CASE MANAGEMENT

A POSITION PAPER

Case Management

Introduction

This paper describes how the introduction of case management could reduce the reliance on secondary care services for clients with long-term conditions. Although this paper does not recommend one particular model of case management, it provides the necessary building blocks for Trusts to implement case management services. However Trusts can use the learning described within this report to identify the aspects of these approaches that are locally relevant, and identify where these aspects might sit within the wider approach to managing the needs of the local population.

Background

Recent health interests in Northern Ireland have recognised the need for better approaches to the management of chronic disease (DHSSPS 2005) following the identification that chronic conditions are currently responsible for 60 per cent of the global disease burden (WHO 2004). There is a growing acceptance that our current focus within the DHSSPS on managing acute episodes of care is no longer appropriate, either in terms of the type of care offered or in terms of managing large and increasing numbers of people who suffer from one or more long-term conditions. The prevalence of chronic disease conditions is likely to continue to rise in future years, yet healthcare systems tend to be based on an acute, episodic model of care which focuses on treatment of urgent need, and cure.

Health providers acknowledge that multiple challenges to effective chronic disease management currently exist. Challenges presented by the complex management demanded, include poor co-ordination of health services, limited training for health care professionals, limited disease management protocols and lack of patient involvement in managing disease. Typically, patients receive intermittent, ad hoc care in response to a crisis or untoward event, but have little preventative intervention in between. Though many professionals are involved in their care, no-one has responsibility for considering all of their health and social care needs together, or to ensure they are met. The Department of Health (DH, 2005) states that people with chronic conditions are significantly more likely to see their general practitioner (GP), accounting for up to 80 per cent of GP consultations. In addition:

- 60 per cent of hospital bed days are for patients with chronic disease or related complications;
- two thirds of patients admitted as medical emergencies have exacerbation of chronic disease, or have chronic disease; and
- some people are highly intensive users of services, with 10 per cent of inpatients accounting for 55 per cent of inpatient days, and five per cent of inpatients accounting for 40 per cent of inpatient days[1].

These issues in particular highlight the importance of managing chronic disease in primary and secondary care settings to bring about benefits to the whole health community. In conjunction, the new GMS contract is also seen as a key enabler in improving chronic disease management.

There is considerable policy interest in case management interventions for chronic conditions aimed to promote self-care, to improve patient health and empower patients with chronic conditions (Donaldson, 2003). It is presented by Bodenheimer et al (2002) that this approach may be associated with reduced healthcare costs or reduced use of healthcare services.

Many different models exist to enhance care for individuals with chronic conditions. Hutt et al (2004) advise that the applicability of these models to a HPSS environment must be judged with caution. The DH (2005) emphasises that improving approaches to chronic disease management is not just an issue for primary care organisations, but will also impact on secondary and emergency care through: reducing waiting lists; improved management of demand; development of the workforce; improved medicines management; and freeing up resources to improve other services. These outputs can be expected to achieve improved quality of care and improved health outcomes for patients.

Evidence makes clear that there are key elements, or 'ingredients', that together can form an improved approach to chronic disease management. Each of these elements can be linked with the current policy agenda, and these links, together with evidence of the level of resources currently used in treating patients with chronic conditions, make clear the importance of taking a more proactive approach to managing chronic conditions at this particular point in time.

In addition to a focus on prevention and health promotion, core elements cover:

- changing the patient and carer role;
- process redesign;
- workforce planning and development;
- clinical information systems;
- knowledge management; and
- partnerships within the health economy and community.

