

# The nursing role in integrated care models Reflecting on the United States' experience



# **Contents**

Introduction	3
Executive summary	4
The nursing voice and influence in the US	5
Performance improvements	9
Incentives for providers	9
Reflections for England	10
The RCN's view	12
Appendix: insurer/provider 'integrated' models	13
References	16

This publication is due for review in April 2016. To provide feedback on its content or on your experience of using the publication, please email **publications.feedback@rcn.org.uk** 

#### Introduction

There is growing recognition that integrated care can improve the quality of care that individuals receive and make the best and most efficient use of limited resources.

On 1 April 2013, changes set out in the Health and Social Care Act 2012 came into effect, resulting in the biggest restructuring in the history of the National Health Service (NHS) in England. On top of these reforms, the 'Nicholson challenge' committed the NHS to delivering £50 billion in efficiency savings by 2020 (£20 billion by 2014-15 and £30 billion by 2020-21) despite growing economic pressures, supply/demand issues and rising inflation rates. As a result, integration and person-centred, co-ordinated care has become dominant in health and care policy debates.

As NHS commissioners and providers continue to implement these reforms in day-to-day clinical practice, there is extensive discussion on how to ensure safe, high quality and patient-centred care that delivers value for money, with nursing playing a crucial role in achieving this. Questions are being asked about lessons to be learned from overseas, particularly how to apply and adapt integrated models such as the Kaiser Permanente (KP) in California; the Veterans Health Administration (VHA), the largest publicly funded system in the United States; and the Geisinger Health Care in Pennsylvania, to the UK's health system (West, 2013).

While they operate under different health systems and environments to the NHS, US insurer/provider systems place a lot of attention on patients and receive world-recognition as innovative, integrated models for delivering health care services for a local population. Nursing is key within these models as significant emphasis is placed on creating and developing a healthy work environment in which nurses excel in patient care, education, leadership, research and community services. While Kaiser Permanente and Geisinger are primarily purchaser/provider integrated models, the Veterans Health Administration focuses on co-ordination across both health and social care services.

This briefing informs ongoing policy debate, facilitates international learning, and highlights the nursing contribution – a distinction less commonly made. It covers:

- the nursing voice and influence in the United States' models
- reflections for the NHS and barriers to adoption
- · the RCN's view
- further background on the insurer/provider integrated models (see appendix).

It is not a comparison of like-for-like models, as the US and UK health care systems have different funding and incentive structures, cultures, and infrastructures in place that have a direct impact on performance and patient outcomes. However, it highlights that with the right investment and practical checks in place, the models offer a useful insight to the nursing role in driving a more integrated, patient-centred care approach.

# **Executive summary**

The recent focus of health care policy on integrated health and social care provision, and its potential to provide better, more cost effective services, is in direct response to three pressing issues:

- spending cuts and a need to deliver further efficiency savings
- demographic changes, with a predicted rise in demand on health and social care services due to an ageing population
- recognition that too many patients aren't getting the services they need, or in the right places (DH, 2013).

This clamour for co-ordinated working is not a phenomenon unique to the United Kingdom. The King's Fund (2013) highlights the growing interests in co-ordinated and person-centred care in both the United States (US) and the UK, despite significantly different systems of care, and outlines how this approach is rapidly becoming the default option for providing care for ageing populations with complex needs.

Nursing staff are vital to delivering integrated care. As care co-ordinators they often work at the interface of health and social care systems and services. Combined with their clinical expertise, they have a unique insight into a patient's holistic needs, and can be adept at anticipating potential gaps between the needs of those they care for and the systems commissioned to deliver services. This places them in a key position, ensuring that effective systems and services are in place throughout the patient's journey.

Understanding the influence of nursing in the delivery of more patient-centred, co-ordinated care in other countries, offers valuable reflections to help shape and inform the development of health and social care policy in the UK. Following on from the NHS reforms in England in 2013 and subsequent reviews into the quality of care delivery, international models are increasingly being used as a tool to better understand challenges to health and social care.

Integrated models such as the Kaiser Permanente (KP) in California, the Veterans Health Administration (VHA) – the largest publicly funded system in the US – and Geisinger Health Care in Pennsylvania, have provided a particular focus back on patients and received world recognition as innovative and integrated models for delivering

health care services for a local population. Within these three models, a significant emphasis is placed on creating and developing a working environment in which nurses excel in patient care, education, leadership, research and community services. Despite the US and UK operating under health systems with different cultures, funding, and incentive structures which all have an impact on how care is delivered, there are valuable reflections to be made that support nursing.

The most significant elements of these overseas models include the emphasis on nursing leadership through shared governance structures and nursing councils, the promotion of nursing knowledge exchanges to strengthen communication, and having a formalised co-ordination role with decision-making authority. Key features of these models focus on:

- leadership
- strengthening communication
- shared governance
- co-ordination roles.

Health and social care policy needs to recognise that long-term commitment and robust investments are critical in ensuring sustainable improvements in the delivery of high quality care. While nursing leadership is essential, the investment required to achieve some of the results experienced in the US models are much broader than this alone. As the policy debate around integration develops further in the UK, and particularly in England, these are important considerations to take into account.

# The nursing voice and influence in the US

Nurses are playing a pivotal role in the implementation of the Affordable Care Act in the US (Obamacare), with the aim of delivering high quality care that stretches from cradle to grave

(ANA 2010a; ANA 2010b). The nursing influence within the KP, VHA and the Geisinger health care models is particularly prominent. Table 1 shows some of the key features.

Table 1: Key features of US integrated care models

	Kaiser-Permanente	Geisinger	Veterans Health Administration
Nursing influence	Nursing Knowledge Exchange (improving nurse leadership). Employs around 50,000 nurses.	Magnet status (nursing excellence); nursing voice at board level and shared governance structure (Nursing Executive Council).	Clinical nurse leader role. Employs nearly 80,000 nurses, licensed practice nurses, nursing assistants and intermediate care technicians.
Funding model	Combination of not-for- profit insurance health plan, with hospitals and clinics, and physicians.	Open system; serves Geisinger health plan (GHP) members and non-GHP patients.	Publicly funded model.
Distribution of services	Serves around 9 million members.	Serves nearly 2.6 million residents.	Serves around 8.3 million each year.
	37 hospitals. 611 medical offices.	44 counties.  Nearly 800 employed physicians.	Employs around 239 000 staff.
IT system	Electronic health records (EHR) system KP Health Connect allows multiple patient panel management and two way patient contacts.  Fully integrated EHRs and the MyGeisinger health portal for patients.	health portal for	Home telehealth, mobile health, secure messaging, and personal health records.
			Aim for 50% of patients to benefit from one or more elements of digital health care by 2014.

