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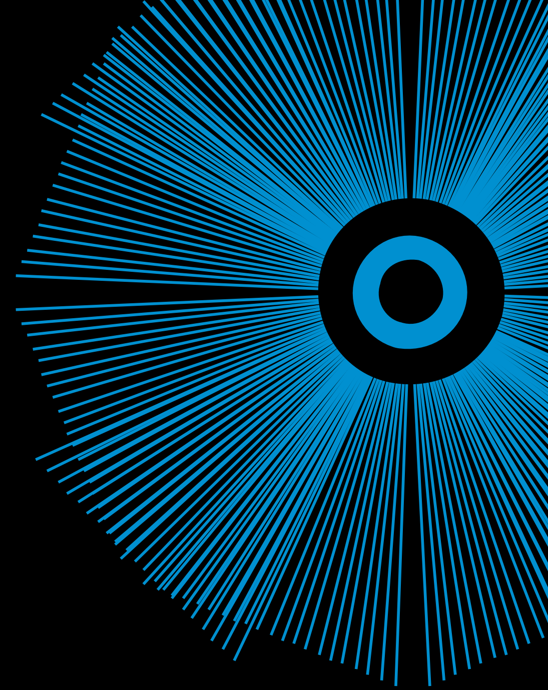
Inspiring Improvement

Shine



Shine 2013 final report

Project title

My Discharge a proactive case management for discharging patients with dementia

Organisation name

Royal Free London NHS foundation rust

Project completion: March 2014

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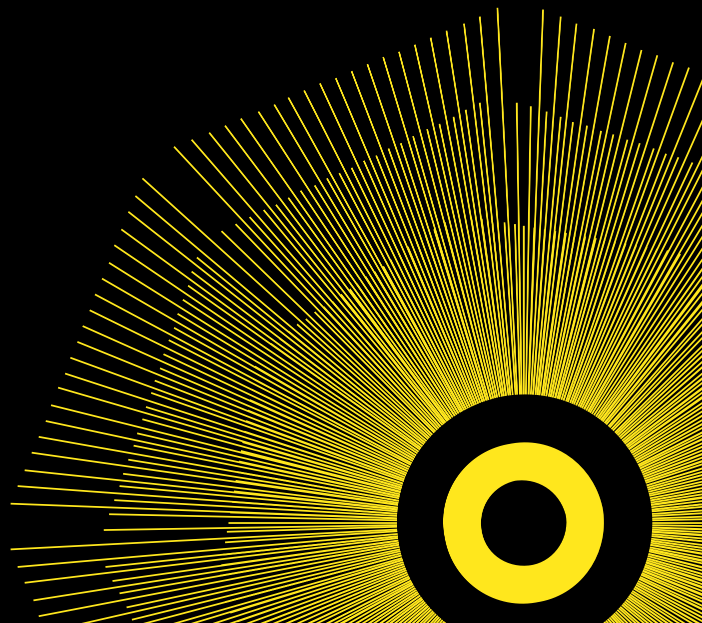

Part 1. Abstract

Project title: My Discharge Project
Lead organisation: Royal Free London NHS foundation trust
Lead Clinician: Becky Lambert

Background and local problem
The 2010 report *Counting the Cost* identified that patients with dementia stay on average 5-7 days longer in hospital than those without dementia, are more likely to die and are more likely to end up in institutions after admissions.

An internal Royal Free long stay audit in 2011 showed that 41.8% of patients with dementia who had delayed discharge, developed an acute medical condition after being approved for discharge, 19% of patients died. Current evidence suggests that the best place to care for a patient with dementia is in a familiar home environment where they will be able to function at their best and will avoid the risks of an extended hospital stay. The National Dementia Strategy explains the importance of well-co-ordinated care:

- **Making sure people with dementia get information and support as soon as possible**
- **Giving everyone with dementia their own personal advisor to help them**
- **Helping people with dementia to stay in their own homes for longer**

Living well with Dementia: A National Dementia Strategy 2009

The My Discharge solution
In response to this, we developed the My Discharge Project.
We applied to the health foundation SHINE awards with the strategic aims to reduce length of stay and reduce 30 day readmission rate for patients with dementia admitted to the Royal free. The overall aim was to increase quality of care while decreasing cost.

My Discharge Solution

- **Pro-active case management model, facilitating safe, sustainable and timely discharges for those with confirmed or suspected dementia**
- **Bespoke, personalised service in partnership with patients and their carers**
- **Thorough in-patient assessment of needs and implementation of therapy plan**
- **Signposts/ co-ordination of developing community infrastructure for on-going care**
- **Follow-up input/management as required**

The project is managed by a specialist dementia Occupational Therapist (OT) who is the lead for the project, and single point of contact for the patient, family and staff throughout the admission and discharge process. The OT case finds, as well as receiving referrals from the ward multidisciplinary team and assesses the patient within 24 hours.
While meeting the trust objectives (Appendix 2.0), the service provides assessment of need and inpatient therapy alongside discharge co-ordination and follow up post discharge (Appendix 2.1)

Additional elements to the OT interventions are:

- Psychiatric liaison review as appropriate.
- Referral to the Royal Voluntary Service (RVS) An effective partnership with Royal Voluntary Service (RVS) volunteering service was established (appendix 2.2) who visited 30% of My Discharge patients post discharge.
- Provision of fresh clothes and a food package if required.
- Provision of key contact list for all people involved in the patients care (Appendix 2.3)
- Follow up call the day after discharge – if not possible to patient directly then to a carer or relative. (Appendix 2.4)
- Access visits, discharge home visits and follow up visits as required. (Appendix 2.4)

The effectiveness of the project was monitored through length of stay and readmission rates and the introduction of a complexity score to help analyse readmission data. Qualitative outcomes were gathered through follow up calls to carers a month post discharge, and completed case studies recognising patients who were discharge home rather than transferred to nursing or residential care.

