

Authors

Chris Naylor
Candace Imison
Rachael Addicott
David Buck
Nick Goodwin
Tony Harrison
Shilpa Ross
Lara Sonola
Yang Tian
Natasha Curry

Revised edition
30 April 2015

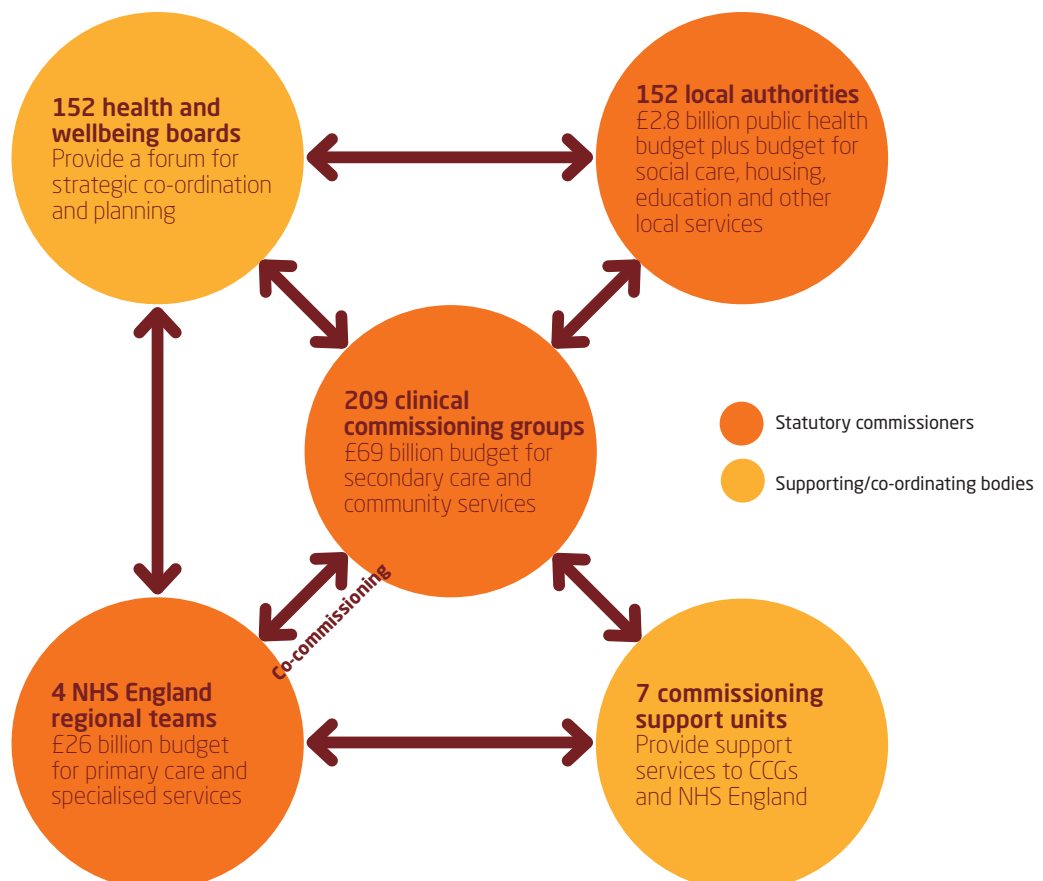
Transforming our health care system

Ten priorities for commissioners

Introduction

The organisations commissioning health services in England changed radically in April 2013. Clinical commissioning groups (CCGs) are now responsible for the majority of the NHS budget, controlling around £69 billion in 2015/16. Public health budgets of £2.8 billion have transferred to local authorities (although this figure does not take into account the in-year budget cuts to the public health grant of £200 million announced in June 2015, or the funding that will flow to local authorities due to the transfer of significant NHS responsibilities from October 2015). NHS England is responsible for commissioning primary care (£12 billion) and specialised services (£15 billion), largely through its 4 regional teams and the sub-regions that sit beneath them. As of April 2015, in most parts of the country NHS England shares these responsibilities with CCGs through co-commissioning arrangements, although the extent of delegation varies between CCGs.

Health and wellbeing boards, convened by local authorities, are intended to play a key role in co-ordinating the activities of these commissioners, although their effectiveness is done so seems variable (Humphries and Galea 2013). Commissioning support units provide a range of services to CCGs and NHS England to help them perform effectively. The commissioning landscape is summarised in the diagram below.



Collectively, the task of this new set of commissioners is to deliver a sustainable health care system in the face of one of the most challenging financial and organisational environments the NHS has ever experienced. The task is especially daunting in the context of a population in which the burden of disease is growing and medical advances offer increasing opportunities to treat disease, but at a cost. The result, if nothing else changes in the NHS, will be significant unmet need and threats to the quality of care.

The ageing population and increased prevalence of chronic diseases require a strong re-orientation away from the current emphasis on acute and episodic care towards prevention, self-care, more consistent standards of primary care, and care that is well co-ordinated and integrated. This paper is designed to support commissioners to meet these challenges by transforming the health care system.

We have identified ten priorities for action. A striking feature of all the priorities is the degree to which they call for change within primary care and the way in which primary care relates to the rest of the system. To achieve this, CCGs will need to work closely with NHS England regional teams – including through co-commissioning arrangements introduced in April 2015. Together, they need to set out what ‘good care’ in general practice looks like and use peer influence to lift performance. The available evidence suggests that CCG leaders have the appetite but not always the capacity to do so (Holder *et al* 2015).

Similarly, CCGs and NHS England regional teams need to engage with the public health agenda. This involves working with local authorities to address the wider determinants of health and ensure that the 300 million contacts that take place each year between patients and NHS professionals are used to help people make positive changes to their lifestyle.

There are several common themes across our ten priorities. It is clear that commissioners need to help drive the following:

- more systematic and proactive management of chronic disease – this will improve health outcomes, reduce inappropriate use of hospitals, and have a significant impact on health inequalities
- the empowerment of patients – patients are arguably the greatest untapped resource within the NHS (Corrigan 2009). The active engagement of patients is a common thread through all of our ten priorities
- a population-based approach to commissioning – a key challenge for commissioners is to direct resources to the patients with greatest need and redress the ‘inverse care law’. Clinicians involved in CCGs will need to shift their focus from the patients that present most frequently in their practice to the wider population that they serve
- more integrated models of care – from ‘virtual’ integration through shared protocols to integrated teams and in some cases shared budgets and organisational integration (Ham *et al* 2011).

1. Active support for self-management

What is it?

Self-management support can be viewed in two ways: as a portfolio of techniques and tools to help patients choose healthy behaviours; and a fundamental transformation of the patient-caregiver relationship into a collaborative partnership (de Sliva 2011).

Why is it important?

- Around 15 million people in England have one or more long-term conditions. The number of people with multiple long-term conditions is predicted to rise by a third over the next ten years (Department of Health 2011c).
- People with long-term conditions are the most frequent users of health care services, accounting for 50 per cent of all GP appointments and 70 per cent of all inpatient bed days.
- Treatment and care of those with long-term conditions accounts for 70 per cent of the primary and acute care budget in England (Department of Health 2011c).
- At the heart of the chronic disease management model (Wagner *et al* 1996) is the informed, empowered patient with access to continuous self-management support.
- Around 70-80 per cent of people with long-term conditions can be supported to manage their own condition (Department of Health 2005).

What is the impact?

- Self-management has potential to improve health outcomes in some cases, with patients reporting increases in physical functioning (Challis *et al* 2010).
- Self-management can improve patient experience, with patients reporting benefits in terms of greater confidence and reduced anxiety (Challis *et al* 2010).
- Self-management programmes have been shown to reduce unplanned hospital admissions for chronic obstructive pulmonary disease and asthma (Purdy 2010) and to improve adherence to treatment and medication (Challis *et al* 2010), but evidence that this translates into cost savings is more equivocal. A cost analysis performed in the United States did indicate that expenditure in other parts of the system can be reduced (Stearns *et al* 2000).

