



Commissioned by:  
South Nottinghamshire  
Transformation Group

 Nottingham University  
Business School  
UNITED KINGDOM • CHINA • MALAYSIA



## Sparklers

**'Sparklers'** is a pioneering service that helps East Midlands health organisations synthesise research from multiple sources, providing the evidence on which to build rapid service improvements.

The project, is funded by the East Midlands Academic Health Science Network (EMAHSN) and coordinated by the EMAHSN Translating Research into Practice workstream, which is hosted by Nottingham University Business School's Centre for Health Innovation, Leadership and Learning (CHILL). The aim of the **Sparkler** service is to provide support where member organisations need to compile evidence based reviews but don't have capacity to pull together and summarise research from the many available sources.

In addition to the commissioning agency, **Sparklers** are available to all our East Midlands member organisations – helping the EMAHSN in its key aim of translating proven research into practice, spreading innovation widely and quickly and underpinning rapid improvements in healthcare for the East Midlands' 4.5m residents.

**Sparklers** – which stands for 'Spreading Applied Research and Knowledge – Longer Evidence Reviews' provide fuller reports on a particular and detailed element of healthcare. They are created using rigorous academic methodology and are written for practice audiences with the aim of synthesising key evidence for impact and evidence based decision making.

**Sparklers** are not a systematic review and are not written for an expert academic audience or to advance theory development, instead they are an independent presentation of the evidence that exists designed for the managers and clinicians responsible for making the decisions on a day to day basis in our health and social care systems. They provide a summary of "what is out there" which may be sufficient or may trigger a further investigation using the information in the **Sparkler** as a start. At all times we advise that these are read in conjunction with the relevant NICE guidance at <http://www.nice.org.uk/>

Sitting alongside **Sparklers** '**Sparks**' – shorter 'at a glance' digest summaries of research evidence intended to improve and enhance practice.

We are happy to take commissions from all organisations providing NHS funded care for both formats. To find out more contact the EMAHSN Project Team at [emaohn@nottingham.ac.uk](mailto:emaohn@nottingham.ac.uk)

The **Sparkler** remains the property of EMAHSN and will be widely circulated and available to download from the EMAHSN website: [www.emaohn.org.uk](http://www.emaohn.org.uk)

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## 1. Background

Discussion with Rebecca Larder, Director of Transformation, from the South Nottinghamshire Transformation Programme confirmed that the programme's work was on the development of a new system of care with opportunity for learning from international experiences and Accountable Care Organisations (It was explained that an Accountable Care 'Organisation' would not be appropriate in South Nottinghamshire due to regulatory/governance reasons) but the characteristics could be. The goal is for all health and social organisations across South Nottinghamshire to work together to commission and deliver high quality and affordable care for patients/citizens.

Despite the local contextual variation in term and governance arrangements, the available evidence refers to Accountable Care Organisations (ACO), and as such, this is the term that is used in this **Sparkler** review.

The EMAHSN was asked to produce a **Sparkler** based on the learning from the models already implemented in New Zealand (Canterbury, Christchurch), Sweden (Jönköping) and Spain (Alzira). Seven specific questions were provided, and the evidence has been appraised in relation to these:

1. How does accountability work in the ACOs?
2. How does decision-making work in the ACOs?
3. How did the ACOs get implemented/sustained?
4. What outcomes were achieved in terms of improved quality, better use of available resource?
5. What can we learn from what did / did not work? What were the 'wicked issues' and how were they overcome?
6. What are the essential characteristics of the ACOs?
7. "Rank" the attributes, which ultimately brought about success in terms of importance.

The **Sparkler** request was received on 14th July 2014. The scope agreed on 21st August 2014, and work commenced 17th September 2014. Summary updates were sent at regular intervals, to provide an update on the work being undertaken. The final report was delivered on 13th November 2014. The turn-around time (from commencement of review to **Sparkler** delivery) was **8 weeks**.

### Our approach

A series of search terms were identified and checked with Rebecca Larder. These included: Accountable Care Organisation(s), Accountable Care System(s), Integrated care, Integrated delivery of healthcare, Jönköping (Sweden), Alzira (Spain) and Canterbury / Christchurch (New Zealand).

### Selection criteria

- International papers
- English language
- Peer reviewed, research papers
- Published from 2008 onwards (to ensure appropriateness to contemporary healthcare context) unless papers are considered to be important to be included (i.e. cited by many other authors)
- Relevant 'policy' style documents from sources including Department of Health, NHS England and NHS Trusts, Kings Fund and international equivalents
- Supplemented by data extracted from websites and national databases

### Search strategy

- Search engine: CINAHL and MEDLINE
- Search models: Boolean / Phrase

### Search results

Initial searching of bibliographic databases produced 669 hits.

When abstracts were screened, this was reduced to 68 papers. After initial scanning this figure was further reduced to 37 papers which drew upon evidence-based evaluations. From these papers, in addition to the references supplied by South Nottinghamshire Transformation Group, further references were identified and included. Policy-style papers have also been included, as have references to a number of national and organisational websites.

The review draws upon **67** references.

## 2. Executive summary

- The NHS needs to adapt in order to survive
- A new approach to care commissioning is required
- Health and social care organisations need to work together for the patient pathway / high quality and affordable care
- Traditionally, a lack of integration between primary and acute care, and health and social care has been seen as source of complaint and blame
- An accountable care organisation is a group of providers who agree to take responsibility for providing all care, for a given population, for a defined period of time under a contractual arrangement with a commissioner
- This **Sparkler** reviews three case studies from New Zealand, Spain and Sweden. Any learning from these international examples needs to be adapted for local contexts within the UK, and not copied directly
- The **Sparkler** offers generic learning points to be considered when establishing and implementing an Accountable Care Organisation:
  - Transformation takes time and requires strong leadership
  - Don't underestimate the time and expertise needed to implement transformational change to a whole care system, in which the goal is for health and social care services to work collaboratively to provide care and improve patient flow through the use of pathways of care
  - Political stability is needed and real authority should be devolved to local levels to makes transformation easier, smoother and more sustainable
  - Changes to contracting models will be required and should be open and transparent
  - An ideology of one budget, one system, with the money following the patient across their care journey should be developed
  - A highly developed and integrated, networked IT systems enabling real-time data display of all clinical and administrative information held on patients should be created/available
  - Development of a 'can do' culture / value system within the organisation that is sustained through a coherent strategic vision developed at board level, and through investment into the enablement of staff
  - Resources available to ensure staff buy-in and support
  - Utilisation of Quality Improvement training, approaches, tools and models, to underpin all work
  - Empower the workforce to make improvements to their service delivery



### 3. Introduction

The NHS 'Five Year Forward View' (2014) highlights three widening gaps in care delivery:

1. The health and wellbeing gap
2. The care and quality gap
3. The funding and efficiency gap

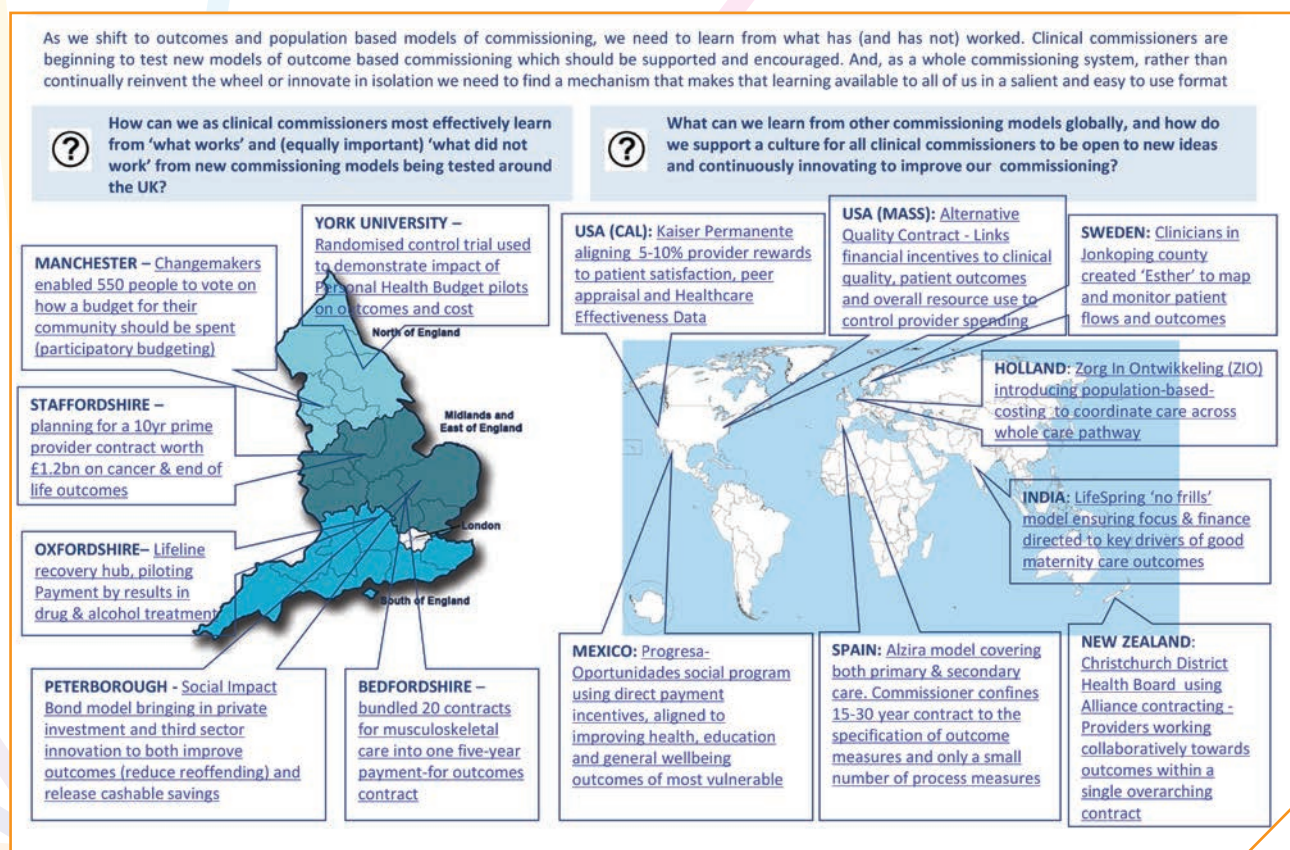
It reinforces the need for the NHS to adapt in order to survive and "meet new challenges: we live longer, with complex health issues" (NHS, 2014:2). Doing more of the same is no longer appropriate. Instead, a new approach to care commissioning is suggested. The NHS Forward View refers to integrated Primary and Acute Care (PAC) systems, which resonate with the descriptions and ideologies of ACOs. Like ACOs, PACs are structurally and organisationally

complex, and demand appropriate time, resource and technical expertise in order to implement.

As with elsewhere in the NHS, the care model for South Nottinghamshire will require radical change within the next five years in order to meet a funding shortfall yet deliver the high quality care that staff and patients expect.

The goal is that all health and social care organisations across South Nottinghamshire will work together to commission and deliver high quality and affordable care for patients/citizens.

To this end, a significant amount of work and learning had already been undertaken prior to the **Sparkler** being commissioned, which led to the following overview chart being produced:



(NHS Commissioning Assembly, Commissioning for outcomes: A narrative from and for clinical commissioners, 2014).

<sup>1</sup>PWC have produced a toolkit to guide organisations in transitioning towards an accountable care model. More details can be found here: <http://www.pwc.co.uk/government-public-sector/healthcare/publications/shifting-to-accountable-care-characteristics-and-capabilities.jhtml>



**“It is the lack of integration within healthcare, as well as between health and social care, that is one of the prime sources of complaint.”**

(Barker, 2014:19).

With costs rising and budgets under increasing pressure, alongside growing expectations for high-quality integrated care, there is much enthusiasm for Accountable Care Organisations (ACOs) amongst policymakers and the health industry (McClellan et al., 2013; Epstein et al., 2014).

An ACO is defined as a group of providers who agree to take responsibility for providing all care, for a given population, for a defined period of time under a contractual arrangement with a commissioner. Providers are held accountable for achieving a set of pre-agreed quality outcomes within a given budget or expenditure target (Shortell et al., 2014).

