Ideas from the NHS

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September 2018

70 YEARS
OF THE NHS
1948 - 2018

Purpose

Background:

The NHS (National Health System) is the largest single-payer system in the world and was ranked #1 in the Commonwealth Fund's Health Care System Performance Rankings in 2017[1] (US placed #11). It achieved particularly high scores in Care Process (prevention, safe care, coordination & patient engagement), Access (timeliness & affordability) and Equity. The NHS is also one of the world's largest employers with around 1.5m staff nationwide. In 2014, the UK spent 9.8% of GDP on healthcare[2].

Of course, it is not without shortcomings, but I am immensely proud of the NHS and stand behind its founding principles. As a physician who has worked in both UK and US, I believe there is much that the countries can learn from each other.

My goals for this document are:

- Outline several examples of successful, promising and even controversial innovations in the UK's National Health Service with an emphasis on primary care.

- Briefly describe their impact on care delivery in the UK.

- Hypothesize how these innovations might be applied to a US employer-based model.

1 Commonwealth Fund: Mirror, Mirror 2017 2 NHS spends about EU average as percentage of GDP on health

Primary Care as Gatekeeper

Overview

The gatekeeping role of primary care in the UK originated over 100 years ago, prior to the founding of the NHS in 1948[1]. In the early 20th century, outpatients departments were free of charge (funded largely by upper and middle class philanthropists) and GPs charged a sixpence or a shilling per visit. Many lamented the abuse of outpatients departments and called for cases to be certified by a 'medical man as requiring special attention'. The National Insurance Act of 1911 provided free GP care for the working-class and required patients to obtain a letter from their GP to be received in out-patients. The principle was retained in the founding of the NHS in 1948 and remains in place today.

Currently a GP referral is required to access specialist NHS services and privately-insured care, except emergency or urgent care and a number of walk-in clinics for family planning and sexual health. GPs are entitled to deny referral if they do not believe they are clinically necessary.

Impact

In England, there are approximately 340M GP consultations a year with an average of 6 visits per year. There are approximately 14M specialist referrals made by GPs each year which accounts for just over 4% of consults. In the US studies have quoted the average referral rate to specialists from primary care at 33%[4,7].

Most would agree that the gatekeeping role of the GP and the way it is adjudicated plays a significant role in containing NHS costs and ensuring specialist resources are used wisely. Additionally, general practice is often the most appropriate venue for care and it can be argued that GPs are best placed to refer the patient to the appropriate specialist. Gatekeeping continues to be used as a lever to control demand[8] and there have controversially been cases of GPs paid bonuses by CCGs to reduce their referral rates[5].

Access continues to be a challenge with recent surveys citing that 24% of patients waiting over a week to see a GP on a backdrop of increasing system pressures[9].

Relevance

Primary care as a gatekeeper to specialists is not a novel concept in the US and is a defining feature of the HMO model, which typically requires primary care referral. KFF reports that in plan year 2016 there were 92M Americans enrolled in HMO plans. However it is clear that even when the PCP is the first port of call, there is a significant gap in referral rates between the UK and US (~4% vs 33%).

Here are some possible ways employers could steer patients toward primary care:
1. Increase ease of primary care access to preempt specialist self-referral
2. Encourage value-based referrals[6] or 'demand management'[8] and primary care management first (where appropriate)
3. Increase capability of primary care to handle aspects of specialized care and reduce need for specialist referrals
4. Hybrid plans (such as POS plans) that incorporate primary care gatekeeping without network restrictions or steer more employees toward HMO plans

1 The principle of referral: the gatekeeping role of the GP 2 GPs are much more than gatekeepers 3 Rethinking primary care's gatekeeper role 4 NHS GPs offered cash rewards not to send patients to hospital 5 All GP referrals should be subject to clinical peer review, says NHS England 4 Dropping the baton: Specialty Referrals in the United States 5 GP practices given cash back for not sending patients to hospital 6 Design and implementation of a Physician Coaching Pilot to promote Value-based Referrals to Specialty care 7 Comparison of specialty referral rates in the United Kingdom and the United States: retrospective cohort analysis 8 NHS England: Demand Management Good Practice Guide 9 One in four patients wait a week to see GP amid record A&E pressures

Free at the Point of Use

Overview

The NHS was born in 1948 with three core principles:
- That it meet the needs of everyone
- **That it be free at the point of delivery**
- That it be based on clinical need, not the ability to pay

Later, a one-shilling charge for prescriptions and a £1 charge for dental treatments was introduced, however all other NHS services have remained free.

The introduction of further co-payments for care has been floated many times and there has always been staunch opposition[1]. The 2005 King's Fund's response to Parliament cited the RAND Health Insurance experiment where co-payments led to much larger reduction in use of medical services by lower income adults and children. The review also suggested that the costs associated with administering a co-payment would negate the additional revenue, that 'frivolous' demand if it exists would be better dealt with on the supply side and ultimately that it goes against the founding principles of the NHS.

Impact

It is no surprise that being free at the point of use is a large part of the reason the NHS scores so highly on equity and access.
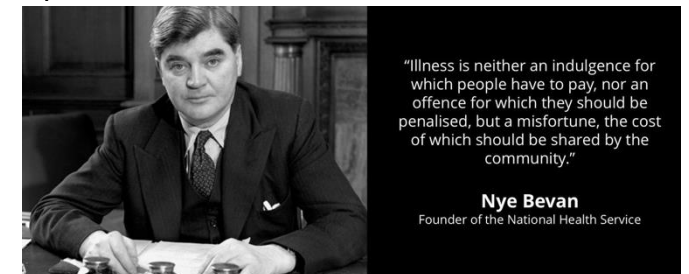
The annual health budget for England is approximately £124bn. In '17-'18 NHS England handled 23.8m A&E attendances, 118m outpatient appointments of which 94m were attended[8], and approximately 12m primary procedures & interventions were performed[7].

However as demand continues to rise and the health budget fails to keep up, the system is under increasing pressure. Consequently waiting times have risen - 19% now wait over 62 days for an appointment after urgent GP referral, 15-20% spend >4hrs in A&E, 4 million people are on the waiting list for treatment and patients wait an average of 22 weeks from being referred by their GP to a specialist and starting treatment. As the NHS looks to free up capacity it is currently considering cutting 17 operations that are currently offered on the NHS but are considered to be ineffective[9].

Relevance

My opinion is that higher cost sharing particularly in the form of high deductible health plans has largely failed, and while it may have led to lower utilization it has also increased health inequality, decreased member satisfaction, and resulted in poorer outcomes despite a modest impact on overall costs.

Employers could make certain high value services free at the point of use, as is currently the case with preventative services covered under the ACA – for example, primary care, centers of excellence or designated providers in a tiered network design. Employers could reduce employee anxiety by encouraging greater price transparency around tests that might result from primary care visits or specialist referrals.

"Illness is neither an indulgence for which people have to pay, nor an offence for which they should be penalised, but a misfortune, the cost of which should be shared by the community."

Nye Bevan
Founder of the National Health Service

1 King's Fund: What if people had to pay £10 to see a GP 2 Patient co-payment for general practice services: slippery slope or survival imperative for the NHS? 3 King's Fund Consultation Response: Co-payments and charges in the NHS 4 Commonwealth Fund: How high is too high? Implications of high-deductible health plans 5 Socioeconomic inequality of access to healthcare: Does choice explain the gradient? 6 RWJF Socioeconomic status and utilization of health care services in Canada and the United States 7 Hospital Admitted Patient Care Activity 8 NHS Outpatient activity 9 NHS wields axe on 17 'unnecessary procedures'

Choice

Overview

The NHS has had a tumultuous history with choice over the past two decades. Historically you could only choose one GP in your local catchment area and while technically you could be referred to any NHS provider for specialty care (with the exception of time sensitive issues and a few specialties such as maternity), choice was rarely advertised or encouraged.