How to do it

There are a number of well-established self-management programmes that aim to empower patients to improve their health. A review of the evidence has highlighted the importance of ensuring the intervention is tailored to the condition (de Sliva 2011). For example, structured patient education can be beneficial for people with diabetes, while people with depression may benefit more from cognitive and behavioural interventions.

Recent work conducted by the Richmond Group of Charities and The King's Fund (2012) called for patients to be offered the opportunity to co-create a personalised self-management plan which could include the following:

- patient and carer education programmes
- medicines management advice and support
- advice and support about diet and exercise
- use of telecare and telehealth to aid self-monitoring
- psychological interventions (eg, coaching)
- telephone-based health coaching
- pain management
- patient access to their own records.

Useful resources

Selfmanagement.co.uk is a resource for all of those involved in self-management: www.selfmanagement.co.uk/

The Health Foundation has launched a self-management resource centre: <http://selfmanagementsupport.health.org.uk/>

Nesta's People Powered Health programme seeks to support the delivery of innovative services focusing on self-management: www.nesta.org.uk/areas_of_work/public_services_lab/health_and_ageing/people_powered_health

The Self Care Forum aims to further the reach of self-care and embed it into everyday life: www.selfcareforum.org

The Expert Patients Programme provides free courses aimed at helping people manage their condition: www.expertpatients.co.uk/

2. Primary prevention

What is it?

Taking action to reduce the incidence of disease and health problems within the population, either through universal measures that reduce lifestyle risks and their causes or by targeting high-risk groups.

Why is it important?

- More systematic primary prevention is critical in order to reduce the overall burden of disease in the population and maintain the financial sustainability of the NHS. While prevention in childhood provides the greatest benefits, it is valuable at any point in life.
- It is estimated that 80 per cent of cases of heart disease, stroke and type 2 diabetes, and 40 per cent of cases of cancer could be avoided if common lifestyle risk factors were eliminated (WHO 2005).
- Common lifestyle risk factors cluster in the population (Buck and Frosini 2012), which has a dramatic effect on life expectancy (Khaw *et al* 2008). Addressing this clustering, and its socio-economic determinants, is likely to reduce inequalities and improve overall population health.

What is the impact?

- Primary prevention is an excellent use of resources compared with many treatments. Of more than 250 studies on prevention published in 2008, almost half showed a cost of under £6,400 per quality-adjusted life year and almost 80 per cent cost less than the £30,000 threshold used by the National Institute for Health and Clinical Excellence for cost-effectiveness (van Gils *et al* 2010).
- More systematic primary prevention in general practice has the potential to improve health outcomes and save costs (Health England 2009). For example, five minutes of advice in a general practice setting to middle-aged smokers to quit smoking can increase quit rates and save £30 per person for a cost of £11 per person.
- Community-level campaigns to improve health behaviours, such as No Smoking Days, have been found to be very cost-effective (£82 per life year gained) (Kotz *et al* 2010).

How to do it

Evidence-based interventions include: supporting individuals to change behaviours, for example, through brief advice during a consultation; systematic community interventions in schools to reduce childhood obesity; and regulatory actions, such as controlling the density of alcohol outlets (Campbell *et al* 2009).

In many areas, a strategic approach using a combination of interventions at the individual and societal level is likely to be most effective. For example, NHS Knowsley has had a major impact on smoking rates in disadvantaged communities through cross-partnership action including targeting illicit tobacco sales, reducing smoking in pregnancy, and providing drop-in clinics.

These approaches often require new ways of engaging with communities to ensure they reach those in greatest need. Social marketing techniques can improve the effectiveness of interventions by tailoring interventions to the needs of specific individuals or groups.

NHS England, acting in its new role as the single purchaser of NHS primary care, has an important opportunity to ensure that primary prevention is implemented systematically and at scale.

Useful resources

Health England has developed several reports on the impact and cost-effectiveness of primary prevention and modelling tools to help local areas prioritise: www.healthengland.org/index.htm

The former National Support Teams programme at the Department of Health published information on systematic approaches to primary prevention, modelling and case studies: <http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/PublicHealth/NationalSupportTeams/index.htm>

Social marketing guidance, resources and toolkits for behaviour change: www.thensmc.com/content/tools-resources

NICE public health guidance: www.nice.org.uk/guidance/phg/published/index.jsp?p=off

NHS Midland and East Making Every Contact Count toolkit: <http://learning.nhslocal.nhs.uk/courses/areas-care/health-management-resources/making-every-contact-count>

Institute of Public Care toolkit to help commissioners target preventative services effectively: <http://ipc.brookes.ac.uk/publications/index.php?absid=667>

3. Secondary prevention

What is it?

Systematically detecting the early stages of disease and intervening before full symptoms develop - for example, prescribing statins to reduce cholesterol and taking measures to reduce high blood pressure.

Why is it important?

- Secondary prevention is based on a range of interventions that are often highly cost-effective and that, if implemented at scale, would rapidly have an impact on life expectancy.
- There is substantial variation between practices in the systematic implementation of approaches towards secondary prevention - for example, use of disease registers. Only a minority of patients receive all recommended interventions.
- Evidence suggests that this is an area where the 'inverse care law' applies and those in greatest need are least likely to receive beneficial services.
- Identifying those at risk and intervening appropriately is one of the most effective ways in which GPs can reduce the widening gaps in life expectancy and health outcomes (Marmot Review 2010).

What is the impact?

- Successful secondary prevention would have a major impact on health outcomes, in terms of improvement in life expectancy and reduction in complications.
- Modelling by the Department of Health (2009) has shown that systematic and scaled-up secondary prevention is a cost-effective, clinically significant and fast way to tackle inequalities in health in local areas. The National Audit Office (2010) suggests that improving cholesterol levels and hypertension control have not been adopted at a sufficient scale. If they were, they would have a significant impact on inequalities.
- Cost savings are likely to accrue over the medium term, as patients are prevented from experiencing a wide range of adverse events as their life expectancy lengthens.

How to do it

Secondary prevention largely involves the systematic application of standard, low-technology and low-cost interventions. The key actions for commissioners are:

- ensuring appropriate coverage of key secondary prevention interventions and processes including managing disease registers systematically by modelling expected versus actual prevalence and incidence, and thereby identifying practices where improvement is needed
- systematic screening, where appropriate and known to be cost-effective
- ensuring systematic control of hypertension, cholesterol and diabetes among clinical commissioning group's populations
- working systematically with local authorities and other partners to ensure secondary prevention forms part of a broader area-level strategy on public health
- working with community and voluntary sector groups to both develop more tailored joint strategic needs assessments and health and wellbeing strategies, and to engage with and provide services to patients who are not reached by mainstream health services.

Useful resources

London Health Observatory's Health Inequalities Intervention Tool can be used to help commissioners understand where to focus their efforts: www.lho.org.uk/LHO_Topics/Analytic_Tools/HealthInequalitiesInterventionToolkit.aspx

The former Health Inequalities National Support Teams' 'how to' guides for secondary prevention in primary care and related resources: <http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/PublicHealth/NationalSupportTeams/index.htm>

Guides to expected prevalence of diseases susceptible to secondary prevention at general practice and local authority level from the network of Public Health Observatories: www.apho.org.uk/diseaseprevalencemodels

National Institute for Health and Clinical Excellence publishes commissioning guides and tools for various forms of secondary prevention, for example, myocardial infarction: <http://publications.nice.org.uk/mi-secondary-prevention-cg48>

4. Managing ambulatory care-sensitive conditions

What is it?