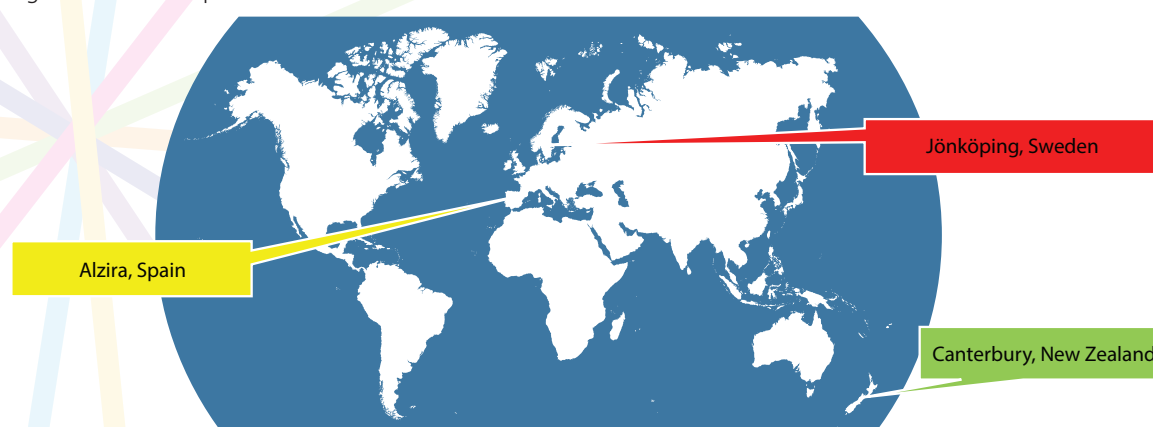
ACOs can take various forms, with an integrated delivery system representing the most formal and organised ACO structure. Built on strong physician leadership, healthcare is provided as a single system with payment mechanisms covering care across organisational boundaries (Shortell et al., 2014). Whilst interest in integration of health and social services has political appeal in terms of reducing resource costs, it also has broad appeal from a patient's perspective in that it offers potential for people with complex needs to remain safe and well in the community (Cameron et al., 2012).

Globally, issues facing healthcare providers are broadly similar, but the political and social contexts in which they operate vary widely and therefore it is not necessarily likely that a system that works in X will work in Y. The literature provides many examples of healthcare research demonstrating that evidence transfers best when guidelines have been adapted for local contexts/conditions (Shaw and Rosen, 2013; Singer and Shortell, 2014).

This SPARKLER draws on three exemplar case studies of global ACOs in order to review evidence and lessons drawn from the experiences of other service providers when looking to better integrate care across service providers.

The three international healthcare provider models identified by the South Nottinghamshire Transformation Group were: Canterbury in New Zealand; Jönköping in Sweden and Alzira in Spain.

Figure 1: world map of selected ACO case studies



Each of the selected ACOs has been cited within the literature as examples of ‘what works’. Each is very different, not only from the English NHS, but also from each other in four ways:

1. Political context
2. Method of funding
3. Breadth of provision
4. Underlying value systems driving strategic direction

However, they share two common features:

1. Each adopts a population health approach underpinned by integration of primary and secondary services
2. There is reliance on quality improvement (QI) models which rest on Deming's (1986) basic principle that improving the quality of production leads to reduced costs in the long term

The term ‘population health’ is widely evident in the literature, and aligned with the idea of a ‘population of attributed patients’, which refers to care for the health of a defined group of patients. In each of the three cases reviewed in this SPARKLER, the population of attributed patients is designated by geographical location. However health population can also refer to a diagnostically related group of patients in order to achieve measurable improvements in the quality of care along the pathways of their treatment/care management. This more focused patient-centred approach that has been adopted in both Jönköping and Canterbury.

In high performing healthcare systems, better care for patients requires that quality be a strategic organisation-level aim, managed through the use of QI programmes (Baker, 2011). The basic principles of any QI model are that it should be:

1. Customer focused (patient focused)
2. Have total employee involvement
3. Be process-centred and integrated system
4. Have a strategic and systematic approach to continual improvement
5. Use fact-based decision-making (evidence-based decision making).

## CASE STUDY 1: Canterbury District Health Board, Christchurch, New Zealand

The story of Canterbury District Health Board's (CDHB) journey to becoming regarded as a highly successful model of integrated health service provision focuses on strong leadership, empowering the workforce and enabling them to make improvements to their service delivery

### **Canterbury** **District Health Board** Te Poari Hauora o Waitaha

The Canterbury mantra is to improvement is: one budget, one system. The right people, receiving the right treatment, at the right time, from the right provider and in the right setting with the right patient experience. Nothing about us, without us.

In New Zealand, years of incremental progress towards integration – a situation described as 'initiativitis' by Timmins and Ham (2013) – has taken place. However, the 2010/2011 earthquakes provided a 'once on a lifetime opportunity' and added impetus to the need for improvement (CDHB, 2013).

Organisational structures of healthcare have remained relatively stable in New Zealand. The devolved nature of the health and disability system means that responsibility and authority for service funding and planning continues to occur across national, regional and local levels (WHO, 2012). It is this sense of political stability, combined with continuity in senior leadership in CDHB that has enabled not only a constancy to strategic planning, but more importantly, permitted the time for the implementation of improvement initiatives to occur (Timmins and Ham, 2013).

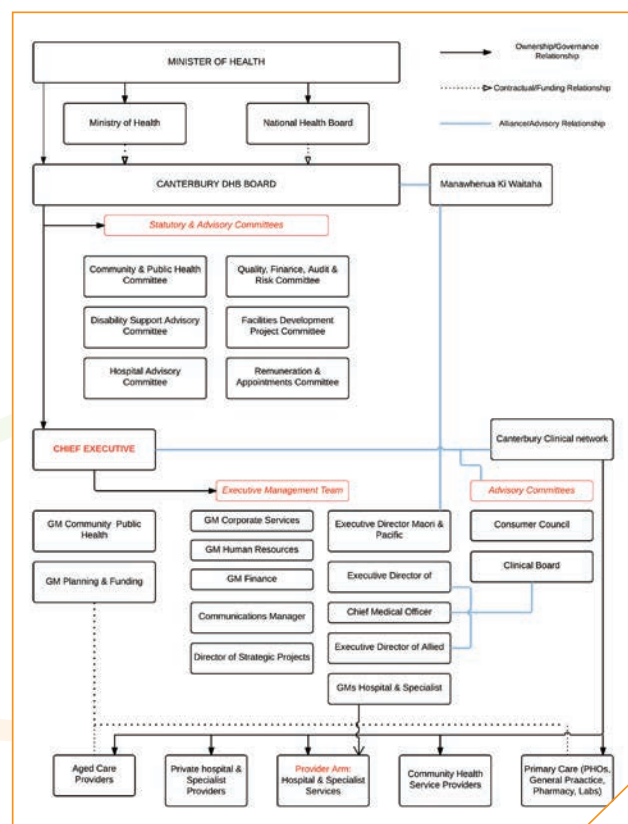
The Canterbury ACO model is about a whole system, in which health services work collaboratively to provide care and improve patient flow through the use of pathways of care that are aligned between hospitals and the community, including the private and NGO sectors:

"Our Population Model of Care identifies a range of services (health promotion, protection and disease prevention; early intervention; management; treatment and support) that will be delivered by any number of providers on an individual or population-wide basis. It supports a flexible approach and can be applied to a specific group of people, a particular disease or condition or a type of service, and explicitly acknowledges the roles of other organisations, groups and individuals who have a key part to play in helping our population stay healthy."

(CDHB, 2013).

Prior to the implementation of the ACO strategy in Canterbury, primary care was already well developed in New Zealand and any retained funds from budget-savings could be spent on implementing innovative local improvement programmes (Timmins and Ham, 2013). This background of innovation provided the foundations which enabled the government to develop its ambitious Primary Health Care Strategy (Cummings and Mays, 2002). In Canterbury this was further developed by focusing investment on services which supported primary care, thus avoiding unnecessary hospital admissions or facilitating early supported discharge when necessary. For example, as members of Primary Health Organisations (PHOs), GPs are required to take responsibility for out-of-hours care. A centralised nurse triage system offers clinical advice and directs patients, where necessary, to the 'extended opening hours' centres which offers radiology and fracture care services. Calls are answered in the name of the practice, and nurses can access patients' specialised care plans thus providing individualised advice. Notes taken during calls are forwarded to the patient's general practice for follow-up (CDHB, 2011).

Figure 2: CDHB Organisational Chart



(Source: CDHB, 2013: 92).



An important aspect to CNDB's 'transformation' were the changes made to their contracting models. As part of the 2001 healthcare reforms, DHBs were empowered to decide how to fund their own hospitals, and CDHB therefore moved from a price/volume schedule to moving to budgets for hospital departments being built from the base up. This meant changing from a system where there was a little incentive for reducing demand (as reduced demand resulted in reduced resources and led to the chasing of resources), to one where the focus was 'how can costs be 'pulled' from the whole care system'.

For Timmins and Ham (2013), the greatest transformation was to the value system within the organisation, which moved towards a 'can do' culture. This has been sustained through a coherent strategic vision developed at board level, but also through investment into the enablement of staff to initiate and maintain changes from the bottom up. In practical terms, this was achieved through the development of a number of '8 programmes' and improvement networks:

- *Xceler8* consists of training in the value of Lean, Six Sigma and other management techniques / approaches
- *Particip8* focuses on engagement, communication and empowerment
- *Collabor8* helps staff to develop a change project
- The continuous quality improvement programme, Improving the Patient Journey, empowers clinical leaders and cross-sector alliances that supported joint planning across the whole health system (CDHB 2012)
- The *Canterbury Clinical Network* (CCN) District Alliance was set up to ensure cross sector support. Its membership comprises healthcare providers (nurses, GPs specialists, physiotherapists etc.) from both PHOs and the secondary sector. CDHB as funders are included to ensure whole system approach is maintained
- The *Canterbury Initiative* works to minimise variation in clinical practice and patient flow caused by individual behaviours. It standardises working practices in order to reduce clinical risk and increase the direct care time that can be spent with patients (CDHB, 2013)

## Examples of Improvement Programmes in Canterbury

- **HealthPathways:**  
**The right care at the right time in the right place**

HealthPathways was developed through the work of the Canterbury Initiative in order to ensure consistent services were delivered in the most appropriate and convenient settings. HealthPathways are locally agreed best practice guidelines or protocols, and include information on what should be done, by whom and how the resources are funded.



For example, an ambulance pathway specifically for people with Chronic Obstructive Pulmonary Disease (COPD) enables ambulance crews to assess people and then arrange the most appropriate care, such as support at home with acute nursing, a visit to a GP/ the 24-hour surgery, or a trip to A&E. In the first 11 months of its utilisation, the alternative COPD ambulance pathway led to 556/1714 patients who called an ambulance being given care in the community instead of being transported to the A&E department (CDHB, 2013).

There are currently nearly 500 pathways being followed and each is regularly reviewed and updated. However this is not an inexpensive process:

**"HealthPathways costs in excess of \$550,000 a year to devise, monitor and maintain. The Canterbury Initiative – the group of hospital and general practice clinicians, funders and planners who help facilitate change programmes – costs an additional \$860,000 a year with the initiative also funding an extensive GP education programme."**

(Timmins and Ham, 2013:30).

### • **Acute Demand Management Service**

The Acute Demand Management Service (ADMS) supports people who are urgently unwell to avoid A&E visits or hospital admission through the delivery of targeted services by general practice teams and community nurses. Ambulance crews and emergency medicine clinicians can also refer patients to the ADMS. Since 2008, over 95,000 people have been supported in the community by the ADMS (CDHB, 2013). The ADMS has an annual budget of \$8 million (Timmins and Ham, 2013).

### • **Community Rehabilitation Enablement and Support Team (CREST)**

CREST was set up to offer earlier discharge from hospital for older people who are medically stable, but need a short period of intensive rehabilitation at home. CREST also accepts direct referrals from GPs if it is thought that extra support might avoid the necessity of hospital admission (CDHB, 2013). Over 3000 people have been supported on discharge from hospital in 27 months. CREST has an annual budget in the region of \$8 million (Timmins and Ham, 2013).

<sup>2</sup>Canterbury Clinical Network are responsible for improving the way the system works, and ensuring safe patient flows across the system. However, it is the Canterbury Clinical Board who have overall responsibility for clinical governance over the services funded by CDHB.

### • **Adult mental health services**

Adult mental health services continue to be the subject of rigorous review, with the aim being to develop a less hospital-based, integrated model of care. A single, integrated multidisciplinary team functioning across outpatient and inpatient settings is proposed. The team will act as the point of continuity irrespective of whether there is a need for inpatient care or the involvement of more than one care agency. It is planned that the services will work to a 'hub and spoke' model. Reportedly, significant progress has been made towards developing the service structures and leadership to reflect these changes and developments (CDHB, 2013), not least the development of a collaboration referred to as Community Support Work Access Pathway (CAP), which was placed on HealthPathways as a centralised referral point in April 2013.

### • **Community-based Falls Prevention Programme**

The Community-based Falls Prevention Programme provides a range of home and community-based options for supporting older people to avoid falls (CDHB, 2013). 2350 people have been referred to the programme in 17 months. There has also been a reduction in the population aged over 75 admitted to hospital as a result of a fall (from 8.4% to 8.2%).