To foster internal competition, as a way to drive up quality and in response to perceived demand for more personalized treatment options, choice was actively encouraged for a few key procedures in 2008[6]. Later reforms went further introducing the concept of "Any Qualified Provider" of whom patients would be encouraged to choose from in a long list of clinical areas[3]. Controversially, private organizations could also be qualified providers which led to calls of backdoor privatization of the NHS.

In parallel, initiatives such as Choose and Book, now e-Referral, Walk-In centers and the NHS Choice Framework[2] have attempted to break down the barriers to the logistics of choosing.

Impact

The NHS choice agenda has had its fair share of critics, many of whom see choice as a mirage, with few real options available in many areas of the country unless one is willing or able to travel large distances. Others fear that continued marketization of the NHS will lead to privatization what is currently a largely NHS owned and operated provider network.

A 2014 survey showed that only 51% were aware of their right to choose the hospital they are referred to, 53% had a discussion about where to be referred and fewer than 40% were offered a choice of hospital during the referral process.

To further increase choice, personal health budgets have also been introduced whereby a patient with an identified health or wellbeing need can receive an amount of money agreed upon with their CCG so they can buy the services, equipment or supplies they need. PHBs have been offered in a wide range of circumstances including for wheel chairs, maternity care, end of life care and mental health.

Relevance

Overwhelming choice can be paralyzing and can lead to decisions based on poor proxies for quality or value. Too much choice might also suggest an oversupply of capacity.

Lack of choice, can be equally frustrating for patients with the potential exclude the right choice for the task at hand. It can also stifle competitive dynamics.

Employers are already using narrow networks to limit choice and drive employees toward high value providers. MA plans like Devoted Health are opting for what seems like a sensible design - a narrow hand-picked primary care network and a wide specialist and hospital network within an HMO model[7].

The presentation of choice is also crucially important. Provider directories and being able to see who is in network is a start but how could it be better integrated in to the referral process?

1 NHS: Find Services 2 NHS Choice Framework: what choices are available to me in the NHS? 3 NHS England - Securing meaningful choice for patients: CCG planning and improvement guide 4 Does Hospital Competition Save Lives? Evidence from the NHS Patient Choice Reforms 5 AAMC 2017 State Physician Workforce Data Report 6 What market-based patient choice can't do for the NHS: The theory and evidence 7 New Medicare Advantage company enters the south Florida market

NICE

Overview

The National Institute for Health and Care Excellence was established in 1999 as a special health authority to reduce variation in availability and quality of NHS treatments and care. It is tasked to:

- Produce evidence-based guidance and advice for health, public health and social care practitioners.
- Develop quality standards and performance metrics for those providing and commissioning health, public health and social care services.
- Provide a range of information services for commissioners, practitioners and managers across the spectrum of health and social care.

An important function of NICE is to provide cost-effectiveness guidance using QALY and ICER methods. The QALY threshold for new drugs is currently around £20-30k. In 16/17 total net expenditure for the operation of NICE was £54M.

Impact

NICE is an integral part of the NHS and informs almost every aspect of care delivery, from clinical care pathways to formularies and commissioning.

NICE publishes an uptake and impact report twice a year[3] and has recently started publishing impact reports on specific conditions like cancer[4], diabetes[3] and maternity[6]. Through a combination of national audits, reports, surveys and framework indicators, NICE tracks adherence to guidelines and supports provider organizations in their efforts, sometimes creating shared learning examples[6]. Changing ways of working even in a national system is challenging as this study on Tamoxifen chemoprevention for breast cancer illustrate[7].

NICE also produces cost-saving guidance[8] for its recommendations and a resource planner for upcoming guidance[9].

Relevance

There are many ways in which concepts from NICE could be applied to the US employer-based model. Indeed many initiatives are already afoot, eg. Choosing Wisely, pre-authorization, claim denials, utilization management, step therapy, professional body guidelines and more.

In my view the keys to success behind NICE is that for NHS staff it can almost be thought of as the single source of truth, it has robust methodology for guidance formation and makes tough cost-effectiveness decisions, so others don't have to.

Could employers set up such an organization to issue guidance, standardize levels of coverage and address particularly high need, high cost care pathways? It would need to be decoupled from profit incentives and might be met with skepticism but it could just work. In any case, NICE willing to share its content, expertise and process through NICE International[10].

1 NICE: Who we are 2 NICE: MIVAT interventional procedures guidelines 3 NICEimpact Diabetes 4 NICEimpact Cancer 5 NICEimpact Maternity 6 Young adult diabetes: engaging to improve, outcomes of the young adult clinic restructure 7 Impact of NICE guidance on tamoxifen prescribing in England 2011-2017: an uninterrupted time series analysis 8 NICE: Cost saving guidance 9 NICE: Resource planner 10 NICE International Services

Clinical Commissioning Groups

Overview

Clinical Commissioning Groups (CCGs) were introduced by the Health and Social Care Bill in 2012 and replaced Primary Care Trusts which were administrative bodies responsible for commissioning the majority of NHS services in geographic areas.

They were designed as a bottoms up approach to commissioning with no central blueprint, covering smaller geographic areas, led by GPs (and thus tilting the power balance toward primary care) and other clinicians with more flexibility to tailor services to the local population.

In 2017 a total of £72bn was allocated to CCGs by NHS England (60% of the overall NHS budget). There are around 200 CCGs with an average population size of approximately 250,000.

Impact

CCGs were a major reorganization of the NHS and it was controversial given the financial pressure the NHS was under. Primary care trusts were disbanded and many of the staff ended up being rehired by CCGs. The first few years seemed disorganized as CCGs scrambled to find their feet, maintain the status quo of service provision and put structure in place – 6 years on we see a more stabilized landscape with CCGs capable and willing to make bolder commissioning decisions.

The CCG model is now beginning to show signs of success. The Tower Hamlets CCG annual report[5] is an interesting view in the inner workings of an award-winning CCG that is rated "Excellent" by the CQC. There are now many documented case studies of CCG success[4] that include earlier intervention for mental illness, establishment of integrated practice units, enhanced end of life care and others. Studies have also shown that there is significant complexity and lack of uniformity in CCGs[2] that can make them difficult to work with and some claim has resulted in a 'postcode lottery'6. Conflict of interest in GPs commissioning their own services also presents unique challenges[3].

Relevance

As a hospital doctor I recall being opposed to the reorganization at the time, however in retrospect it seems like a well intentioned, albeit initially disruptive, way to create a more primary care driven system. Only the NHS could pull this off on a national scale, literally shifting most of the NHS budget to GP-led consortia overnight. Of course much of the work to transform and integrate care is still to be done.

Aledade is helping form primary care led ACOs, which feel like the most direct US equivalent of CCGs. That said, through necessity, they are an overlay on top of the existing system. Such arrangements, if they reached sufficient scale could begin to rival the scope

Primary care is also positioned to make better use of its referral power to force the market commission the services it requires, however currently primary care is neither coordinated nor collectively incentivized to do so.

1 NHS England Allocations for CCG Core Services 2017-2019 2 Complexity in the new NHS: longitudinal case studies of CCGs in England 3 How are clinical commissioning groups managing conflicts of interest under primary care co-commissioning in England? A qualitative analysis 4 NHS clinical commissioners: CCG Success stories 5 Tower Hamlets CCG: 2018 Annual Report and Accounts 6 'Postcode lottery' revealed in NHS

Quality and Outcomes Framework

Overview

QOF is a performance management and payment system introduced for primary care in 2004 as part of GPs' new contract.

