

South East

Clinical **senate**

Reducing avoidable hospital based care:
re-thinking out of hospital clinical pathways

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Foreword

Improving health outcomes, preventing serious illness, providing convenient, timely and cost effective care, and avoiding the unnecessary use of acute hospitals, is a shared goal across the NHS. This is requiring a radical re-think about how and where care is delivered, for both acute and long term conditions.

It is clear that the design and implementation of high quality community-focused clinical pathways now requires the full range of health and social care professionals and their organisations to work together, alongside patient and public partners. New ways of working are required that maximise the impact of available staff, facilities and resources, and creative and innovative but realistic models of care need to be implemented.

This report by the South East Clinical Senate, commissioned by the East Kent Strategy Board, is intended to guide all stakeholders, working together in their local health systems, to improve clinical pathways and develop models of care that are less dependent on acute hospitals. It has been developed and is presented as a generic resource with recommendations that should be widely applicable, and not specific to any one geographical area.

Whilst the review started by considering acute and long term conditions pathways separately, the relationship between acute and chronic disease is often so close that most recommendations are relevant to both, and are presented as such. There are of course many issues specific to acute care, and the report also provides a detailed guide to managing acute symptoms and acute conditions out of hospital where safe and appropriate to do so. It also provides detailed guidance on effective pathways for three common long term conditions: heart failure, respiratory conditions and patients living with and beyond cancer.

Providing more care out of hospital will require a concentration of resources in clinical hubs. Where a range of professions, specialties and services are co-located to augment community based care. This report describes some of the key requirements for these sites to fulfil their potential.

The remit of this review was broad and deep, and reference is made throughout to many relevant reviews and publications. This report in particular sits alongside and is intended to supplement NHS England's Urgent and Emergency Care Review and its subsequent guidance (particularly its 'Safer, Faster, Better' report), incorporates learning from previous trail-blazing initiatives, and anticipates some of the learning expected from the national Five Year Forward View vanguard sites that relate to joined up working between primary, community and hospital care.

I would like to thank wholeheartedly all the members of the two expert clinical review groups set up for this review for sharing their expertise and time, the attendees of the clinical senate summit on out of hospital acute care, and the members of the clinical senate council for their contributions to this report. Finally I would like to acknowledge Ali Parsons and Eleanor Langridge, of the clinical senate's management team, for their skill and hard work in orchestrating and delivering this complex project.



Dr Lawrence Goldberg,
South East Clinical Senate Chair

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Executive summary and key recommendations

Summary

The aim to provide more and better care out of hospital, closer to or in people's homes, and to reduce the increasing and unsustainable strain on acute hospitals, is widely supported and promoted. Yet hospitals and the community each have growing demographic, workforce and financial challenges, and now need to work together with other health and social care partners to re-design clinical pathways and models of care to meet the needs of their populations. Using the roadmaps provided by the Five Year Forward View and the wide range of vanguard pilot sites, the Urgent and Emergency Care Review, and new sustainability and transformation plan footprints, health systems are now working much more closely on this task to develop patient centred, more integrated and place based care for their populations. What is now required to make possible the necessary transformation is the development of pathways that encompass integrated health and care.

In this context, the South East Clinical Senate was asked by the East Kent Strategy Board to undertake an independent clinical review to provide advice and recommendations on how pathways could be re-designed to achieve the goal of improved acute and chronic disease management in the community, thereby moving more care out of the hospital setting. Two expert clinical review groups were assembled (one for acute care pathways, the other for long term conditions), constituted of clinicians from within the South East region together with patient and public representation. A clinical senate summit was subsequently convened to further develop and refine recommendations.

There is substantial overlap in the requirements of clinical pathways for acute and chronic diseases that seek to move care out of hospitals and in to the community, and much acute disease relates to sudden deterioration of complications of a long term condition (LTC). Therefore many of our generic recommendations are applicable to both, and are set out in section 3.

For the specific review of acute pathways, care was considered from three perspectives: acute assessment in the community, the potential for admission avoidance (for which the focus was on ambulatory care sensitive conditions), and the enhancement of earlier discharge from hospital. For all of these aspects of acute care, we concluded that the infrastructure, workforce competencies and other enablers for acute assessment, admission avoidance and earlier hospital discharge are highly inter-related, and should be considered together when planning new services.

As exemplars for the integrated, community-focused approach to disease management that can be taken, three major long term condition pathways were described in detail. These are for patients with chronic heart failure, chronic obstructive pulmonary disease, and those living with and beyond cancer.

For all pathways, patient centred care, increased self-management and shared decision making (using the House of Care approach) were seen as key, and care plans are a central component of such care. Pathways should be value based and lean, avoiding unnecessary steps, visits, investigations and procedures for patients that do not improve patient outcomes.

Extensive coordination, if not full integration, of the various services and organisations that look after patients is essential. It is the people providing care to individual patients and on specific pathways of care that need to work together rather than in isolation. This involves physical health, mental health and social care professionals working together and across organisations, without unnecessary contractual, professional or structural barriers.

The workforce for out of hospital acute and LTC care needs to be based on an assessment of the competencies required, and on a flexible and innovative approach to education, training and career development. There are a range of new and extended roles that should be

progressed, including those of pharmacists, paramedics, specialist nurses, GPs, interface geriatricians, physician assistants, allied health professionals, healthcare scientists and the unregistered workforce, and relevant post-graduate education and training programmes (such as those for 'advanced clinical practice') are increasingly available.

For patients with acute illness who are not admitted to hospital, there needs to be clarity as to which clinician is responsible for the acute care, as it cannot be assumed to be that of the GP. The patient's clinicians need to ensure seamless communication and real time transfer of relevant clinical information, with ready access to specialist advice via email, phone or other links. This should be supported by electronically stored and shared clinical information, and electronic patient records should be accessible to all relevant clinicians involved with the patient's care, if not fully integrated.

Much routine hospital follow up of patients can be avoided with innovative use of email advice services, or telephone support and such easy channels of communication should be agreed by primary and secondary care clinicians, and enabled by their respective organisations.

Significant opportunity was found for the avoidance of hospital based care and admission avoidance. This review provides detailed symptom specific and diagnosis specific guidance for community based clinical care (see tables 1 and 2). This will require detailed local work and clinical agreement on specific pathways, the identification of red flag symptoms or diagnoses that mandate hospital assessment and admission, and putting the necessary competencies, workforce, diagnostics and infrastructure in place. The development of such services in the community will have the additional benefit of enabling earlier discharge of many patients from hospital as their clinical care could be continued in ways that are currently not feasible.

Community based acute services, particularly if distant from the acute hospital, would usually benefit from the co-location of services in a clinical hub. This report provides a range of clinical recommendations for how

clinical hubs, a core component of out of hospital care, could be provided.

Clinicians now need to work together within their shared health systems to re-think and co-design new community focused pathways, in partnership with managers, patients, carers and the public, if the goal of bringing care closer to home and away from hospitals is to be fully realised.

Key recommendations

This report groups the recommendations under four headings:

1. Core elements of high quality clinical pathways
2. Guidance on assessment of acute symptoms and the management of acute conditions out of hospital
3. Three exemplars of common long term condition pathways
4. Factors that maximise the potential of community based clinical hubs

1. Core elements of high quality clinical pathways

1.1. Pathway principles

- Patient centric, addressing people's physical health, mental health and social care needs through an integrated holistic approach.
- Seamless, well signposted, and easy to navigate for patients, their families and the staff providing their care.
- The important patient outcomes (both clinical and those reported by patients) are agreed by health systems and their clinicians and their achievement measured to ensure ongoing quality improvement.
- Clinical pathways have in place strong governance mechanisms to lead and manage them, with identified and accountable clinicians responsible for each.

- Designed to deliver high value care, avoiding unnecessary visits, tests and treatments that do not add value to the patient or improve outcomes.
- Designed to ensure that patients with multiple co-morbidities have closely coordinated to avoid duplication and excessive and disconnected disease-specific consultations.
- The specific roles of specialists in out-of-hospital care are defined and agreed, to avoid unnecessary long term hospital-based follow up when this could be provided in the community by other professionals.
- Have considered in their design how to deliver all aspects of acute and chronic care in the community, other than those where there is a clear rationale for hospital based care.
- The impact on education and training of any pathway re-design is fully considered, ensuring that there is early collaboration with Health Education England and education providers.
- The voluntary and charitable sector is involved as an important additional resource to provide support and care to patients.

1.2. Prevention and early diagnosis

- Evidence based primary and secondary disease prevention is delivered consistently and appropriately.
- Enable the early diagnosis of a new chronic condition, or the early detection of deterioration or relapse of a pre-existing condition.
- For patients in care homes, staff are provided with education and training to help prevent and detect exacerbations of pre-existing disease, and the early stages of acute illness.
- Local authorities have an essential role in relation to housing, shelter provision, and accessing a range of health, wellbeing and support services, all of which impact on health outcomes.

1.3. Enhancing patients' involvement in their care

- Through shared decision making, patients, their families and carers are kept well informed and fully involved in the decisions about their investigations and treatments in ways that are understandable and accessible.
- Patients are made aware of the explicit triggers requiring an escalation of care, and who to contact in the event of clinical deterioration, without experiencing any barriers or delays.
- Develop structured education and support programmes for patients, families and carers and adopt or customise existing programmes.
- Commissioners promote patient centred holistic care in line with the House of Care and 'shared decision making' approaches.
- The voluntary sector is engaged to provide holistic support and promote self-management for patients with long term conditions and those recovering from acute illness.

1.4. Care planning

- Patients with long term conditions have personalised care and support planning, with individualised, co-authored, holistic care plans which include a named navigator/care coordinator, and named clinicians and other professionals involved with their care.
- Care plans must be regularly up-dated and readily accessible to any professional involved with the patient's care. Ways need to be developed to facilitate this and specifically ensure that IT systems are inter-operable.
- Where the patient's underlying disease(s) is progressing and their prognosis is poor, end of life care planning and DNAR decisions must be discussed and agreed whilst the patient is stable and competent, to ensure their future care is aligned with their wishes.

- Care plans with embedded joint decision making should become a process measure of best practice, and commissioned to ensure full implementation.

1.5. Integrating physical, mental and social care

- Adopt a pathway based integrated model of social and health care to ensure patient-centred, coordinated, streamlined care and services for patients.
- An integrated approach to the management of patients with acute or chronic physical illness and co-existing mental health issues is essential.
- Improve referral pathways by providing 'liaison physicians' and specialist medical clinics for mental health inpatients.
- Improve the physical wellbeing and outcomes for adults with learning disabilities through the early identification of illness.

1.6. Workforce

- Map the competencies required for patient centred, community and home based care of both acute and chronic illnesses, before determining which staff groups have the potential to meet them.
- New and extended roles are developed to meet new models of care and delivery, and to address workforce constraints.
- Expand the number of independent prescribers to broaden the roles of non-medical staff and improve patient experience.
- Increase the opportunities for joint or integrated health and social care training and education for all health professionals. Encouraging cross boundary training rotations to enhance staff recruitment and retention and increase understanding and delivery of integrated care.

- Raise public and patient awareness of the reasons for, and the potential benefits to patient outcomes, of new workforce models.

1.7. Clinical collaboration, communication, and responsibility for patients managed out of hospital

- Clinician responsibilities are clarified, agreed and embedded in to new pathways of care, whilst recognising that the patient's named GP remains the overarching clinician responsible for their care in the community.
- Upon hospital discharge there is a seamless, explicit handover, and agreement regarding ongoing clinical responsibilities, especially when there are outstanding test results, or ongoing diagnostics or monitoring tests are required.
- Specialist advice must be available within a clinically appropriate time frame to provide support for diagnostic and clinical management decision making by community based clinicians. Clinicians need to agree how this can be provided effectively and efficiently.

1.8. Follow up of patients with long term conditions, and medicines management

- A patient centred, holistic approach is adopted, taking in to account medical and mental health co-morbidities and social care needs, so as to avoid a fragmented single disease based approach wherever possible and appropriate. There is a clear rationale for ongoing clinical reviews, focussed on preventing deterioration in the patient's condition, enhancing recovery from acute illness, and managing any side effects of treatment. Alternative ways to monitor such patients safely and efficiently are actively explored.
- Patients are provided with medication support to better understand their need, assess tolerability and side effects, and to consider of alternative approaches to treatment.

1.9. Information sharing and health informatics

- Establish effective and integrated patient centred records to improve information and system interoperability whilst maintaining the required levels of data confidentiality
- Health systems must agree the minimum essential patient information that needs to be shared in order to safely and effectively manage patients.
- Patients' care plans should be available electronically, and patients should be able to access their own plan and keep a copy.
- Align plans for health informatics and information sharing with the regional and local digital roadmaps.
- Enable access to provider Wi-Fi networks and clinical information systems for all relevant professionals, to maximise the potential for real time patient-related communication and access to relevant and up to date clinical information.

1.10. Additional enablers for increasing acute care out of hospital

- Community based clinical services that enable ambulatory care as well as earlier discharge should be put in place, to include:
 - » Access to out-patient IV antibiotics seven days per week, and able to administer drugs more than once daily if required.
 - » Tissue viability and wound management.
 - » Specialist outreach for ongoing care in partnership and coordination with the GP, e.g. community geriatricians and other generalists or specialists.
 - » Specialist nursing teams, who should be closely coordinated and ideally integrated across primary and secondary care.
- Commissioners model community resources to address the complex co-morbidities and care needs

of frail patients, and map the current workforce competencies to better meet these needs.

- Integrated rapid response community services are established to help maintain patients in the home, especially for those with reduced mobility, frailty, or lack of a live-in carer.
- Rapid access to community based mental health services must be available for a wide range of presenting conditions where this is considered an important component of the acute illness.
- Staff on psychiatric wards are given training in the delivery of basic medical inpatient care, including IV fluids. The medical needs of patients on mental health wards are assessed and reviewed by physical health care staff.
- Clinicians undertaking out of hospital acute assessments must have the right training and competencies for the role, and be able to appropriately triage patients for urgent hospital transfer if indicated once a provisional diagnosis is made, taking account of the severity, acuity and complexity of the case.
- 'Red flag' symptoms, signs or results of initial investigations, that indicate the need for urgent transfer of the patient to hospital (and the avoidance of delay from community assessment), should be clearly described and accessible, including for the paramedic service.
- Paramedics are equipped with the training, skills, clinical and social care backup to maximise their potential in avoiding unnecessary transfer to hospital.
- Rapid access to imaging (plain XR, ultrasound and potentially CT), and rapid reporting if required (either by on site reporters, or via electronic image links) is an essential component of acute diagnosis, and is provided alongside the clinical assessment.
- Phlebotomy and rapid processing of samples and reporting back of results (same day or next day according to the urgency) is an essential component of acute diagnosis, and are provided alongside the clinician assessment.

- Two-week cancer referral pathways must be available to A&E and hospital doctors so that admission avoidance doesn't paradoxically delay assessment for cancer and investigations.
- The social support needs of patients and their carers must be assessed to ensure safe ongoing care if not admitted to hospital.
- An 'assessment for discharge' checklist should be developed by inpatient providers and their clinicians to identify and address the organisational and patient-specific medical and social barriers to discharge.
- Adherence to NICE guidance 'Transition between inpatient hospital settings and community or care home settings for adults with social care needs'.

2. Guidance on assessment of acute symptoms and the management of acute conditions out of hospital

When patients become acutely ill and alternatives to hospital based care are sought, there are two distinct stages of care to consider. Firstly there is the **assessment** of the patient's symptoms, where the diagnosis is not yet known. Subsequently there is the decision as to whether there are **safe and appropriate alternatives to hospital admission**, which depends on the diagnosis and the severity of the illness. In this review, we have therefore undertaken a detailed analysis of the following:

- A wide range of specific acute symptoms patients might present with, and for each provide detailed guidance on the differential diagnoses to be considered, the diagnostics required for each, and the potential for clinical assessment in a community based clinical hub, rather than in an acute hospital setting. These are presented in table 1 of this report.
- A list of 20 ambulatory care sensitive conditions, the required treatment and aftercare, and the potential for non-admitted ongoing care. These are presented in table 2 of this report.

This analysis concludes that there is significant scope to increase out of hospital care, if an appropriately skilled workforce, diagnostics, support services and infrastructure are put in place.

3. Three exemplars of common long term condition pathways

Section 5 of the main report provides a detailed review of three long term condition pathways:

- Chronic heart failure
- Chronic respiratory disease
- Patients living with and beyond cancer.

This review provides guidance on the delivery of high quality, out of hospital pathways for these conditions, taking the broad principles described in earlier sections of the report, and applying them to these specific conditions. Particular focus is on the following areas:

- Prevention, early detection and diagnosis
- Treatments and optimising ongoing care
- Patient involvement in their care, and care planning
- Role of the specialist
- Information sharing between professionals
- Pre-emptive care
- Addressing mental health needs
- Potential location of care out of hospital
- Workforce considerations
- Commissioning issues.

4. Factors that maximise the potential of community based clinical hubs

The provision of augmented community based care requires the co-location of a range of services in facilities larger than the average general practice surgery, often termed clinical hubs. The following points should be addressed when establishing such clinical hubs:

- A wide range of services for patients with acute and chronic illnesses could be provided in such hubs. Potential services are listed in table 3 of the report.
- Their size and scope will be determined by factors including catchment population, available workforce, proximity to the nearest acute hospital, currently available estate, existence of established alternative providers, and cost effectiveness.
- They should be staffed by clinicians with the appropriate skills and experience for the acute care that will be provided. Such skills should include comprehensive geriatric assessment (CGA) for patients with frailty.
- There should be direct access to specialist clinical advice, either on site (through on site sessions or outreach clinics) or via rapid response telemedicine links (telephone, video or email).
- Co-locate services provided by a wide range of health and social care professionals, to enable integrated, patient centred, efficient and holistic care.
- Ensure the training of junior doctors and other staff groups is not compromised by setting up services out of the hospital setting, by close liaison with Health Education England partners.
- Imaging studies (X-rays, CT and MRI scanning, fluoroscopy and ultrasound) require appropriately skilled radiographers on site (though only certain diagnostics or procedures would require an on-site radiologist). There must however be a facility for the electronic transmission of images to skilled radiological reporters based at the local acute trust or other sites.
- For acutely ill patients, there must be rapid access (the speed determined by clinical need) to on-site tests and reporting of results, particularly imaging and blood tests. Phlebotomy must be available throughout the hours of operation, with a turnaround time for blood test results to be locally agreed. Near patient tests should be used where available and validated to enable rapid diagnosis.
- Diagnostic testing should be proportionate and evidence based, following agreed local pathways and national guidelines.
- The use of disposable equipment (for procedures such as sigmoidoscopy, hysteroscopy and cystoscopy) helps to avoid the need for on-site sterilisation facilities.
- If the hub isn't planned to provide a 24/7 service, then pathways for patient assessment and treatment when the facility is closed should be explicitly agreed and coordinated with the other local acute providers.
- Acute health and care services in the community must have response times that enable rapid patient assessment, triage and treatment, and facilitate admission avoidance.
- Contractual barriers should be broken down, to enable staff to rotate through clinical hubs and across different sites or organisations.
- Clear protocols must be in place for acute patients who deteriorate, or who present with a level of severity above that which can safely be managed outside of the hospital setting.
- Good ambulance and transport links, and easy parking, should be provided to ensure accessibility. Urgent patient transport services must be provided for those needing rapid transfer to hospital following assessment in a hub.
- Community hubs could be co-located on the acute hospital site where travel times, facilities and the geography of the area suggest this as the best option, though this may lose the benefits of accessibility that more local off site hubs could provide.

1 Context and scope of the review

Background

Acute hospitals across England are overstretched and facing increasing demand through demographic change and the lack of adequate out of hospital alternatives, within the context of constrained finances. In addition, patients generally prefer for their care to be provided in a more local and accessible setting and to avoid unnecessary attendance at hospital, admission or prolonged inpatient care. This aim is described in the Urgent and Emergency Care Review (1):

'For those people with urgent but non-life threatening needs we must provide highly responsive, effective and personalised services outside of hospital. These services should deliver care in or as close to people's homes as possible, minimising disruption and inconvenience for patients and their families.'

Constraints and pressures within primary care are also increasingly apparent, as described in the by the Kings Fund (2), and recently addressed by NHS England's General Practice Forward View (3).

