Perspective and Debates

Accountable Care Organizations and Clinical Commissioning Groups face an uncertain challenge for improving public health

Douglas J. Noble
Clinical Lecturer, Centre for Primary Care and Public Health, Barts and The London School of Medicine and Dentistry, London, UK

Significance for public health
The United States of America’s (USA) government has given Accountable Care Organizations (ACOs) multiple different functions. One of these is improving the population health of their registered patients. How ACOs in the USA understand their role in improving the population health of their patients has yet to be explained. Likewise in the United Kingdom (UK), as Clinical Commissioning Groups (CCGs) take on a new role including functions related to public health, many of the roles proposed are not clear. There are possible lessons that emerging ACOs in the USA and CCGs in the UK could share to improve public health, and further research is required.

Abstract
Accountable Care Organizations (ACOs) in the United States of America (USA) and Clinical Commissioning Groups (CCGs) in the United Kingdom (UK) are newly proposed cross-organisational structures in health services both tasked with a role which includes improving public health. Although there are very significant differences between the UK and USA health systems, there appears to be some similar confusion as to how ACOs and CCGs will regard and address public or population health. This short perspective article gives an overview of ACOs in the USA and CCGs in the UK, with the underlying context of possible public health functions. It concludes by considering the challenges facing both countries and highlighting the opportunity for shared learning.

Introduction
There are significant differences between the health systems in the United States of America (USA) and the United Kingdom (UK). The UK operates a tax-based National Health Service (NHS) which ensures equal provision for all UK citizens. This is in contrast to the insurance based system in the USA which results in variable provision for the population. Although estimates vary, and basic state funded healthcare is available for children, the poor, and the elderly, tens of millions of Americans remain uninsured.1 A major focus of US health policy has been to increase coverage to address this deficit in access, whereas in the UK improving quality and reducing costs have been more prominent themes.2

An analysis of the health systems of twelve countries in 2011, using Organization for Economic Cooperation and Development data from 2010, included both the UK and the USA.3 The USA had the largest financial investment in healthcare, spending about double the proportion of gross domestic product compared to the UK. Yet, despite higher spending, the USA had fewer doctors and consultations than in the UK. Medication was more frequently prescribed in the USA, and there were vastly more diagnostic scanning machines per million population compared to the UK. Comparisons of performance were mixed.

However, despite these vast differences, both countries have something to learn from each other. This shared learning has been more successful at a clinical level, yet it has been suggested that there are several areas in which it could also be possible at an organisational level. For example, the UK could learn from the US experience of low cost high performance centres for complicated interventions.4

At the present moment, both the UK and USA are embracing fundamental changes to their healthcare systems. Specifically, Accountable Care Organizations (ACOs) in the USA and Clinical Commissioning Groups (CCGs) in the UK are newly proposed cross-organisational structures in health services. Both have a wide range of possible functions and, interestingly, both have been tasked with a role in improving public health. ACOs are expected to improve the population health of their patients, and CCGs are expected to reflect public health priorities in their commissioning plans.

Preventive medicine has had a more prominent focus in the USA since President Obama initiated his plans for USA healthcare in 2008.5 There was the same shift in focus with the change in government in the UK in 2010; initial plans of the incoming government included changing the name of the Department of Health to the Department of Public Health,6 although this has not been done.

It is as yet unclear how ACOs and CCGs will handle public health, which aspects they will focus on, and what resources will be at their disposal. However, even though it is very early days, and although provision in the USA and UK for healthcare and public health are very different, there are parallels in the conceptualisation of these new organisational structures and how they may address improving public health. This short perspective article gives an overview of ACOs in the USA and CCGs in the UK, with the underlying context of possible public health functions, and concludes by considering the challenges facing both countries and highlighting the opportunity for shared learning.

USA: Accountable Care Organizations and population health

The Patient Protection and Affordable Care Act (ACA) 2010, Section 3022, created the mandate for the development of ACOs.7 It is envisioned that existing healthcare provider organisations with sufficient primary care capacity, integrated care arrangements and registered patients will form conglomerates of ACOs. Their main intended function is to achieve a measurable improvement in quality of healthcare and a reduction in healthcare costs.8 ACOs are umbrella organisations that seek to bring together different types of healthcare groups, and have the potential to improve integrated care pathways, reduce the
The US has for many years tried to improve integrated care arrangements between primary and secondary care and other levels. ACOs represent a continuing attempt to streamline health services by bringing several different providers under a common system.\textsuperscript{11} Several types of organisations could potentially become ACOs, including: integrated delivery systems, multispecialty group practices, independent practice associations, virtual physician organisations, and physician-hospital organisations.\textsuperscript{9,10} The aim of reducing duplication and improving coordination could increase quality of care, and drive down costs.

