

Economic Impact Case Study: Doncaster Royal Infirmary Social Worker

How a dedicated Macmillan Social Worker can improve quality outcomes for people with terminal cancer and free up the clinical capacity of specialist staff to perform core functions

Service summary

The Macmillan Social Worker is a single specialist post managed by Doncaster Metropolitan Borough Council and based within its Social Care Team at Doncaster Royal Infirmary. The Social Worker primarily supports people with terminal cancer patients in their final weeks of life to have a safe and timely discharge from hospital to their preferred place of care and continues to provide support until their end of life.

Impact Summary

Evidence indicates that the Social Worker is playing an invaluable role in supporting terminally ill cancer patients to die with dignity in their preferred place of care. Qualitative feedback from key informants reveals very positive views about the difference that the Social Worker has made to patients, their families and the Specialist Palliative Care Multidisciplinary Team which the post holder works closely with. The Social Worker is able to reduce the use of acute bed days by speeding up discharges and avoiding readmissions. They are also able to free up the clinical capacity of specialist staff to perform core functions.

1) Background to the economic evaluation

This case study is part of a wider programme of economic evaluation of Macmillan-funded services which will report in full in June 2011. An overarching report to be produced at a later date will set out, amongst other information, the aims and objectives of the evaluation; its methodology, key assumptions and caveats; and comparative analyses across services as well as with relevant findings reported in the wider evidence base. This present series of case studies reports quantifiable, direct financial costs and benefits that can be monetised. Where case studies include complementary analysis of wider in-direct benefits that are amenable to monetisation, these are introduced conservatively and with necessary caveats. Ongoing scoping of the literature will further refine these estimates as well as provide comparable cost effectiveness ratios.

2) The Service

Project aims and purpose

The Macmillan Social Worker is a single post managed by Doncaster Metropolitan Borough Council and based within its Social Care Team at Doncaster Royal Infirmary (DRI), one of the main hospitals in the Doncaster and Bassetlaw Hospitals NHS Foundation Trust. The main aim of this post, created in June 2008, is to support people with terminal cancer in their final weeks of life to have a safe and timely discharge from hospital to their preferred place of care. The majority of clients meet end of life “fast track” discharge criteria: this means that they have been assessed by their Consultant as likely to have a rapidly deteriorating condition, which may be in a terminal phase, and an increasing level of dependency¹. These clients are likely to be in their final twelve weeks of life.

The Social Worker responds to referrals as a matter of urgency, taking immediate action if a person expresses a wish to die at home (or other place) and death is imminent. The post holder is a key member of the Specialist Palliative Care Multidisciplinary Team, and works with a range of professionals to assess clients and identify a care package that will best meet their needs, which are often complex. The Social Worker then facilitates the implementation of the care package, applying for financial support from the Continuing Health Care Team at Doncaster Primary Care Trust and Macmillan Cancer Support where needed. The worker continues to support her clients following discharge until their end of life.

Staffing

One full time cancer specific Social Worker situated within Doncaster Council's Social Care Team at Doncaster Royal Infirmary. The post holder receives line management and professional supervision from Doncaster Council and clinical supervision from the Macmillan Lead Cancer Nurse at DRI.

Services offered and intended outcomes

A Pathways to Outcomes model for the Social Worker post is presented in Figure 1, which includes description of the services offered and a range of outcomes that the service aims to achieve.

