



national association
of primary care

PROVIDING ACCOUNTABLE CARE

Comparing the delivery of Primary Care in the
UK and USA through Accountable Care
Systems and Organisations

MSD have funded a medical writer for
this document and have contributed to
the content. MSD have also sponsored
the symposium in the USA and
supported the logistical arrangements.

Date of Prep: September 2017
NOND-1227794-0005

Foreword

The new care model known as the Primary Care Home (PCH), launched in April 2016, has rapidly evolved and spread throughout England to now cover a total population of approximately 8 million people. This means that 1-in-7 people in England are now being served by a developing Primary Care Home. With nearly 200 sites approved, the challenge is to provide streamlined and coordinated care within a community setting to improve the health and care outcomes of local populations of around 30,000 - 50,000 people.

The National Association of Primary Care, which developed the model and is leading on the national implementation, is also exploring how the PCH can be part of an accountable care system or, indeed, an ACO.

This report is the summation of some of the debate by system leaders within the UK and US and describes some of the future challenges and possible solutions.

The group of enthusiasts, named at the end of this report, hope that it adds to the debate about how care services should come together locally to create change.

We believe that it is only through tapping into the enthusiasm, potential and capacity of a multi-professional workforce to develop better solutions and services for the people they serve that we will identify the steps needed to make accountable care happen.

We would like to acknowledge and thank Merck, Sharp and Dohme Ltd. (MSD), with whom we co-created the USA symposium in Washington DC. MSD sponsored the USA symposium and logistics as well as a medical writer for this report. The NAPC and MSD have both contributed and had editorial control on this report.

*Dr James P Kingsland OBE
President National Association of Primary Care*

Contents

Foreword	1
Executive summary.....	3
Background.....	4
The symposium.....	5
Accountable care	5
Population health.....	6
Value and personalisation	7
Primary care and personalised health	7
Multispecialty community provision	9
Accountable care and the NHS	10
Key concepts.....	11
Summary and consensus	14
References	15

Executive summary

Accountable care is the current 'buzz' concept in UK health policy. It involves a transition from the current fee-for-service system to a more integrated form of care delivery, with groups of health providers collaborating to achieve specified outcomes for defined populations within agreed budgets.

At a time when ageing populations and an increase in chronic disease are placing sometimes unbearable strain on the health economy, accountable care holds out the prospect of reducing costs by improving population health, decreasing inappropriate or unnecessary use of services and reducing the reliance on hospital care.

The implementation of accountable care is at a very early stage in the UK, but NHS England is working on developing systems across several regions, based on new models, particularly the Primary Care Home. The US is further ahead, with Accountable Care Organisations, enshrined in legislation since 2010.

A two-day symposium held in Washington DC in May 2017 brought together health leaders from both countries to share best practice and exchange ideas and experience about accountable care.

Areas of consensus that emerged from the symposium were as follows:

- Transitions from fee-for-service systems to integrated, capitated and accountable care will only be effective if coordinated by primary care.
- For primary care-led systems to improve population health, interventions must build on the strengths of people and communities rather than targeting their weaknesses.
- Caution is needed before transposing ACO models to the UK, since ACOs still have lessons to learn in terms of improved cost savings, better team-based care and more collaborative governance.
- Effective implementation of accountable care in the UK will depend on improvements in population health analytics, new predictive and case management tools and fully electronic health records.
- New commissioning and payment mechanisms will be needed, based on longer-term, outcome-based contracts and whole-population budgets.
- Better coordination of care across the primary-secondary interface will require changes in culture, behaviour and leadership style, with an emphasis on team development and coaching.
- Workforce capacity and capability, and both the numbers and skill mix of care professionals in relation to population size and need, are crucial factors in the success of accountable care.
- There is a need for a consistent shared definition of accountable care and a clear understanding of the differences between the various models in use.

Background

Developed countries throughout the world face similar challenges in matching their healthcare provision to the changing needs and expectations of their populations in the 21st century (The Commonwealth Fund, 2017). Nevertheless, there are wide variations in the approach to healthcare delivery from country to country.

Now, however, there are signs that the growing pressures on OECD countries caused by ageing populations, an increased burden of chronic disease and a variety of behavioural health issues are encouraging health economies to learn from each other when it comes to tackling the challenges.