Alongside this we established an operational group and carried out weekly structured meetings to help keep on track and monitor progress.
There were regular reviews of the processes between inpatient teams such as the RVS and the ward based therapists, ensuring everyone was aware of any project developments so they could react accordingly.

Significant outcomes

- Average length of stay reduction by 1.9 days per person
- 90% patients discharged home – 94% directly, 6% via rehab/ respite
- 26% reduction in re-attendances to A&E in addition to unexpected benefit of readmission avoidance through intervention in A&E
- 34% patients at risk of permanent placement discharged home with My Discharge support
- Consistently positive carers feedback with 100% of carers acknowledging the effectiveness of the personalised approach to My Discharge

Challenges and learning

One challenge faced was around referral criteria for My Discharge patients. We found that as the OT became more well-known on the ward and successfully managed complex discharges, staff did misinterpret the referral criteria. This led to inappropriate or late referrals. To monitor this we maintained records of the number of days between admission and referral, and separately kept track of the patients the OT ended up withdrawing services from.

Another difficulty was referral inclusion of patients who had a “suspected” not established diagnosis of dementia. This was an significant patient group for inclusion due to the importance of diagnosis and addressing issues associated with dementia prior to crisis, however on occasions the cognitive presentation was due to an acute episode and once treated did not have an impact on the patients discharge needs.

The OT has been working with the MDT to emphasise the importance of formal diagnosis in order to ensure correct diagnosis and access to support services as well as tighten and explain the referral criteria. (Appendix 2.5)

My discharge was intended as a time limited intervention to expedite discharge and provide resettlement support at home. A key feature of the project, is the importance of providing on-going contact names for patient’s and relatives following completion of My Discharge involvement At times it was difficult to identify a single person who would take on the key worker management and therefore the length of follow up could vary from 1- 153 days.

Part 2. Quality impact: outcomes

My Discharge has run for 10 months and taken on 119 patients, following the recruitment of the dementia specialist OT (Appendix 2.6).
For the purpose of data analysis, 101 patients who fulfilled the inclusion criteria of suitable for discharge home, has dementia which impacts on functioning, and has a place of discharge, remained under the My Discharge project for the duration of their time in hospital were used in evaluation of effectiveness.

The project concentrates on patients admitted from their own homes, with a large focus on making it possible for them to return there.
90% of My Discharge patients were discharged home, of these 94% went home directly from hospital and 6% via rehab or respite.

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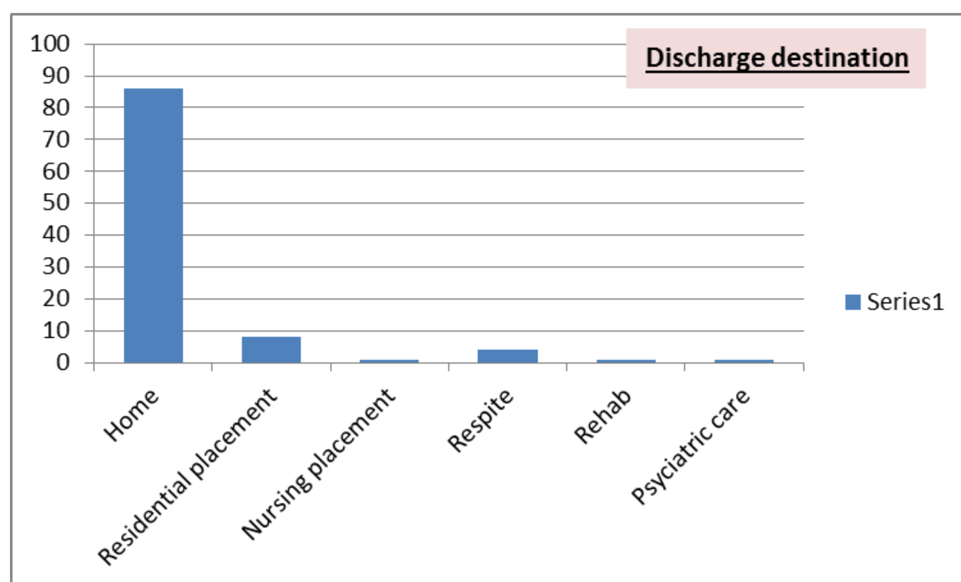
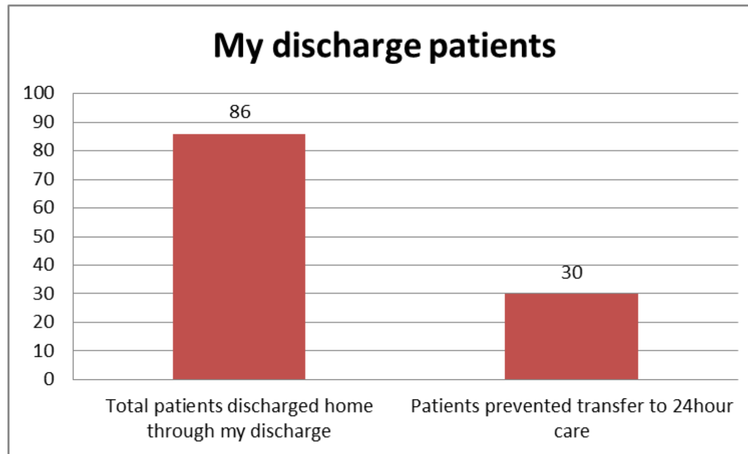


Figure 1: Discharge breakdown for My Discharge patients

30 patients (34%) who received My Discharge intervention had been at high risk of being transferred to 24 hour care but instead received a supported discharge home.

