The King's Fund>

Ideas that change health care

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Community services
How they can transform care

Key messages

- The ambition to move care closer to home has resulted in some reduction in lengths of stay in hospital, but further significant changes are needed in the way care is delivered.

- A policy called Transforming Community Services was launched in 2008 but it was mostly concerned with structural changes rather than with how services could be changed. It is now time to correct this.

- The King's Fund convened a working group of community providers to explore the steps that are required to change community services in ways that will help create the transformation that was promised in that policy.

- A key first step is to remove the complexity that has resulted from different policy initiatives over the years. A simple pattern of services should be developed, based around primary care and natural geographies and with a multidisciplinary team. These teams need to work in new ways with specialist services – both community and hospital based, to offer patients a much more complete and less fragmented service.

- New models need to include both mental health and social care, including the management of the health and social care budget for the care of their patients.

- These services need to be capable of a very rapid response and to work with hospitals to speed up discharge. Access to community or nursing home beds for short stays can make an important difference.

- Significant numbers of patients occupying hospital beds could be cared for in other settings but only if suitable services are available and can be accessed easily.

- New ways to contract and pay for these services are needed. This will also require changes in primary care and hospital contractual arrangements and in the infrastructure to support the model.

- Community services also need to reach out into communities more effectively. The opportunity to harness the power of the wider community to support people in their own homes, combat social isolation and improve prevention is not being fully exploited.

Introduction

Community services are a large part of NHS activity. Around 100 million community contacts take place each year, ranging from universal public health functions such as health visiting and school nursing to targeted specialist interventions in musculo-skeletal services, chronic disease management and intensive rehabilitation. The scale of these interventions is poorly understood and not well served by the way the debate on health services often defaults to 'GPs and hospitals' or 'primary and secondary care'.

There has been a longstanding ambition to shift more health care from hospitals to settings closer to people's homes, and from reactive care to prevention and proactive models based on early intervention. There has been some progress, with significant reductions in lengths of stay, although these have begun to plateau while emergency admission rates have continued to rise.

Frequent reorganisations – which have often been poorly thought through and not always skilfully executed – have created problems, delayed progress, and undermined leadership in the sector. Further uncertainties about NHS trusts' ability to achieve foundation trust status and the requirement to re-procure these services over the next one to two years have added to their problems.

Recognising these problems, The King's Fund convened a working group of community providers to explore the steps that are required to change community services in ways that will help create the transformation that was promised in previous policy (Department of Health 2009, 2013a, 2013b). Despite incomplete evidence, there is an emerging consensus about the impact that community services can have and what is needed to improve their effectiveness. The main steps identified are:

■ reduce complexity of services

■ wrap services around primary care

■ build multidisciplinary teams for people with complex needs, including social care, mental health and other services

■ support these teams with specialist medical input and redesigned approaches to consultant services – particularly for older people and those with chronic conditions

■ create services that offer an alternative to hospital stay

■ build an infrastructure to support the model based on these components including much better ways to measure and pay for services

■ develop the capability to harness the power of the wider community.

This approach requires locality-based teams that are grouped around primary care and natural geographies, offering 24/7 services as standard, and complemented by highly flexible and responsive community and social care services.

The following sections discuss in more detail these components of an effective approach to transforming community services, which is already emerging in many places. To achieve real transformation, it seems likely that all of these elements need to be in place and working consistently; partial implementation is not sufficient to create significant change.

Transforming community services

Reducing complexity

In many places, community services have become complex and fragmented. A pattern of large numbers of small, narrowly defined and often poorly co-ordinated services (usually delivered by different providers) has arisen, making the system difficult to understand and navigate, even for professionals. This has mainly been the result of services being created for a particular purpose or client group without a clear plan for how they relate to the wider system. The fragmentation of services and tasks means that patients receive multiple visits from different professionals, incurring high costs of co-ordination, and leading to frustration for the referring clinicians, their patients and carers. Not only is this not necessarily cheaper, but it may also mean that important opportunities to notice changes in the patient's condition are missed. Care co-ordinators and navigators, single points of access and other interventions can help to deal with this, but in some cases this may just create an additional service layer without reducing complexity.

An important first step is to simplify the pattern of services, creating larger community teams with a shared set of skills that would include some staff with more specialist knowledge. These specialists are still required (for example, in areas such as tissue viability, Parkinson's disease, respiratory problems, incontinence, palliative care, etc) but may focus more on education, support, and providing input in the most difficult cases. The role of specialist teams for rehabilitation, discharge and admission prevention is considered in more detail below. Shared assessment processes are key; a single assessment that can be done by any member of the team is an important step in this simplification process.

Wrapping services around primary care

A second issue with the way many services have developed is that their connections with primary care and hospital services are too weak. Centralising the workforce may appear more efficient but can reduce the effectiveness of the whole care system by disrupting relationships and care planning.