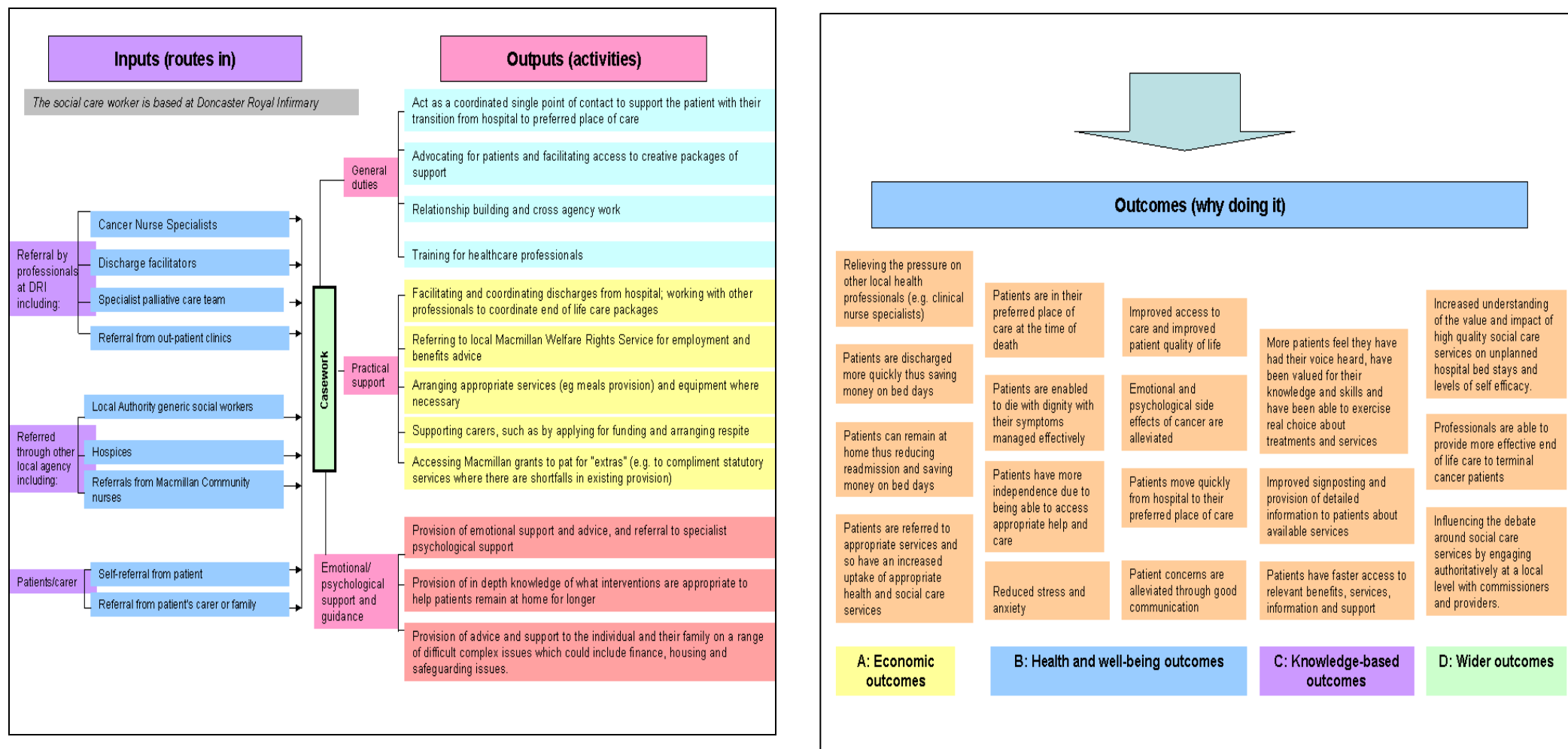
Delivery volume: referrals and clients

In 2009, **175** people were referred to the service. The majority of referrals come from within Doncaster Royal Infirmary, from Clinical Nurse Specialists, the Specialist Palliative Care Team, Discharge Facilitators, Ward Sisters, and out-patient services. However, referrals are also received from generic social workers within Doncaster Royal Infirmary area as well as social care area teams.

Methods of delivery

The worker commonly makes first contact with clients at their bedside in hospital following a referral from a healthcare professional. An essential element of the role is proactive engagement with professionals across DRI to promote early identification of clients who may be in need of the service, as well as relationship building with a range of community based health and social care providers to implement a package of care. A case study in Appendix I illustrates how the Social Worker facilitated a package of care which enabled a client to die in their preferred place.

Figure 1: Pathway to outcomes



3) Impact Evidence

The impact evidence currently available is primarily qualitative and indicates very positive views about the difference that the Social Worker has made to clients, their families and the Specialist Palliative Care Multidisciplinary Team. The skills and experiences of the post holder have been central to the success of the service.

Quality outcomes

End of life in preferred place of care: Table 1 illustrates the place of care on discharge for the 2009 clients. Whilst the table does not reveal whether this was their preferred place of care, the high proportion (51%) of clients who were discharged home is encouraging: the 2007 National Care of the Dying Audit² found that 55% of people with cancer would prefer to die at home but only around 25% actually achieve this wish.