### • **Consumer Council**

CDHB's 16 member Consumer Council provides input into decision making as an advisory group for the Chief Executive. Built on the premise 'nothing about us, without us', it supports CDHB's transparent partnership ethos by ensuring patient voices are heard. Whilst it communicates the views of the community on a wide range of issues, it is not involved in either contracting processes or decisions of a clinical nature.

### • **Shared Care Record View**

The Shared Care Record View (eSCRv) is an influential feature of CDHB's transformation of cross-sector care. It is a secure database for electronic patient information linked to CDHB's principal clinical information system and contains up to date information, as the technology used automatically gathers all hospital and pharmacy data 'live' as it is entered. Access is given to general practices, pharmacists and community nurses. eSCRvs contain scan and test results, which are then used to inform care decisions. More recently, parts of GP's patient records have been made accessible to pharmacies and hospitals.

### **How is CDHB performing?**

Outcome data for year 2011/2012 shows that:

- The rate of avoidable hospital admissions per 100,000 population was 1,603 (an almost identical figure to that seen in the UK)
- The percentage of patients presenting to A&E who were admitted, discharged or transferred within six hours has risen from 87% in 2009/2010 to 95% in 2013. Across New Zealand the figures were 80% to 93% respectively
- The percentage of people waiting < 6 months from referral to First Specialist Assessment was 99%
- The percentage of people waiting < 6 from commitment to treat until treatment was 98%
- Acute surgical inpatient length of stay was maintained at < 4.28 days
- Elective surgical inpatient length of stay was maintained at < 3.21 days

(Source: CDHB, 2013)

Table 1 demonstrates the impact that the earthquakes had on Canterbury health services and shows that in the last year, demand in the community has been better managed, leading to a decrease in acute readmissions, unlike the situation across the rest of New Zealand.

Table 1: Acute Readmissions in New Zealand

Acute readmissions	Canterbury DHB	All New Zealand
<b>2008/2009</b>	8.7%	9.6%
<b>2009/2010</b>	9.1%	9.9%
<b>2010/2011 (Earthquake period)</b>	9.7%	10.1%
<b>2011/2012</b>	9.4%	10.4%
<b>Overall change over four years</b>	+ 8.04%	+ 8.33%
<b>Change in last year</b>	- 3.1%	+ 2.97%

Source: <https://www.cdhb.health.nz/Hospitals-Services/AToZ/Documents/CDHB%20Quality%20Accounts%202011-12.pdf>

Whilst the system appears to be working much more efficiently than compared to five years ago, measuring CDHB's improvement is no easy task (Timmins and Ham, 2010) and no evidence was found to demonstrate if this improvement was statistically significant, nor if it was related to a direct causal relationship between the reductions in acute readmissions and Canterbury's 'whole-system' approach. Moreover, although there is plenty of evidence showing increased primary and community activity, this does not in itself demonstrate higher-quality care or good value for money. Income for the year 2011/12 was \$731.25 million (of which 93% was Ministry of Health revenue) yet outgoings were only \$723.96 million (CDHB, 2013).

The Canterbury ACO model appears to be working well as a system, but as yet very little evaluation has taken place. What can be learnt from Canterbury is that openness and transparency in contracting, funding and planning all appear to be positive influences.

## CASE STUDY 2: Alzira, Valencia, Spain



The story of Alzira's journey to becoming regarded as a highly successful model for integrating primary and secondary service delivery focuses on the use of private sector finance and its highly sophisticated use of IT facilitating information sharing to minimise duplication and enhance clinical decision making.

The Alzira mantra to improvement is: the money follows the patient.

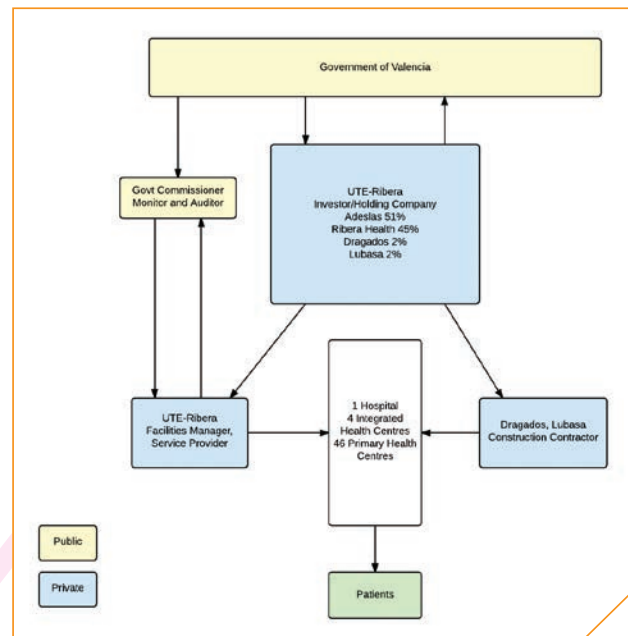
The Alzira model is named after the town where Spain's first Public/Private Finance Initiative (PPFI) covering health provision was established (Serrano et al., 2009).

The national legislative framework for the Spanish national health service is defined centrally by the Ministry of Health and Social Policy, and is funded through general taxation. The responsibility for ensuring effective health provision is devolved to the 17 regional government or communities. Legislation enables regional taxation to raise additional funds (Edwards, 2011), however no details were evident in the literature regarding exact levels.

In 1997 the Valencian Autonomous Community's Department of Health (VDoH) entered into a comprehensive PPFI contract with Ribera Salud (Ribera Health) Unión Temporal de Empresas RSUTE (UTE - Ribera, an Investor/Holding company). Adeslas, a medical insurance company, owned a 51% share, Ribera Health owned a 45% share, the remaining 4% was owned by Dragados and Lubasa, the construction contractors. Significantly, both Ribera Salud and Adeslas were not simply financed by, but were partly owned by national banks; this led to very preferential lending rates which ultimately gave RSUTE a substantial advantage over any other potential competitors for the contract (Acerete et al., 2011). In the event, RSUTE were the only bidders for the contract.



Figure 3: Alzira Organisational Chart



(Source: Acerete et al., 2011).

In comparison to some other European countries, Spain has a low level of public investment in PPFI (at 6.9%). The UK has a 20% rate of PPFI (Engel et al., 2013). Spain also has a tradition of strong trade union influence. As recently as 2012, doctors and other healthcare professionals went on strike over concerns with the Spanish government's ongoing privatisation agenda (Garcia Rada, 2012). The above reasons offer contextual information as to why criticism of Ribera Salud has been focused on financial and employment issues.

Due to inherent problems in the initial contract linked to cost-shifting between primary and secondary care (McKee et al., 2006), by 2003 the level of losses for Ribera Salud became unsustainable and the contract was terminated by VDoH, despite the basic assumption that Ribera Salud would assume risk transfer. Criticisms of the contract include:

- Failure to extend to primary services
- The capitated fee agreed by VDoH (€233) was much lower than elsewhere in Valencia (€465)
- In terminating the RSUTE contract early, VDoH paid out €69.3 million, of which €43.3 million was for the purchase of the infrastructure assets at their written down value, and €26million for compensation of lost profits
- RSUTE II paid €72m for the new contract, which meant that for only €2.7 million it had achieved not only a new 15 year contract, but also a renegotiation of the breadth of service provision and an increased per capita fee which was still below the regional average
- In the second contract the starting per capita fee was set at €379



The whole process of terminating and re-letting the contract brought considerable political criticism (Acerete et al., 2012).

Alzira hospital is state owned, and at end of RSUTE contract period, the ongoing operation of the hospital will be returned to the state. Ribera Salud is responsible for operating and managing both the clinical and non-clinical services within the hospital, in addition to the primary healthcare of the corresponding health area.

Publicly accessible literature is dominated by that produced by Ribera Salud, and naturally it paints a favourable picture. However, in accordance with national Spanish healthcare outcomes reporting requirements, Ribera Salud's performance data is freely accessible (albeit in Spanish), via the Instituto Nacional de Estadística (INE, the Spanish national statistical office).

An NHS Confederation report of their visit to Alzira offers perhaps a more impartial view which, in combination with details provided by Ribera Salud and other sources, forms the basis of the evidence presented below on the actual delivery of the Alzira model of healthcare provision (Edwards, 2011).

The Alzira model appears to demonstrate impressive outcomes, which according to Ribera Salud have been achieved through:

1. The creation of a rigorous management culture in which 'compliance is expected'
2. The creation of a highly developed networked IT system enabling real-time data display of all clinical and administrative information held on patients
3. Careful control over clinical processes.

### **Alzira's rigorous management culture**

Overseen by a Medical Training Commission, Ribera Salud has an education committee which provides continuing medical education (Edwards, 2011) and health professionals are expected to participate in continuing professional development (CPD) activities (McKee et al., 2006). Compliance is achieved by offering financial incentives, which for some staff can be sizeable sums. There is no mention of how non-compliance is handled. Incidentally, whilst the Ribera Salud management team suggests workers 'cohabit perfectly', there is evidence that local trade unions disagree (Acerete et al., 2011) and following a major strike in 2007, 10% of the hospital's doctors resigned (Bes, 2009).

The employee base in Ribera Salud comprises a mix of public and private contracts.

- 27% are public sector workers, who were transferred from the previous state run hospitals
- 73% are directly employed by the private sector with different employment terms and conditions
- All hospital doctors are employed directly
- Approximately 50% of GPs are employed directly
- Hospital doctors received their salaries by way of an 80% fixed component plus up to 20% on an incentive bases, whereas for GPs, this translates to 90% fixed plus 10% incentive based salary



- Incentives are used to encourage team work and individual development (McClellan, 2013)
- Responsibility for determining the bonus amount paid to staff lies with the Commissioner who acts as a coordinator between the management company and VDoH. Although located within the hospital, the Commissioner is a Valencian government employee
- Bonuses have three components: the performance of the overall company, of one's local team or service, and of the individual
- Performance is tracked through Ribera Salud's information system
- All clinicians can access their own performance scores online, as well as weekly benchmarks against their peers

(Sources: McKee et al., 2006; McClellan et al., 2013).

Within the Spanish healthcare system, care remains free at the point of delivery, access to specialist/hospital care is accessed via GPs working in Primary Health Centres, and patients are geographically allocated to a Primary Health Centre. However, patients do have a choice over which hospitals they are referred to.

With stated mean surgical waiting times of 40 days and out-patient visit waiting times of 15 days (source: Ribera Salud, 2014: [http://www.hospital-ribera.com/english/alzira\\_model/04.htm](http://www.hospital-ribera.com/english/alzira_model/04.htm)), Alzira is thought to have attracted patients from regions with longer waiting times (Edwards, 2011). It is likely that this may be a contributory factor in the regular claims of understaffing that beset Ribera Salud. Under the contract terms, when a local patient is referred to Alzira, 100% of the capitation fee is paid to Ribera Salud. However, only 80% of the relevant fee is received if patients are not from the local area (McKee et al., 2006). Therefore although choice and access is available to patients living in the general region, Ribera Salud are disincentivised to accommodate them, while a further incentive for Ribera Salud to keep their own populations satisfied is that if/when Alzira patients choose to be treated in other state funded hospitals, Ribera Salud are accountable for the full cost of their care. Ribera Salud acknowledges the disincentive by stating that "the hospital has an incentive to maintain high standards to retain the loyalty of patients, as "money follows the patient" (Serrano et al., 2009:20).

### **Alzira's highly developed networked IT system**

Alzira was the first organisation in Spain to develop and implement electronic healthcare records displaying real time information, including X-ray and lab results, available to all clinicians (in both primary and secondary care). Whilst the system's hospital generated data is accessible between sectors, complete integration with Primary Care Medical History is less well developed and described as 'being through ad hoc interfaces' (source: Ribera Salud, 2014: [http://www.hospital-ribera.com/english/institutional\\_info/07.htm](http://www.hospital-ribera.com/english/institutional_info/07.htm)). The use of IT in clinical management across sectors, between different levels of the clinical hierarchy and its access to administrative and other non-clinical personnel, is portrayed as evidence of functional integration within the organisation (Torner, 2012).

**Alzira's control over clinical processes**

A number of medical care pathways have been locally developed and implemented, and staff are performance managed according to these guidelines. The pathways are described as maps of processes which clearly state who, when, where and how an intervention will be carried out, in a defined and agreed process. All staff are further required to ensure the meeting of nationally set health targets and to 'out-perform' other hospitals in the region.

The control over clinical processes extends to primary care by way of prevention measures including chronic condition management, and pathways for rehabilitation and palliative care services (McKee et al., 2006). A further measure described as a 'medical link' is the locating of GP consultants and specialist outpatient clinics within primary care centres, who act as 'bridges and counsellors' aligning procedures across sectors, plus ultimately reducing the need for hospital attendance or admission and hence added costs. In addition

to X-ray facilities, some larger primary care centres also offer an A&E facility.