To meet these challenges, out of hospital services need to be re-designed, and across the country health and care services are now developing plans to integrate and transform how services are provided to patients. This is being undertaken within the framework of the NHS's Five Year Forward View and sustainability and transformation plans (STPs), particularly via the new integrated care models of 'multispecialty community providers' (MCPs) and 'primary and acute care systems' (PACS) (4). To support this work, NHS England's urgent and emergency care review team published their detailed guidance 'Safer, faster, better: good practice in delivering urgent and emergency care' in 2015 (5). This is a core reference for a whole system approach to urgent and emergency care for providers and commissioners.

The current national 'vanguard' programme of the new models of care will provide important learning in

the coming period, but there is a need here and now to provide practical, clinically focussed guidance for how health and social care services, in partnership with empowered and informed patients and carers, can work together and innovate to provide better and more patient centred care away from the hospital setting, both for acute and long term conditions (LTC) pathways.

Purpose and scope

With that need in mind, the South East Clinical Senate was asked by the East Kent Strategy Board (EKSB) (composed of the combined commissioners, providers and county council in East Kent) to produce such guidance through a fresh, broad and pragmatic clinically focused review, taking account of published evidence and guidance. The agreed request was for a generic review of the topic, rather than one which was specific for East Kent, which should therefore be relevant for other health and care commissioners, providers and systems around the country.

This review considered out of hospital care pathways from two perspectives: acute illness, and the care of LTCs. There is of course extensive overlap in the services, staff and issues that relate to these two sets of pathways, and many patients get acutely ill on a background of chronic disease. This should be reflected in pathway design and service planning and delivery, as there are risks of duplication, inefficiencies and wasted opportunities if acute and LTC pathways are seen as distinct and mutually exclusive. This became very apparent during the course of this review, and most of the recommendations within the two sections 'Features of high quality pathways' and 'Enablers of community based care' Pathways are therefore relevant to both acute and LTC pathways.

However, there are specific issues relating to urgent and emergency care or LTC pathways, and greater provision of such care out of hospital, that need careful and distinct consideration, and each has their own section in this report.

Community based care can be provided in a range of out of hospital settings. The pathways and settings of care reviewed by the clinical senate are summarised in Figure 1.

For out of hospital acute care three components of care were considered:

- Assessment of acutely ill patients outside of the acute hospital.
- Avoidance of unnecessary admission of patients following assessment and initial diagnosis.
- Earlier discharge from hospital by enhancing community based ongoing clinical and social care.

For LTCs, three exemplars were reviewed in detail:

- Chronic heart failure
- Chronic obstructive pulmonary disease
- Living with and beyond cancer.

Acute assessment in the community and admission avoidance pathways

When a person develops acute symptoms, there are two distinct initial stages to their care. Firstly, they need to be assessed, and an initial diagnosis and treatment plan made. Secondly, a decision must be made as to whether the patient should be admitted to hospital for ongoing care, or could remain at home with ongoing care from community based services. This distinction provided the framework for this review when considering hospital attendance and admission avoidance strategies.

The range of the most common conditions that could be assessed and managed without admission ('ambulatory care') have previously been described through two different approaches: 'ambulatory care sensitive conditions' (ACSC), and a 'directory for ambulatory emergency care for adults' (AEC). ACSCs are defined as conditions where effective community care and case

management can help prevent the need for hospital admission (6) (7).

A refined list of 19 ACSCs was adopted in the UK via the Institute for Innovation and Improvement (8), which account for around 20% of acute admissions, and provide a significant opportunity to improve both the quality and efficiency of care (9). The directory of AEC conditions was developed separately (see the Directory of Ambulatory Emergency Care for Adults (2014) (10), which also informed the Royal College of Physicians acute care toolkit (11). This current clinical senate review has combined and integrated both lists in addressing the range of symptoms and most common diagnoses potentially amenable to community based care (see section 4).

Over recent years there has been little reduction in hospitalisation rates for ACSCs, though the rates vary across the country, and are strongly associated with increasing age (see figures 2a-d) (6,7). From this data, there appears to be significant potential to further develop ambulatory care, if effective pathways and appropriate infrastructure and manpower can be put in place. Indeed, a recent thorough review of the current published evidence on alternatives to acute hospital care for older people found that for certain conditions 'hospital at home' was 'broadly safe with comparable mortality and clinical outcomes for a range of acute and chronic conditions' (though the evidence varied for specific conditions, and cost effectiveness was uncertain) (12). An international evidence review also found that care coordination, preventive health checks and care home liaison were effective in admission avoidance in frail older people (13) clearly requiring joint up working between health care and adult social care.

Discharge pathways

Hospital bed capacity is a finite resource, and under intense pressure across England from a range of factors, including increasing population size and age, increasing admissions, particularly of patients with multiple co-morbidities, and inadequate community resources to safely transfer patient care to the out of hospital setting. This is particularly true for the elderly, in whom each day of relative immobility in a hospital bed causes rapid loss of muscle mass and therefore strength and ability to cope independently. The recent National Audit Office report 'Discharging Older Patients from Hospital' has reviewed this issue in detail. They have shown that 'delayed transfers of care' (using the official definition) is responsible for 3% of total bed days, but the true number is around 2.7 times that number (14).

In addition to these 'official' delays, which relate mainly to the provision of social care arrangements in the community, there is significant potential for patients with ongoing medical and healthcare issues to receive their ongoing care in the community, as they might no longer need the range of services and care that can only be provided in an acute hospital. This was demonstrated by East Kent Hospitals who undertook an audit of their inpatients, and found many patients with a low early warning score who were not needing daily blood tests or ongoing imaging, who would in principle be suitable for out of acute hospital care, potentially freeing up many beds. The enablers to earlier discharge for ongoing medical care are therefore an important component of this review.

Figure 1. Out of hospital pathways under review, and potential care settings

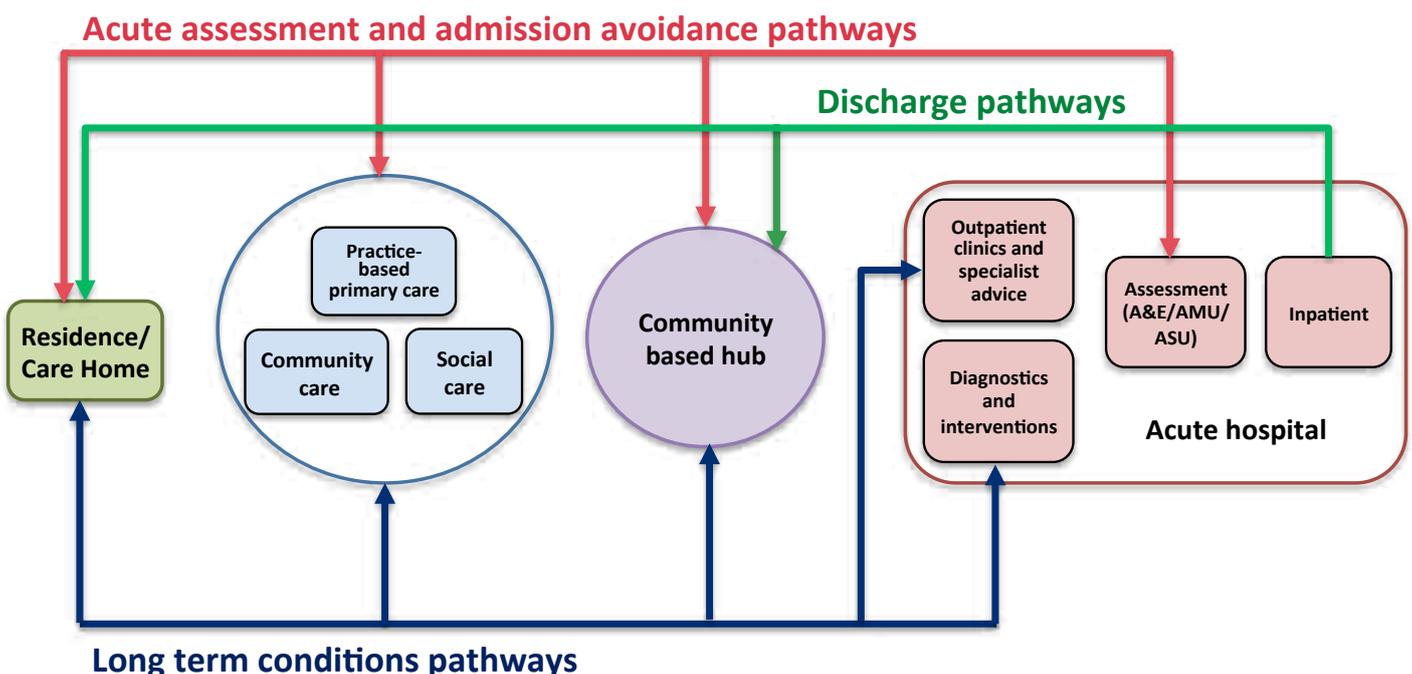


Figure 2. Variation, trends and demography of ambulatory care sensitive conditions in England (11)

Figure 2a. Unplanned hospitalisation in England for chronic ambulatory care sensitive conditions (2014-15)

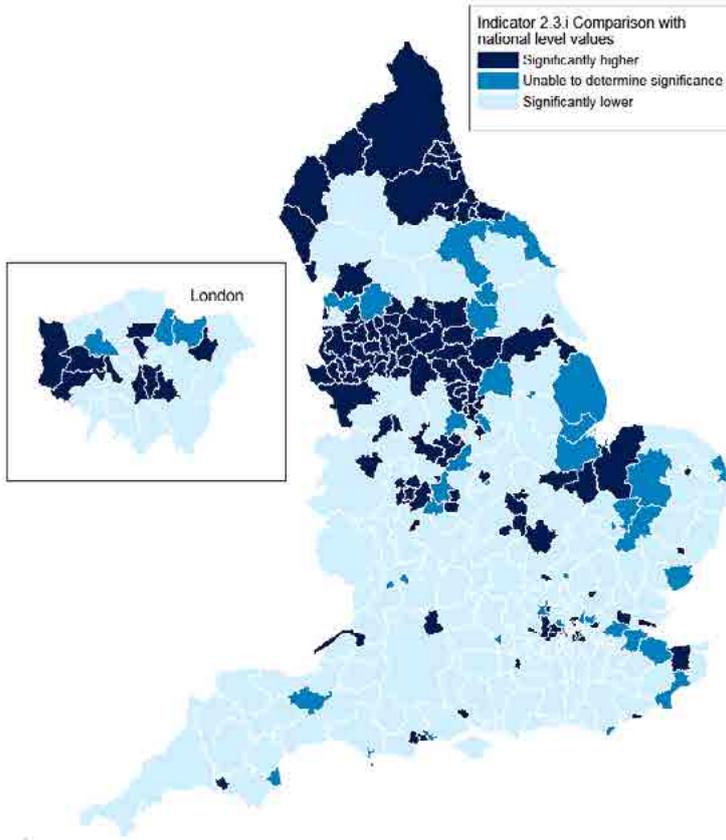


Figure 2b. Unplanned hospitalisation for chronic ambulatory care sensitive conditions, by year and gender (2005/6 - 2014/15)

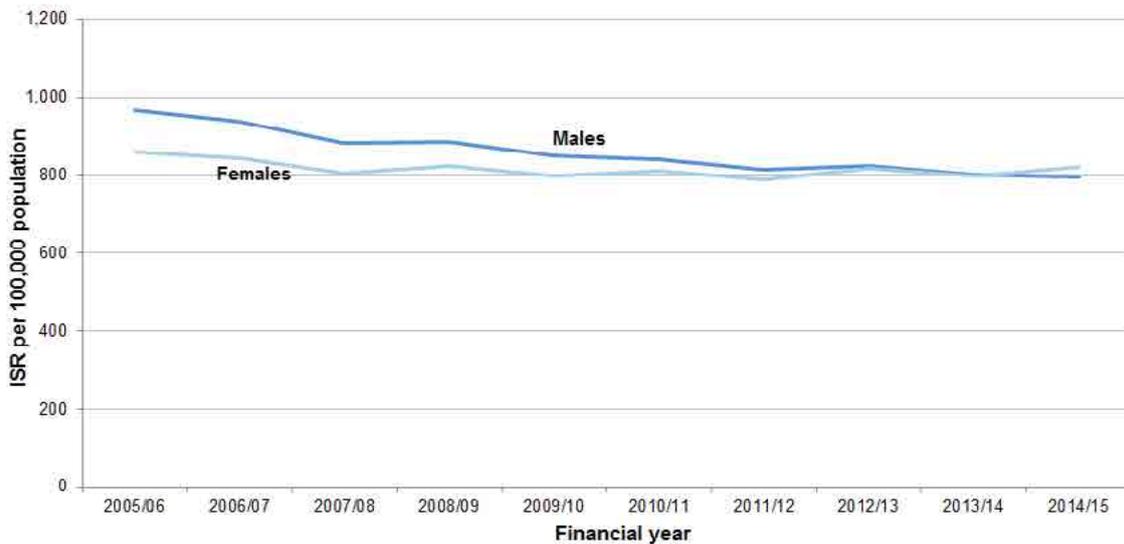


Figure 2c. Unplanned hospitalisation for chronic ambulatory care sensitive conditions by age (2014-15)

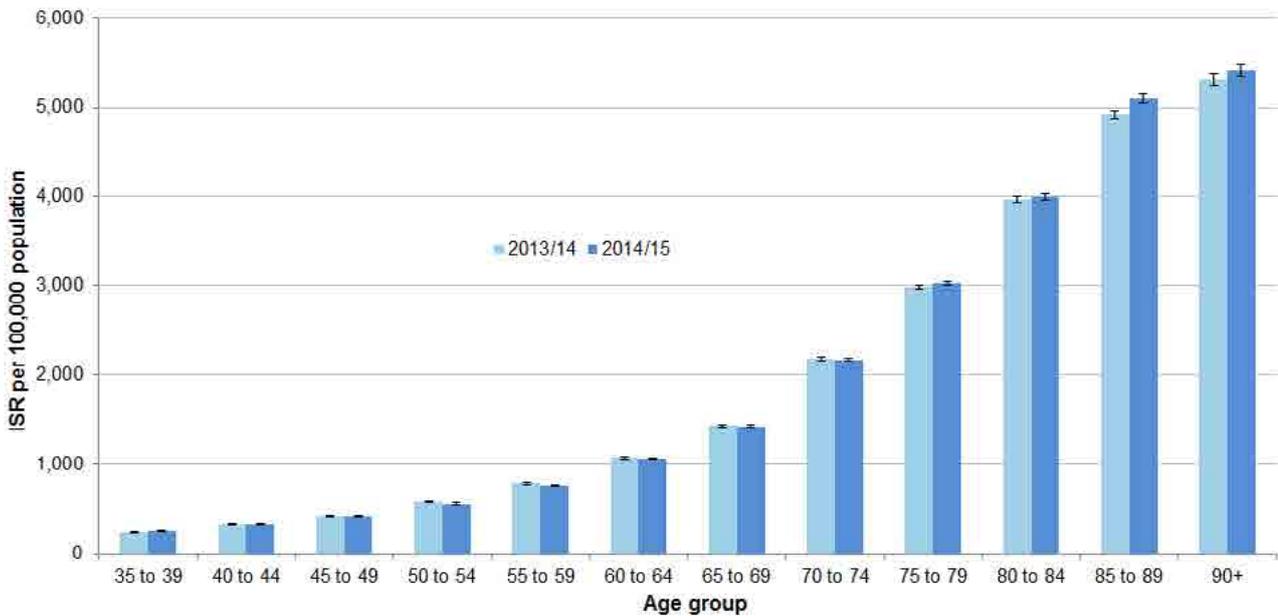
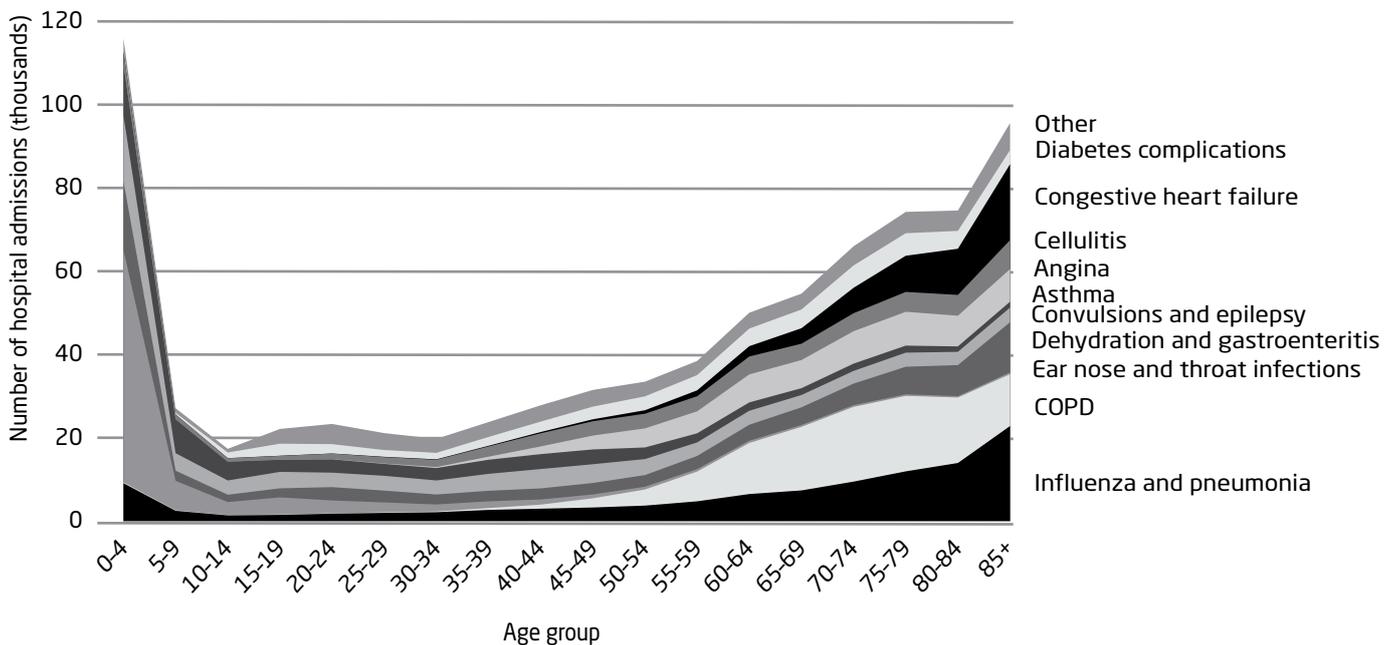


Figure 2d. Admissions for ambulatory care sensitive conditions, by age group (2009-10). (Kings Fund Data Briefing 2012)



Long term condition pathways

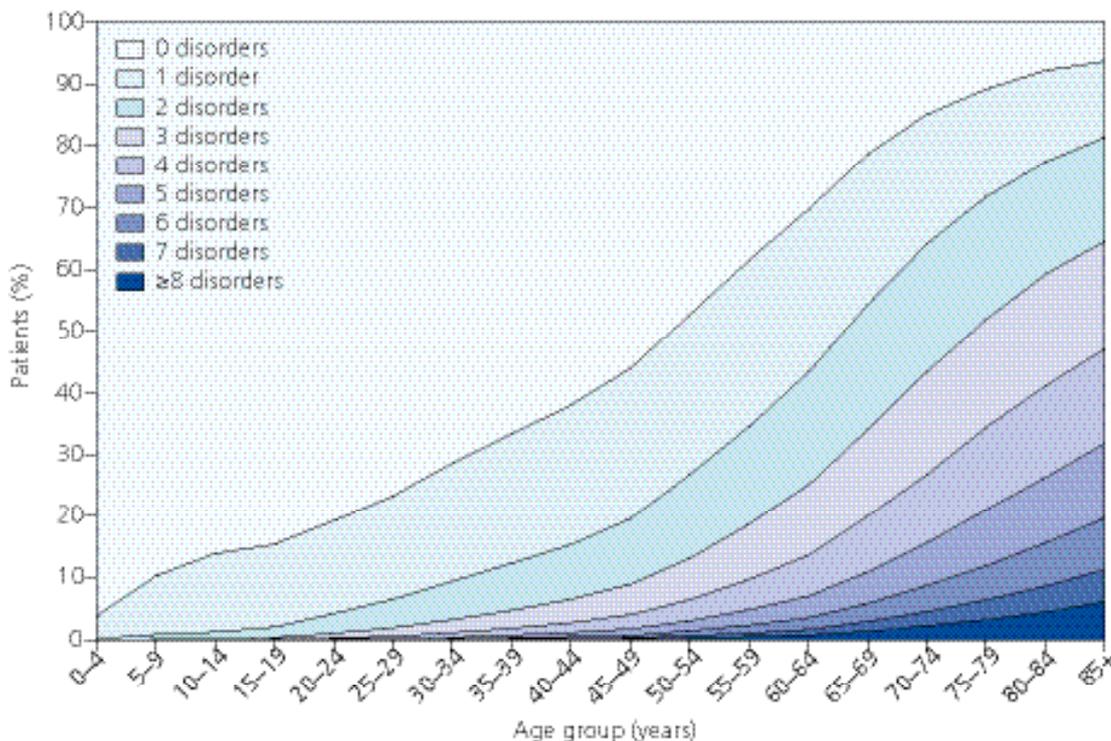
High quality care for people with long term conditions will result in less ill health and resulting demand on acute hospital services, and better quality and quantity of life. There have been numerous initiatives to reform the way chronic care is delivered since Ed Wagner's description of the chronic care model (1996-98) (15). Important UK programmes include the Department of Health's Supporting People with Long Term Conditions (2005) (16), and NHS Scotland's Long Term Conditions Collaborative report (2010) (17).