It was a voluntary program that could help practices significantly supplement their income by earning a maximum of 1050 QOF points through performance across 146 'indicators'.

The indicators are now managed by NICE[2]. Here is just one example:

"The percentage of patients aged 80 years and over with hypertension in whom the last recorded blood pressure (measured in the preceding 9 months) is 150/90 or less"

Impact

Despite its voluntary nature, GPs quickly rose to the challenge of QOF and scored on average 90% (vs 70% projected) of the available points in the first year. Each QOF point was worth £75 in 2004 and this led to a significant and much needed pay boost for most GPs. QOF became one of the largest pay-for-performance implementations in the world.

QOF measures, indicators and value of points have changed over the years although the program remains in effect. The impact of QOF on the quality of care has been widely studied and the results appear to be modest on a background of many other improvement activities at the time. The largest effects found appear to be in closing socioeconomic inequalities in care delivery, encouraging greater adoption of EHR technologies (as QOF indicators are reported through data captured within the EHR) and more multidisciplinary management of chronic diseases[3,5]. Other studies have found that practices in deprived areas are less likely to score as many QOF points[4].

Relevance

In many ways QOF demonstrates the power of financial incentives to change behavior as GP practices quickly maximized their points. Depending on how you assess the evidence, it might also be a cautionary tale of how incentivizing process measures over true outcomes can lead to topping out, wasted money and unnecessary administrative burden.

Medicare is no stranger to performance measures and QOF-like programs through initiatives like PQRS, VBP, CPC+ and MIPS. Unlike QOF some of these programs are cost neutral, penalizing low performers and rewarding high performers and making implementation much more political.

As employers increasingly contract directly with providers there is certainly scope for performance management systems that might involve financial incentives although these systems must be designed with care.

1 Quality and Outcomes Framework: what have we learnt? [2]NICE Quality and Outcomes Framework indicator list 3 The role of the Quality and Outcomes Framework in the care of long-term conditions: a systematic review 4 Overall Quality of Outcomes framework scores lower in practices in deprived areas 5 Quality and Outcomes framework: what have we learnt?

Social Prescribing

Overview

Social prescribing has been introduced as a means for GPs and other frontline healthcare professionals to refer people to 'services' in their community instead of offering solely medicalized solutions.

The first point of referral is often a 'community connector' who can talk to the patient about things that matter to them.

Together they can co-produce a social prescription to help improve their health and wellbeing.

Social prescription can include things as diverse as singing groups and gardening to debt and housing help.

Social prescribing was recognized as one of the 10 high impact areas to release capacity in the GP Forward View[6]. Nearly half of all CCGs are now investing in social prescribing programs with 1 in 5 GPs regularly referring patients to social prescribing[5].

Impact

Social Prescribing has been embraced by policymakers in the UK as a way to bring positive health benefits and reduce patient reliance on the NHS services.

The implementation thus far has been patchy, least not because at a time when resources are stretched it has been difficult to fully fund social prescribing organizations to fulfil their potential[4]. Equally, despite many anecdotal stories of success there is still little robust evidence on its success or cost-effectiveness[3].

Social Prescribing Pathway

Relevance

There has been much talk of the social determinants of health here in the US and some models of care are now beginning to not only recognize them but also address them through social prescribing initiatives (eg. Combating loneliness at CareMore[8]).

Similarly employers are recognizing that employee wellbeing, productivity and retention is not only affected by medical issues but also by general health, financial wellbeing (eg. Brightside, launched out of Comcast Ventures) and mental health.

Employers are well placed to deploy resources toward social needs but they may not be best placed to elicit and identify those needs. How could such employee benefits be more closely integrated with care delivery?

1 The King's Fund: What is Social Prescribing? 2 The impact of a social prescribing service on patients in primary care: a mixed methods evaluation 3 Social prescribing: less rhetoric and more reality. A systematic review of the evidence. 4 Delivering primary-care based social prescribing initiative: a qualitative study of the benefits and challenges 5 NHS England: Social Prescribing 6 NHS England: 2016 General Practice Forward View 7 Social Prescribing in general practice: adding meaning to medicine 8 Athenainsight: Innovative Chronic Care

ScriptSwitch

Overview

ScriptSwitch is a prescription decision support solution developed in the UK and later acquired by Optum that integrates with GP clinical systems and operates at the point of prescribing.

It works to promote rational prescribing choices, cost saving opportunities and adherence to local and national guidelines. It does this by alerting the prescriber to alternatives and/or best practices during the prescription writing process. The alerts and protocols are developed in conjunction with Optum's Medicine Management team.

It was first developed in 2000 and first piloted in 2003. It is now approved for use in over two-thirds of NHS organizations and was acquired by Optum in 2009.

Impact

ScriptSwitch has a long history of use in the NHS with changes to its functionality and sophistication over time.

Studies have highlighted skepticism amongst GPs that ScriptSwitch's recommendations provide additional value over existing prescribing initiatives and a tension between patient choice and broader practice prescribing goals[3].

Despite this ScriptSwitch appears to generate consistent cost savings across different CCGs for example in Glasgow it generated an estimated savings of £125k over 6 months for a population of 190,000. ROI of 3.1:1[2]. In 2013 a comparison of practices in Scotland showed an average switch offer rate of around 5% (demonstrating good existing compliance with the local formulary) and an average acceptance rate around 25%[4].
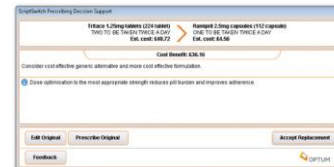
Relevance

There is a significant opportunity to reduce prescription medication spend through more effective, evidence-based prescribing and switching to generic alternatives with equivalent efficacy[5].

I was involved in initiatives at Castlight Health help nudge employees toward the generic alternatives. Step therapy is another strategy that has been widely deployed and was recently approved by CMS for use by Medicare Advantage plans, yet feels a somewhat awkward solution[6].

The strengths of the NHS system are that is it a recommendation system integrated at the point-of-care, its recommendations are overseen clinically and driven by a national body (NICE) and that performance on a range of metrics such as adherence to formulary is monitored and published in a system where incentives are aligned around reducing prescription drug spend and adhering to best practice guidelines.

1 Optum ScriptSwitch Marketing Material 2 ScriptSwitch case study from implementation in NHS Greater Glasgow and Clyde 3 General Practitioners' views on using a prescribing substitution application (ScriptSwitch) 4 NHS Grampian, SwitchScript update March 2014 5 FT : US doctors waste millions of dollars on branded medicines 6 How does step therapy impact patient access, costs?

Integrated e-Prescribing

Overview

The NHS is working toward an entirely electronic system-wide prescribing service. The Electronic Prescription Service (EPS) Release 2 is currently being rolled out and enables prescribers to send prescriptions electronically to a dispenser of the patient's choice, issue repeat prescriptions and cancel prescriptions as needed. Electronic prescribing is also being trialed at urgent care centers and through NHS 111.

Patients are given a unique token (as a code or barcode) to take to their nominated dispenser.

The NHS Spine infrastructure supports implementation as it moves toward a national roll out.

Impact

According to NHS Digital statistics[1] 6,835 (99.2%) of GP practices in England are currently live with EPS Release 2. On average 46% of a practice's patient list has nominated their dispenser and 28% are using electronic repeat prescriptions.