The working group convened by The King's Fund recommended that teams of community staff should be developed around groups of practices and forge very close working relationships with them. These teams need to include both generic and specialist staff. Appropriate multidisciplinary skill-mix is essential (GPs, nurses, generic support workers, therapists, social workers), with effective delegation of tasks to the right level. For example, advanced nurse practitioners should be freed up to support patients with complex conditions, and provide appropriate supervision and training for other clinicians. The team should also include integrated care co-ordinators who can support the management of patients with long-term conditions.

The community team will need generic mental health skills due to the high level of anxiety among patients with long-term conditions (and its concomitant impact on readmissions) and the growing number of patients with dementia. In fact, it may be that this team will take on a significant amount of work currently done by specialist mental health providers. The team will also need access to more specialist support (*see* below).

In rural areas, this model could cover relatively small populations (30,000 and above). In other areas, a larger population size could be more appropriate (50,000–120,000). A key feature of the model is that there is a coherent geography and that organisational leaders promote good communication and working relationships between staff. Co-location, where possible, also seems to be desirable; where it is not possible, it is vital that opportunities are created for practice and community staff in particular

to have regular conversations, develop stronger trust, and work more effectively together. These approaches seem to work best when they cover a defined locality that is recognisable to local people. Using a community hospital or other buildings as a focus for some shared services is a useful option where these exist (for example, for diagnostics), but it is important that this does not lead to reduced contact with practice staff.

In some localities, proposals are being developed to give these teams the budget for adult social care and the support needed to commission services. Previous work by The King's Fund has demonstrated the potential for improving care by creating a single system with one budget (Thistlethwaite 2011; Timmins and Ham 2013).

Building multidisciplinary care for people with complex needs

Improving the management of long-term conditions and multi-morbidity should reduce the demand for hospital care and improve patients' quality of life. There are also opportunities for more preventive interventions to meet people's needs for social care. All this requires the co-ordinated deployment of multidisciplinary teams of experts as well as the close involvement of patients and their carers in setting goals and planning care.

Recent research by The King's Fund has found that care co-ordination programmes appear to flourish best at the neighbourhood level, where there is engagement with local communities as well as close working relationships within multidisciplinary care teams (Goodwin *et al* 2013). However, the caseloads allocated to these teams need to be manageable. Other research sets out the components of the type of case management programme that is required. These include (Ross *et al* 2011):

- case finding

- assessment

- care planning

- care co-ordination, usually undertaken by a case manager in the context of a multidisciplinary team. This can include, but is not limited to:
  - medication management
  - self-care support
  - advocacy and negotiation
  - monitoring and review.

The patients that are likely to benefit most from these programmes need to be identified, and a combination of predictive software and professional judgement seems to offer the best approach. The patterns of demand mean that a small number of patients consume a very large proportion of total resources. Tables 1–3 (*see* pp 5–6) present estimates of the consumption of health and social care by different population groups. Some elements of care are missing in some instances, but it is likely that they follow a similar pattern of use.

In the north-west London analysis, the average spend per person was 81 times higher for those in the very high risk category compared with the very low risk category. Service utilisation is substantially higher among people in the high risk categories. People in the very high risk category had, on average: seven times more emergency admissions than those in moderate risk categories; three times the length of stay; two and a half times more primary care contacts; and 22 times more contacts with the community health system (Bestsennyy *et al* 2013).

Similarly, high risk category patients receive 54 per cent of the total social care spend compared with 14 per cent of those at moderate risk. On average, people in the very

Table 1 Consumption of health and social care by different population groups: analysis for north-west London

Health risk category	Population	Acute £ per capita	Out of hospital £ per capita	Social care £	Total £ per capita	% population	% cost
Very high	4,414	7,631	3,356	13,315	24,302	0.5	11
High	38,635	951	1,327	3,175	7,453	4.7	31
Moderate	132,824	1,137	736	315	2,188	16.0	31
Low	300,273	41	358	103	502	36.3	16
Very low	352,028	3	216	82	301	42.5	11
Total	**828,174**	**378**	**420**	**310**	**1,108**		

Source: McKinsey & Co analysis for NHS North West London (unpublished)

high risk category receive 39 times more hours of social care than people in the moderate risk category. There was a strong interplay between age, long-term conditions, and mental health:

■ 64 per cent of people aged between 65 and 74 had two or more physical or mental long-term conditions, while 39 per cent had three or more.

■ age, while a significant factor, is not the only determinant for being in the high risk group: 58 per cent of people in the very high risk category were elderly, compared with 6 per cent in the moderate risk category. Seventy-four per cent of all elderly people were in the high risk categories.

■ 83 per cent of people in the very high risk category had at least one long-term condition.

■ 39 per cent of people in the very high risk category had at least one long-term mental health condition.

A slightly different approach to this analysis for Birmingham (*see* Table 2 below) shows a more skewed pattern of service use. This may be because it does not include primary care.

Table 2 Consumption of health and social care by different population groups: Birmingham

Health risk category	Patients (%)	Average spend per capita	Cost (%)
Very high	2	£53,899	26
High	6	£19,045	37
Medium	32	£3,459	33
Low	40	£302	4
No contact	20	£0	0

Source: NHS Central Midlands Commissioning Support Unit

Data from the Symphony Project in south Somerset (*see* Table 3 overleaf) include most health and social care use but do not include ambulance, district nursing, health visiting and a few other community services. This approach is interesting as it shows the impact of multi-morbidity on costs.