'Scientifically we are one world, and our health system needs all the help it can get', commented Dr David Blumenthal, President of the Commonwealth Fund earlier this year (Blumenthal, 2017). 'Our physicians and scientists readily adopt new surgical approaches, medications and devices that are developed by colleagues in other countries. We should keep our eyes and ears open for comparable international innovations in the way we organise our health services.'

As far as the UK National Health Service is concerned, the emerging accountable care systems (ACSS) may be able to learn from the more mature accountable care organisations (ACOs) in the USA, which were introduced through the Affordable Care Act 2010 ('Obamacare') but had their roots in much older integrated systems such as Kaiser Permanente (Kings Fund 2017).

The theory underlying accountable care is that if provider organisations are given population-based budgets to deliver specific health outcomes they will be incentivised to:

- keep people as healthy as possible to decrease overall use of services, and
- minimise the use of high-cost hospital care by ensuring effective community-based provision (Miller, 2016).

While all accountable care systems and organisations share these key aims, there are a variety of models and structures that can be used to achieve them (Shortell, 2008).

The latest refresh of *The Five Year Forward View*, a policy document for the reform of the NHS in England, has signalled the intention to develop accountable care systems across a number of regions in England with the aim of achieving better integration of health and social care through closer alignment of commissioning and provision of services (NHS England, 2014). Currently, however, the details of how these systems will be implemented remain unclear (NHS England, 2017).

The symposium

The UK has an evolving healthcare system in which rapid transformation is taking place with the key aim of ensuring clinical and financial accountability for improved patient outcomes.

A two-day symposium held in Washington DC on May 4th and 5th 2017 was set up to compare and contrast key features of first contact primary care that could be translated between the health and care systems of the UK and USA, with the aim of publishing an in-depth follow-up report.

An international faculty drawn from both countries had the opportunity to debate and share best practice against a set of fundamental criteria common to both the NHS in England and ACOs in the United States.

The UK was represented by members of the National Association of Primary Care (NAPC) and MSD, and the USA by seven providers (and their industry partners), as follows:

- American College of Physicians
- American Board of Family Medicine
- Office of Primary Care Operations Department of Veterans Affairs
- Community Health Center, Inc
- CareMore
- American Osteopathic Association
- IBM Healthcare and Life Sciences.

Discussions focused on the core characteristics of *The Primary Care Home*, a programme developed by NAPC in 2015 that is currently the most widely adopted model for the development of primary health care provision in England which is designed as a whole population management approach to care (NAPC, 2016).

The importance of population-based approaches, together with the *value* dimension to care, are now widely recognised by many health systems in the light of the growing mismatch between demand and resources.

This requires a fundamental shift of focus from process-orientated targets to measures of outcomes for whole populations (Department of Health, 2012), (Gray, 2016). This shift is fundamental to all accountable systems of care.

Accountable care

The concept of accountable care was first invoked in the US in 2006 during discussions of the Medicare Payment Advisory Commission. It was predicated on the need to improve care quality while controlling costs, and to hold providers accountable for their results and the outcomes for patients. These principles have since been adopted by many other countries as the basis for health and care reform.

An ACO brings together various groups of providers to meet the needs of a defined population within an agreed budget. ACOs can take many different forms, ranging from loose alliances and networks of hospitals, community-based services and other providers, to fully integrated systems.

They were enshrined in US legislation through the Affordable Care Act in March 2010, popularly known as ‘Obamacare’. This most sweeping health care reform since the enactment of Medicare and Medicaid in 1965 aimed to improve patient protection through expansion of health insurance coverage.

ACOs incorporate three core elements (Kings Fund, 2017):

1. They involve a provider or, more usually, an alliance of providers that collaborate to meet the needs of a defined population.
2. These providers take responsibility for a budget allocated by a commissioner, or alliance of commissioners, to deliver a range of services to that population.
3. They work under a contract that specifies the outcomes and other objectives they are required to achieve within the given budget, often extending over a number of years.

While these principles are accepted on both sides of the Atlantic, the commissioning and payment systems differ widely between the US and UK.