NHS England has reported[2] NHS savings of £130M between 2013-16 from EPS. They also state £75M in savings to patients, £327M in savings to prescribers and £60M in savings to dispensers, all largely through time and efficiency savings. GP practices save on average 1:20h through electronic signing and 1:13h by issuing repeat prescriptions electronically.

Relevance

The path to a national e-Prescribing system has not been easy but there are signs that the years of investment and tedious implementation is now paying off. In the US, reports have suggested that 85% of ambulatory prescribers are prescribing electronically[3] however the functionality of these systems varies considerably and the NHS system has the advantage of real-time visibility of prescribing activity system wide. The initiative also has synergies with other initiatives such as ScriptSwitch (described in another slide).

SureScripts is the dominant e-Prescribing player in the US processing 67% of all new prescriptions in 2014. They recently announced an initiative with Epic, Cerner and CVS to make personalized prescription benefit and cost information available in the EHR. Such moves are likely to benefit employers.

1 NHS England EPS statistics 2 NHS England: Electronic prescription service saves NHS over £130M over 3 years 3 Scope of e-Prescribing Trends and Implications 2018

NHS Spine

Overview

The NHS Spine supports IT infrastructure for health and social care, joining over 23,000 IT systems in 20,500 organizations through a vast patient database and messaging platform[1].

It allows information to be shared securely through national services such as the Electronic Prescription Service, Summary Care Record and e-Referral Service.

It was previously developed by outsourced contractor, BT using Oracle technology however in 2014 the operation was moved in-house to HSCIC (Health and Social Care Information Center) which has since rebranded to NHS Digital. In the process they also transitioned away from Oracle to a range of open-source technologies including Raik as their database tech.

Impact

The first iteration of NHS Spine was developed as part of the 2003-2011 £12bn NHS National Program for IT (NPfIT) which was largely seen as a monumental public sector failure.

Despite its troubled beginning the NHS Spine is now beginning to deliver real value. The NHS Spine has been an enabler of many national digital initiatives that are now having a widespread impact as per the slides on e-Prescribing and e-Booking.

Furthermore, with the goal of encouraging outside innovation, the Spine has a test environment that is open to third party developers[2] to build new applications that can potentially access features like the summary care record, e-Referrals and prescriptions.

Relevance

NHS Spine represents the kind of interoperability patient advocates have been calling out for decades in the US. Of course the fragmented nature of US healthcare, its competitive dynamics and a government that tip-toes around them has hindered progress.

Perhaps the most comparable initiatives in the US are the CommonWell Alliance (which includes Cerner, McKesson, Allscripts, Athenahealth) and The Sequoia Project that supports Carequality (that includes Epic, UHC, KP). However these initiatives are more around commitment to a shared interoperability framework that can enable data sharing between organizations when a compelling individual use cases exist rather than a genuinely data sharing network.

1 NHS Spine summary 2 Open access test environment for Spine, Opentest

EMIS: A Primary Care EHR

Overview

GP practices in the UK have a long history of electronic record keeping and by 1996, 96% of practices were 'computerized'. Part of that success is due to EMIS, a company that was originally founded by two GPs in the late 80s and now supplies a fully fledged EHR system used by over half of the 7,500 GP practices across the UK.

It was the first system to enable patients to book GP appointments online, order repeat prescriptions and look up their records through a patient portal.
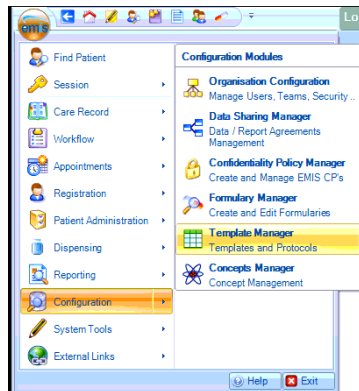
Impact

While there are surprisingly few data on the impact EMIS has had on care provision, it is clear that they have played a significant role in the digitization of primary care in the NHS. The company has since acquired Ascribe, an e-Prescribing platform used in secondary care, as it looks to gain a stronger foothold beyond primary care as integration across care settings becomes increasingly important.

Searching online, there are many stories of poor user experience with EMIS and interoperability problems with other providers in the local area who have chosen to go with other vendors.

Recently in Wales, a decision was made to strip EMIS of its NHS contract which covers 195 practices after it failed a procurement test for customer and product support[4].

Relevance

By contrast a recent extensive survey revealed that 76% of family practice offices in the US use an electronic health record. Market share for vendors also appears much more fragmented, with the largest vendor of all practices with 1-3 physicians surprisingly being Epic (they have over 50% market share in practices with 41+ physicians).

This fragmentation undoubtedly complicates data exchange between primary and secondary care for things even as basic as discharge summaries and medication lists.

Employers have long tried to encourage more robust record keeping and data sharing, a notable initiative being Dossia, founded by Walmart, Intel and several other large companies, which initially developed a personal health record. As Walmart explores an acquisition of Humana, it was recently awarded a patent for a blockchain based medical record system – perhaps this kind of technology could be a cure for the US fragmented interoperability problem?

1 Quantifying physician EHR adoption through 2014 2 EMIS Health is the supplier 'most receptive to interoperability', new report suggests 3 SK&A Physician Software usage report 2018 4 EMIS Health loses NHS contract in Wales 5 NHS Digita to fling half a billion quid at new GP procurement framework.

e-Referral (formerly Choose & Book)

Overview

As part of the NPfIT program, Choose and Book[1] launched in 2005 as a point-of-care electronic booking system that allowed patients seen by primary care requiring an outpatient referral to choose a hospital and a convenient date and time for their appointment.

It was replaced with the e-Referral system[2] in 2014, which similarly allows appointments to be booked at the point of care or at the patient's own convenience through use of a reference number online and over the phone. Appointments can also be rescheduled and cancelled online. Although plagued by initial technical issues, by October 1, 2018 it will be used for all NHS out-patient referrals.

Impact

Despite a rocky implementation, at its peak Choose & Book accounted for over 50% of outpatient appointments. It is estimated to have reduced no shows by 8.7% in 2009[4].

It is still early days for its replacement as hospitals rush toward the October 1 deadline. However, NHS Digital using its Outpatient Pathway Modelling Tool projects a saving of at least £50m per year based on a reduction in no shows by 50%[3]. Once all referrals are digital, both patients and GPs will be able to see real-time waiting times and available appointments. Other benefits include reduced paper burden, no having to chase up lost referrals, specialists being able to view and vet referrals as they are received and being able to more closely and quickly analyze referral data.

Relevance

Most US referral processes still rely on paper and the benefits of an electronic referral system seem clear. There are several examples of electronic referral systems such as the one developed at SF General & UCSF for their safety net population[5]. Many health systems have also implemented electronic referral systems. Companies like Kyruus enable electronic referrals and more informed and data driven referral choices "enterprise-wide" and listing several health systems as customers including Partners HealthCare.

An e-Referral style system accessed from primary care would likely be popular with employees and might be preferable over having to navigate a self-referral. If incentives were aligned it might facilitate better collaboration between referrer and specialist to ensure appropriateness, facilitate learning and enable more primary care-based management. Employers are well placed to leverage their relationships across provider networks to encourage interoperability of e-booking systems despite a trend to siloed vertical integration of primary and secondary care.

1 Choose and book 2 NHS e-Referral system for patients 3 Electronic outpatient system set to save NHS at least £50m 4 Choosing and booking – and attending? Impact of electronic booking system on outpatient referrals and non-attendances 5 Innovator highlight: San Francisco General Hospital's eReferral system

Whole System Demonstrator

Overview

The largest RCT of telehealth and telecare in the world, set up by the Department of Health and launched in 2008[1].