Evidence about improving care for people with long-term conditions

There is evidence to support the following initiatives;

- Broad chronic care management programmes
- Integrated community and hospital care
- Greater reliance on primary care
- Identifying people at greatest risk of complications and hospitalisations
- Involving people with long-term conditions in decision-making

- Providing accessible structured information for people with long term conditions and their families
- Self management education
- Self monitoring and referral systems
- Using nurse-led strategies where appropriate

Case for Change:

- About 78% of all healthcare spend relates to people with long-term conditions.
- 80% of GP consultations relate to long-term conditions
- For patients with more than one condition costs are six times higher that those with only one.
- Patients with long-term conditions or complications utilise over 60% of hospital bed days, often as a result of an emergency admission
- 10% of inpatients account for 55% of inpatient days; 5% of inpatients account for 42% of inpatient days.
- In the NHS pilots of American Evercare system, 3% of the at-risk over 65s accounted for 35% of unplanned admissions for that group.
- Between 50%-80% of that cohort were not known to district nursing services or social services.
- The recognition that a very small percentage of the population contributes disproportionately to both the number of emergency admissions and emergency bed days used.
- The national direction of how long-term conditions management should develop.
- The opportunities for improved Long Term Conditions (LTC) management now available, drawing on the experience of models from the USA, which are now being tested in Great Britain.
- The new GMS contract is seen as a key enabler in improving chronic disease management.
- The development of the new pharmacy contract also holds potential to support improvements in chronic disease management.

What is case management?

Case management has been defined as 'the process of planning, co-ordinating, managing and reviewing the care of an individual. The broad aim is to develop cost effective and efficient ways of co-ordinating services in order to improve the quality of life' (Kings Fund 2004). There are different models of case management in chronic care. However, the broad principle is to assign each person a 'case manager' to assess patients' needs; develop a care plan' arrange suitable care; monitor the quality of care; and maintain contact with the patient and their family.

It is suggested that while patients with chronic diseases need individually tailored care, patients can be broadly divided into three groups requiring different levels of support.

The individual elements of the case management model are:

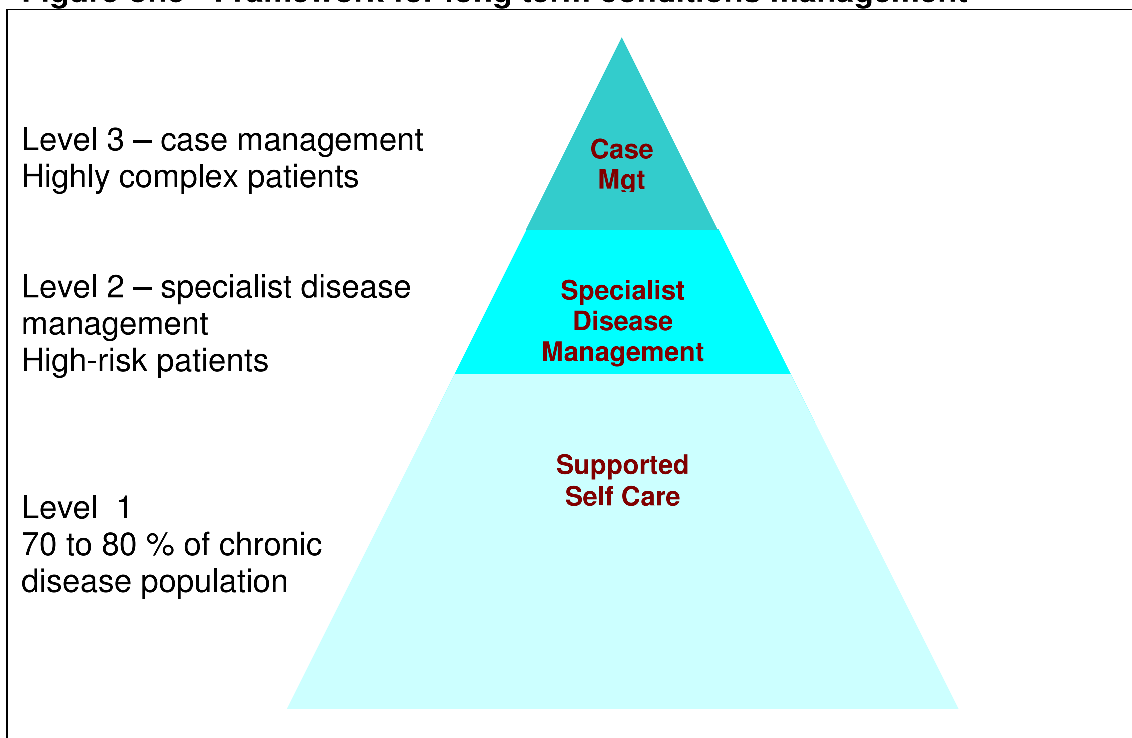
1. Case Management – Requires the identification of the very high intensity users (VHIU) of unplanned secondary care and the subsequent provision of intensive, personally tailored care to the 3 to 5 % of people at greatest risk of hospital admissions

2. Disease Management – Involves providing people who have complex single need or multiple conditions with responsive, specialist services using multidisciplinary teams and disease-specific protocols and pathways.-.

