



# **An Economic Assessment of Making Occupational Therapy Services More Therapeutically Led**

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## Abstract

This economic assessment has three aims:

1. to make occupational therapy services in a hospice day services centre more therapeutically led
2. to increase awareness of the role of occupational therapy in palliative care and increase the confidence of the staff to refer to the service
3. to improve the efficiency of the occupational therapy service delivery.

To achieve these aims, 6 practical occupational therapy led sessions were added to the existing 12-week themed programme currently running in day services. This changed the way occupational therapy services were delivered, focusing more on group-based activities rather than one to one assessments and was offered alongside the information sessions that were traditionally offered. This pilot project was evaluated over the course of 12 weeks.

It involved few extra costs as all staff were already in employment and all materials required were purchased using an existing budget. Additionally, no traditional services were eliminated, as volunteers still offer distraction therapy group-based activities, and one to one appointments are still available with the occupational therapy team if required.

It shows an increase in referrals during the pilot period with a notable increase in non-occupational therapy referrals and an escalation in the occupational therapy case load. Additionally, although it cannot solely be attributed to the occupational therapy input, patient perception of their anxiety, carer anxiety

and practical problems recorded on their IPOS reduced on occupational therapy led weeks.

Additionally, although small, the project suggests that with no additional costs, occupational therapy can increase the capacity of the counselling team, local authority OT; and potentially the respite and response team by avoiding referrals to these teams. It also shows the possibility for occupational therapy services to run more efficiently by allowing in-patients to be assessed during the practical group sessions rather than one to one by the therapist in the unit.

## Introduction

Occupational Therapist's (OT'S) look at the barriers to engagement in daily activities. It is widely recognised that in palliative care, patients will functionally decline and with that comes significant losses in participation in day to day activities, roles, decision making and quality of life. However, it has been shown that participation in meaningful activities improves symptoms such as fatigue; pain and anxiety; it allows patients to adapt and learn new strategies to maintain their independence; and also allows them to regain some control and enhance their quality of life despite their reduced ability in function. (Mills and Payne, 2014)

The main purpose of this economic assessment is to look at the costs and benefits of making OT services more therapeutically led to allow patients to continue to engage in meaningful activities despite their life-limiting illness. Additionally, there are a further two aims; to raise awareness of the role of occupational therapy among hospice staff and volunteers and to increase their confidence to refer to the service and; to improve the efficiency of the occupational therapy service delivery.

It will look at each of these three aims in turn. Firstly, it will discuss how services were run traditionally. It will then look at the policies and the drivers for change; the methods that were used to complete this report and finally the costs and benefits. It will finally look at some limitations to this project, some future steps and a conclusion.

Inputs	Activities and outputs	Groups targeted	Outcomes
<p><b>Direct</b></p> <p>Staffing 1 x band 6 OT (25 hrs) 1 X OTTI (FT)</p> <p>Materials Reminiscence props Craft material Recipes Food</p>	<ul style="list-style-type: none"> <li>• Allow time for Occupational Therapy Technical Instructor (OTTI) and volunteers to input their ideas for activities that link with the topic of the week</li> <li>• Purchase any required material for the activities</li> <li>• Group style activities will be offered daily on 6 weeks</li> <li>• Liaise with IT re access to crosscare for volunteers</li> </ul>	<p><b>For intervention</b></p> <ul style="list-style-type: none"> <li>• Any patient aged 16+ with a life-limiting illness currently attending day services</li> <li>• Due to OT day off this will not currently be offered on a Friday</li> <li>• Patients will be able to access the activities for 12 weeks.</li> </ul>	<p><b>Staff outcomes</b></p> <ul style="list-style-type: none"> <li>• Increased awareness of occupational therapy</li> <li>• Increased efficiency of service delivery</li> <li>• Ability to see, assess and treat more patients in a timely manner</li> </ul> <p><b>Patient outcomes</b></p> <ul style="list-style-type: none"> <li>• Increased self-esteem</li> <li>• Increased independence</li> <li>• Maintained/redefined roles in their daily life</li> <li>• Assist in ACP/legacy leaving</li> <li>• Decreased carer stress</li> <li>• Increased ability to self-manage</li> <li>• Increased quality of life</li> <li>• Decreased risk of social isolation</li> </ul> <p><b>Organisational outcomes</b></p> <ul style="list-style-type: none"> <li>• Patients will be implementing techniques to self-manage their condition earlier</li> <li>• Decreased crisis intervention required</li> </ul> <p><b>Other outcomes</b></p> <ul style="list-style-type: none"> <li>• Decreased need for carers</li> </ul>