Clinical pathways are used not only to define what, who and which is the best place for diagnosis and therapy but also as a means of measuring, evaluating and cost benchmarking. It is these processes that are offered as evidence for clinical integration (Torner, 2012).

Álvarez and Durán (2013) compare hospital outcomes, and describe how Alzira is generally shown to have higher patient satisfaction rates, lower staff absenteeism numbers, shorter average lengths of stay, lower waiting times and lower capitation costs than its regional competitors. However, they note that the data used to make these assessments is provided by the hospital. Consequently, although there is not a question of data validity, questions should be asked about 'data provenance' and the objectivity of the data that is used to form the evidence.

Table 2: Outcomes data for Ribera Salud

Activity results, Ribera Salud hospitals vs. other hospitals in Valencia region.		
	Ribera Salud hospitals	Valencia region hospitals
Readmission rate within 3 days per 1,000 discharges	4.05	6.1
Average length of stay	4.5 days	5.8 days
Electronic case history use in hospital	100%	20%
Patient satisfaction (0 - 10 with 10 being the best)	9.1	7.2
External consultation delay	25 days	51 days
Average surgery delay	34 days	60-90 days
CAT scan appointment waiting time	12 days	90-120 days
MRI scan appointment waiting time	15 days	90-120 days
Major day surgery rate *	56%	43%
Outpatient surgery rate *	79%	52%
Caesarean rate	22%	25%
Emergency waiting time	< 60 minutes	131 minutes

(Source: Edwards, 2011:13)

\* Higher rates are better. This indicates that a larger proportion of cases are carried out as day or outpatient surgery, which has not only cost benefits but is preferable for patients in terms of avoiding hospital admission.

Objective financial data is no more readily accessible either. As Acerete et al. (2011) note, under Spanish law private companies are not required to make their financial statements public. It is possible that financial details are publicly available from Generalitat Valenciana, however the English version of the website does not include these details. The only readily accessible data on levels of capitation funding are offered by Bes (2009) in an independent World Health Organisation bulletin. Bes writes that where Alzira really stands out is in its ability to control costs; Ribera Salud spends approximately 25% less than state run hospitals in the region, and thus demonstrates sustained value for money.

Table 3 showing growth in capitation costs

Per capita costs					
	2006	2007	2008	2009	2010
<b>Cost per inhabitant for the wider region of Valencia</b>	€659.53	€731.11	€780.96	€811.74	€824.64
<b>Annual fee per inhabitant paid to Ribera Salud</b>	€494.72	€535.39	€571.90	€597.64	€607.14
<b>Difference between the region of Valencia and Ribera Salud</b>	-25%	-27%	-27%	-26%	-26%

(Source: Edwards, 2011:8)

Figures from patient satisfaction surveys show Ribera Salud to be a patient-oriented organisation (Torner, 2012). There is however, no evidence presented concerning patient voice or service user involvement in the planning of services. Possibly McClellan et al.'s (2013:30) observation is acceptable, "what matters to patients is not the structural organisation of the provider group, but the effectiveness of that group in clinically integrating and coordinating care delivery".

The Alzira model offers the following benefits:

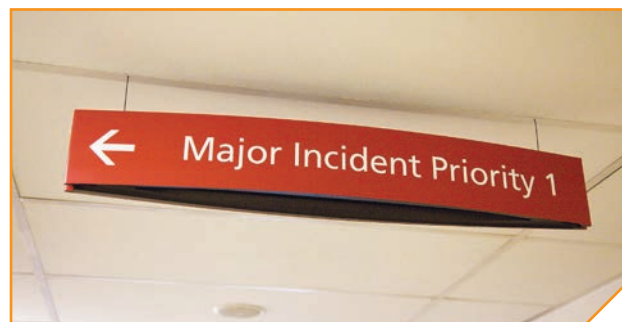
- For the patients, it offers quality care that is more human, personalised and comfortable
- Patients have easy access to, and short waiting times before seeing well informed surgeons
- For staff, there is security of job stability with a salary that incorporates both a fixed element and an incentive bonus. Hard work is rewarded
- For staff, it provides an opportunity for career development, to become involved in research and of working in an environment where decision-making is well supported by the use of IT
- For the commissioner (VDOH), it offers lower than average and relatively predictable operational costs through an annual capitated fee, which also serves as a form of financial risk transfer, no need to worry about capital investments for the duration of the contract and the additional benefit of innovative management and IT systems being implemented

(Source: (Edwards, 2011).

The Valencian government appear satisfied with the Alzira model as they have taken out further contracts with Ribera Salud for hospitals in Torrevieja, Denia, Manises and Vinalopó and Crevillent (Hospital de Torrejón) (McKee et al., 2006; Edwards, 2011), providing a total of 1500 beds across the region.

If looking to determine whether outcomes have improved and costs have been contained, then it appears that the Alzira model is achieving this goal.

However the long-term sustainability of the Alzira model is uncertain. In 2009, Ribera Salud reportedly made a profit of €2.1 million (García Rada, 2012) yet since the global financial crisis, Alzira profits have started to fall. The Valencian government has received lower increases in government healthcare budgets and



although the contracted for annual increase in capitation fee has occurred, the annual increases have fallen from a high of 10.1% in 2005, to below 2% for 2010 and 2011. Falling profits, in combination with reduced increases in capitation budgets, means there is unlikely to be sufficient cash-flow generated to pay back the investment made by the consortium/prime contractor (Acerete et al., 2012).

#### EU Press release Brussels, 11 July 2014

The European Commission launched a formal investigation into the possible manipulation of statistics in the region of Valencia, Spain. The Commission is not calling into the question the accuracy of the statistics being utilised, but will examine whether deliberate or seriously negligent misreporting of expenditure in the region has occurred. It appears that the Intervención General de la Generalidad Valenciana (IGGV) may have systematically sent incorrect information to the national statistical authorities over many years. As well as failing to report considerable health expenditure, the IGGV may not have respected the accrual principle, required under national and EU law. Moreover, reports by the Regional Court of Auditors, flagging these problems, and comments of the Regional Ministry of Health, seemed to have been ignored.

The seriousness of the claims to be investigated by EU commission would suggest that earlier concerns regarding the financial viability of the model were justifiable (Acerete et al., 2011). A similar comment was made by Edwards (2011:110) who noted that:

"Study visit participants were concerned that to a certain extent the representatives of the Valencia community administration were very close to the concession holders, which could reduce the effectiveness of the oversight they were providing (regulatory capture). We also had the strong impression that the detail of the contractual relationship was rather more negotiable than UK public administration may be comfortable with."



## CASE STUDY 3: The Jönköping Model, Sweden



The story of Jönköping's journey to becoming promoted as a highly successful model of health service delivery focuses on Qulturum, described as the 'motor of improvement work' (Bodenheimer et al., 2007). Established in 2001 and funded by Jönköping County Council, Qulturum has no clinical function. Its work is devoted to innovation and learning to support improvements in the delivery of health services.

The Jönköping mantra to improvement is: we all have two jobs to do - to do our job and to improve our job.

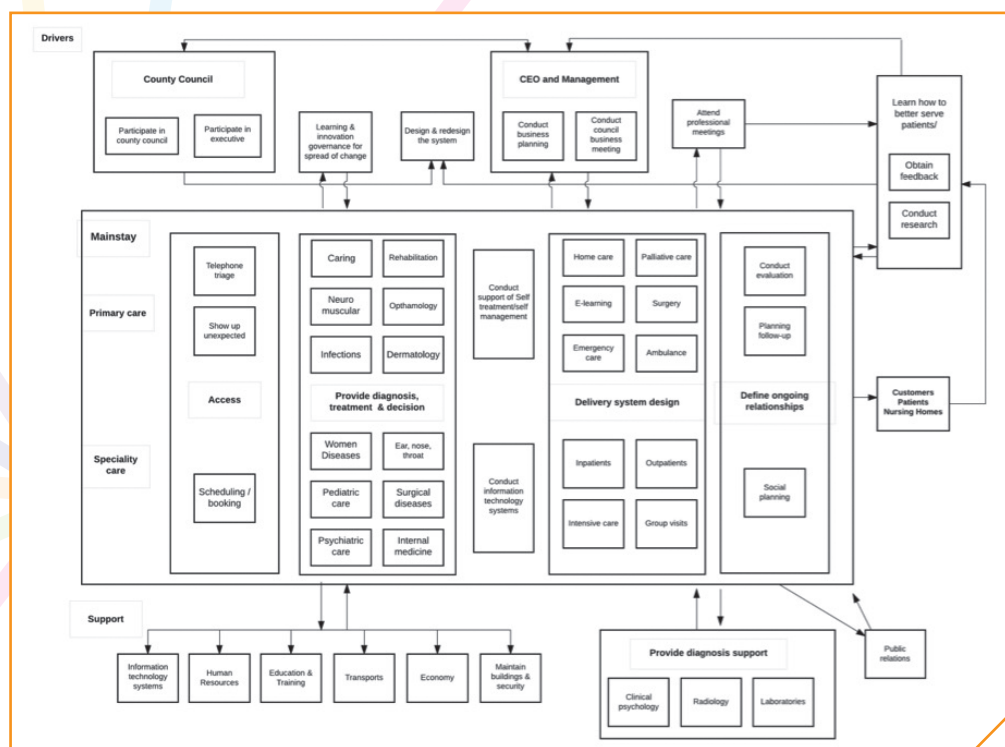
Jönköping is situated in the south east of Sweden and has a strong local economy (Forss, 2013). It has excellent access to transport links which have also contributed to the areas commercial success (Jönköping is home to international companies such as Ikea and Husqvarna). The county council's description of Jönköping as offering, 'a good life in an attractive county' reflects not only its commercial success but presents a holistic vision focused on quality of life, and this has been an important part of the context of the Jönköping model (Øvretveit and Staines 2007).

In Jönköping, along with the rest of Sweden, access to healthcare was previously a problem. Long waiting times for appointments, fragmentation of services, patients feeling

poorly involved in decision-making and problems with some safety aspects of elderly patients care were experienced (Bodenheimer et al., 2007). In response to this, Jönköping county council developed a conceptual model for improved access called Bra Mottagning (which translates as 'Good Clinic'), grounded in the belief that 'lack of access caused a waste of resources' it was based on 'logistic principles and collaborative learning' (Bodenheimer et al., 2007:12). The Bra Mottagning Collaboration was intended to spread the learning across Sweden; it was most successful however in counties where the leadership was committed to the concepts (Strindhall and Henriks, 2007).

The need for strong, well established leadership in high performing healthcare organisations is well known (Shortell, 2009; Baker, 2011). Gozzard and Willson (2011) note the importance of this in Jönköping, describing Sven-Olof Karlsson (now ex-CEO of Jönköping county council), Mats Bojestig (Medical Director) and Göran Henriks (Director of Learning and Innovation) as the 'triumvirate', implying a close and powerful relationship. Another important relationship is that between Qulturum, Jönköping and the Institute for Healthcare Improvement (IHI) in the USA, from whom they have received much support and encouragement following their participation in the Pursuing Perfection Programme (Andersson-Gare and Neuhauser, 2007; Baker and Denis, 2011). Qulturum's association with IHI and its highly regarded status with international policymakers will undoubtedly have been of great influence in disseminating the benefit of the Jönköping model within the literature.

Figure 4: Jönköping's Organisational Chart



(Source: Øvretveit and Staines, 2007: 74).

Jönköping's leadership's clarity of vision regarding the need to build on the work of Bra Mottagning to improve access and control costs led to the establishment of Qulturum (Henriks and Bojestig, 2008). In turn, the guiding principles of Qulturum are:

- Learning is key to improvement
- Improvements need to be broad and deep
- Improvements must be both bottom up and top down.

(Source: Bodenheimer et al., 2007).

### • *Learning as key to improvement*

The creation and funding of Qulturum to develop QI work and training for staff sits at the very centre of Jönköping's expression of learning as key to improvement. Qulturum started working with the organisation's leaders, but has since expanded and now over half of Jönköping's staff have benefitted, with improvements aimed across the system to facilitate better patient flows.

### • *Improvements must be top down*

Quality registers were designed to support efforts by the county councils to analyse, improve and manage the healthcare services they provide (SALAR, 2013). These were used to identify the variation in Jönköping's performance within the indicators provided, which gave direction for where upcoming improvement efforts could be focused (Andersson-Gare and Neuhauser, 2007). At a strategic level, the Balanced Scorecard (Kaplan and Norton, 1996) was used to evaluate performance across four domains: financial; customer/patient experience; internal processes and institutional learning.

Coordination between top down and bottom up improvements occur at 'Big Group' meetings, held every two months, and attended by representatives of the clinical and leadership groups (Strindhall and Henriks, 2007). Through open dialogue, progress

towards achieving strategic aims is reported and how quality improvement initiatives are (or are not) contributing to these in measurable ways is discussed (Baker et al., 2008).

