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Improving ward environments and developing skills for discharge with the implementation of self-catering on a low secure forensic unit.

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ABSTRACT

The opportunities for service users to develop skills for more independent living and take control of their environments are limited in secure mental health units. This paper will outline a quality improvement project that changed how the catering services were delivered in a low secure unit in East London NHS Foundation Trust (ELFT). A Quality Improvement methodology was adopted incorporating the Plan, Do, Study, Act (PDSA) cycle which included the trial of service users preparing their own meals on a daily basis. The participation rates were measured and functional daily living skills were recorded. Following success of the trial, long-term implementation of self-catering was agreed, with service users being supported to prepare a shared evening meal every day on the ward with an average of 60% participation. Functional living skills indicated an improvement in the area of process skills. The project aligned with ELFT's aims of service users working in collaboration with staff to implement changes in service delivery.

PROBLEM

Service users in forensic mental health units remain in hospital for long periods of time with the expectation that the majority will be discharged into more independent living in the community. The ability to carry out activities of daily living (ADL) is part of this expectation and whilst Occupational Therapists and other members of staff plan interventions around this, there remains a deficit of opportunity to carry out basic ADLs.

This paper describes the intervention that occurred in a Low Secure Unit within East London NHS Foundation Trust. Secure mental health services in England aim to provide care and treatment within varying levels of secure environments for individuals detained under the Mental Health Act via the criminal courts or transfer from prisons. Within this setting feedback from the service users suggested that the catering services

provided very poor quality meals with regards to taste and nutritional content. Service users had little control over this and the ongoing complaints about meals did little to enhance well-being. Recovery focused services should aim to deliver services collaboratively with service users^{1 2} and create enabling environments. This setting provided many opportunities to achieve this however there were limitations in the ward environment that demonstrated scope for improvement.

There was a need to increase opportunities for individuals to participate in ADLs to support them in their transition into living in the community and to take control of their environment during their stay in hospital.

BACKGROUND

Policy focuses on the development of recovery-orientated services.³ Much is written about how services translate policy into practice and it has been suggested that a lack of the key principles are present.⁴ Kidd et al.⁵ highlight the need for more service user participation in the delivery of services and opportunities for empowerment. One of the key principles often discussed in Recovery is that of co-production – developing services with service users.^{2 4 1}

Additionally, the Department of Health's (DoH) white paper No Health without Mental Health³ cites the development of skills for daily living as a key component of Recovery. This can be seen as a central role of Occupational Therapy.⁶ Studies have demonstrated the importance of occupation in mental health settings to structure time and maintain well-being^{7 8} and that there can be a perceived lack of activities on the wards.⁸ There is a need for occupations to maintain hope as well as a sense of 'normal' activities.⁷



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The need for recovery-orientated services adopting a collaborative approach and the use of occupation to develop skills for daily living and enhance well-being formed the theoretical basis for the quality improvement project.

BASELINE MEASUREMENT

The overall aim of the project was to change the delivery of catering services and enable service users to take control of this aspect of the service. Therefore, a simple measure was chosen; to measure the participation rates of service users in the delivery of meals. The initial aim was for 60% of service users to be participating in the delivery of the evening meal each week. Data was collected weekly for the first few months of the project. Participation was defined as any task that contributed to the delivery of the ward meal which could include preparation, washing up and completing laundry.

A number of other measures were considered throughout the project. A baseline functional ADL score was taken using the Single Observation from the Model of Human Occupation Screening Tool (MOHOST).⁹ The MOHOST is an observational tool that rates individuals in six domains: Motivation, Pattern of Occupation, Communication and Interaction Skills, Process Skills, Motor Skills, and Environment. The MOHOST has been demonstrated as a reliable and valid tool to measure outcomes in occupational therapy interventions.¹⁰ Baseline scores were taken during the first month and a repeat taken between 3-5 months after. A numerical value was given to the MOHOST scoring in order to measure change.¹⁰

A qualitative survey was completed at the beginning and end of the month's trial. It was hoped to repeat this survey more frequently but participation in this reduced significantly.

Although data was collected related to weight and BMI this was not a core focus in the initial stages but is important to note. It was considered that the project may result in changes to weight and BMI but that it may be difficult to attribute this solely to the project. Additionally it was expected that any changes would likely be in the longer term.

DESIGN

The project team was formed and included ward-based multi-disciplinary clinicians including nurses, the Consultant Psychiatrist, the ward manager, the Occupational Therapist (OT), Occupational Therapy Assistant and two service users. Other service users and ward staff took part in discussion during the community and ward meetings.

Fortnightly meetings took place which focused on Quality Improvement. During these meetings the PDSAs were developed with timescales and regular reviews incorporated. A research visit was conducted to a similar service who had implemented changes to their catering

provision. This helped the project team to understand the logistical components of making changes as well as give encouragement that change was possible. Trials of self-catering were commenced on varying scales with planning, feedback and evaluation included.

The data collected regarding participation rates was reviewed by the project lead (the OT) throughout, and individuals with lower participation rates were approached to offer additional support and encouragement.

STRATEGY

PDSA Cycle 1: The project team decided to introduce a weekly meal led by the ward OT. Service users planned the meal, completed the shopping and cooking with the OT. Feedback was obtained from the wider peer group about the meal each week and cost was noted for potential future planning. In addition ward staff were already facilitating a weekly ward meal which ran in a similar format. The introduction of the second meal aimed to test rates of participation following increase of meal frequency and to enable more detailed assessments by the OT. Verbal feedback was obtained additionally in community meetings.

