Whittington Health Integrated Care Strategy

Summary

Whittington Health's integrated care strategy adopts a whole system approach to deliver high quality care to whole populations with a focus on older people and people with long term conditions. The strategy has three objectives: adding value for patients (defined as quality outcome per £ spent); supporting GPs as providers and commissioners, and improving population health.

These strategic imperatives require clinical and service integration. This means

- co-ordinating care for individual service users and carers
- supporting more integrated working with primary care by organising community services around GP practices
- working jointly with social care
- transforming communication between GPs and specialists
- collaborating with other local healthcare providers
- measuring outcomes and costs and making this information widely available, and
- providing comprehensive disease management and preventive services to our population.

It also means redefining the provider-commissioner relationship. The trust will act as GP commissioners' agent for hospital and community care, and be rewarded for excellence and innovations that increase value for patients. By providing information and support to patients and GPs, Whittington Health aims to actively support care closer to home and end cost shifting practices that erode trust between clinicians and divide commissioners and providers.

Enabling conditions include harnessing the power of information, having a flexible workforce, and developing new approaches to payment and pricing. The ultimate goal is to provide high quality patient care at a lower cost.

Whittington Health recognises that co-prosperity with our commissioners is vital for organisational survival. We therefore propose a financing model that enables GP commissioners to transfer risks to the trust by fixing contractual payments at the level of the baseline year (2011/12), in a "cap and collar" contract, for an initial period of two years. During this period, any increase in expenditure from natural activity growth or costs will be absorbed by Whittington Health, as would any savings generated. This arrangement protects GP commissioners from overspending with Whittington Health whilst giving the trust income certainty and an incentive to innovate and transform services unconstrained by prevailing payment mechanisms.

As a responsible corporate citizen, Whittington Health is committed to improve health outcomes for the populations we serve. This integrated care strategy redefines the business around individuals and populations as well as GPs, hereby contributing to a sustainable health economy.

Introduction

- Whittington Health was established on 1 April 2011 from the integration of The Whittington Hospital NHS Trust with the community health services of Islington and Haringey PCTs and Islington social services. The legal entity of the organisation remains The Whittington Hospital NHS Trust. Whittington Health was adopted as a trading name to reflect the expanded service portfolio and strategic intentions.
- 2. With a total of 4237 staff (hospital 2640, community 1597) and a budget of £273m (hospital £181m, community £92m), Whittington Health operates the 384 bed Whittington Hospital and 16 health centres across the two boroughs, as well as providing a limited range of community services in neighbouring boroughs.

The business case for Whittington Health

3. The business case for Whittington Health is predicated on achieving synergy from vertical integration. Evidence (Hamm and Curry, 2011) indicates that the benefits of the Transforming Community Services programme will be realised only if organisational integration is used to promote clinical and service integration. Quality and productivity should improve through clinicians working in a different way that reflects true integration of services. Economies of scale will strengthen the trust's long term financial plan for Foundation Trust application.

Policy context

- 4. The NHS Constitution (Department of Health, 2010) makes specific references to integrated care:
 - NHS services must reflect the needs and preferences of patients, their families and their carers
 - The NHS works across organisational boundaries and in partnership with other organisations in the interest of patients, local communities and the wider population
 - The NHS is committed to providing best value for taxpayers' money and the most cost effective, fair and sustainable use of finite resources
- 5. The NHS Future Forum report (2011) devoted a chapter (Chapter 3) to integrated care, stating that "formal structures are all too often presented as an excuse for fragmented care. The reality is that the provision of integrated services around the needs of patients occurs when the right values and behaviours are allowed to prevail and there is the will to do something different. We need to move beyond arguing for integration to making it happen, whilst exploring the barriers" (page 20).

- 6. The government's response to the NHS Future Forum report proposes amendments to the Health and Social Care Bill in line with the Forum's recommendations including
 - Requiring Monitor to support the delivery of integrated services for patients where this would improve quality of care for patients or improve efficiency
 - Creating a new duty for clinical commissioning groups to promote integrated services for patients, both within the NHS and between health, social care and other local services; and
 - Strengthening the existing duty on the NHS Commissioning Board to promote innovative ways of demonstrating how care can be made more integrated for patients: for example, by developing tariffs for integrated pathways of care, and exploring opportunities to move towards single budgets for health and social care.