Population health

Population health can be defined as the health outcomes of a group of individuals, including the distribution of these outcomes within the group (Kindig D, 2003). It involves proactively addressing the health needs of a population by segmenting it into groups defined by common symptoms, conditions or characteristics. Interventions can then be targeted to the groups and the individuals within them, including those who are currently healthy but at-risk of illness because of lifestyle behaviours or other factors.

Several studies have looked at the impact on health outcomes of broader determinants of health. One study (McGinnis, 2002), summarised in a wider report (Kings Fund, 2013) concluded that health interventions are only responsible for up to 15 per cent of health outcomes, while a further 40 per cent are determined by lifestyle and the remaining 45 per cent by social and environmental factors.

Thus, it is vitally important at population level to think in terms of ‘systems of care’ that can form alliances between health, local government, social and voluntary agencies to address the health needs of populations in a holistic fashion.

Value and personalisation

The concept of population health is inextricably linked with the idea of 'value', as total care needs, costs and outcomes are weighed against each other.

Gray (2016) considers three dimensions of value in relation to populations that are important in the 21st century:

- *allocative* value, which is about the equitable allocation of resources to different groups in a way that maximises value for the whole population;
- *technical* value, which is about how effectively the resources are used by the groups;
- *personalised* value, which is about making sure that health decisions are based on the best evidence and a careful assessment of a person's clinical condition and the values they themselves place on good and bad outcomes.

Personalisation is an approach to care and support that treats people as autonomous individuals and responds to their personal needs and wishes (Local Government Association, 2014). Snowdon and colleagues set out 10 steps to achieving the personalisation of health systems (Snowdon, 2014). These include:

- focusing on people not diseases;
- defining success in terms of outcomes that are valued by people and populations;
- shifting the power balance from 'provider as expert' to 'person as expert';
- encouraging collaboration rather than competition between stakeholders;
- directly engaging individuals, using digital tools that connect to tools they are already using to support self-management of health and wellness.

Primary care and personalised health

Primary care systems have the potential to connect to individuals as part of a population health approach and can be a key component of personalisation. One study (Starfield, 2005) looked at the impact of primary care systems on population health and, particularly, health inequalities, with reference to international models described in the literature.

They characterised primary care as providing: 'accessibility for first contact care for each new problem or health need, long-term person-focused care (longitudinality), comprehensiveness of care and coordination of care in instances in which patients do have to go elsewhere'.

They demonstrated that systems built around primary care were associated with better health outcomes, lower costs and reductions in health inequalities.

The UK's National Association of Primary Care (NAPC) identifies primary care as both a level in the health system (its form) and a strategy or philosophy for organising approaches to care (its function).

NAPC recognises four central features of primary care (NAPC, 2016):

1. first point of contact for all new health needs;
2. person-centred continuous lifetime care that is holistic rather than disease-focused;
3. comprehensive care for all common population needs;
4. coordination and integration of care for those whose needs are sufficiently uncommon as to require special services or provision from another sector (secondary or tertiary care).

Primary care is therefore the first point of entry to a health system for all new needs and problems and is where most preventive and curative health needs, including health promotion and care monitoring, are provided and satisfied.

Primary care provision is universally accessible, comprehensive and community-based, supplied by professional teams that are accountable for addressing the bulk of health needs at both personal and population levels.

These services are delivered in a sustained partnership with patients and informal caregivers in a family and community context and play a central role in the overall coordination and continuity of healthcare.

Primary care has also been shown to improve care quality, reduce medical errors and generate improved satisfaction (Rosenthal, 2008).

So, there is great potential for primary care-led systems to improve population health outcomes; but for this to happen, interventions targeting the broader determinants of health must start to view people and communities as assets rather than liabilities.

Kretzmann and McKnight (1993) outlined an approach to community development that focused on building the capacity and capability of local communities to enhance their strength and resources, tackle the issues that mattered to them and make use of existing resources and expertise to achieve local improvements.

This contrasts with more traditional deficit-based approaches, with people and communities seen as problems and health care interventions designed to target those perceived problems.