Ambulatory care-sensitive (ACS) conditions are chronic conditions for which it is possible to prevent acute exacerbations and reduce the need for hospital admission through active management, such as vaccination; better self-management, disease management or case management; or lifestyle interventions. Examples include congestive heart failure, diabetes, asthma, angina, epilepsy and hypertension.

Why is it important?

- Despite admission being largely preventable, a significant proportion of all acute hospital activity is related to ACS conditions. In England ACS conditions accounted for 15.9 per cent of all emergency hospital admissions in 2009/10 (Tian *et al* 2012).
- There is significant variation in how effectively ACS conditions are managed – emergency admissions per head vary more than two-fold between local authority areas after adjusting for the differences in age, gender and deprivation (Tian *et al* 2012).
- These admissions are costly. The total cost to the NHS in 2009/10 was estimated at £1.42 billion for a core set of 19 ACS conditions (Tian *et al* 2012).

What is the impact?

- Maintaining wellness and independence in the community prevents deterioration in conditions and therefore results in better health outcomes.
- Emergency admissions to hospital are distressing, so better management that keeps people well and out of hospital should lead to a better patient experience.
- According to The King's Fund estimates, emergency admissions for ACS conditions could be reduced by between 8 and 18 per cent simply by tackling variations in care and spreading existing good practice. This would result in savings of between £96 million and £238 million (Tian *et al* 2012). This calculation may significantly underestimate potential savings as admission rates in all areas are significantly above what should be achievable.

How to do it

Early identification of ACS patients is crucial if their management is to be successful. GPs are well placed to do this through the use of risk stratification tools and clinical decision support software within GP practices. Some progress can be made through relatively simple measures such as expanding vaccination, where available, to prevent the onset of a condition. For other ACS conditions (chronic and acute aggravated conditions), commissioners will need to encourage active disease management.

A previous review of evidence (Purdy 2010) suggests that the following evidence-based interventions for avoidable admissions should be implemented and evaluated locally:

- disease management and support for self-management for those with long-term conditions
- telephone health coaching
- other behavioural change programmes to encourage patient lifestyle change.

The review also suggested that improvements in the quality of primary and secondary care are needed, for example:

- increase continuity of care with a GP
- ensure local, out-of-hours primary care arrangements are effective
- for those with acute aggravated conditions, ensure there is easy access to urgent care
- conduct early senior review in A&E, and implement structured discharge planning.

Useful resources

The King's Fund data briefing on *Emergency Hospital Admissions for Ambulatory Care-sensitive Conditions: Identifying the potential for reductions*: www.kingsfund.org.uk/publications/data-briefing-emergency-hospital-admissions-ambulatory-care-sensitive-conditions

5. Improving the management of patients with both mental and physical health needs

What is it?

Developing a more integrated response to people with both mental and physical health problems, in particular supporting people with common mental health problems (such as, depression or anxiety) alongside a physical long-term condition.

Why is it important?

- At least half of all people with long-term conditions suffer from multiple co-existing conditions. Mental health problems are one of the most common forms of co-morbidity, particularly among people from the most deprived population groups (Barnett *et al* 2012).
- Mental health problems interact with physical health and can trigger or severely exacerbate other conditions. For example, depression has been associated with a four-fold increase in the risk of heart disease (Osborn *et al* 2007) and a three-and-a-half-fold increase in mortality rates after heart attack (Lesperance *et al* 2002).
- Between 12 and 18 per cent of all NHS expenditure on long-term conditions is estimated to be linked to mental health problems (Naylor *et al* 2012). Across a range of conditions, each patient with co-morbid depression costs health services between 30 and 140 per cent more than equivalent patients without depression (Welch *et al* 2009; Melek and Norris 2008).
- Unidentified mental health problems often underlie 'medically unexplained symptoms', which cost the NHS around £3 billion each year and cause significant distress to patients (Bermingham *et al* 2010).

What is the impact?

- Improving the way we respond to co-morbid physical and mental health problems would have a high impact in terms of patient experience and clinical outcomes, since both of these are substantially poorer relative to those for people with a single condition (Naylor *et al* 2012).
- There could also be a significant impact on costs. Integrated models of disease management have been found to deliver savings four times greater than the investment required (Howard *et al* 2010), as have enhanced models of liaison psychiatry in acute hospitals (Parsonage *et al* 2012).

How to do it

Some of the changes required would be relatively simple for commissioners to implement, while others would be more complex as they involve redesigning the interface between multiple providers. Specific priorities include:

- improving identification of mental health needs among people with long-term conditions
- strengthening data systems to support more systematic coding and recording of mental health needs
- commissioning services that improve the interface between primary care, mental health and other professionals, for example, based on collaborative care models recommended by National Institute for Health and Clinical Excellence (2009)
- strengthening disease management and rehabilitation programmes by including psychological or mental health input
- using CQUIN payments and other targeted quality incentives to encourage providers to develop innovative forms of liaison psychiatry within acute hospitals, care homes and elsewhere
- expanding Improving Access to Psychological Therapy services to support people with co-morbid long-term conditions, in line with government ambitions
- improving mental health skills in general practice using training programmes developed specifically for primary care professionals.

Useful resources

A joint publication from The King's Fund and the Centre for Mental Health gives an overview of the evidence base regarding long-term conditions and mental health: www.kingsfund.org.uk/publications/long-term-conditions-and-mental-health

Numerous examples of services that integrate mental and physical health care are given in guidance published by the NHS Confederation: www.nhsconfed.org/Publications/reports/Pages/InvestinginEmotionalandPsychologicalWellbeingLongTermPatients.aspx

6. Care co-ordination through integrated health and social care teams

What is it?

Creating patient-centred care that is more co-ordinated across care settings and over time, particularly for patients with long-term chronic and medically complex conditions who may find it difficult to 'navigate' fragmented health care systems.

Why is it important?

- Co-ordination of care for people with complex chronic illness is a global challenge. Driven by broad shifts in demographics and disease status, long-term conditions absorb by far the largest, and growing, share of health care budgets (see 'Active support for self-management').
- Co-ordination of care for patients with complex needs and long-term illness is currently poor (The King's Fund 2011), and those with long-term conditions have a lower quality of life (Department of Health 2011c).

What is the impact?

- Robust evidence on health outcomes is limited, but improved care co-ordination can have a significant effect on the quality of life of older frail people and people with multiple long-term conditions (Hofmarcher *et al* 2007).
- Highly integrated primary care systems that emphasise continuity and co-ordination of care are associated with better patient experience (Starfield 1998; Bodenheimer 2008).
- Impact on costs and cost-effectiveness is less easy to predict and is likely to be low in the short term given the upfront investments required. However, health systems that employ models of chronic care management tend to be associated with lower costs, as well as better outcomes and higher patient satisfaction (Singh and Ham 2005).

How to do it

There is no one model of care co-ordination, but evidence suggests that joint commissioning between health and social care that results in a multi-component approach is likely to achieve better results than those that rely on a single or limited set of strategies (Singh and Ham 2005; Powell Davies *et al* 2008; Kodner 2009). Some of the key components (The King's Fund 2011) are:

- a move to community-based multi-professional teams based around general practices that include generalists working alongside specialists
- a focus on intermediate care, case management and support to home-based care
- joint care planning and co-ordinated assessments of care needs
- personalised health care plans and programmes
- named care co-ordinators who act as navigators and who retain responsibility for patient care and experiences throughout the patient journey
- clinical records that are shared across the multi-professional team.

Care for Older People in Torbay provides a good example of the kind of change required. Torbay established five integrated health and social care teams organised in localities aligned with general practices. Care co-ordinators support older people following an emergency hospitalisation, helping them to receive the intensive support required to enable them to live at home.