In spite of this, adoption and full implementation of best practice remains patchy and incomplete, with services failing to be patient centred, and remaining uncoordinated and often hospital and specialist focused. This has become a major challenge for health systems,

with the increasing age and co-morbidities of patients (figure 3), and the associated increasing demands on healthcare resources, including those of acute hospitals.

This review undertook to distil out, for long term conditions, recommendations on the principles that health systems and their clinicians should use in re-designing pathways of care, with a particular focus on integrated and patient centred care, delivered in the community rather than at the hospital. As described in the section 2, such recommendations were combined with those relevant to acute pathways in view of the substantial overlap. A more detailed analysis of three common chronic disease pathways: chronic heart failure, chronic obstructive pulmonary disease (COPD) and long term cancer care was undertaken to inform this review with specific pathway examples.

Figure 3: Number of chronic disorders by age-group (18)



2 Approach

The South East Clinical Senate (SECS) received the formal request from the providers and commissioners in East Kent through their EKSB, and the remit, terms of reference and project initiation document were developed and agreed. The remit was to consider the following two broad questions:

- How can community based health and care pathways be improved to reduce unnecessary acute hospital utilisation?
- What are the interdependencies of such community based services?

Hospital based care can arise either as a new unanticipated acute event, or as an exacerbation or complication of a LTC. This review therefore considered the impact and requirements of both acute and LTC pathways, and how better community based care for both could reduce hospital centred care. In addition, the current difficulties in discharging patients, particularly the elderly, when they are ready back into the community because of a lack of capacity or alternatives (14) is also a key contributor to inappropriate use of hospital resources and was therefore an important strand of this review.

The review set out to provide broad theme based recommendations, together with a specific detailed consideration of acute elements (initial clinical assessment, admission avoidance, and enhancing hospital discharge) and three LTC pathways (chronic heart failure, chronic obstructive pulmonary disease, and living with and beyond cancer). It was agreed with the EKSB that the review would be generic in nature, and not specific to East Kent. It would be of adult (≥ 18) care only, and would not review the management of patients whose primary diagnosis was one of mental health illness.

Two expert clinical review groups (ECRGs), one for acute pathways, the other for long term conditions pathways, were established by the SECS's council, specifically constituted for the purposes of this review and both convened in May. The invited membership

included individuals from a wide range of professions with relevant expertise, together with patient and public representation. A full summary of the membership of the ECRGs declarations of interests, together with the agendas for the meetings, is found in appendix A.

An interim report was produced in June to be available during the preparation of Kent and Medway's sustainability and transformation plan (ahead of the national submission date of 30.06.16). Subsequently a clinical senate summit 'Acute Care in the Community: How Do We Do It?' was held in early July, which drew together a wider range of clinical and other expertise and public and patient representatives to further consider the issues of how out of hospital acute care can be effectively delivered. A copy of the summit's agenda and attendees is in appendix A.

In the subsequent preparation of this report, it became apparent that many of the theme based recommendations for acute and LTC pathways suggested by the ECRGs and summit attendees overlap, and rather than report them separately with inevitable duplication, they are provided as a single set of recommendations.

3

Core elements of high quality clinical pathways

3.1. Pathway principles

Local clinical pathways have often evolved over years by organisations working in isolation and sometimes competition, and without a set of guiding principles. This is unlikely to lead to the fully coordinated, streamlined and patient centred care, or the best use of resources to achieve the best outcomes for patients, and the following are recommended as a guide to implementing high quality clinical pathways.

Clinical pathways should:

- Be patient centric, addressing people's physical health, mental health and social care needs through an integrated holistic approach. Self-care should be promoted, and patients and carers involved as part of the team. The House of Care approach is strongly recommended (19) as a guide to patient centred care, and pathways should be commissioned to align with this approach, and involve patients and the public in their design.
- Be seamless and well signposted, so that they are easy to navigate for patients, their families and for the staff providing their care. Continuity of care is vital for safe care, efficiency and in recognising the importance of the relationship between patients and specific professionals who are caring for them.
- Ensure that health systems and their clinicians agree the important outcomes (both clinical and those reported by patients), measure their achievement through the collection of appropriate data, and audit and feedback to all clinicians involved in the pathway to ensure ongoing quality improvement.
- Have strong governance mechanisms to lead and manage them, with identified and accountable clinicians responsible for each pathway.
- Focus on delivering high value care, avoiding unnecessary visits, tests and treatments that do not add value to the patient or improve outcomes.
- Take account of the multiple, often interacting co-morbidities that patients have, which increase the risk of clinical complications and drug interactions, and ensure close coordination between multiple caring teams, avoiding duplication and excessive and disconnected disease-specific consultations.
- Have clarity and agreement on what the specific roles of specialists, and where such specialist care could be provided other than in hospital, and avoid unnecessary long term hospital-based follow up when this could be provided in the community by other professionals (such as appropriately trained nursing staff, or GPs with a special interest, such as has been developed for much community based diabetes care now).
- Be modelled on the basis of how to provide all aspects of care of acute and chronic conditions in the community, other than those which can only be delivered within or by the acute hospital, or when there is a clear rationale for hospital based care (e.g. geographical proximity, health economics).
- Enable early diagnosis of new long term conditions and the timely identification of clinical deterioration or relapse to maximise the opportunities for proactive care.
- Anticipate the impact on education and training of any pathway re-design, and ensure that there is early collaboration with Health Education England and education providers to maintain and enhance learning opportunities that meet professional, statutory and regulatory body requirements.
- Involve the voluntary and charitable sector where possible as they are an important resource to provide support and care to patients alongside health and care professionals.

3.2. Prevention and early diagnosis

- Both primary and secondary prevention should be explicit components of clinical pathways, with a consistent approach across healthcare professionals and organisations. General evidence based measures relevant to maintaining health should be routinely promoted wherever possible and appropriate, including: the avoidance or management of obesity; exercise; smoking avoidance or cessation; avoiding alcohol excess; blood pressure and cholesterol management (determined by agreed and clear guidelines and targets); influenza and pneumococcal vaccinations for relevant groups; and measures to enhance psychological and emotional wellbeing. Public health measures, such as smoking cessation, must be integrated in to pathway design, with the direct involvement of public health professionals (whether through local authorities or Public Health England).
- The early diagnosis of new disease or the clinical deterioration or relapse of a pre-existing condition is key to high quality care and better outcomes. Early detection of a long term condition can lead to pre-emptive and pro-active measures that reduce or prevent short or long term deterioration. Population screening for early or subclinical disease should follow national public health programmes (such as NHS Healthcheck (20)), but clinicians should also have a high index of suspicion for at risk patients with symptoms, and investigate accordingly (using NICE guidance where available).
- For the proactive care of patients in care homes, staff should be provided with education and training to help prevent and detect exacerbations of pre-existing disease, and to detect the early stages of acute illness.
- Local authorities have a key role in relation to housing and shelter provision, and access to a range of health and wellbeing and support services, in maintaining stable health.

3.3. Enhancing patients' involvement in their care

- Patients (and their carer and/or family where appropriate) should be kept well informed and fully involved in the decisions about their investigations and treatments, through shared decision making (21). This is well described in the NHS Outcomes Framework programme 'Personalised care for long term conditions' (22), but is just as relevant for those with acute illness. Information about their diagnosis and treatments must be presented in a way that is understandable and accessible for the individual (19). Patients should be aware of their shared role as an equal partner in their management (something that is not often made clear to them). Not all patients however want to or are able to self-manage, particularly those who are frail or otherwise poorly, and expectations of patients in this regard need to be judged on a case by case basis.
- Patients should be made aware of the explicit triggers for escalation of care, such as new or worsening symptoms or blood or other test results. They must be clear about who and how to contact in the event of clinical deterioration, and not have inappropriate barriers and delays to such contacts and subsequent clinical review. Delay in identifying a patient's deterioration will often result in worse outcomes, and increases the chance of needing hospital based care.
- The use of structured education and support programmes for patients and carers that are already developed and in use are recommended, such as for diabetes, and others should be developed. Patient participation groups within GP practices, and joint working with volunteer support groups and charitable trusts, could be augmented.
- Patient mentoring helps patients understand their condition better and take more control over their own health and care, and care navigators could fulfil this role (23) (24).

- Carers are an important resource to help support patients with long term conditions in additional ways if appropriately engaged, supported, informed and trained, such as by an expert patients' programme to harness their expertise, and by sharing information and experience with other carers through support groups.
- Commissioners need to actively promote patient centred holistic care in line with the House of Care and 'shared decision making' approaches, and should commission general training for hospital doctors, GPs and nursing staff to enable patient led consultations.
- The voluntary sector can provide additional holistic support for patients with long term conditions and those recovering from acute illness, and help them in managing their condition. An example of this is the Stroke Association, which undertakes six month reviews in some areas, visits stroke survivors and coordinates patient focussed events.
- Care plans must be readily accessible to any professional involved with the patient's care, and might need to know the patient's wishes (particularly if they are incapacitated), and kept updated. Ways need to be developed to enable this, particularly how to develop and share an electronic version, and patients should have an up to date copy, either electronic or paper.
- Where patients are suffering progression of their underlying disease(s) and their prognosis is poor, end of life care planning and DNAR decisions should be discussed and agreed in the community whilst the patient is stable, to ensure their future care is aligned with their wishes.
- Care planning that includes advance care planning is advisable for many people but is essential for residents of care and nursing homes. These patients are at risk of fluctuating confusion and may not have the capacity to make the best decisions at times of health crisis. Residents should be regularly reviewed for any change in their status, including dementia, that impacts on their care planning. Reference should be made to the South East Clinical Senate's Advance Care Planning report 2013 (26), which provides advice and recommendations to clinicians, commissioners and the public.

3.4. Care planning

- Patients with long term conditions benefit from personalised care and support planning, and individualised care plans are a core component (25). Care plans should be holistic, patient centred and patient co-authored, and not disease-specific (recognising patients' various physical co-morbidities, and mental health and social care needs). They should have a named navigator/ care coordinator, and named clinicians and other professionals responsible for the various aspects of patient care. Their design should balance comprehensiveness with usability both for patients and professionals.
- Lay people and unregistered staff can help with care planning, not just clinicians. Carers, health care assistants and voluntary sector personnel could be trained to support patients in their care planning. For example, Age Concern has a number of projects nationally where trained volunteers have been effective.

3.5. Integrating physical, mental and social care

- Integration of social and health care would provide more patient centric care, and should streamline services for patients by reducing duplication and the number of hand-offs, enable a more efficient, coordinated and pro-active approach to care, and enhance more timely discharge from hospital. Such impacts are currently under evaluation in the

various vanguard sites and other areas developing integrated care. Recent NICE guidance 'Older people with social care needs and multiple long term conditions' (27) covers many of these issues, and should be referred to.

- Many patients with acute and chronic physical illness have co-existing mental health issues, and patient centred care should mandate an integrated approach to management. This includes enhanced support within primary care, provision of integrated multidisciplinary teams in the community, and the provision of liaison psychiatry and psychological medicine services not just within acute hospitals, but potentially within acute and chronic care settings within the community. These opportunities, and examples of where pilots have had a big impact on patient care and reduced hospital admissions, are well described in the Kings Fund report 'Bringing together physical and mental health: a new frontier for integrated care' (28), a resource which is strongly recommended.
- For patients with primary mental illness, their physical health care needs are generally inadequately served, with higher mortality rates compared with those without mental illness. Options include upskilling mental health nursing staff in aspects of physical health care, better referral pathways, providing 'liaison physicians', and providing specialist medical clinics to mental health inpatients (15)(29).
- People with learning disabilities have higher rates of physical illness and poor outcomes. Such health inequalities should be addressed through holistic and appropriately targeted measures, such as: addressing relevant social determinants of poorer health (poverty, poor housing conditions, unemployment, social disconnectedness and discrimination); the early identification of illness (e.g. ensuring participation in national screening programmes, and annual health checks); enhancing health literacy and awareness of such people and their family and carers; and enhancing healthcare workers' knowledge and skills for working with people with learning disabilities (30).

3.6. Workforce

The workforce needs to be urgently re-designed to meet the current and future needs of patients, to provide care closer to home and out of hospital, and to address the constraints of historic employment models, including the capacity and capabilities of GPs and doctors of various key specialities. This requires a parallel approach of reviewing curricula of pre-registration training schemes and new graduates, together with extended training and skills development of current staff groups, particularly non-medical staff, in order to create a current and future workforce fit for the future. The provision of more care outside of the hospital setting will require more flexibility from the professions and more working across organisational boundaries. It should also be recognised that there is significant overlap of the skills and competencies required for caring for patients with acute and with long term conditions, and therefore recommendations here consider these together.

This section should be read alongside the important Nuffield Trust report 'Reshaping the workforce to deliver the care patients need' (31), which contains many examples of innovative practice, and the General Practice Forward View (3) which describes NHS England's workforce plans to support general practice and the detailed rationale for change.

Health Education England (HEE) and its regional branches are undergoing detailed work with commissioners and schools to prepare and adapt the workforce for the future needs of patients. The Shape of Caring Review (Raising the Bar) published in March 2015 by HEE; makes recommendations to ensure that nurses and care assistants receive consistent high quality education and training to support high quality care over the next 15 years (32). HEE is also leading a range of work streams focussing on a number of professions that is developing the workforce. This includes developing paramedics and the NHS 111 service, emergency and urgent care, dementia, older people and the Shape of Training which is modernising medical education. HEE-Kent Surrey and Sussex has a 'skills development strategy' developed in partnership with providers of NHS care that incorporates

these national programmes and also includes major programmes for primary care, mental health, public health, and technology enhanced learning (33).

General recommendations

- The competencies required for patient centred, community and home based care of both acute and chronic illnesses should be mapped, before determining which staff groups have the potential to meet them. A more generically skilled workforce is required which can multi-task, with access to specialist advice and support to enable effective care for people who often have multiple pathologies.
- The requirements for specialist care for each clinical pathway should be defined and agreed, and the range of professional groups that could provide such specialist input, and where in the out of hospital setting it could be provided, should be reviewed. As the Future Hospitals Commission concludes:

“Specialist medical care will not be confined to inside the hospital walls. Medical teams will work closely with GPs and those working in social care to make sure that patients have swift access to specialist care when they need it, wherever they need it. Much specialised care will be delivered in or close to the patient’s home. Physicians and specialist medical teams will expect to spend part of their time working in the community, with a particular focus on caring for patients with long-term conditions and preventing crises (34).”

- This could be enabled by any reduction in hospital based care releasing time for clinicians to provide more outreach care in the community, if appropriate for the relevant clinical pathways.
- Care should be delivered in the home wherever feasible and safe to do so (and with the patient’s agreement), supported by appropriately trained and accessible staff with the skills to assess and keep people at home (such as clinical monitoring, medication adjustment, carer support), and with ready access to more specialist support (remotely or otherwise) where required. The voluntary sector can

help develop the required skills and competencies, with their extensive experience of community based patient support (e.g. Macmillan Cancer Support, British Heart Foundation, Stroke Association).

- A review of tasks that do not add value to patient care (such as unnecessary or duplicative form filling) for nursing and other staff working in the community should be undertaken, to increase the patient facing clinical time available to deliver care within the resources available.
- Ways should be developed to better integrate social and health care training across traditional boundaries. This could include a generic role working across health and social care at a low band level, and may be appropriate for staff working in care and nursing homes. The benefits of nursing staff acquiring basic skills in social care assessment and of social care staff acquiring basic healthcare skills, should be explored. Training rotations that work across boundaries could enhance recruitment and retention, and increase understanding and delivery of integrated care. The range of professionals trained to undertake social prescribing should be increased, as an important way of enhancing wellbeing (35) (36).
- The number of staff able to prescribe independently should be expanded to broaden the roles of non-medical staff and to help reduce the need for additional and avoidable GP visits.
- The confidence of patients and the public that new workforce models will deliver care by appropriately trained staff must be maintained. Education and public relations will be important in this regard, informed by the evaluation of new roles and care models, and how they impact on patient outcomes.

New and extended roles

- More **GPs** could develop special interests in both acute and long term condition care, to ensure the required specialist skills are available in the

community, and to minimise the need for outreach of hospital clinicians. This of course needs to take account of the challenges of the current GP workforce, but there may be opportunities for some GPs to sub-specialise in urgent care.

- **Interface geriatricians** can work across the acute, primary and community care sectors, providing the required expertise and specialist support to patients and community-based clinicians for elderly patients to avoid unnecessary admissions and provide a more streamlined and effective hospital pathway. They can support community based integrated health and social care multi-disciplinary teams, provide home visits, provide specialist phone advice to GPs and others, support patients in intermediate care beds, and within the hospital provide comprehensive geriatric assessment in A&E which care often help avoid admission. This role has been pioneered in Leeds (37), and is described within a coherent and comprehensive review of future models of geriatrics.
- **Nurses** make up the largest group of healthcare professionals with the potential to work more in the community. Few currently opt to do so directly after qualifying, often due to a lack of direct access to supervision, and they should be incentivised, enabled and trained with the relevant skills. There may be a role to use an ‘apprentice levy’ in this regard. Later in their careers many nurses do move from the acute hospital to the community or primary care setting, but they need the appropriate educational support for the transition. New or extended nursing roles that could be developed include:
 - » Expansion of specialist and advance practitioner roles for band 7 and 8s (and reducing their team leader roles) to support senior and experienced clinicians to deliver front line care.
 - » Band 4 associate practitioner roles where staff have had foundation degree level training or equivalent and can undertake a range of skills with the oversight and agreement of a registered practitioner.
- **Specialist nurses** should be joint appointments across primary and secondary care. Community and hospital specialist nursing teams should work in a highly coordinated if not fully integrated way (ideally joint community/acute posts), with clear lines of accountability and support. The Buurtzorg model of community nursing (pioneered in Holland), in which the nurses have a wide range of competencies, and work semi-autonomously, should be reviewed for its potential in the NHS (38).
- **Community pharmacists** have untapped potential, are based in facilities close to where patients live, are able to advise on a wide range of treatments for acute and chronic conditions, and assess symptoms which might otherwise require a GP appointment (39). There are a wide range of pilots testing how pharmacists can extend their role and contribution to health care, such as within the current NHS England vanguard sites (40). Activities include having pharmacists in urgent care centres, doing home or nursing home visits, managing medicines for patients with multiple morbidities and minimising the adverse effects of polypharmacy, placing trainee community pharmacists within GP surgeries (developed within KSS), and advising patients who would otherwise need to see their GP.
- **Paramedic practitioners.** Paramedics are by nature skilled at acute assessment and ambulatory care, are respected and trusted for delivering acute care, and working within and with the support of a local multi-disciplinary team can undertake extended roles. This is being pioneered as a ‘community paramedic’ team in the Encompass (previously Whitstable) vanguard site in East Kent, where paramedics undertake selected urgent home visits instead of GPs (such as for falls), can perform on site assessments (e.g. ECGs), and enhance the potential for patients remaining at home (41). A further example is the team working within the clinical assessment unit at Crawley Hospital (42). In Eastbourne, several GP practices use paramedics as front line staff. To undertake the home assessment of frail patients in particular, a close relationship with the primary care and community care based

clinicians and social care professionals is essential to maximise their potential and for delivering safe and appropriate care.