In April 2017, Family Medicine for America's Health (FMAHealth) and the Patient-Centred Primary Care Collaborative (PCPCC) set out the following 'shared principles of primary care' (PCPCC 2017):

- 1. Person- and family centred** – with opportunities for individuals and families to shape the design, operation and evaluation of care delivery.
- 2. Continuous** – marked by respectful and enduring relationships between individuals, families and clinical team members.
- 3. Comprehensive and equitable** – marked by a holistic approach to care, promoting population health and highlighting/managing inequalities.
- 4. Team-based and collaborative** – with team members trained to work together according to clearly defined roles and responsibilities.
- 5. Coordinated and integrated** – with primary care actively engaged in achieving seamless care delivery across the life span.
- 6. Accessible** to all individuals, regardless of educational, socioeconomic, cognitive or physical barriers.
- 7. High-value** – achieving excellent equitable outcomes, including wise use of resources and considering costs to patients, payers and systems.

Multispecialty community provision

The Primary Care Home - England

The National Health Service in England is developing new care models as part of a national strategy to address current gaps in health and wellbeing, care and quality, and funding and efficiency (NHS England, 2014). A number of these models are being implemented through rapid testing approaches – each with a commitment to population-based healthcare and a move to accountable care systems progressing towards capitated payments for aligned providers.

One model currently gaining traction is the Primary Care Home (PCH) (National Association of Primary Care, 2016), whose core characteristics are set out on page 13 of this report. The PCH is made up of primary, community, mental, social and secondary providers working together in their localities to provide comprehensive and personalised care designed around the health and social needs of populations of between 30,000 and 50,000 people.

The principles of this model are similar to the multispecialty community provider (MCP) described in the *Five Year Forward View* (NHS England 2014) and in line with the *General Practice Forward View* (NHS England, 2016). The PCH and MCP models share many of the same goals, including better outcomes for patients at lower cost, based on greater integration between primary and secondary care.

Having been successfully trialled in 15 rapid test sites, the PCH programme has since expanded to more than 180 sites across England, serving eight million patients - 14 per cent of the population (NAPC, 2016). A recent impact report (PA Consulting, 2017) found that some PCH sites are beginning to show some benefits in service improvements, including

reductions in A&E attendances and prescribing costs, improved staff recruitment and retention and a positive impact on patient experience.

The Patient-Centred Medical Home – USA

The Patient-Centred Medical Home (PCMH) is a team-based care delivery model that coordinates treatment through primary care providers and aims to provide continuous care throughout a patient's lifetime to optimise health outcomes (AHRQ, 2017). The PCMH practice is responsible for meeting all a patient's healthcare needs – including prevention, treatment of acute and chronic illness and end-of-life care - or arranging appropriate care with other qualified professionals.

The objective is to have a centralised setting that facilitates partnerships between patients, providers and, when appropriate, their families. Care is facilitated through registries, information technology, health information exchange and other means to make sure that patients get the right care when and where they need it, provided in a way that is appropriate to their culture and language.

Accountable care and the NHS

Accountable Care principles could provide a mechanism for overcoming the current fragmentation between commissioning and provision of care in the UK without the need for new legislation. ACOs could build from current list-based practice in a way that allows NHS organisations and their partners to collaborate to meet the needs of their populations.

There are key similarities between the English Primary Care Home and the US Patient-Centred Medical Home in terms of accountable care, and sharing of experience of these two models could have significant benefits for both the US and UK.

However, it is important to note that evidence from the USA about the performance of both ACOs and medical homes is mixed (Jabbarapour, 2017) and that early lessons need to be learned before they can be successfully adopted by other health economies (King's Fund 2014).

The first public performance report of the original 32 pioneer ACOs revealed that all were successfully meeting the quality measures and 25 had lower risk-adjusted readmissions rates compared with the benchmark rate for all Medicare fee-for-service beneficiaries. But while 18 of these ACOs had generated savings for Medicare, 14 had made losses. The challenges facing ACOs include the need for better team-based care and more collaborative forms of governance (King's Fund, 2014).

In terms of Medical Homes the findings are also mixed but generally show some modest costs savings, mostly due to reduced A&E visits and lower hospital readmissions, while maintaining and improving quality (Williams, 2012).