Northamptonshire Integrated Care Partnership focused on helping patients remain independent for longer and creating personalised care plans for high-risk individuals that aimed to reduce admissions to hospital. It developed a new community-based service for patients at the end of life and a multidisciplinary care service for older people to support independent living in the community.

Useful resources

NHS Institute for Innovation and Improvement 'Joined Up Care' resources - a suite of products and tools to help create seamless care between services: www.institute.nhs.uk/qipp/joined_up_care/joined_up_care_homepage.html

The Department of Health's *Compendium of Information on Long-term Conditions* includes local examples: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_134487

A paper from National Voices sets out the argument for co-ordination of care: www.nationalvoices.org.uk/sites/www.nationalvoices.org.uk/files/what_patients_want_from_integration_national_voices_paper.pdf

Care co-ordination tools and resources developed in the United States: www.improvingchroniccare.org/index.php?p=Tools_Resources&s=349

7. Improving primary care management of end-of-life care

What is it?

Within primary care, improving the systematic identification of patients who are at the end of life, and then providing the appropriate support; in particular, improving the co-ordination of care, continuity, quality of communication, and the provision of bereavement care.

Why is it important?

- Two-thirds of people would prefer to die at home, but in practice only about one-third of individuals actually do (Higginson 2003).
- The annual number of deaths in England and Wales is expected to rise by 17 per cent from 2012 to 2030, and the average age at death is also set to increase markedly (Gomes and Higginson 2008).
- The costs of caring for people at the end of their lives is estimated to run into billions of pounds (National Audit Office 2008). Care for the 27 per cent who die from cancer is around £1.8 billion in the last year of their life, or £14,236 per patient (Hatzia Andreu *et al* 2008).
- Wide variations exist in the quality of end-of-life care across England. Spending by primary care trusts (PCTs) on palliative care has varied from £154 to more than £1,600 per patient (National Audit Office 2008).

What is the impact?

- Research by The King's Fund has identified many examples of how improvements in end-of-life care can have a high impact on patient experience as well as the experience of family members and carers (Addicott and Ross 2010).
- Some evidence suggests greater co-ordination of care can improve quality without incurring any additional costs (Addicott and Dewar 2008). There may be some scope to make cost savings, particularly through a reduction of unnecessary admissions into the acute setting.

How to do it

End-of-life care is provided in a variety of settings by a wide range of professionals. To meet patients' needs a whole-systems approach is needed that co-ordinates care across professional and organisational boundaries (Addicott and Ross 2010). GPs are in a central position to do this.

Commissioners should drive a whole-systems approach that focuses on the availability of a range of services across the care pathway, such as:

- facilitation of discharge from the acute setting
- rapid response services during periods out of hospital
- centralised co-ordination of care provision in the community
- guaranteeing 24/7 care.

The integration of services is currently hindered both by the way that end-of-life care is funded and by the contracting mechanisms used. Commissioners should contract for a pathway or package of care in order to encourage providers to work together to deliver a more streamlined service. However, packages should be structured so that they can cater for a range of individual needs and preferences (Addicott and Hiley 2011).

Pooled budgets offer the most concrete approach for encouraging integration across providers. Commissioners should start small in their approaches to using pooled budgets, and focus on areas where the relationships, common pathways and data exist to support such a model.

It will also be important to ensure that end-of-life care features in any care pathway to ensure that we shift the focus beyond terminal cancer.

Useful resources

The Gold Standards Framework (GSF) is a systematic, evidence-based approach to help clinicians to a) identify patients in the final years of life, b) assess the needs, symptoms and preferences of those patients, and c) plan care on that basis, enabling patients to live and die where they choose: www.goldstandardsframework.org.uk/index.html

The NHS Improving Quality website provides a range of resources to support quality improvement in end-of-life care: <http://www.nhs.uk/improvement-programmes/long-term-conditions-and-integrated-care/end-of-life-care.aspx>

The Leadership Alliance for the Care of Dying People recommend five priorities for care: <https://www.gov.uk/government/publications/liverpool-care-pathway-review-response-to-recommendations>

8. Medicines management

What is it?

Medicines management supports better and more cost-effective prescribing in primary care, as well as helping patients to manage medications better. Good medicines management can help to reduce the likelihood of medication errors and hence patient harm.

Why is it important?

- There is a considerable body of evidence from the point of view of patient safety, service efficiency and cost that medicines management needs to be improved.
- In 2011, 961.5 million prescription items were dispensed in primary care alone at a cost of £8.8 billion (Information Centre 2012).
- Medication errors occur in up to 11 per cent of prescriptions, mainly due to errors in dosage (Sanders and Esmail 2003).
- Around 7 per cent of all hospital admissions have been attributed to, or associated with, adverse drug reactions, with up to two-thirds of these being preventable (Pirmohamed *et al* 2004). Adverse reactions are particularly common among vulnerable groups, such as, frail older patients in nursing homes (Gurwitz *et al* 2005).
- Four out of five people aged over 75 years take a prescription medicine and 36 per cent are taking four or more (Department of Health 2001). The average number of medicines prescribed for people aged 60 years and over in England almost doubled from 21.2 to 40.8 items per person per year in the ten years to 2007 (Information Centre 2007).
- Between one-third and one-half of all medication prescribed for long-term conditions is not taken as recommended (Nunes *et al* 2009).

What is the impact?

- Improved medicines management could be expected to have a high impact in terms of patient experience and health outcomes. There is good evidence that guidance and peer review can support improvements in the quality of prescribing (Duerden *et al* 2011), although significantly improving patient compliance may be more difficult (Haynes *et al* 2008).
- The impact on costs could also be substantial, given the levels of drug wastage and the high numbers of preventable drug-related emergency hospital admissions. Standardising prescribing practices for certain treatments (such as low-cost statins) could save the NHS more than £200 million a year (National Audit Office 2007).

How to do it

There are a number of techniques available that GPs will be in a prime position to implement:

- medication reviews, usually in general practice, that seek to ensure prescribing standards are being met, for example, through practice-based audits linked to peer review of prescribing practices and outcomes
- use of IT and decision-support tools to support best practice in prescribing by professionals
- pharmacist- and nurse-led interventions that provide educational information and outreach services to reduce prescribing and monitoring errors among high-risk patients (Avery 2010)
- use of pharmacy technicians to support general practices to improve their prescribing practice by conducting systematic audits, evaluating patients and recommending changes to medication
- improved systems to support safe transfer of information on patient medication at admission and discharge
- providing clinicians with benchmarked information on prescribing performance.

Useful resource

The Medicines and Prescribing Centre at NICE provides a range of tools and support: www.nice.org.uk/mpc/index.jsp

NHS Evidence summary of medicines and prescribing information for health care professionals: www.evidence.nhs.uk/nhs-evidence-content/medicines-information

NHS Scotland (2012) *Polypharmacy guidance*, Quality and Efficiency Support Team, The Scottish Government: www.central.knowledge.scot.nhs.uk/upload/Polypharmacy%20full%20guidance%20v2.pdf

9. Managing elective activity – referral quality

What is it?

Managing elective (planned) hospital activity by systematically reviewing and auditing referrals with a view to benchmarking against other practices and improving referral quality and by ensuring patients are fully involved in decision-making.

Why is it important?