Evidence base for integrated care

7. There are many different forms of integrated care. A major evidence review by The King's Fund (Curry and Ham, 2010; Ham and Curry, 2011) on the impact of integrated care recommends taking a whole system approach to integration and organising clinical services around populations, for example older people and children, with definable sets of needs. The evidence discourages disease-based integration of services that "just replace the old silos with the new silos" (Ham, 2011).

Design principles

- 8. Integrated care should be defined from the patient or service user's perspectives. National Voices (2011) published a set of principles for integrated care which describes what joined-up care might feel like from the patient's point of view. Not surprisingly, patients, service users and carers want continuity of care, smooth transitions between care settings, and services that are responsive to all their needs together.
- 9. Productivity (defined as output per unit of input) can be improved through skill mix review, team working, changing the model of care, adopting best practice and changing how staff relate to patients (Charlton et al, 2011). Integrated care can provide such opportunities, which are not only better for patients but can cost less.
- 10. The commissioner-provider relationship needs to transform from the present environment of restrictive practices to a new role enabling competition on the basis of quality and value (Porter and Teisberg, 2006). Expected impacts of transformation are shown in Figure 1.

Figure 1 Transforming the provider-commissioner relationship (adapted from Porter and Teisberg, 2006)

Present	Future	
Old role: restrictive practices in an environment of mistrust	New role: competition based on quality and value	
Restrict patient choice of providers and treatment	 Enable informed patient and clinician choice and better self care 	
Micromanage provider processes and choices	 Measure and reward providers based on results 	
Minimise the cost of each service or treatment	→ Maximise the value of care over the full care cycle	
Engage in complex paperwork and administrative transactions with providers to control costs and settle disputes	Minimise the need for administrative transactions and simplify payment	

- 11. To gather patient insight, the Department of Health commissioned a national survey of people with long term conditions with regard to their use of health care services (Ipsos Mori, 2011). The results show patients and carers want more information, specifically about their condition, about the treatment and about how to avoid the condition worsening. For the vast majority, the preferred source of information and advice about long term conditions is the GP.
- 12. The design principles lead to the following strategic and organisational imperatives:
 - Redefine the business around populations
 - Organise high volume generic community services that are essential to the delivery of primary care around GP practices
 - Integrate with social care
 - Collaborate with other local healthcare providers
 - Measure results to determine value
 - Transform information sharing with GPs and patients
 - Innovate to create new funding models and currencies

Enabling conditions

13. High quality health and care services depend on having good information. The document "Liberating the NHS: An Information Revolution" (2010) sets out proposals to improve the information available to patients to enable genuine shared decision making - "no decision about me, without me". To improve communication between patients, GPs and Whittington Health, the trust will develop a communication strategy that focuses on transparency, including, as a

- priority, a directory of services that informs patients about what is available in the community, who can access the services and when.
- 14. The information revolution aims to transform the way information is accessed, collected, analysed and used by the NHS and social services. To meet this challenge, the trust will procure a single electronic patient record for the hospital and community that interfaces with GP and social care systems to be implemented in 2013.
- 15. To deliver the strategy requires a flexible workforce. The trust has always worked closely with UCL Partners, UCL and Middlesex Universities as well as London Deanery and medical royal colleges to ensure education and training support safe, high quality care that demonstrates value for money, promotes flexibility and widens participation. We will strengthen these links. Central to this is to remain employer of choice.
- 16. New payment models and currencies are needed as the present funding mechanisms do not promote integrated care. Financial incentives must be aligned to reinforce the collective responsibility of commissioners and providers to deliver sustainable care models and to end the cycles of cost shifting that erode trust between clinicians and divide commissioners and providers.

Whittington Health integrated care model

- 17. Whittington Health defines integrated care by the patient's journey across institutions and care sectors. The focus is on delivering continuity of care, smoothing transitions between care settings, and providing services that are responsive to patients' needs at lower cost. Our mission is to provide or facilitate the delivery of high quality care that is economic, effective and efficient for all of our patients.
- 18. The evidence for integrated care indicates that benefits of organisational integration can be realised only if there are
 - Clinical and service integrations
 - Integrated care that is meaningful for population groups
 - Changing skill mix and team working, and
 - Improving use through changing the model of care, adopting best practice and changing how staff relate to patients
- 19. To facilitate integration, hospital and community services were restructured in September 2011. Services are now organised in three divisions according to population groups with definable sets of needs:
 - a) Acute medicine and integrated care cares for adult patients in five pathways: urgent care, long term conditions, rehabilitation, prison healthcare and disease prevention and health promotion. The division is integrated with Islington adult social care and operates