### • *Improvements must be bottom up*

To enable bottom-up improvements Jönköping uses the concept of 'micro clinical systems' (Batalden and Davidoff, 2007). Micro clinical systems are primary care teams and clinical units who jointly make decisions and improvements regarding the care of their patients. They have shared clinical and business aims against which they are performance managed. Outcome improvements feed into the meso-level where they are coordinated, and then upwards to the macro-level where improvements become incorporated into policy and priority setting by senior management (Gozzard and Willson, 2011).

Øvretveit and Staines (2007) found that whilst participation at micro-level is encouraged, it is not mandated, and consequently that evidence base management and guideline implementation is better in some departments than others. However, participation is encouraged through an incentive scheme, which is based on an awards system.

### *Outcomes*

Baker and Denis (2011:4) describe how over fifteen years, Jönköping has achieved "improvements in virtually all sites, improving patient flow, asthma care, elder care, children's services, prevention of influenza and patient safety". More specifically, training has led to significant improvements being achieved against the national targets:

- As a result of primary care team's attendance on Qulturum courses, by 2004, 88% of patients received appointments within 7 days. In 2011, 94.8% of Jönköping patients received appointments within 7 days
- The surgery department at Varnamo hospital cut its waiting times from 30 days to 14 days after the department's 'champion' received improvement training from Qulturum



Each micro unit determines their own improvement measures and how these will be implemented in practice. However they do so only after having been given the tools, knowledge of how to do so and also the 'inspiration' to do so by Qulturum.

The process used in Varnamo hospital was to:

1. Map the processes in the department to show where productivity was low
2. Use this knowledge to see which processes could be carried out by nurses if they were given extra training
3. Enable nurses to carry out extended duties (as identified in 2), thereby freeing up physician time and increasing physician capacity to respond to waiting times for appointments.
4. This resulted in waiting times being reduced and access times improved



(Source: Bodenheimer et al., 2007).

Through ongoing redesign of services and better management of long-term conditions, Jönköping has succeeded in reducing hospital days for congestive heart failure by 30%, hospital 'utilisation' for long standing Ambulatory Care Sensitive Conditions by 20%, and hospitalisation for paediatric asthma cases down from 22 per 10,000 to 7 per 10,000 (Gozzard and Willson, 2011).

### On buy-in or sustainability

Qulturum training is perceived as successful, as it includes an ideology that elevates its improvement methodologies to being received as more than just technical tools (Øvretveit and Staines, 2007). Andersson-Gare and Neuhauser (2007:3) corroborate this, writing that Jönköping states amongst its goals that "the healthcare system should preserve and constantly recreate the commitment which determined why those who work in the healthcare sector chose to do so in the first place, i.e. to do well to fellow man".

Recognising the value of thinking in terms of whole system improvements, various rewards are initiated at different levels within the system. For example, at a senior level, hospital CEOs can receive annual bonuses of up to 5% of their salary (Baker et al., 2008). Similarly financial incentives exist at individual organisation or unit levels, where rather than any cost savings made as a result of the improvement work being absorbed back into the 'global' budget, savings are retained and used to develop further improvement work.

There is an expectation that QI work will be promoted by senior physicians, although not all physicians have the desire to become actively involved (Øvretveit and Staines, 2007). Baker et al. (2008) found that many clinicians felt that there should be a greater focus placed on a clinical evidence based approach, for example the use of epidemiological data to determine improvement priorities. Josefsson et al. (2102) draw attention to the requirement of the Swedish National Board of Health Care, which states that "county

leadership has responsibility for knowledge management and the development of evidence based guidelines and for their application in clinical activities" (NBHC, 2009:124). However Josefsson et al.'s survey of 1,445 healthcare professionals (physicians, nurses and other clinicians) found evidence of differences in priorities between management teams and clinicians. They report that although respondents felt that their superiors and colleagues encouraged them to change practice, shortages in time and resources and current workload levels meant that although it should be the responsibility of the management to create the conditions for evidence based practice, managers showed relatively little interest in evidence based approaches. As a result, evidence based decision-making was rarely used in either daily practice or in changing practice:

"Many times it is easier to do as you have always done and when there is insufficient time and resources then so be it. With a growing waiting list and prolonged understaffing there is also a decrease of endurance and motivation to search for new findings and to change or renew practice."

(Josefsson et al., 2012:122).

### Integration of services

A common IT system has been in use across primary care in Jönköping for many years (Gozzard and Willson, 2011). More recent however, has been the installation of a new system from MetaVision, resulting in primary and secondary care having access to shared data. This was sold as "providing a complete continuum of care across the Jönköping network" (Leiden, 2010). This recent connectivity of IT between primary and secondary care appears to suggest that integration between services had not been as high up on the QI agenda as other QI work within sectors. Moreover, the hospital sector seemed to be more involved than the primary sector.

A further barrier to integration is that primary care staff are only invited to attend Big Group meetings when they are specifically discussing primary care service developments. Moreover, unlike hospital staff, primary care staff or units are charged for their use of Qulturum learning resources and training.

With the exception of staff involved with the Esther project (see below), primary care does not appear to be well integrated with social care (Gozzard and Willson, 2011), with patients and clinicians reporting that integration and coordination of care are significant issues, especially for the ageing population (Baker et al., 2008). However, the Esther project has done much to remedy this situation. Through redesign of hospital discharge processes, integration of documentation and improved patient self-management, the Esther project has achieved a 20% reduction in hospital admissions and a redeployment of resources to the community (Baker and Denis, 2011).



### Introducing Esther

The Esther project was developed in the late 1990s, by a group of clinicians keen to improve cross service episodes of care.

The fictitious character of Esther was created.

Esther is an 88 year old woman with several chronic conditions which lead to occasional acute flare ups (Baker and Denis, 2011). In order to develop a chain of care, "Esther" is used to help clinical and management teams envisage her treatment 'flow' through the system, and identify where barriers might be and how these might be overcome/improved.

The Esther Project is not a formal integration of services, but relies on the efforts of a network of health, social services and community staff. The programme functions as a result of goodwill and commitment to the project; no extra salary or incentives are received. Refusal to accepting the status quo or passively allowing poor practice to continue underlies Jönköping's mantra that 'we all have two jobs to do - to do our job and to improve our job'. Staff are welcome to join the Esther programme, but are not coerced into giving their time (Davies, 2012).

Although Esther started as a persona, over time representative 'Esthers' have become involved in discussions over service development. As the project has grown, so too has the benefit



to patients, now seen with regular meetings between staff and elderly people to inform QI work. The following extract is taken from a presentation given by Nicoline Wackerberg, the Esther Project Co-ordinator (Davies, 2012:13):

"Quality time for Esther is protected personal time in a social care environment such as a care home when the patient dictates what happens. It is usually a thirty minute period per week, but it enables the particular issue that concern Esther to be resolved. Communications between care-givers is crucial, with regular meetings between care-givers, education and understanding of the challenges different professions face in delivering services, a commitment to multi-professionalism and valuing the roles and contributions of others, and a general atmosphere of openness and learning. This enables the development of a shared map and a shared narrative. Site visits between agencies and organisations are important learning opportunities. This does not always mean that individuals working within the network always work well together – the process is not 'friction-free'. However, disagreements are opportunities to review the network and identify the stumbling blocks that damage relationships. Nobody is perfect, but everyone is working on it."



**Achievements**

**“Jönköping is recognised as a world leader in healthcare improvements and has the best healthcare outcomes in the world at the third lowest cost”.**

(Source: NHS Trust website).

A belief in magic bullets and wanting so desperately for something to actually work can sometimes lead to unintentional myth building.

Andersson-Gare and Neuhauser (2007:7) provide a more realistic assessment, and explain that “in the first initiative to make national registry data transparent in 2006, not all clinical results from Jönköping county council did well: some were excellent, several were in the middle range

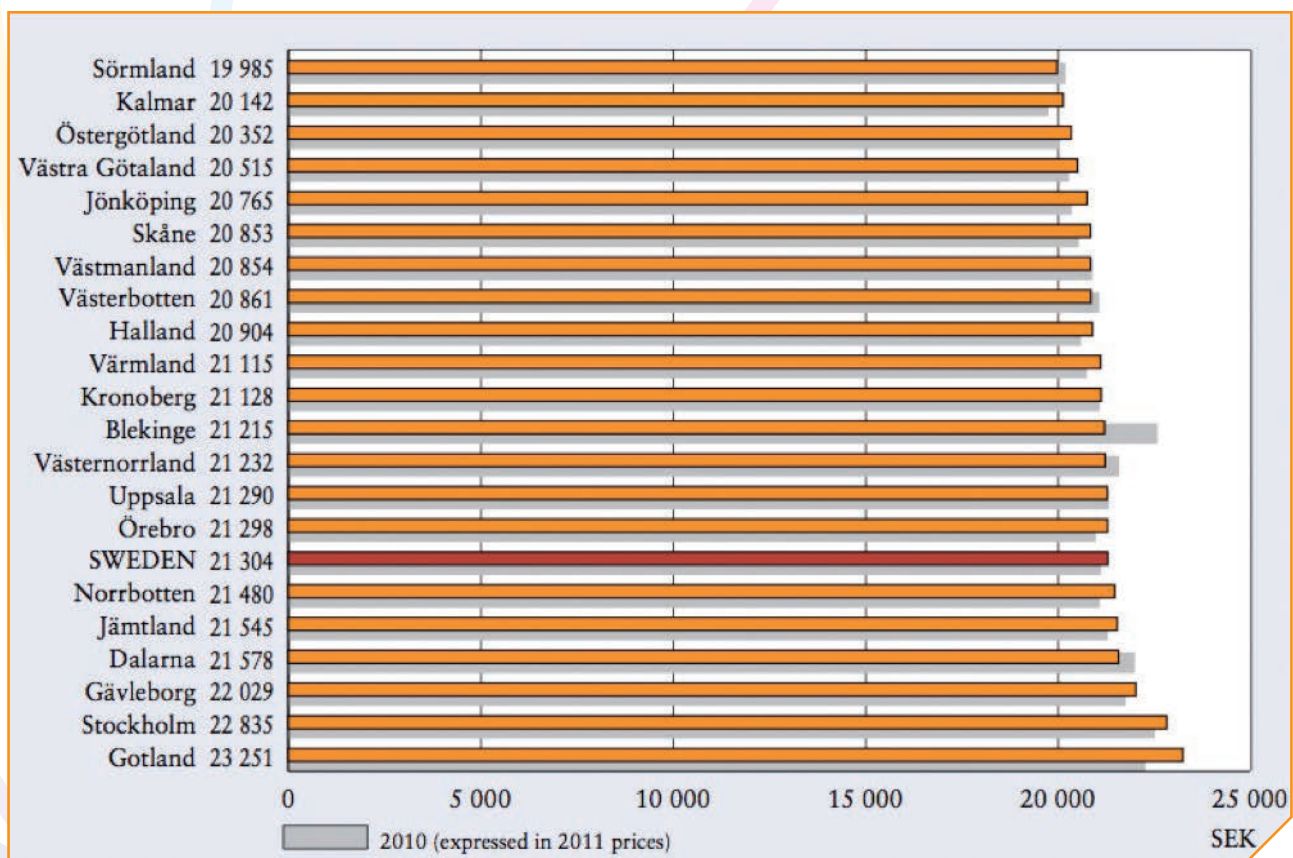
- Ham (2014b:21) suggests that “the results of this work over many years are evident, as Jönköping compares favourably with other county councils on measures of quality of care in national rankings”

Figure 5 demonstrates that Jönköping’s costs compare favourably with other counties in Sweden. However, it also shows that they are not the third lowest, despite some of the claims that are made.

The conclusion from an early, but independent, case study of the Jönköping Quality Programme by Øvretveit and Staines (2007:81-82) is used as an illustration of the, at times, slightly confusing evidence surrounding the Jönköping model:

“There is evidence that the programme has initiated and nurtured many changes and projects and achieved a number of successes. There is less evidence of patient and clinical outcomes and no evidence of the costs or the savings of the

Figure 5: Structure-adjusted healthcare costs per capita, 2011. (The figures exclude home healthcare, dental care and restructuring.



(Source: Swedish Association of Local Authorities and Regions Statistics, 2012:82)

and some needed to be improved”. Much of the literature describing the success of Jönköping makes reference to it being highly ranked when comparing various indicators by other county counties.

- Baker (2011:9) states that “compared to the other 20 county councils in Sweden, Jönköping achieves the best overall ranking on indicators across Sweden’s six goals for quality”

programme. A perceived success of the programme was in the use of quality as a business strategy, a real rather than verbal commitment to learning and continuous improvement and a widespread understanding of processes and systems thinking.”

Through constancy of clear sighted leadership and the resourcing of Kulturm, Jönköping has undoubtedly succeeded in putting ‘improvement science’ and learning at the heart of what they do.