Minimum prerequisites to obtaining ACO status include a 3-year contract with a population of at least 5000 patients. Incentives are primarily financial (in terms of shared savings) from the Centers for Medicare and Medicaid Services (CMS) fee-for-service payment model.\textsuperscript{12,13} A part of the savings is retained by the ACOs and passed on by them to individual provider organisations that make up the ACOs. Groups of physician led organisations can apply through CMS for ACO status. Since their inception, ACOs have received considerable coverage in medical journals and the lay media.\textsuperscript{14,15} Online learning groups to support emerging ACOs are beginning to gather momentum.\textsuperscript{16,17}

Professor Donald Berwick, while Administrator of CMS wrote in 2011 in the New England Journal of Medicine: The creation of ACOs is one of the first delivery-reform initiatives that will be implemented under the ACA. Its purpose is to foster change in patient care so as to accelerate progress toward a three-part aim: better care for individuals, better health for populations, and slower growth in costs through improvements in care.\textsuperscript{18} Yet, despite this interest and the high level support epitomised by Berwick’s comment, the role of ACOs in improving population health and evaluating the health needs of their registered patients remains ill-defined and poorly explored.

Berwick also outlines the expectation that ACOs will tackle their patients’ needs for preventing disease and utilise health intelligence data to address population health.\textsuperscript{18} Other key commentators have also reported population health as an agreed priority for ACOs.\textsuperscript{19} CMS released 65 performance metrics in five domains for ACOs.\textsuperscript{20} Nine of these are specifically in the area of preventive medicine, including: vaccination, screening, tobacco cessation interventions and adult weight screening. In other domains, targets for controlling diabetes, cardiovascular disease and other chronic diseases predominate.

It seems apparent that ACO policy-makers intend ACOs to not only improve quality of healthcare and save money, but also to take responsibility for the health and well-being of their registered patient population.\textsuperscript{21} In other words, as well as providing reactive care to individuals who are ill or believe themselves to be ill, ACOs must provide proactive care to people who are not (currently) patients, even though they are registered with an insurance plan. Establishing how ACOs perceive the challenge of improving the population health of their registered patients, and whether their perceptions are realistic and feasible, has implications for their long-term success.

### UK: Clinical Commissioning Groups and public health

The USA and UK differ in their definition of population and public health. In the UK, population health is thought of as virtually synonymous with public health (the terms are often used interchangeably). There are three principal domains of public health: health protection, health promotion, and health services’ public health.\textsuperscript{22}

Health protection is led by the Health Protection Agency which is responsible for all biological, chemical and radiological threats to human health (the equivalent of the Communicable Disease Control Center or CDC in the USA). This includes contact tracing and control of infectious disease, quantitative assessment of toxicity to guide interventions, and health intelligence support for all healthcare organisations in the UK to handle such incidents. Health promotion concerns interventions aimed at enabling individuals and communities to cease unhealthy behaviour patterns and adopt healthier ones. For example, the availability of tobacco cessation interventions or support for catering businesses to adopt healthier cooking practices. These functions are currently divided between the NHS and local government.

The last domain, health services’ public health, is the least understood even within the UK public health system. This is compounded by a current reorganisation of the NHS,\textsuperscript{23} of which public health is currently a core part, accounting for approximately 4% of the NHS budget.\textsuperscript{24} Public health departments are currently located within Primary Care Trusts (PCTs) which are the commissioning bodies for local populations (and are in some ways similar to ACOs) especially proposed community models. Public health departments advise healthcare commissioners on the quality and performance of healthcare services. In addition, public health specialists work at regional and national levels to perform similar functions for specialist services, and to develop guidelines and health intelligence in bodies such as the National Institute for Health and Clinical Excellence.\textsuperscript{25}

Health protection (particularly related to hygiene and sanitation) and high-level health promotion (e.g. national advertising for healthier eating) would typically be considered as public health in the USA (although it should be noted there are no hard and fast rules). Population health in US terms has a more specific meaning and may be applied to preventive medicine functions of healthcare organisations. This distinction is less clear in the UK, as described above.

