Integrated Care by the Health and Social Services Staff in Joint Emergency Team (JET) to Prevent Unnecessary Hospital Admissions in London Borough of Greenwich

**Abstract**

**Background:** The Joint Emergency Team (JET) sees patients that require assessment and care package within 24 hours of referral in their own home, Accident, and Emergency (A and E) department or the Acute Medical Unit (AMU) at the local hospital. The JET integrated team accepts referrals from all primary, community, acute and social services. There has been greater emphasis on evaluating JET working and the outcomes, studies show more of the differences in policies and design with little evidence on how the integrated team of health and social service carry their daily work. The purpose of the study is to ascertain how JET interventions can help to avoid unnecessary hospital admissions.

**Method:** The researchers interviewed eight JET professionals taken from Nursing, Occupational Therapy, Physiotherapy and Social Services who have been involved in integrated care for two years. The interview was recorded and transcribed verbatim and a thematic analysis was carried out.

**Findings:** The study found that the Joint Emergency Team provides integrated care using multidisciplinary and Trans-disciplinary team approaches to prevent unnecessary hospital admissions in the Accident and Emergency department, Acute Medical Unit (AMU) and the Community in Greenwich borough.

**Conclusion:** The integrated care provided by JET helps to ensure timely assessment and management of patients in the hospital and community which helps to prevent unnecessary hospital admissions.

**Keywords:** Integrated care; Multidisciplinary team; Unnecessary hospital admissions; Admission avoidance; Integrated working; Health and social care

**Introduction**

Integrated care has been described as an organizing principle for care delivery that aims to improve patient care, and this is a key policy concern in the United Kingdom [1]. It is argued that there are several kinds of literature on structures, processes and the impacts of integrated care but not much has been written on its effectiveness to service users [2]. The trust is one of the fourteen trusts for piloting of integrated care in England but there still exists fragmentation and weak integration between health and Social service staff in the trust. Details of how the health and social service staff work together to prevent unnecessary hospital admission are missing in literature hence there is a need to find out the specific ways roles are allocated to make sure service users are satisfied and at the same time prevent unnecessary hospital admissions. The findings from different kinds of literature illustrate that the most effective models in preventing unnecessary hospital admissions are provided by well-coordinated integrated Multidisciplinary teams within hospitals and community settings. Previous studies have identified the following to help in preventing unnecessary hospital admissions: Policy and application, communication among staff and service users, integrated models, community-based integrated care, rehabilitation services, intermediate care beds (ICB) and factors...
enabling integrated health and social care. Although evaluations of integrated care have shown some positive outcomes on its impact on process or inputs like admission avoidance, evaluation should also concentrate on its impact on outcomes for patients and service users.

Methods: Research Design

Social sciences research has two major approaches in research methods: a quantitative and a qualitative approach. However, some researchers may decide to combine the two approaches in their research. Quantitative and Qualitative approaches are distinguished in terms of the amount and type of data generated from them [3]. Quantitative methodology usually involves a larger amount of data than qualitative approach. However, data collected by qualitative approach are usually more in-depth [4].

The type of research carried out must be the type that is most fitting for research questions [5]. The chosen approach in this study is qualitative and eight people were interviewed, and their views analysed to generate the desired results within four weeks period. A qualitative research method enables the researcher to gather data based on participants' in-depth life experiences and views. Qualitative research is more humanistic oriented [6]. It uses method such as ethnography, participant observation, interviewing and other social anthropological method to collect data, observe human behaviour and reach conclusions [7]. It is also known as in-depth research method and good in studying social phenomenon especially issues that have do with exploring the lived experiences of the studied population. In addition, qualitative description is a suitable method to apply when straight descriptions of phenomena are desired [8,9]. Phenomenology is the most suitable method to apply in this study because it studies conscious human experiences in day to day life [10]. Many authors define phenomenology as “the live experience” and it is most commonly seen in topics of this nature [10,11]. Also, the interpretive/qualitative approach is chosen because the researchers want to focus on individual perspectives as it has the best capacity compared with positivism in this project.