In all cases the patient consistently expressed the wish to return home however there were concerns from the multidisciplinary team and or family that there was not adequate support in place. My Discharge intervention provided the support, care co-ordination and reassurance required to make it possible for these patients to have a trial at home prior to transfer to 24hour care.



Not only did this intervention benefit the patient in supporting their choice, enhancing their wellbeing and reducing length of stay, it had a wider economical impact through deterrence of the cost impact.
Average cost of Local Authority residential home: £1,005 per week (£52,260 per year)

18 patients originally accepted by My Discharge were withdrawn from the project. 5 died and 13 were excluded following initial intervention as their needs moved beyond the initial inclusion criteria and were therefore no longer appropriate for the input.

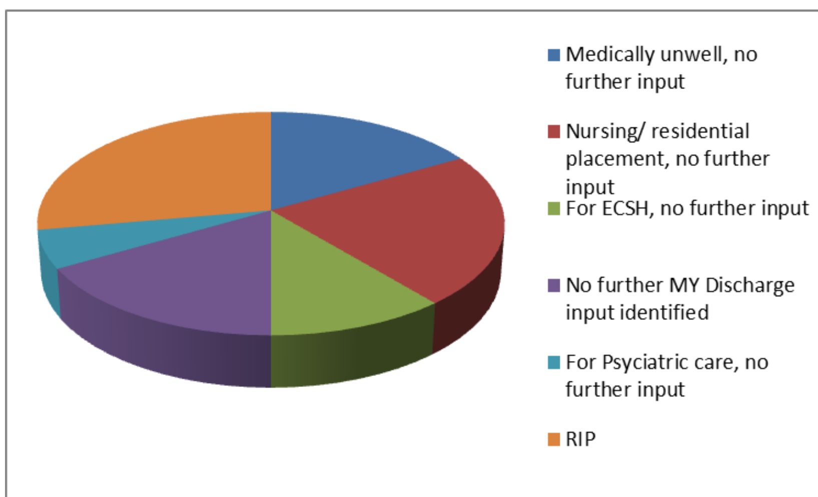


Figure 2: Reason for My Discharge withdrawal

A baseline comparison measure for length of stay and readmissions was taken from a sample 100 patients who have dementia and were admitted to the Royal Free Hospital Health Services for Elderly People (HSEP) wards between April 2012 and December 2012. Once the comparison group data became available, it was apparent that it would be difficult to draw an exact comparison on My Discharge data as the baseline data collection was not able to be divided into the specific required outcome measures e.g. discharge destination. (Appendix 2.7)

SHINE Baseline Data	
Data Source	Cerner
Reporting Period	Period 1: 01/04/2012 - 31/12/2012 (inclusive, first 100 spells only); Period 2: 01/04/2013 - 31/12/2013 (inclusive)
Unit Of Measure	Spells
Description	Comparison of 2 samples of patients with Dementia, from before and after the implementation of Dementia discharge program
	Period 2 records grouped by month and average length of stay shown
	Period 1 average length of stay shown, along with trend-line for period 2 monthly averages

Figure 3: Explanation of comparison data

Figure 3 contains the comparison description for data used in analysis, Period 1 being the comparison group and Period 2 being My Discharge patients. Data for period 1 taken from patients who have dementia who are discharged to their "usual place of residence"

Month	Spells	Period 2 Monthly Length Of Stay Average	Period 1 Length Of Stay Average
April 2013	25	11.0	13.9
May 2013	26	14.2	13.9
June 2013	38	9.3	13.9
July 2013	42	10.1	13.9
August 2013	27	12.2	13.9
September 2013	24	9.7	13.9
October 2013	45	12.4	13.9
November 2013	34	11.9	13.9
December 2013	45	10.9	13.9
Total Average:		11.3	13.9

Figure 4: Monthly breakdown of My Discharge and comparison length of stay (comparison group discharged to "usual place of residence"

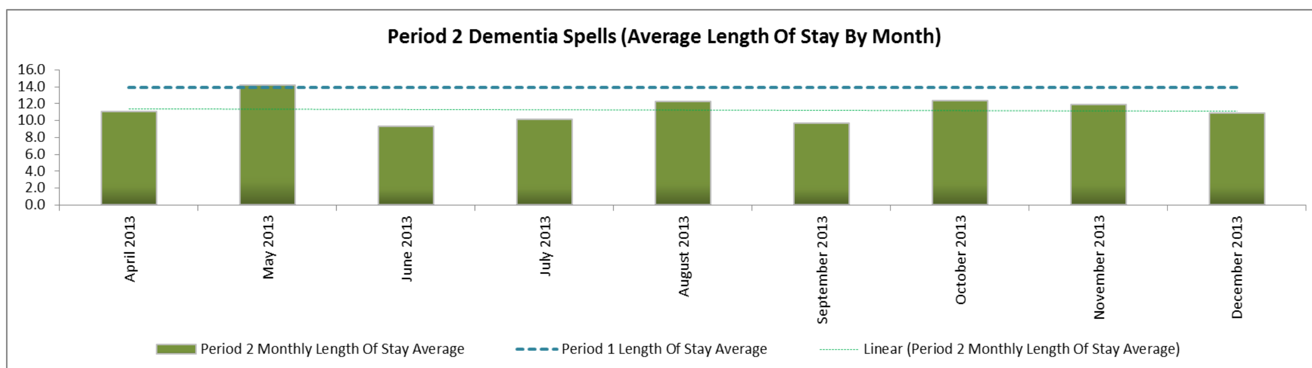


Figure 5: Length of stay reduction for patients through My Discharge vs comparison group

Figure 5 shows the clear reduction in length of stay of 1.9 days following My Discharge intervention.