- GPs make more than nine million referrals to hospital for elective care each year. These then trigger an annual spend of more than £15 billion in the NHS (McKinsey 2009). As a result, control over a significant proportion of CCGs' commissioning budget lies in the hands of their member practices.
- Referral rates to a particular specialty within a single area vary as much as ten-fold between GPs (Creed *et al* 1990; Ashworth *et al* 2002). A wide variety of factors account for this variation, clinical and non-clinical (Foot *et al* 2010). The available research suggests that a substantial proportion of activity is discretionary and could be avoided or redirected.
- There are also patients who need a referral but fail to receive one. For example, lack of or late referral is thought to be a key driver of poor survival rates for cancer (Department of Health 2011b).
- There is evidence to suggest that the quality of referral letters could be improved in some cases (Foot *et al* 2010). The absence of key information can make it difficult to triage referrals appropriately and identify the best destination for the referral (Speed and Crisp 2005).
- GPs, patients and specialists do not always share a common understanding of why a referral is being made, for example, whether it is primarily for diagnosis, investigation, treatment or reassurance (Grace and Armstrong 1986, Broomfield *et al* 2001, Molloy and O'Hare 2003).

What is the impact?

- Given the link between poor outcomes and late referral, particularly for cancer, improving referral quality should have an impact on health outcomes in some cases.
- Improving the quality and appropriateness of referral would have an impact on patient experience by avoiding unnecessary visits and improving the timeliness of treatment.
- There is some scope to reduce costs by avoiding unnecessary referrals. However, this needs to be balanced against the likelihood that improved review and audit processes would also identify under-referral in some clinical areas.
- Referral audit can help to identify training needs and thereby improve the quality and cost-effectiveness of clinical care.

How to do it

Clinical commissioning groups and the locality groups beneath them provide a structure through which active referral review can take place, within the context of wider audit programmes that should become day-to-day business for practices in the future. Referral review could involve:

- systematic use of comparative information about GP and practice referral rates by specialty supported by more detailed audits at practice level including discussion of a sample of referrals to examine their content and appropriateness
- generalists and specialists agreeing redesigned elective care pathways including consultant-to-consultant referral protocols.

Approaches based on review and audit are recommended over the establishment of referral management centres, which can add a significant overhead cost to each referral, fail to address individual practice deficits, and introduce new clinical risks (Imison and Naylor 2010).

Useful resources

The King's Fund report, *Referral management: Lessons for success*, describes the strengths and weaknesses of different approaches and provides some practical suggestions of ways to support the referral process. There is also an accompanying case study providing a detailed description of how one practice has introduced referral management and the impact that it has had: www.kingsfund.org.uk/publications/referral-management

A directory of referral and demand management resources compiled by Quality MK: www.qualitymk.nhs.uk/default.asp?ContentID=4897

10. Managing urgent and emergency activity

What is it?

Developing an integrated approach to urgent and emergency care, particularly emergency medical admissions to hospital, involving hospital, community, primary and ambulance services through joint service planning and sharing of clinical information across different agencies.

Why is it important?

- Urgent and emergency care services are currently often highly fragmented and generate confusion among patients about how and where to access care (Lattimer *et al* 2010).
- Patients are frequently admitted to hospital when this is not clinically justified because of a lack of alternative options.
- Poor sharing of information as patients move between different providers is a cause of significant failures of care (Gandhi 2005)
- The growth of new forms of urgent care, such as walk-in and urgent care centres, has failed to reduce A&E attendances. These grew by 30 per cent between 2003/4 and 2011/12 (Department of Health 2011a).
- New forms of urgent care have also failed to reduce emergency admissions, which continue to grow, rising by 5 per cent between 2008/9 and 2011/12 (Department of Health 2011d; 2012).

What is the impact?

- Addressing poor practice, improving care continuity and reducing the numbers admitted to hospital could have a significant impact on health outcomes.
- Making the urgent and emergency care system easier to navigate would improve patient experience substantially.
- Integrated urgent and emergency care services that manage demand more effectively have the potential to be significantly more cost-effective than existing arrangements.

How to do it

Although the impact could be highly positive, redesigning the urgent and emergency care system is likely to be highly challenging. Specific actions for commissioners could include:

- providing effective signposting to help patients choose the right service
- ensuring that hospital and community services can adjust service levels in response to changes in demand, so that need and provision are kept in balance
- ensuring that A&E departments adopt best practice for handling 'majors' including early senior review
- ensuring that hospitals and local authority social service and housing departments work effectively together to reduce delayed discharges and shorten lengths of stay
- mapping and analysing patient flows around the system to identify bottlenecks and the scope for changing pathways to reduce the use of hospitals and to ensure that there is sufficient capacity across the health and social care system.

Useful resources

Tackling Demand Together: a toolkit for improving urgent and emergency pathways by understanding increases in 999 demand offers practical analysis, worksheets and tools to help all commissioners and providers improve urgent and emergency care services: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/dh_106925

Royal College of General Practitioners (2011). *Guidance for Commissioning Integrated Urgent and Emergency Care: A whole system approach*: www.rcgp.org.uk/revalidation-and-cpd/centre-for-commissioning.aspx

A multidisciplinary group of professional bodies and charities has collaborated on *Silver Book: Quality care for older people with urgent & emergency care needs*: www.bgs.org.uk/campaigns/silverb/silver_book_complete.pdf

Primary Care Foundation/NHS Alliance (2011). *Breaking the Mould without Breaking the System*: www.primarycarefoundation.co.uk/commissioning-urgent-care.html

ECIST (2011) *Effective approaches in urgent and emergency care: Paper 1. Priorities within acute hospitals*: www.nhs.uk/what-we-can-offer/driving-improvement-masterclass/masterclass-conference-papers/

A directory of resources on urgent care compiled by Quality MK: www.qualitymk.nhs.uk/default.asp?ContentID=6306

Discussion and conclusion

These ten priorities provide an action plan for commissioning bodies to transform the health of their local population. In bringing about these improvements, the role of GPs – both as providers and commissioners – will be pivotal. Clinical commissioning groups (CCGs) will need to work closely with commissioners of primary care in NHS England's regional teams (including through co-commissioning arrangements), and with public health professionals and others in local authorities. Successful collaboration between these three agencies is of paramount importance – no one set of commissioners will be able to bring about the necessary service improvements alone. An equally important challenge for CCGs is sustaining member engagement, which is essential if they are to harness the potential power of increased clinical involvement in commissioning (Holder *et al* 2015). Health and wellbeing boards need to become the key vehicle through which commissioners from all agencies can come together and develop a co-ordinated response to shared challenges.

How does this fit with national and local priorities?

The most important set of tools now used by the Department of Health for assessing the performance of the system are the three outcomes frameworks for the NHS, public health and social care. These are used for judging how well the system is performing as a whole. Sitting beneath these frameworks, the CCG Outcomes Indicator Set is used to assess the performance of individual clinical commissioning groups. CCGs are financially rewarded through a quality premium for their performance against a subset of these indicators, including locally selected and nationally prescribed objectives.

Taking action on our ten priority areas will help CCGs to make progress on many of the outcomes included in the indicator set, including the national priorities relating to reductions in amenable mortality and avoidable emergency admissions. Our priorities give significant weight to improvement in general practice itself, and to prevention; CCGs will need to be involved in both of these if they are to meet the objectives encapsulated in the outcomes indicator set. They will not be able to perform highly on these indicators by focusing solely on those services within the scope of their own commissioning budget. It is for this reason that close partnership-working with NHS England and local authorities is essential.

Implementing the ten priorities

The table below maps each of the priorities showing their relative impact versus ease of implementation. This is a subjective assessment by the authors of this paper but one that draws on the evidence underpinning the interventions, and on feedback gathered during a commissioning masterclass with GP leaders and a range of senior NHS professionals involved in commissioning.