It involved 6191 patients and 238 GP practices across three geographic areas. 3030 patients with one of three conditions (diabetes, HF, COPD) were included.

The overarching question posed was "Does the use of technology as a remote intervention make a difference?"

Impact

The WSD trial showed that if delivered effectively, telehealth can substantially reduce mortality (↓45%), reduce the need for hospital admissions (↓15%), reduce the number of days spent in hospital (↓14%) and reduce the time spent in A&E[1]. Since the trial concluded in early 2011 the focus has shifted to how these findings can be more broadly applied across the country. The Department of Health estimated that up to £1.2bn could be saved over 5 years through the adoption of telehealth and telecare. It was based on 3 million people with long term conditions and social needs benefiting.

A subsequent campaign called 3 Million Lives was launched with a paltry £10k seed funding, primarily to provide NHS leadership and advocacy for telehealth adoption and to work with industry partners to make it happen[2].

While the 3 Million Lives initiative seems to have fizzled out, there is no doubt the WSD trial has put wind in the sails of telehealth adoption in the UK[3].

Relevance

Employers are increasingly investing in chronic care management programs[4]. Health systems are also continuing to develop better ways to treat chronic conditions including the use of integrated practice units.

Payers, especially MA plans, are trying new ways to better manage long-term conditions.

Companies have emerged in most of the condition verticals that account for the majority of employee cost burden[5]. These include diabetes (Livongo, Omada, Onduo), arthritis (Hinge, Motion), musculoskeletal (Hinge, Physera), mental health (Lyra, Ginger.io), back pain (SpineZone), pregnancy (Maven), weight loss (WW, Omada), hypertension (Omada). Telehealth and telecare are core to the way these companies deliver their services.

Employers can choose to adopt a range of fragmented vertical specific services to their employees. How could they be better integrated and connected to primary care?

[1] Whole System Demonstrator programme: Headline findings: December 2011 [2] 3 Million Lives Campaign [3] Philips: Publication of results from major three year telehealth study builds case for 'at scale' roll-out of supported care [4] NY Times: For chronic care, try turning to your employer [5] Health, Absence, Disability and Presenteeism Cost Estimates of certain physician mental health conditions affecting US employees

GP Connect: APIs for Interoperability

Overview

GP Connect is part of an initiative to support primary care practices to share and view authorized information and data across care settings including secondary care[1]. Specifically GP Connect is developing a set of open FHIR (Fast Health Interoperability Resources) based APIs to enable interoperability between the various clinical systems in use in primary and secondary care.

The specification allows for access to a detailed patient record from every connected practice at the point of care including current and past medications and enables appointment management between practice and the ability to book an appointment at a practice from another care setting.

Impact

While it is yet to go live there are many expected benefits of GP Connect including increased collaboration across care settings, better continuity of care, less duplication of data entry, fewer medical errors and better care planning through point-of-care booking.

Vendors also believe that it will create a more level playing field[2], allowing practices to adopt a wide range of healthcare IT technologies to suit their individual needs without having to worry about interoperability or being forced within a federated system to use a certain system.

GP Connect - "A" Neutral Platform Example — NHS England
www.england.nhs.uk
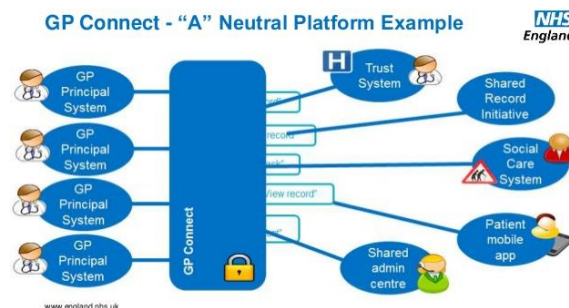
Relevance

While GP Connect is far from a realized vision it is clear that if we want a future where specialists and primary care can collaborate and deliver timely and appropriate care around a patient, this kind of data sharing needs to happen.

In the US perhaps the most similar initiative is the CommonWell Health Alliance, a vendor-led organization that aims to develop and promote national infrastructure and standards to make health data available to individuals and providers regardless of where care occurs. Health systems are increasingly adopting FHIR based APIs, although trust is still a huge issue. Companies like Redox Engine are enabling third party vendors to integrate through a standardized API and list BWH and Intermountain as their clients. They pitch themselves as a full-service integration platform to provider organizations and a way to integrate at scale for vendors.

1 GP Connect Demonstrator Site 2 Microtest: The difference GP connect will make for GP practices

GPs with Extended Roles

Overview

Previously known as GPs with a Special Interest (GPwSI), they are GPs able to independently deliver a specialist service working in a clinical area outside the normal remit of general practice[1].

Initially introduced as part of the 2000 'NHS plan' it was envisaged there would be up to 1000 GPs with SIs in fields such as ENT, cardiology and dermatology.

Earlier this year The Royal College of GPs released a new framework that it is trialing to accredit and revalidate GPwERs.

Impact

Soon after it's inception, GPs with special interests flourished and took on roles across a wide range of specialties from headaches and neurology to public health and echocardiography.

Studies have found patients to be enthusiastic about the new extended role and in many cases, cost savings and improved outcomes have been demonstrated[3].

In 2005 an audit of the dermatology GPwSI framework found that few had completed the accreditation process and most lacked the required experience and CPD hours[2]. A more formal accreditation process was established however continued NHS reforms have hindered its implementation.

Relevance

GPs with Extended Roles have enabled specialist care to be delivered in primary care settings and has also helped attract clinicians to primary care as a specialty.

With upskilling of NPs and PAs in the US, many NPs and PAs argue that their day-to-day job is actually remarkably similar to their higher paid PCP colleagues. There may be room to upskill primary care physicians to enable a wider scope of practice and a more collaborative approach with secondary care.

How could employers encourage such an extended scope of practice?

1 A study of role expansion: a new GP role in cardiology care 2 What's next for accreditation of GPs with a special interest? 3 A new GP with special interest headache service: observational study

NHS 111

CALL **111**
when it's less urgent than 999

NHS

Overview

NHS 111 replaced NHS Direct (a nurse-led telephone hotline) with a nationally accessible free-to-call non-emergency medical helpline accessed by dialing 111 on any phone. It was turned on nationally in March 2013.

Powered by a clinical decision support system, calls are initially assessed by a handler and may be passed to a clinician.

Responses can range from telephone-based advice to dispatch of an emergency ambulance.

Impact
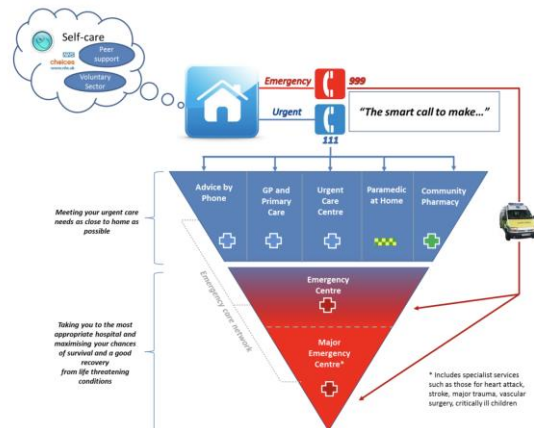
NHS Direct, the service NHS 111 replaced took as many as 30,000 calls per day. NHS 111 has reached highs of 65,000 callers on peak days. Each call is estimated to cost between £12 and £16 depending on who the call is routed to.

Several studies have looked at its performance and have been mixed in their assessment. The Nuffield Trust found that from '13 to '16 was likely to have steered 8 million patients away from A&E and ambulances. It also found that the proportion of callers being dispatched emergency services had steadily increased over the 3 year period although the service was less likely to refer to urgent services at peak times during the winter[2]. Another study found that it had NHS 111 had failed to reduce calls to the 999 ambulance service and failed to shift patients to urgent rather than emergency care[3].