PDSA Cycle 2: Following the success of the twice weekly meals, the project team planned their second test to increase the frequency of meals. A meeting was arranged between the OT and current catering provider who were keen to work with the project team on the changes that were being implemented. This resulted in an agreement that the catering provider would provide raw goods instead of the prepared meals with no change to the contract. As no additional staff were required to facilitate the daily meals, this meant that the change was cost neutral in the long-term (with the exception of equipment purchased at the outset). Simultaneously a visit was carried out to another Forensic service who had implemented catering around three years prior. This visit provided a useful insight into the potential for the project.

It was agreed to trial one month of daily evening meals being prepared by service users with staff support. A period of planning took place with everyone invited to participate in putting together the menu for the month. Weekly community meetings were used as a forum to discuss the plans and raise any issues. Monthly nursing meetings were used similarly to discuss any additional issues and anxieties about the trial. Data was collected during this month which included recording participation rates, baseline ADL measures and a short qualitative survey.

PDSA Cycle 3: Following success of the month's trial, review and planning took place to implement the evening catering in the longer term. Additional equipment was required (such as a fridge and freezer) and menu planning took place with service users. A date was set and the longer term implementation commenced.

RESULTS

PDSA Cycle 1: The participation rates showed that 17% (2/12) of service users were participating in ward meal

preparation each week (see figure 1). One of the reasons for this low figure could be explained by the number of opportunities for service users to participate with only two meals each week. Thus this low figure was expected.

PDSA Cycle 2: Participation rates for the month's trial averaged 60.5% (7/12) participation based on each week (see figure 2). The participation for the whole month was over 90% (11/12) – based on service users participating at least once in the whole month.

The qualitative survey demonstrated that service user's satisfaction in meals and ward environment improved.

PDSA Cycle 3: Participation rates following the long term implementation averaged at 52% over a period of three months. This figure demonstrates a drop in participation rates from the month's trial. No formal data was collected to determine the reason for this. However discussions with service users and staff indicated a minority were doing the majority of the tasks. This impacted on others then choosing not to participate and some individuals lacked the confidence to prepare meals for all of their peers.

The balance measure of the MOHOST for ADL scores indicated changes on the repeat scores in the category of Process Skills. Scores were collected for 9 of the 12 service users. The numerical value added to the scoring gives a range from 4-16. The average change in scores under the Process Skills domain was an increase of 1.7 demonstrating an improvement from the beginning of the project (see figure 3). It is important to acknowledge that this measure is limited as the observation of the single task was not necessarily a like-for-like task. There would have been similarity in the scale of the task, but the complexity of the meal being prepared would have varied. A further analysis between increases in ADL scores and participation rates didn't suggest a clear correlation, thus further consideration could be given to the reasons for changes.

There were no significant changes to weight and BMI. This was not wholly unexpected and the projects aim was primarily focused on participation. Addressing wider issues of physical health and diet were beyond the scope of this project (See supplementary - Appendices).

LESSONS AND LIMITATIONS

This project implemented a significant change to the way services were delivered to the ward. The changes directly impacted on both staff and service users. There were a number of perceived benefits to this project which weren't measured and therefore this is one of the projects limitations. Many discussions took place regarding what could realistically be captured in the data. This included: improvements to individual's physical health following a change in diet; improvement to the ward environment (this was captured in a small survey and anecdotally); improvement to individual's well-being and self-esteem following participation in the daily activity;

the potential to effect skills of daily living and subsequently level of support required for placements in the community; increased time spent in meaningful activities. This list is not exhaustive and it may be that some measures can be collected retrospectively.

One of the greatest challenges of a project of this nature is to maintain the momentum. Both staff and service users displayed anxieties throughout about the ability to sustain the catering and how to support more service users to be involved. Regular meetings took place which helped to relieve these anxieties however ongoing input with service users was a necessary part of keeping the project alive. Identifying leads within the nursing team proved beneficial to enhance ownership of the project and share the work load. Ongoing input from the project lead, the ward OT, was necessary to provide encouragement and oversee the embedding of changes into daily practice.

Whilst changes were made in agreement with the catering provider to provide the raw goods at no additional cost, no further changes were made to their contract. It was agreed that whilst there could be potential additional savings to the service – as the catering provider was in effect providing a lesser service with the raw goods as opposed to prepared meals, it would require a longer period to ensure changes were sustained and occurrence on a greater scale across the wards before these could be considered.

It is difficult to generalise the results on a project of such a small scale. It could be suggested that the results would be transferable if the changes were made in a similar setting. There is a dearth in the literature of studies that measure the impact of intervention based on participation in skills of daily living.

CONCLUSION

Recovery orientated services focus on developing services collaboratively with service users. This project made a significant change to a service with the direct involvement of service users throughout the process. The project achieved it's core aim and initial results indicate the ability to effect skills of daily living. Ongoing input is needed to maintain the daily delivery of the evening meals and creating new systems that have become embedded in the ward environment was of benefit. The changes have been sustained with the self-catering continuing on the ward for almost two years with two further wards adopting the same model successfully.

The change implemented was achieved at no extra cost to the service and with the perceived benefits it can be seen to be cost-effective. The project demonstrates how changes can be incorporated into daily practice without the need for additional resources with clear and tangible benefits.

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Declaration of interests Nothing to declare.

Ethical approval Ethical approval was not sought as the the focus was on improvement, not as a human study.

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