3. Supported self-care – support of self-management of the 70% of people with chronic conditions whose symptoms are largely stable. Collaboratively helping individuals (c 70-80%) and their carers to develop the knowledge, skills and confidence to care for themselves and their condition effectively.

Figure one represents the overall framework for case management proposed by the Department of Health, adapted from Kaiser Permanente (DOH, 'Chronic Disease Management: A Compendium of Information', 2004).

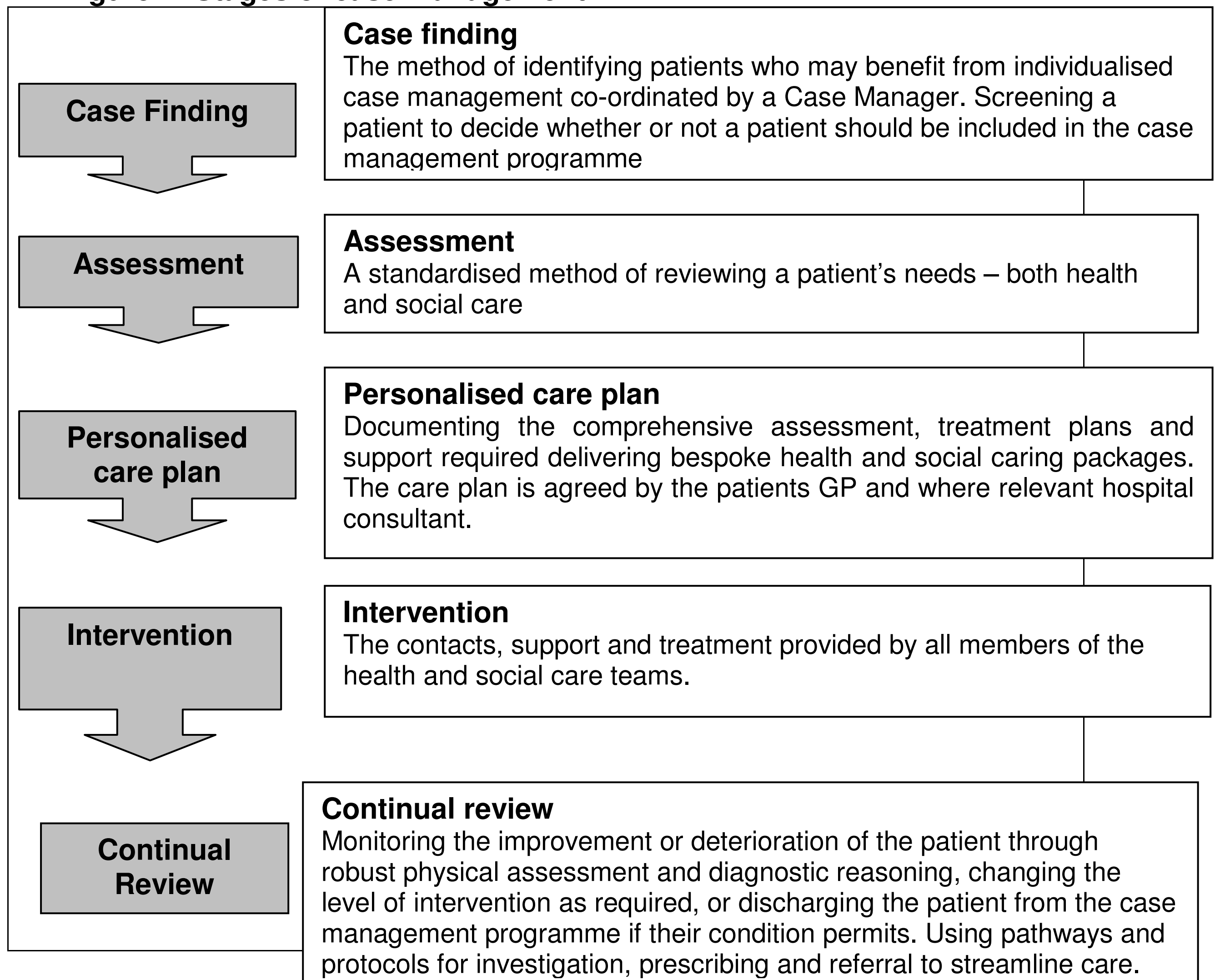
Figure one - Framework for long term conditions management