Experience in the UK suggests that loose collaborations with incentives focused on individual institutions are not always sustainable. And the consensus that emerged from the symposium was that the effective implementation of accountable care systems or organisations in the UK would depend on improvements in population health analytics, the development of new predictive and case management tools and accelerated implementation of fully electronic care records.

Coordination of care across the primary-secondary divide would be a major challenge, calling for changes in culture, behaviour and leadership. Additionally, new commissioning and payment mechanisms would be needed, based on longer term outcome-based contracts and whole-population budgets.

Key concepts

A number of common themes emerged from the discussions, including the need for strong organisational and clinical leadership and a focus on workforce capacity, clarity over definitions and differences, systems integration, population health needs and contractual incentives and levers.

Leadership

Effective organisational and clinical leadership is fundamental to success for both health systems, with an emphasis on team development and coaching for healthcare staff designed to promote engagement of patients as well as the workforce.

For example, the Veteran Affairs health system involves the investment of considerable time and training into the development of a team culture, with the overall goal for teams of achieving 'Joy of Practice'.

Workforce and capacity

Workforce capacity and capability are seen as crucial to achieving sustainable healthcare in England (NHS England, 2017) and the USA (Hostetter, 2017).

The size and structure of the workforce and the ratio of care professionals to population size are key factors in the effectiveness of accountable care in the US. And non-physician staff, such as nurse practitioners, practice assistants, pharmacists, case workers and behavioural therapists, are seen as vital to the successful delivery of care.

One US study focused on the concept of a multidisciplinary 'teamlet', which can include a variable mix of mental health workers, pharmacists, clinical providers, dentists, social workers and behavioural health specialists (Bodenheimer, 2007). Critical to the success of the teamlet is absolute clarity over the roles and functions of each team member. It involves significant investment into workforce development, reaching beyond clinical capabilities into leadership and team dynamics. Organisational 'readiness' for a team to deliver population-based healthcare is based on detailed assessment.

While multidisciplinary teams are also a key component of the UK NHS and the Primary Care Home model, the US teamlets use a much more sophisticated workforce modelling formula that ensures they have the right resources and capabilities for the populations they serve.

Clarity over definitions and differences

There are five different models of ACOs in the US (King's Fund 2014). These are:

- integrated delivery systems, with organisations brought together in a single system and payment mechanism encompassing all care across organisational boundaries;
- multispecialty group practices, where different specialty providers work together, usually owning or strongly affiliated to a hospital;
- physician hospital organisations, which contract with health insurers to deliver care for defined populations;
- independent practice associations, where individual practices come together to contract with health insurers;
- virtual physician organisations, where small practices, mostly in rural areas, are supported by a local medical foundation or similar body.

Given this diversity, the faculty emphasised the need for a consistent, shared definition of accountable care and a clear understanding of the differences between the various models to prevent misunderstandings when working out which of the various models might be capable of translation to the UK.

Systems integration

Care delivery through integrated systems is key to the delivery of quality care in the US. One methodology, described as a 'malleable approach', involves the creation of the smallest possible team for a given population, with the composition and approach tailored to the specific needs of that population. The description 'warm hand-offs' was used to describe how patients are passed through the system in an efficient, predictable and caring manner, ensuring their health needs are met with a return to optimal health and wellbeing.

Digital enablement was seen as a key component of systems integration, particularly the use of telehealth, telecoaching and teleconsultation to deliver care in the most appropriate settings, with patients routinely supplied with smart tablets for home use.

The Community Health Center, Inc model has primary care centres forming the hub of care, with a focus on serving the 'vulnerable of the vulnerable'. They also provide school-based health centres, which aim to tackle the determinants of health from an early age. Their ambition is to provide seamless care from cradle to later life, with the ethos 'every patient has a team'. CHC also has a fully developed research and innovation arm – the Weitzman Institute – to test and study new models of care delivery and their outcomes.

Population health: size and scale

The definition and size of the population to be served are key factors for accountable care, and there is some evidence of consistency between the UK and US models.

The core characteristics of the UK Primary Care Home include:

- provision of care to a defined registered population of 30,000 to 50,000 people;
- clinical financial drivers aligned through a unified capitated budget with appropriately shared risks and rewards;
- integration of the workforce, with a strong focus on partnerships spanning primary, secondary and social care;
- combined focus on personalisation of care and improvement in population health outcomes.