A locality-based service creates the opportunity to build virtual wards, care co-ordination machinery, and a range of other services either within one locality or shared between two

Table 3 Number of conditions and resource use: South Somerset Healthcare Federation

Number of conditions	Population	Average cost per capita (£)	Total (£m)	%	Primary care (£m)	Other health (£m)	Social (£m)
5 or more	2,839	7,219	20.5	17	2.5	14.3	3.7
3–4	10,170	3,299	33.4	28	5.5	22.3	5.3
2 recorded	14,056	1,655	23.3	20	4.7	15.3	3.3
1 recorded	29,447	795	23.4	20	5.6	15.1	2.7
0 recorded	58,362	293	17.1	15	4.3	10.6	2.2
Total	**114,874**	**1,026**	**117.8**		**22.6**	**77.6**	**17.2**

Source: The Symphony Project, south Somerset and the Centre for Health Economics, University of York

or more. Various models have been developed to meet local population needs, which tend to share the following characteristics (Lewis 2006):

■ case finding – using a variety of methods

■ care planning, including the family and other agencies, and incorporating escalation plans

■ patients remaining in the community and receiving multidisciplinary team care in person at the patient's home, by telephone, and/or at a local clinic

■ patients may be streamed depending on the levels of monitoring or care they require and how frequently they are reviewed

■ continuity is important; patients on a virtual ward need to be given the contact number of a ward clerk or co-ordinator, who acts as a single point of contact. Where wards do not operate 24 hours a day, a list of the virtual ward's current patients is notified to local hospitals, ambulance and out-of-hours services. Should a virtual ward patient present to a service, staff are alerted about their status on the virtual ward, and the case manager is also alerted

■ certain specialist staff (eg, tissue viability nurse) may cover several virtual wards

■ virtual ward staff share a common medical record; ideally, this is on the same system used by other services (particularly practices) or, at the very least, there is effective sharing of information

■ when a patient has been assessed by all relevant virtual ward staff, and has been cared for uneventfully for a defined period, they will revert to their state prior to the intervention.

The evidence suggests a need for caution in assuming a large impact of locality-based services on the use of hospital care but there are encouraging results in local experiments (*see* Box on Wigan's integrated teams opposite).

The working group convened by The King's Fund was clear that these models should not remove responsibility for patients from GP practices; indeed, more needs to be done to ensure that someone has oversight of every patient as they move through the system. Recent proposed changes to the GP contract reflect this need, but do not seem to outline how this can be achieved. Community services have the potential to provide this support and to provide case management and other complementary services.

As part of these approaches, the working group wanted to pay particular attention to nursing home and residential home residents who need regular ward rounds, medicines reviews, and expert advice. This requires a realignment of how GPs work: it is not possible to provide the level of oversight required where there are large numbers of

different practices looking after residents. Community services can help with this and provide support and back-up, including improving staff training in homes. There are models in which care home residents and other frail older people have their care managed by specialist services; in the United States of America, for example, some health care organisations use specialist teams and geriatricians to provide tailored and highly intensive care to this group, often with impressive results. Such models could be replicated in the United Kingdom (Milstein and Gilbertson 2009).

Combining these approaches to include housing, criminal justice and other services where there are similar 'hot spots' of activity and frequent users, also has major potential for reducing use and improving outcomes.

Wigan Integrated Neighbourhood Teams project

In April 2013, the Integrated Neighbourhood Teams (INT) project went live in Wigan. Its aim is to streamline the approach to case managing care for patients with multiple long-term conditions. The project is a collaboration between Bridgewater Community Healthcare NHS Trust, Wrightington, Wigan and Leigh NHS Foundation Trust, Wigan Council, 5 Boroughs Partnership NHS Foundation Trust, and Wigan Borough Clinical Commissioning Group (CCG). It falls under the QIPP (Quality, Innovation, Productivity and Prevention) Long-Term Conditions work stream, and aims to deliver £12 million in savings over two years through reduced hospital activity and more care being delivered in the community.

The INT project involves GPs identifying patients who have a 30 per cent or higher risk of admission to hospital. A standard operating procedure has been produced, which includes criteria to determine which patients should be retained by GPs and which should be referred on to the 16 integrated neighbourhood teams. GPs retain low-risk patients, while medium and higher-risk patients are referred on to the INTs.

Each INT has a core team consisting of representatives from GP practices, community matrons/clinical facilitators, district nurses, and social care and mental health services; it also seeks input from a range of other specialist health and social care services as and when required. By ensuring the involvement of all partners from community, primary, hospital and social care, the aim is to provide a more integrated approach to care for each patient and reduce the number of patients needing hospital care.