	Health outcomes	Patient experience	Savings	Ease
Self-management	M	H	L	L
Primary prevention	H	M	M	M
Secondary prevention	H	M	M	M
Managing ACS conditions	H	M	M	M
Integrating mental and physical health care	H	H	M	M
Care co-ordination and integration	H	H	L	L
End-of-life care	n/a	H	M	M
Medicines management	H	H	H	M
Managing elective activity	M	M	M	M
Managing emergency activity	H	H	H	L

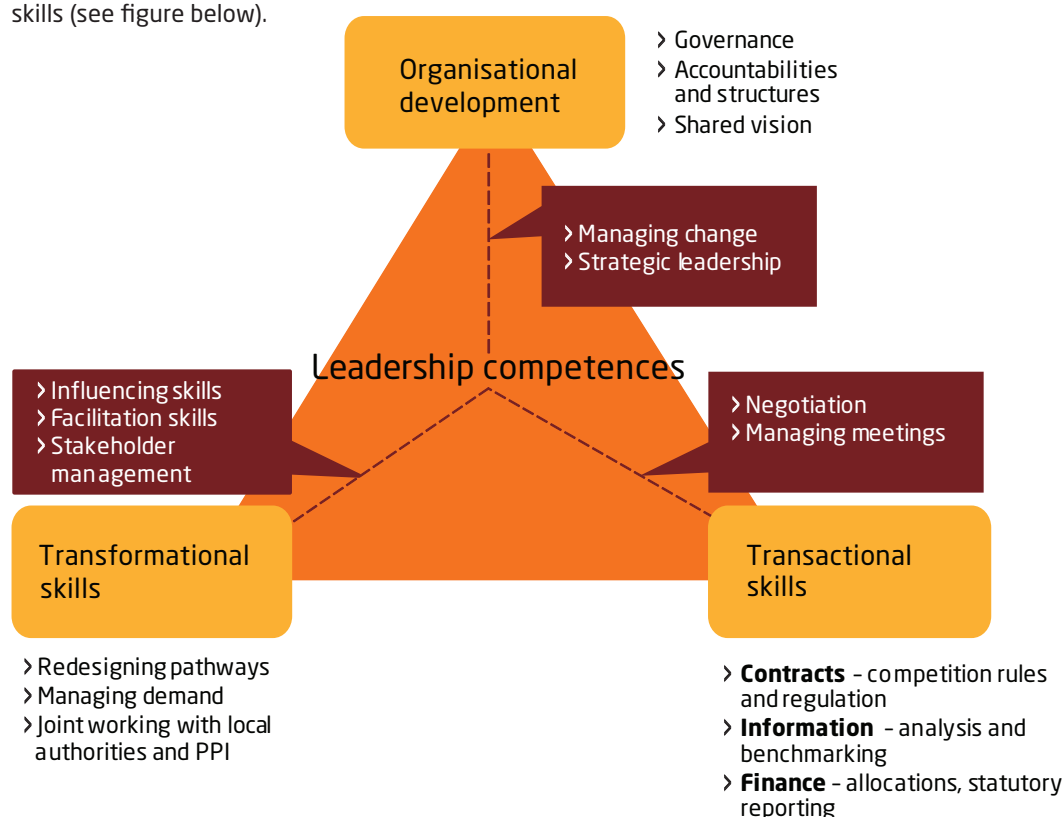
Low impact / low ease (high difficulty)

Medium impact / medium ease

High impact / high ease (low difficulty)

It is clear that the potential gains in terms of health outcomes, patient experience and cost savings are considerable. Many of the suggested interventions would also have an impact on health inequalities, something that CCGs have a legal duty to consider. Yet implementation will not be straightforward. In the main, this is not because we lack the evidence and information about what to do, but because of the scale of the change management task, particularly as investing in community-based care will deliver savings only if accompanied by strategic disinvestment from hospitals. Commissioners should make a robust case for such disinvestment where it is clinically justified, and need to develop strong communication and political skills in order to defuse potential resistance to much-needed, evidence-based change.

It is not just a question of 'doing the right thing' but 'making the right things happen'. Much of what we describe has been known for some time, yet it is not applied in practice. Why? Because while it is relatively straightforward to impart knowledge about what to change, it is much harder to create the culture and enthusiasm required to deliver change, particularly when working across organisational boundaries. The potential strength of GPs' engagement in commissioning is that their clinical foundation is a step towards creating the necessary culture, but they will need to invest heavily in developing strong commissioning organisations and good working relationships across the health system if they are to exploit this advantage. There are three important areas that require developing – organisational development, transactional skills and transformational skills (see figure below).



Organisational development - the healthy organisation

Much has been written about the factors that lead to healthy organisations. For example, organisations with a clear vision and values, owned by their members, are more likely to deliver on their objectives (Senge 2004; Zairi 1998). There is also evidence from the United States that when commissioning budgets are handed to medical groups their success is highly associated with strong leadership and governance (Ham 2010; Thorlby *et al* 2011). Establishing robust clinical and organisational governance not only underpins high-quality performance but is also needed to support compliance with competition law and regulations, and to ensure accountability for the use of public money.

Transactional skills - support for commissioning

Commissioners require a high level of technical competence to undertake the 'transactional' elements of commissioning. They have at their disposal a range of market mechanisms, such as putting services out to tender. Used creatively and well these can facilitate novel and more integrated models of care. Used badly, they can result in fragmentation. Key to their success is how commissioners use the various contractual levers available, such as incentive payments (eg, Commissioning for Quality and Innovation (CQUIN) payments), risk-sharing arrangements and innovative outcome-based contracting (eg, Capitation Outcomes Based Incentivised Contracts (COBIC)). This will be particularly important to achieve improvement in outcomes related to provider performance, such as improving patient experience of hospital care. Commissioners also need strong information management and technology capabilities to help them understand variation in outcomes, resource utilisation and performance in order to hold providers to account. For many CCGs, these transactional skills are provided to a large extent by commissioning support units, and the importance of establishing effective relationships between these and CCGs cannot be underestimated.

Transformational skills

Finally, commissioners need the relational skills to deliver service transformation. High-quality commissioning requires extensive collaboration and the ability to work with partners across the health and social care system to deliver change. However, as Smith *et al* (2013) have found, this collaboration needs to be backed up by strong transactional commissioning if aspirations are to be turned into reality.

Commissioners will need to make progress in all three of these areas if they are to rise to the challenge of transforming the health care system. This will not be easy, but the potential for CCGs to engage the local clinical community much more effectively than previously, and for health and wellbeing boards to convene and co-ordinate the activities of a wider group of actors, give some important grounds for optimism.

Acknowledgements

This is an updated version of a paper of the same name, first published by The King's Fund in July 2010. The authors would like to thank Dr Stephen Shortt, Dr Shane Gordon, Dr Douglas Russell and Dr Paul Zollinger-Read, who provided advice and expertise on the original version.