## Aim 1

### **To make occupational therapy services in day services more therapeutically led**

#### Traditionally

- 12-week themed programme available to all patients attending day services
- Occupational therapy provided group information sessions on three of these weeks. This included fatigue management and sleep hygiene; cognition; and self-esteem. These groups run in the morning for 1 hour on average (the groups are available Monday to Friday).
- One to one assessments provided when identified as appropriate by the OT or OTTI.
- Daily capacity was determined by prioritising patient needs due to the requirement to cover both the in-patient unit and day services.
- Volunteers used for distraction therapy such as quizzes, games, arts and crafts and gardening.

#### Why the need to change?

- Mills and Payne (2014) suggest that enabling participation in meaningful activities is a way to enhance quality of life and support patients to live with dignity despite a reduced ability to be active.
- Hospice UK's "Rehabilitative Palliative Care Enabling People to Live Fully until They Die" (Tiberini & Richardson, 2015) encourages rehabilitation, enablement and self-management. The aim is to optimise people's function and well-being and enable them to live as independently as possible despite the limitations of their illness.

#### Methods

- Information sessions continue to be provided on the same three weeks in the same time slot.
- The addition of practical group sessions are now also offered on these three weeks and on an additional three weeks which includes: looking back and moving forward; anticipatory care planning; and being active. This involves an hour of the OT and OTTI's time in the afternoon. (For the purpose of the pilot this ran Monday to Thursday only due to the OT's day off totalling 24 hours).
- One to one assessment still available if required.

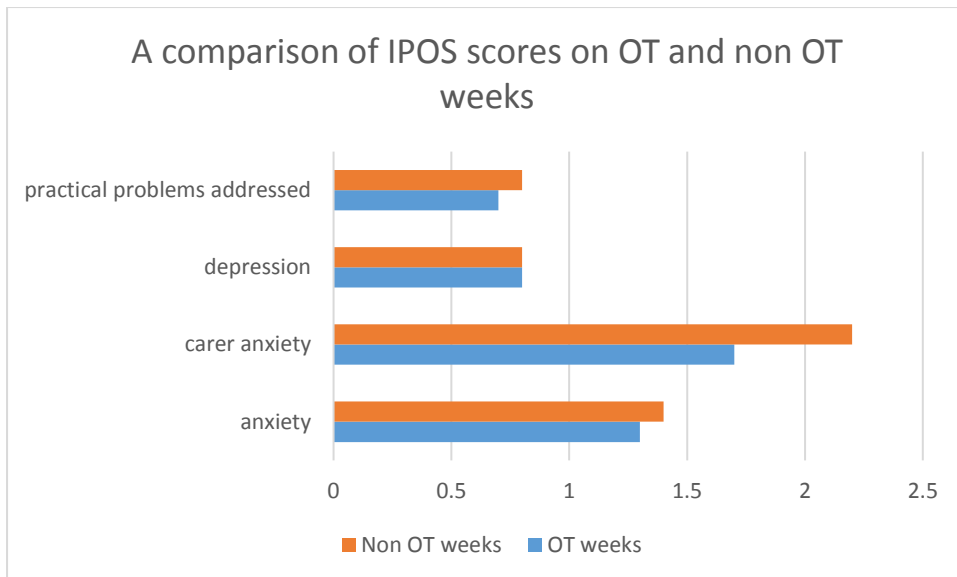
- Volunteers are still providing distraction therapy as detailed above.
- Integrated Palliative Outcome Scale (IPOS) was used to collect individual patient perception on their anxiety, depression, carer anxiety and practical problems each week. This is a relatively new assessment tool which has been newly introduced to the Ayrshire Hospice. The other elements collected relate to physical symptoms so were not analysed for this study.
- As day services is a rolling programme, only patients attending on the first day of the project (8/7/19) were analysed giving a total of 22 patients. Due to missed attendance or non-compliance to complete it, none of the 22 patients had an IPOS score for each week.