The underlying principles of case management are to:

- To maintain people at home
- Support effective primary care
- Focus on patients in the community carrying the highest burdens of disease
- Build partnership with secondary care clinicians and social services
- Identify patients who are at high risk of unplanned admissions to hospital
- Enable each patient to have a personalised care plan based on his or her needs, preference and choices.
- Integrate the patient journey throughout all parts of the health and social care system
- Case management service should be available 24 hours per day, 7 days per week

Figure 2- Stages of case management



What is case management trying to achieve?

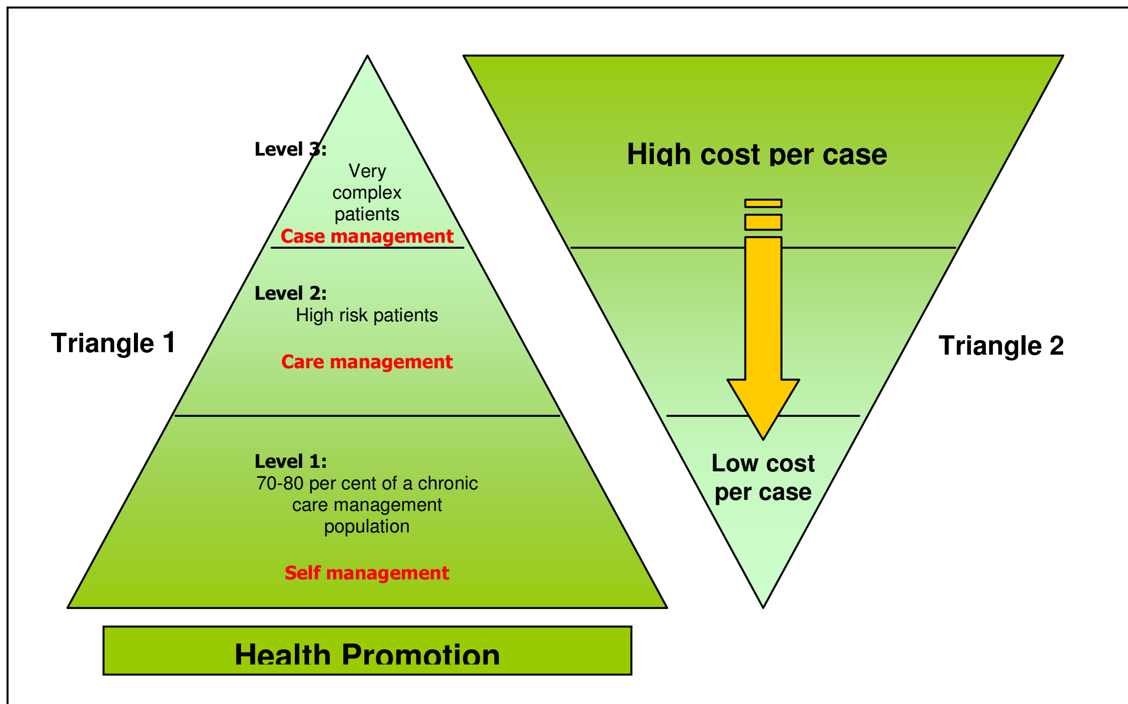
Many of the most vulnerable, who account for a significant proportion of emergency admissions, have multiple needs that cross the responsibilities of many organisations and professionals. Handling each component separately fragments care, fails to recognise the sum total of problems and results in adequate and incomplete treatment plans. This can result in an unnecessary hospital admission or even premature institutionalisation.