The model requires a whole population management approach which, in time, requires the responsibility for deployment of the resources relating to the population to sit at the level of the Primary Care Home. This in turn enables the workforce model to be built around population need and defines the maximum size of the population that can be cared for by this approach to care.

The Primary Care Home was considered to be similar in size and scope to the Vermont Blueprint for Health, a State-led, nationally-recognised initiative aiming to transform healthcare delivery and payments (Department of Vermont Health Access, 2016). Its foundation is a local Transformation Network including practice facilitators, community health team leaders and project managers, working with Patient-Centered Medical Homes, community health teams and local health and human services leaders to allow for rapid response to Vermont's health priorities.

The VA 'teamlet' model is based on smaller populations of 6,000, normally served by a blend of six providers, including registered nurses, licensed practical nurses, clerks and clinical staff according to demographic need. Populations across regions can be as large as 30,000, with workforce numbers scaled up accordingly. With up to 500 of these teamlets across the country, peer to peer support is vitally important to enable whole-system learning. The NHS has signalled its intention to develop Accountable Care Systems (NHS England, 2017); but while this might be achievable at clinical level, delegates agreed that it might prove challenging in the light of current funding restrictions.

Contractual incentives and levers

Incentives and levers vary between ACOs, but the faculty agreed on the need for these to be aligned across the various providers, linked to clear definitions, consistent leadership and a shared vision.

Making systems more 'Kaiser-like' in being capitated and moving from a fee-for-service basis to accountability is fundamental to accountable care in the US. However, the payment flow changes needed can be complex and need congressional approval.

A Commonwealth Fund paper presented at the symposium (Hostetter, 2017) described the CareMore model for high-needs patients – a parallel system of care that partners with independent primary care physicians (PCPs) to identify high-risk patients who would benefit from referral to Care Centers, where primary, behavioural and specialist care can be delivered by multidisciplinary teams.

The plan pays PCPs capitated rates so they have no disincentive for referring patients to Care Centers. Additionally, they receive an incentive package that rewards agreed goals, such as the delivery of comprehensive health assessments and preventive tests as well as performance on other quality measures, including patient satisfaction. In 2015 CareMore members were found to have 20 per cent fewer hospital admissions, 23 per cent fewer bed days and a 4 per cent shorter length of stay than people covered under fee-for-service Medicare.

Summary and consensus

Accountable care is an operational model that brings together various groups of healthcare providers to serve the needs of defined populations within agreed budgets to achieve specified outcomes.

It is based on the theory that providers organised in this way will be incentivised to keep people as healthy as possible, thus decreasing overall use of services and minimising the use of high-cost hospital care.

This prospect is particularly attractive for developed countries at a time when ageing populations and an increase in chronic diseases have led to rising and unsustainable costs in care delivery and when integrated working has been facilitated by the digitalisation of society and the availability of comprehensive and intelligent data.

There is now an urgent need to move beyond rhetoric to reality, according to Dr James Kingsland OBE, President of the National Association of Primary Care. 'There is a feeling that if you say the words "transformation" or "integration" often enough then it will just happen. We want to get beyond the rhetoric.'

A two-day symposium, held in Washington DC in May 2017, attempted to do just that by bringing together health leaders from the US and UK to share best practice and exchange ideas and experience about accountable care.

Accountable Care Organisations (ACOs) have been in operation in the US since 2010, with their roots in much older integrated systems like Kaiser Permanente. Accountable Care Systems (ACSs) are a more recent feature of the UK National Health Service, but NHS England has signalled its intention to develop them across a number of regions, and new care models, including the Primary Care Home, are being developed for this purpose.

A number of areas of consensus emerged from the symposium, as follows:

- Transitions from fee-for-service systems to integrated, capitated and accountable care will be effective only if coordinated by primary care.
- For primary care-led systems to improve population health, interventions must build on the strengths of people and communities rather than targeting their weaknesses.