Relevance

NHS 111 is an integrated care navigation system on a national level, unencumbered by the complexity of benefit design fragmentation.

NHS 111 is:
- Easy to remember in a time of need, available 24/7
- Single point of entry for a wide range of non-emergent issues
- Increasingly integrated (e-Booking, e-Prescribing, Summary Care Record) to mobilize the necessary resources around the patient
- Centralized to enable scale economies and rapid learning
- Triage based to enable efficient use of MD/nurse/handler workforce

US employers are already using navigation programs, Amazon for example has a 24/7 nurse-led medical advice line for diagnosing and treating common illnesses. There is likely much that could be learned from NHS 111 both in terms of how it handles and routes patients to the ways it has integrated with other systems especially as it fine tunes itself toward its original goals.

Image: Diagram from the Keogh Urgent and Emergency Care Review looking to unify and streamline services 2 The Nuffield Trust: Winter Insight NHS 111 3 Impact of the urgent care telephone service NHS 111 pilot sites: a controlled before and after study

National PROMs

Overview

The NHS National Patient-Reported Outcomes survey started in 2009, collecting pre and post-operative patient-reported outcomes data for every patient that undergoes one of four common procedures: Hip Replacement, Knee Replacement, Groin Hernia repair and Varicose Vein surgery.

Outcome measures include the EQ-5D, the Oxford Hip/Knee scores, Aberdeen VVQ and four multiple choice post-surgery satisfaction/success questions:
How would you describe the results of your operation?
Overall, how are your hernia problems now, compared to before your operation?

Impact

The results of the national PROMs surveys are regularly published on the NHS Digital website with anonymized patient level and question level responses, grouped by provider. With paper-based methods, 94% of knee and 86% of hip replacement patients completed a pre-operative PROMs assessment in '13/'14. Post-operative response rates were 76% and 78% respectively.

It has been proposed that national PROMs data could be used for a wide range of uses including commissioning, making treatment decisions and determining which treatments provide sufficient value[3]. Case studies highlight a range of ways in which the PROMs data has impacted practice from switching orthopedic implant brand to adopting a surgical technique that was associated with better health gains[1]. CCGs and regional trusts produce score cards to compare performance on PROMs that is used to identify potential quality improvement opportunities[4].

Relevance

While its paper-based and delayed-reporting logistics preclude real-time point-of-care use for individual patient monitoring, the national PROMs program has been successful at enabling broader scale insight for a wide range of uses.

Perhaps the most comparable US effort is the Health Outcomes Survey[6] which periodically surveys a sampling of Medicare Advantage members for a given plan and is based on a modified VR-12 survey. The results drive quality improvement activities, help monitor health plan performance and feed directly in to the Medicare Stars ratings. Payers and registries are also beginning to collect PROMs data, the latter, in some cases, being indirectly sponsored by employers[7].

It is quite feasible that TPAs or even employer sponsored primary care could collect PROMs data that could be used as another metric by which to judge quality and define networks and referral practices.

1 PROMs clinical case study: data informs clinical practice 2 PROMs: Latest provisional data 3 Getting the most out of PROMs: Putting health outcomes at the heart of NHS decision-making 4 Setting the scene: progress with the national PROMs programme
6 Medicare Health Outcomes Survey 7 California Joint Replacement Registry

Centralizing Services

Overview

In early 00's there was a big push to centralize NHS services[3], leading to the downgrading or closure of ER departments, designation of major trauma centers and reconfiguration of maternity, pediatric and highly specialized services[5] such as acute stroke care.

It was noted by Simon Stevens, Chief Executive of NHS England that '.. as a legacy of tight NHS spending in the 70s-90s, England now has quite concentrated acute services with a stronger degree of regionalization than in many other western nations'. Acute care is delivered in just over 200 hospitals in England with an average of 400 beds serving a population of 300,000 compared to the EU average of 54,000. In 2014 Stevens signaled an end to 'mass' centralization and called for an expansion of local services to treat people in their own communities.

Centralization of some specialized services has continued and some changes have taken many years of public consultation and planning to realize.

Impact

Before changes in 2010, 30 London hospitals provided acute stroke care - this was reduced to 8 designated hyperacute stroke centers chosen based on modeling that included a requirement that no Londoner would be more than 30 minutes away by ambulance. The switch happened in 2010. A pre vs post study[1] found there was a 1.1% absolute reduction in 90-day mortality (168 deaths over the post 27-month study period) and a reduction in risk adjusted hospital stay length of 1.4 days.

In 2012 there was a shake-up of trauma care with the designation of major trauma centers and downgrading of many A&E departments. A recent NHS Digital analysis[2] found that an additional 1,600 trauma victims are alive today (with a 20% increase in chances of survival) in large part because of the 2012 changes.

Despite these successes the path to centralizing services remains controversial and politicized. The government was recently forced to backtrack on plans to close the Brompton Hospital pediatric cardiac surgery unit[4].

Relevance

Much of the rationale behind the NHS' push toward centralization came from US studies linking volume to quality.

Employers have embarked on Centers of Excellence programs[5,6] to centralize referrals of high value procedures with varying levels of sophistication in hospital selection. Narrowed networks can also be seen as a mechanism to centralize services, along with benefit design and provision of on-site or highly accessible services that one would expect to be preferentially used.

Lessons can also be learned from the push back that some NHS centralization initiatives have received and the new direction the NHS has taken to ensure patients can still be treated in their own communities.

1 Impact of centralizing acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis 2 NHS Digital: More than 1,600 extra trauma victims alive today says major new study 3 The King's Fund: The reconfiguration of clinical services 4 Why is this children's heart unit facing closure? A day on the NHS front line 5 Walmart roles out Centers of Excellence Program 6 PBGH Employers Centers of Excellence Network
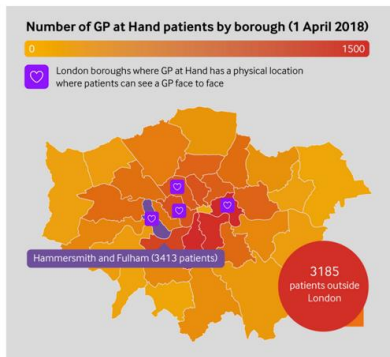
Tele-primary care: GP at Hand

Overview

GP at Hand is a digitally enabled primary care practice launched in Novembner 2017 and powered by digital health company, Babylon.

Londoners can de-register with their current GP and register with GP at Hand to access services that are provided in conjunction with a bricks and mortar West London NHS GP practice[1].

The app includes a chatbot symptom checker triage, access to GPs through video chat 24/7 and face-to-face appointments booked through the app if necessary and offered same day or next day. Prescriptions can be delivered or sent to any pharmacy.

Number of GP at Hand patients by borough (1 April 2018)

London boroughs where GP at Hand has a physical location where patients can see a GP face to face

Hammersmith and Fulham (3413 patients)

3185 patients outside London

Impact

Matt Hancock, the new secretary for health and social care recently endorsed GP at Hand by controversially saying that it should be available to all[2].
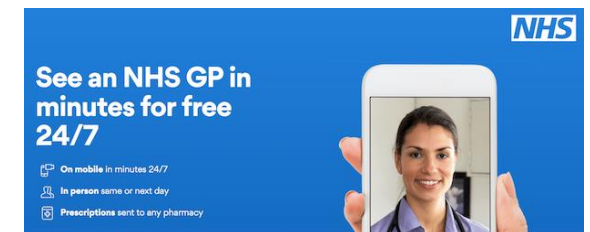
Many GPs have protested that the service is diverting much needed funds away from GP practices (as they are paid around £150 per patient on their list per year) and cherry picking by saying it is not suitable for patients with "complex mental health problems or complex physical, psychological or social needs"[3]. Some suggest that initiatives like eConsult (later slide) that enables existing practices to implement asynchronous telemedicine are more inline with the NHS ethos. Most patient reviews seem to rate the GP at Hand experience highly unless it requires in-person care which many report can be difficult to access and poorly coordinated[5].