### Costs

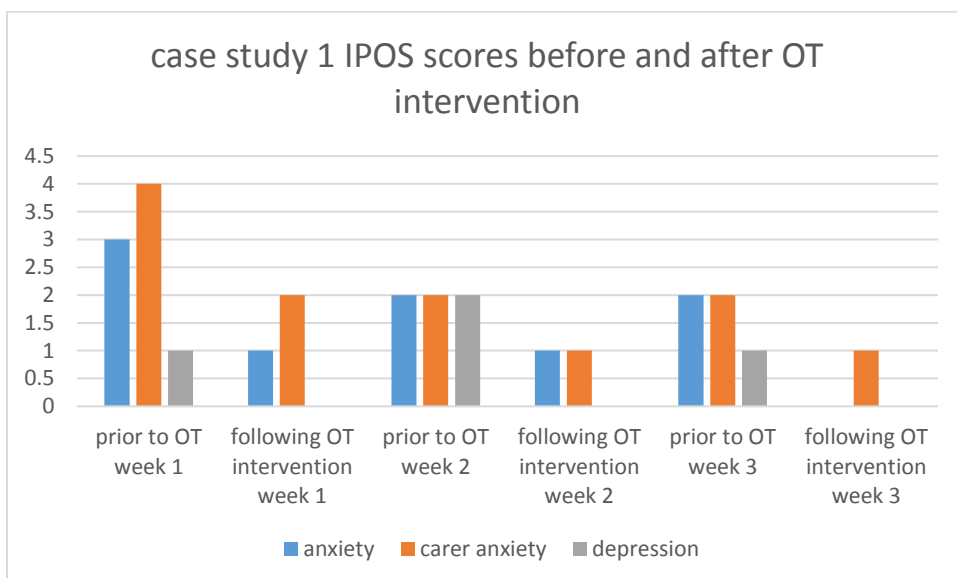
	Total cost	Additional cost
Staff salary	OT - £38700 total cost per annum/12 = 3225/150 hours per month=21 per hour OTTI - £25900 total cost/12 = 2158/150 hours per month = £14 per hour	No, as all staff already in place and are using the group practical session instead of one to one assessment slots.
Materials for fatigue cooking group	£11.72 every 12 weeks =£46.88 a year	No, as the use of the out and about group budget which no longer exists is being used to purchase these materials.

### Outcomes

- IPOS scores suggest a reduction in patient perception of their anxiety; their carer anxiety; and practical problems on OT led weeks although this cannot solely be attributed to the OT input.



- Individual case studies detailed below suggest a reduction in individual IPOS scores on the patient’s perception of their anxiety; carer anxiety; depression and practical problems. Although again, this cannot solely be claimed to be due to OT intervention.



- An individual patient was quoted to say that “being able to try things in a safe environment, gives me the confidence to then attempt them at home, easing the pressure on my husband”. This could correlate to why patients perceive their carers stress reduces on the weeks following the practical interventions being delivered by the OT. It could be hoped that by encouraging patients to be more independent with daily tasks, their dependence on carers could decrease and consequently reduce the need for respite for their carer. The cost to the hospice of a Band 3 respite and response care assistant providing respite for 3 hours is £51

(total costs of £30772/12/150= hourly rate =£17) not including travel cost of up to 0.47p a mile (Hospice Finance department, 2019). This compares to £35 for the OT and OTTI to provide an opportunity for patients to increase their independence in an hour. However, further information would be needed to gather how many referrals to respite and response was avoided by the OT input.

- One individual patient who was participating in the practical groups was quoted to say “it boosts my self-esteem, gives me a feeling of purpose and I feel less anxious as a result”. This same patient had been referred to the Counselling team. However, it was determined that due to the OT intervention, this input was no longer required. The counselling team would provide a minimum of 6 sessions. The true costs of a counsellor is £38700/12/150 hours per month = £21 per hour x 6 hours= £126 patient (Hospice finance department, 2019) which was avoided by the OT input. Having said that, some patients may still require specialist counselling input and this would be need assessed on a case to case basis.
- 7 of the 22 patients (31%) analysed in the study required a prescription for equipment as a result of the practical group sessions. As patients were assessed using the equipment, it allowed the OT team to prescribe the equipment directly from community stores rather than referring to a local authority OT. Traditionally, as the session was not practical, the hospice OT would have had to ask the local authority OT to assess for suitable aids. A local authority OT would also earn approximately £21/hour (my job Scotland, 2019) and would likely require at least an hour’s home visit plus travel time to assess each of these 7 patients = 7 hours x £21= £147 that was avoided by the OT input at the hospice.