- **Physician associates** have the potential to work in community based roles, but the curriculum needs to include skills appropriate to community based care, and they should not be assumed to be purely hospital based. They are 'dependent practitioners' who 'work within their sphere of competence' (Royal College of Physicians (RCP)) and the profession now has a faculty within the RCP (43). They are trained to perform a number of duties, including taking medical histories, performing examinations, diagnosing illnesses, analysing test results, and developing management plans under the supervision of a doctor. They should receive independent prescribing training to maximise their function.
- **Advanced clinical practitioner** training and qualifications offer a significant opportunity to develop the roles of nurses, paramedics, physiotherapists and others, including independent prescribing.
- **Allied health professionals and health care scientists** are staffing groups who could review the common generic skills and consider how best these could be aligned to minimise unnecessary duplication and maximise the value of their interactions with patients. AHPs are a workforce familiar with working across organisational boundaries and in primary; secondary; community care as well as within physical, mental and social care. There are opportunities to use this workforce in extended roles (e.g. advanced clinical practitioner roles). An example is that of the Sussex musculo-skeletal (MSK) pathway where extended scope physiotherapists are the first point of contact and triage patients to the most appropriate care pathway. Healthcare scientists have the potential to offer point of care testing and offer other physiological screening tests such as echocardiograms and neurological tests in community or primary care settings.
- The **support workforce** (e.g. health care assistants and care home workers) often know their patients well but are also under-utilised for healthcare delivery and do not always have access to education opportunities. These staff should be looked at for how they could be trained to contribute more actively to patient care and navigation. They are being increasingly utilised in primary care doing jobs previously undertaken by nurses.

3.7. Clinical collaboration, communication, and responsibility for patients managed out of hospital

- The default clinician responsible for patient care is the GP when in the community, and a designated consultant when in hospital. If there is to be more out of hospital acute care delivered by alternative clinicians (e.g. community geriatricians, GPSs, liaison psychiatry, paramedics, pharmacists), then the clinician responsible for that episode of care may be unclear, with risks to patient safety and continuity of care. Clinical responsibilities should be agreed and built in to new pathways of acute care, but recognising that the patient's named GP remains the overarching clinician responsible for their care in the community. Examples of community-located care needing clear lines of clinical accountability include:
 - » Patients with an acute condition needing close monitoring and re-assessment.
 - » Patients discharged from hospital with ongoing acute care needs, such as awaiting further diagnostics or test results.
 - » Following acute paramedic assessment in the patient's home without admission.
 - » Patients receiving outpatient intravenous antibiotic therapy.
 - » Heart failure and COPD and end of life care specialist nurse-led services.
- A methodology for attributing accountability and responsibility should be used across pathways. One

example is the 'responsibility and assignment matrix' (RACI) model (44).

- At the time of hospital discharge there should be a seamless and explicit handover of responsibility, and agreement of what aspects of care remains the responsibility of the discharging or other specialist team, and which of the GP or other community based clinician. This is particularly important if there are outstanding diagnostic or monitoring tests to undertake, or if results of tests already done are awaited.
- Specialist advice must be available within a clinically appropriate time frame to provide support for diagnostic and clinical management decision making by community based clinicians, and clinicians need to agree how this can be provided effectively and efficiently, and design their clinical pathways accordingly. For acute patients, advice can be provided by telephone hot lines or video links, and by the electronic transmission of diagnostic and clinical information, e.g. patient assessments, ECGs for review, imaging tests and results.
- For less acute or chronic disease patients direct email communication between GPs and specialist teams and easy telephone access for advice should be set up if not already in place. The majority of patients with stable or only slowly progressive disease should not need formal specialist review with a well developed and implemented pathway, supplemented by remote advice as required. There is no generally agreed funding mechanism to provide such remote advice, and the loss to trusts of income associated with outpatient or acute attendances can be a disincentive to new ways of working. Ways for hospital specialists to provide advice to community based clinicians should be commissioned. This might include agreeing local tariffs or payments to hospitals for the medical time required for such remote consultations and provision of advice that is not already part of standard practice.

3.8. Follow up of patients with long term conditions, and medicines management

- The long term management of patients should be patient centred and holistic, taking in to account medical and mental health co-morbidities and social care needs. There are many potential interactions between the patient's different conditions, symptoms and treatments which should not be assessed by a single disease based approach. In particular the risks of polypharmacy, drug interactions and associated adverse events are well known, and many are avoidable with a whole patient approach.
- There should be a clear rationale when planning a patient's ongoing reviews, focussed on preventing short or long term deterioration in the patient's condition, enhancing recovery from acute illness, and managing any side effects of treatment. Alternative ways to monitor such patients should be actively explored, such as patient/carer triggers, flagging of abnormal blood tests and telephone follow up. Risk stratification can be used to guide patient review strategies.
- For those considered to genuinely need planned follow up and monitoring, commissioners and providers should ensure there is sufficient capacity that avoids clinically inappropriate delays.
- Rigorous and ongoing medicines management is essential, particularly for people with multiple conditions, in order to prevent avoidable illness and even hospital admission from side effects and drug interactions. Patients should be provided with support with their medications (through review by pharmacists, GPs or appropriately trained nurses), particularly with regard to their necessity, tolerability and side effects, and consideration of alternatives. There is significant scope for pharmacists to extend their role here, as well as nursing and other staff with independent prescribing qualifications. Patients and carers themselves have a role to play with appropriate training and advice.

3.9. Information sharing and health informatics

- Real time access for health and care staff to all relevant clinical and social care information about individual patients is key to effective, efficient and safe care. Whilst a single integrated electronic patient record (EPR) is almost universally agreed as the key enabler for highly functioning integrated patient pathways, a fully integrated EPR is still some way off, so other ways must be found to share information electronically across the range of professionals and organisations caring for patients, through shared access and inter-operability of systems, whilst maintaining the required levels of data confidentiality.
- Health systems should agree the minimum essential patient information that needs to be shared in order to safely and effectively manage patients. This should include previous medical history, medications, allergies, care plans (including any advance care plan), care needs, correspondence between professionals, recent diagnostics results, and recent clinical events.
- Clinicians caring for patients who are acutely ill should be able to access the patient's GP record (even if read only) from any site, together with laboratory and imaging results. Current examples within the South East include the A&E department of Royal Surrey County Hospital where clinicians can access EMIS GP records directly, and the use of the IBIS system by ambulance staff in the South East to access patients' care plans.
- With the increasing use of electronic transfer of patient information between primary and secondary care attention should be focussed on the quality of the data flow. Standardising templates ensures that minimum data sets are provided, and key information, requests or changes in patient management are not missed.
- The benefits of sharing electronically patient-specific information between health and care professionals should be made clear to patients when patient consent is required. Patients expect sharing of information between their professionals, but may not realise they can unlock it by expressing permission.
- Patients' care plans should be available electronically to staff involved with their care. Patients should also be able to access their own plan, and could keep a copy on an approved storage device. Alternatively, they should have a paper copy, but if so these must be kept updated.
- Assistive technologies and telehealth (such as wearable sensors, web-based communication with healthcare professionals, results monitoring) have significant potential to support self-care and remote care, and are under ongoing evaluation (45) (46). There is also an increasing array of smartphone and computer applications that can support self-care. For example kidney patients can look up and monitor their own blood results, and with appropriate education, know when to seek advice (PatientView (47)). Electronic monitoring of pill taking by patients is also feasible (with their agreement) to review and address concordance issues with prescribed treatments. Note that all devices employed for medical use must be approved by the Medicines and Healthcare Products Regulatory Agency.
- Plans for health informatics and information sharing should be aligned with the regional and local 'digital roadmaps' (which includes the national priority of replacing paper based systems as soon as possible). Note should be taken of NHS Digital's GP Systems of Choice (GPSoC), which provides a contractual framework to supply systems/services to GP practices and associated organisations in England (48).
- Provider Wi-Fi networks and clinical information systems should be accessible to relevant professionals from other providers, to maximise the potential for real time patient-related communication and access to relevant and up to date clinical information. IT departments should minimise barriers to such access.

- Much of the workforce now, particularly the younger, are very competent with information technology, and would be ready adopters of effective healthcare informatics, apps and novel means of communicating. This potential must be utilised, and they should be involved in considering the health informatics strategy and tools that could be introduced in their clinical areas and pathways. All new health technologies must however be approved by the government's regulatory body.

3.10. Additional enablers for increasing acute care out of hospital

The management of acute patients out of hospital should take account of the key elements of high quality clinical pathways described above (3.1 – 3.9). There are in addition considerations and recommendations specific to acute care, which is presented below.

Although frailty adds layers of complexity to acute out of hospital pathways, it was not addressed as a distinct acute condition in this report, but it is recognised that it will often require a modified approach to management.

In addition, whilst recognising the importance of the 999 and NHS 111 initial referral routes for emergency and unscheduled care, the specific competencies, referral processes and systems associated with these services (crucial to a well performing acute care system) were not detailed in this report. NHS England's 'Commissioning standards: integrated urgent care' provides an essential and comprehensive overview of how these services should be integrated with other related urgent care services, such as GP out of hours, and clinical hub and assessment services (51).

- Integrated rapid response community services should be established to help maintain patients in the home, especially if they have reduced mobility, frailty, or lack of a live-in carer. Such a service would include allied health professionals, social care, nursing, and potential the voluntary sector as required, and would include ant support available from the patient's family and carers.
- Rapid access to community based mental health services must be available for a wide range of presenting conditions where this is considered an important component of the acute illness.
- To enable patients with an acute mental health problem needing inpatient psychiatric care, but who also have a physical illness, to avoid unnecessary admission to an acute medical bed, staff on psychiatric wards should be given training in the delivery of basic medical inpatient care, including IV fluids. This should be supported more generally by a review of the medical needs of patients on mental health wards by physical health care staff and how they can be met (29).
- For patients with frailty in addition to (or as a result of) an acute illness commissioners should model community resources to address the complex co-morbidities and care needs that these patients present with, and map the current workforce to these needs. There is often insufficient community and intermediate care provision, which if addressed could make a big impact on preventing admission or enabling earlier discharge (52) (53) (54). Reference should also be made to the Acute Frailty Network, a national initiative established in 2015 to optimise the acute care of frail elderly people in England using evidence based guiding principles, and a collaborative improvement model involving local health and social care systems supported by national improvement expertise (55).
- Services that should be provided out of hospital to enable ambulatory care as well as earlier discharge include:
 - » Access to out-patient IV antibiotics seven days per week, and able to administer drugs more than once daily if required.
 - » Tissue viability and wound management.
 - » Specialist outreach for ongoing care in partnership and coordination with the GP, e.g. community geriatricians and other generalists or specialists, providing important benefits for the ongoing care of complex patients.

- » Specialist nursing teams, who should be closely coordinated and ideally integrated across primary and secondary care.

Assessment-specific

- Clinicians undertaking out of hospital acute assessments must have the right training and competencies for the role, and be able to appropriately triage patients for urgent hospital transfer if indicated, taking account of the severity, acuity and complexity of the case.
- 'Red flag' symptoms, signs or results of initial investigations, that indicate the need for urgent transfer of the patient to hospital (and the avoidance of delay from community assessment), should be clearly described and accessible, including for the paramedic service.
- Paramedics should be equipped with the training, skills and clinical and social care backup to maximise their potential in avoiding unnecessary acute transfer to hospital.
- Rapid access to imaging (plain XR, ultrasound and potentially CT), and rapid reporting if required (either by on site reporters, or via electronic image links) is an essential component of acute diagnosis, and should be provided alongside the clinician assessment.
- Phlebotomy and rapid processing of samples and reporting back of results (same day or next day according to the urgency) is an essential component of acute diagnosis, and should be provided alongside the clinician assessment.

Admission avoidance-specific

- Most acute diagnoses should have a pathway agreed between primary and secondary (and community and social care where relevant, such as for patients with frailty) that everyone involved works to. Again, red flag symptoms, signs or results of initial investigations that indicate the need

for urgent transfer to hospital should be clearly described and followed.

- Continuity of care is vital. Patients who are ill but not referred to hospital must not be lost in the system without clarity about who is responsible for the ongoing care of the acute episode.
- A service should be in place to administer intravenous antibiotics out of hospital (such as Outpatient parenteral antimicrobial therapy (OPAT) teams or skilled up community nurses). This should be adequately staffed, and available 7/7, and to maximise its potential be able to administer antibiotics twice (or even three times) daily.
- Two-week cancer referral pathways must be available to A&E and hospital doctors so that admission avoidance doesn't paradoxically delay assessment for cancer and investigations.
- The social support needs of patients and their carers must be assessed to ensure safe ongoing care if not admitted to hospital. These assessments may need repeating as circumstances change.

Discharge-specific

- To enable patients to be discharged as soon as they no longer need inpatient care, the medical and social barriers to discharge should be explicit, and it is recommended that an 'assessment for discharge' checklist should be developed by organisations and their clinicians to consider the general and patient-specific medical and social barriers to discharge. Medical questions to answer would include items such as those below (to which a range of issues relating to any required social support would be added):
 - » If the patient is awaiting tests or results, can these not be carried out or delivered as an outpatient?
 - » Can the patient's ongoing clinical needs be met out of hospital (e.g. IV antibiotics, daily monitoring and re-assessment, wound care)?

- » Will the medical condition likely worsen or result in a worse outcome if care continues in the community? If so, what measures could be put in place to facilitate safe and appropriate discharge?
- Reference should be made to NICE guidance 'Transition between inpatient hospital settings and community or care home settings for adults with social care needs', which provides important broad recommendations relating to the health and social care planning of hospital discharge (56).
- Confidence, experience, and knowledge of the available community services is required by hospital clinicians to make an appropriate discharge decision. Information and education may be required for consultants, junior doctors and ward nursing staff so they are fully aware of the options, supported by discharge coordinators.
- There should be a seamless handover of responsibility to the patient's GP, and agreement of what aspects of care remains the responsibility of the discharging or other specialist team (and see the section 'Clinical collaboration and communication, and clinician responsibilities, for patients managed out of hospital'). This is particularly important if there are outstanding diagnostic or monitoring tests to undertake, or key results of tests already done that are awaited.
- Well planned and integrated discharge planning and care are essential, taking account of primary, community, social, mental health and specialist care needs, particularly those with frailty. Various innovative models to enable discharge are available. These include the 'Discharge to Assess model (see for example the Warwickshire experience (57) and that of Sheffield (58)), 'Early Supported Discharge' (59), the provision of discharge in reach teams, and the Swedish 'Esther' model, which aims to establish what matters most to the patient, and includes a shared care plan with an integrated crisis plan (60).
- A navigator role could be provided for selected patients at the point of hospital discharge who would take responsibility for ensuring liaison with the relevant clinicians. This role could be provided by specialist nurses (as is being piloted in Bath).

4

Guidance on assessment of acute symptoms and the management of acute conditions out of hospital

When patients become acutely ill and alternatives to hospital based care are sought, there are two distinct stages of care to consider. Firstly, there is the **assessment** of the patient's symptoms, where the diagnosis is not yet known. Subsequently there is the decision as to whether there are safe and appropriate **alternatives to hospital admission**, which depends on the diagnosis and the severity of the illness. In this review, we have undertaken a detailed analysis of the following, presented in two tables:

- Table 1: A wide range of specific acute symptoms patients might present with, and for each provide detailed guidance on the differential diagnoses to be considered, the diagnostics required for each, and the potential for clinical assessment in a community based clinical hub. A colour code indicates the potential for out of hospital assessment:
 - » Green – generally feasible
 - » Amber – possible with additional safeguards
 - » Red - not appropriate
- Table 2: A list of 20 ambulatory care sensitive conditions, the required treatment and aftercare, and the potential for non-admitted ongoing care. For this phase of the work, a list of diagnoses that might be amenable to ambulatory (non-admitted) care was pooled from the Directory of Ambulatory Emergency Care and the ACSC list. The main clinical focus for this stage of our work relates to ambulatory urgent and emergency care (AEC). The Royal College of Physicians' Acute Care Toolkit (11) defines AEC as 'Clinical care which may include diagnosis, observation, treatment and rehabilitation, not provided within the traditional hospital bed base or within the traditional outpatient services and that can be provided across the primary/secondary care interface. Where there are current NICE, College or specialist society guidelines these are indicated, but admission avoidance also depends on the availability of the necessary competencies, diagnostics, treatments and infrastructure.

This analysis concludes that there is significant scope to increase out of hospital care, if an appropriately skilled workforce, diagnostics, support services and infrastructure are put in place.

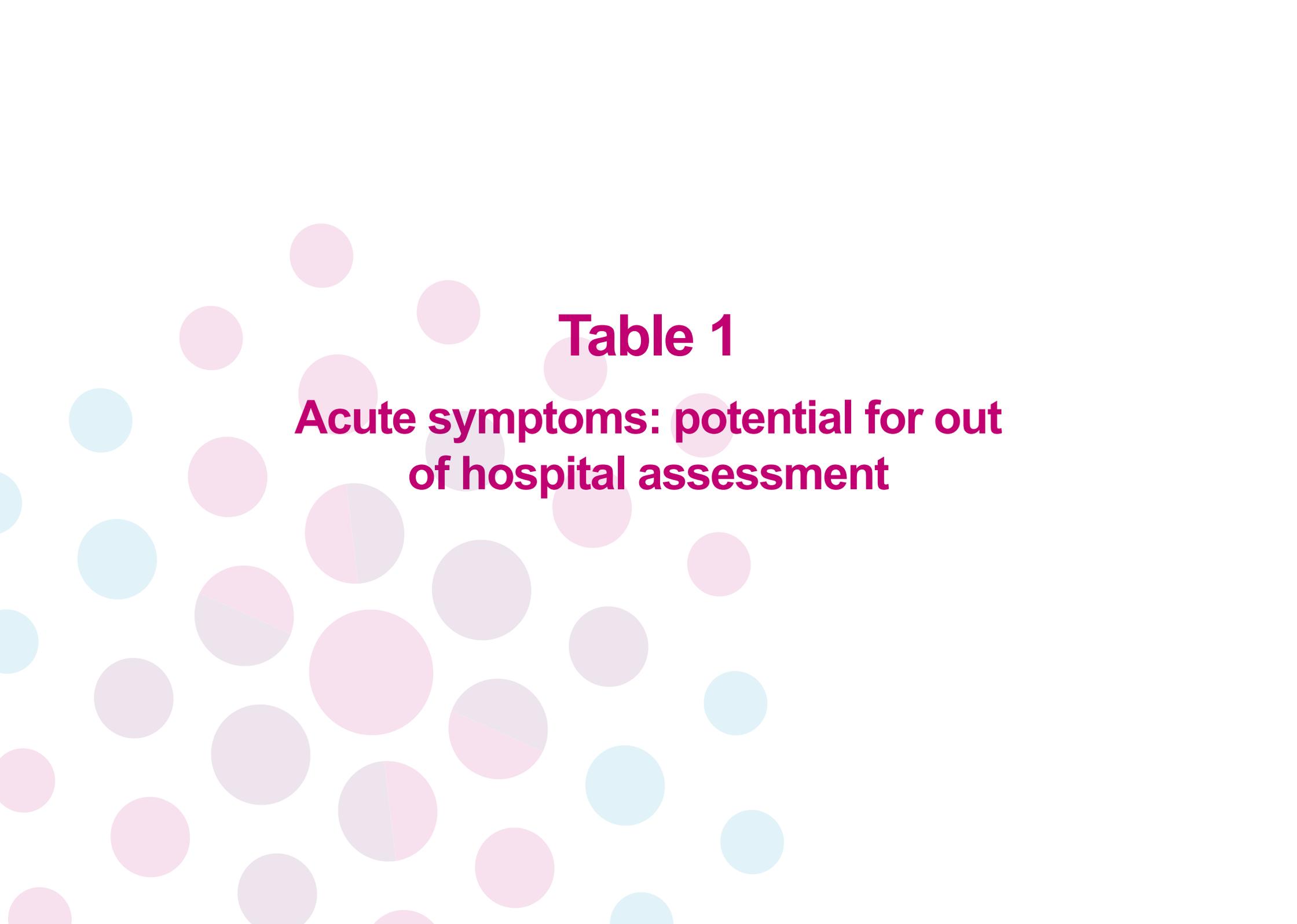


Table 1

**Acute symptoms: potential for out
of hospital assessment**

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
1	Unilateral swollen or painful leg	DVT, thrombophlebitis, cellulitis, ruptured calf muscle or Bakers cyst, trauma with a missed fracture, lymphatic or venous obstruction.	Use the 2-level Wells score together with the D dimer test (near patient finger prick testing available) to assess likelihood of DVT (61). Imaging: Doppler USS; XR if history of trauma. NICE QS: all investigations for suspected DVT completed within 24 hours; and if delay, provide interim anticoagulation (61). New oral anticoagulants (NOACs) are NICE approved (TA 261).	Need appropriately trained workforce, and on site XR (if required) and USS. DVT can be managed as an outpatient with sub-cutaneous LMW heparin or a NOAC.	Green
2	Shortness of breath	Lower respiratory tract infection, exacerbation of COPD, asthma, PE, acute heart failure, anxiety/panic attack, substance misuse, pneumothorax, pneumonia, pleural effusion.	CXR, ECG, basic blood tests (including BNP/NT-proBNP if required) with same day results/reports.	Many could be assessed out of hospital, but need to refer on to hospital if of a higher acuity. Clinical expertise required to maximise accuracy of assessment and triage. Paramedics could undertake assessment and triage in the home if have access to information, protocols and clinical advice. Need same day diagnostics (and reporting if interpretation required).	Green