Table 1: Place of care on discharge for 175 clients in 2009

Place of care on discharge	% (number)
Home	51% (89)
Nursing home	20% (35)
Doncaster Royal Infirmary	12% (21)
Hospice	11% (19)
Other eg specialist continuing care ward, other hospital	6% (11)
Total	100% (175)

Wellbeing outcomes

Giving clients a real choice about their end of life care and supporting them to die with dignity: The case study in Appendix I illustrates how the Social Worker facilitated a package of care which enabled a client to die in their preferred place of care, and the following quotations illustrate the positive difference the service has made to others.

"I just wanted to thank you for the help you gave my daughter and I when my husband was on Ward 27. Unfortunately he died on [date] but with your help he had two days in the hospice before he died...and we were able to be with him and have some time together." **Taken from a Thank-you card sent by carer**

"Verbal feedback on the post holder's contribution to care from people with cancer, their carers and professionals has been entirely positive. In my own experience, patients and their carers have expressed increased satisfaction and confidence because their social worker is expert in the social needs of people with cancer." **Macmillan Specialist Palliative Care Nurse**

Wider outcomes

Improving the end of life care delivered by other professionals: The Social Worker attends a range of meetings to raise awareness of her role and provides training, supervision and support to a range of professionals. Written feedback from colleagues provides valuable evidence of the contribution of the post to the wider MDT and other professionals, for example:

"The appointment of a Macmillan Social Worker has been a valuable source of expertise to the Specialist Palliative Care Team and other professionals in Doncaster and has improved the care we provide. The post holder's skills facilitate and help to expedite the discharge of people with complex needs wishing to return home or transfer to other facilities." **Specialist Palliative Care Nurse**

4) Economic Evidence and Cost Calculation

The Social Worker post was established in July 2008 for three years. Doncaster Council receives funding from Macmillan of £3,095.00 per month to cover salary, on costs and overheads. As a condition of the funding, Doncaster Council agreed to continue to fund the post from July 2011.

A table in Appendix II sets out the currently available cost data for establishing and managing the Social Worker post, and the organisations to which these accrue. The data relating to salaries are based on 2010 figures, and the number of hours assigned to line management, professional supervision and administrative support are based on estimates provided by the individuals involved.

The total cost of set up and one year of operation would be £46,288.

Potential productivity savings

The National Audit Office has reported that meeting patient preferences about where to die would reduce the average length of stay following admission by three days³. Using this data, it is possible to generate an estimate of the potential bed days saved at Doncaster Royal Infirmary as a result of the Social Worker's intervention. The estimate is based on the following assumptions:

1. The 143 clients discharged home, to a hospice or 'other place of care' (see Table 1). were discharged to their preferred place of care.
2. The Social Worker reduced each client's length in hospital by an average of three days.
3. The average cost of an oncology bed day is £321⁴.

The Social Worker potentially saved 429 bed days at Doncaster Royal Infirmary, which releases resources to the value of £137,709.

As well as delivering savings in terms of reduced bed days, the Social Worker delivers a range of non-monetisable, categorical benefits as illustrated in Figure 1. It is also important to remember that by setting up complex packages of continuing health and social care support, the post holder "levers in" a range of support for her clients. This refers to services which are organised by, but not funded by, the service eg welfare rights advice, meals provision, and home care support. These costs stand outside the scope of this case study but it is important to remember that clients and their families will be entitled to the statutory services levered in and care in the community costs are generally cheaper than staying in an acute hospital setting.

Potential costs incurred in the absence of the service

In the absence of the Macmillan Social Worker, clients would receive support from another professional which could be a generic social worker, a cancer specialist nurse, a key worker or a complex case facilitator. This would lead to the following potential costs:

1. Delays in discharge to preferred place of care

- other professionals are unlikely to be able to respond to a referral as quickly as the dedicated Macmillan Social Worker due to existing workload. The Macmillan Social Worker often sees clients the same day as the referral, and if not, then the next day
- other professionals do not have the established relationships with members of the Specialist Palliative Care Team that are necessary to mobilise a speedy case conference and access Continuing Health Care funding
- other professionals do not have the established links with community and voluntary sector providers required to implement a timely and effective care package that is tailored to someone with terminal cancer.