## Aim 2

**To increase understanding of occupational therapy in palliative care and to increase confidence to refer to the service**

### Traditionally

- Average number of monthly referrals for the 6 months prior to the pilot was 12 for both the in-patient unit and day services.
- 28 referrals from day services in the 3 months prior to the project starting.
- Of these 28, 12 of them were from non-OT staff members.

- Referrals traditionally picked up by the OT or OTTI at morning handover or multi-disciplinary meetings (MDT).

Why the need to change?

- The 2017/18 clinical services review by Ayrshire Hospice focused on community services ensuring that patients have a choice to stay at home. Therefore OT requires to have a presence in community day services.
- Ayrshire Hospice people strategy 2017/2018 wants to provide appropriate and efficient resources and to build on individual competence and capability.

Methods

- A survey was sent to all staff to gain insight into their understanding of occupational therapy and meaningful activities
  - 61% of staff felt not at all confident, not so confident or only somewhat confident in understanding the role of occupational therapy in palliative care.
  - 32% did not feel confident to refer to the service.
  - 18% were not aware of the self-management role of occupational therapy.
  - 13% were not aware of distraction techniques.
  - 5% thought OT volunteers were used to entertain day services patients.
- One to one discussions took place with two staff nurses and one charge nurse in day services about the changes in service delivery following the pilot.
- Where appropriate, practical workshops were delivered with members of the day services MDT present or in the vicinity.

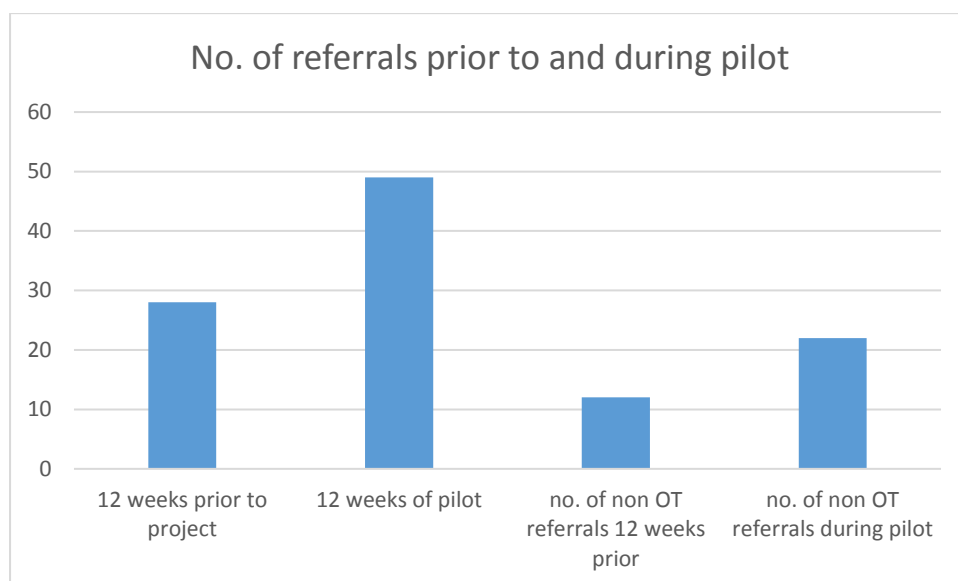
Costs

Staff salary	OT time x 3 hours £63 (£21 per hour as detailed above) No additional hours were required for this. The project was included into the OT's current working day.
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## Outcomes

- Average number of referrals to occupational therapy for both IPU and day services in the 3-month pilot was 30
- Referrals to OT from day service patients increased from 28 in the 12 week prior to project to 49 in the 12 weeks of the project (75% increase)
- Referrals received from non-OT staff increased from 12 in the 12 weeks prior to the project to 22 (83% increase)



- Case load increased from 129 over 6 months from January to July (21 average per month) to 143 in 3 months (47) a month. This suggests a reduced cost per patient for OT input. OT and OTTI joint annual salary of true costs =  $\pounds 64600/2 = \pounds 32300$  for 6 months/ 129 patients over this period =  $\pounds 250$  per patient.  $\pounds 16150$  total OT and OTTI for 3 months/ 143 patients  $\pounds 112$  per patient.
- Staff felt that it was useful to see occupational therapy in action and one member was quoted to say “it makes me realise the extent of what you can offer, things I didn’t realise before so I now know what to refer to the service for”.