Another impact on length of stay analysis was that the Trust wide length of stay has reduced however the patient complexity has increased. This is due to the effectiveness of the admission avoidance and Early supported discharge teams started prior to My Discharge implementation.

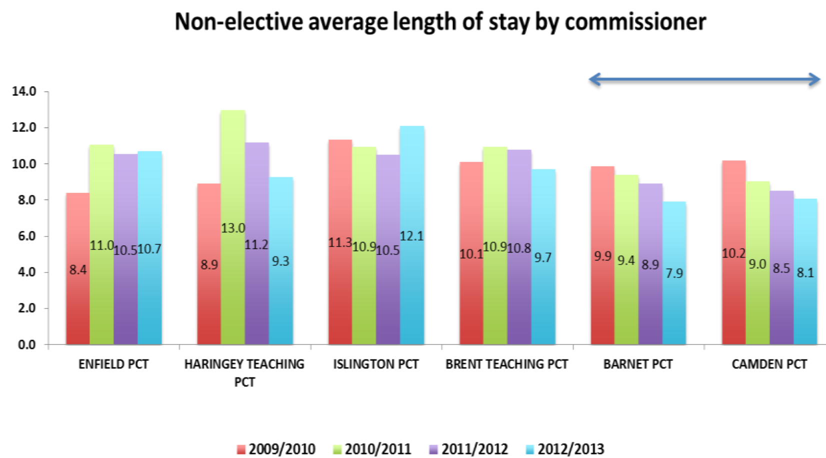


Figure 6: Demonstration of length of stay reduction for other hospital early supported discharge teams

In response to the increase of complexity, the original measures of the project were refined and developed. This included the introduction of a complexity score (Appendix 2.8)

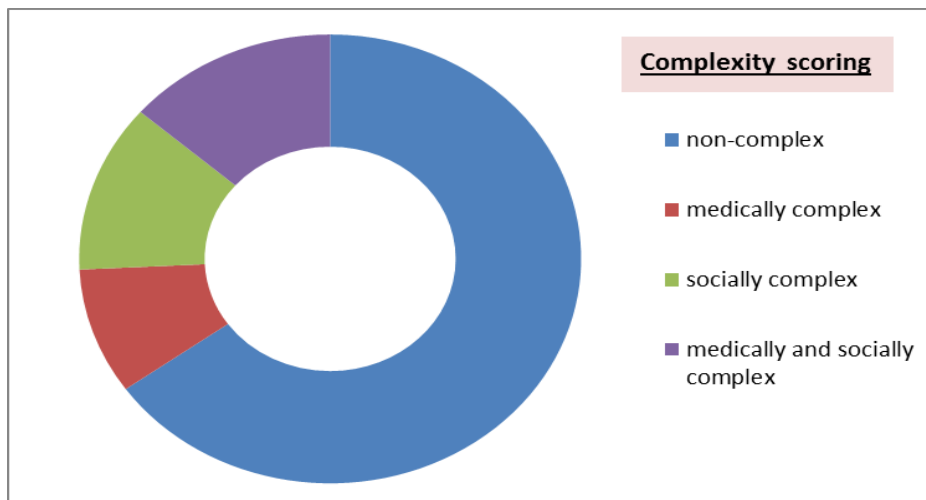


Figure 7: complexity ratio for My Discharge patients (N=101)

This helped to identify the main focus of intervention and the fundamental considerations when arranging discharge. It was also used when reviewing readmission data to help determine if the readmission was avoidable or not.

