a dedicated outpatient department. Up until May 2003 there was no dedicated oncology physiotherapist on the in-patient wards so rehabilitation of this patient group was not being met. The new physiotherapy post was created and funded by the therapy services who recognised this important gap in service delivery. Initially eighteen hours was funded but it was noted that the number of cancer patients referred in the first six months exceeded time available on the wards to address the rehabilitation needs of the patients referred. With no funding forthcoming from the oncology directorate the post was increased to twenty hours in April 2005 and Macmillan was approached to fund a three-year full time physiotherapy post, which commenced in June 2005.

To date the oncology physiotherapy service has slowly started to implement rehabilitation onto the wards. However there is an increasing demand on this limited service. Consequently the current number of cancer patients referred for physiotherapy continues to exceed physiotherapy time available for rehabilitation. Other areas of work which reduce the number of physiotherapy hours available on the ward include: senior 1 meetings; senior 11 meetings; clinical supervision; mentorship; student supervision; Dorset Cancer Network Allied Health Professional (AHP) rehabilitation sub-group; AHP cancer services meeting; Physiotherapy in Oncology and Palliative Care meeting; In-services; study days; appraisals; team planning; case conferences; paper work and Macmillan objectives (Appendix A). It is therefore necessary to evaluate the current physiotherapy service to see what areas need to be addressed to achieve the rehabilitative service required by people with cancer.

The purpose of this evaluation

Aim: To evaluate the number of oncology patients currently being referred and treated against the number of hours of current dedicated physiotherapy in-put available on the oncology in-patient wards.

Objectives:

1. To investigate whether the prioritisation standards (appendix B) are being met
2. To investigate whether referrals are being seen within the standard of two working days
3. To investigate whether there are still gaps in the oncology service provision and what is required to meet these gaps.

Literature review

Palliative care is dynamic and evolving with new concepts emerging. Consequently the boundaries between the two models of palliative care and curative care are becoming increasingly blurred. There is also a flourishing body of evidence suggesting that cancer patients would benefit from rehabilitation (Dietz 1969; Marciniak et al 1996; Sabers et al 1999). However the introduction of rehabilitation within the oncology setting may well place heavy financial burdens on hospitals with increasing need for more skilled professionals. With this in mind further financial demands are likely with the growing requirement for space and equipment to carry out the rehabilitation. Other operational problems may include a variety of essential differences in health and social services philosophies (Burch et al 1999). Furthermore the boundaries of palliative care are continuously changing and developing and physiotherapists working in this specialist area are constantly challenged to improve their knowledge base as well as enhancing their skills and expertise (Robinson 2000).

Method

The senior 1 oncology physiotherapist led the project with both the Macmillan and oncology physiotherapist collecting the raw data. The therapy manager was notified about the project while the oncology physiotherapists line manager provided guidance at the outset of the project. Advice was gained from the audit department regarding data collection and analysis and Mr Belchamber provided the expertise in designing the macro for the data analysis whilst also providing IT support.

Procedure

During an eleven-week period from December 2005 to February 2006 data was collected on the ward front sheets (Appendix C). A coding system was used (Appendix D) to identify treatment time and type of therapy in-put. Eleven weeks of raw data was entered onto an excel spreadsheet (Appendix E) with the maximum possible detail in order to allow the greatest flexibility for analysis. For every individual patient entered, each day had a separate cell formed for the available staff e.g.; physiotherapy 1 (P1); physiotherapy 2 (P2); physiotherapy assistant (A1) and student (S). The coding system (Appendix D) was then used to enter the correct number of

minutes under the type of therapy in-put that each individual patient received. Colour coding was used for the prioritisation (Appendix A), red for high priorities, blue for medium priorities and green for low priorities. Where the priority of a patient changed without being seen, the time was entered in the new colour coding with a time value of 0. Also entered at the left hand side of the first worksheet is the general information about the patient, including referral and discharge dates.