Either way, the service has registered a significant number of patients with 30,000 signed up by mid 2018. Approximately 80% of those patients are aged between 20-39[4].

Relevance

In many ways the model seems similar to the One Medical's although instead of an annual fee, there is a technology competence requirement and some restrictions on the type of care that is offered. Unlike One Medical, tele-medicine is the default although One Medical does offer an entirely free, NP-led 24/7 video visit service to members. Similarities can also be drawn to companies like Doctor on Demand, Teladoc and American Well who are increasingly offering their services to employees of self-insured employers.

What is clear is that there is significant demand for a convenient tele-primary care service over bricks and mortar, especially with patients in their 20s and 30s.

NHS

See an NHS GP in minutes for free 24/7

On mobile in minutes 24/7
In person same or next day
Prescriptions sent to any pharmacy

1 Babylon GP at Hand website 2 Hancock: I want to help GP at Hand expand 3 The Guardian: Seeing a GP on a smartphone sounds wonderful – but it's not 4 GP at Hand nears 30,000 patient mark as thousands more young patients join 5: GP at Hand app reviews (google Play Store and Apple App Store)

Patient Reviews: iWantGreatCare

Overview

Launched by Dr. Neil Bacon in 2008 (who was just appointed CEO of ICHOM), iWantGreatCare is an online service that allows patients to rate individual GPs, hospital doctors and nursing staff on the care they provide. It's initial launch evoked outrage in some members of the clinical community and uptake by patients was initially slow.

As providers and organizations have become more receptive to publicly visible patient, some organizations have started to embed iWGC in their patient experience to routinely collect feedback and use it to drive service improvement.

iWGC also paved the way for the NHS to launch its own review system embedded within their NHS.uk site[2].

Recent Reviews

Recommend	★★★★★	14th September 2018 Written by a patient at Royal Hallamshire Hospital
Trust	★★★★★	I had a cervical myelogram yesterday and although I was terrified, Dr Romanowski and his team, put me at ease. He explained everything, step by step. What a great man with an exceptional team. I totally trusted him and would recommend him in a heartbeat. Thank Dr Romanowski x
Listening	★★★★★	

I found this review helpful   Report this review

Impact

iWantGreatCare surveyed over 14,000 patients[5] who had left reviews who said:
- Over 80% left reviews for their doctor because they had a great experience and wanted to tell them about it
- 14% left reviews because they had a poor experience and wanted their clinician to learn from it
- 88% felt it was important to leave a review to help others
- Over 90% feel it is important to be able to review their individual clinician

Conversely, a 2015 an in-depth study of GPs views of online patient feedback[4] found several concerns including bias toward negative reviews, small sample sizes, risk of false allegations, and potential for reviews to lead to more defensive practice.

Public doctor reviews remain a divisive issue with many valid concerns around their current implementation in the NHS, but with potential to improve experience and bring a more patient-centric experience.

Relevance

In many ways the US has been a leader in collecting data on patient satisfaction through initiatives like the HCAHPs survey. Health systems like Utah[1] and Stanford have embedded routine patient reviews in their care process and make the results available on their website at a physician level.

Products like iRound (acquired by Optum through TABC) and Bivarus (acquired by Press Ganey) are enabling providers to capture and use patient experience feedback in real-time, similar to iWGC's latest efforts.

Employers can certainly advocate have an opportunity to capture feedback from their employees around the care they receive. This could be used to give employees more information on their options, define networks and referral patterns where possible.
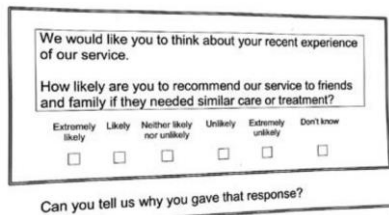
What could employees be asked? Check out the slides on the Friends and Family test and the National PROMs program for some NHS-rooted ideas.

1 University of Utah Health Care Online Physician Reviews Continue to Lead Transparency Efforts in Academic Medicine 2 NHS.uk Service Search – Imperial College NHS Trust reviews 3 Ashford and St Peter's Hospitals launch iWantGreatCare initiative 4 General Practitioners concerns about online patient feedback: Findings from a descriptive exploratory qualitative study in England 5 The one thing that should make or break a doctor's practice

Friends and Family Test

Overview

The Friends and Family Test (FFT) is a national initiative that was launched in 2013 and aims to ask the simple question: "Would you recommend this service to friends and family?". It is often accompanied with a free text question: "Can you tell us why you gave that response?"[1].

Guidance from NHS England suggests that people using NHS services should always be given an opportunity to provide feedback from the FFT unless it would be inappropriate to do so. It is to be viewed as continuous and not a one-time survey and responses should be anonymous. It also requires an inclusive approach that uses the standardized question format and monthly reporting to NHS England.

We would like you to think about your recent experience of our service.

How likely are you to recommend our service to friends and family if they needed similar care or treatment?

Extremely likely | Likely | Neither likely nor unlikely | Unlikely | Extremely unlikely | Don't know
☐ | ☐ | ☐ | ☐ | ☐ | ☐

Can you tell us why you gave that response?

Impact

By February 2015 the FFT data had grown to the largest collection of patient opinions collected in any health service in the world.

As of March 2018 FFT had produced 48 million pieces of feedback, adding around 1.2 additional responses each month.

The results are available for public download[3] including staff FFT responses. The percentage reporting "Extremely likely" + "Likely" is also reported on the NHS provider search website[4]. Practices also report using the free text comments for quality improvement and are encouraged to publish "You said: x We did: y" in visible areas[5].

The FFT development project[2] recently commissioned by Simon Stevens (Chief Executive of NHS England) aims to explore improving the question and building supportive services that can enable local service improvement and improved use of the data.

Relevance

The simplicity and anonymity of the FFT feels powerful. The combination of a single question that attempts to capture the overall care experience with a free text field that provides the patient opportunity" to express their feelings and gives the organization broader insight in to issues patients are facing" provides a great deal of flexibility. It was initially modelled around the Net Promoter Score which has seen remarkable uptake in consumer-oriented companies.

Employers could be well placed to collect similar kinds of feedback from their employees on their healthcare interactions. That data could be fed back to drive improvement and used to augment consumer choice or drive referral preference.

1 Friends and Family Test: Guidance 2014 2 The Friends and Family Test development project 2018-2019 3 Friends and Family Test Data 4 St Mary's Hospital NHS Providers Search Page 5 Implementation and use of the FFT as a tool for local service improvement in NHS general practice in England

Consultant-led community clinics

Overview

A widespread push by NHS England to bring "Care closer to Home" has created a number of consultant-led (equivalent of attending physician) specialty clinics in community settings, usually based in primary care clinics.

While many have involved a specialist running a physical clinic co-located at and often run together with primary care, there have also been e-Clinic multi-disciplinary team models where patients can be discussed with a specialist team and where appropriate, continue to be managed by primary care or referred in where needed.

Specialties where examples of such arrangements exist include renal medicine, gynecology[6], neurology[1], cardiology[2] and ophthalmology.