The project plans to identify and review up to 5,000 patients a year through risk stratification. Of these, a third will be referred on to the INTs, where a care plan is agreed and a care manager appointed. The review of patients and subsequent care plans is done collaboratively across primary care and with community, secondary and mental health services. This supports another key aspect of the project, which is to review variation in referral and complexity rates of patients from primary care.

An integrated performance dashboard has been developed in order to demonstrate the project's impact in improving quality of care and reducing secondary care activity.

In Wigan, results of the project's impact have come more quickly than research elsewhere would suggest. Around 3,900 patients have been identified as being in the high-risk cohort. Of these, approximately 2,800 patients been reviewed during the first six months of the project and now have a care plan in place. Within this group, accident and emergency (A&E) attendances have reduced by 33 per cent and unplanned admissions by 37 per cent. The challenge will be to ensure that this early success is maintained and that the admission threshold among acute providers does not fall – replacing these admissions with other patients, as has happened elsewhere.

Supporting multidisciplinary teams with specialist medical input

The development of the services described above provides a strong platform on which to build additional specialist support – particularly if practices can adopt shared ways of working and standardised approaches to common conditions. The traditional approach of simply relocating the outpatient clinic fails to recognise the changes needed in the delivery model and has generally not led to successful knowledge transfer. Changing the role of hospital specialists in chronic conditions to provide support, education, clinical governance and specialist consultation to primary and community care is a key component of the new model. These consultants and their teams tend to see patients with the most complex needs and spend much of their time providing direct support to primary care, community services, and in joint consultations and case review meetings.

Community providers – particularly specialist nurses and teams working with primary care colleagues – have the capability to develop specialist disease management services to support these changes to the role of hospital specialists.

It will still be important for geriatricians and paediatricians providing community-based services to be involved in work in the acute hospital and to participate in dealing with emergency cases.

Creating services that offer an alternative to hospital stays

There are two components to this: preventing admission, and reducing length of stay. The services that can support this share a number of features.

Relatively few admissions are identifiably inappropriate at the time of admission. However, various estimates from the literature on emergency admissions suggest that a significant proportion (between 20 and 30 per cent) could have been avoided if appropriate alternative forms of care had been available or if care had been managed better in the period leading up to the admission (Health Foundation 2013). There are a number ways of delivering this improvement, but the most important thing is ensuring that there is high-quality expert decision-making as early in the process as possible (particularly for elderly patients), and that decision-makers have easy and rapid access to alternative services and diagnostics (NCEPOD 2007, 2009).

There are two main challenges around preventing unnecessary admissions: 1) how to get an accurate assessment rapidly; and 2) how to respond with alternative services if it is determined that the patient could be cared for appropriately elsewhere. New types of community-based ambulatory medical units are emerging as one way of delivering acute assessment and rehabilitation of frail patients. We visited an example in Abingdon, Oxfordshire (*see* Box opposite).

One paradox of existing admission prevention schemes is that while they can identify many individuals for whom they can make a strong case that an admission was prevented, little or no impact is seen at a population level. One reason for this may be that the admission threshold changes and other patients are admitted instead. This is another reason why consistent senior decision-making early in the pathway is important.

There is even greater potential to reduce length of stay once patients have been admitted to hospital. It is well known that there are a significant number of patients occupying hospital beds that could be cared for in other settings, but only with certain provisos: if there was sufficient capacity in those settings; if hospital staff were aware of the services and prepared to use them; if discharge to alternative settings was available seven days a week; and if delays to assessment or funding were removed.

A community-based emergency medical unit (EMU) service in Oxford

The model developed by one of the working group members at Abingdon provides a community-based emergency medical unit (EMU) service. Key features of this model include the following.

■ Urgent assessment, including diagnostics for frail patients – typically those with infections, heart failure, etc. Availability of x-ray, point of care pathology tests and other diagnostics.

■ Patients can be referred to the EMU by a GP, a community nurse or ambulance paramedic.

■ The unit is open seven days a week from 8.00am to 8.00pm on weekdays and 10.00am to 4.00pm on weekends. It serves a population of 140,000.

■ The unit is staffed by GPs and hospital staff who work as a single team.

■ 65 per cent of patients who are assessed by the unit are able to stay in their own home and only 17 per cent need acute hospital care. A small number of beds are available for patients who need observation and care. Patients can also be brought back from the acute hospital for rehabilitation and aftercare very quickly after an acute admission.

■ Pathways and a strong gate-keeping function are seen as important to prevent the tendency to default to admission simply because a bed is available.

The unit sees more than 5,500 patients a year. Non-elective admissions for the area have fallen by almost 10 per cent in one year.

For more information see: www.phc.ox.ac.uk/news/guardian-healthcare-innovation-award-winners

In utilisation reviews of UK hospitals it is generally found that between 50 and 60 per cent of medical inpatient beds are occupied by patients who could be cared for elsewhere. The top seven alternative services required by these patients are shown in Figure 1 below.