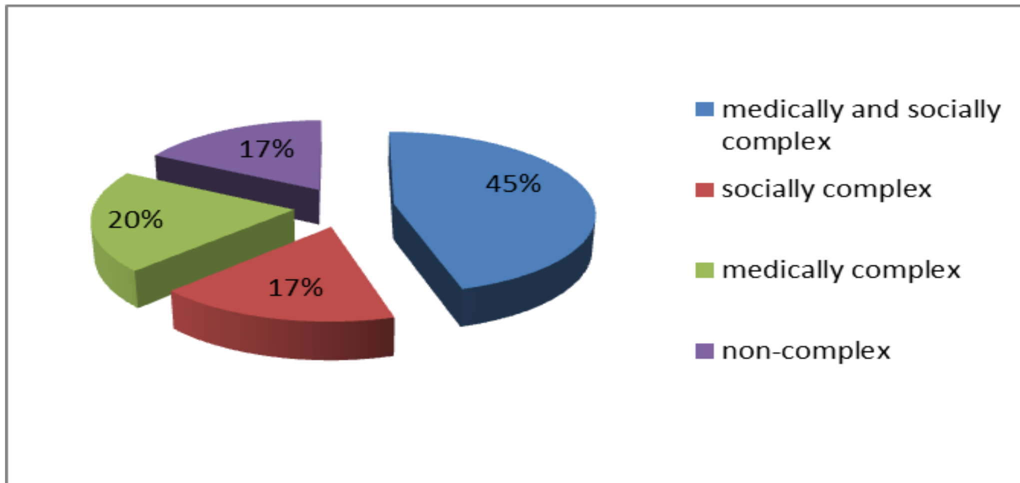
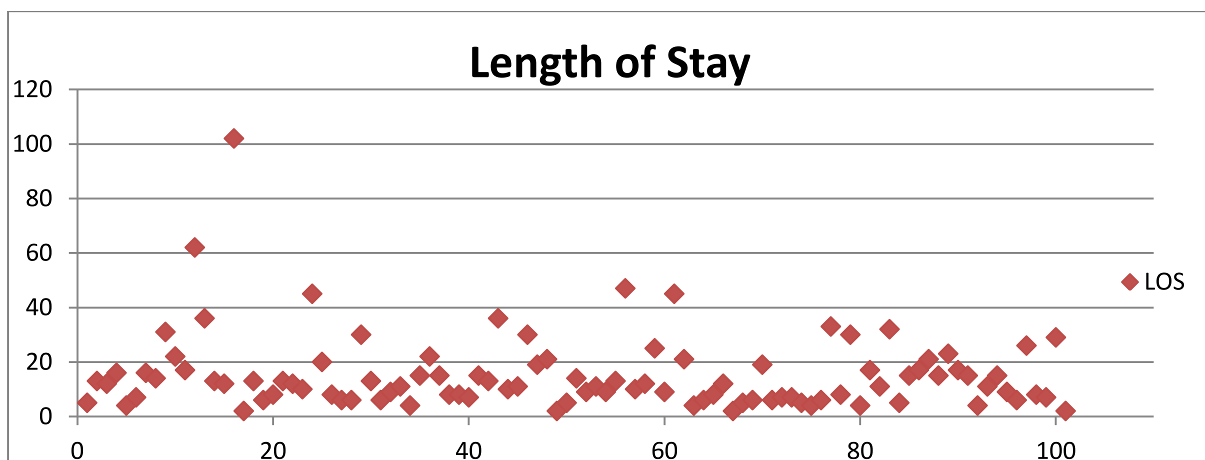


Figure 8: complexity breakdown for readmissions (N=23)

The primary data was developed through a clear set of qualitative and activity measures for the project data on an excel database, collected by the OT and reviewed regularly. Secondary quantitative data was in the form of carers feedback and staff video evaluations (appendix 2.9) to keep it relevant and in line with carer expectations as well as the service outline. The video evaluations involved questions around the discharge process and skills mix of the MDT rather than a direct evaluation of My Discharge. In retrospect this resulted in no direct staff evaluation of My Discharged as previously hoped.

Some key refinements were made to the data collection and these can be viewed in Appendix 2.10

As is to be expected with this complex client group, 5 patients had unavoidable discharge delays due to complications with social services arranging bespoke social care or establishing appropriate residential placement that has the skills to meet the needs of patients with complex behavioural issues. The average length of stay for these patients was 52 days.



The ‘readmission within 30 days’ outcome did not show a great improvement with 22% readmissions for My Discharge (Appendix 2.13) vs. 21% comparison group (patients discharged to their “usual place of discharge”); however re-attendance post discharge was significantly reduced in My Discharge patients.

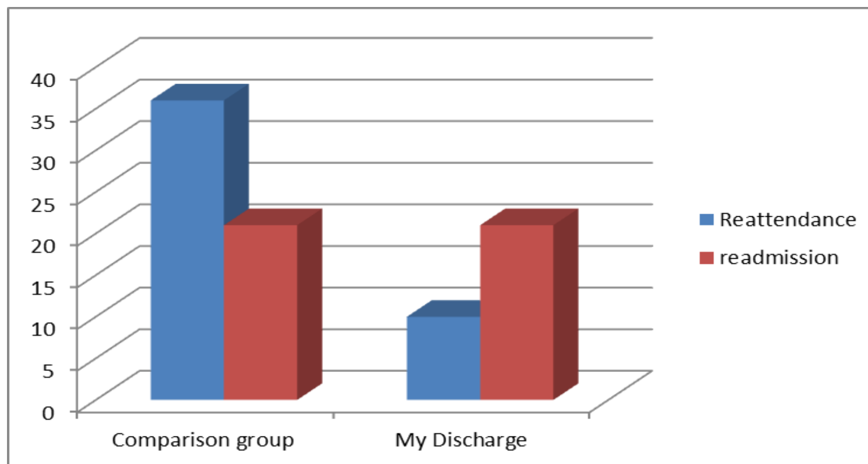


Figure 9: Readmissions and re-attendance breakdown

The intervention of My Discharge on patients admitted to A&E provided an unexpected benefit. It ensured a number of unnecessary admission were avoided and a quick assessment was carried out with valuable information provided to the medical teams and follow up support provided as appropriate.