- out of the hospital, health centres, GP surgeries and council buildings, as well as provides care in patients' homes. The focus in the first instance will be on frail older patients with complex health needs and those with long term conditions.
- b) Women, children and families provides women's health services, sexual health services, children's services and includes population based disease prevention programmes. The division is integrated with Islington children's social services and operates out of the hospital, health centres, children's centres, GP surgeries and schools.
- c) Surgery, diagnostics and cancer provides all surgery, investigations (including imaging and laboratory tests), intensive care and community dentistry. It coordinates cancer care across the trust.
- 20. Clinical and service integrations provide both scale and scope for transforming the workforce and services. Transformation programmes starting now include
 - Improving flow in the hospital. The National Emergency Care Intensive Support Team (2011) advises that admitting patients directly to specialty care will improve outcomes for frail older patients who tend to decompensate rapidly in hospital. The reduced lengths of stay can cut bed numbers by a quarter while improving patient outcomes.
 - Remodelling how medicines are managed out of hospital. Audits show that part of the 70 percent of district nurses' time currently spent on administering medicine and related activities could be undertaken by pharmacy technicians or trained carers. Patients receiving multiple nurse visits daily for medicine will trigger a medical review.
 - Adopting best practice. The trust has been invited by NHS London to pilot the Milliman evidence based guidelines to reduce variations in care across the trust.
 - Extending the award winning "enhanced recovery" programme to all elective care patients. There is strong clinical evidence enhanced recovery accelerates recovery and optimises rehabilitation.
 - Refocusing Whittington Health as an innovative teaching institution by collaborating with UCLP, UCL and Middlesex Universities to develop integrated care education and training programmes for undergraduates and postgraduates.
- 21. The integrated care model acknowledges the GP as the patient's agent for access to NHS services. GPs account for 90 percent of all patient

interactions with the NHS and know their patients' needs best. The trust wants to support general practices, and to let GPs have the information they need, quickly and efficiently, to care for patients in primary care. This will require a step change in the way we communicate with GPs.

22. Last but not least, the integrated care strategy includes population health programmes that promote health and prevent ill health.

Proposal for new funding model

Methodology

- 23. To achieve rapid large scale change requires taking a whole population approach as this maximises opportunities from economies of scale and scope. The traditional approach of managing long term conditions as single disease pathways can be problematic due to the presence of comorbidities and there is mixed evidence on their relative contribution to value (Ham and Curry, 2011). Such an approach also risks discounting the impacts of social settings which often have a large bearing on effective care delivery. This applies especially to populations, both young and old, with complex health and care needs.
- 24. Single disease pathways are however easier to cost, and in order to develop new payment models for integrated care, providers must be able to cost each component of care pathways across hospital, community, primary care and social care that accurately reflect resource use at each stage of the patient journey. The resultant patient level costing information can then be used to price integrated care pathways that optimise best value. It will incentivise providers to improve their efficiencies to the level of the best in class and to collaborate to provide care in the most appropriate settings.
- 25. The method will involve stakeholders in a rigorous process that:
 - a) Analyses and costs the current "as is" pathway from the patient's perspective i.e. the patient's journey
 - b) designs the most effective and efficient "to be" pathway that maximises value
 - c) develops proposals for bundled tariffs (price) that reflect the revised allocation of resources as a result of new pathways
 - d) agrees pathways with commissioners
 - e) implements new pathways
 - f) audits actual cost of new pathways
- 26. It is recognised that existing pathway expenditure may be different to the current associated funding stream and that not all costs will necessarily be saved or changed when designing optimal ways of providing care. New funding mechanisms will need to consider the

- impact upon the combined commissioner provider position when setting revised tariffs so as to ensure overall financial stability.
- 27. Whittington Health undertakes to measure the actual costs of each component of care and to share this information with commissioners. How this would work in practice is shown below in relation to the journey of patients with chronic obstructive airways disease (COPD). For simplicity of illustration, the example only includes tariffs for NHS hospital and community service provision and excludes outpatient, primary care, drugs and social care costs as well as costs of treating co-morbidities.

Example: Management of a COPD patient with three hospital admissions/year for exacerbations and monitored by her GP and receiving district nursing at home.