The rationale for the introduction of case management is to obtain tangible improvements aimed at enhancing primary and community services, to reduce unnecessary admissions and improve discharge arrangements to achieve health and social care economy efficiencies. Case management is considered the best vehicle for bringing together all of the care and treatments needed by many people with complex long-term conditions (Essex NHS Strategic Health Authority 2004). Summary of the Kings Fund review of case management documents findings from a literature review conducted by the Kings Fund (2005). Key recommendations from the report include:

- Many different models of case management exist and the review did not find evidence for the superiority of any particular model.
- Trusts should clarify the needs that they are trying to address through case management and then consider how to organise services in order to address these needs. This may be possible by adapting existing services or may require the development of new systems and services
- Case management should be developed in close collaboration with social care providers to ensure that an appropriate range of health and social care services is available to prevent hospitalisation.

The DH describes a ‘population management’ approach to chronic disease management, which is illustrated in triangle 1 in Figure 2 below. It is possible to place this model against triangle 2, which illustrates the resource use associated with the different groups of patients in triangle 1. This indicates that developing an effective approach to providing care for the small number of highly complex patients will ensure that a large proportion of the resources currently invested in chronic disease management are used effectively.

Figure 3- Model of population management and cost per case



UK based case management programmes

There are a number of case management models, for which there are published results, which help to inform the future development of these services. However, there is no model that has an evidence base demonstrating that it is superior to other models. Current policy drivers are encouraging a move away from the reactive treatment cycles of delivering patient care, to a more proactive approach to chronic disease management, with utilisation of a number of roles within the healthcare team, and with the involvement of a number of organisations and services within the community. In addition the NHS has been looking to examples of chronic care management that have been shown to be effective in other healthcare systems.

- **Runcorn, Cheshire** Case management approach has been developed within Castlefields Health Centre. The Castlefields work predated the Evercare pilots in England. A district nurse was appointed to work alongside a fulltime social worker for the elderly. They worked together to co-ordinate care and deploy packages of support, including both medical and social elements. Patients were visited at home by a case management nurse for an initial assessment and the nurse coordinates the care on offer, advises and educates patients. The approach is described as an intensive, coordinated approach to health and social care

PCTs across the UK are currently piloting several approaches to chronic disease management that harness learning from approaches used in the US. The approaches are being piloted as part of the current focus on managing chronic disease within the whole healthcare population, and the learning

drawn from these approaches will contribute to the wider development of whole systems approaches to population management.

- **PCTs working with United Healthcare to implement the EverCare model.** Nine PCTs are currently implementing the EverCare model of 'proactive care for the most vulnerable' which encourages hospital admissions avoidance for older people through the provision of an integrated primary care service with an advanced nurse working collaboratively with a GP. The final report from Evercare does not contain any concrete figures relating to reduced hospital admissions or length of stay, as these are still being evaluated. However, it does contain some significant information regarding the patients included in the case finding of patients who would benefit from case management:

    - Only 24% were active on district nurse caseloads, and only 35% were on social services caseload
    - Contrary to expectations, the highly complex group of patients lived mainly in the community. 75% lived in their private homes, 6% in residential care homes and 10% in nursing care homes
    - Many admissions were avoidable – urinary tract infection, dehydration
    - Reducing polypharmacy had beneficial effects on drugs budgets

- **PCTs working to apply best practice from Kaiser Permanente (KP).** Five healthcare economies are currently working to apply the experiences of KP within their local health system to reduce hospital admissions, including models of chronic care management. The Kaiser programme manages diseases by population and encourages the self-management of patients through lifelong learning. Further research into the costs of work using Kaiser's approach to healthcare as opposed to that of the NHS showed that the per capita costs of the two systems, adjusted for differences in benefits, special activities, population characteristics, and the cost environment, were similar (to within 10 per cent), concluding that Kaiser achieved better performance at roughly the same cost as the NHS because of integration throughout the system, efficient management of hospital use, the benefits of competition and greater investment in information technology.