## 4. Discussion

In this section, we respond to the following questions that we set by the South Nottinghamshire Transformation Group:

1. How does accountability work in the ACOs?
2. How does decision-making work in the ACOs?
3. How did the ACOs get implemented/sustained?
4. What outcomes were achieved in terms of improved quality, better use of available resource?
5. What can we learn from what did / did not work? What were the 'wicked issues' and how were they overcome?
6. What are the essential characteristics of the ACOs?
7. "Rank" the attributes, which ultimately brought about success in terms of importance

### *How does accountability work in these organisations?*

- The Alzira model differs from both the Jönköping and Canterbury models as it refers to the implementation of a PFI contract. The Valencian Autonomous Community (VAC), as all other communities in Spain, had authority to negotiate the contract with Ribera Salud as the lead / prime contractor
- Jönköping county council and CDHB are fully autonomous legally constituted entities, and both organisations act as purchaser and provider
- Where Jönköping County Council differs from CDHB is that it also has responsibility for services other than health provision. Whilst the county council has a duty to provide funds for healthcare, the level of funding remains open to outside political influences
- In Jönköping, Primary Care Centres are owned and funded by the county council who contract with them on a per capita basis as sole (group) providers. GPs working in privately built and owned practices, and are described as having an independent contractor status similar to that of GPs in the UK (Gozzard and Willson, 2011)
- Hospitals in Jönköping receive global budgets. All staff are employed by the county council.
- CDHB owns its hospitals and employs salaried staff. It is the responsibility of the Planning and Funding Division to undertake and manage agreements with service providers, and a large numbers of allied and community services collaborate and work on an alliance contractor basis
- In CDHB, GPs are independent contractors

### *How does decision-making work in these models?*

- Scant detail has been published regarding decision-making within the three case study organisations
- Organisational level structures (as seen in Figures 2, 3 and 4) imply the governance frameworks used for decision-making
- All three cases refer to clinical decision-making being undertaken at micro system levels, which are then fed up to board level by way of medical directors and clinical coordinators

- Joint decision-making is also referred to in the alliance contracting process used in CDHB

### *How did these organisations get implemented and sustained?*

- Health services already existed and as such, any implementation refers to processes within these models
- In both Jönköping and Canterbury, political reform led to devolved authority for local governments, which as autonomous entities were able to determine the funding of health services to better meet local needs
- The Alzira model was implemented as a result of VAC taking the decision to introduce Spain's first PFI for healthcare in order to provide a hospital for the region, and it is this aspect that draws interest to the model. Bardsley and Dixon (2011) argue that whilst concerns have been raised regarding independent ownership and a focus on making profits as opposed to ploughing back surpluses into improving care, much of the problem is determining how successful private providers are at actually delivering care. The literature shows no evidence that Ribera Salud had a proven track record of healthcare provision. Ribera Salud themselves make reference to the 'benefit to our organisation of gaining 'know how' in running the Alzira hospital' and to the 'opportunity to demonstrate that the "Alzira model" is a valid option for the early future of the public health system'
- For Jönköping, it is the value of Qulturum's involvement and the Esther project that distinguishes the model and how it has become sustained
- What distinguishes the Canterbury model from the other two case studies is the breadth of its integration and its use of alliance contracting

All three are examples of integrated systems which have been sustained, not least, through their successful use of QI programmes.

- Ribera Salud state that they use Lean thinking. However, no details are evident in the literature regarding how such training is conducted within the organisation
- Where Jönköping and CDHB differ is that the literature clearly shows that commitment from leaders ensures that resources are available for training. Both Jönköping and Canterbury spend sizeable amounts of their budgets on ensuring this
  - Jönköping has a £1.4 million annual training budget, which significantly, is not linked to clinical outcomes performance
  - Canterbury's Patient Journey, the continuous quality improvement programme which underpins both HealthPathways and the Canterbury Initiative, costs in the region of £0.7 million per annum



### What outcomes were achieved in terms of improved quality and better use of resources?

Valuable lessons can be learnt when considering the importance and influence of context in terms of a) knowing where you're starting from, and b) whether outcomes occur directly as a result of the interventions (ACO models) used.

The literature makes reference to Jönköping achieving a 20% reduction in hospital admissions and reduced waiting times to see specialists through redesigning services (Bodenheimer et al., 2007; Baker et al., 2008). However, measuring performance that demonstrates successful integration of services is not without problems. If composite measures are to be used, questions need to be asked about how they can be meaningfully grouped together (Agins and Holden, 2007). Some groups of measures are linked, for instance, sequential steps in a process where if one process fails this impacts on the outcome of the whole process.

High levels of admissions for avoidable hospitalisations are thought to indicate poor co-ordination between the different elements of the healthcare system, in particular between primary and secondary care, such that "an emergency admission for an ACSC is a sign of the poor overall quality of care, even if the ACSC episode itself is managed well" (Tian et al., 2012:2). The age standardised admission rate for ASCS across the English NHS was 1,613 per 100,000 for the year 2012/13 (Blunt, 2013). In Jönköping, the age standardised admission rate for Avoidable Hospitalisations, for females was 1,018 and males 1,265 per 100,000 for year 2011 (SALAR, 2013).

However, when compared with other Swedish data, figures show that for females, the mean rate of avoidable hospitalisations was 1,047, with a range of 899 to 1260

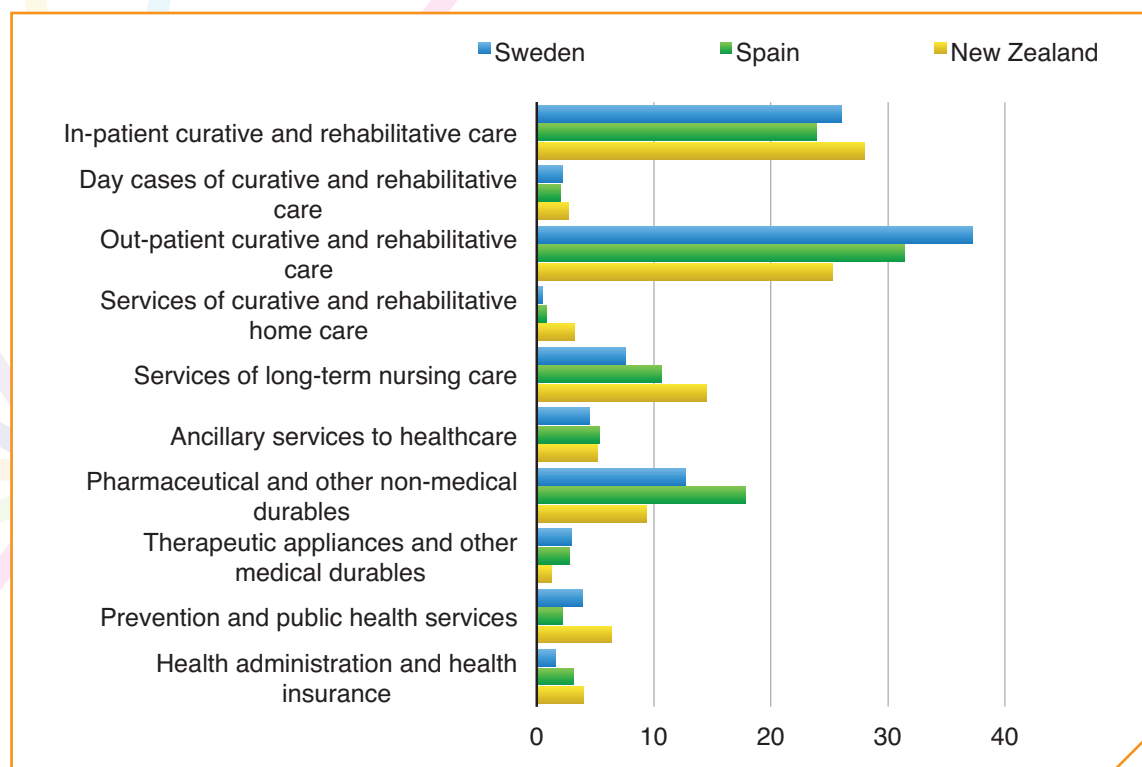
per 100,000, and for males a mean of 1,300, and a range of 1063 to 1,441. This ranks Jönköping in sixth place, and shows that they are indeed performing better than some counties. Yet countrywide, avoidable hospitalisation rates have fallen since 2000, reflecting Sweden's national policy to invest more heavily in primary care over the same period.

Considering cost improvements as measures of performance is equally problematic. Whilst limited data is available for CDHB and Jönköping, as a private company Ribera Salud are not required to publicise detailed breakdown of costs improvements that have been made. National figures have therefore been used to examine the contexts in which each model operates.

- Shifting the emphasis in resources from secondary to primary care, as is occurring at present in UK, took place in Sweden some 10 years ago. However Swedish healthcare costs remain at a similar level to UK and New Zealand, but with primary care accounting for the largest increase in annual costs (Swedish Institute, 2014)
- In Sweden better integration across sectors has occurred and that whilst overall costs have not increased, they have simply shifted to where they are incurred

Using OECD (2011) data, Figure 6 illustrates current national expenditure by sector, for Sweden, Spain and New Zealand. The national focus on primary care is clearly demonstrated; in Sweden, the highest single spending area is out-patient curative and rehabilitative care at 37% of total spend, a markedly higher proportion than is spent in either Spain or New Zealand. Additionally Figure 6 demonstrates that in Sweden, a greater proportion overall is spent on curative and rehabilitative care (66%) compared to Spain (58%) or New Zealand (59%).

Figure 6: Percentage of current national health expenditure by sector, for Sweden, Spain and New Zealand.



### • Patients and populations

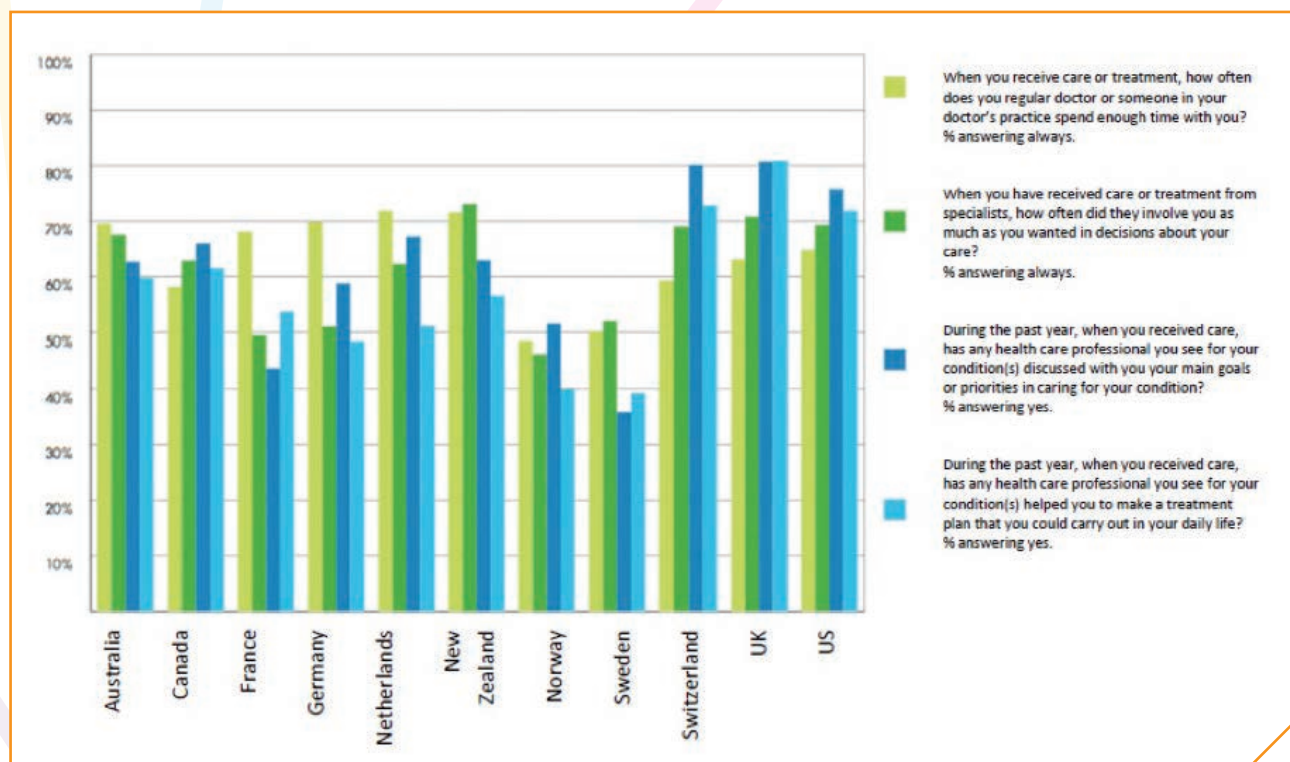
Lean thinking sees value as defined in terms of the primary customer: the patient (Rechel et al., 2010). It requires satisfying the customer the first time and every time, hence patient satisfaction surveys are given great credence, and are particularly evident in the Alzira literature, which is especially significant when there is no other evidence of patient involvement in the organisation.