#### **Leadership and communication**

Geisinger is committed to delivering nursing excellence and was awarded Magnet status for Geisinger Medical Centre, the largest tertiary care teaching hospital in central and north-east Pennsylvania in 2008 by the American Nursing Credentialing Center (Geisinger Health System, 2008). Hospitals that receive a Magnet designation are recognised worldwide as institutions that deliver quality patient care and excellence in nursing practice and innovation.

The current CEO at Geisinger is committed to having nurses influence key organisational decisions from ward level to board. At ward level, the nurse manager works in collaboration with the unit medical director to uphold good practice and deliver safe patient care. The model is focused on optimal patient care and as a result staffing levels are given a high priority, especially as it is part of the criterion for achieving/maintaining Magnet status.

Geisinger's Vice President (Nursing), Dr Terri Bickert, confirms there is a close working relationship with the Pennsylvania State Nurses Association (PSNA), where PSNA is consulted on key health and nursing issues. She says one of the successes of nursing at Geisinger is that nurses are involved in all aspects of care and are instrumental in innovating and leading change. This commitment and investment in nursing is a key element to the model's success. Furthermore, electronic health records have had a significant impact on the success of this model. and have allowed nurses to co-ordinate better with secondary and community counterparts to ensure the patient is continually supported – which further highlights nursing leadership in providing patientcentred care.

Kaiser Permanente (KP) has also taken steps to improve nurse leadership within hospitals and find innovative ways to improve nursing practice and outcomes. For example, in 2000, KP worked closely with a consultancy firm IDEO to develop a Nursing Knowledge Exchange (NKE) (Kaiser Permanente, 2010), a process designed to strengthen communication and information handovers during nursing shift changes. Projects such as NKE take significant commitments from the organisation of time, financial resources, training and educating staff on the new processes, and cultural change. The exchange includes:

- bedside rounds shift change reporting at the bedside with the patient
- care boards with patient teach-back using the whiteboard to identify patient goals for

- treatment and engaging the patient in the reporting process to encourage continuity of care from one shift to another
- previous shift preparation the outgoing charge nurse plans the nursing/patient shift assignments for the next shift
- data template each nurse will complete a standard tool that reports the patient's status at the end of a particular shift to improve reporting culture.

These features have all helped to achieve a more patient-centred focus, with nursing driving this change. NKE has been implemented in all 33 KP hospitals and has received positive anecdotal support from both staff and patients, specifically as it has helped to strengthen communication between nurses and their patients and encourage patient empowerment.

VHA employs around 239,000 staff of which nurses form the largest component with nearly 80,000 registered nurses, licensed practice nurses, nursing assistants and intermediate care technicians. According to the VHA's Chief Nursing Officer:

"VHA nursing is at the center of generating valuebased innovation. Their work is a demonstration of integrity, commitment, respect and excellence, as we shape efforts to ensure access to personalised, proactive health care for Veterans" (US Department of Veterans Affairs, 2013).

In the 1990s, VHA provided clinical experience and training to nearly one in every four nursing students in the US. It is still recognised for its high quality clinical training and education opportunities, enabling nursing leadership, and works closely with pre-registration and graduate level universities to continue this service (US Department of Veterans Affairs, 2013).

#### **Shared governance**

At Geisinger, emphasis is placed on ensuring nurses have a voice at board level and input into decisions that impact on organisational service restructuring. These type of organisational changes require long-term planning and vision. Geisinger's investment recognises the value of nursing in driving integrated care. The Chief Nursing Officer sits on the board as the Executive Vice President for Nursing and influences all board decisions related to nursing practice and patient safety. A shared governance structure has been set up at Geisinger Medical Centre consisting of nursing councils responsible for leadership, development, operations, performance and quality improvement,

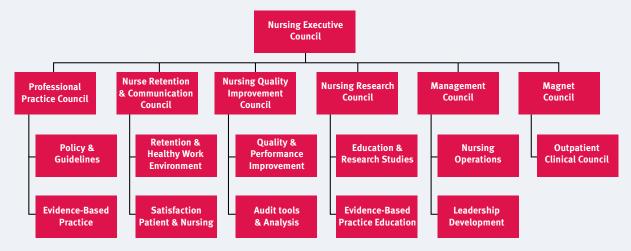
Magnet status, and education (refer to Table 2) (Geisinger Medical Center, 2012). The Nursing Executive Council is responsible for central coordination, strategic direction for nursing, and providing guidance on organisational priorities. They are also responsible for sign off on all major nursing initiatives such as the Bedside Care Role and Process Redesign, which involves bedside reporting to encourage patients and families to ask questions and raise concerns. The percentage of nurses with management abilities or decision making authority has grown (refer to Table 3) as a result of this focus.

# Other sub committees (Geisinger Medical Center, 2012)

 Nurse retention and communication council: consists of a group of 60 Geisinger nurses working towards identifying ways to improve recruitment, networking, supporting staff and encouraging relationships between nurses, human resources and public relations. Some of the key subgroups introduced to improve the working culture at Geisinger include healthy work environments, patient satisfaction and

- nurses' week. Table 3 outlines results from the employee engagement survey reporting staff satisfaction and involvement in decision making within the organisation.
- Nursing quality improvement council: provides a structure to support quality benchmarks, standards, and high level nursing care across the organisation. Direct care nurses work jointly to identify gaps in services, and provide a business case to implement change and make improvements.
- Nurse research council: co-ordinates a platform for nurses providing direct patient care to link with nurse researchers and identify evidencebased practice.
- Magnet council: consists mainly of 20 nurse champions who are dedicated to preserving the Magnet culture and helping the organisation to maintain its status.
- Nursing outpatient clinical council: co-ordinates communication with outpatient nurses regarding changes in practice, policy and regulatory requirements to promote optimal care in the outpatient setting.

Table 2: Shared governance structure at Geisinger Medical Centre



Source: Geisinger Annual nursing report, 2012

Table 3: Geisinger employee engagement survey comparing nursing data

# **Employee Engagement Survey: Nursing Data Comparison 2010 & 2013**



Source: Geisinger annual nursing report, 2012

#### Co-ordination role

The VHA has appointed a clinical nurse leader (CNL), to provide clinical leadership in all health care settings and more personalised support for patients and families. The CNL role involves delivering and directing evidence-based practice, evaluating patient outcomes, and assessing risk while improving the overall co-ordination and delivery of care. The role has decision-making authority to change care plans when necessary and was designed to meet the need for expert clinical leadership at the point of care (American Association of Colleges of Nursing, 2013). This means the CNL is regarded as the 'pivotal clinician' at the point of care and not an additional layer to team or management structures, making it a strong co-ordination role (American Association of Colleges of Nursing, 2013). Similar roles may exist informally in the NHS, however the difference is the VHA's commitment to making it an official role. The system works well because of the clear authority and responsibility given to a co-ordination role in improving integration and the delivery of patientcentred care.