References

- Addicott R, Hiley J (2011). *Issues Facing Commissioners of End-of-life Care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/issues-facing-commissioners-end-life-care (accessed on 25 March 2013).
- Addicott R, Dewar S (2008). *Improving Choice at End of Life. A descriptive analysis of the impact and costs of the Marie Curie Delivering Choice Programme in Lincolnshire*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/improving-choice-end-life (accessed on 25 March 2013).
- Addicott R, Ross S (2010). *Implementing the End-of-Life Care Strategy. Lessons from good practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/implementing-end-life-care-strategy (accessed on 25 March 2013).
- Ashworth M, Clement S, Sandhu J, Farley N, Ramsay R, Davies T (2002). 'Psychiatric referral rates and the influence of on-site mental health workers in general practice'. *British Journal of General Practice*, vol 52, no 474, pp 39-41.
- Avery T (2010). 'Avoidable prescribing errors: communication and monitoring'. *Prescriber*, vol 21, no 6, pp 44-6.
- Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B (2012). 'Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study'. *The Lancet*, vol 380, no 9836, pp 37-43.
- Bermingham S, Cohen A, Hague J, Parsonage M (2010). 'The cost of somatisation among the working-age population in England for the year 2008-2009'. *Mental Health in Family Medicine*, vol 7, pp 71-84.
- Bodenheimer T (2008). 'Co-ordinating care - a perilous journey through the health care system'. *New England Journal of Medicine*, vol 358, pp 1064-70.
- Broomfield N, Fleming P, Foot D (2001). 'An investigation of the correspondence between psychological problems diagnosed by GPs and those subsequently targeted for treatment by clinical psychologists'. *Health Bulletin (Edinburgh)*, vol 59, no 3, pp 178-87.
- Buck D, Frosini F (2012). *Clustering of Unhealthy Behaviours over Time: Implications for policy and practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/clustering-unhealthy-behaviours-over-time (accessed on 13 March 2013).
- Campbell CA, Hahn RA, Elder R, Brewer R, Chattopadhyay S, Fielding J, Naimi TS, Toomey T, Lawrence B, Middleton JC (2009). 'The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms'. *American Journal of Preventive Medicine*, vol 37, no 6, pp 556-69.
- Challis D, Hughes J, Berzins K, Reilly S, Abell J, Stewart K (2010). *Self-care and Case Management in Long-term Conditions: The effective management of critical interfaces*. London: HMSO. Available at: www.netscc.ac.uk/hsdr/projdetails.php?ref=08-1715-201 (accessed on 12 March 2013).
- Corrigan P (2009). 'DIY doctors: patients can boost NHS's value'. *Health Service Journal*, 30 April, pp 12-3.
- Creed F, Gowrisunkur J, Russell E, Kinsey J (1990). 'General practitioner referral rates to district psychiatry and psychology services'. *British Journal of General Practitioners*, vol 40, no 340, pp 450-4.
- Department of Health (2012). 'Weekly A&E SitReps 2011-12'. Department of Health website. Available at: <http://transparency.dh.gov.uk/2012/06/14/weekly-ae-sitreps-2011-12/> (accessed on 20 March 2013).
- Department of Health (2011a). 'A&E Attendances'. Department of Health [online]. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Statistics/Perfomancedataandstatistics/AccidentandEmergency/DH_077485 (accessed on 18 March 2013).
- Department of Health (2011b). *Improving Outcomes: A strategy for cancer*. London: Department of Health.
- Department of Health (2011c). 'Ten things you need to know about long term conditions'. Department of Health website. Available at: www.dh.gov.uk/en/Healthcare/Longtermconditions/tenthingsyouneedtoknow/index.htm (accessed on 13 March 2013).
- Department of Health (2011d). 'Archive - A&E Attendances'. Department of Health website. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Statistics/Perfomancedataandstatistics/AccidentandEmergency/DH_087973 (accessed 18 March 2013).
- Department of Health (2009). *Tackling Health Inequalities: 2006-08 Policy and data update for the 2010 national target* [online]. Available at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_109469 (accessed on 18 March 2013).
- Department of Health (2005). *Supporting People with Long-term Conditions: An NHS and social care model to support local innovation and integration*. London: Department of Health.
- Department of Health (2001). *National Service Framework for Older People*. London: Stationery Office.
- Duerden M, Millson D, Avery T (2011). 'The Quality of GP Prescribing'. The King's Fund website. Available at: www.kingsfund.org.uk/projects/gp-inquiry/prescription-management (accessed on 13 March 2013).
- Foot C, Naylor C, Imison C (2010). *The Quality of GP Diagnosis and Referral*. London: The King's Fund. Available at: www.kingsfund.org.uk/projects/gp-inquiry/diagnosis-referral (accessed on 18 March 2013).
- Gandhi TK (2005). 'Fumbled handoffs: one dropped ball after another'. *Annals of Internal Medicine*, vol 142, pp 352-8.
- Gomes B, Higginson I (2008). 'Where people die (1974-2030): Past trends, future projections and implications for care.' *Palliative Medicine*, vol 22, pp 33-41.
- Grace JF, Armstrong D (1986). 'Reasons for referral to hospital: extent of agreement between the perceptions of patients,

- GPs and consultants'. *Family Practitioner*, vol 3, pp 143–47.
- Gurwitz J, Field T, Judge J (2005). 'The incidence of adverse drug events in two large academic long-term care facilities'. *American Journal of Medicine*, vol 188, no 3, pp 251–8.
- Ham C (2010). *GP Budget Holding: Lessons from across the Pond*. Birmingham: Health Services Management Centre, University of Birmingham.
- Ham C, Dixon J, Chantler C (2011). 'Clinically integrated systems: the future of NHS reform in England?' *British Medical Journal*, vol 342: d905.
- Hatziafreu E, Archontakis F, Daly A (2008). *The Potential Cost Savings of Greater Use of Home- and Hospice-based End of Life Care in England*. Technical report. London: National Audit Office.
- Haynes RB, Ackloo E, Sahota N, McDonald HP, Yao X (2008). 'Interventions for enhancing medication adherence'. *Cochrane Database of Systematic Reviews*, issue 2, article CD000011.
- Health England (2009). *Intervention Reports: Report no 5*. Available at: <http://help.matrixknowledge.com/page/Full-Report-Listing.aspx> (accessed on 13 March 2013).
- Higginson IJ (2003). *Priorities and Preferences for End Of Life Care in England, Scotland and Wales*. London: National Council for Hospice and Specialist Palliative Care.
- Hofmarcher, Oxley H, Rusticelli E (2007). *Improved Health System Performance through Better Care Coordination*. Health Working Paper No. 30. Paris: Organisation for Economic Co-operation and Development.
- Holder H, Robertson R, Ross S, Bennett L, Gosling J, Curry N (2015). *Risk or reward? The changing role of CCGs in practice*. London: Nuffield Trust. Available at: www.kingsfund.org.uk/publications/risk-or-reward
- Howard C, Dupont S, Haselden B, Lynch J, Wills P (2010). 'The effectiveness of a group cognitive-behavioural breathlessness intervention on health status, mood and hospital admissions in elderly patients with chronic obstructive pulmonary disease'. *Psychology, Health and Medicine*, vol 15, no 4, pp 371–85.
- Humphries R, Galea A (2013). *Health and wellbeing boards: one year on*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/health-and-wellbeing-boards-one-year-on
- Imison C, Naylor C (2010). *Referral Management. Lessons for success*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/referral-management (accessed on 18 March 2013).
- Information Centre (2012). *Prescription Cost Analysis - England, 2011*. London: Health and Social Care Information Centre. Available at: www.ic.nhs.uk/article/2021/Website-Search?productid=5461&q=prescription+cost+analysis&sort=Relevance&size=10&page=1&area=both#top (accessed on 13 March 2013).
- Information Centre (2007). *Prescriptions dispensed in the community. Statistics for 1996–2006. England 2007*. London: The Information Centre.
- The King's Fund (2012). *From Vision to Action: Making patient-centred care a reality*. Available at: www.kingsfund.org.uk/publications/articles/vision-action-making-patient-centred-care-reality (accessed on 18 March 2013).
- The King's Fund (2011). *Improving the Quality of Care in General Practice*. Report of an independent inquiry commissioned by The King's Fund. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/improving-quality-care-general-practice (accessed on 18 March 2013).
- Khaw KT, Wareham N, Bingham S, Welch A, Luben R, Day N (2008). 'Combined impact of health behaviours and mortality in men and women: the EPIC-Norfolk prospective population study'. *Public Library of Science Medicine*, vol 5, no 1. Available at: www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.0050012 (accessed on 13 March 2013).
- Kodner D (2009). 'All together now: a conceptual exploration of integrated care'. *Healthcare Quarterly*, vol 13 (Sp), pp 6–15. Available at: www.longwoods.com/content/21091 (accessed on 13 March 2013).
- Kotz D, Stapleton JA, Owen L, West R (2010). 'How cost-effective is "No Smoking Day"?'. *Tobacco Control*, vol 20, no 4, pp 302–4.
- Lattimer V, Burgess A, Knapp F, Dalton S, Brailsford S, Moore M, Baverstock J, Heaney D (2010). *The Impact of Changing Workforce Patterns in Emergency and Urgent Out-of-hours Care on Patient Experience, Staff Practice and Health System Performance*. London: National Institute for Health Research. Available at: www.netssc.ac.uk/hsdr/projdetails.php?ref=08-1519-97 (accessed on 18 March 2013).
- Lesperance F, Frasura Smith N, Talajic M, Bourassa MG (2002). 'Five-year risk of cardiac mortality in relation to initial severity and one year changes in depression symptoms after myocardial infarction'. *Circulation*, vol 105, no 9, pp 1049–53.
- Marmot Review (2010). *Fair Society, Healthy Lives: Strategic review of health inequalities in England, post 2010*. London: The Marmot Review. Available at: www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review (accessed on 13 March 2013).
- McKinsey & Co (2009). *Achieving World Class Productivity in the NHS 2009/10–2013/14: Detailing the size of the opportunity* [online]. Department of Health website. Available at: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_116521.pdf (accessed on 13 March 2013).
- Melek S, Norris D (2008). *Chronic Conditions and Comorbid Psychological Disorders*. Seattle: Milliman.
- Molloy E, O'Hare JA (2003). 'Unravelling referrals to medical outpatients'. *Irish Medical Journal*, vol 96, no 5, pp 145–6.
- National Audit Office (2010). *Tackling Inequalities in Life Expectancy in Areas with the Worst Health and Deprivation: Executive summary*. Available at: www.nao.org.uk/report/tackling-inequalities-in-life-expectancy-in-areas-with-the-worst-health-and-deprivation/ (accessed 18 March 2013).
- National Audit Office (2008). *End of Life Care*. London: National Audit Office.
- National Audit Office (2007). *Prescribing Costs in Primary Care*. London: National Audit Office. Available at: www.nao.org.uk/publications/0607/costs_in_primary_care.aspx (accessed on 13 March 2013).