The researcher’s main interest is in understanding the interpretation of meanings from the participants’ point of view and knowing about their life experience of their work. Patient’s experience Questionnaires completed for JET integrated care was explored to compare patient’s experience of JET interventions. The interviews were recorded using a Sony Digital Dictation Machine. After recording, they were all individually transcribed by the 1st researcher and reviewed for accuracy by the 2nd researcher. The original audio recordings were securely deleted after submission of the project. The transcripts were all individually identified by numbers only and secured in a password-protected folder of a personal computer belonging to the 1st researcher.

Results

Data analysis was carried out using a thematic analysis. All interviews were transcribed verbatim by the researcher and each transcript was read and analysed individually. The themes identified in each document were compared and linked to similar themes. Thematic analysis is described as examining commonality and differences [3]. Thematic analysis was chosen because it offers an accessible and theoretically flexible approach to analysing qualitative data [12]. There is no one ideal theoretical framework for conducting qualitative research rather the important issue is using a theoretical framework and a method that brings out the information that the researcher is seeking [12]. An inductive approach was used to identify themes. This implies that identified themes were strongly linked to the data and not imposed by the researchers’ theoretical interests [4]. When all interviews have been themed fully, the patient’s experience Questionnaires completed for JET integrated care was explored to compare patient’s experience of JET interventions. Background checking could form part of the analysis process if it will help to explain an emerging theme [4]. It is pointed out that the quality of data analysis is key and so it is anticipated that this will take a considerable time to achieve at an appropriate standard [11]. It is recommended that multiple readings of the transcript and themes identified to ensure accuracy and to ensure that all relevant data have been identified and themed [13].

Findings

The data collected in the form of interviews from the Joint Emergency Team (JET) staff is classified, analysed and interpreted. The themes that emerged from these exercises are as follows:

Multi-disciplinary team (MDT) approach

The JET Multidisciplinary Team is made up of four different professionals working together to prevent unnecessary A and E attendance and hospital admissions, facilitate discharges from the A and E and AMU and provide services to enable patients to be cared for in the community. JET intervention involves health and social care input for providing care packages, intermediate care bed, reablement, emergency equipment and placement.

RT1: ‘Having the right skill mix in the A and E, AMU and the community: I mean we have the Multidisciplinary team who provides their expert skills, and this has helped to prevent unnecessary hospital admissions’. The Multidisciplinary teamwork collaboratively in the hospital and community to prevent unnecessary hospital admissions by using their individual expertise to formulate a solution.

All the eight participants agree that MDT approach and colocate by the health and social service staff in the same office has helped to promote integration and reduce unnecessary hospital admissions.
Trans-disciplinary team work

JET practices a Trans-disciplinary model approach. This is where professionals perform each other’s roles when necessary, seek support from each other in difficult situations and leave complex cases for the appropriate professionals. Seven of the participants stated that in-house informal and formal training of staff is a factor that has promoted safe Transdisciplinary working in JET. To avoided problems associated with incompetent professionals doing each other’s jobs, knowledge, skills, and experiences are transferred through teaching, coaching, budding and mentoring.

Also core professional skills’/assignments are assigned to qualified professionals.

Admission avoidance in the accident and emergency department (A and E)

All the eight participants affirm that admission avoidance in the A and E is facilitated by prompt assessment by the JET team.

NI: ‘Basically if we get a referral we would go to the A and E to assess the patient and if the patient is medically fit for discharge, we facilitate their transfer back home’. However, if identified as not medically fit for discharge by the team, the patient is referred to the Doctors for further investigations/management. If there is need for this patient to have support with taking their medication or prompting with eating, package of care is arranged for the patient through contact with a care agency by a JET staff.

Discharges from the acute medical unit (AMU)

All eight participants agree that JET allocates a social worker and a health care staff to the AMU weekly to assess and provide required support in the community for patients prior to discharge.

NI: ‘We have one social worker and health staff on a weekly roster that is based in AMU, they will cover all the patients in the borough that need health and social care input to facilitate quick discharge and positive patient outcome.

RT2: ‘Our health staff deals with patients going for Intermediate Care Bed (ICB) from the AMU’. The health staff usually concentrates on referring patients to the reablement service or complete assessment forms for ICB’

Rapid response in the community

Seven out of the eight participants stated that Rapid response is provided in the community by JET to patients that are not coping with their ADLs, require medication management or a break in care and the patient requires immediate support in the community.