In recognition of the success of the model, in 2011 the Office of Nursing Services (ONS) at the US Department of Veterans Affairs made a fiscal commitment to introduce the CNL role 'at all points of care' in all VHA facilities by 2016 (US Department of Veterans Affairs, 2013b). To take this initiative forward, VHA has identified specific objectives to: overcome barriers and improve implementation of the CNL role; marry together the CNL role with the patient care model; and enhance collaboration between schools of nursing to promote this role. A pilot CNL transition-to-practice programme was launched in May 2012 with a full launch due in 2014 to enhance CNLs knowledge,

skills and competences. It aims to engage with interdisciplinary professionals to better understand the role and its benefits (US Department of Veterans Affairs, 2013b).

While Kaiser and VHA systems do not clearly embed nursing within their governance structures – as Geisinger does through its Nursing Executive Council – heavy emphasis is still given to the nursing role through the NKE and the CNL role.

#### Safe staffing levels

The nursing voice in California is very strong. In the 1990s, Californian nurses and nursing unions lobbied for mandatory nurse-to-patient ratios as nurses were overloaded with excessive paperwork and concerned about patient safety due to rising level of demand. In 1999, legislation was passed requiring Californian hospitals to have a minimum number of nurses on staff at all times. This was a big breakthrough for the nurses' associations. Californian hospital statistics on the staffing per bed indicator show a rise of 14 per cent between 2001 and 2010, due in part to an increase in registered nurses per bed (California Healthcare Foundation, 2013).

National Nurses United (NNU) and the California Nurses Association (CNA), part of the NNU, continue to influence health providers to adhere to the nurse-to-patient staffing ratios and maintain safe staffing levels at all times. The CNA is more actively involved with the Kaiser Permanente nurses and management system. The NNU has lobbied KP to hire more mental health clinicians to reduce waiting times and improve care (National Nurses United, 2013) and to keep Kaiser's only inpatient paediatric unit open (National Nurses United 2012a; National Nurses United 2012b).

In 2012, Kaiser's registered nurses (RN) picketed outside one of the hospitals to voice their concerns about safe staffing levels. There is some concern that the minimum nursing staffing ratio has resulted in hospitals using the minimum as a maximum despite the rising level of need and increasing comorbidities. The staffing ratio is a state-mandated regulation and not specifically linked to the KP model. However, RNs in KP hospitals are calling for improved staffing in all hospital departments for moving and lifting patients to reduce the risk of patient falls or injury and for dedicated rapid response teams in the hospital to respond to emergencies (National Nurses United, 2012c). The RNs say that Kaiser needs to assure there is a triage RN in the emergency room at all times to assess patients in need of emergency care (National Nurses United, 2012c).

According to the CNA, 'Obamacare' has led to major changes in the health care landscape and there are added pressures on the nursing workforce to take some of these initiatives forward. Furthermore, the CNA is concerned that health care coverage and provision in California is dominated by managed care models (eg Kaiser) such as the health maintenance organisations that are increasingly working under the assumption of 'the less care you provide, the more money you save' (Kipling, 2013).

At Geisinger, on the other hand, staffing levels are based on benchmarks from the National Database for Nursing Quality Indicators (NDNQI), a programme of the American Nurses Association (ANA, 2013). Data is gathered at hospital unit level and participants can compare their hospital data to state, regional and national benchmarks and performance.

# Performance improvements

In 2002, two studies compared the cost and performance of the KP system with that of the NHS and found that KP delivered better value for money, using only a third of the acute bed days of the NHS. KP also had lower admission rates and shorter length of stay. However, there were certain areas where the NHS came out on top, for instance lower admission rates for acute myocardial infarction, urinary infection and heart failure. Performance improvements in KP were attributed to a better integrated system (including funding, and inpatient and outpatient integration); more efficient hospital management; focus on reducing length of stay; emphasis on primary care and prevention;

prioritising the nursing workforce; a robust electronic health records system; and patients having the option to seek alternative services if they are not satisfied (Feachem et al 2002; Ham et al 2003).

A 2004 RAND Corporation study examining the performance of VHA services found that the system delivered higher quality of care than private hospitals in all cases (for instance screening, diagnosis, treatment and access to follow-up care) except for acute care (RAND Corporation, 2005). For example, diabetes care is better in the VHA system than the private sector (Kerr et al, 2004), patients are more likely to receive quality cardiac services (Peterson et al, 2001), greater prevention focus like higher uptake of influenza and pneumonia vaccination rates and patients report a higher level of satisfaction than other non-VHA systems (University of Michigan, 2006). VHA continues to provide better care whilst keeping costs low, however due to budget constraints and rising demand especially from veterans returning from Iraq and Afghanistan, some people have fallen through the cracks. Overall, the system continues to deliver good care because of its use of electronic health records (EHR), its pursuit of evidence-based data and its affiliation with some of the top medical schools in the US (Kellermann, 2012).

While these studies are not recent, they highlight the impact on quality of care that a focus on patients can have, and the role of nursing in achieving this.

# **Incentives for providers**

Both the KP and Geisinger models aim to use incentives to engage providers to be more cost conscious about the care they commission and provide. For example, as KP doctors have a pooled budget for primary, secondary and tertiary care, the system has incentivised generalist and specialist providers to minimise the use of costly hospital services and focus on health promotion, early intervention and prevention strategies. Any inefficiencies in the system impact directly on the budget holders (ie the doctors) (Kellermann, 2012).

The medical home initiative (ProvenHealth Navigator) in Geisinger incentivises doctors through a series of practice-based payments. Incentives include a monthly payment of \$1,800 per physician to expand their scope of practice or a monthly 'transformational' stipend (for creative and costeffective initiatives) of \$5,000 per thousand Medicare members. This support extended hours and implement action of other practice

infrastructure changes to improve accessibility and quality of care. Incentive payments are also split between individual providers and the practice to encourage team-based care approaches (Paulus et al, 2008). Incentives are aligned across the systems and providers, physicians and advanced practice nurses are rewarded for better clinical outcomes financially and by recognition.

# **Reflections for England**

#### **Barriers to adoption**

There is a strong drive to encourage greater integration across the health and social care systems in England. This has been largely driven by recent reviews and the changes to the system that came into effect in April 2013. A core feature of the US models (as highlighted in Table 1) is the significant investment in nursing to drive an integrated care pathway. The US models have evolved from a different starting point to the UK. It is difficult to make direct comparisons with the NHS. The NHS has a long history and is a good health care system - it is ranked consistently highly on a range of global comparison measures for health outcomes (Telegraph, 2011). In 2010 the Commonwealth Fund rated it the second most impressive health care system across six other countries. It was rated as the best system in terms of efficiency, effective care and cost-related problems. It was also ranked second for patient equality and safety (NHS, 2013).

As the NHS has an established system in place, what is more useful to take from the US models is the potential for positive improvements when investment is well targeted. The US models all have significant resources, lead in times, and commitments to enable them to work. This is a potential barrier to adoption in the NHS and it will require long-term thinking and real investments to make changes last.