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
3	Chest pain	Myocardial infarction, acute coronary syndrome, angina, peptic ulcer or inflammation, pericarditis, pleurisy, pneumothorax, PE, aortic dissection, referred abdominal pain MSK.	ECG, CXR, blood tests such as D-dimer, FBC, U&Es, troponin (near patient testing available but needs evaluation (62)).	Potential serious condition that often need urgent and accurate diagnosis. Very dependent on assessment skills available and rapid reporting/interpretation of ECG and CXR in particular. Potential to consider out of hospital model for some low risk patients, but need to describe how these would be triaged. Explore potential of using portable ECGs in patient's home (GP or paramedic), with electronic transmission to specialist for assessment, and troponin if cardiac cause of pain unclear.	Amber
4	Palpitations	Dysrhythmia, anxiety, hyperthyroidism.	CXR, ECG, basic blood tests (including BNP/NT-proBNP if required) with same day results/reports.	Any loss of consciousness or other red flag symptoms then admit. Otherwise, excellent opportunity for ambulatory care, including via paramedic assessment (ECG in the home and transmitted for instant diagnosis).	Green
5	Headache	Migraine, spontaneous haemorrhage, severe hypertension, cranial arteritis, drug side effects, meningitis, encephalitis, space occupying lesion, (e.g. tumour), sinusitis, glaucoma, post-trauma, hangover.	CT scan for selected patients (but often not required same day), blood tests.	Many patients already managed in 1° care. Need rapid access (not necessarily same day) to CT scanning.	Green

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
6	Acute confusional state / delirium	Drugs, alcohol, exacerbation of dementia, sepsis, dehydration, constipation, hypoglycaemia, drug side effects, intra-cranial haemorrhage.	Elderly/frail may benefit from additional comprehensive geriatric assessment. Urgent blood tests, CXR, urine assessment for infection. Brain CT.	Resource-intensive patients who may be hard to manage out of hospital. May be appropriate for elderly patients with frailty and/or dementia who may benefit more from avoidance of the acute hospital setting. Must have access to pre-existing care plans (including any advance care plan to avoid inappropriate hospital transfer), and elderly care expertise (on site or telelink). See NICE delirium guidelines (63), RCP acute care toolkit 3 (64) and BGS Silver Book (65). Need to fully involve carer(s) in planning if not admitting. Some patients could be managed within their care homes if staff appropriately trained and supported. Good coordination/integration between physical and mental health clinicians is required.	Amber
7	First seizure	Alcohol, tumour, drugs, infection, stroke, trauma, intra-cranial haemorrhage, hypoglycaemia, dysrhythmia, eclampsia, allergy, pseudo-seizures.	Seizure witness. ECG (+/- 24-72 hr ECG), Refer to NICE first fit pathway (66). CT scan (not required same day if full recovery).	Many patients/carer/public would call 999. Paramedics would need clear guidance of whether to transfer to acute hospital or community hub. Latter feasible if full recovery post-fit.	Amber

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
8	Transient loss of consciousness	Very wide range of possible diagnoses. Includes postural hypotension/faint, unwitnessed seizure, hypoglycaemia, dysrhythmia, TIA, GI bleeding. Potential cause of falls.	ECG. Blood tests if indicated (e.g. blood glucose in diabetic, Hb if potential internal bleeding).	Feasible for a significant proportion of presentations. See NICE guidance 109 (67).	Green
9	Fall - without loss of consciousness	Multiple causes. Establish if significant injury.	History, examination and comprehensive geriatric assessment where appropriate to determine cause of the fall, and assess ongoing vulnerability. XRs to rule out fractures if relevant symptoms or signs.	If no LOC or fracture then potential for ongoing management out of hospital, but needs a risk assessment (e.g. patient living alone, access to care and support, and their capabilities). Potential for paramedic triage, with direct access to rapid response social care, and/or onward direct referral to community falls prevention service. Align with local falls and frailty pathway. An integrated model of care (that includes social care) may be more appropriate than a medical management model (and there is a risk of inappropriate medicalisation if admitted).	Green

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
10	Diarrhoea	Infection, colitis, 'overload', drug side effects, C difficile.	Assess for dehydration. Blood electrolytes and renal function. Stool sampling.	Elderly or frail should have access to short term carer support for hydration, linen changing and supplies if required. Need to take account of home/social circumstances and ability for patient and carer to manage. Avoid hospital admission unless needing IV fluids or other agreed red flag features.	Green
11	Vomiting (without blood)	Food poisoning, bowel obstruction, drugs, alcohol, drugs, gastritis, vestibulitis, acute brain disease (stroke, infection, brain space occupying lesion), head injury, pregnancy.	Basic blood tests (e.g. FBC, U&Es).	Usually self-limiting. Depends on incapacity, likely cause, degree of dehydration and ability to keep key oral medications down. Assess effect on other co-morbidities (e.g. renal disease).	Green
12	Vomiting (with blood)	Peptic inflammation or ulcer, Mallory Weiss tear, bleeding oesophageal varices, spurious.	Assess likely volume of blood loss and assess for shock. Blood tests (especially Hb, renal function). Early endoscopy, but not necessarily same day. Use Glasgow-Blatchford bleeding score (GBS) to assess risk and guide management (68).	Depends on clinical condition, amount of blood, blood results, GBS score. Transfer and admission not mandated.	Amber

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
13	Passing blood rectally	Haemorrhoids, cancer, colitis, rectal/colonic polyp, angiodysplasia, diverticulitis.	Access to diagnostic blood tests, but not necessarily same day. Two week wait referral for query cancer if indicated. Sigmoidoscopy within agreed time frame.	Hospital transfer not required unless associated abdominal pain, continuous bleeding and/or shock.	Green
14	Vomiting (without blood)	Gastritis, pancreatitis, bowel obstruction, aortic aneurysm leak/rupture, appendicitis, cholecystitis, non-specific, constipation.	Basic blood tests, with results available rapidly. USS and/or CT scan (urgency dependent on clinical condition).	Severity of pain and associated symptoms (e.g. vomiting, GI bleeding) dictates location of assessment. Community based assessment feasible if no red flag symptoms. Would need regular follow up and observations (e.g. daily) if not settling, and escalation to hospital assessment if worsens. Patients generally anticipate problem is serious and therefore want rapid access to assessment. Very common presentation to paramedics so potential for training and remote advice.	Amber
15	Painless Jaundice	Gallstone obstruction +/- cholangitis, cancer, hepatitis, drugs, autoimmune disease, decompensated liver disease / cirrhosis.	Blood tests. Abdominal ultrasound (not required same day if otherwise well).	If unwell (e.g. vomiting, reduced conscious level) direct hospital assessment appropriate, otherwise rapid access to outpatient specialist assessment, with 2 week cancer referral if USS suggests possible malignancy. Need agreed integrated pathway with the local gastroenterology service.	Green

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
16	Lower urinary tract symptoms/ catheter complications	Acute urinary obstruction, urinary tract infection, leaking or blocked catheter.	Blood tests (especially renal function if obstruction). USS bladder +/- kidneys. Urine dipstick and sample for microbiology.	A valuable use of community nursing expertise. Rarely need admission or hospital attendance if competencies and responsiveness available in the community. Commonly present to paramedics, who should have pathways and back up for management without transfer. Reference BGS Silver Book (encompasses UTI management) (65).	Green
17	Visible blood in the urine	UTI, cancer, stone, acute glomerulonephritis.	Blood tests for kidney function. Urine for dipstick, microscopy and culture and proteinuria measurement. Non-urgent USS, +/- CT scan. Urine cytology.	Rarely needs acute hospital attendance unless acutely painful (suggesting renal stones). Investigations need to be done promptly, and 2 week cancer referral pathway if meets criteria (see NICE guidelines on Urological cancers - recognition and referral (69)).	Green
18	Acutely painful joint(s) (without history of trauma)	Septic arthritis, gout/ pseudo-gout, other inflammatory arthritides.	Blood tests. Joint aspiration if indicated.	Initial assessment feasible out of hospital. Various personnel could be trained in joint aspiration, e.g. GPs, community rheumatology nurses. May need rapid access community support for patients with resulting reduced mobility. Urgent access to specialist team if diagnosis unclear or needs specialist opinion. Community gout treatment pathways should be in place.	Green

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
19	Acute symptoms in a dying patient	For cancer patients, effects of spreading malignancy, pneumonia, falls, drowsiness, increasing pain. For end stage heart failure, respiratory disease, neurological disease: worsening of related symptoms.	Depends on appropriateness following assessment, and knowledge of patient's wishes.	Assess out of hospital wherever possible. Relies of access to pre-existing shared care plans (including any advance care plans) to know patient's wishes, for any professional assessing the patient, at any time of the day or night. Nursing home staff should also know patient's wishes, and have the education, training and support to manage without sending to the hospital if not appropriate. Need same day access to sufficiently resourced palliative care team and access to medication ('just in case' boxes). Suggest telephone/on call system targeted at supporting dying patients in their own home, as well as well-informed carer who knows where to access support.	Green
20	Pain or bruising following mild-moderate trauma	Wide range of potential causes. May be in the context of other presenting issues, e.g. following falls.	X-rays as indicated based on symptoms and signs.	Minor injuries assessment unit appropriate, or a hub providing the required expertise and XRs, Paramedic assessment depending on manner of patient presentation (e.g. leave at home if XRs not required, and liaise with any community support services required).	Green

	Presenting Symptom	Potential diagnoses	Required diagnostics NB All require an appropriately trained professional to assess the patient, and have access to the clinical history and medications.	Factors affecting out of hospital assessment NB All require agreed red flag symptoms and signs that indicate referral on to the acute hospital	Feasibility rating
21	Deliberate self-harm (overdose or trauma)	Wide range of causes.	Clinical history, examination and assessment by an appropriately trained professional. Blood tests for paracetamol and other medications. Rapid access to mental health assessment.	Need to assess the context and the nature of the self-harm. Need carefully agreed criteria for drug overdoses that can be safely assessed and managed out of an acute hospital. Psychiatric and physical risk assessment is required. Minor self-inflicted injuries (such as cutting) could be managed/stitched out of hospital. Must have timely access to liaison psychiatry working in the community. Urgent community mental health pathways will need to be reviewed, reformed and resourced to avoid admission to acute hospitals for these patients.	Amber

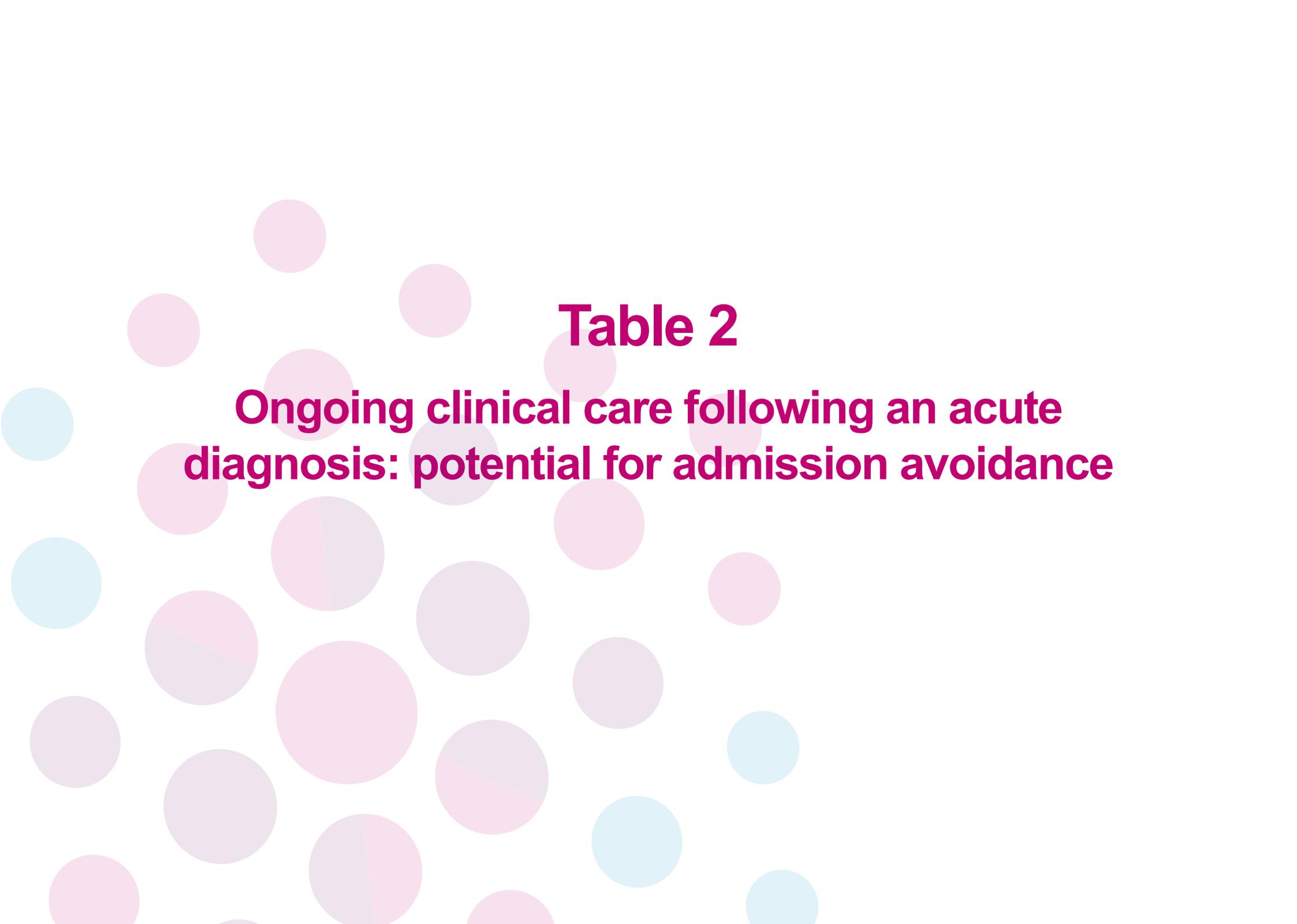


Table 2

Ongoing clinical care following an acute diagnosis: potential for admission avoidance

Diagnosis	Required treatment, monitoring and aftercare	Threshold for ongoing community based care
Deep vein thrombosis	<p>Refer to NICE guidance (70). Initiation of LMW heparin and transition to oral anticoagulation, or NOAC (for 3+ months). Undertake urgent investigations for cause of DVT if no clear trigger, including investigations for underlying malignancy.</p> <p>Have an agreed pathway in place for ongoing anti-coagulation and where monitoring will take place (if on warfarin). Can be provided in primary care or via pharmacies. Assess patient social needs and availability of support for patient from family and carers. Provide information to patients and carers on what to do if there are problems (e.g. symptoms of PE, or worsening swelling).</p>	<p>Not generally admitted. Ongoing anticoagulation and monitoring, and further investigations if required, could take place out of the hospital setting.</p>
Cellulitis of the limb	<p>Refer to NICE Clinical Knowledge Summary on acute cellulitis (71). Describes indications for admission, and who needs IV vs oral antibiotics. Need a community based service for IV treatment (dedicated OPAT service or via community nursing).</p>	<p>Appropriate for community based pathway unless systemic sepsis or other complicating factors.</p>
Pleural effusion	<p>If first presentation with effusion, needs specialist diagnostic tests to establish cause, which will usually be required in the hospital setting, though not same day unless patient requiring oxygen or systemically ill. Recurrent pleural effusions could be managed out of hospital in a planned way in an appropriate facility if patient well enough.</p>	<p>Would not need acute admission unless oxygen requiring, or systemically ill.</p>
Asthma	<p>In absence of red flag features, manage without admission. See BTS/SIGN guidelines (72): 1) admit patients with any feature of a life-threatening or near-fatal asthma attack; 2) admit patients with any feature of a severe asthma attack persisting after initial treatment; 3) patients whose peak flow is greater than 75% best or predicted one hour after initial treatment may be discharged from ED, unless there are other reasons why admission may be appropriate.</p>	<p>Admit according to guidelines, otherwise feasible for community based care.</p>

Diagnosis	Required treatment, monitoring and aftercare	Threshold for ongoing community based care
Exacerbation of chronic obstructive pulmonary disease (COPD)	<p>See NICE COPD guideline CG101 sections 1.3.2 – 1.3.4 for factors to consider when deciding where to treat the patients, and for recommendations on ‘hospital at home’ and assisted discharge schemes (73).</p> <p>A multi-professional community based team with competence in managing COPD patients should be in place, with access to pulmonary rehabilitation. This would have a big impact on admission avoidance, and enhanced discharge. Uncertain role and evidence for telemedicine monitoring. Need good access to support services as required (social care, 3rd sector, 24/7 cover).</p>	Admit if meet agreed criteria. Major potential impact if community based acute services put in place.
Community acquired pneumonia and other lower respiratory tract infections	<p>For pneumonia, use CRB-65 (without a urea blood test) in the community, or CURB-65 (with urea) in hospital, in conjunction with holistic clinical assessment as per BTS guidelines (74) and NICE guidance CG191 (75) to guide admission decision. Generally, if the patient is ill enough to need oxygen and/or IV antibiotics, they will need admission. CXR not mandatory in low risk pneumonia, and oral antibiotics appropriate. Need clear alerting/monitoring/escalation plan with patient/carer in case deteriorates, which would generally require hospital assessment and possible admission.</p> <p>For other lower respiratory tract infections (e.g. acute bronchitis) without hypoxia or sepsis syndrome (as assessed by e.g. the qSOFA score), management could be community based (NB CRB-65 score only appropriate for presumed pneumonia).</p>	High CURB-65 score or severe enough to need IV antibiotics then admit. Otherwise manage out of hospital.
Decompensated heart failure	Refer to NICE guidance for acute heart failure CG187 (76). Treated with commencement or increase in diuretics. Need mechanisms for monitoring response daily, such as daily weighing (? with electronic scales and transmission of data), and daily symptom review by phone/Skype/home visit. Intermittent blood testing for kidney function and electrolytes. Clear role for community based nursing team with the required knowledge and skills.	Admit depending on severity, need for oxygen, need for IV diuretics, frailty, complicating co-morbidities. Otherwise could be managed out of hospital.

Diagnosis	Required treatment, monitoring and aftercare	Threshold for ongoing community based care
Unstable Angina	Refer to NICE guidance (77) There are well established pathways and triggers for admission. Includes ready access to rapid access chest-pain clinics. These clinics need to have capacity to see patients within required timescales, and A&Es and acute assessment units should be able to refer to them directly. Advice should be sought from cardiology authorities and local specialist team as to what would be safe not to admit.	Admitted or referred to rapid access chest pain clinics, according to clinical criteria.
First seizure	<p>If the patient has made a full recovery, then NICE recommends that 'all adults having a first seizure should be seen as soon as possible [defined as within 2 weeks] by a specialist in the management of the epilepsies to ensure precise and early diagnosis and initiation of therapy as appropriate to their needs.'(66) Note that there is a 25% rate of misdiagnosis of epilepsy without specialist assessment.</p> <p>Often an ambulance will be called for a first fit, so paramedics will need appropriate protocols and access to real time clinical backup in deciding whether to admit or triage to community-based assessment.</p>	Can generally be managed in the community unless there are red flag symptoms or signs, or if timely recovery from the fit has not occurred.
Seizure in a known epileptic	Use protocols and guidance (e.g. NICE CG137(66)). To decide on modification of medications, and clinical history to determine precipitating events. Primary care led specialist intervention when required.	Usually not admitted unless complications (trauma, or failure to recover adequately).
Upper gastro-intestinal haemorrhage	<p>The Glasgow-Blatchford bleeding score (GBS) can identify low risk GI bleed patients (score of 0) who could be managed without hospital admission (78). Such patients should have their endoscopy arranged within 24 hours (see NICE CG141(79)). This 24 hour requirement for non-admitted patients should be reviewed, as it may be clinically unnecessary for stable patients who have not re-bled (ECRG view).</p> <p>Clinical decision aids should be available to clinical assessors to avoid unnecessary admission (particular issue of over-admission via junior hospital doctors, but often because there is not rapid outpatient alternative pathway).</p>	Urgent endoscopy could take place in an acute community hub, otherwise in the hospital setting as a day case procedure. There should be ready direct access to urgent outpatient endoscopy to avoid unnecessary admission.