Figure 1 Top seven alternative services required
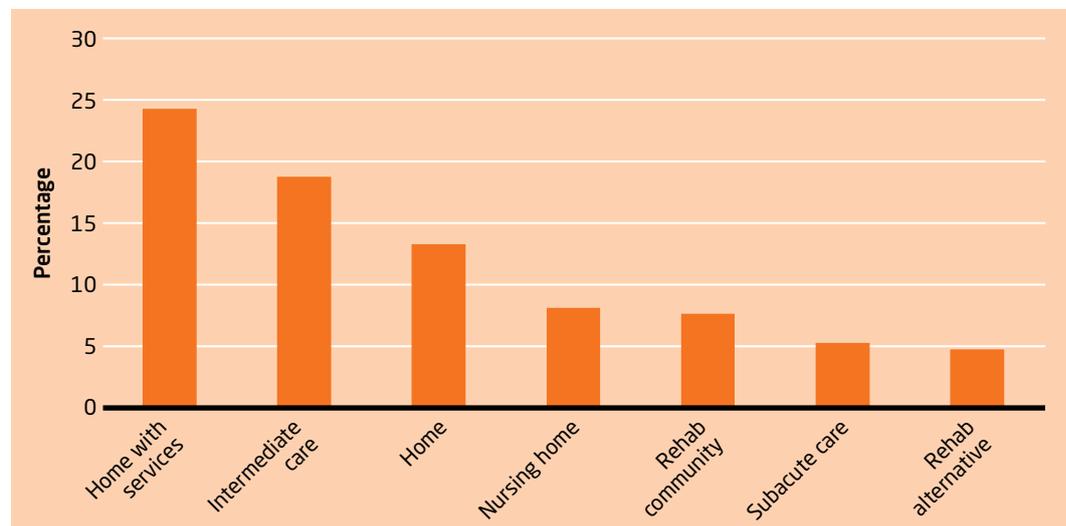
Source: The Oak Group

It is worth noting that many of the reasons why these alternatives were not taken up are the result of direct actions (or failure to act) by the hospital concerned. One implication of this is that the officially reported delayed transfers of care figures substantially underestimate the real numbers of patients waiting for step-down care.

A recent Health Foundation report analysed one trust's patient notes for 23 of the 100 patients with the longest stays. The notes revealed numerous points when the patients could have been discharged, but these opportunities were missed – probably because the services involved in discharge were unable to respond quickly enough. Due to the delay in discharge, some of these frail patients deteriorated or had further internal bed transfer (leading to information being lost, further deterioration, rework and delay). On average, patients spent four times longer in hospital than was initially estimated by geriatric medicine consultants involved in their care (Health Foundation 2013). This study indicates a common problem in both admission prevention and accelerated discharge – namely, the speed of response of alternative services.

Some organisations are experimenting with a more aggressive approach to discharging patients, which involves taking patients home once they are medically stable but not necessarily medically fit (Healthcare at Home Ltd 2013).

Greenwich (*see* Figure 2 below) has had success with a model that offers rapid response to emergencies (within two hours) as well as a proactive approach to discharge. Integrated teams based in localities are supported by specialist teams for emergency response and early discharge. These are able to call on a range of specialist services. The teams combine health and social care staff and have a high degree of multi-professional working while managing to get the right balance between using specialist skills and generic working. The model has reduced hospital admissions, bed days, and social care spend. Models such as this, and the use of the 'discharge to assess' approach, can also reduce the need for nursing home and residential care.

Figure 2 Greenwich: team-based approaches to supporting people at home

Integrated and specialist teams

Integrated teams	Specialist teams
Community Assessment and Rehabilitation Team (CARs) ■ Woolwich ■ Greenwich ■ Eltham	Social Care Occupational Therapist
	Reviewing Team
	Falls Prevention Team
	Neuro Rehabilitation Team
Joint Emergency Team – JET	Wheelchair Service
	Specialist Social Work
Hospital Integrated Discharge Team (HID)	Community Learning Disability Team
	Older People's Mental Health

Bringing all these ideas together requires a demanding set of service redesign changes, both for community providers and the wider system. These changes include the following (*see* Philp 2012 for information on the first four):

■ ensuring that hospitals operate a 'choose to admit' policy so that only those frail older people who have evidence of underlying life-threatening illness or need for surgery are admitted as an emergency to an acute bed

■ providing early access to an old age acute care specialist, ideally within the first 24 hours, to set up the right management plan

■ 'discharge to assess' as soon as the acute episode is complete, in order to plan post-acute care in the person's own home or at least a more appropriate setting than an acute hospital

■ providing comprehensive assessment and re-ablement during post-acute care to determine and reduce long-term care needs

■ operating response times that meet the needs of patients and other parts of the system, not the internal time clock of community services

■ creating in-reach services in emergency departments and to support discharge planning

■ developing a single point of access for health and social care professionals to provide signposting and to mobilise services (that is, not multiple single points)

■ ensuring that packages of care can be kept open for short periods where patients have short stays in hospital.

There also seems to be good evidence that providing access to short-term beds in nursing or residential homes (or extra care housing for patients where home care is not the best option) significantly reduces acute bed use.

In addition, there are a number of other changes needed in the wider system, which are explored in the next section.