The adoption of IT and EHR systems in the US models indicate there are benefits to the delivery of care; however, such adoption involves more than the purchase of new technology. There are practical limitations to its use to consider: whether the right infrastructure is in place, whether staff are adequately trained, and whether various systems are compatible. While nurses may be given new technology such as laptops or tablets to take out into the community, the effectiveness of the equipment will still be constrained by these factors. In adopting new practices and systems, the focus should therefore be on delivering the

right commitments and investments first, to ensure improvements are sustainable. There is an opportunity to build on some of the progress made in the NHS already.

#### **Collaborative contracting**

KP and Geisinger have given physicians and service providers increased control and ownership over joint budgets, facilitating a culture of collaborative contracting with an aim to deliver care closer to home, reduce expensive hospital admissions and focus on health promotion and prevention. The pooled budgets and integrated EHRs have helped to reduce inefficiencies like service duplication, medication errors, high waiting times and unnecessary referrals. There is published evidence to demonstrate cost-effectiveness and positive health outcomes as a result of these models.

In England, major health and social care reforms have led to the setting up of clinical commissioning groups (CCGs) with a mandate to commission health care services for the local population, in some cases working jointly with other CCGs to co-ordinate care for a wider geographical area. At least one registered nurse is required to sit on the governing body of each CCG. To commission effectively, strong nursing leadership is critical to ensure there is a clear understanding of what is required to deliver effective services for health and wellbeing to communities. Nursing leaders bring experience of patient safety, quality improvement, service delivery and workforce planning. This means they have expertise in relation to how systems work together strategically, systematically and practically.

It is still early days to determine if putting the NHS budget into the hands of CCGs will deliver care that is better value for money without compromising patient care. The effectiveness of the commissioner-provider split is expected to be a significant part of the NHS Call to Action, based on comments made by Sir David Nicholson to the Health Service Journal (West, 2013). The RCN believes that the split has created false boundaries and restricted collaborative working between sectors. Moreover, the RCN has been critical of the transaction costs involved in maintaining the commissioner-provider market, which is considered by some commentators to be substantial (Fisher, 2013; Mannion, 2011; Campbell, 2010; Greener & Mannion, 2009). Given the scale of the current NHS reforms it may not be realistic to attempt to 'turn back the clock' when commissioning now underpins so much of the reforms that have come to fruition. The KP and Geisinger systems have highlighted

the potential value of a whole system approach with the integration of inpatient, outpatient and preventative care through use of comprehensive digital technology.

#### **Engaging the nursing workforce**

The case for investment in nursing has become more pertinent in England, with projections of a serious undersupply of nursing staff in the face of increasing patient demand. The 2013 RCN Frontline First report, *Running the Red Light*, highlights the importance of aligning workforce and service delivery, and notes that inadequate staffing seriously impacts upon the capacity for staff to deliver safe, high quality patient care. The RCN is concerned that without significant workforce investment and realignment of services, an everwidening gap between supply and demand means the situation could deteriorate rapidly.

Skilled nursing leaders can bring the experience of patient safety, quality improvements, service delivery and workforce planning to bear on commissioning decisions. At Geisinger, nurses are given authority in the decision-making process at board level. The shared governance nursing councils are the foundation of nursing in Geisinger, displaying a commitment to improving nursing practice, promoting a more positive workplace culture and raising the standard of care. Magnet status at Geisinger emphasises a commitment to the nursing workforce, to develop nursing leadership and to evidencebased nursing research. The VHA system is also well recognised for providing top quality clinical training and education opportunities, and works closely with pre-registration and graduate level universities to develop high quality nurses. To capitalise on the benefits for quality of care, the NHS needs investment in nurse executive roles and responsibilities at board level, particularly in empowering nurses to contribute to key organisational processes. It also needs to invest in nurse education and leadership opportunities.

#### Aligning incentives with outcomes

The insurer-provider structures at KP and Geisinger align financial incentives with outcomes and in some cases even promote co-ordinated patient transfers of care between different providers and care settings, through pooling budgets and linking clinical and financial responsibilities. The 'fee for service' system in the US tends to encourage

the delivery of unnecessary services, which is why KP and Geisinger have a strong focus on shared budgets. The models have demonstrated improvements in length of hospital stay, reducing hospital admissions, and improving patient engagement and satisfaction.

In England, the NHS has been debating the issue of its financial incentives and integration, especially as CCGs will have the flexibility to pool health and social care budgets where appropriate. It is important to set reasonable budgets with accurate costing of health and social care services if England is to move towards an integrated, patient-centred care system, otherwise the concern is that the NHS will be 'picking up the tab' for the social care shortfall.

The RCN believes that financial incentives should be more firmly linked to quality requirements and it is important to set positive incentives. GPs are expected to work within the Quality and Outcomes Framework (QOF) which has a number of incentives and rewards. If a pay for performance system is implemented, nurses should be incentivised also, as nurses are increasingly running nurse-led social enterprises and clinics.

Unlike the US where people opt in or out (and hence can choose to accept limits on their choice and pay a lower premium) and where patient services are billed, the NHS is not a pay for performance system, therefore it is easy to see how it can have a better chance of giving the right incentives. Learning opportunities should be weighed carefully, taking into account the culture and infrastructure within both systems that lends itself to shared learning.

# Patient engagement and electronic health records

A key contribution to the success of all three US models has been the extent to which services are actually patient-centred and patients are engaged in the care process. Within these models, patients are encouraged to take responsibility for their own health. The use of electronic health records (EHRs) and the effective use of digital health technologies also benefits nurses (Agency for Health Care Research and Quality, 2012; Kutney-Lee & Kelly, 2011; Schwartz, 2012) and the quality of care they can provide, improving their ability to provide seamless care that focuses on the patient. eHealth¹ technology has empowered patients to take charge of their health and connect

[1] The RCN defines eHealth as concerned with promoting, empowering and facilitating health and wellbeing with individuals, families and communities, and the enhancement of professional practice through the use of information management and information and communication technology (ICT).

with appropriate professionals to address health concerns. In England, the NHS has been working on improving its IT system; however, initial plans to introduce EHRs to make patient records accessible to all NHS staff have been fraught with problems. Data management issues, patient confidentiality problems and poor planning have resulted in numerous delays and its eventual overhaul due to escalating costs with little consensus.

The NHS needs a robust IT system that encourages communication between different care settings and engages patients to manage their own health. This would help achieve a much more integrated approach to care (linking health and social care services) and more efficient use of resources. For example, VHA's telehealth greatly supports a personalisation agenda and has seen both a significant benefit to patient wellbeing and a marked reduction in the utilisation of health care resources (Cruickshank et al, 2013). The RCN believes that sharing information about patients across the health care service, subject to appropriate safeguards, is an integral part of nursing and multidisciplinary care and is supportive of the direction travel of health IT in all four countries of the UK. It has produced a number of eHealth resources and guides to show how health information can be best utilised (RCN, 2013).

