

**Evaluating Active Case Management in Greater
Manchester
Executive Summary**

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EVALUATING ACTIVE CASE MANAGEMENT IN GREATER MANCHESTER

EXECUTIVE SUMMARY

Recent policy guidance from the Department of Health in England recommends that patients with long term conditions are stratified into three broad groups according to the severity of their condition and the level of support which they require. It is expected that those patients whose health and social needs are most complex will require case management to deliver and coordinate their care from a range of agencies. NHS case management has the broad aim of identifying these patients and actively managing their care to enable them to remain at home longer and use less unplanned reactive care from specialist services. This approach, known in Greater Manchester as active case management (ACM), is expected to contribute significantly to delivering the Public Service Agreement target of reducing bed days by five per cent by 2008.

The Personal Social Services Research Unit was funded by the Department of Health to investigate whether service utilisation outcomes can be attributed to and are associated with different approaches to ACM for people with long term conditions. The evaluation was undertaken in conjunction with the Association of Primary Care Trusts in Greater Manchester and was designed to:

1. Map current provision of ACM services in primary care for people with long term conditions;
2. Classify programmes on observable features of case management implementation with particular focus upon the integration of care between primary and secondary care and between health and social care;
3. Explore the overall ACM intervention effect on service utilisation;
4. Examine whether different service outcomes are associated with different approaches, specific programme operations or processes of service delivery.

Method

There were three stages to the study. Stage one comprised a postal survey (Spring / Summer 2007) of managers with lead responsibility for ACM services in each PCT (n=10). Stage two comprised in-depth interviews (Summer 2007) with managers in PCTs (n=8) to further explore the particular local logics and rationales for the set of case management arrangements in place in each PCT. In the final stage of the study resource utilisation outcome data for patients with long term conditions in receipt of case management were tracked through data held by the Tactical Information Service (TIS). Individual patient level data were transferred to the PSSRU in a pseudonymised format. The main analysis was conducted using a sample of patients in receipt of ACM services for whom, at the time of the TIS data extraction, nine months or more had lapsed since they were added to the caseload (n=867). The dates these patients had been added to ACM caseloads ranged from 1st July 2005 to 1st October 2006.

Findings

Service description

- The ten PCTs in Greater Manchester compared favourably on a number of Health Care Commission national indicators relating to case management and improving the health of people with long term conditions.
- The date the first patient was accepted into each ACM service ranged from the first six months of 2005 to the first six months of 2006 for the ten PCTs.
- The majority of PCTs were based on a GP practice locality model and had worked to establish links with GPs. The most commonly established formal agreements were between ACM and community nursing. The majority of PCTs had formal arrangements for sharing assessment documents within the Single Assessment Process with local authorities. By comparison, formal links between secondary care and ACM were much slower to develop.
- Only four of the PCTs targeted their ACM service at a specific disease or condition. These included Chronic Obstructive Pulmonary Disease, Diabetes, Hypertension, Cancer, Coronary Heart Disease, Stroke and Transient Ischaemic Attack and Musculoskeletal Conditions.
- All PCTs used referrals from other professionals to identify patients for the ACM service and the majority also utilised the Castlefields tool and Patient at Risk of Re-hospitalisation II (PARR II). A locally approved Single Assessment Process (SAP) tool to assess ACM patients was used in all PCTs.
- Staff groups most likely to act as case managers were: community matrons, district nurses and other qualified community nurses such as disease specialist nurses. A broad range of tasks were usually carried out by case managers in all PCTs. However, some role conflict for certain staff groups was highlighted e.g., district nurses undertaking a disproportionate amount of 'hands on' or direct care.
- Case managers were managed by health services staff in all PCTs and the majority were based in a nurse team. Case managers did not usually undertake financial assessments or manage budgets for their patients in the ACM service of any of the PCTs.
- Size of caseload, an issue of contention, varied from 30 to 80 (mean 47). Some felt that the target caseload of 80 was unrealistic. Only half of the PCTs' ACM services had written policies to allocate cases of different levels of need or complexity to different levels of case management. The majority of respondents estimated that over 40 per cent of patients on caseloads were visited at least weekly. Several interviewees described cases being stepped down to a 'maintenance level' rather than discharged.