Current "as is" pathway (estimated tariffs)

Annual cost = £13,224 (based on (3x £2,232) + (3x £2,176))

Each inpatient stay = seven days and assuming three admissions / year

(PbR: £2,232/spell wtd average)

Discharge home to community matron assuming one contact per week for 17 weeks (tariff: £2,176) before next admission plus social care support

- 28. COPD patients often experience multiple admissions to hospital. As the majority are smokers, a significant proportion will also have cardiovascular diseases. New pathway options will actively manage patients with COPD in the community to reduce exacerbations and thereby frequency of hospital admissions. The nature of the condition meant that there will be times when these patients may still require acute hospital treatment. Such admissions would then be short but intensive to enable patients to be discharged back to their own home early. Back in the community, patients can be educated and supported in self care and preventive actions such as smoking cessation.
- 29. A more community based model of care can lead to fewer outpatient appointments with patients managed by other staff groups for example community matron, or in primary care, as in the case for patient with heart failure under the new NICE guidance. Knowing how much each component of care costs will allow resources to be rebalanced into care pathways that add most value.

Future pathway options (estimated tariffs)

30. Using COPD as an example, three pathway options are shown below as alternatives to the current care model. Option 1 shows a patient being admitted for a short but intensive stay for chest infection, during which he is looked after by the specialist respiratory team and

discharged home on IV antibiotics. Upon recovery, he receives a period of pulmonary rehabilitation and ongoing support at home from his GP and community matron.

Option1 = estimated annual costs excluding outpatients = £11,790 based on £5,262(acute) and £6528 (community).

Inpatient	Acute care at	Pulmonary	Ongoing GP and
< two days	home for five days	rehabilitation	community matron
(PbR: £681)	(tariff: £390/day =	for 16 weeks	support
Assuming two	£1950/spell)	(cost to be	one contact/week
admissions/year		measured)	(tariff: £130/visit)

31. Option 2 avoided hospital admission altogether by assertive intervention of the rapid response health and social care team. A care package is co-ordinated enabling the patient to be cared for at home, with a period of re-ablement which consists of services that help people with poor health deal with their condition by learning or re-learning the skills necessary for daily living.

Option 2 = cost of total care package needs to be measured.

Admission avoided	Acute care at	Re-ablement	Self care,
due to Trust Rapid	home for five	for six weeks	supported by GP
Response service	days	(cost unknown:	and fortnightly
and better care	(tariff:	package	community
coordination	£1950/spell)	provided social	matron visit
(costs of re-provision		care)	(tariff: £130/visit)
unknown as variable			
resources used)			

32. Option 3 also avoided hospital admission by the provision of acute care at home and re-ablement services. The patient is also offered smoking cessation advice, after which she continues with self management supported by her GP. As before, the cost of care package or care cycle costs needs to be measured.

Option 3 = cost of total care package needs to be measured.

Admission avoided	Acute care	Reablement	Smoking	Self care
due to Trust Rapid	at home for	16 weeks	cessation	with GP
Response service and better care coordination	five days (tariff: as before)	(costs unknown)	support (costs to be measured)	support

33. We know prolonged hospital stays increases the risk of long term dependence, which reduces choice and quality of life (Newbronner et al, 2007). The optimum care model is dependent on four key variables:

- processes within hospital, organisation of health and care services out of hospital, capacity of community and primary care workforce, and relationship between health and social care. All of these factors affect the effectiveness and efficiency of the patient's journey.
- 34. Integrated care sets out to prevent care that is uneconomic, ineffective and inefficient. It remains unclear if health care outside hospital is cheaper (Shepperd et al, 2008; Steventon et al, 2011). We therefore need to measure the true cost of re-provision both for each care episode and care cycle costs as well as the whole-life cost of care. This will require having an integrated IT system in place that work with GPs. It will take two years to procure and implement the IT system, which is when we can move to a patient level funding system.