- Caution is needed before transposing ACO models to the UK since ACOs still have lessons to learn in terms of improved cost savings, better team-based care and more collaborative governance.
- Effective implementation of accountable care in the UK will depend on improvements in population health analytics, new predictive and case management tools and fully electronic health records.
- New commissioning and payment mechanisms will be needed, based on longer-term, outcome-based contracts and whole-population budgets.
- Coordination of primary and secondary care will require changes in culture, behaviour and leadership, with an emphasis on team development and coaching.
- Workforce capacity and capability, and the ratio of care professionals to population size, are crucial factors in the success of accountable care.
- There is a need for a consistent shared definition of accountable care and a clear understanding of the differences between the various models in use.

References

- Agency for Healthcare Research and Quality. (2017). *Transforming the organization and delivery of primary care*. <https://www.pcmh.ahrq.gov>.
- Benjamin, R. M. (2011). *The National Prevention Strategy: Shifting the nation's healthcare system*. US National Library of Medicine.
- Blount, A. (2003). Integrated Primary Care: Organizing the Evidence. *Families, Systems & Health*.
- Blumenthal, D. (2017). Health Care Needs a Better System for Importing Ideas From Abroad. *The Wall Street Journal*. Available at: <https://blogs.wsj.com/experts/2017/03/03/health-care-needs-a-better-system-for-importing-ideas-from-abroad/>
- Bodenheimer, T., Laing, BY. (2007). *The Teamlet Model of Primary Care*. *Ann Fam Med* Volume 5, 457-461.
- Cooke NJ, H. M. (2015). *Enhancing the Effectiveness of Team Science*. Washington DC: The National Academies Press.
- Department of Health. (2012). *The Health And Social Care Act*. London: HMSO.
- Department of Vermont Health Access. (2016). *Vermont Blueprint for Health*. Available at: <http://dvha.vermont.gov>
- Fawcett, K. (2011, May 13). How to respond to complaints. *Nursing Times*. Available at: <https://www.nursingtimes.net/roles/nurse-managers/how-to-respond-to-complaints/5029567.article>
- Gray, M. (2016). Population Healthcare: a new clinical responsibility. *Journal of the Royal Society of Medicine*, Volume 109 (12), 437-438.

- Harnik, S. (2016, June 09). *Lack of Diversity among Healthcare Providers Impacts Healthcare Disparities*. Available at: <http://www.chisite.org/2016/06/09/lack-diversity-among-healthcare-providers-impacts-healthcare-disparity/>
- Hostetter, M., Klein, S. and McCarthy, D. (2017). *CareMore: Improving Outcomes and Controlling Health Care Spending for High Needs Patients*. The Commonwealth Fund.
- Jabbarpour, Y., DeMarchis, E., Bazemore, A., Grundy, P. (2017). *The Impact of Primary Care Practice Transformation on Cost, Quality and Utilization*. <http://www.pccpc.org/resource/impact-primary-care-practice-transformation-cost-quality-and-utilization>.
- Kindig, DSG. (2003). What is Population Health? *American Journal of Population Health*, Volume 93(3), 380-3.
- King's Fund. (2013). *Broader Determinants of Health*. Available at: www.kingsfund.org.uk/time-to-think-differently/trends/broader-determinants-health. [Accessed 28/3/2017].
- King's Fund. (2017). *Accountable care organisations (ACOs) explained*. <https://www.kingsfund.org.uk/publications/accountable-care-organisations-explained>
- King's Fund. (2014). *Accountable care organisations in the United States and England: Testing, evaluating and learning what works*. <https://www.kingsfund.org.uk/publications/accountable-care-organisations-united-states-and-england>
- Kretzmann, JA. (1993). Building Communities from the Inside Out. *Centre for Urban Affairs and Policy Research, Neighbourhood Innovations Network*.
- Local Government Association. (2014). *Personalisation*. London: Local Government Association.
- McGinnis J, WRP. (2002). *The case for more active policy attention to health promotion*. *Health Affairs*. Volume 21(2), 78-93.
- Miller, R., Smith, J. (2016). *Accountable care organisations: the future of the NHS*. Available at: <http://www.nationalhealthexecutive.com/Comment/accountable-care-organisations-the-future-of-the-nhs>
- National Association of Primary Care. (2016). *Primary Care Home: A unique model of care*. London: NAPC.
- NHS England. (2014). *Five Year Forward View*. London: NHS England.
- NHS England. (2017). *Next Steps on the Five Year Forward View*. London: NHS England.
- NHS England. (2016). *The multispecialty community provider (MCP) emerging care model and contract framework*. London: NHS England.
- NHS England. (2016). *General Practice Forward View*. London: NHS England.
- PA Consulting. (2017). *Does the Primary Care Home make a difference*. London: PA Consulting.