Overall effect of ACM on service utilization

- The proportion of patients from different PCTs in the nine month cohort sample (n=867) varied widely. The analysis is therefore based upon the combined PCT results.
- The majority of ACM patients included in the sample were white (88%), female (63%) and over 75 years of age (65%). Around half of the sample resided in the most deprived area of the locality (49%) (measured by the Index of Multiple Deprivation). The most prevalent primary diagnosis groups were (1) 'symptoms,

signs and abnormal clinical and laboratory findings, not elsewhere classified' (37%), (2) 'diseases of the circulatory system' (28%), (3) 'diseases of the respiratory system' (26%), (4) 'diseases of the digestive system' (19%) and (5) 'injury, poisoning and certain other consequences of external causes' (18%).

- Overall the average (mean) time for the ACM service to have been operating when a patient was added to a caseload was 10.7 months. Few (10%) ACM cases were recorded as formally closed (with a reason for closure described). Most of these patients had died.
- The use of hospital services in the nine months prior to the ACM intervention and nine months post ACM registration were compared. The mean number of hospital admissions and the mean length of stay for all admissions reduced significantly at the one per cent level. A similar pattern of results were detected in the number of emergency admissions and associated length of stay (mean reduction of 0.3 emergency hospital admissions and 2.9 days in length of stay for emergency admissions).
- The use of hospital services for this sample was also explored by the seven most prevalent primary diagnoses and the nine most prevalent specialties. The majority of the results showed a reduction but due to the small subgroups of the sample (when analysed by diagnosis or specialty) fewer of the findings were significant.

Relationship between service utilisation and service delivery

- Multivariate models were employed to explore the simultaneous effect of diagnosis and features of ACM service provision on admission patterns. Case complexity measured by the number of diagnostic categories present (ICD 10 chapter headings) was associated with a greater number of emergency admissions and greater length of stay.
- A very modest effect was shown with regard to ACM features, suggesting possibly the benefit of good communication between ACM and hospital services. A clustering of effects was observed whereby geographically adjacent PCTs appeared to have reductions or increases in the length of stay related to emergency admissions.
- For each day spent in hospital before ACM, patients are predicted to experience a reduction of nearly one day after ACM. The most powerful predictor of emergency hospital admissions within nine months from being added to an ACM caseload was prior admissions. This is consistent with the attempts to reduce readmissions in patients by focusing on those with prior recent admissions. However, it does not constitute definitive evidence that the reduction is attributable to ACM. This was the premise upon which much of the Long Term Conditions Policy has been founded.
- Conversely, a substantial share of the sample showed an increase in length of stay for emergency admissions. The number of primary and secondary diagnoses (ICD 10 chapter headings) is the main contributor towards explaining increases in length of stay for emergency admissions. Each added diagnostic group is associated with a 2.4 day increase in length of stay, everything else being equal.
- There are methodological limitations in our research design. Any measure of impact of this kind in a non randomised trial risks the effect of regression towards

the mean being the major cause of reduction in both hospital admissions and length of stay.

- Nonetheless, and related to this observation, the number of patients who had no recorded length of stay (as they were admitted and discharged on the same day of an admission), rose in the post nine months period. Thus it could be inferred that the process of preventing admissions was having some effect under case management.

Conclusions

- The commitment and support of all ten primary care trusts in Greater Manchester in undertaking this work has been paramount in completing this study.
- The study provides a benchmark by which progress can be judged and areas for future development can be signposted.
- The Long Term Conditions Policy has worked under a tight set of PSA targets until 2008. Following this target period there would seem to be a need to explore the sustainability of the active case management approach and examine the new roles and levels of staffing required.
- The present study has shed relatively little light on the impact of different approaches to case management upon outcomes, due in part to the relative homogeneity of the ways of working across Greater Manchester.
- The literature would indicate that there is a need for greater clarity about the impact of different case management models and approaches upon outcomes. Articulating these different models and identifying their relative effectiveness and cost is an area where further work is required.