- **PCT working with Pfizer to implement their InformaCare® approach for chronic disease management.** InformaCare® is an internet-enabled population and disease management application for large health plans that uses nationally recognized, evidence-based, clinical guidelines to help:
    - promote better understanding of common chronic conditions among their members;
    - encourage member self-treatment and behaviour modification;
    - enhance the member-provider partnership with their individual treatment plans; and
    - improve the coordination of care throughout the healthcare system

The approaches described each involve taking steps to understand the local population; to identify levels of risk within different groups of the population; and to provide an appropriate level of healthcare and care management in response to this risk.

These approaches do not represent 'one size fits all' solutions, nor do they represent whole system approaches to managing chronic disease within the wider population.

Summary of Kings Fund review of case management

This report documented findings from a literature review conducted by the Kings Fund (2005). Key recommendations from the report include:

- Many different models of case management exist and the review did not find evidence for the superiority of any particular model.

- Trusts should clarify the needs that they are trying to address through case management and then consider how to organise services in order to address these needs. This may be possible by adapting existing services or may require the development of new systems and services

- Case management should be developed in close collaboration with social care providers to ensure that an appropriate range of health and social care services is available to prevent hospitalisation.

Evidence about improving care for people through case management

There is conflicting evidence about the effects of case management, which might have some benefits for people at greatest risk of hospitalisation, but might not always be worthwhile for other people with long-term conditions.

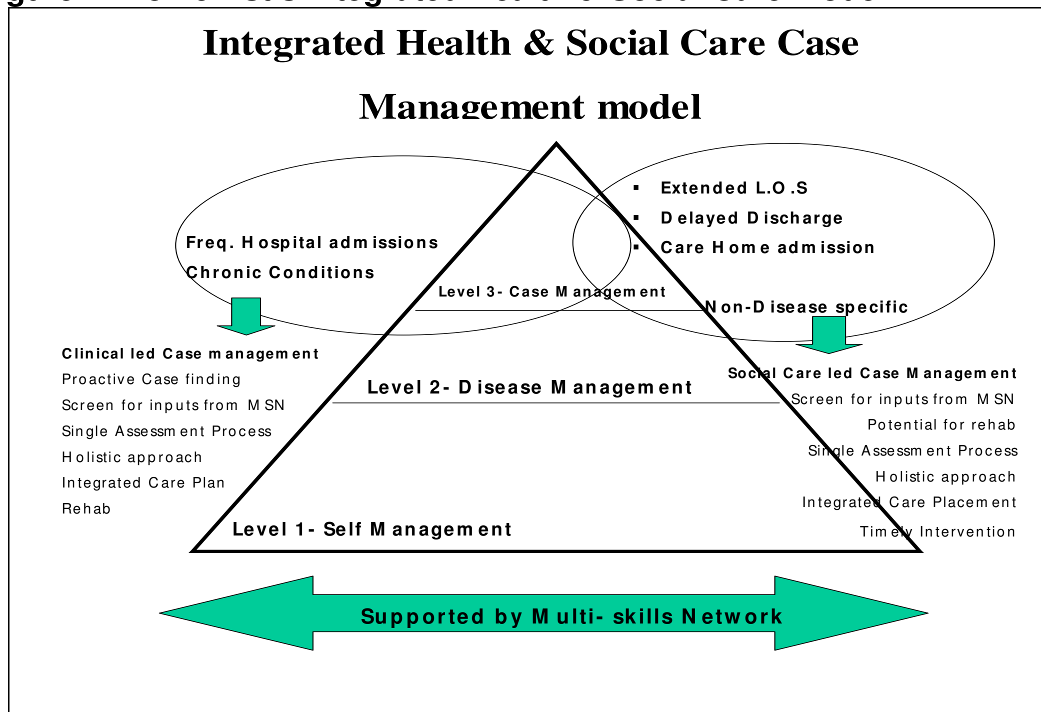
Table 1: Comparison of the three approaches currently being tested within the UK.