- Patient-Centered Primary Care Collaborative. (2017). *Shared principles of Primary Care*. Available at:
https://www.pcpcc.org/sites/default/files/Shared_Principles_of_Primary_Care.pdf
- Rosenthal, T. (2008). The medical home: growing evidence to support a new approach to primary care. *The Journal of the American Board of Family Medicine*, Volume 21, 427-40.
- Schumacher, A. (2016). Telehealth: current barriers, potential progress. *Ohio State Law Journal*.
- Shortell, SM. Casalino, LP. (2008). Health care reform requires accountable care systems. *JAMA*. 2008;300(1):95-97. doi:10.1001/jama.300.1.95
- Sidorov, J. (2006). It ain't necessarily so: the electronic health record and the unlikely prospect of reducing health care costs. *Health Affairs*.
- Singer, JA. (2014). Integrating complementary and alternative medicine into mainstream healthcare services: the perspectives of health service managers. BioMed Central.
- Snowdon A, S. K. (2014). *"It's All About Me": the personalisation of health systems*. Canada: Ivey Business School.
- Spears PA, Devine P., and Finestone, S. (2016). Measuring what is important to patients in clinical trials. *Proceedings of the 2016 San Antonio Breast Cancer Symposium*. San Antonio: AACR.
- Stanberry, B. (2000). Telemedicine: barriers and opportunities in the 21st century. *Journal of Internal Medicine*.
- Starfield B., Shi, L., Macinko, J. (2005). *Contribution of primary care to health systems and health*. *Milbank Quarterly* (83), 457-502.
- The Commonwealth Fund. (2017). *Mirror, Mirror 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care*, Available at:
<http://www.commonwealthfund.org/Publications/Fund-Reports/2017/Jul/Mirror-Mirror-International-Comparisons-2017>
- Williams JW., (2012). Closing the quality gap: revisiting the state of the science, Volume 2: the patient-centred medical home. *Evid Rep Technol* (Full Rep). 2012 Jul; 208(2): 1-210.

With special thanks to the symposium faculty and healthcare organisations

Bob Doherty, Senior Vice President Governmental Affairs and Public Policy, American College of Physicians

Shari Erickson, Vice President, Governmental Affairs and Medical Practice, American College of Physicians

Paul Grundy, MD, MPH, FACOEM, FACPM, Chief Medical Officer, Global Director of Healthcare Transformation, IBM Healthcare and Life Sciences

Robert Phillips, MD, MSPH, FAFAP, Vice President for Research & Policy, American Board of Family Medicine

Angela L. Denietolis, M.D. Executive Director, Office of Primary Care Operations, Department of Veterans Affairs

Joanne Shear, MS, FNP-BC, Former Clinical Program Manager, Office of Patient Care Services, Primary Care, Department of Veterans Affairs

Margaret Flinter, APRN, PhD, c-FNP, FAAN, FAANP, Senior Vice President and Clinical Director, Community Health Center, Inc.

Raziuddin Ali, MD, Regional Medical Officer, CareMore

Laura Wooster, MPH, Senior Vice President, Public Policy, American Osteopathic Association

Irene Dankwa-Mullan, MD, MPH, Deputy Chief Health Officer, IBM Watson Health

Dr. James Kingsland OBE, President National Association of Primary Care (UK)

Dr. Nav Chana Chairman National Association of Primary Care (UK)

Simon Nicholson, Strategy Value Access, Merck Sharp & Dohme Limited (MSD UK)

Vikki Beddow, Strategy Value Access, Merck Sharp & Dohme Limited (MSD UK)

Robert Dribbon, Strategy and Innovation, Merck & Co., Inc. of Kenilworth, NJ, USA

Lisa LaMond, Strategy and Planning, Merck & Co., Inc. of Kenilworth, NJ, USA