Choice of primary care provider in Jönköping contributes to this 'patients as customer' approach, and in the growing trend towards more demand-led healthcare systems, attracting, satisfying and retaining patients becomes even more important.

CDHB's mantra, 'nothing about us without us', describes the organisation of a whole care delivery pathway around patient's perceptions of their needs. CDHB has a Consumer Council which meets throughout the year and offers users, or their representatives, a voice not only in their own treatment but in decision-making around future planning of services in their six months reports to

the CEO. The Esther programme has evolved to include not only real life 'Esthers' joining planning meetings as patient representatives, but also weekly ring-fenced time for elderly patients to discuss their ongoing care with their health providers (Davies, 2012). However, the Esther project only covers older patients and may not be representative of patient involvement across the system. Docteur and Coulter (2013a:34) argue that the state of patient-centered healthcare shows "a number of shortfalls in terms of achieving patient-centred care in Sweden's health system and that the concept of shared decision-making between patient and provider has yet to take root". Low levels of variation in patient-centredness between the counties within Sweden were identified, leading to the conclusion that the administration of healthcare by the county councils had not had any particular impact. Moreover, Docteur and Coulter (2013b) using evidence from the Commonwealth Fund's 2011 International Health Policy Survey, present data showing that Sweden appears to be lagging behind other national systems, including both New Zealand and the UK, in relation to patient-centredness.

Figure 7: Comparative data from 2011 International Health Policy Survey in relation to patient-centredness measures.



(Data source: Commonwealth Fund, 2011. <http://www.commonwealthfund.org/publications/surveys/2011/nov/2011-international-survey>)

The three ACO models reviewed here vary in the breadth of care which they offer to the populations for whom they are 'accountable', and the degree to which a model facilitates integration of services may in some part be related to its structural organisation.

- In Alzira, Ribera Salud's contract was only to provide primary and secondary services. Population health in its widest sense was not a consideration
- In Canterbury, structural and financial measures are in place that not only to encourage, but that require integration of service delivery in order to meet shared goals and targets
- In Jönköping, like the UK situation where health and social services are split, there are clear boundaries between the counties and the municipalities regarding responsibility for patients at various stages of their care and/or rehabilitation

### ***What can we learn from what did and did not work?***

The individual case study summaries present the available evidence on 'what has worked' in relation to Alzira, Canterbury and Jönköping. Little detail is available regarding what not did not work, as such evaluations have either not taken place, or have not been published.

Ham (2014a; 2014b) suggests that there are still lessons to be learnt from ACOs, including:

- The value of building networks and alliances
- The use of innovative models such as alliance contracting using capitated budgets
- Offering incentives related to system wide outcomes
- The importance of specialists working in the community, sharing information and investing in IT
- Engaging with patients

Similarly, Shortell (2009) suggests that enablers of integrative care include:

- Aligning payment systems and incentives
- Managing sets of targeted quality and outcome measures
- Ensuring high levels of clinical and managerial leadership

Ham (2014a) warns that integration will deliver nothing if it is only about organisational change. Benefits will only occur when clinical barriers and service silos are overcome

### ***Processes within systems can be controlled, but social and political influences create the contexts in which systems operate***

Wicked problems have no ready answers and in practical terms, knowing where you want to end up, determines the objectives that must be set and achieved in order to accomplish the goal. Evidence confirming that a greater emphasis on out of hospital care will deliver financial savings is still at its early stages, and if full and meaningful provider engagement in the process is to occur, more - rather than less - investment is necessary (Foundation Trust Network, 2014a). Equally important in the context of this review, is consideration of the starting point. Local contexts and the 'views' of local actors will mediate any efforts to implement improvement or integration programmes, hence different areas will have different starting points from which to drive their transformations (Bardsley et al., 2013; Shaw and Rosen, 2013).

### ***Different departure points and different destinations but aspects common to all three ACO models***

- Political stability and real authority devolved to local levels makes transformation easier
- Transformation takes time and requires strong leadership
- Resources need to be available to ensure staff buy-in and support (through the use of training and incentives)
- Integration of IT networks, for example, the use of full Electronic Healthcare Records to assist clinical decision-making and Single Point of Access appointment systems to physically improve patient flow through the system
- In Canterbury, alliance contracting seems to work as it is being used in conjunction with other forms of contracts (GP contracts etc.). Rather than relying on the intrinsic motivation of staff, alliance contracts appear to sit most comfortably with the development of networks

Table 4 outlines a range of additional characteristics of the ACOs in Alzira, Canterbury and Jönköping, and provides an assessment of the influence that these characteristics had in the success and sustainability of the ACOs. The rankings are an indication of the extent to which each aspect is portrayed as having contributed to the success of each case or model. The defining characteristics are taken from Baker's (2011) list of characteristics of high performing health care organisations. Use of IT has been added, to make a clear distinction between information and IT.

It is important to note that the rankings are based on an interpretation of the existing evidence-base, and demonstrate the prominence attached in the literature to each characteristic in terms of how it contributes to each of the ACO models implemented in Alzira, Canterbury and Jönköping.





Table 4: The key characteristics of high performing healthcare organisations as evident within the three ACO models

Characteristic	Canterbury		Jönköping		Alzira	
Consistent leadership that embraces common goals and aligns activities throughout the organisation	✓	4	✓	2	?	N/A
Quality and system improvement seen as core strategy	✓	5	✓	1	✓	3
Significant investment in developing the skills and capacity to support performance improvement	✓	4	✓	3	?	N/A
Robust primary care at the centre of the system	✓	3	✓	8	✓	2
Opportunities for patients to be engaged in their care and design of care	✓	5	✓	6	?	N/A
Promotion of professional cultures that support teamwork, continuous improvement and patient engagement	✓	4	✓	7	?	N/A
Effective integration of care promoting seamless transitions	✓	1	?	N/A	✓	4
Information as a platform for guiding improvement	✓	4	✓	4	?	N/A
Use of IT to integrate care	✓	4	?	N/A	✓	1
Effective learning strategies and methods to test and scale up	✓	5	✓	5	?	N/A
Providing an enabling environment to buffer short-term factors that undermine success.	✓	2	?	N/A	?	N/A

<sup>4</sup>Key:

- ✓ Documented evidence available that this characteristic exists in the ACO
- ? This characteristic is possibly included in the ACO model, but no evidence available in publicly accessible literature
- 1-10 Based on the priority given to this in the literature/evidence. The lower the number the higher the ranking in terms of impact on the final ACO model. Ranking is only provided where documented evidence is available that this characteristic exists.

In reviewing the three cases, it is not possible to provide assurance about what will guarantee successful implementation of an ACO, partly because the literature presented no details but also because:

“Integrated care will be achieved as much by discovery as design; frustrating though that is for those who would like a package, or a pick-and-choose menu of neat, precisely measured and clearly articulated steps to get there.”

(Timmins and Ham, 2013:33).



## 5. Conclusion and learning points

As the NHS Forward View (2014) notes, ACOs (or PACS as they are likely to be termed in England), are complex, multi-organisational and multi-professional ways of procuring and delivering care to address health needs. They require suitable time and expertise to implement. However, it is hoped that the following learning points, identified throughout this review – and summarised here – will provide valuable assistance:

- A need to look beyond individual organisational responsibilities and values to see the whole. This will be possible through:
  - The implementation of a clear and agreed contractual and governance model
  - A transparent procurement and payment system
  - A strong management culture and approach
  - Strong and effective leadership
  - A coherent, strong and clear organisational vision which is widely shared
  - Openness and transparency in contracting, funding and planning decisions
- An integrated organisational identity
- IT systems must allow for real-time data sharing
- An empowered workforce able to introduce improvements and make them happen
  - Staff should be invested in, allowing them to initiate, enable and maintain change
  - Staff should undergo QI training
  - Staff should be incentivised
- Services should be integrated around the patient – the patient must come first.
  - Patient voices should be heard
- All stakeholders should be engaged and communicated with on a regular basis
- Improvement networks and networks of care should be built, to enable proper rather than siloed or tokenistic integration



## 6. Appendices

### Canterbury

- New Zealand has a tax-based, national health system. Overseen by the Ministry of Health (MoH) and the National Health Board, are the 20 local or regional District Health Boards (DHB)
- Funding from MoH is allocated on a population based formula to ensure that all DHBs have an equal opportunity to meet the health and disability needs of their population. The MoH has a direct relationship with each DHB chair. This relationship lies at the heart of accountability and performance management
- Canterbury District Health Board (CDHB) has 11 members, 5 of whom are locally elected with the remaining 6 being centrally appointed, including both CEO and deputy CEO. Working with CDHB are six local committees:
  - Community and Public Health Advisory Committee
  - Disability Support Advisory Committee
  - The Consumer Council
  - The Clinical Board
  - The Hospital Advisory Committee
  - The Quality, Finance, Audit and Risk Committee
- All public hospitals are owned and funded by CDHB. Christchurch is the main/largest hospital in Canterbury. At an operational level, the Executive Management Team (EMT) is comprised of 10 members including the CEO, plus five business/finances members, two population health members and two clinical members. The CEO reports directly to Chair of District Health Board
- Just over half a million people, 12% of New Zealand's population, live in the Canterbury region
- CDHB holds budgets for primary and secondary healthcare and community support services.
- As lead/provider, if CDHB cannot provide services themselves, they have a duty to contract out to an appropriate non-government organisation (NGO) provider

### Health Promotion and disease prevention

<b>Environmental health, Communicable disease and Tobacco Control</b>	<ul style="list-style-type: none"> <li>• CDHB, as each of the other 19 DHBs, has its own Public Health Unit (PHU) which is funded out of CDHB budget</li> <li>• Strong national campaigns and centrally defined health targets</li> </ul>
<b>Health protection</b>	<ul style="list-style-type: none"> <li>• Various local government authorities (including Police and Fire Services)</li> </ul>
<b>Health promotion</b>	<ul style="list-style-type: none"> <li>• Nationally by MoH, NGOs and Health Promotion Agency (HPA)</li> <li>• Regionally through CDHB and PHUs</li> <li>• Locally through Primary Health Organisations (PHO), NGOs and Maori and Pacific health providers</li> </ul>
<b>Screening</b>	<ul style="list-style-type: none"> <li>• Approved national screening programmes</li> </ul>
<b>Immunisation</b>	<ul style="list-style-type: none"> <li>• Immunisations on the national immunisation schedule are provided nationally by the MoH, through a range of CDHB providers and PHOs</li> </ul>
<b>Oral health services</b>	<ul style="list-style-type: none"> <li>• Private provision, some of which is paid for by private dental insurance</li> <li>• Emergency dental treatment is free for low income adults</li> <li>• All oral health services free for children up to age 18</li> <li>• Within the Canterbury District there are 110 dentists</li> </ul>



Primary care and community services	
<b>Primary care services</b>	<ul style="list-style-type: none"> <li>• Mostly delivered through general practices, who are members of PHO</li> <li>• Across New Zealand PHOs vary in size and structure, are not-for-profit organisations and provide services either through own members or directly by employing staff</li> <li>• GPs via PHOs receive capitated funding and additional per capita funding for health promotion, coordinating care &amp; providing extra services for chronic disease patients and for reducing barriers for patients experiencing access difficulties</li> <li>• Prior to 2013, 85% of GPs in CDHB belonged to Pegasus Health (a form of Independent Practitioner Association). These have now merged and become one PHO which contracts with CDHB to provide a range of primary and community services. As such, they are independent contractors who receive approximately half of their income from CDHB which is made up with co-payments from patients</li> <li>• In Christchurch, a typical GP visit costs around £25, whilst out-of- hours visits typically cost £40</li> <li>• GPs act as gatekeepers to specialist services</li> <li>• An increasing numbers of GP practices are becoming privately owned, unaffiliated with PHOs and operating independently</li> <li>• There are 115 community pharmacies in the Canterbury district and patients pay a small prescription charge equivalent to £2.50 per item, which is capped at a maximum of £50 per annum</li> <li>• Nationally across all sectors, there are 261 doctors per 100,000 population and 1,003 nurses per 100,000 population</li> </ul>
<b>Community services</b>	<ul style="list-style-type: none"> <li>• Many community services are delivered by NGOs either through national contracts or contracts with CDHB and Maori and Pacific health providers</li> <li>• Canterbury uses a form of 'alliance' contracting for services such as district nursing, mental health, professions allied to medicine and laboratory services</li> <li>• Although a collective contract, each contractor has an agreed budget and targets</li> <li>• Performance outcomes are monitored and are accessible to other partners in the alliance. These figures are used to agree upon where any 'profits' go back into the system to improve services</li> <li>• The basic assumption is that multiple organisations can achieve more by working together on agreed contracts in which 'everyone wins, or everyone loses'</li> </ul>
<b>Ambulance services</b>	<ul style="list-style-type: none"> <li>• St John's Ambulance Service covers over 90% of NZ population</li> <li>• Contracts with the MOH and DHBs fund just under 80% of the direct operating costs</li> <li>• Patients are charged for ambulance transportation, on a scale upwards from emergency transports at \$88 NZ (£43). These costs may be covered by individual's private insurance</li> </ul>
Secondary and tertiary services	
<b>In-patient and out-patient, medical, surgical, maternity, emergency services and diagnostics</b>	<ul style="list-style-type: none"> <li>• In addition to extensive services offered to local population, CDHB provides specialist services at both regional and national level (e.g. Christchurch hospital delivers 50% of all surgical services on South Island)</li> <li>• All hospital doctors are salaried employees of CDHB, although many also work in the private sector</li> <li>• Approximately 30% of the population of New Zealand have private medical and dental insurance</li> </ul>

Long-term care services	
<b>Aged care services</b>	<ul style="list-style-type: none"> <li>There are 100 residential care homes in the Canterbury District which along with in-home services are provided by various private and other NGOs and services</li> <li>These are funded, where eligible, by CDHB</li> </ul>
<b>Community outreach services from hospital</b>	<ul style="list-style-type: none"> <li>CDHB provide generalist and specialist community nursing services</li> </ul>
<b>Long-term care and rehabilitation</b>	<ul style="list-style-type: none"> <li>Long-term care is based on needs assessments and is means tested</li> <li>If the patient is eligible, DCHB will fully fund comprehensive care, including medical care</li> </ul>

Data sources: Cumming and Mays (2002); WHO (2012); CDHB (2012/13); Timmins and Ham (2013).