Changing the wider system

Creating infrastructure to support the model

The model proposed here requires a number of system-wide changes, many of which have been rehearsed elsewhere in discussions about integrated care. They include the following:

■ creating systems for shared access to up-to-date patient records for all carers

■ developing registers for specific groups of patients (*see* Box below), including those with particularly complex needs and at the end of life where co-ordination seems to be particularly effective

■ simplifying and standardising assessment processes

■ using self-care initiatives, including patient education and self-management, exercise and rehabilitation, which can be effective when used with carefully targeted payment mechanisms (Purdy 2010)

■ controlling admission processes to mitigate against the risk that reductions in length of stay allow the admission threshold to fall

■ eliminating obstacles in contractual and payment arrangements – eg, block contracts, poor specification, and replicating historic commissioning patterns

■ developing new payment methods for specialists that encourage multidisciplinary working and promote the new models

■ understanding that these models may require a new type of workforce with greater ability to provide whole person care and support rather than systems that provide large numbers of different inputs from many professionals.

End-of-life care registers

Bedfordshire's Partnerships for Excellence in Palliative Support service uses a shared electronic register as a central single point of access for care co-ordination in a patient's last year of life. Multidisciplinary and organisational support is provided.

This approach has resulted in 66 per cent of deaths taking place in the person's usual place of residence, and only 10 per cent of patients dying in hospital (including a 16 per cent reduction in deaths in hospital). Patients, their carers and GPs all report satisfaction with the service.

Harnessing the power of the wider community

It seems that current methods of care and case management are not able to reach a sufficient number of people to make enough of a difference. Also, these interventions may be coming too late for many people. Greater efforts on earlier action and prevention may be required to make a substantial difference. This means that community and primary care services will need to develop very different approaches that mobilise local people and are more clearly targeted at particular communities.

An award-winning population-based approach called the Nuka system (from the Native Alaskan word meaning a strong, living and large structure) has been developed by the Southcentral Foundation in Alaska (*see* Box below) (Southcentral Foundation (no date); Graves 2013; Lindberg 2013).

There are also initiatives in the United Kingdom (*see* Boxes on Birmingham and Leeds, pp 14–15) in which community services are playing an important role in supporting change.

Southcentral Foundation's Nuka system of health care

The Alaska-based Nuka system of health care is an alternative approach to clinical practice. The Southcentral Foundation assumed the clinical responsibilities of the Indian Health Service under the Indian Self-determination Act about three decades ago. Since that time, Southcentral has redefined what it means to be in a medical clinic for a check-up or routine care.

The Nuka system is based on four principles:

■ customers drive everything

■ customers must know and trust their health care team

■ customers should face no barriers when seeking care

■ employees and supporting facilities are key to everything.

One of the main differences brought about by the Nuka system is illustrated by routine clinic appointments: these are often carried out with a team of four clinical people who sit together in an open area (there are no physicians' offices and no nurses' stations in the clinic). The team includes a primary care physician, a doctor's assistant (who administers clinical tests), a nurse (who arranges further care and provides medical instructions), and a person who helps co-ordinate future appointments and navigate through the medical centre. The team's four members take pride in their ability to work together. Physicians can use a private examination room to treat patients if needed.

If patients need to see a specialist, such as a nutritionist, psychologist, or pharmacist, these providers rotate throughout the clinic teams. Other medical specialists, such as cardiologists, are available on referral the same day, within another area of the medical centre. Clinical options also include Native Alaskan traditional healing, which is available on request and encouraged as a complement to Western medical treatment.

One of the main factors behind Nuka's success is that staff members who know each other well function optimally; they understand the importance of knowing their patients' needs and take sufficient time to do so. Southcentral's employee and patient satisfaction ratings are well above national averages.

The Nuka system has achieved some very impressive outcomes since its inception in 1982, including:

■ a 50 per cent reduction in emergency room and urgent care visits

■ a 65 per cent decrease in specialty care requirements

■ a 53 per cent reduction in hospital admissions (Ayrshirehealth, no date).

Birmingham: Healthy Villages programme

The strategy

Faced with wide disparities in health status, and growing financial and demographic pressures, local health partners in the city have come together to plan a new way forward – to make health and social care systems more proactive in their approach to wellbeing and prevention.

What's different about the programme?

Using supply chain techniques that have been modified for the public sector, with a strong focus on transformation and innovation, the programme is:

■ undertaking improvement conversations between the local authority, health care organisations, third sector organisations, corporate bodies and community groups

■ developing co-created community models of care and wellbeing in line with the city's strategic imperatives

■ uncovering the factors that drive demand for statutory services and providing the means of controlling these with community-derived interventions

■ developing system management skills in the shape of 'capability managers'

■ linking the Department for Communities and Local Government's Our Place programme (community neighbourhood pilots) with health and social care activity within communities

■ seeking to increase the return on the public sector pound by developing a 'market exchange' that connects the city's procurement strategies with the corporate social responsibility (CSR) agenda and community projects requiring investment

■ connecting the Birmingham 'Be Active' agenda with better use of green spaces (including food cultivation and availability of fresh produce), lifestyle services, and testing of a health credit to capture and incentivise healthy behaviours.