Incentives for change

- 35. There are significant costs in developing, testing and implementing new models of care on a large scale and at pace. The trust recognises that GP commissioners are equally financially challenged, hence is proposing a financing model that maintains the stability of all parties whilst enabling the trust to invest in change and transitional support.
- 36. Whittington Health recognises that co-prosperity with our commissioners is vital for organisational survival. We therefore propose a financing model that enables GP commissioners to transfer some risks to the trust by fixing contractual payments at the level of the baseline year (2011/12), in a "cap and collar" contract, for an initial period of two years. During this period, any increase in expenditure from natural activity growth or costs will be absorbed by Whittington Health, as would any savings generated. This arrangement protects GP commissioners from overspending with Whittington Health whilst giving the trust income certainty and an incentive to innovate and transform services unconstrained by prevailing payment mechanisms.
- 37. The trust sees opportunities to improve value by streamlining care, thereby reducing costs whilst improving patient outcomes. But change takes time, hence the request for an initial two year period of flat cash, to allow the trust to accelerate service change using savings generated to fund transitional cost. With annual inflation at 5 percent, this signifies significantly improved value for commissioners, especially as the trust will absorb the risk of over spending from natural activity growth.
- 38. It is proposed that commissioning from year three be based on real cost data generated from the revised pathways. Whittington Health will share any net gains beyond that required to maintain the required Monitor risk rating with GP commissioners 50:50. GP commissioners will be offered a range of options to use their freed up resources in ways that will improve the capacity of general practice to deliver high quality primary care.

Addressing choice and competition

39. Whittington Health is mindful that whatever arrangements are put in place must be consistent with the Principles and Rules of Cooperation and Competition (see www.ccpanel.org.uk). The proposal takes note of the Cooperation and Competition Panel (2011) report on the operation of "Any Willing Provider" and does not limit patient choice. The redesigned pathways will offer patient choice at each point where patients are currently given a choice. In addition, the trust will look to ensure that patients have more choice over aspects of care in addition to which provider is supplying the care. Patients and taxpayers benefit from improved quality and value as a result of cooperation between competing healthcare providers.

Supporting GPs

- 40. Central to Whittington Health's integrated care strategy is to organise high volume generic community services that are essential to the delivery of primary care around GP practices and to work jointly with social services to form integrated practice units. GPs tell us that they want district nurses and health visitors to be part of their primary care team. We support this philosophy and have provided all practices with a named district nurse and named health visitor.
- 41. In the spirit of transparency, the trust plans to provide all Islington and Haringey practices with their capitation allocation of district nursing and health visiting, as well as information on existing activity, so that practices could see how resources are being used for their patients.
- 42. Staff will be organised in localities to support meaningful groupings of GP practices that will be able to access health and social care teams based at larger health centres where some of the services will be provided. Optimisation of scarce community resources should allay the concerns of GPs in East Haringey and South Islington who refer predominantly to North Middlesex Hospital and UCLH respectively for acute services. Whittington Health recognises that internal trust processes may mean different integrated care pathways for different groups of practices.
- 43. Starting 1 April 2013, Whittington Health intends to provide all local general practices with a flexible package of community services that best meet the needs of individual practices. We will engage with GP commissioners during 2012/13 to work up community service packages that are responsive to practice health profiles. Practices may wish to consider their priorities for community services in the light of this approach, including using freed up resources to invest in new services in due course.

- 44. All Whittington Health staff now use the secure NHS mail for electronic communication. The usual email address for any individual is name.surname@nhs.net (but please check NHS mail address book to make sure your email reaches the right individual). Whittington Health will provide every GP in our catchment area with an up to date electronic directory of consultants and specialists with their email addresses and telephone numbers. To encourage dialogue between GPs and consultants, the trust has set a target for every email from a GP to a consultant to be responded to personally by a consultant within 2 working days. This is a complimentary service, and is in addition to the usual channels of communication.
- 45. Whittington Health will be procuring a new IT system that interfaces with GP and social care systems in 2013. The trust expects the new system to dramatically improve communication between GPs and the trust as all referrals, ordering of tests, test results, clinic and discharge letters will be conducted electronically. Ahead of the change, we are moving rapidly to 100 per cent electronic communication with GPs.
- 46. Whittington Health is aware of the increasing administrative demands being placed on GPs as providers of primary care. Beside compliance and regulatory requirements such as registration with Care Quality Commission, the chief executive of the NHS Commissioning Board has announced that the board will be publishing comparative information on practice performance. The trust has expertise in these areas and is able to offer a range of business support services that practices could take up using freed-up resources. Examples of such services include mandatory training, data validation on practice benchmarking, help with the compliance regime and occupational health.