#### The RCN's view

Nurses are vital to integrated care as they often interface between health and social care sectors while supporting patients to access appropriate care. Skilled nurse leadership is paramount within any system as nurses are directly involved in patient care and often are aware of gaps in the service or areas for improvement. Within all three of the US models, nurses are highly influential in driving patient-centred, co-ordinated care. There is strong support for an integration agenda and a drive for patient-centred care in the NHS at present and this momentum presents an opportunity for significant improvements to be embedded into the system.

The Kaiser, VHA and Geisinger models offer a different perspective of systems where integration, collective contracting, investment in leadership opportunities and robust IT and EHR systems have led to noticeable improvements in hospital readmission rates, better value for money and a higher focus on prevention and promotion initiatives. Most significantly, they all give a strong emphasis to nursing and the contribution it makes to the system. However, the US system is primarily a fee for service insurance model

(except VHA) that can refuse coverage based on pre-existing conditions and other eligibility criteria, and people have an opt in or out option based on monthly premiums and deductibles which can deter patients from accessing health care services. While Kaiser receives a lot of attention from media and policymakers, it is VHA's publicly funded model that provides more similarities with the NHS. However, the NHS has a very different system to the US in general, founded on distinct principles and culture, making it difficult to draw clear comparisons.

At Geisinger, nurses have a strong voice at board level and are empowered to participate in decisionmaking processes. The Nursing Executive Council at Geisinger provides the structure for nurse leaders to shape organisational policy and practice. There is an emphasis on delivering excellence in nursing through its Magnet status and investment, on evidence based research and on commitment to staff satisfaction. The RCN has consistently identified the importance of nurse executives having a seat at board level to influence clinical decisions and nursing practice within England. The RCN was instrumental in lobbying for a nurse to have a seat within CCGs so that they can use their expertise and experience to guide commissioning decisions.

All models also stress the importance of having robust, integrated electronic health records and IT systems to facilitate information sharing between providers, commissioners and patients. The success with EHR, telehealth and telehome services has helped clinicians (doctors, nurses, consultants and pharmacists) to connect with their patients at an advanced level, which has helped to reduce referral duplication and medication errors. There has been some progress made in the NHS with telehealth, and nursing has been at the forefront in this shift. However, there are still some opportunities for further growth in these areas in England.

While it must be acknowledged that the US health system varies substantially in both funding and provision from the UK models, there are lessons to learn from the way the US models are able to deliver integrated services, and make full use of the skills and aptitudes of their nursing workforce. Long-term commitments are required to make any changes sustainable – and while nurse leadership is essential, the investments necessary are much broader than this alone. These are important reflections and evidence for the NHS to draw on as the integration debate develops further.

The RCN is undertaking a range of work to understand the full implications of integrated care. These include international comparisons; a

more detailed look at the implications for nursing of integrating the health and social care systems in England; and the findings of a survey of district nurses in England.

# Appendix: insurer/provider integrated models

#### **Kaiser Permanente**

Founded in 1945 in Oakland California, Kaiser Permanente (KP) is recognised as a successful integrated health care system (Light & Dixon, 2004), delivering cost-effective care. It combines a not-for-profit insurance health plan (Kaiser Foundation Health Plan) with hospitals and clinics (Kaiser Foundation Hospitals), and physicians (Permanente Medical Groups), creating a collaborative process to deliver seamless, coordinated care for its members. With an operating revenue of \$50.4 billion, KP currently has 37 hospitals and 611 medical offices that provide services for nearly 9.1 million members, making it easier for patients to move smoothly from the clinic to the hospital or from primary to specialist or secondary care services (Kaiser Permanente, 2013).

KP offers a range of health plans that vary by individual states and also depending on the type of coverage, deductibles, eligibility criteria, prevalence of pre-existing medical conditions<sup>2</sup> and premiums. Services under a KP health plan include: outpatient care including outpatient surgery; inpatient care; rehabilitation and ambulatory services; skilled nursing care; maternity care; optical care; home care services; and infertility services. KP also offers Medicare<sup>3</sup> health plans. Although the system has evolved as the health needs of the population have changed and medical technology has come a long way, a key focus is still on health promotion and preventing the need for patients to have to pay to see a doctor (Light & Dixon, 2004).

A 2013 Hospital Safety Score report rated 36 of the 38 KP medical centres with an 'A' grade for patient safety (two were not graded due to insufficient data) (Kaiser Permanente, 2013). This scoring system rates a hospital based on 28 variables, including hospital-acquired infections, medication

errors and injuries acquired in hospital.

The chairman of KP, Mr George C. Halvorson, argues that lowering costs is about finding ways to get people to take more responsibility for their health – for losing weight, for example, or bringing their blood pressure down (Abelson, 2013):

"Kaiser's improvements in the quality of care save money but the way to get costs lower is to move care farther and farther from the hospital setting — and even out of doctors' offices. Kaiser is experimenting with ways to provide care at home or over the internet, without the need for a physical office visit at all."

#### Integration and co-ordination of care

KP employs doctors who embrace a whole-systems approach. The focus is not only on episodic care and general practice but also on actively seeking to address health promotion, self-care, preventative screening, active management of people with longterm conditions in the community, and keeping patients out of hospital. KP doctors work as a team, sharing the budget and responsibility for care across acute, secondary and tertiary services. Health plans pay a fixed amount for medical care per patient (based on a prepaid, capitated provider budget model). This creates a financial incentive for providers and doctors to keep people healthy and out of hospital by increasing accessibility in the community (for example through out-of-hours services and KP's *HealthConnect*, where patients can email doctors, nurses and other clinicians to discuss health concerns) (Abelson, 2013). One of the successes of the Kaiser model is making clinicians more accountable and responsible for local health care needs and keeping costs down by reducing unnecessary care. Team based bonuses are also available for meeting performance targets (HSJ, 2012; Strandberg-Larsen et al, 2004).

#### IT systems and electronic health records

Using a sophisticated electronic health records (EHR) and IT system that cost nearly \$30 billion, Kaiser hospitals and GP practices deliver continuous care by sharing and communicating patient medical histories and treatment plans across varied provider and care settings. EHR and the IT system have been integral in delivering integrated care as it has helped to promote joint working and increase the efficiency of the system (ie by reducing waste and cutting bureaucracy). In

[2] It is important to note that from 2014 insurance companies cannot deny health coverage due to a pre-existing medical condition as legislated in the Affordable Care Act 2010.

[3] Medicare is a national social insurance programme for people who are 65 years or older and young people with disabilities. This is administered by the US federal government.