In the current UK NHS re-organisation, control and commissioning of appropriate local healthcare services are passing from PCTs to new cross-organisational structures (currently under development) called Clinical Commissioning Groups (CCGs). These groups aim to be, like ACOs, physician led. They will also assume a role for public health,\textsuperscript{26} but this role, like that of the newly-formed ACOs, is currently unclear. Plans for the public health role state: clinical commissioning groups... will receive specialist population health commissioning advice from directors of public health.\textsuperscript{27}

A new structure called Public Health England is in the process of being formed to house some of the public health functions described above. Local government will take much more responsibility for public health outcomes, hosting health and well-being boards, a conglomeration of all parties with an interest or duty to improve public health. It is intended that CCGs will be an integral part of this set-up, with a role in health and well-being plans, and with the intention that this will also inform their commissioning activities.\textsuperscript{28}

In the UK, information for public health is ubiquitous and has traditionally been handled by public health specialists and ancillary staff. Members of CCGs will need to have skills in handling health information in order to commission services.\textsuperscript{29} Yet there is evidence to suggest that, at least for general practitioners, both skills in handling and using
health information for commissioning may be limited. This could be linked to: i) lack of training in handling and processing population level data; ii) lack of skills in prioritising health information based on health needs as opposed to exclusively service demands or cost savings; and iii) lack of experience in using health information selectively to plan and manage services and public health interventions. Making use of existing public health specialists and their skills will be critical for CCGs, although details of exactly how this will be brought about are as yet unclear.

Future challenges and learning

There are lessons that ACOs in the USA and CCGs in the UK could learn from each other as they evolve to improve public health outcomes in the communities they serve.

ACOs have been tasked with multiple different functions by the US government. One of these is improving the population health of their registered patients. How ACOs in the USA understand their role in improving the population health of their patients is yet to be explained. The expectations of ACO policy leaders in government, academia, policy think-tanks and other relevant groups for ACOs to address the population health of their registered patients may be quite different to how individual ACOs currently understand and are planning this new role. Will they even think it is their role at all? Likewise in the UK, as CCGs take on a role in public health, many proposed functions are unclear and members of the public may lack the skills needed to address these issues. ACOs and CCGs have different roles in different contexts but both are innovative and new. Research into their function needs to go beyond transatlantic comparisons and draw out lessons for shared learning. As has been previously noted, the experience of novel health systems in one country should also be seen as pilots for other countries. This could especially be the case when there are similarities in proposed functions, as is the apparent case with ACOs and CCGs.

Context is critical. The UK spends less on healthcare than the USA but has greater access to services. CCGs face spending cuts and decisions regarding prioritisation, but they will probably not have the option to ignore sections of the population’s health. This allows a real effort to be made to improve public health. In contrast, ACOs have a defined insured population which will not necessarily be representative of the city or town of its location. By definition, improving all local public health will be problematic. Interventions, though, are a large part of US healthcare, and even if ACOs fail to reach entire populations they may be better placed and funded to provide successful preventive medicine than CCGs facing spending cuts. CCGs may be reduced to funding acute care, with few resources left over to tackle the underlying causes of poor health.

Putting public health in the hands of healthcare providers or health service commissioners risks creating practical and philosophical tensions between individual and public health perspectives, e.g. a population orientation is underpinned by utilitarian ethics (the greatest good for the greatest number) whereas an individual orientation is underpinned by deontological ethics (the professional obligation to the individual patient). How ACOs and CCGs will address this dichotomy has yet to be seen and this is a likely area of fruitful and interesting qualitative research. CCGs in the UK that adopt a PCT style approach may be better placed to address public health as they will inherit a skilled workforce. Those that adopt a private sector model may have a less certain future for tackling population health issues. Likewise in the USA, as community based ACOs begin to emerge and consider taking population health responsibilities, and possible investment of shared savings in local population health goals, improving public health may become more intrinsic to their overall functioning.

Although there are very significant differences between the UK and USA health systems, there appears to be a similar confusion as to how CCGs and ACOs will regard and address public health. Lessons learned from the USA and UK experience may inform mechanisms for physician led organisations in the UK and the USA to assess health needs, use population health information and improve population health outcomes. This comparison is particularly relevant given the massive restructuring of health systems in both the USA and UK, a redefining of commissioning of public health in the UK, and a potential new role for ACOs addressing population health in the USA. Further research into these emerging new structures using organisational theory is required to reveal mechanisms for improving public health that can be shared between the two countries.

References