2. Increased avoidable readmissions

- other professionals do not have the specialist knowledge and experience of the specific issues relating to cancer that supports the development of effective care packages that enable clients to remain in their preferred place of care
- other professionals are not able to provide ongoing support to clients and their families following discharge.

5) Evidence to Support Quality and Productivity Effects

Published papers on social work and similar services indicate that the findings from this case study are in line with the wider literature. Such evidence includes:

- **Economic outcomes:** Evidence suggests that end of life care outside of hospital results in economic benefits; the National Audit Office calculates that £1.8 billion is spent annually on treating patients in the last year of their life. Providing opportunities for patient preferences in terms of choosing where to die would reduce hospital admissions by 10%, the average length of stay following admission by three days, and could free up to £104m to be redistributed⁵. Furthermore there could be potential savings due to a reduction in the number of complaints since approximately half of all complaints made to acute trusts relate to an aspect of end of life care.⁶
- **Improved psychological health:** Research shows that the emotional support provided by social workers improves levels of depression and other psychiatric symptoms for cancer patients⁷.
- **Meeting patient needs:** Research on assessments indicates that setting up systems for the early identification of support needs can improve outcomes for patients both in terms of getting the help they need quicker, and improving psychological status⁸. This can result in economic outcomes through a reduction in the uptake of inappropriate services. A review of the wider literature may be able to shed some light on potential cost savings as a result of reduction in inappropriate use of services and this is something we will address in the next stage of the work.
- **Increasing quality of life and wellbeing:** Studies have suggested that the provision of psychosocial support to cancer patients and their carers/families leads to increased wellbeing⁹. Specifically one study shows the benefit to family carers in terms of improving quality of life, and reducing the perceived burden of patients' symptoms and their care tasks¹⁰.

6) Conclusions and next steps

Evidence indicates that the Social Worker is playing an invaluable role in supporting people with terminal cancer to die with dignity in their preferred place of care and that the role is supporting a reduction in length of stay and readmission avoidance. A further economic evaluation of posts such as the one described in this case study is planned to generate such evidence as follows:

- (1) Comparing the number of days between admission and discharge for the Social Worker's clients with a similar group of people eg terminal cancer patients who are not referred to the Social Care Worker, or terminal cancer patients who were discharged before the Social Care Worker's post came into existence. This would facilitate a more accurate calculation of the bed days saved as a result of the Social Worker's intervention than the estimate provided earlier.
- (2) Comparing the number of avoidable readmissions of the Social Worker's clients with a similar group of people eg terminal cancer patients who are not referred to the Social Worker, or terminal cancer patients who were discharged before the Social Worker's post came into existence. This would facilitate a calculation of the bed days saved as a result of the Social Worker's intervention.
- (3) Recording the value of Continuing Health Care funding and Macmillan grants directly accessed by the Social Worker for her patients. This would facilitate a return of investment calculation which compares the costs of the service (including setting up costs) with the amount of funding directly generated by the post holder.

References

- ¹ Doncaster and Bassetlaw Hospitals NHS Foundation Trust (2010) *Policy for the Discharge of Patients from Hospital*. http://www.dbh.nhs.uk/Library/Patient_Policies/PAT%20PA%2003%20v.3%20-%20Discharge%20Policy%20-%20final.pdf
- ² Marie Curie Palliative Care Institute Liverpool (2007) *National Care of the Dying Audit*
- ³ National Audit Office (2008) *End of Life Care* Available online at: http://www.nao.org.uk/publications/0708/end_of_life_care.aspx (accessed 30.09.10)
- ⁴ Macmillan Cancer Support (2009) Response to the Care and Support Green Paper <http://www.macmillan.org.uk/Documents/GetInvolved/Campaigns/SocialCare/ResponseCareSupportGreenPaper.pdf>
- ⁵ National Audit Office (2008) *End of Life Care* Available online at: http://www.nao.org.uk/publications/0708/end_of_life_care.aspx (accessed 30.09.10)
- ⁶ Ibid.
- ⁷ NICE, (2004) Improving Supportive and Palliative Care for Adults with Cancer: The Manual *NICE: Guidance on Cancer Services* Available online at: <http://www.nice.org.uk/nicemedia/live/10893/28816/28816.pdf> (accessed 29/09/10)
- ⁸ NICE, (2004) Improving Supportive and Palliative Care for Adults with Cancer: The Manual *NICE: Guidance on Cancer Services* Available online at: <http://www.nice.org.uk/nicemedia/live/10893/28816/28816.pdf> (accessed 29/09/10)
- ⁹ Hudson, Peter L; Remedios, Cheryl; Thomas, Kristina (2010) 'A systematic review of psychosocial interventions for family carers of palliative care patients' *BMC Palliative Care* 9 (17) Available online at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2924287/> (accessed 29/09/10)
- ¹⁰ Milberg A, Rydstrand K, Helander L, Friedrichsen M. (2005) Participants' experiences of a support group intervention for family members during ongoing palliative home care. *Journal of Palliative Care*. 21(4):277–284