	Evercare approach	**Kaiser approach**	**Pfizer approach**
Changing the patient and care role	Use of Early Alert tool. Use of advanced life planning.	Patient education: material on website, and during hospital stay.	Coaching approach from care managers to encourage self-management.
Process redesign	Implementation of case management approach. Provision of: change in condition observation worksheet; clinical risk assessment tool and medication review by Advanced Primary Nurses (APN). Use of multi-disciplinary care plan.	Management of disease by population. Development of integrated care pathways. Reduction in inappropriate referrals to services.	Case management approach with high-risk patients. Use of care plans with individual patients.
Workforce planning and development	Development of APN, with competency guidelines and evaluation for APN role.	Clarification of roles and responsibilities between primary and secondary care. Development of clinical leaders.	Recruitment of case managers.
Clinical information systems	Identification of high-risk group utilising data on acute admissions. Use of Hospital Analysis Tool to review admissions. Use of operational database to record APN activity.	Utilisation of 'risk stratification' to ensure appropriate provision for different levels of risk within the population.	Identification of high-risk (patient) group by disease severity, through outpatient clinics and primary care.
Knowledge management	Provision of: change in condition observation worksheet; clinical risk assessment tool and medication review to support decision making by APNs.	Use of clinical evidence database.	Use of 'InformaCare®' - an internet-enabled population and disease management application.
Partnerships within the health economy and community	Collaborative relationship between the APNs, GPs and consultants in the acute trust. Use of APNs as a primary and secondary care resource.	Development of partnerships between clinicians and managers.	Engagement of local acute trusts.

How is it working in NI?
There is a lack of publications within Northern Ireland regarding case management approaches and its adoption within health and social care practice. Trusts are developing separate models and others are developing proposals to secure additional funding to progress work.

- Homefirst Community Trust is implementing a case management approach based on elements of both Castlefields and Evercare. They have redesigned their community nursing service to create capacity for case management. Continuing Care nurses will case manage patients with Heart Failure, COPD, Asthma and Diabetes as part of an integrated health & social care model. A **CCN** is a nurse who provides advanced clinical nursing care in addition to case management to individual patients who are very high intensity users of health and social services.

Figure 4: Homefirst's Integrated Health & Social Care model



- Causeway HSST are in the process of appointing two Long Term condition practitioners(one nursing and one social worker) to undertake roles similar to the Castlefields models

- South & East Belfast has submitted a proposal paper to pilot the case management approach with 5 GP practices

- Many Trusts are addressing the chronic disease population through the introduction of disease specific service e.g. COPD service, Heart Failure service

Steps for Implementation

Organisations may choose to use any model that meets the individual's needs, however the techniques chosen should always be applicable within the context of the Trust's service model that requires services to:

- Identify individuals who fall into level three of the triangle as we know their needs are not being well met
- Decide on what type of service and workforce is required
- Develop services to enable the case managers to work effectively by being able to request diagnostics and refer to other clinicians e.g. medical consultants
- Address workforce issues e.g. appropriate competences of staff (NHS Modernisation Agency and Skills for Health (2005)

Further information is included in Appendix A.

Expected Outcomes of case management

- To improve quality of life issues for patients and carers
- Admissions avoidance
- Early detection of disease deterioration and proactive interventions
- Reduction in length of stay within hospital
- Improved way medication is given and administered, rationalising the medication to aid patient concordance
- Promoting a seamless service for the patient and improving communication through the patients journey
- Improve awareness of disease progression through avoiding crisis situation through education and advice to patient and carers
- Empowered and informed patients
- Improve provision of consistent and integrated care
- Provide more effective use of healthcare resources

This will be achieved by targeting the following:

- Self management for people with chronic conditions
- Provision of care at a the right place and the right time
- Redesigning of staff roles and workforce development
- Using information to ensure health and social care resources are more effectively used
- Using and exploiting technologies within the context of case management to more effectively aid the monitoring of people with chronic diseases.

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