Diagnosis	Required treatment, monitoring and aftercare	Threshold for ongoing community based care
Lower gastro-intestinal haemorrhage	Refer to NICE guidance (77) There are well established pathways and triggers for admission. Includes ready access to rapid access chest-pain clinics. These clinics need to have capacity to see patients within required timescales, and A&Es and acute assessment units should be able to refer to them directly. Advice should be sought from cardiology authorities and local specialist team as to what would be safe not to admit.	Admitted or referred to rapid access chest pain clinics, according to clinical criteria.
Gastroenteritis	Patients should be managed at home wherever possible. Main issues of risk are: a) Dehydration and associated symptoms. Potential for supervised sub-cutaneous fluids to be administered if oral intake insufficient and as an alternative to IV fluids that would require hospital admission. b) Ability for frail patients and their carer to cope with the diarrhoea if there are mobility limitations, or incontinence. May need help with mobility, and laundry.	There is scope for rapid response community support to reduce admissions, particularly in the elderly and those with reduced mobility.
Anaemia needing blood transfusion	Blood transfusion can be provided within an ambulatory care model as a day case (even if transfusion cannot be completed in a single day). In a stable patient, admission should be avoided, but will need ready access to outpatient transfusion, either in hospital or at a community based facility.	Should not need admission in a stable patient.
Falls- without loss of consciousness	Too broad a category to provide specific guidelines at present, but major cause of avoidable admissions in the elderly. Exclude fractures (XRs required if relevant symptoms). Need a clear falls pathway, and access to falls diagnosis and prevention clinics and service. Need an integrated medical and social care approach. Refer to the BGS Silver Book (65).	Admission generally avoidable in the absence of significant injury.
Pyelonephritis	Avoid admission unless sepsis (assess e.g. using qSOFA score), acute kidney injury (AKI), or sick enough to need IV antibiotics or pain requiring parenteral analgesia. Kidney USS same day if AKI to rule out obstruction, and within e.g. 2 weeks to look for underlying cause (e.g. kidney stone). USS can be provided out of hospital.	Treat in the community unless red flag clinical features.
Other urinary tract infections	Oral antibiotics often sufficient. Often over-diagnosed so consider other causes of clinical condition, especially in the elderly. Urine dipstick testing can be misleading (blood and or protein has many causes – sticks should test for leucocytes and nitrites), and a urine sample for culture should be sent to the lab to confirm the diagnosis (or rapid near patient microbiological diagnosis – being piloted).	Significant potential for admission avoidance in the elderly by enhanced community support.

Diagnosis	Required treatment, monitoring and aftercare	Threshold for ongoing community based care
Non-traumatic vertebral fractures, and low risk pubic rami fractures	<p>Management usually just bed rest for a defined period then mobilise, and pain relief. As above, need rapid response community based wrap around services to maintain patients in their own home. DVT prophylaxis as per inpatient bed rest management. Avoidance of bed sores.</p> <p>Need a non-weight bearing patient pathway. Patients often admitted through lack of clear alternative, particularly out of hours. Such services are resource intensive (but could be cost effective?).</p> <p>Refer to national audit of intermediate care (54). Secondary fracture prevention is important, and fracture liaison services, such as described by International Osteoporosis Foundation (80), and a community based model as piloted in Crawley (81) are examples.</p> <p>Admission avoidance in the frail elderly can be enhanced by acute frailty units, such as being pioneered successfully in Leicester (82), and the embedded short video.</p>	<p>Acute hospital admission should be avoidable in the majority of cases. As above, need rapid response community based wrap around services to maintain patients in their own home.</p>
Appendicular fractures not requiring immediate internal fixation	<p>If carer/ relative assessment done and appropriate care package in place, then back slab/stabilising cast and avoid admission. Only admit if patient genuinely cannot cope and no care available, but may be more suitable for a community based bed if so. Increased complexity from the impact of multiple fractures increases short term needs. Needs close coordination with the hospital's trauma coordinator for orthopaedic management plan. Virtual fracture clinics have been successfully piloted, and can avoid unnecessary attendance for follow up visits, replace by effective phone advice and physiotherapy input as indicated (83).</p>	<p>Significant potential to avoid admission of the elderly with fractures with enhanced community support.</p>
Hip pain secondary to a fall, without fractured femoral neck but non-weight bearing	<p>As for non-traumatic vertebral fractures.</p> <p>Pain relief as required, and mobilise as possible.</p>	<p>Acute hospital admission should be avoidable in the majority of cases with community support.</p>

5

Three exemplars of common long term condition pathways

A detailed review of three long term condition pathways was undertaken, to test the broad principles described in section 3. The three long term conditions were:

- **Chronic heart failure**
- **Chronic respiratory failure**
- **Patients living with and beyond cancer**

5.1. Chronic heart failure pathway

Key references (84), (85).

General pathway points

- The majority of care for people with heart failure should be provided in the community and pathways should reflect this.
- Heart failure exerts a considerable physical and mental health burden, which should be reflected in local arrangements for person centred care.
- Deterioration, which is frequent, often leads to hospitalisation following which there is a high risk of readmission and further deterioration. Care planning should focus on an optimal diagnostic strategy, followed by therapy optimisation and maintenance in the context of the individual's desired goals for treatment.
- Although heart failure may occur at any age, people with heart failure are usually older and have other co-morbidities. Ongoing treatments and care planning therefore needs to cater for this wide individual variation and take into consideration the risk of comorbidities (particularly renal impairment), polypharmacy and the trajectory of the condition. There should be a particular focus on people with recurrent admissions, with worsening of the condition despite intervention, or with complications of medication. Heart failure can be an unpredictable condition.

- Pathways thus need to be local and responsive with specialist support and advice available promptly to facilitate local care provision. Any such pathway should have named accountable clinical leads and contribute to formal evaluation of care processes and outcomes.

Prevention

- Optimal primary and secondary prevention, together with optimal acute management of ischaemic heart disease, reduces the incidence of heart failure. Long term good control of blood pressure is particularly important.

Early detection and diagnosis

- Practitioners should have a high index of suspicion for the development of heart failure in the presence of relevant co-morbidities (such as hypertension, atrial fibrillation, previous ischaemic heart disease, diabetes and other vascular disease).
- Where heart failure is suspected a blood test measuring BNP/NT-pro-BNP should be carried out, and if above the threshold, echocardiography and specialist review should be requested (see NICE guidelines and quality standards). This requires access to the blood test, a clear understanding of the action to take once the result is available, and access to echocardiography and specialist review within the agreed timeframe for patients requiring it.
- There is a range of quality standards along with NICE guidance relating to heart failure diagnosis and treatment that describe the evidence based pathways, and should be implemented.
- Echocardiography capacity should match anticipated demand. Access to echocardiography is a current and widespread cause of delays to patient diagnosis and commencement of treatment. A focus on appropriateness of indication for echocardiography may facilitate capacity and timeliness.

Treatments, and optimising ongoing care

- Guideline based treatment (as per NICE guidelines and quality standards) for all people with heart failure should be followed. See figure 4 for an example of a heart failure pathway.
- For people with heart failure with reduced ejection fraction (left ventricular systolic dysfunction) first-line treatment should include ACE inhibitors and beta blockers, supported by diuretics and other medications, with monitoring of renal function and blood potassium levels as indicated.
- Medication needs to be titrated to the optimum tolerated dose. Local pathways could consider options other than medical staff, e.g. nursing staff, physician associates, patients or carers, pharmacists for up-titration and optimisation of heart failure drugs provided continued oversight of care is provided.
- Local pathways should consider how to support six monthly reviews with more frequent review if medication changes.
- People with heart failure require support with medications (tolerability, clarity, quantity of drugs, side effects, compliance), especially those with multiple conditions.
- Specialist referral is required for assessing and advising on treatment resistance or clinical deterioration beyond the competency of general practice, and for the consideration of implantable devices to improve cardiac function.
- Local pathways should ensure that associated risk factors (especially diabetes, atrial fibrillation, and hypertension) are managed appropriately.

Supported self-care and patient involvement with care decisions

- A 'House of Care' approach facilitates person centred care planning. This should include the individual's desired goals for treatment. Alongside medication optimisation, care planning should place a central emphasis on quality of life.

- The care plan should reflect and plan for the potentially progressive nature of the cardiac condition, with a particular emphasis on people with recurrent admissions, worsening of the condition despite intervention or complications of medication.
- The adoption of advocates for each person on the pathway might allow greater ownership of the pathway by the person in receipt of care by maximising the benefit of clinical contacts from the perspective of the person with heart failure. Such advocates might be the person themselves, their relative or from the voluntary or another sector.
- Patients and carers should be provided with education and training to enable them to self-care better. The voluntary sector (such as the British Heart Foundation and other support groups) can contribute to this, particularly around cardiac rehabilitation.

Roles of the specialist, accessing specialist advice, and information sharing and communications between professionals

- Although establishing the diagnosis requires specialist input, the majority of patients should not need direct specialist advice with a well developed and implemented pathway.
- A common model of care is through community (and hospital) heart failure nurses. These should form part of an integrated heart failure team (that is shared working across community and hospital, access to clinical records and investigations, and routine multidisciplinary meetings).
- A typical heart failure multidisciplinary team would include the heart failure nurse, GP and specialist (but may also include practitioners in end of life care, psychology, and pharmacy for example).
- There should be regular direct access to specialist input for all members of the team to allow for assessment, advice on treatment resistance or clinical deterioration beyond the competency of general practice, and for the consideration of implantable devices to improve cardiac function.

Early detection of deterioration and pre-emptive management

- A sub-set of heart failure patients are at high risk for decompensation, e.g. 30% of patients discharged with newly diagnosed heart failure are re-admitted within one year.
- Explicit mechanisms for quick identification of deterioration, understood by patient and carers, such as self-monitoring (e.g. daily weight, symptoms) may allow some people to better self-manage and to identify deterioration.
- People with heart failure may need repeated support to understand the nature of their condition and the need to quickly report changes in symptoms since deterioration may occur gradually but accelerate providing an opportunity for community intervention if detected early.
- Early response to deterioration in the community will require availability of specialist nurses and protocols to enable prompt adjustment of oral medications and the ability to deliver treatments such as intravenous diuretics (and subcutaneous in some circumstances) in the person's home or community.
- Pathways should consider escalation plans, notably for out-of-hours care.

Accountability and clinical responsibility in the community

- Pathways need to be local and responsive, with specialist support and advice available promptly to facilitate local care provision. Any such pathway should have named accountable clinical leads and contribute to formal evaluation of care processes and outcomes.

Outcome measures, audit, standards and service improvement

- Clear standards for the management of chronic and acute heart failure are available (NICE – see pathway slide).
- All localities should contribute data to ongoing benchmarking through the National Heart Failure Audit for acute admissions. Within the KSS area hospitals and communities should contribute data to the AHSN EQ programme.
- Patient reported outcome measures (PROMs) for heart failure are available and are being introduced in the KSS area as part of the AHSN EQ programme.

Potential locations for community based care, and service interdependencies

- Blood testing, ECG, echocardiography and chest X-rays are the diagnostics required, all of which could be provided in a community based hub.
- Demand should be formally evaluated to allow sufficient space, equipment (including access to all relevant clinical records) and staff.
- The facility should cater for rapid access to pre-empt further deterioration and the need for an acute hospital admission. Access to same day specialist advice should be built in to the model.
- The acute hospital location is only absolutely required for elective specific diagnostic investigations and the insertion of devices that might improve cardiac function. Acute presentation to hospital may be necessary in cases of new onset heart failure, and on occasion for acute deterioration of existing heart failure (for example an arrhythmia or acute coronary syndrome). Acute admission to hospital remains a default place of safety and treatment for people with chronic heart failure. Such admissions fall under the 'ambulatory care sensitive condition' definition – that is they are avoidable where provision of services is optimal. Root cause analysis of acute admissions in people with a known diagnosis of heart failure may facilitate pathway optimisation.

Workforce competencies, capacity and options

- Specialist care needs to be defined for this pathway, and consideration as to which staff groups could provide it with appropriate training in addition to the cardiologist (specialist cardiac nurses, physician associates, pharmacists, GP specialists).
- Pharmacists are a potential source of advice for ongoing management of heart failure patients (diuretics, drug interactions, triggers for kidney function testing etc.).
- The community and hospital based heart failure nursing and clinical teams should be integrated. Accountable medical supervision, responsibility and support for community heart failure nurses should be established.

Care planning (including end of life)

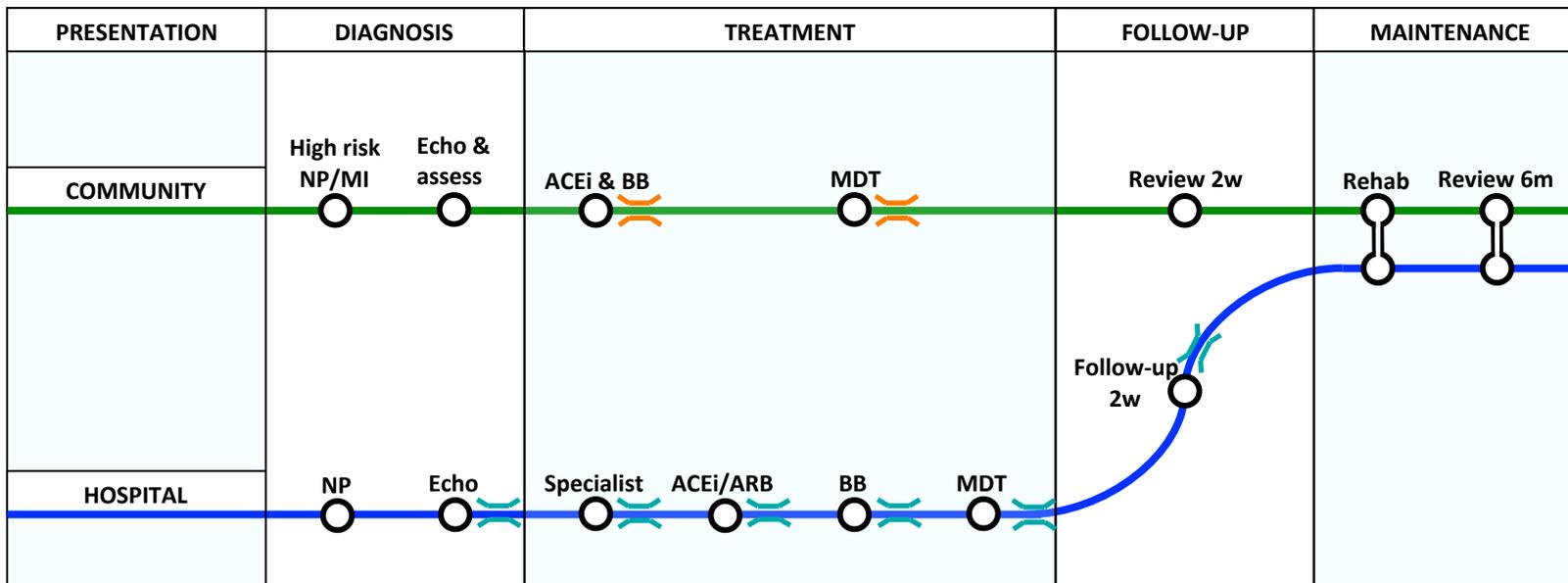
- The plan should include end of life planning. Scoring systems exist to help stratify those most at need but none are particularly reliable. Optimal person centred ongoing care may afford the best method for identifying those who would benefit from specific end of life planning.

- End of life care planning should be offered to people at the highest risk of mortality and identify individual wishes for future care, resuscitation status etc. (e.g. those with repeated admissions - there is a 50% two-year mortality if discharged from hospital with a diagnosis of heart failure).

Commissioning issues

- Commissioners will need to understand the workforce implications of the agreed pathways, and map realistically how resources could be transferred from hospital to the community.
- Commissioners should review how the local model and pathway is commissioned, and who it is to be delivered by (across the range of potential providers).

Figure 4. Heart failure pathway (from Kent Surrey and Sussex AHSN (86))



STANDARDS

Community Pathway:



- CHFSt 2. Diagnosis-high risk (MI or NP): seen within 2 weeks of referral.
- CHFSt 1. Diagnosis: echocardiogram and specialist assessment.
- CHFSt 3. LVSD ACEi(ARB)/BB: to optimal tolerated/target dose.
- QS9CHFSt 6. Multidisciplinary heart failure team.
- CHFSt 4. Review (after any medication change): 2 weeks
- CHFSt 6/7. Rehabilitation.
- CHFSt 5. Review (routinely): 6 monthly.

Acute Pathway



- AHFSt 1. Diagnosis NP: at admission.
- AHFSt 2. Diagnosis Echo: for new HF <48 hours of admission.
- AHFSt 3. Care: dedicated specialist heart failure team.
- AHFSt 5. RxLVSD ACEi(or ARB),(MRA): at discharge.
- AHFSt 4. RxLVSD BB: (unless HR<50/AVB/shock) or restart pre-discharge
- QS9CHFSt 6. Multidisciplinary heart failure team.
- QS9CHFSt 10. Discharge. Management plan.
- AHFSt 6. Follow-up: by team within 2 weeks

MEASURES

Community Pathway:



- EQComm 1. Rx LVSD: ACEi/BB at target.
- EQComm 2. Review: within 2 weeks of referral receipt.

Acute Pathway:



- EQAcute 2. Diagnosis Echo.
- EQAcute 1. Care: specialist Input.
- EQAcute 3. RxLVSD ACEi(ARB): at discharge.
- EQAcute 4. RxLVSD BB: at discharge.
- EQAcute 5. Discharge: Management Plan
- EQAcute 6. RxLVSD : Specialist Nurse Follow Up

STATEMENT SOURCES

Community Pathway:

- CHFSt: Statements from Quality Standards for CHF: 2016
- QS9CHFSt: Statements from Quality Standards (QS9) for CHF: 2010

Acute Pathway:

- AHFSt: Statements from Quality Standards for AHF: 2015
- QS9CHFSt: Statements from Quality Standards (QS9) for CHF: 2010

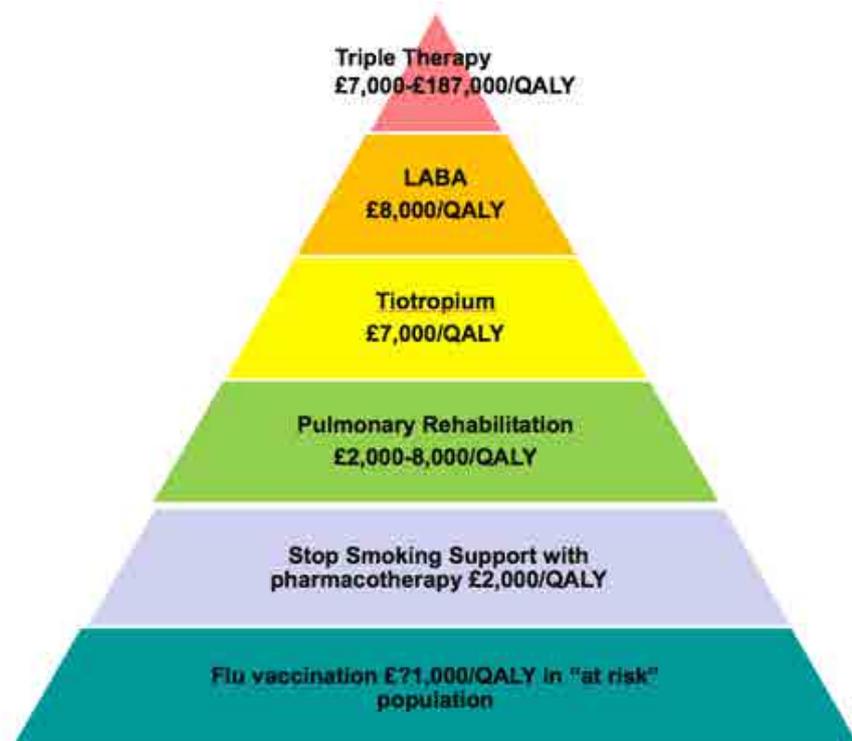
5.2. Chronic respiratory conditions

Key references: (73) (87) (88)

Prevention

- The key measures for preventing COPD are: public health measures (stop smoking campaigns, cigarette taxation and packaging, reducing and avoiding air pollution at work and home), and related individual measures (smoking avoidance or cessation, avoidance of air pollution, physical activity). These are also much more cost effective measures than treating the disease once it has developed (see figure. 5).