## Alzira

- Spain has a national health service which is publicly financed through taxation, with political devolution to the 17 autonomous regions
- The national legislative framework is defined by the Ministry of Health and Social Policy in Madrid, but each region produces detailed health maps setting out their service provision
- The Interterritorial Council of the National Health System is the body responsible for the coordination, cooperation and liaison among the central and autonomous communities public health administrations
- Regional taxation provides additional funds for health care
- Legislation permits the involvement of private sector provision as long as it remains free at the point of care
- All hospitals using the Alzira model have to meet a series of targets set by the Valencian government, which include:
  - Quality and safety objectives
  - Process indicators
  - Clinical outcomes
  - Patient experience
- The model sees a private contractor build and operate a hospital, with a contract to provide care for a defined population (including primary care). The contractor has no in-built responsibility for public health or social services
- Patient centredness revolves around the notion that money follows the patient, seen via the statement that 'citizens are at the system's core'
- The original Ribera Salud hospital in Alzira covered a population of 245,000, representing 0.5% of the total Spanish population. Coverage has now been extended to 1.08 million people

Health Promotion and disease prevention	
<b>Environmental health and Health protection</b>	<ul style="list-style-type: none"> <li>Central government administration; Ministry of Health Social Services and Equality; The Interterritorial Council and Sistema Sanitario Público (public health service)</li> </ul>
<b>Health promotion</b>	<ul style="list-style-type: none"> <li>Health promotion and disease prevention are the responsibility of primary care at regional levels</li> <li>Ribera Salud is working in communities and schools, to encourage their population to take a more active role in staying healthy</li> </ul>
<b>Screening</b>	<ul style="list-style-type: none"> <li>Spain has no national screening programme</li> <li>Screening networks exist at regional levels with varied levels of uptake</li> <li>Interest and priority devoted to its implementation and development have, in part, been endorsed by all health authorities (national and regional)</li> <li>Ribera Salud offers advanced screening capabilities</li> </ul>
<b>Immunisation</b>	<ul style="list-style-type: none"> <li>Spain has a nationally funded immunisation programme</li> <li>No details available specifically regarding Ribera Salud</li> </ul>
<b>Oral health services</b>	<ul style="list-style-type: none"> <li>Spain has a private dental system</li> <li>Children receive free treatment</li> <li>No details available specifically regarding Ribera Salud</li> </ul>

Primary care and community services	
<b>Primary care services</b>	<ul style="list-style-type: none"> <li>Ribera Salud Alzira has 40 primary care centres (PCC) where treatment is free</li> <li>PCCs are staffed by GPs, 50% of whom are directly employed by Ribera Salud and receive 90% of salary on a fixed basis and 10% on incentive basis. The remainder are state employees on fixed salaries</li> <li>They are supported by specialists working out of the main hospitals</li> </ul>
<b>Ambulance services</b>	<ul style="list-style-type: none"> <li>St John's Ambulance Service covers over 90% of NZ population</li> <li>Contracts with the MOH and DHBs fund just under 80% of the direct operating costs</li> <li>Patients are charged for ambulance transportation, on a scale upwards from emergency transports at \$88 NZ (£43). These costs may be covered by individual's private insurance</li> </ul>
Secondary and tertiary services	
<b>In-patient and out-patient - medical, surgical, maternity, emergency services and diagnostics</b>	<ul style="list-style-type: none"> <li>Ribera Salud Alzira provide a 301 bed hospital, with 254 single rooms (with companion beds), 27 intensive care beds, 10 psychiatric beds and 10 neonatal cots</li> <li>Ribera Salud receives an annual capitation fee (an index-linked lump-sum payment for each local resident) from the regional government, and in return provides the full range of healthcare services to all residents of the designated area</li> <li>Hospital Doctors are all directly employed by Ribera Salud and work within a clinical directorate</li> <li>Salaries comprise a 80% fixed rate plus up to 20% incentive based</li> <li>All doctors are required to work closely with clinical coordinators who manage all outpatient and inpatient activities, in addition to arranging the support services necessary to achieve clinical and non-clinical objectives</li> <li>Doctors' interests are represented at board level by clinical co-ordinators and the medical director</li> <li>Nationally across all sectors, there are 376 doctors per 100,000 population and 515 nurses per 100,000 population</li> </ul>
Long-term care services	
<b>Aged care services and long-term care and rehabilitation. Community outreach services from hospital</b>	<ul style="list-style-type: none"> <li>'Long-term care' has only recently been defined as a specific service within health and social policy</li> <li>Traditionally health services have provided some long-term care, e.g. in mental health facilities, or where elderly people have remained in hospital rather than being discharged due to shortage of alternatives</li> <li>Limited social care is provided locally by municipalities, with an estimated 4% of those in need actually receiving public assistance</li> <li>Whilst health care is provided free of charge, social care is subject to means-testing, which varies according to region</li> <li>No data is available concerning community outreach services from hospital, either nationally or specifically regarding Ribera Salud</li> </ul>

(Data sources: Acerete et al., 2011; Edwards, 2011; Generalitat Valenciana website, 2014; INe website, 2011; OECD website, 2012; McClellan et al., 2013; Ribera Salud website, 2014).



**Jönköping**

- Sweden has a national health system
- Healthcare costs are met through central government taxation (25% paid as block grants to Councils) with the remainder from taxation raised locally by the 21 County Councils, for whom healthcare represents almost 80% of their total spend
- Jönköping County has a population of 330,000 people, representing 3.5% of Sweden's population
- It comprises 13 municipalities, each with responsibility for social care and the majority of community services
- Jönköping municipality has responsibility for social care and community services.
- Jönköping County Council have responsibility for health care
- Overseen by the Ministry of Health and Social Affairs who determine national priorities, the County Councils have a statutory duty to purchase and/or provide services
- The semi-independent National Board of Health and Welfare contributes to the development of health services through production of guidelines or models of care for major disease areas and medical conditions
- The Health and Social Care Directorate (IVO) was created to take over the supervisory role of the National Board of Health and Welfare and now supervises health, medical care, social services and 'Support and Service for persons with Certain Functional Impairments'. Its wider remit signals a national aim towards better integration across health and welfare

**Health Promotion and disease prevention**

<b>Environmental health, Communicable disease Control and Tobacco Control</b>	<ul style="list-style-type: none"> <li>• The Public Health Agency of Sweden (Folkhälsoinstitutet) has a national responsibility for public health issues</li> <li>• The agency promotes good public health by building and disseminating knowledge, to health care and others responsible for infectious disease control and public health. This includes promotion and prevention and communicable diseases</li> <li>• Public health work is carried out at regional and local levels in Sweden</li> <li>• Jönköping County Council manages the health care services and the 13 municipalities the remainder of services</li> </ul>
<b>Health protection</b>	<ul style="list-style-type: none"> <li>• Is the responsibility of individual municipalities</li> </ul>
<b>Health promotion</b>	<ul style="list-style-type: none"> <li>• Is the responsibility of individual municipalities and to a certain extent the County councils, via payment incentives made to primary care practices</li> </ul>
<b>Screening</b>	<ul style="list-style-type: none"> <li>• Approved national screening programmes</li> </ul>
<b>Immunisation</b>	<ul style="list-style-type: none"> <li>• All children in Sweden are entitled to vaccination against nine serious diseases, through the child and school health services</li> <li>• These services are run by the municipalities</li> </ul>
<b>Oral health services</b>	<ul style="list-style-type: none"> <li>• Private dental services</li> <li>• Dental care benefit available for children, pregnant women and patients with long term disabilities</li> <li>• Across Sweden there are 4200 registered dentists, equivalent to 44 per 100,000 inhabitants</li> </ul>

Primary care and community services	
<b>Primary care services</b>	<ul style="list-style-type: none"> <li>Mainly delivered by Primary Care Centres (PCC), majority of which have contracts with Jönköping County Council (JKCC) but increasing numbers are becoming privately run as independent contractors</li> <li>Generally GPs are state salaried and via JKCC, receive capitated funding for patients plus a per capita fee incentive based on population adjusted DRGs</li> <li>As part of the 'choice of care' scheme, compliance with safety, access and quality indicators, GPs receive additional payments</li> <li>Patients pay the first £180 for medication, £15 for each initial primary/secondary care consultation; follow up appointments are free. There is an annual cap of £120 and £8/day spent in hospital</li> <li>Out of hours calls and A&amp;E visits are charged at the equivalent of £30</li> <li>All treatment costs up to age 20 years are free</li> <li>All patients are registered with a PCC according to their geographical location but may choose to visit a different GP</li> <li>Free primary care for children up to 6 years old</li> <li>Nationally across all sectors, there are 387 doctors per 100,000 population and 1107 nurses per 100,000 population</li> <li>In 2006, 16% of physicians, 12% of nurses and 10% of midwives worked in the private healthcare sector</li> </ul>
<b>Community services</b>	<ul style="list-style-type: none"> <li>Community services are funded by the local municipalities</li> </ul>
<b>Ambulance services</b>	<ul style="list-style-type: none"> <li>Owned and run by County Council</li> </ul>
Secondary and tertiary services	
<b>In-patient and out-patient - medical, surgical, maternity, emergency services and diagnostics</b>	<ul style="list-style-type: none"> <li>Three hospitals in Jönköping: Värnamo sjukhus, Höglandssjukhuset, Eksjö, and Länssjukhuset Ryhov</li> <li>Each of the 3 hospitals has its own executive management team, led by CEO and Hospital Board</li> <li>Above individual hospital boards is the CEO Board on which sit the three CEOs, a medical director, nursing director, finance director and director of learning and innovation</li> <li>The CEO of the CEO Board reports directly to Jönköping County Council</li> <li>Within these three hospitals, 37% of beds are medical beds, 33% surgical, 14% geriatric and 16% psychiatric beds</li> <li>In addition to extensive services offered to local population, they serve patients from other County Councils - in Sweden patients have the right to choose medical providers and GPs do not act as gatekeepers to secondary/specialist care</li> <li>Across Sweden, common forms of payments made by County Councils to hospitals include global budgets or a mix of global budgets, case-based and performance-based payments</li> <li>No financial details could be accessed specifically concerning Jönköping, although it appears that hospital contracts with the three hospitals are on the basis of global payments</li> </ul>

Long-term care services	
<b>Aged care services and long-term care and rehabilitation</b>	<ul style="list-style-type: none"> <li>• Care home provision funded by the municipality, not the county</li> <li>• Municipalities are responsible for health and medical care services for elderly persons, and for support and service to those whose medical treatment has been completed and who have been discharged from hospital care</li> <li>• For those patients who are medically fit to be discharged but no social service capacity is available, health care costs must be paid for by the municipalities</li> <li>• The municipalities are also responsible for school health services, housing, and support for mental health services</li> </ul>
<b>Community outreach services from hospital</b>	<ul style="list-style-type: none"> <li>• No formal integration as community services are funded by municipalities</li> <li>• The Esther Project is an embodiment of this outreach function</li> </ul>

(Data sources: Anell et al., 1996; Health and Social Care Directorate (IVO Inspektionen för vård och omsorg, Verspohl) 2012; SALAR, 2013).





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