Carers feedback remained consistently positive with 89% either agreeing or strongly agreeing to the effectiveness questions, compared to 78.5%. This is likely to be higher however relatives often evaluated the whole hospital experience rather than just My Discharge. 100% of carers acknowledge the effectiveness of the personalised approach to My Discharge (Appendix 2.14)

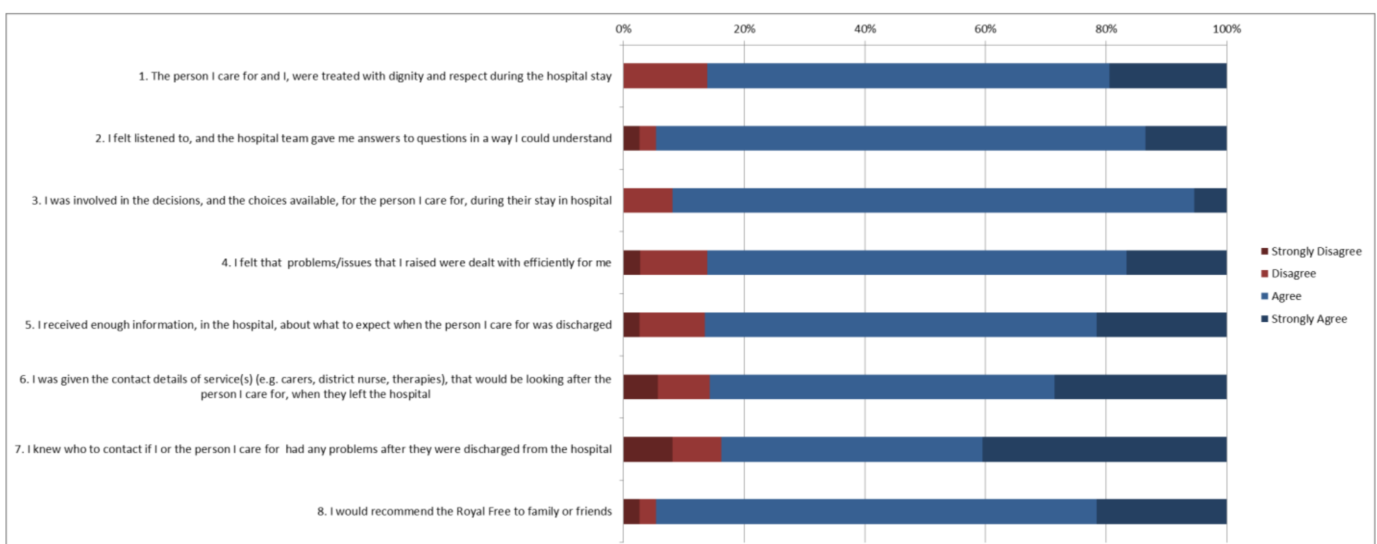
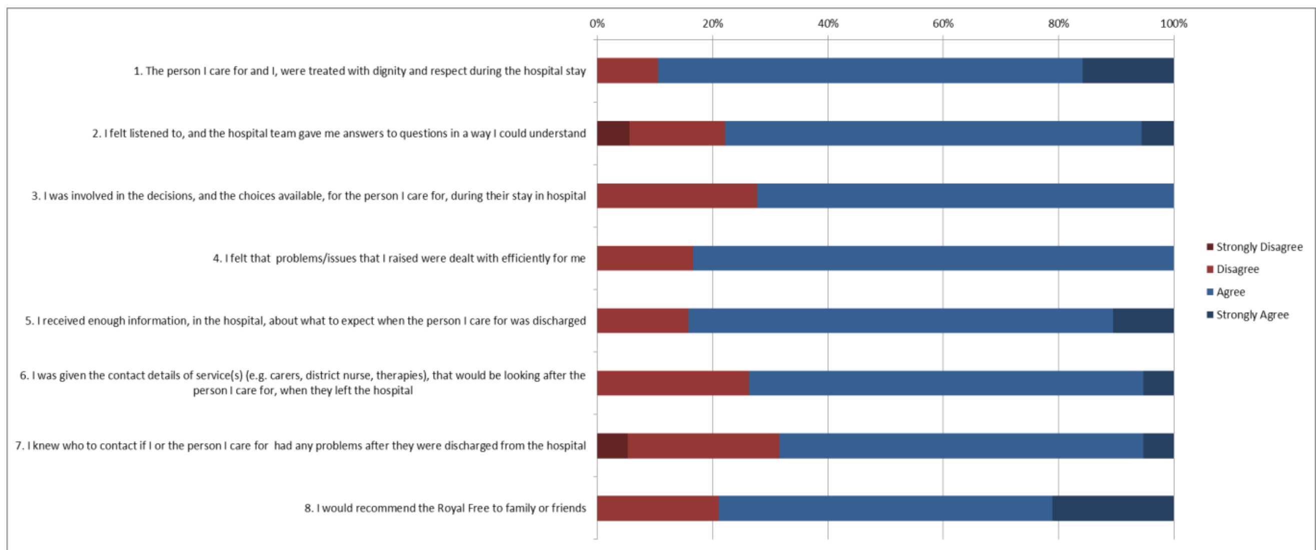


Figure 10: My Discharge carer experience

Figure 11: Comparison group carer experience



Part 3.

Cost impact

The primary input cost for the project was the recruitment of the Dementia OT. This took time to recruit to and costs didn't start being accrued until April 2013. The post was advertised as a 1 year fixed contract as any shorter period would significantly affect the chances of being able to recruit.

Cash releasing savings for My Discharge are evaluated against two main cost indicators

1. A reduction in length of stay for My discharge patients compared to the comparison group
2. A reduction in 30 day readmissions for My discharge patients compared to the comparison group

Whilst we are using the comparison group as our baseline, our ultimate aim is to see the length of stay and readmissions to be no more than for the non-dementia group, and ideally less, as we know that a familiar home environment is of particular need to this patient group.