A macro was written to scan the data and find days when a patient should have been seen but was not, these are considered to be 'deficiencies'. The macro indicates these 'deficiencies' on the main timesheet by filling in cells with a solid block of colour, the colour responding to the priority as above. It also marked all cells between the referral and discharge dates in light yellow to help with verification that the data has been correctly entered. As the scan was completed, data was accumulated into the week-data (worksheet 2) for charting with the following standards being checked:

- Referrals – should be seen within 2 working days
- High priority – should be seen 4-5 times a week
- Medium priority – should be seen 2-3 times a week
- Low priority – should be seen 1-2 times a week

In the analysis, once a 'deficiency' has been detected, the counter was reset so that the new 'deficiency' was timed directly from the previous one. This gave a more accurate assessment of the extent of the failure to meet the standards, as the 'deficiencies' will be higher if for example a priority 1 patient is not seen all week, than if he is seen mostly on target but just a day late on one occasion.

In practice, this translates to:

- A high priority 'deficiency' if the patient is not seen for 2 working days
- A medium priority 'deficiency' if the patient is not seen for 4 working days
- A low priority 'deficiency' if the patient is not seen for 5 working days

From the data copied to the week-data worksheet, the following charts (Appendix F) were created:

- **Total patient number** (chart 1): An area chart showing the total number of patients treated and indicating the proportion in the 3 different priorities by colour
- **'Deficiencies'** (chart 2): An area chart showing the total 'deficiencies', and indicating the proportion in the 3 different priorities by colour
- **Patient total and 'Deficiencies'** (chart 3): On the same chart, showing as expected that there is some correlation between these
- **Capacity** (chart 4): The 'deficiency' subtracted from the total number of patients. For example this meant that fourteen oncology patients were treated on 04/01/06 in the time available. However 18 patients required treatment on that day so 4 patients were not treated. Thus the estimated capacity for treatment time available for that day was 14 treatments
- **Hours delivering treatment** (chart 5): An area chart showing the number of hours spent in total treating patients as well as colour coding for the different therapists available to carry out the treatment
- **Frequency of days from referral to first treatment** (Chart 6): A bar chart showing the

number of days taken to treat a patient after referral

Findings

In total 114 patients were referred in the eleven week period evaluated, with a maximum of 23 patients requiring physiotherapy treatment per day. The total number of patients peaked in mid December 2005 and during the month of January 2006. The number of hours spent delivering treatment (Appendix F: chart 5) in mid December 2005 peaked at nine and a half hours (Appendix F: chart 6), which correlates with the peak in patient numbers and 'deficiencies'. The number of hours delivering treatment also peaked in January to eight and a half hours, which again correlates with increased workload and 'deficiencies'.

'Deficiencies' rose dramatically when there was no oncology physiotherapy service available or when there was a reduced physiotherapy service either routinely for example during Thursday afternoons and Fridays when only one physiotherapist was available and in some cases none due to study or annual leave. As a consequence to the latter 'deficiencies' are noted after weekends and there is an obvious peak after the weekend of 17th December 2005. 'Deficiencies' peaked from the 21st to the 27th December 2005 when only one member of staff was available to cover the wards due to annual leave. 'Deficiencies' also peaked after the bank holidays where no cover was available for the oncology wards and the previous decrease in staffing levels over the Thursday and Friday compounded this situation.

Results

The aim of this project was to evaluate the number of oncology patients currently being referred and treated against the number of hours of current dedicated physiotherapy in-put available on the oncology in-patient wards. The objectives have been answered from the findings and it can be concluded that:

1. The 'deficiencies' correlate with the patient total in chart 3 and overall the patient count is slightly above the capacity (Appendix F: chart 4), which results in the prioritisation standards frequently not being met in full. There is a frequency of three 'deficiencies' daily with a peak of four oncology patients not being treated within the prioritisation standards. Each treatment session equates to half an hour with three quarters of an hour dedicated for new referrals or rehabilitation slots. The majority of 'deficiencies' are high priorities requiring three quarters of an hour each, which means that the level of resources required to meet this service gap is two and a half hours.
2. The referral standards are being met with 75 patients being seen on the day of referral. Twenty-one patients being seen one day after referral and three patients being seen after two days of referral. There is one exception to this where one patient was seen after four days of referral. The latter was due to deterioration in the patient's condition, which meant that physiotherapy was not indicated until day four post referral. The other 17 oncology patients were referred prior to the evaluation data collection so cannot be commented upon.