- National Institute for Health and Clinical Excellence (2009). *Depression in Adults with a Chronic Physical Health Problem: Treatment and management*. National Clinical Guideline Number 91. London: NICE. Available at: www.nccmh.org.uk/downloads/DCHP/CG91NICEGuideline.pdf (accessed on 13 March 2013).
- Naylor C, Goodwin G (2010). *Building High-Quality Commissioning. What role can external organisations play?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/building-high-quality-commissioning (accessed on 25 March 2013).
- Naylor C, Parsonage M, McDaid D, Knapp M, Fossey M, Galea A (2012). *Long-term Conditions and Mental Health: The cost of co-morbidities*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/long-term-conditions-and-mental-health (accessed on 13 March 2013).
- Nunes V, Neilson J, O'Flynn N, Calvert N, Kuntze S, Smithson H, Benson J, Blair J, Bowser A, Clyne W, Crome P, Haddad P, Hemingway S, Horne R, Johnson S, Kelly S, Packham B, Patel M, Steel J (2009). *Clinical Guidelines and Evidence Review for Medicines Adherence: Involving patients in decisions about prescribed medicines and supporting adherence*. London: National Collaborating Centre for Primary Care and Royal College of General Practitioners.
- Osborn D, Levy G, Nazareth I (2007). 'Relative risk of cardiovascular and cancer mortality in people with severe mental illness from the United Kingdom's General Practice Research Database'. *Archives of General Psychiatry*, vol 64, pp 242-9.
- Parsonage M, Fossey M, Tutty C (2012). *Liaison Psychiatry in the Modern NHS*. London: Centre for Mental Health. Available at: www.centreformentalhealth.org.uk/mental_physical_health/liaison_psychiatry.aspx (accessed on 13 March 2013).
- Pirmohamed M, James S, Meakin S, Green C, Scott A, Walley T, Farrar K, Park B, Breckenridge A (2004). 'Adverse drug reactions as cause of admission to hospital: prospective analysis of 18,820 patients'. *British Medical Journal*, vol 329, pp 15-19.
- Powell Davies G, Williams AM, Larsen K, Perkins D, Roland M, Harris MF (2008). 'Coordinating primary health care: an analysis of the outcomes of a systematic review'. *Medical Journal of Australia*, vol 188 (8 suppl), pp S65-S68. Available at: www.mja.com.au/public/issues/188_08_210408/pow11099_fm.html (accessed on 13 March 2013).
- Purdy S (2010). *Avoiding Hospital Admissions. What does the research evidence say?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/avoiding_hospital.html (accessed on 13 March 2013).
- Sanders J, Esmail A (2003). 'The frequency and nature of medical error in primary care: understanding the diversity across studies'. *Family Practice*, vol 20, no 3, pp 231-6.
- Senge P (2004). 'Building vision: New roles for new leaders'. *Executive Excellence*, vol 21, no 7, p 16.
- Singh D, Ham C (2005). *Transforming Chronic Care: Evidence about improving care for people with long-term conditions*. Birmingham: University of Birmingham, Health Services Management Centre.
- de Sliva D (2011). *Helping People Help Themselves*. London: The Health Foundation.
- Smith J, Porter A, Shaw S, Rosen R, Blunt I, Mays N (2013). *Commissioning High-quality Care for People with Long-term Conditions*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/commissioning-high-quality-care (accessed on 18 March 2013).
- Speed CA, Crisp AJ (2005). 'Referrals to hospital-based rheumatology and orthopaedic services: seeking direction'. *Rheumatology*, vol 44, no 4, pp 469-71.
- Starfield B (1998). *Primary Care: Balancing health needs, services and technology*. Oxford: Oxford University Press.
- Stearns SC, Bernard SL, Fasick SB, Schwartz R, Konrad TR, Ory MG, DeFries GH (2000). 'The economic implications of self-care: the effect of lifestyle, functional adaptations, and medical self-care among a national sample of Medicare beneficiaries'. *American Journal of Public Health*, vol 90, no 10, pp 1608-12.
- Thorlby R, Rosen R, Smith J (2011). *GP Commissioning: Insights from the medical groups in the United States*. London: The Nuffield Trust.
- Tian Y, Dixon A, Gao H (2012). *Emergency Hospital Admissions for Ambulatory Care-sensitive Conditions: Identifying the potential for reductions*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/data-briefing-emergency-hospital-admissions-ambulatory-care-sensitive-conditions (accessed 18 March 2013).
- Van Gils PF, Tariq L, Verschuuren M, van der Berg M (2010). 'Cost-effectiveness research on preventive interventions: a survey of the publications in 2008'. *European Journal of Public Health*, vol 21, no 2, pp 260-4.
- Wagner W, Austin B, Von Korff M (1996). 'Organizing care for patients with chronic illness'. *The Milbank Quarterly*, vol 74, no 4, pp 511-4.
- Welch CA, Czerwinski D, Ghimire B, Bertsimas D (2009). 'Depression and costs of health care'. *Psychosomatics*, vol 50, no 4, pp 392-401.
- World Health Organization (2005). *Preventing Chronic Diseases: A vital investment*. Geneva: World Health Organization. Available at: www.who.int/chp/chronic_disease_report/full_report.pdf (accessed 13 March 2013).
- Zairi M (1998). 'Building human resources capacity in health care: a global analysis of best practice Part III'. *Health Manpower Management*, vol 24, issue 5, pp 166-9.