P2: ‘It is challenging nowadays in the community as the focus is on how we are utilising our integrated team skills to provide comprehensive assessment and care support in the community’

NI: ‘In JET, we normally make an appointment the same day and see community patients within two hours of referral’. Prompt response to patients in the community help to prevent unnecessary hospital attendance.

Rehabilitation

All eight participants agree that JET staff makes sure that patients who are not back to their pre-morbid baseline after discharge from the hospital are transferred to the ICB for rehabilitation. Also, patients are transferred from their homes to the ICB if they are identified as requiring rehabilitation to get back to their baseline.

RT: ‘JET facilitates patients to ICB from hospital and community’. The reduction in the number of ICB units and ICB bed currently is affecting patient’s outcome as most patients tend to stay long in the acute hospital because there is no bed space in the only ICB unit in the borough. There were three intermediate care units in the borough when I started this service evaluation but late last year the other two were closed. It is a huge challenge now to transfer patients to ICB and this is affecting hospital admissions.

Resources and capacity

Most elderly patients usually need equipment like Zimmer-frame, walking stick, commode, perching stool, and hospital beds to function well at home and this equipment is usually provided by the hospital. The Joint Emergency Team has access to this equipment, and this makes it easy for patients to be discharged safely home with equipment. RT: ‘Access to require resources like equipment were readily available through mediquip and JET workers have access to order equipment for delivery in the community within four hours’. All eight participants were worried about limitations to staffing. The study found that there were limitations to staffing. Effective integrated care by the JET team could always be improved by having both health and social service staff on duty including on weekends.

Patients experience questionnaire

As documented that patient experience questionnaire would form part of data analysis evidence to determine if JET work impacts positively on patients while helping to prevent unnecessary hospital admissions. The report of March Patient’s experience questionnaire of the studied team was explored to identify the similarities with participants’ views. This is in accordance with Dawson which states that background checking could form part of analysis process if it will help to explain an emerging theme (Figures 1-3).

This further shows that JET integrated work helps to prevent unnecessary hospital admission as well as increase patient outcome.
Figure 1: How likely are you to recommend the service to family? Ninety-five percent of respondents will recommend JET to their loved ones.

Figure 2: Has your appointment with the JET team been helpful today? One hundred percent of respondents view their appointment with JET as beneficial.

Figure 3: Involvement in care and treatment decisions. Ninety-eight percent of the respondents were satisfied with JET involvement in their care and treatment.
Discussion of Findings

Effective multi-disciplinary team work

Multi-disciplinary team working was identified as a major factor that helps the JET Integrated team to prevent unnecessary hospital admission in the studied borough. Eight of the study participants affirmed that JET has different professionals working together for the common goal of preventing unnecessary hospital admissions and improving patients’ outcomes. The key features of MDT working include collaboration and teamwork as identified by Hogston and Marjoram [14]. The eight participants identified that multi-disciplinary working improved patient’s outcomes because JET integrated team has better communication, colocated, information and data sharing and a combined sense of purpose. Effective communication among team members enhances joint working [15]. Effective team working leads to improved outcomes for patients and cases are prioritised more effectively [16]. This agrees with Department of Health which states that all professionals in health and social services should work collaboratively to ensure that patients and their informal carers receive coordinated, effective, timely care and support required for their needs [17].

All eight participants agree that a multi-disciplinary team ensures coordination of care by providers from different disciplines. However, conflict in MDT working can have negative effect on team communication [1]. The operational manager ensures the simultaneous contribution of team members and application of their expertise. Team handover meetings are held in the morning and afternoon on daily bases to discuss cases and take expert opinions as cases are discussed. Having different professionals in the team helps to facilitate early discharge from hospital as nurses check the patients to ensure they are Medically Fit for Discharge, the Physiotherapist make sure they are mobilising to baseline and give mobility equipment if required, the Occupational therapist ensures that the environment is safe while the Social worker arranges care package if required.