Individual bed day was costed at £187.34(this excludes consultant costs, overheads and clinical test costs.)

Patients discharge home through My Discharge have an average length of stay of 12 days. Patients in the comparison group have an average length of stay of 13.9 days saving 1.9 days per person:

- Comparison group cost of stay:
  13.9 days x £187.34 = £2,604.03 per patient
  £2,604.03 x 100 patients = £260,402.60 (overall cost)

- My Discharge patients cost of stay:
  11.3 days x £187.34 - £2,116.94
  £2,116.94 x 100 patients = £211,694.20 (overall cost)

Predicted cost saving of = £48,708.40 through the first 9 month period of My Discharge
An average reduction of 1.9 days = £355.95 per patient

For patients who are discharged to a residential or nursing home placement or "alternative destination", average length of stay is 15 days. It is therefore appropriate to state that discharge home through My Discharge saves on average 3 bed days per person.

- For 30 the patients prevented from placement
  30 patients x 3days = 90 bed days saved
  £187.34 x 90 = potential saving of £16,860.60

There is also a larger economical financial benefit from the patients who were supported home who were at risk of being transferred to 24 hour care:

Local Authority Residential care home cost:
Per week = £1,005
Per year = £52,260 (predicted impact as patient may RIP within the year)

For 30 identified potential cost impact reduction:
30 x £52,260 = £1,567,800

One strategic aim of the project was to reduce readmission rate, however it is not possible to carry out the comparable cost due to the additional cost in addition basic bed stay costs.

It may not be possible to quantify readmission rates, however the project has had a *positive impact on length of stay and no resulting negative impact on readmissions*.

It has also seen a reduction in A&E attendances which is another cost reduction

This highlights that standards of care have not been adversely affected by an earlier discharge and in fact the shorter length of stay reduces the risk of hospital acquired infection and deterioration of physical and cognitive function.

There are some significant additional requirements and indirect costs that should be applied both in terms of in direct cost benefits and direct costs that would need to be included for any other area wishing to implement the care model. They have provided significant role in the project (appendix 2.15)

It is also important to acknowledge that due to the behavioural complexities of the patient group, many receive enhanced supervision from staff providing 24hour support above standard ward care. This is an additional cost saving when bed days are reduced.

Non cash releasing benefits accrue from providing excellent care for patients through the My Discharge innovation in terms of patient and carer experience and trust reputation. This has been shown through publicity of the My Discharge project and being approached by other hospitals and service providers requesting information and guidance on the project set up.

Part 4: Learning from your project

Our objectives have always been to improve the patient experience of discharge for people with dementia and their carers that have an inpatient episode alongside maintaining high quality standards within financial barriers in order to achieve this we developed robust and accurate data collection and outcome measures.

Our main approaches were:

1. By refining the discharge process for this group to ensure their length of stay is no more than somebody without dementia and ideally to reduce it further (Appendix 2.16)
2. To reduce 30day readmissions (Appendix 2.10)
3. To facilitate discharge home, whenever possible in line with patient wishes (Appendix 2.11)

All are dependent on excellent case management, discharge planning and post discharge support. In addition clear communication, ease of building quick rapport, flexibility in line with service demands, initiative and access of community teams are essential and the OT was able to maintain these throughout.

A challenge regarding referral to My Discharge resulted in an average of 6 days between admission and referral. At times this is appropriate for example when patients admitted to ITU and therefore a referral to My Discharge would not be appropriate.
In retrospect it would have been useful to collect information around admission to HSEP wards and referral to My Discharge as this would have shown more preventable delays to referral and provided us with more of a focus of reducing length of time between admission to HSEP and referral to my Discharge

The feedback received from carers through the follow up calls has been consistently very positive reporting they were kept informed about the discharge process and the follow up received. It has played an important part in on-going service review to ensure positive experience for patients and carers. Robust data collection has been maintained from the start of the project to ensure clear demonstration of the benefits of the project. This was essential in order to be able to build a business case to make the service a mainstream part of the case management of patients with dementia.

We identified two main challenges at the outset of the project

- Our key concern was the recruitment of a dementia specialist OT. This took time but was achieved and we were able to launch the project to the trust in April 2013. There are still risks that we have just the one specialist OT and this could prove a single point of failure if the OT were to either leave or be sick for a significant time. We have mitigated some of this risk through engaging and up skilling the rest of the ward based OTs into the project and

they have provided cover for annual leave successfully. The specialist OT has put together a daily operational plan which clearly explains the process of My Discharge e.g. case finding, main contacts within boroughs and guidance on follow up (Appendix 2.17). This is a way of managing the risk if absence was to occur. The My Discharge project now has the additional support of a dementia lead within the trust and the recent recruitment of a dedicated therapy assistant will also assist in managing this risk.

- Staff engagement and referral to the service was a risk identified. This has been enhanced through having the medical dementia lead as the service champion and through a planned communication plan for staff across the hospital, other key stakeholders and our patients (Appendix 2.6). The OT has also carried out teaching sessions around the role to the therapy service and on the wards to increase understanding and awareness of the My Discharge project.

The proposal, planning and initial setting up of the project was completed by the dementia lead, occupational therapy team lead and project manager prior to the recruitment of the dementia specialist OT. Preceding the start date of the OT and My Discharge project starting, the dementia lead left the trust and the lead OT went on maternity leave a month into the project. This resulted in the dementia OT, who was new to the trust, to lead the completion of the project with the support of the project manager.