1996, KP started offering online health services, which enabled patients to view, schedule or cancel appointments, request repeat medications, email their doctor or nurse to get advice on health issues and even contact the pharmacist to discuss side effects and drug-to-drug interactions. The system also allowed doctors in private practice to make referrals to specialist services via the EHR system and send reminders to patients for follow-up appointments (Silvestre et al, 2009).

#### Issues with the model

The Kaiser system has received some criticism for its long waiting times and accessibility. This is mostly due to the choice of doctors and services being restricted with Kaiser members only allowed to access Kaiser doctors or hospitals. The extent of these issues depends on where the clinics and hospitals are located and the travel time patients might incur to get to a Kaiser hospital to access specialist treatment.

#### **Geisinger health system**

The Geisinger health care system in Pennsylvania is recognised as an innovative, integrated health model that was designed to improve co-ordination between public facilities, physician practices and managed care organisations. Serving a population of nearly 2.6 million residents throughout 44 counties in central and north-eastern Pennsylvania, this is an integrated delivery system consisting of nearly 800 employed physicians providing primary and specialist care services across clinical practices, specialist hospitals and ambulatory services (for both Geisinger members and nonmembers) (Geisinger Health System, 2013; Paulus et al, 2008). One of the differentiating aspects of Geisinger compared to Kaiser Permanente is that Geisinger is an open system, which means that it serves both its own Geisinger health plan (GHP) members as well as non-GHP patients. Each hospital and GP practice has its own individual targets and quality outcomes to achieve.

#### IT systems and electronic health records

Geisinger is widely recognised for its use of electronic health records (EHR) and specifically for the development of initiatives such as the ProvenHealth Navigator (advanced medical home model) and the ProvenCare programme (chronic disease and acute episode care model).

One of the benchmarks for the Geisinger model is its fully integrated EHR system which (costing more than \$135 million in hardware, software, manpower and training) facilitates information sharing

between Geisinger community practices, hospitals, emergency departments, retail-based clinics and physician practices. This helps to improve continuity of care, transparency, and optimise the transitioning of care across sectors and providers (Steele, 2011). This EHR system enables GHP members to look up bloodwork results, book appointments with the physician, receive appointment reminders, email physicians and nurses about health concerns, and request repeat prescriptions.

The ProvenHealth Navigator initiative is a patientcentred, medical home programme set up to improve care co-ordination and deliver positive patient outcomes. The main aim of this medical home initiative is to reduce unnecessary hospital admissions and to treat patients closer to home. It includes services such as comprehensive access to primary and specialist services, a GHP-funded nurse co-ordinator in each practice setting, and virtual care management support for patients with long-term conditions. It also provides support services like home-based monitoring, interactive voice-response surveillance and support for endof life decisions to reduce hospital admissions and optimise the health status of the population (Geisinger Health System, 2013).

ProvenCare (chronic disease) is an initiative set up to improve continuity of care for patients suffering from chronic diseases such as diabetes, congestive heart failure, and coronary artery disease. It also invests in management and health maintenance strategies for patients with long-term conditions in the community. The focus in recent years has shifted to preventative care. In 2008, clinical practices were standardised with the aid of a nursing tool designed to capture and collate patient medical history. Patients are routinely updated on their health status and performance via a 'reports card'. Success of this initiative is noted by a drop in admissions for patients with multiple chronic diseases by nearly 25 per cent, and that readmission rates following discharge decreased by as much as 50 per cent in community sites (Steele, 2009).

ProvenCare (acute-episode care) is a programme set up to assess acute episodes of care and identify ways to improve existing treatment pathways and outcomes (Geisinger Health System, 2013).

#### **Veterans Health Administration**

Set up in the 1930s, the Veterans Health Administration (VHA) is a branch of the Department of Veterans Affairs that purchases coverage for and delivers health care to veterans and their families across the US. As the largest publicly

funded system in the US, VHA has many similarities with the NHS. Internationally recognised as an integrated model of care, it employs doctors and nurses; owns and runs hospitals, clinics and outpatient services; and provides skilled nursing facilities for enrolled veterans. Currently serving a population of 8.3 million veterans each year (VHA, 2013a), VHA is known for its ability to provide high quality care at lower costs, compared to other US private insurance providers.

Most veterans are eligible for some type of coverage under a uniform Medical Benefits Package that covers inpatient and outpatient care, primary and preventative care, and medications. Families (spouses and dependent children) of disabled or deceased disabled veterans are also covered if they meet the eligibility requirements (VHA, 2013b).

Compared to other private sector providers, VHA has the following attributes (Ibrahim, 2007):

- · a central administration system
- focus on primary health care and prevention initiatives
- well-established national electronic health records system
- an affordable medication prescription plan.

#### Integration and coordination of care

The VHA system is an integrated model with a strong focus on co-ordination across health and social care services. It has unique features that capture the 'personalisation' of care.

- An integrated social worker is often the first point of contact for a newly enrolled veteran. The social worker assesses the health and social care needs of the newly insured client and refers them to the appropriate services or interdisciplinary teams. They are also involved with long-term case management services for patients with co-morbidities (Cruickshank et al, 2013).
- A move away from hospital-centric care was prioritised by increasing the number of community based out-patient clinics from 200 in 1994 to about 800 in 2012. Also, 22 Veterans Integrated Service Networks (VISNs) were set-up with a mandate to cover vast geographical areas and provide services based on local demand and supply. VISN directors are responsible for the integration of health and social care services within their networks.

 A program for interdisciplinary Patient Aligned Care Teams (PACTs) was launched to improve co-ordination and link patients to appropriate primary care services within their jurisdiction. There is a strong focus on the personalisation agenda through delivery of patient-centred care closer to home and reduced reliance on hospital and accident and emergency (A&E) services.

#### IT systems and electronic health records

Use of electronic health records and sophisticated telehealth systems have helped to facilitate integration between providers. EHRs work alongside other digital advancements like MyHealtheVet allowing patients access to their personal health records and sharing accurate information between doctors, hospitals and patients.

VHA also introduced a Home Telehealth programme that monitors and manages patients with long-term conditions through portable devices in patients' homes, enabling remote access and monitoring of vital signs, blood glucose levels and other health indicators. Clinical video conferencing was also set up to strengthen dialogue between providers and patients.

## References

Abelson R (2013) The face of future healthcare, *The New York Times*, 21 March. Available at: www.nytimes.com/2013/03/21/business/kaiser-permanente-is-seen-as-face-of-future-health-care. html?pagewanted=all& r=1& (accessed 07/11/13) (web).

Adams S (2011) NHS 'among best health care systems in the world', *The Telegraph*, 9 November. Available at: <a href="https://www.telegraph.co.uk/health/">www.telegraph.co.uk/health/</a> healthnews/8877412/NHS-among-best-health-caresystems-in-the-world.html (accessed 23/12/13) (web).