Effective trans-disciplinary team working

The trans-disciplinary model is a gold standard for delivering person-centered care as it involves better-integrated service delivery [18]. All the eight participants agree that working in a transdisciplinary manner has helped to prevent unnecessary hospital admissions in the borough and has improved patient’s outcomes as seen on the patient’s experience questionnaires. The team members confirm that communication and decision making are redistributed, and the different professionals communicate with each other to take decision on the right services necessary to keep patients safe in the community. This agrees with Karol which states that Trans-disciplinary teams ensure that all disciplines communicate with each other to ensure that decision making is jointly made [18].

In trans-disciplinary model, no problem is owned by a specific discipline [18]. In JET, any staff can carry out the holistic assessment in the hospital or community and the team jointly attend to patient’s needs: a nurse can put package of care and discuss microenvironment with a patient likewise a social worker can assess a patient’s pressure areas and intermediate care bed transfer and liaise with other team members as required. Transdisciplinary team working has an essential feature that every practitioner has the responsibility for patient progress [18]. Seven of the participants gave example of days they visited patients and had to contact their colleagues from patient’s homes for expert opinion on issues outside their professional boundaries that are required to keep patients safe at home.

Inter-professional learning across the MDT helps to bring changes to practice and improves patient’s outcome [19]. All eight participants discussed how JET in-house training has helped them to acquire new skills that have enabled them to work more effectively in the integrated team. Inter-professional learning involves two or more professionals that learn from each other to improve working together and the quality of service especially health and social services [20-22]. There was a 100 percent agreement amongst all eight participants that Trans-disciplinary working saves time, money and cause fewer inconveniences to patients. Patients reported in the experience questionnaire that holistic assessment and prompt support from JET prevents them from going to hospital.

Facilitating discharges from A and E

JET staff works proactively in the A and E in the form of case finding to identify potential patients for discharge and start their discharge plans early. Seven out of eight participants identified that case finding in the A and E help to get in contact with the care providers on time to keep them informed of patient’s progress and early discharge. Five staff agreed that JET prompt involvement in the A and E helps for early discharge and care coordination. This agrees with the NICE guidance which recommends that from admission, hospitals and community based multidisciplinary teams should work together to determine and address elements that could hinder safe, timely transfer of patients care from hospital to the community [23]. Seven staff argued that situations, where there is not enough JET staff in the A and E, delays patient’s discharge.

Facilitating safe discharge from the acute medical unit (AMU)

The JET integrated team facilitates the safe discharge of patients from the hospital’s AMU. JET integrated team liaises with the hospital therapists to make sure that necessary equipments are provided for patients before discharge. JET’s weekly allocates a social worker to this unit to ensure that the right care package is put in place before patients are discharged home. However, discharges could be delayed in AMU due to lack of social inputs.
on weekends. This is because JET social workers do not work on weekends and the few health staff on weekends usually concentrate on the A and E.

**JET involvement in the community**

All eight participants in the study identified that JET community rapid response and liaison with other teams in the community help to prevent unnecessary hospital admission because patients need are either met by the integrated team in the community or referred to the appropriate team in a timely manner. JET performs rapid response duties in the community by providing immediate care, refer to reablement, send patient to ICB rehabilitation and can refer a patient from the community to the hospital depending on the patient’s need. JET also arranges reablement care packages for patients to be cared for in their home whereby a physiotherapist from the reablement team rehabilitates the patient in their own home and support with activities of daily living are provided by the council support workers.

**Intermediate care bed (ICB) rehabilitation**

All eight participants confirm that JET integrated team assess eligible patients for rehabilitation in the A and E, AMU, and community and transfer to ICB. These patients would have remained in the acute setting without JET’s intervention. Transferring patients to ICB helps to prevent unnecessary hospital admissions in the acute hospital [24,25]. However, this depends on the availability of bed in the intermediate care unit. Eight participants confirm that when there were three rehabilitation units in the borough, transfer of patients from hospital to the units were very efficient but the closure of two of the rehabilitation units have caused delay in patients discharge from the acute hospital. Furthermore, seven out of the eight participants complained bitterly that closing twenty beds out of the forty-bed intermediate Care unit affected the prompt transfer of patients for rehabilitation.