The main impact this had on My Discharge was an initial slow start to the project as a result of the OT establishing a knowledge base of the trust procedures and community services available. It also resulted in the OT developing data collection methods according to the written proposals and a reduction in the clinical support received.

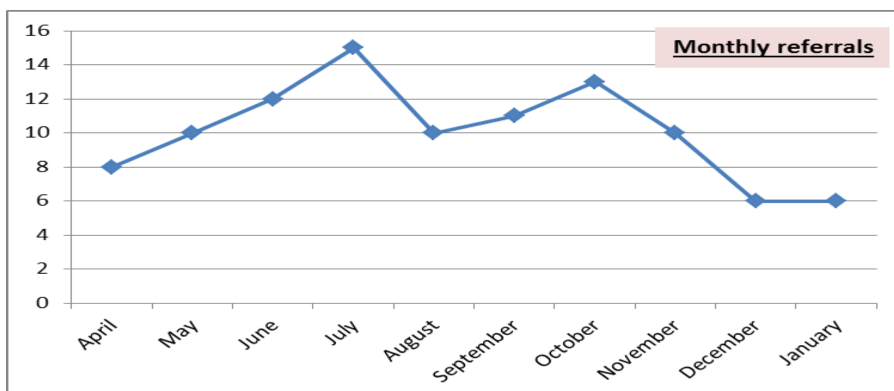


Figure 12: Monthly referral breakdown

Referrals received in December = 9 and January = 10.

Only patients who had been discharged from the hospital were included in data analysis.

Despite this, strong support networks were established between the OT and project manager and with other members of the MDT.

The initial aims of the project were well established and easy to follow. They gave a solid grounding for the project start and were realistic for implementation. If the project was to be repeated the main suggestion would be for the dementia specialist

OT to be recruited prior to the planning stages of the project to ensure the key person running the project has a good knowledge base.

Part 5. Plans for sustainability and spread

The experience of patients with dementia is of paramount importance to the RFL. We have been given high amounts of board level exposure and have direct support from the director with responsibility for or Quality Innovation, Productivity and Prevention programme as well as endorsement of the project as exactly what we should be doing from both the Chief executive and non-executive directors.

A lot of work has been put in to creating operational plans and education to staff on project implementation to make it easy for staff to referral and cover in absence of the OT to be carried out ensuring there is no dip in service. (Appendix 2.17)

We have also had support from a charitable organisation who pledged additional resource into the service after hearing what we were trying to achieve. This funding was used to employ a Therapy assistant for the project who started in March 2014 (appendix 2.18). My Discharge supported the development and initiation of an In-reach reablement service to improve the quality and continuity of care for patients with dementia which complemented the care approach of My Discharge patients (Appendix 2.19)

- **The improvement in length of stay and reduction of A&E attendances show some of the success of the project**
- **It also highlights and is reactive to areas of service development to improve this further.**

This makes it a compelling case for the longevity of the service through mainstream funding and we are currently in the process of presenting a business case to the trust board.

To maintain the effectiveness of the service, a full time band 7 would need to be identified with the addition of a band 4 Therapy Assistant where possible, to ensure the continuity and effectiveness of the service provision. (Appendix 2.20)

Whilst we are and can do a lot within the variety of clinical networks to promote the My Discharge model, it would be good to explore the options of getting exposure at a national or international level on the benefits of this approach to care for a challenging and vulnerable group. Support with being able to attend national dementia conferences and providing a précis or poster presentation at

these events would be beneficial and we would be able to underpin our work with robust data.

The dementia specialist OT received a staff achievement award in December 2013 in recognition of the improvements to dementia services at the Royal Free hospital and close working with the RVS. My Discharge also hosted a Schwartz round to 150 staff discussing a complex My Discharge patient.
We have applied for the Advanced Healthcare Awards and the Patient Safety awards to promote the project and will be presenting at the University College London Partnership dementia network event in March 2014.

We know that we cannot communicate too much or too often and we all take every opportunity to do so. We have already had good exposure with one of our non-executive directors, co-chair of the National Dementia Strategy up to its launch and now the national Local Authority champion. We can also use the links that come with being part of a large teaching hospital to further promote the methodology of what we are doing.

Through monitoring and continuous reviewing of the project and patient outcomes, we are able to maintain an up to date, flexible and responsive service that provides high standard quality care. The case managed approach is designed in a way that can be used by other departments and service providers with the way for establishing a standard way of working.

Appendix 2: Resources from the project

Appendices:

2.0 – Royal Free Hampstead Trust objectives
2.1 - Dementia Specialist Occupational Therapist interventions
2.2 – Royal Voluntary Services summary
2.3 – Example of Key contacts
2.4 – Home visits data
2.5 – Referral information
2.6 – My Discharge Project plan
2.7 – Discharge destination breakdown
2.8 – Patient complexity scoring
2.9 – Staff evaluation videos
2.10 – Key refinements to data collection
2.11 – Case study of patient prevented of transfer to 24hour care
2.12 – Breakdown of patients prevented from transfer to 24hour care
2.13 – Readmission and re-attendance data
2.14 – Carers feedback outcomes
2.15 – Indirect costing
2.16 – Length of stay breakdown
2.17 – Dementia Specialist OT operational instructions
2.18 – Benefits to dementia specialist Therapy Assistant
2.19 – Reablement Project information
2.20 – Benefits to Dementia Specialist occupational Therapist