### Aim 3

#### **To improve efficiency of the occupational therapy service in day services**

##### Traditionally

- Referrals to service were identified by the OT or OTTI.
- There was a lot of time wasted walking between day services and the in-patient unit to attempt to assess patients.
- No allocated time for practical sessions.

##### Why the need to change?

- People strategy – as mentioned above aims to improve the efficiency of resources.
- If the OT service is able to reach more people, and see them earlier in their illness, it should allow time for them to learn non-pharmacological strategies that can improve pain, fatigue, anxiety, loneliness, and decrease their risk of falls. (Scottish Partnership for Palliative Care, 2019)

##### Methods

- Provided group-based information sessions and practical sessions at specific times of the day.
- Provided groups that allow function and ability to be assessed, such as within the cooking group.
- Restructured day services layout to encourage patients to independently serve their own tea and coffee and encouraged support staff to assist patients with this to allow assessment of Activities of Daily Living (ADL'S) to be done in a discreet way.

##### Costs

As detailed under aim 1

##### Outcomes

- Increased reach in terms of referrals.
- Increased reach in terms of caseload.

- A patient who was in the in-patient unit participated in the cooking group. This avoided the OT having to assess her in the unit which would have likely taken an hour (£21) and freed up time for the OT to see another patient.

### Limitations

As said above, it is not possible to claim whether the decrease in IPOS scores on OT weeks are solely due to the OT intervention or not. It was felt not to be fair to patients to have to complete another form in addition to the IPOS therefore a standardised OT outcome measure was not used in this pilot.

Additionally, due to the order of the themes set in day services, the occupational therapy led weeks were not in alternate order. For example, sometimes they were over two continuous weeks and other times there was a gap of a couple of weeks between them. This made it difficult to compare the IPOS scores from week to week for individual patients.

Lastly, the data collected was relatively small due to the number of patients who do not attend day services continually for the 12-week period. Most patients tend to miss some weeks due to illness or alternative appointments.

### Future Steps

- Liaise with the Scottish Occupational Therapists in Palliative Care and Oncology special interest group to establish if any other area has plans to look at therapeutic activities.
- It would be useful to introduce a quality of life outcome measure to occupational therapy specific activities, to help establish the exact value of OT intervention on quality of life or use an OT standardised outcome measure.
- Increase the number of patients in the in-patient unit that are attending the practical sessions.
- Record how many referrals to respite and response are avoided due to the increased confidence of patients to attend to ADL's independently.

## Conclusion

The role of occupational therapy in palliative care is traditionally poorly understood, resulting in low referral rates and an MDT with little confidence in identifying when patients need this specialised input. At the same time the literature suggests that there is a need to provide meaningful, therapeutic activities even when a patient's function is decreasing. Therefore, if staff are not aware to refer to occupational therapy there is a chance they will miss out on an important part of their care.

Additionally, in a time of increasing demand, it is important that occupational therapy interventions are being delivered in an efficient and timely manner.

This study has hopefully demonstrated that with little set up or running costs and simply through service redesign, specialist palliative care OT's can increase the number of patients referred to their service. It could be suggested that by doing so could potentially avoid referrals to local authority OT, counselling and perhaps Respite and Response teams.

This case study was completed by Lynsey Cameron, Senior Occupational Therapist, Ayrshire Hospice in 2019. Lynsey successfully completed an RCN leadership development programme commissioned by a consortia of four hospices in Scotland. The programme was designed to empower professionals to understand the principles of economic assessment and apply them in their practice in order to demonstrate the value of, and continuously transform, their services.

The programme is endorsed by the Institute of Leadership and Management.

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