Example of a Healthy Villages project – the Complete Care Model (CCM)

The Complete Care Model uses innovative ways to connect people, places and services to promote wellbeing. It looks at the whole person needs of older adults in three key stages (below), and will test the clustering of effort and services around those phases to offer the maximum benefit for patients.

1. Prevention and early intervention.

2. Intensive home environment-based clinical interventions.

3. Crisis (hospitalisation – both community and acute).

Using published information and other sources such as social media, the capabilities of each locality are being mapped in order to identify any gaps or overlaps. This allows a stronger focus on the drivers of the future wellbeing of people in those communities.

Birmingham Community Healthcare NHS Trust is one of the key partners behind this model, which is to be tested in four localities.

The CCM is designed to shift the system bias from 'caring' to 'coping' and 'feeling well' for longer. Critically, the model will operate a 'no hand-off' policy. This means that the most vulnerable people will no longer be simply signposted to other services but will receive a co-ordinated and seamless programme of care. Linked to this is the development of a community-based Medical Assessment Unit and Care Co-ordination Centre.

Leeds: People Powered Health and Supported Self-Management

People Powered Health offers a different model of care that is more suited to an ageing population with long-term conditions, which maximises people's opportunities to remain in their own home or community. The approach puts people more in control of their health and wellbeing, overcomes service fragmentation through integrated care, and focuses more attention on resources at the community level.

The key features of People Powered Health are as follows.

- It mobilises people and recognises their assets, personal strengths and abilities as well as those of their families, friends, communities and peer networks, that all have a role to play in working alongside health care professionals and the community and voluntary sector to support patients to live well.

- It is powered by a redefined relationship – a partnership of equals between people and health care professionals – and based on relationships that are trusting and orientated to the needs of the individual.

- It takes an approach that organises care around the patient, blurring the boundaries between health, social care and the voluntary sector, and between formal and informal support.

Maximising the opportunities of People Powered Health requires whole-system change, including looking at how patients are actively engaged and empowered, how services are commissioned and led, how resources are allocated, what gets measured, and how technology can be used to support reform. Historically, health care has tended to be very hospital-centric. Although hospital care is still important, the management of patients with long-term conditions has to happen more in homes and workplaces. Taking this approach provides greater opportunities to manage the broader determinants of health and social factors such as isolation.

Developing approaches such as People Powered Health and Supported Self-Management has the potential to deliver substantial savings. Evidence indicates a reduction of around 20 per cent in A&E attendances, planned and unplanned admissions, and outpatient appointments (*see* www.nesta.org.uk/project/people-powered-health).

Leeds was one of six pilot sites across the country to work with Nesta to develop People Powered Health. The approach was part of a whole system transformational change programme and complemented ongoing work around health and social care integration and the roll-out of a locally developed risk stratification tool. Central to the project was creating a systematic approach to supported self-management (the name agreed through engagement with local people across the city), which was adopted by all participating organisations. A number of new self-care initiatives were developed (such as time banking (an exchange of skills or services based around the 'currency' of time – for each hour a participant 'deposits' through donating, eg, practical help or support, they can 'withdraw' an equivalent in support or help when they are in need), social prescribing (an expansion of the options available in a primary care consultation that gives an individual options to make choices that can add meaning, new relationships or responsibilities to their life), and e-learning for primary care) alongside a series of city-wide capacity-building initiatives that included personalised care planning, asset mapping, and Year of Care training.

Potential impact of the proposed model on admission rates

A combination of all these different approaches is likely to produce a significant impact on admission rates. Reliable estimates of the potential impacts are not easy to determine, as most studies have looked at opportunities to reduce admissions in selected sub-populations. It is very likely that these overlap with each other and it is therefore not possible to simply add the estimated impacts of different studies together. For the purpose of modelling, we have therefore assumed a wide range of potential impacts from a combination of improved disease management and admission prevention schemes. The following assumptions have been used.

- Reductions in admissions: 5–20 per cent for medicine, less for surgery.

- Reductions in extended stays: 14–40 per cent, including bed days avoided by reducing admissions.

- A range of direct and semi-variable costs can be released but the full cost per bed day may not be available in the short to medium term.

- 50 per cent of elective patients staying more than six days could be cared for in alternative settings (this obviously excludes respite admissions).

Table 4, below, gives the range of outputs for a population of 200,000. The number of patients for whom admission is prevented ranges from approximately 750 to 2,900, or between two and eight admissions per day.