3. This evaluation demonstrates that there are still gaps in the oncology service provision. For example there is no dedicated time for service development such as achieving the Macmillan objectives/audits/protocols/ guidelines/SCC assessment forms or for providing education on rehabilitation to other members of the multi-disciplinary team.

From the results it can be concluded that if a PTA was available for two and a half hours five days a week then the prioritisation standards would be met. However the latter would only meet the treatment demands and would not allow for development of the oncology service. Thus if the oncology physiotherapy service is to achieve the Macmillan objectives and the Dorset cancer network rehabilitation implementation plan (2005) then at least another hour and a half of PTA time would be required to move towards accomplishing these goals. This equates to a total of twenty hours of PTA in-put a week on the in-patient oncology wards.

Introduction of a PTA onto the oncology wards

A job description would be written stating clearly what the PTA's duty would be. A training programme would be organised to provide the PTA with the competencies required for the job. The PTA would also be nominated a mentor to help them to adjust to their new role while gaining knowledge from an experienced member of staff. Appraisals would be carried out so that objectives can be set, performance reviewed with training needs identified. The PTA would be expected to follow the standards set by the Association of Chartered Physiotherapists in Oncology and Palliative Care (ACPOPC) as well as the Chartered Society of Physiotherapists (CSP) core standards. In the future the PTA could work towards their National Vocational Qualification (NVQ), which provides a national framework of standards of competence.

Cost profile

Ideally a PTA for four hours, five times a week (whole time equivalent 0.5) would meet the gap in service delivery demonstrated by this project.

Discussion

Given the different underpinning philosophies adopted by the range of professionals and agencies involved with a person with cancer the whole team must have a clear vision as to the outcome of rehabilitation in order to ensure a consistent approach. This demands not only effective interagency working, but also patient-centred goal setting and appropriate funding to provide a gold standard of service. Unfortunately on the oncology wards there is not a consistent approach to rehabilitation by the multi-disciplinary team. The latter is due to lack of understanding of rehabilitation in the context of oncology, disagreements regarding the rehabilitation of spinal cord compression (SCC) e.g. at what stage to commence mobility after the emergency admission. Furthermore there is not a seamless service between hospital and home with lack of professional dedicated therapy staff in the community to provide the rehabilitation that cancer patients require. Interagency working is also limited due to poor staffing levels where funding has been inadequate. This has led initially to lack of support for rehabilitation on the wards and will require education both at ward level as well as strategic level where the therapy services need to be represented effectively in order to meet the government targets as well as the Dorset cancer network rehabilitation implementation plan (2005).

Conclusion

Funding for a PTA on the oncology wards would help towards achieving the following:

- Increased level of rehabilitation for cancer patients therefore meeting the prioritisation guidelines; Macmillan objectives and working towards the Dorset cancer network rehabilitation implementation plan (2005)
- Provision of a more comprehensive and streamlined rehabilitation programme for patients with SCC which may lead to a site identified for the rehabilitation of this specific group of oncology patients (Dorset cancer network rehabilitation implementation plan 2005)
- Development of the oncology physiotherapy service working on Macmillan objectives/ audits/ protocols/guidelines/SCC assessment forms
- Provision of education on oncology rehabilitation to other members of the multi-disciplinary team
- Opportunity to assess community services to ascertain how they could be developed for people with cancer
- Opportunity to attend the Dorset cancer network AHP rehabilitation sub-group meeting working towards the Dorset cancer network implementation plan

The above would benefit cancer patients enormously, however oncology rehabilitation will not succeed if the other members of the multi-disciplinary team and management at strategic level are not working towards the same vision and supporting the physiotherapists in this important area of service delivery.

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Appendices