Figure 5: Cost effectiveness of various interventions for people with COPD (89)



Early detection and diagnosis

- Diagnosis needs to be accurate to ensure timely institution of the correct treatment and pathway. Key diagnostic tests are spirometry, chest radiography, and in some cases CT scanning. In the community, there should be ready access to spirometry, undertaken by professionals competent in its performance and interpretation.

Treatments and the optimisation of ongoing care

- Monitoring and re-assessments only for patients who need it. The goal is the prevention of deterioration rather than monitoring well people, and the identification of those who will benefit from review, by appropriate risk assessment and stratification.
- The mainstay of treatment is appropriate inhalers, pulmonary rehabilitation (90), and long term home oxygen therapy for patients meeting agreed criteria. These can all be assessed, delivered and monitored in the community.
- There is a prime role for community based respiratory nurse specialist teams, which have demonstrated their effectiveness in clinical care and reducing hospital admissions for targeted patients.
- Patients should be reviewed by an appropriately trained professional after any exacerbation which leads to hospitalisation. In some cases, this will be within the primary care team, but it may be preferable to organise this through a community respiratory service.
- Discussions on DNAR (do not attempt resuscitation) wishes and end of life planning for patients with impending end stage lung disease should take place whilst stable.

Supported self-care and patient involvement with care decisions

- Pulmonary rehabilitation is important for patients' long term health, and is often supplemented by post-rehabilitation clubs. This can become self-managed with support as required. There may be an opportunity for third sector involvement (pulmonary rehabilitation clubs can be run and funded by patients or the voluntary sector). There are significant additional benefits from providing these locally, rather than within the acute hospital setting.
- Psychological support should be offered to people who might benefit. This can include patients with anxiety overlay.

Roles of the specialist, accessing specialist advice, and information sharing and communications between professionals

- Respiratory specialists have an important role in assessing patients where the diagnosis is in doubt, and in providing clinical support to the community respiratory service.

Early detection of deterioration and pre-emptive management

- Patients should be provided with a written 'exacerbation plan' and rescue medication for anticipated complications or exacerbations, so patients can start effective treatment as soon as possible.
- The key intervention is rapid response and assessment, to maximise the chance of the patient being able to remain at home and avoid admission. This can be provided by a rapid response/crisis response team (to provide short term community based support in the home setting). Patients and carers need to know who to call in a crisis.

- There are a number of innovations and initiatives aimed at avoiding admission in acutely decompensated respiratory patients (these will be covered in the acute pathways sections of our report). These include paramedic practitioners and urgent access to the community respiratory nurse team, assessing the patient at home, or arranging urgent transfer to an acute assessment unit if clinically required.

Addressing mental health needs

- COPD patients are at higher risk for anxiety than many other LTCs. Extra support can be helpful and may reduce the frequency of admissions. Respiratory nurses can be trained in depression assessment (such as through the PHQ9 assessment tool), and either refer on to the GP, or direct to psychological services.

Potential locations for community based care, and service interdependencies

- The assessment, diagnostics, and ongoing management of COPD patients can all take place outside of the acute hospital. Diagnosis, initial management and routine monitoring will usually be based in the GP surgery.
- There are potential benefits of a centralised community hub for spirometry, ongoing monitoring and access to the specialist respiratory team.

Workforce competencies, capacity and options

- There is potential for extended scope roles for nurses, AHPs and pharmacists, including independent prescribing.
- Maximise the use of pharmacists for assessing COPD patients' respiratory symptoms and modifying treatment with appropriate training.

- Maximise the deployment of paramedic practitioners for management of respiratory exacerbations (see acute section of clinical senate report).
- Ensure there is capacity within primary care or other community services for patients with exacerbations, to minimise the risk of acute transfer to hospital.
- Sufficient trained staff are required to provide support for patients on home oxygen therapy. This is preferably delivered by the community respiratory team, with nurses trained in blood gas analysis (as has been implemented at CSH Surrey), with access to advice from respiratory specialists.

Care planning (including end of life)

- Advance care planning – this is poorly done for chronic progressive respiratory illnesses – needs to be done early and out of hospital. DNAR orders should also be discussed in the community setting.

Alternative options for patients in care homes

- Could provide pulmonary rehabilitation on site.
- Consider the educational and training needs of staff in care homes.

Commissioning issues

- Consideration of how local monitoring is commissioned, including provision and training for spirometry.
- Provide specific psychological support for LTC and particularly COPD, not just IAPT.

5.3 Living with and beyond cancer

People who survive cancer do not so much have a chronic disease, as it may be cured, but do have potential long term physical effects from the cancer itself or its treatment, or long term emotional and psychological effects. They also need monitoring over time for recurrence of the disease (depending on the nature of the specific cancer). Much of this currently takes place in a specialist and hospital environment, but there is opportunity to deliver more of this longer term care in the community. It was therefore considered a relevant set of pathways to review in the context of this report.

There are two post-treatment pathways where there is the maximum potential for increasing community based long term care: monitoring following initial treatment of the cancer (whether by surgery, chemotherapy or radiotherapy), and palliative care. These recommendations focus on the former.

Key resources and guidelines: (91)

Pathway principles

- There are multiple pathways depending on the cancer subtype. For each, follow up strategies should be rationalised, conducted where possible away from secondary care, and ideally in a setting where a holistic approach is feasible. This should include patients who have had rarer cancers that tend to involve visits to regional or supra-regional centres far from home.
- The evidence base and rationale for the clinical follow up frequency and duration, and the associated diagnostics to check for disease recurrence should be reviewed. Many follow up plans are locally determined, and have evolved without national guidelines to refer to. There are risks as well as benefits to patients of unnecessary follow up and repeated diagnostics that are not of value, and it diverts resources away from people who would benefit.
- Each post-cancer treatment pathway should be reviewed for the potential to deliver it in a community setting rather than in hospital. Pathways should be agreed across Cancer Alliances, once these are established. Pathways should be 'lean', expediting diagnostics and access to specialists in the event of concern about disease recurrence.
- Consider a primary care led model for follow up. The current model is over-medicalised and over-hospitalised. Cancer follow up tends to occur in the acute setting, and is undertaken by clinicians without necessarily the requisite holistic skills. More time and continuity of care could be provided in the community, subject to capacity issues within the primary care sector. Criteria for longer term hospital-based follow up should be reviewed, to avoid unnecessary or un-evidenced practice.
- Patients would need to have reassurance provided by the medical team devolving their care following the completion of radical treatment (surgery, radiotherapy and chemotherapy), for the perceived loss of access to experts in this model. Access, when required, should be expedited via agreed communication pathways.
- GPs and other professionals taking responsibility for the supervision of patients following cancer treatment will require training in detection of recurrence, and close liaison with cancer centres, to facilitate early communication with specialists in the event of recurrence.
- Care navigators (potentially clinical nurse specialists) could support a model that reduces dependency on the medicalised follow up model (as has been trailed successfully in elderly patients, and those with long term mental health conditions (92)(93)(94).
- There is a need to take more account of the patient perspective and feedback on post-cancer pathways. See National Cancer Patient Experience surveys cancer experience surveys (95).

- The emphasis should be on 'self-management and after care', to the extent that individual patients are capable of, and comfortable with this approach. Specific model could be more focused on 'aftercare' rather than 'follow up' – more empowering and positive.
- Outcomes monitoring will be complicated by out of hospital follow-up; it will be vital, potentially within the auspices of the local cancer alliance, to enable connectivity of information to allow outcomes monitoring and audit. The use of electronic records will facilitate this.
- Continuity of care is paramount to patient experience in this area.

Early detection and diagnosis of recurrence

- Each cancer type will have its own characteristics, required diagnostics and monitoring, and facilities should be in place to provide such diagnostics.
- There is expected to be a major potential future role for genomics and proteomics for subclinical diagnosis or relapse (reducing need for more invasive diagnostic monitoring, and allowing the more appropriate cancer treatments. That is, relapse may in future be more easily diagnosable by blood tests, which could be performed locally.
- The potential for GPs to be the first receiver of the results should be explored, providing the patient with the opportunity to assimilate the results before contact and discussion with the specialist. However, there must be a quick and smooth pathway back to the specialist from the GP if the results suggest a recurrence or deterioration of the condition. The role of the clinical nurse specialist could be developed in this area. Depending on the results, GPs should also have at their disposal any resources for signposting patients who may need psychological or other support.

Supported self-care and patient involvement with care decisions

- It is vital to minimise the delay between when tests are carried out for recurrence, and informing the patient of result (whether positive or negative). There are high levels of anxiety whilst waiting for results. Need to develop ways of communicating rapidly with patients, and ensuring that appropriate support is in place.
- As well as affording access to holistic care, community-led follow-up will reduce capacity issues in hospital outpatient clinics.
- There is a risk to sending out results of tests without interpretation, with potentially a negative impact on the patient, and this should be avoided. Explanation, support and advice should be in place for patients receiving bad news.

Role of the specialist, accessing specialist advice, and information sharing and communications between professionals

- If the model of care is changed to one that is primary care and community based, there will be a need to ensure that is communicated with other specialties managing the patient's non-cancer co-morbidities.
- The electronic integration of patient records provides huge benefits for joined up patient centric care of cancer patients, and is a key enabler for more community based care (and true for all chronic diseases).
- Specialists will need to provide the education and training required to primary care and other clinicians to enable more community based devolved care.

Integrated management of physical and mental health

- Use opportunities during contact points in pathway to signpost patients to mental health services.
- Must recognise and manage the psychological impacts of the patient living with and beyond cancer.

Potential locations for community based care, and service interdependencies

- Consider a community based team and service for follow up reviews. Specialists where required, and certain diagnostics, could be based in an out of hospital hub, such as a multi-specialty community provider.
- Aim for 'one stop shop' wherever possible for necessary diagnostics and clinical review and sharing of results.
- Care should be delivered as locally as possible, whilst ensuring cost effectiveness and deliverability by available manpower.
- Explore the option of a community based "cancer survivorship centre", interfaced with the GP surgery, removing need for hospital based follow-up appointments.
- Diagnostics for recurrent cancer over and beyond imaging (XRs, ultrasound, CT and MRI scanning) could include hub based cystoscopy (for bladder cancer surveillance) and endoscopies (for bowel cancer surveillance), subject to JAG requirements.
- Hub within hubs: an extension of this model to create mini-hubs that could undertake a limited number of interventions/follow ups for specific cancer follow up pathways, but would benefit from integration with other services (this could be based in a GP practice or small group of practices). See referenced examples for breast cancer (96) and prostate cancer (97) follow up models in primary care.

- Cannot assume there will be a benefit in doing the same thing with the same pathway, just in a different location from the acute hospital. This should be carefully evaluated.
- Benefits of community based follow-up approach will need to be fully evaluated, rather than assumed; in particular, impact on capacity in primary care sector.

Workforce competencies, capacity and options

- Need to recognise the current unfamiliarity of primary care with cancer follow up, and therefore the challenge in transferring clinical responsibility away from hospitals and specialists. The role of the GP in cancer follow-up needs to be defined and agreed.
- Would require significant shift in workforce both in terms of competencies and skills. Is this a new workforce requirement?
- Care coordinators could help with diagnostics, social services, and other interventions. Role could be provided by allied health professionals or cancer nurse specialists.
- There is a shortfall in radiological staff who provide and interpret diagnostics which needs to be addressed in a more community based model of diagnostics. This will be particularly important for cancer patients under surveillance, where the population is growing significantly year on year. The remote reporting of imaging would have the benefit of avoiding the need for a radiologist presence in a hub.
- Cancer nurse specialists have an important potential role to play for patients following their cancer treatment when they move in to the monitoring phase.

6 Factors that maximise the potential of community based clinical hubs

How services and facilities that have traditionally been hospital based are provided in the community setting is a subject of major focus nationally via the MCP and PACS vanguard sites, but on a background of many local initiatives over recent years. Within Kent the Encompass vanguard, building on the innovative work of the Whitstable Medical Practice, is a prime example (49). Local health systems need to decide to what extent they wish to provide acute care in such facilities, which will determine the range of facilities, services and competencies and staffing required. Whilst the full extent of the learning from the national pilots is awaited, below are a number of recommendations and considerations that the clinical senate wishes to highlight for consideration when planning such facilities.

- There is a wide range of options and sizes for such community hubs, and the services provided within them, depending on the population size served, the current buildings and estates legacy, and the proximity to an acute provider or other local alternatives. A compromise between ease of access and cost effectiveness and deliverability (particularly the workforce) is required.
- The range of services that could be provided includes those listed in table 3. Depending on the catchment population of the hub, CT scanning could be considered for larger units, and mobile MRI scanners can service out of hospital locations (such as at the Estuary View Medical Centre in East Kent).

Required competencies

- Ensure there is direct access to specialist opinions, either on site (outreach clinics or sessions) or via rapid response telemedicine links (phone, video, email), to provide rapid advice on results, e.g. imaging, ECGs and blood tests to hub based clinicians, and to avoid otherwise unnecessary acute transfer to or subsequent outpatient appointment at the hospital. Hospital based teams would need

to agree the most efficient and effective ways of communicating that is not too disruptive to their clinical work, such as designating an individual to be the contact point for the hub for the day, or the batching of requests for advice that is less urgent.

- Acute community hubs should be staffed by clinicians with the appropriate skills and experience for the acute care that will be provided.
- Comprehensive geriatric assessment (CGA) provided by a multi-disciplinary team is a key evaluation skill for patients presenting with complications of frailty, and identifies the range of needs and services that might keep the patient out of hospital. The appropriate skill set should be in place.
- The co-location of services in a community based hub provides the potential for better integration and communication between a range of health and care professionals, all of whom could be based in or work in such a facility. Co-location of different professions enables innovative working practices, with core skill sets and competencies used across a range of different clinical conditions (particularly specialist nursing and therapies services). Examples include integrated care for patients with long term neurological conditions, stroke, and other acquired brain injuries.
- Staff could rotate through community clinical hubs to maintain and develop skills, and provide variety and enhance cross-organisational collaboration. This could include radiographers, AHPs, nursing staff, GPs and hospital doctors. Retention and recruitment of staff may be enhanced by such rotations, underpinned by strong leadership and clinical governance, but full consultation with the relevant staff should be undertaken before deciding on the merits of such rotations locally.
- There are risks to the training of junior doctors away from the hospital setting, Any peripheral hubs should work closely with the acute hospital and liaise with the deanery to ensure that training of doctors is not compromised.

Diagnostics

- The community location of diagnostics provides convenience to patients, reduced travel time and carbon footprint, and enables the separation of elective procedures from acute patients in the hospital setting that have to compete for available slots, thereby reducing cancellations, delays and interruptions. Which tests are provided out of hospital will be determined by the population catchment area and anticipated demand, by the anticipated cost effectiveness, and by the availability of the required workforce.
- Imaging tests (X-rays, CT and MRI scanning, fluoroscopy and ultrasound) require appropriately skilled radiographers on site. Certain diagnostics or procedures would require an on-site radiologist (such as specialist USS and interventional procedures such as biopsies), but otherwise radiologists would not need to be on site.
- There must be a facility for the electronic transmission of images to skilled reporters on other sites, either at the local acute trust or by a range of alternative reporting services.
- For acutely ill patients, there should be rapid access (determined by clinical need) to on-site tests and reporting of results, particularly imaging (e.g. X-rays and USS) and blood tests. Phlebotomy must be available throughout the hours of operation, with a turnaround time for blood test results to be locally agreed to enable timely diagnosis. Near patient (chair-side) tests where available and validated should be provided to enable rapid diagnosis and are an alternative to laboratory-requiring testing.
- If image-guided interventional procedures (e.g. joint injections, pleural fluid aspirations) are envisaged in the out of hospital setting, then the service should make the most efficient use of the on-site radiologist's time (aligned with other more complex imaging services such as CT and/or MRI).
- Diagnostic testing should be proportionate and evidence based, following agreed local pathways, and NICE guidance and iRefer guidelines where relevant. Clinicians should refer to the iRefer guidelines of the Royal College of Radiologists (50).
- The use of disposable equipment (for procedures such as sigmoidoscopy, hysteroscopy and cystoscopy) helps to avoid the need for on-site sterilisation facilities.

Operational issues

- If the hub isn't providing a 24/7 service, then pathways for patient assessment and treatment when the facility is closed should be explicitly agreed and coordinated with the other local acute providers.
- Acute health and care services must have response times that enable rapid patient assessment, triage and treatment, and admission avoidance. For example, the speed of social care response for frail elderly is critical, e.g. provision of a commode, night sitter, package of care.
- Contractual barriers should be broken down, to enable staff to work across different sites or organisations.
- Clear protocols must be in place for acute patients who deteriorate, or who present with a level of severity above that which can safely be managed outside of the hospital setting.
- The location of hubs should take account of the need for good transport links, and easy parking, to ensure their accessibility. These links should be developed in partnership with the local authority. Urgent patient transport services should be agreed and provided for those needing rapid transfer to hospital.
- Community hubs could be co-located on the acute hospital site where travel times, facilities and the geography of the area suggest this as the best option, though this may lose the benefits of perceived accessibility, ease of parking.

Table 3. Range of potential services in community-based clinical hubs

DIAGNOSTICS	
Phlebotomy	Spirometry
Imaging, including any of: XRs, ultrasound, CT scanning, mobile MRI scanning	Echocardiography
Upper and lower GI endoscopy (in larger units with JAG approval)	Cystoscopy, hysteroscopy
TREATMENTS	
Urinary catheter care (including unblocking)	Interventional radiology (e.g. pleural drainage, ascites drainage, USS-guided tissue biopsies, joint aspiration)
Pleural drain emptying/monitoring	Parenteral (IV, IM or SC) administration of fluids, drugs (e.g. heparin, antibiotics) or blood transfusions.
Therapies services: physiotherapy, occupational therapy, nutrition and dietetics, speech and language therapy, podiatry, orthoptics	Minor operative procedures
PEG feeding tube management and troubleshooting	Wound care e.g. post-op reviews, dressing changes.
Nurse-led renal dialysis	Chemotherapy (and potentially radiotherapy) treatments
CLINICS	
Outpatient specialist clinics (including video-consultations): medical and nursing, physical and mental health.	Community paediatrics
End of life care symptom advice (in person or by phone/video), including management of pain and distressing symptoms	Mental health services (including psychotherapies and counselling)
OTHER SERVICES	
Shared resource/information space to be used jointly with third sector agencies	Audiology services (including ear debris microsuction)
Integrated multi-disciplinary team meetings and coordination	Social services

7 Conclusion

Moving more care out of hospitals and in to the community setting requires focus on an extensive range of factors. A pathway based, patient centred approach that involves the close cooperation between the full range of providers (current and potential), commissioners and patients is essential. This report finds significant opportunity to meet this aim, but will require innovative development and use of the available workforce, more extensive use of new technologies, and a whole system approach to service delivery that breaks down organisational and professional barriers.

Avoidable pressures on acute hospitals result from assessments that could take place in other settings, admissions that could be avoided if safe alternatives are put in place, and the enabling of earlier discharge to relevant and responsive services in the community. Community based facilities and pathways can address all three of these challenges, and in designing pathways and out of hospital infrastructure and services, the multi-faceted impact should be understood.

More effective, pro-active and patient centred pathways for long term conditions are expected to reduce complications of the diseases and their treatments and slow progression, and thereby also reduce the need for acute hospital services.

The constraints and challenges are considerable, particularly those of the currently available workforce. The financial impact is uncertain. Whilst developing new services usually requires temporary double running alongside current services with an associated cost, the health economic impact of reducing hospital based care though the measures recommended in this report could be substantial.

Clinicians now need to work together within their shared health systems to re-think and co-design new pathways, in partnership with patient, carer and public input, if the reality of shifting care closer to home and away from hospitals is to happen.