**Safeguarding patients**

A patient could be brought to the hospital due to safeguarding issues raised by the London ambulance services, the GP, Cares, neighbours or other health care teams. According to the Care Act, local authorities have the responsibility to make inquiries when a concern is raised about abuse or neglect of a vulnerable adult [26]. Eight participants affirmed that safeguarding patients in the community is an integral part of the role JET does. Seven participants confirm that JET staff carries out safeguarding investigation for both patients in the community and in hospital. If the patient is in the community, a prompt response by JET helps to safeguard the patient by getting an emergency placement for the patient while investigation is going on to ensure that patient is safe in the community. All adults with care and support needs are eligible for safeguarding services if they are unable to protect themselves, or at risk of abuse or neglect [26].

**Availability of resources and capacity**

The success of integrated health and social care team interventions could be facilitated by availability of required resources and capacity [27-29]. Investing in the integrated team through recruitment and retention of enough staff in the team would help to achieve the goal of preventing unnecessary hospital admission [30,31]. Eight participants confirm that the JET staff organises equipment delivery to patient’s home when required by liaising with mediquip for the delivery and the therapist usually organised delivery of suitable equipment for patients. In addition, because all JET staff is trained to order and supervise equipment delivery, equipments are usually ordered on time and this facilitates quick discharge of patients to the community. Although the research participants were happy that they use both systems effectively, seven participants confirm that JET staff waste so much time in duplicating data into both Information and Communication Technology (ICT). Furthermore, seven participants reported that due to lack of social service staff in the evenings and weekends, patients with complex social issues discharges are delayed until when social workers are on duty. To prevent unnecessary hospital admissions, both health and social service staff should work on evenings and weekends to provide enough cover [32]. As identified in the literature review, reducing the use of acute hospital beds by adults requires an integrated approach within the hospital, community and social care settings [32]. From my experience, both health and social service staff are always needed by the team to achieve the goal of preventing unnecessary hospital admissions.

**Conclusion and Recommendations**

Joint Emergency team work in integrated manner to prevent unnecessary hospital admissions through MDT, Transdisciplinary working in A and E, CDU and Rapid response in the community. The team addresses the changing demand for care of patients in the community arising from the ageing of the population. The models of integrated care applied by JET have led to better system efficiency through effective coordination of care in the hospital and community. The integrated care provided by JET is person-centred and has facilitated better integration of vulnerable patients into the systems that allows better access to services in the community. There has been great investment in the training of all professionals in the team to bridge the cultural divide between health and social care and this has improved patient’s outcomes in the studied borough. Greater success in preventing unnecessary hospital admissions will be achieved if the team has more access to intermediate care beds. Policies need to be adjusted to ensure full integration of health and social service in the evenings and weekends to prevent unnecessary hospital admission.

The findings of this evaluation have several implications for service improvement and could be adopted to improve prevention of hospital admissions by the health and social service.

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integrated team (JET) in the studied borough. Firstly, multi-disciplinary and trans-disciplinary team working were identified as major factors that helps the JET integrated team to prevent unnecessary hospital admissions in the studied borough. However, while health staff work long weekdays and long weekends (7.30 a.m. 8:30 p.m.) shifts, the social services staff currently work only standard weekday (9 a.m. - 5 p.m.) duties. To ensure effective service integration and better outcome for patients I recommend that both health and social services staff should always jointly be on duty covering long weekdays and weekends. Secondly, the findings of this evaluation suggest that there is a relationship between the availability of Intermediate Care Beds (ICB) and rate of discharges from hospital. The NHS Trust, local authority and the clinical commissioners should provide enough intermediate care beds for the timely and effective discharge into rehabilitation of patients who are medically fit to be discharged from the hospital but need rehabilitation. The intermediate care beds will also serve as step-up care for patients in the community that are not suitable for home reablement but would benefit from ICB rehabilitation. Another finding is that integrated working improved when team has better communication, information, and data sharing. Presently, there are two different information and communication technology (ICT) systems adopted and used separately by the NHS Trust (Rio system) and the local authority (Framework-i system). The JET team members are required to document on the Rio system of the NHS Trust and duplicate the same documentation on the Framework-i system of the local authority. It is observed that this results in a waste of valuable time that could better serve to improve patient’s outcome. I strongly recommend that a single integrated ICT platform be adopted to serve both the NHS trust and local authority to ensure effective service integration and outcome for patients.

References