Appendix I – Case study

“A” was referred to the Macmillan Social Worker by a Breast Cancer Nurse Specialist due to the advanced state of her condition, poor prognosis and complex needs. She also had additional health conditions and psychological support needs. The client was 62, lived alone, and expressed a strong wish to return home from hospital. The referral was made on a Thursday.

The Macmillan Social Worker met with the client at her bedside on the day of referral, during which the client was tearful and reiterated her strong wish to return home. Subsequent to this meeting, the Macmillan Social Worker undertook the following activities:

- negotiated with the client’s Consultant to get the relevant paperwork completed for “fast track” discharge
- liaised with a range of professionals and family members including: the case facilitator, community liaison department, occupational therapist, breast cancer nurse, discharge planning colleagues and the client’s son
- arranged and chaired a case conference which took place the following day (Friday)
- worked with colleagues to complete the continuing health care assessment
- talked to the client’s son and his wife, who had a young child and were anxious about looking after the client, helping them understand what was involved and providing reassurance of ongoing support
- negotiated a care package for the client to enable them to return home with appropriate support in place. This included the provision of equipment (organised by an Occupational Therapist), carers visiting four times a day, night sitters (for the first three nights), Hospice at Home and support from a Macmillan Community Nurse.

The client went home the following Monday (3 days after referral to the Macmillan Social Worker) and died four days later. During the time the client was at home, the Macmillan Social Worker continued to support to the client’s son. Following the client’s death, her son phoned the Macmillan Social Worker to offer his thanks for the support provided, and to express his gratitude that his mother was able to die in her preferred place of care.

Appendix II: Estimate of the cost of establishing and managing the Social Worker post

Cost/benefit type	Measure/s	Costs	Total
Direct costs – one off set-up costs			
Writing bid to secure project funding from Macmillan	Estimated cost in £ ¹⁰	<ul style="list-style-type: none"> Estimate based on the cost of writing a bid to secure funding for a Social Worker post at Northampton General Hospital 	Total: £1,316
Set up and maintenance of computer, purchase of desk and phone	Estimated value in £	<ul style="list-style-type: none"> Estimated cost to local authority (if starting 'from scratch') 	Total: £1,600
Direct costs - recurrent			
Staff time	Staff time : wte x salary plus on costs and overheads (based on 2010 salary)	<ul style="list-style-type: none"> Social Worker = 1x WTE time plus on costs 	<p>Total = £41,013 per annum</p> <p>Macmillan grant covers £37,140 of this, and the remaining £3,873 is incurred by the local authority</p>
Line management, professional supervision and admin support	Staff time: number of hours x hourly rate	<ul style="list-style-type: none"> Line management and professional supervision = approx. 46 hours @ £22.29 per hour (cost to local authority) Clinical supervision = approx. 12 hours @ £26.23 (cost to Macmillan) Admin support = approx. 115 hours @ £8.86 per hour (cost to local authority) 	<ul style="list-style-type: none"> £1,025 £315 £1,019 <p>Total=£2,359 per annum</p>
Training received and provided	Staff time: wte x salary (inclusive of on-costs and overheads)	<ul style="list-style-type: none"> Mandatory training provided by the local authority and DRI = cost neutral as training is run as a matter of course and is not provided exclusively for the Social Worker Macmillan training = cost neutral as training is free and of no cost to the local authority or DRI Training provided = cost neutral as undertaken as part of the Social Worker's everyday role 	Cost neutral