Agency for Health Care Research and Quality (2012) Electronic health records improve nursing care, coordination, and patient safety, *AHRQ Research Activities*, No. 381, May. Available at: <a href="https://www.ahrq.gov/news/newsletters/research-activities/may12/0512RA11.html">www.ahrq.gov/news/newsletters/research-activities/may12/0512RA11.html</a> (accessed 07/11/13) (web).

American Association of Colleges of Nursing (2012) *Clinical Nurse Leader Frequently Asked Questions*. Available at: <a href="www.aacn.nche.edu/cnl/CNLFAQ.pdf">www.aacn.nche.edu/cnl/CNLFAQ.pdf</a> (accessed 07/11/13) (web).

American Customer Satisfaction Index (no date)

American Customer Satisfaction Index (ACSI).

Available at: <a href="http://www.theacsi.org/the-american-customer-satisfaction-index">http://www.theacsi.org/the-american-customer-satisfaction-index</a> (accessed 20/09/13) (web).

American Nurses Association (2010a) Health system reform: nursing's goal of high quality, affordable care for all, ANA Issue Brief. Available at: www.nursingworld.org/MainMenuCategories/Policy-Advocacy/Positions-and-Resolutions/Issue-Briefs/Health-System-Reform.pdf (accessed 07/11/13) (web).

American Nurses Association (2010b) New care delivery models in health system reform: opportunities for nurses and their patients, ANA Issue Brief. Available at: <a href="https://www.nursingworld.org/MainMenuCategories/Policy-Advocacy/Positions-and-Resolutions/Issue-Briefs/Care-Delivery-Models.pdf">https://www.nursingworld.org/MainMenuCategories/Policy-Advocacy/Positions-and-Resolutions/Issue-Briefs/Care-Delivery-Models.pdf</a> (accessed 07/11/13) (web).

American Nurses Association (2014) *National Database for Nursing Quality Indicators (NDNQI)*. Available at: <a href="https://www.nursingquality.org/default.aspx">www.nursingquality.org/default.aspx</a> (accessed 25/06/13) (web).

California Healthcare Foundation (2013) California health care almanac: California hospitals: buildings, beds and business, Oakland, Calif.: CHF. Available at: www.chcf.org/~/media/MEDIA%20LIBRARY%20 Files/ PDF/C/PDF%20CaliforniaHospitals2013.pdf (accessed 21/06/13) (web).

Campbell D (2010) NHS spends 14% of budget on management, MPs reveal, *The Guardian*, 30 March. Available at: <a href="https://www.theguardian.com/society/2010/mar/30/nhs-management-costs-spending">www.theguardian.com/society/2010/mar/30/nhs-management-costs-spending</a> (accessed 24/01/14) (web).

Cruickshank J, Harding J, Paxman J & Morris C (2013) *Making connections: a transatlantic exchange to support the adoption of digital health between the US VHA and England's NHS*, London: 2020health. org. Available at: <a href="http://3millionlives.co.uk/wp-content/uploads/2013/03/Making-Connections-Report-2013.pdf">http://3millionlives.co.uk/wp-content/uploads/2013/03/Making-Connections-Report-2013.pdf</a> (accessed 19/11/13) (web).

Feachem R, Sekhri N & White KL (2002) Getting more for their dollar: a comparison of the NHS with California's Kaiser Permanente, *British Medical Journal*, 324 (7330), 19 January, pp.135–41.

Fisher B (2013) The dangers of marketisation, Health Service Journal, 23 January. Available at: http://m.hsj.co.uk/5053782.article (accessed 21/01/14) (web).

Geisinger Health System (2012) Geisinger Medical Center earns prestigious Magnet designation, Geisinger Health System Press Release. Available at: https://webapps.geisinger.org/ghsnews/articles/GeisingerMedicalCenterearns4866.html (accessed 25/06/13) (web).

Geisinger Health System (2014) About Geisinger. Available at: <a href="http://www.geisinger.org/about/">http://www.geisinger.org/about/</a> index.html (accessed 07/11/13) (web).

Geisinger Medical Center (2012) 2012 Annual Nursing Report, Danville, PA Geisinger Medical Center. Available at: <a href="https://www.geisinger.org/professionals/nursing/75243-1-GMCNurseAnnlReport-2012.pdf">www.geisinger.org/professionals/nursing/75243-1-GMCNurseAnnlReport-2012.pdf</a> (accessed 25/06/13) (web).

Greener I & Mannion R (2009), A realistic evaluation of practice-based commissioning, *Policy & Politics*, 37(1), January, pp. 57-73.

Ham C, York N, Sutch S & Shaw R (2003) Hospital bed utilisation in the NHS, Kaiser Permanente and the US Medicare programme: analysis of routine data. *British Medical Journal*, 327(7426),29 November, pp.1257-1260.

Health Service Journal (2012) Kaiser Permanente and the NHS have much in common, *Health Service Journal*, 13 November. Available at: <a href="www.hsj.co.uk/resource-centre/leadership/kaiser-permanente-and-the-nhs-have-much-in-common/5050474">www.hsj.co.uk/resource-centre/leadership/kaiser-permanente-and-the-nhs-have-much-in-common/5050474</a>.

<a href="article">article</a> (accessed 18/06/13) (web).

Ibrahim S (2007) The Veterans Health Administration: a domestic model of a national health care system?, *American Journal of Public Health*, 97(12), December, pp.2124-2126.

Kaiser Permanente (2010) *Kaiser Permanente's innovation consultancy featured in Harvard Business Review.* Available at: <a href="http://xnet.kp.org/newscenter/opexcellence/2010/081810hbr.html">http://xnet.kp.org/newscenter/opexcellence/2010/081810hbr.html</a> (accessed 25/06/13) (web).

Kaiser Permanente (2013) Kaiser Permanente hospitals on the A-list when it comes to patient safety: KP Press Release. Available at: <a href="http://share.kaiserpermanente.org/article/kaiser-permanente-hospitals-on-the-a-list-when-it-comes-to-patient-safety/">http://share.kaiser-permanente-hospitals-on-the-a-list-when-it-comes-to-patient-safety/</a> (accessed 01/11/13) (web).

Kaiser Permanente (2014) Fast facts about Kaiser Permanente. Available at: <a href="http://xnet.kp.org/newscenter/aboutkp/fastfacts.html">http://xnet.kp.org/newscenter/aboutkp/fastfacts.html</a> (accessed 18/06/13) (web).

Kellermann AL (2012) 'Socialized' or not, we can learn from the VA, Santa Monica, Calif.: RAND Corporation. Available at: <a href="https://www.rand.org/blog/2012/08/socialized-or-not-we-can-learn-from-the-va.html">www.rand.org/blog/2012/08/socialized-or-not-we-can-learn-from-the-va.html</a> (accessed 07/11/13) (web).

Kerr E, Gerzoff R, Krein S et al. (2004) Diabetes care quality in the Veterans Affairs Health Care System and commercial managed care: the TRIAD study, *Annals of Internal Medicine*, 141 (4), August, pp.272–281.