Table 4 Potential impact of community approaches on number of bed days

Assume a reduction in non-elective admissions of	Low			High
Medical specialties	5%	10%	15%	20%
Surgical specialties	2%	3%	4%	5%
Assume reductions in bed days				
Medical	14%	22%	30%	42%
Surgical	11%	17%	22%	32%
Per day this reduces number of patients by:				
Medical patients	38	56	73	98
Surgical patients	16	16	27	32
Total	54	72	100	130
This requires the following alternative provision:				
Home with services	13	17	24	31
Intermediate care	9	12	17	22
Nursing/res home	4	6	6	6
Community rehab	4	4	8	8
Other sub-acute/rehab	5	7	10	13
Other misc	11	18	22	36
Home	7	7	13	13
Total	54	72	100	130
Number of acute beds saved assuming 85% occupancy	63	85	117	153

The savings available for reinvestment could be as much as £270 per day (Health Foundation 2013); this includes the full costs of care and probably significantly overstates the direct costs and semi-variable costs that can realistically be saved. A range of costs per day is shown in Table 5, below, for each of the scenarios.

Table 5 Acute savings per bed day

Assume acute sector saves the following	Savings £m			
£ per bed day	Low			High
£60	1.2	1.6	2.2	2.9
£100	1.9	2.6	3.6	4.8
£200	3.9	5.3	7.3	9.5

Source: Data supplied by Central London Community Health Trust from unpublished work by McKinsey & Co.

Even making conservative assumptions about the amount of money that could be reinvested, these are substantial numbers; they would allow many places to absorb increases in demand from the ageing population without the need for any additional investments in hospital beds. It may be less effective in allowing hospitals to close.

The costs of alternative services are generally in the lower end of the range assumed above – on top of any baseline of care that is already being provided. Home care packages from working group members appear to be equivalent to the cost of direct patient care in hospital. This suggests that these services can be provided just as cost-effectively as hospital care, but without creating a problem of stranded costs and capacity.

Incremental change or step change?

The evidence base for these types of service model is incomplete and in some cases inconclusive, but it is growing. Work by The King's Fund has already demonstrated that areas that have well-developed, integrated services for older people have lower rates of bed use. And areas with low bed use also deliver a good patient experience and have lower readmission rates (Imison *et al* 2012).

The local context and approach to implementation and design seems to have more influence on the success of community service models than is the case in more traditional hospital services. This means that models are less transferable and need more adaptation to ensure that they work. However, models such as the House of Care and case studies in previous publications by The King's Fund provide a number of generalisable design principles (Thistlethwaite 2011; Coulter *et al* 2013; Goodwin *et al* 2013; Timmins and Ham 2013).

It is becoming increasingly obvious that there need to be significant changes in the health workforce. There are issues about the shortage of community nurses and the ageing of this workforce. There is also a need for multi-skilled generic workers who can bridge the gap between health and social care and take responsibility for looking after the whole person rather than performing individual tasks.

This suggests that an incremental approach might be sensible, as it would allow experimentation and time for services to develop the most effective approach. However, there are some difficulties with this, as follows.

■ Small incremental changes do not allow hospitals to make any significant adjustment to their cost base. This means that even where community services are cheaper than the inpatient equivalent, there may be an inflationary effect as overhead and other semi-fixed costs will remain stuck in the system. This may not be a problem if there is other work that the hospital can take on (and commissioners are willing to pay for it); but this is increasingly not the case.

■ Scale is important in terms of being able to provide both the level of support and the responsiveness that is required.

A combination of different approaches is required, ranging from the incremental to large-scale and bold experiments. All of these need much better evaluation than is usually available. The recently announced Better Care Fund (formerly the Integration Transformation Fund) will help to support this, but the absence of any major funds to allow providers to restructure is a significant problem that will inhibit progress.

Conclusion

There is still much to do to realise the full potential of community services. A great deal of effort has been expended on organisational change, but there is more to do to implement appropriate service models. The Better Care Fund offers an opportunity to take a significant step forward.

The working group that produced the ideas behind this paper were very clearly of the view that community services can make a major difference to people's lives, but also have the ability to unlock change in both primary care and the acute sector. Running community services in their traditional silos is no longer appropriate; they need to be closely connected to all other parts of the health and social care system if they are to be a major driving force in improving community health. They need to be much more closely involved in key decisions about patients at an earlier stage in their journey through the system.

The changes proposed in this document are interrelated, and it is not possible to pick and mix individual components. Comprehensive change is required in the nature of services and how they relate to the rest of the system. The key components of the changes proposed by the working group are as follows.

- Simplify services and remove unnecessary complexity.

- Wrap multidisciplinary teams around groups of practices, including mental health, social care, specialist nursing and community resources.

- Use these services to build multidisciplinary care teams for patients with complex needs.

- Support these teams with new models of specialist input.

- Develop teams and services to provide support to patients as an alternative to admission or hospital stay.

- Build the information infrastructure, workforce, and ways of working and commissioning that are required to support this.

- Reach out into the wider community to improve prevention, provide support for isolated people, and create healthy communities.

All of this requires leadership and investment, and organisations finding new ways to work together. It also requires quite fundamental changes in how primary care and hospitals are configured and in how social care is commissioned.

The transformation of community services promised by previous policy was concerned with structures and ownership. Now, new models are increasingly being adopted that have significant potential to change the pattern of care. These models will have a key role to play in containing the growth in demand and the tight finances the NHS will face for the next few years. There is considerable reason for optimism, but much still to be done.

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Acknowledgements

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