Improving population health

- 47. As a responsible corporate citizen, Whittington Health is committed to improve health outcomes for the populations we serve. The trust signs up to the philosophy of WHO/Europe International Network of Health Promoting Hospitals and Health Services (www.hphnet.org). This means integrating health promotion into our services and changing the culture of health care towards inter-disciplinary working, transparent decision-making and with active involvement of patients and partners.
- 48. The geographical spread of the trust enables us to reach a large section of the local population, including staff and patients. The trust aspires to make every patient and service user interaction a health promoting experience. As such, all front line staff will be offered training in level one smoking cessation advice, which includes referring people who want to give up smoking to specialist stop smoking services.

- 49. The trust is committed to working with GPs to improve the uptake of disease prevention public health programmes such as immunisation and screening to achieve early diagnosis.
- 50. We intend to procure an IT system with a patient portal so that patients can access their own records, communicate with the trust and manage their appointments at times that are convenient for them.
- 51. Whittington Health provides the full range of services to encourage people to live healthy active lives. In joining forces with local councils and by flexing the community services workforce to match practice health profiles, the trust could help GP commissioners address issues around health inequalities.

Conclusions

52. Working together to improve the patient's journey should lead naturally to higher quality care at lower cost. The integrated care strategy sets out a simple solution to build a sustainable health economy whilst ensuring co-prosperity of providers and commissioners going forward.

Next Steps

- 53. Whittington Health plans to consult stakeholders on our integrated care strategy which redefines the business around individuals, populations and GPs.
- 54. The Trust will engage commissioners in dialogue about the proposed new financial model with a view to implementation in 2012/13.
- 55. The Trust plans to approach Monitor to discuss being a pilot for bundled tariffs.
- 56. To support the scale and pace of change, the trust plans to seek transitional support from NCL and NHS London.
- 57. The trust will discuss with Clinical Commissioning Groups on the best ways to engage with practices on the approach and required support.

Dr Yi Mien Koh

14 November 11

References

- 1. Charlton, R, Imison, C, & Curson, J. (2011) How to get the best outcomes when measuring productivity. *HSJ* 12 July.
- 2. Cooperation and Competition Panel. (2011). *Review of the operation of "Any Willing Provider" for the provision of routine elective care.* Final report.(dated 28 July 2011) CCP, London
- 3. Curry, N & Ham, C. (2010) *Clinical and service integration: the route to improved outcomes*. The King's Fund, London.
- Department of Health. (2010) The NHS Constitution for England (Gateway 13506) Published 8 March 2010. Department of Health, London.
- 5. Department of Health. (2010) *Liberating the NHS: an information revolution* (Gateway 13506) Published 8 March 2010. Department of Health, London.
- 6. Department of Health. (2011) *Government changes in response to the NHS Future Forum report*. (Gateway 16221) Published 20 June 2011. Department of Health, London.
- 7. Ham, C. (2011) Presentation given at the King's Fund conference Integrated-care could save the NHS if only we could agree on what it means 13 July.
- 8. Ham, C & Curry, N. (2011) *Integrated Care*. The King's Fund, London
- 9. Ipsos Mori. (2011) *Long Term Health Conditions 2011 research study*. Department of Health (Gateway 16781), London.
- National Emergency Care Support Team. (2011) Report of the ECIST diagnostic of local emergency and urgent care pathway. IMAS, NHS.
- 11. National Voices. (2011) *Principles for Integrated Care* National Voices, London.
- 12. NHS Future Forum. (2011) **Summary report on proposed changes to the NHS** published 13 June 2011 Department of Health, London.
- 13. Newbronner, E, Baxter, M, Chamberlain, R, Maddison, J, Arksey, H, Glendinning, C. (2007) *Research into the longer terms effects/impacts of re-ablement services*. University of York SPRU, Acton Shapiro and Department of Health/CSEP, London

- 14. Porter, M. & Teisberg, E. (2006) *Redefining healthcare*. Harvard Business Review Press, Boston, Mass.
- 15. Porter, M. & Teisberg, E. (2007) How physicians can change the future of healthcare. *JAMA*. 297(10): 1103-1111
- 16. Shepperd S, Doll H, Angus RM, Clarke MJ, Iliffe S, Kalra L, Ricauda NA, Wilson AD (2008) Admission avoidance hospital at home. Cochrane Database of Systematic Reviews 2008, issue 4, Art No: CD007491.
- 17. Steventon, A, Bardsley, M, Billlings, J, Georghiou, T, and Lewis, G. (2011) An evaluation of the impact of community based interventions on hospital use: a case study of eight Partnership for Older People Projects (POPP). The Nuffield Trust, London.