The King's Fund (2013) Health care innovations in the United States: what lessons are there for the NHS? London: KF, 3 June 2013. Available at: www.kingsfund.org.uk/blog/2013/06/health-careinnovations-united-states-what-lessons-are-therenhs (accessed 20/02/14) (web).

Kipling, R (2013) Nurses' association approaches Obamacare with hope—and concern, Alhambra, Calif.: California Healthcare Foundation
Center for Health Reporting. Available at: http://centerforhealthreporting.org/blog/nurses%E2%80%99-association-approaches-obamacare-hope-%E2%80%93-and-concerns1125 (accessed 21/06/13) (web).

Kutney-Lee & Kelly D (2011), The effect of hospital electronic health record adoption on nurse-assessed quality of care and patient safety, *Journal of Nursing Administration*, 41(11), November, pp. 466-472.

Light D, Dixon M (2004) Making the NHS more like Kaiser Permanente, *British Medical Journal*, 328(7442), 27 March, pp.763-5. Available at: http://www.bmj.com/content/328/7442/763 (accessed 18/06/13) (web).

Mannion R (2011) General practitioner-led commissioning in the NHS: progress, prospects and pitfalls, *British Medical Bulletin*,. 97(1), 1 March, pp.7-15.

National Nurses United (2012a) *Save Kaiser Pediatrics*, Silver Spring, Md.:NNU. Available at: <a href="https://www.nationalnursesunited.org/pages/save-kaiser-pediatrics">www.nationalnursesunited.org/pages/save-kaiser-pediatrics</a> (accessed 26/06/13) (web).

National Nurses United (2012b) *Nurses Say Kaiser Will Make Kids Drive Too Far For Hospital Care*, Silver Spring, Md.:NNU. Available at: <a href="https://www.nationalnursesunited.org/news/entry/nurses-say-kaiser-will-make-kids-drive-too-far-for-hospital-care">www.nationalnursesunited.org/news/entry/nurses-say-kaiser-will-make-kids-drive-too-far-for-hospital-care</a> (accessed 25/06/13) (web).

National Nurses United (2012c) Citing Safe Staffing Concerns, Kaiser RNs Plan to Picket Oakland Hospital Tuesday, Silver Spring, Md:NNU. Available at: www.nationalnursesunited.org/press/entry/citing-safe-staffing-concerns-kaiser-rns-plan-to-picket-oakland-hospital-tu (accessed 25/06/13) (web).

National Nurses United, *Kaiser Permanente*, Silver Spring, Md.:NNU. Available at: <a href="https://www.nationalnursesunited.org/pages/ca-kaiser-affiliates">www.nationalnursesunited.org/pages/ca-kaiser-affiliates</a> (accessed 25/06/13) (web).

NHS Choices (2013) About the National Health Service. Available at: <a href="https://www.nhs.uk/NHSEngland/thenhs/about/Pages/overview.aspx">www.nhs.uk/NHSEngland/thenhs/about/Pages/overview.aspx</a> (accessed 23/12/13) (web).

Paulus R, Davis K & Steele G (2008) Continuous Innovation in Health Care: Implications of the Geisinger Experience, *Health Affairs*, 27 (5), September, pp.1235-1245.

Peterson L, Normand S, Leape L & McNeil BJ (2001) Comparison of Use of Medications After Acute Myocardial Infarction in the Veterans Health Administration and Medicare, *Circulation*, 104(24), 11 December, pp.2898–2904.

RAND Corporation (2005) Improving quality of care: how the VA outpaces other systems in delivering patient care, Santa Monica, Calif: RAND Corporation. Available at: <a href="https://www.rand.org/pubs/research\_briefs/RB9100/index1.html">www.rand.org/pubs/research\_briefs/RB9100/index1.html</a> (accessed 11/11/13) (web).

Royal College of Nursing (2014), *Welcome to the RCN eHealth web pages*, London: RCN. Available at: <a href="https://www.rcn.org.uk/development/practice/e-health">www.rcn.org.uk/development/practice/e-health</a> (accessed 09/01/14) (web).

Schwartz A (2012), Nurses adopt electronic health records, *Science of Caring*, May. Available at: <a href="http://scienceofcaring.ucsf.edu/future-nursing/nurses-adopt-electronic-health-records">http://scienceofcaring.ucsf.edu/future-nursing/nurses-adopt-electronic-health-records</a> (accessed 07/11/13) (web).

Silvestre A, Sue V, Allen J (2009) If you build it, will they come? The Kaiser Permanente Model of Online Health Care, *Health Affairs*, 28(2), March, pp.334-344.

Steele G (2009) *Reforming the healthcare delivery system*, Danville, PA: Geisinger Health System. Available at: <a href="https://www.geisinger.org/news/dr-steele/62520-1%20SenateFinance%20Tstmnl-ReaderSprds.pdf">www.geisinger.org/news/dr-steele/62520-1%20SenateFinance%20Tstmnl-ReaderSprds.pdf</a> (accessed 24/06/13) (web).

Steele G (2011) *Healthcare transformation post-reforms: Geisinger's model*, Danville, PA: Geisinger Health System. Available at: <a href="https://www.pasg.org/documents/11">www.pasg.org/documents/11</a> AM Presentations/SteeleHandout. <a href="https://pdf">pdf</a> (accessed 07/11/13) (web).

Strandberg-Larsen M, Schiøtz ML & Frølich A (2004) Kaiser Permanente revisited – Can European health care systems learn? *Eurohealth*, 13(4), 24-26.

US Department of Veterans Affairs Office of Nursing Services (2013) *Clinical nurse leader.* Available at: <a href="https://www.va.gov/NURSING/Practice/cnl.asp">www.va.gov/NURSING/Practice/cnl.asp</a> (accessed 24/3/14) (web).

US Department of Veterans Affairs, Veterans Health Administration (2013a), Affordable Care Act, VA, and You. Available at: <a href="https://www.va.gov/health/aca/FamilyMembers.asp">www.va.gov/health/aca/FamilyMembers.asp</a> (accessed 19/11/13) (web).

US Department of Veterans Affairs, Veterans Health Administration (2013b). *Providing health care for veterans*. Available at: <a href="https://www.va.gov/health/">www.va.gov/health/</a> (accessed 30/11/13) (web).

US Department of Veterans Affairs, Veterans Health Administration (2013c) VA nurses: quality and innovation in patient care. Available at: www.va.gov/health/NewsFeatures/2013/May/VA-Nurses-Quality-and-Innovation-in-Patient-Care.asp (accessed 07/11/13) (web).

West D (2013) Time to question 'commissionerprovider' split, *Health Service Journal*; 123(6354), 7 June, pp.4-5. May 2014 Published by the Royal College of Nursing 20 Cavendish Square London W1G oRN 020 7409 3333 www.rcn.org.uk The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies Publication code 004 601