8

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Appendix A. Expert Clinical Review Groups membership, agendas and declarations

Expert Clinical Review Group for ‘The key principles and requirements of community based, clinically integrated chronic disease pathways’: Membership

Name	Roles
Lawrence Goldberg (Chair)	SECS Chair, and Chair of ECRGs, Consultant Nephrologist, Brighton and Sussex University Hospitals NHS Trust
Amanda Allen	Therapy Manager, Maidstone and Tunbridge Wells NHS Trust
Mandy Assin	Consultant Psychiatrist, Sussex Partnership NHS Foundation Trust
Michael Bosch	General Practitioner, Horley, Surrey
May Bullen	Patient, Public Engagement representative
Graeme Dewhurst	Post Graduate Dean, Health Education Kent, Surrey, Sussex
Andrew Foulkes	General Practitioner, Arundel, West Sussex
Anthony Frew	Consultant Respiratory Physician and Professor, Brighton and Sussex Medical School, Brighton and Sussex University Hospitals NHS Trust
Mark Gaffney	General Practitioner, Eastbourne, East Sussex
Jenefer Gillam	Head of Managed Care, Sussex Community NHS Foundation Trust
Peter Green	Chief Clinical Officer, General Practitioner, NHS Medway Clinical Commissioning Group.
Larisa Han	General Practitioner, Guildford, Surrey
Jackie Huddleston	Interim Joint Associate Director, SE Clinical Senate & Clinical Networks, NHS England South (South East)
Marianne Illsley	Consultant Clinical Oncologist, and Deputy Medical Director, Royal Surrey County Hospital Foundation Trust
Hugh McIntyre	Consultant Physician, East Sussex Healthcare NHS Trust
Carolyn Morris	Patient, Public Engagement representative
Suzy Neve	Proactive Care Team Lead Sussex Community NHS Foundation Trust
James Nicholl	Consultant Orthopaedic Surgeon, Maidstone and Tunbridge Wells NHS Trust
Karen Poole	Professional Lead for Physiotherapy & Clinical Specialist for Neurology and Rehabilitation, East Sussex Healthcare NHS Trust
Waqar Rashid	Consultant Neurologist , Brighton and Sussex University Hospitals NHS Trust
Jonathan Richenberg	Consultant Radiologist , Brighton and Sussex University Hospitals NHS Trust
Mohit Sharma	Centre Consultant, Healthcare Public Health, Public Health England
Robert Stewart	Clinical Design Director of the Design and Learning Centre for Clinical and Social Innovation, Chair Kent and Medway Integration Pioneers
Jo Thomas	Director of Nursing, Queen Victoria Hospital NHS Foundation
Maudie Van de Burgh	Patient, Public Engagement representative
Ali Parsons	SECS Manager
Eleanor Langridge	SECS Programme Manager

2. Expert Clinical Review Group Agenda 4th May 2016

South East Clinical Senate Expert Clinical Review Group on 'The key principles and requirements of community based, clinically integrated chronic disease pathways'

4th May 2016, 2.00pm – 6.00pm Holiday Inn London Gatwick Airport Povey Cross Road Gatwick RH6 0BA

Item	Time	Item		Lead
Introduction and meeting outline (timings indicative only)				
1	2.00	Welcome and Mutual introductions ECRG declarations of interests Outline for the afternoon: The task in hand, materials and resources.	Verbal	LG
2.	2.10	Agreeing the key principles underpinning the delivery of safe and high quality care. What is our shared understanding of the following principles? <ul style="list-style-type: none"> • safe provision • patient centred care • sustainable provision • timely provision • Consistent application of the evidence base. 	Discussion	LG
Chronic Disease Pathways				
3.	2.25	Pathway overview presentations x 3 5-10 min presentations from leads Heart failure, chronic lung diseases and cancer follow-up pathways.	Discussion	All
4.	2.55	Three pathway Groups (Break to be taken at convenient point of group discussions)	Discussion	All
5.	4.30	Working Break reviewing each of the pathways		
6.	4.45	Review and Feedback from pathway groups <ul style="list-style-type: none"> • Critical pathway milestones • Out of hospital options • What are the clustered requirements/critical dependencies/ • co-dependencies to enable out of hospital provision 	Discussion	All
7.	5.45	Overview and next steps	Discussion	LG
8.	6.00	Meeting Close		

3. Expert Clinical Review Group for ‘The key principles and requirements of community based, clinically integrated chronic disease pathways’: Membership

Name	Roles
Lawrence Goldberg (Chair)	SECS Chair, and Chair of ECRGs. Consultant Nephrologist, Brighton and Sussex University Hospitals NHS Trust
Amanda Allen	Therapy Manager, Maidstone and Tunbridge Wells NHS Trust
Mandy Assin	Consultant Psychiatrist, Sussex Partnership NHS Foundation Trust
Fiona Barrett	Consultant in Emergency Medicine, Brighton and Sussex University Hospitals NHS Trust
Alison Barnett	Public Health Consultant, Healthcare Public Health, Public Health England
Amit Bhargava	General Practitioner and Clinical Chief Officer, Crawley Clinical Commissioning Group.
Michael Bosch	General Practitioner, Horley, Surrey
May Bullen	Patient, Public Engagement representative
Graeme Dewhurst	Post Graduate Dean, Health Education Kent, Surrey, Sussex
David Davis	NHS111 Workforce National Clinical Lead, NHS England
Andrew Foulkes	General Practitioner, Arundel, West Sussex
Vijay Hajela	Consultant Acute Physician and Rheumatologist, Brighton and Sussex University Hospitals NHS Trust
Larisa Han	General Practitioner, Guildford, Surrey
Marianne Illsley	Consultant Clinical Oncologist, and Deputy Medical Director, Royal Surrey County Hospital Foundation Trust
James Nicholl	Consultant Orthopaedic Surgeon, Maidstone and Tunbridge Wells NHS Trust
Paula Parker	Adult Social Care Commissioning Manager, Adult Social Care Services, Kent County Council
Jo Pritchard	Managing Director, CSH Surrey
Mansoor Sange	Consultant Anaesthetist and Intensivist, Dartford and Gravesham NHS Trust
Aneetha Skinner	Clinical Director of Adult Specialist Rehabilitation Services, Sussex Community NHS Foundation Trust
Robert Stewart	Clinical Design Director of the Design and Learning Centre for Clinical and Social Innovation, Chair Kent and Medway Integration Pioneers
Jo Thomas	Director of Nursing, Queen Victoria Hospital NHS Foundation
Maudie Van de Burgh	Patient, Public Engagement representative
Iain Wilkinson	Honorary Clinical Senior Lecturer, Brighton & Sussex Medical School, Consultant Orthogeriatrician, Surrey and Sussex Healthcare NHS Trust
Ali Parsons	SECS Manager

4. Expert Clinical Review Group Agenda 17th May 2016

South East Clinical Senate Expert Clinical Review Group on 'The key principles and requirements of community based, clinically integrated acute and discharge pathways'.

17th May 2016, 2.00pm – 6.00pm Board Room, York House, 18-20 Massetts Road, Horley, Surrey, RH6 7DE

Item	Time	Item		Lead
Introduction and meeting outline (timings indicative only)				
1	2.00	Welcome and mutual introductions <ul style="list-style-type: none"> • ECRG declarations of interests • Outline for the afternoon: • The task in hand, orientation to materials and resources. 	Verbal	LG
2.	2.15	Key messages from the chronic disease pathways ECRG 04.05.16	Verbal	LG
Assessment and diagnosis of the acutely ill person				
3.	2.25	Assessment of the acutely ill person <ul style="list-style-type: none"> • To consider the range of common presenting acute symptoms, and identify community based assessment options. • To describe the clinical interdependencies of such community assessment based services, to inform the re-design of services. • To consider key cross cutting issues.* 	Discussion	All
4.	3.25	Break		
Ongoing management of the acutely ill person following diagnosis				
5.	3.35	Admission avoidance, and ongoing management of the acutely ill person in the community To consider what community facilities for delivering such care need to be in place to help avoid hospital admission. To describe the clinical interdependencies of such community based services, to inform the re-design of services. To consider key cross cutting issues.*	Discussion	All
6.	4.35	Break		
Enhancing discharge of people from an acute hospital bed to community based ongoing care.				
7.	4.45	Enhancing discharge. <ul style="list-style-type: none"> • To consider the workforce, facilities and services that can maximise the opportunities for earlier discharge to the community for their ongoing care. • To describe the clinical interdependencies of such community based services, to inform the re-design of services. • To consider key cross cutting issues. 	Discussion	All
8.	5.40	Summary, review of progress and next steps	Discussion	LG
9.	6.00	Meeting Close		

5. Long Term Conditions Pathways ECRG: Declarations of Interest

Name	Personal pecuniary interest	Personal family interest	Non-personal pecuniary interest	Personal non-pecuniary interest
Lawrence Goldberg	None	None	None	None
Amanda Allen	None	None	None	None
Mandy Assin	None	None	None	None
Michael Bosch	None	None	None	None
May Bullen	None	None	None	None
Graeme Dewhurst	None	None	None	None
Andrew Foulkes	None	None	None	None
Anthony Frew	None	None	None	None
Mark Gaffney	None	None	None	None
Jenefer Gillam	None	None	None	None
Peter Green	None	None	None	None
Larisa Han	None	None	None	None
Jackie Huddleston	None	None	None	None
Marianne Illsley	None	None	None	None
Hugh McIntyre	None	None	None	None
Carolyn Morris	None	None	None	None
Suzy Neve	None	None	None	None
James Nicholl	None	None	None	None
Karen Poole	None	None	None	None
Waqar Rashid	None	None	None	None
Jonathan Richenberg	None	None	None	None
Mohit Sharma	None	None	None	None
Robert Stewart	None	None	None	None
Jo Thomas	None	None	None	None
Maudie Van de Burgh	None	None	None	None
Ali Parsons	None	None	None	None
Eleanor Langridge	None	None	None	None

6. Acute and Discharge Pathways ECRG Declarations of Interest

Name	Personal pecuniary interest	Personal family interest	Non-personal pecuniary interest	Personal non-pecuniary interest
Lawrence Goldberg	None	None	None	None
Amanda Allen	None	None	None	None
Mandy Assin	None	None	None	None
Fiona Barrett	None	None	None	None
Alison Bartlett	None	None	None	None
Amit Bhargava	None	None	None	None
Michael Bosch	None	None	None	None
May Bullen	None	None	None	None
Graeme Dewhurst	None	None	None	None
David Davis	None	None	None	None
Andrew Foulkes	None	None	None	None
Vijay Hajela	None	None	None	None
Larisa Han	None	None	None	None
Marianne Illsley	None	None	None	None
James Nicholl	None	None	None	None
Paula Parker	None	None	None	None
Jo Pritchard	None	None	None	None
Mansoor Sange	None	None	None	None
Aneetha Skinner	None	None	None	None
Robert Stewart	None	None	None	None
Jo Thomas	None	None	None	None
Maudie Van de Burgh	None	None	None	None
Iain Wilkinson	None	None	None	None
Ali Parsons	None	None	None	None

Appendix B. Summit agenda and delegate list

1. Summit Agenda

'Acute Care in the Community: How Do We Do It?' A regional summit hosted by the South East Clinical Senate

Wednesday 6th July 2016 10.00am - 1.30pm Holiday Inn London Gatwick Airport, Povey Cross Road, Gatwick RH6 0BA

From 09.15	Registration
10:00	Chair's welcome, aims for the morning and context setting. <i>Lawrence Goldberg, Chair, South East Clinical Senate</i>
10.10	Presentation: Acute assessment in the community, admission avoidance, and enhanced discharge pathways (themes 1-3 in the clinical senate's draft report): summary of draft findings and recommendations. <i>Lawrence Goldberg</i>
10.30	Presentation: East Kent University Hospital NHS Trust audit of inpatients suitable for earlier discharge. <i>Paul Stevens, Medical Director, East Kent University Hospital NHS Trust</i>
10.50	Presentation: Encompass MCP Vanguard - Providing acute care in the community, avoiding hospital utilisation and lessons learnt so far. <i>Dr John Ribchester, Clinical Lead and Chair, Encompass MCP Vanguard</i>
11.10	Presentation: Workforce, education and training – an essential component of service transformation. <i>Jane Butler, Head of Clinical Education, Health Education Kent, Surrey, Sussex</i>
11.30	Refreshments
11.50	Table top and consensus building session 1. Assessment, admission avoidance options and enhanced discharge pathways for patients with acute illness. 2. Considering key enablers of increased community based acute care, focussing on three themes: <ul style="list-style-type: none"> • Potential configuration of out of hospital acute services and their co- dependencies • Ensuring clarity of clinical responsibility for acute patient care out of hospital • Sharing of patient information to deliver seamless patient centred care 3. Feedback, consensus development and synthesis.
13.20	Conclusions, next steps and closing remarks. <i>Lawrence Goldberg</i>
13.30	Close and lunch.

2. Clinical Senate Summit on acute care in the community: delegate list

Name	Role	Organisation
Sue Aston	Deputy Programme Director Urgent Care	Crawley CCG, Horsham & Mid Sussex CCG
Dr Natalie Broomhead	Consultant Geriatrician - Clinical Lead for Elderly Medicine	Surrey & Sussex Healthcare NHS Trust
Jackie Brown	Commissioning Manager – Urgent Care and Resilience	Coastal West Sussex CCG
Mags Brownings	Service Manager - Independent Living	West Sussex County Council
May Bullen	Patient representative	PPE
Jane Butler	Head of Clinical Education	Health Education Kent Surrey Sussex
Bianca Byrne	Acting Head of Policy & Strategic Development	Adult Social Care East Sussex County Council
Sue Carter	Service Manager Cardiovascular	East Sussex Healthcare NHS Trust
Priscilla Chandro	Patient representative	PPE
Sally Dando	Head of Therapies	Surrey & Sussex Healthcare NHS Trust
David Davis	Allied Health Professional representative	South East Clinical Senate
Helen Davies	Service Improvement Manager	Sussex Community NHS Foundation Trust
Eva Dembinska	Head of Physiotherapy	Surrey & Sussex Healthcare NHS Trust
Richard Ewins	Head of Information Development & Data Architecture	East Kent Hospitals University NHS Foundation Trust
Joe Gardner	National Management Trainee, Health & Social Care Commissioning	West Sussex County Council
Dr Lawrence Goldberg	South East Clinical Senate Chair	South East Clinical Senate
Dr Vijay Hajela	Consultant in Acute Medicine and Rheumatology	Brighton and Sussex University Hospitals NHS Trust
Dr Laura Hill	Clinical Executive Director	NHS Crawley CCG
Dr Matt Jones	Consultant Anaesthetist, Director of Trauma & Clinical Lead for Strategic Development	East Kent Hospitals University NHS Foundation Trust
Christine Ketley	Service Development Manager Joint Commissioning	East Sussex County Council & East Sussex CCGs
Eleanor Langridge	South East Clinical Senate Programme Manager	South East Clinical Senate
Tom Lovegrove	Principal Analyst - Quality	East Kent Hospitals University NHS Foundation Trust
Hugo Luck	Associate Director of Operations	High Weald Lewes Havens CCG
Dr Elizabeth Lunt	Clinical Chair	Dartford Gravesham & Swanley CCG
Judi Mallalieu	Director of Transformation & Partnerships	Surrey & Borders NHS Trust

Name	Role	Organisation
Dr Peter Maskell	Medical Director	Kent Community Health NHS Trust
Frances McCabe	Chair	Healthwatch Brighton and Hove
Fiona Mooney	Lead Clinical Manager for Epsom Hub	CSH Surrey
Carolyn Morris	Patient representative	Patient Representative
Anastacia O'Donnell	Service Manager Early Intervention In Psychosis Service	Sussex Partnership NHS Foundation Trust
Dr Edward Palfrey	Consultant Urologist / Clinical Integration Director	Frimley Health NHS Foundation Trust
Ali Parsons	South East Clinical Senate Manager	South East Clinical Senate
Victoria Peace	Senior Community Matron, Dorking Hub	CSH Surrey
Dr Richard Quirk	Medical Director	Sussex Community NHS Foundation Trust
Dr John Ribchester	Clinical Lead and Chair Encompass MCP Vanguard	Encompass MCP Vanguard
Dr Jonathan Richenberg	Consultant Radiologist	Brighton and Sussex University Hospitals NHS Trust
Dr David Roche	General Practitioner	High Weald Lewes Havens CCG
Liz Shutler	Director of Strategic Development, Transformation Team	East Kent Hospitals University NHS Foundation Trust
Dr Paul Stevens	Medical Director	East Kent Hospitals University NHS Foundation Trust
Dr Robert Stewart	Clinical Design Director, Chair Kent and Medway Integration Pioneers	Design and Learning Centre for Clinical and Social Innovation
Dr Sanjay Suman	Consultant Physician and Clinical Lead - Elderly Care	Medway Foundation Trust
Davina Toomey	Head of Nursing Cardiovascular	East Sussex Healthcare NHS Trust
Ann Tuohy	Senior Community Matron, Epsom Hub	CSH Surrey
Isobel Warren	Integrated Care Programme Manager, Joint Commissioning	East Sussex CCGs - East Sussex Better Together
Dr Christopher Warwick	Head of GP School & Deputy Head of Primary & Community Care Education	Health Education Kent Surrey Sussex
Tracey Webb	Joint Associate Director for Independent Services	Medway Community Healthcare
Dr David Whitehead	Clinical Director	Coastal West Sussex CCG
Alison Whitehorn	Deputy Chief Operating Officer Adult Services East, Service Lead for Transformation	Sussex Community NHS Foundation Trust

Appendix C. South East Clinical Senate council members

Name	Roles
Lawrence Goldberg	Clinical Senate Chair Consultant Nephrologist, Brighton and Sussex University Hospitals NHS Trust
Amanda Allen	Therapy Manager, Maidstone and Tunbridge Wells NHS Trust
Sally Allum	Director of Nursing & Quality, NHS England South (South East)
Mandy Assin	Consultant Psychiatrist, Sussex Partnership NHS Foundation Trust
Amit Bhargava (deputising for Katie Armstrong from Feb 2016)	Clinical Chief Officer, Crawley CCG, Representing Sussex CCGs
Michael Bosch	General Practitioner, Horley, Surrey
Maxine Bullen	Independent Patient and Public Engagement Facilitator
Priscilla Chandro	Patient and Public Engagement Representative
Peter Clarkson	Consultant Cardiologist
David Davis	NHS111 Workforce National Clinical Lead, NHS England
Graeme Dewhurst	Postgraduate Dean Health Education England, Kent, Surrey & Sussex
Andrew Foulkes	General Practitioner, Avisford Medical Group, Arundel
Tony Frew	Consultant Respiratory Physician and Professor, Brighton and Sussex Medical School, Brighton and Sussex University Hospitals NHS Trust
Andy Brooks	Clinical Commissioner, Surrey CCGs Collaborative. General Practitioner
Mark Gaffney	General Practitioner, Green Street Clinic, Eastbourne
Peter Green	Chief Clinical Officer, General Practitioner, NHS Medway CCG. General Practitioner. Representing Kent and Medway CCGs
Larisa Han	General Practitioner, Merrow Park Surgery, Guildford
Timothy Ho	Medical Director, and Consultant Respiratory Physician, Frimley Health NHS Foundation Trust
Des Holden	Medical Director, Surrey and Sussex Healthcare NHS Trust
Linda Honey	Head of Prescribing and Medicines Commissioning, NHS North West Surrey CCG
Jackie Huddleston	Interim Joint Associate Director, SE Clinical Senate & Clinical Networks NHS England South (South East)
Marianne Illsley	Consultant Clinical Oncologist, and Deputy Medical Director, Royal Surrey County Hospital Foundation Trust
Rachael Liebmann	Registrar and Consulting Lead, Royal College of Pathologists. Clinical Director of Pathology Services, Queen Victoria Hospital, East Grinstead. Consultant Pathologist
Hugh McIntyre	Consultant Physician, East Sussex Healthcare NHS Trust
Carolyn Morris	Patient and Public Engagement Representative
James Nicholl	Consultant Orthopaedic Surgeon, Maidstone and Tunbridge Wells NHS Trust
Jo Pritchard	Managing Director, CSH Surrey
Waqar Rashid	Consultant Neurologist, Brighton and Sussex University Hospitals NHS Trust

Name	Roles
Jonathan Richenberg	Consultant Radiologist, Brighton and Sussex University Hospitals NHS Trust
Mansoor Sange	Consultant Anaesthetist and Intensivist, Dartford and Gravesham NHS Trust
Mohit Sharma Or deputised by: Michael Baker	Centre Consultant, Healthcare Public Health England, South East Deputy Director of Healthcare Public Health
Aneetha Skinner	Clinical Director of Adult Specialist Rehabilitation Services, Sussex Community NHS Foundation Trust
James Thallon Or deputised by: Caroline Jessel	Medical Director, NHS England South (South East) Lead for Clinical Transformation and Outcomes (South East), and Lead for Sustainability and Health (South)