Impact

There are many case studies for these clinics demonstrating cost savings, convenience and increased satisfaction with patients.

A community urology service was established in a primary care setting for male urological conditions[3], primary lower urinary tract symptoms, with two GP with Special Interest (GPwSI) led clinics and an additional clinic led by a consultant urologist from a local hospital. Over 12 months, 275 GP referrals were made to the service representing 23% of all urology referrals in the area. The cost of service provision for the 275 cases was approximately £53,000, less than half of what it would have cost in a secondary care setting. Patient satisfaction was "good" to "excellent".

An ENT/audiology satellite clinic pilot was established at a Cardiff GP practice[7]. They noted that DNA rates declined from 13% seen in secondary care to less than 1%, patient travel time was reduced by 62% and travel distance reduced by 67%. Patients rated the service an average of 9/10 (70% 10/10).

Relevance

Greater collaboration between primary and secondary care with these kind of initiatives has the potential to:
1. Reduce costs through more timely treatment in a lower cost setting with less propensity to order costly follow-on tests or procedures.
2. Improve patient satisfaction through timely treatment closer to home at lower cost.
3. Improve outcomes through improved continuity of care in the community and skill building of community-based providers.

It can also be a win-win for specialists: they support the community on the understanding that when there is a case that requires specialist diagnostics or treatment, they get the referral. Under an ACO model or integrated delivery networks incentives may already exist for this kind of working.

There are also other ways to deliver a similar service – eg. "e-Consults" where specialists provide remote advice. Organizations like Open Door Health (a FQHC) offers specialist telemedicine clinics to remote geographies.

1 A community-based epilepsy clinic in Camden 2 Ealing CCG: Cardiology Outpatient Service Redesign 3 Cost-effectiveness of a Community Male Urology Service: Is it worth it? 4 New Models of Care in Practice: Multispecialty Community Provider Vanguard 5 Imperial College: Community Gynaecology Administration 6 The NHS Commissioning Handbook for Librarians : Acute care in the community 7 Operational research modelling: transferring ENT/audiology services into a community setting

GP-led Urgent Care

Overview

An evolution from the GP walk-in-centers that proliferated to boost access in the late '00s, GP-led urgent care centers aimed to reduce pressure on increasingly busy A&E departments and provide a closer to home option for urgent care needs when regular primary care is not accessible.

These urgent care centers can be co-located near A&E departments or primary care practices in the community. In some cases they may also host a GP Out-of-Hours service[7].

NHS England

Current provision of urgent and emergency care services

>100 million calls or visits to urgent and emergency services annually:

Self-care and self management	• 438 million health-related visits to pharmacies (2008/09)
Telephone care	• 24 million calls to NHS • urgent and emergency care telephone services
Face to face care	• 300 million consultations in general practice (20010/11)
999 services	• 7 million emergency ambulance journeys
A&E departments	• **14.9 million** attendances at major / specialty A&E departments (2012/13) • 6.9 million attendances at Minor Injury Units, Walk in Centres etc (2013/13)
Emergency admissions	• 5.3 million emergency admissions to England's hospitals (2012/13)

Impact

GP-led urgent care continues to be a core part of the urgent and emergency care strategy in the NHS. GP led urgent care centers are estimated to be able to deal with 75% of cases, while 25% require onward referral to A&E[9]. Another study[10] found that 37% of A&E attendances could be cared for in an urgent care center.

In a survey of patients attending GP-led urgent care[4] 50% reported they had used the service because they could see a GP without an appointment and 20% reported they could not see their GP because of working hours. 93% were highly or fairly satisfied with the service they received.

Relevance

Urgent care has seen rapid growth in the US over the past decade with 7,357 urgent care centers reported in 2017, a 10% increase on 2016. In 2014 there were approximately 80M urgent care visits compared with 137M ER visits. Fewer than 4% of patients need to be referred to the ER and the most common presentation was URTI - most presentations could be dealt with in primary care however urgent care are by its definition is available the same day and often walk-in. Urgent care was reported to generate $14bn revenue in 2014, which divided by 80M cases = an average charge of $175 per visit. Insurers, health systems and hospitals are increasingly operating urgent care centers – undoubtedly urgent care has brought many benefits to patients, relieved pressure from ER departments and helped reduce cost although some have also described them as loss leaders, a way to stop leakage and increase market presence.

Urgent care led by primary care has the potential to be better integrated, and lower cost. Companies like One Medical are now beginning to provide urgent care in a primary care setting.

1 Staff perceptions on patient motives for attending GP-led urgent care centers in London: a qualitative study 2 Evaluation of a general practitioner-led urgent care centre in an urban setting, description of service model and plan analysis 3 Time to recognize the real impact GP led urgent care has on A&Es 4 Patients' experience and satisfaction with GP led walk-in centres in the UK; a cross-sectional study 5 Impact of initiatives to improve access to , and choice of, primary and urgent care in England: A systematic review 7 Greenwich CCG: Procurement of a combined GP Out of Hours and Urgent Care Centre service in Greenwich 8 The Keogh Urgent and Emergency Care Review 9 GP-led urgent care centers 'can deal with three-quarters of attendees' 10 Time to recognize the real impact GP led urgent care has had on A&Es

Mental Health: Simplify Health

Overview

A UK subsidiary of Beacon Health Options, Simplify Health provides a clinically-led mental health care management system that co-locates with NHS services.

Working with Clinical Commissioning Groups and offering their platform to large geographic patient populations, they offer a single point of access with care navigators, intensive case management, a service directory, analytics and utilization management[1]. This system helps patient find and use appropriate existing services and coordinates care between them.

Impact

An example of Simplify Health run initiative is the One Stop, a single point of referral for and young people with mental health and learning difficulties. It sits in-front of Mindsight Surrey CAMHS, a partnership led by the NHS with private and voluntary organizations. The single point of entry ensures that every case is routed to the appropriate service. Referrals can be made by all health, social care and educational practitioners via a web interface, telephone and written letter.

Feedback on the service from Simplify Health's website[2]:

Delighted to have been provided with an urgent appointment the following day after I made the referral to the One Stop. (GP)

I was so surprised at how quickly you got back to me. I am very impressed. (mother of 13y/o)

Relevance

The parent company, Beacon Health Options (formed from the merger of Beacon and ValueOptions), is a much larger operation and provides behavioral healthcare management to over 45 million people in the US working with 41 Fortune 500 companies, health plans and federal and local governments. It seems to be a tried and tested care management solution for larger organizations, although they appear to be rooted in old practices[2].

Studies have shown that where you are referred can make a big difference in the treatment you ultimately receive

1 Simplify Health: What we do [2] Simplify Health: What people say about us 2 Yelp: Beacon Health Options Reviews Woburn 3 Health care company paying $900,000 penalty to New York

Macmillan Cancer Support

Overview

Macmillan is one of Britain's largest charities, spending almost £200M each year toward cancer support.

Last year they funded 4,555 Macmillan nurses with at least 5 years nursing experience and 2 years of cancer or palliative care experience. Nurses are embedded within the NHS service, providing support in the clinic, on the ward and in the community.

Macmillan also offers cancer care navigation[1], financial advice and one-time need-based grants, practical and emotional support and a wide range of information and online communities.

Impact

From Macmillan's 2017 annual report[2] they provided personal support to 1.6 million people including 658,000 who received support from a specialist Macmillan nurse. 6.5 million people used their online support services including forums and sign posting.

Macmillan continues to work to improving cancer care – for example in 2017 they tested a new model for providing specialist palliative care at home and were able to deliver home treatment 5 months earlier than was previously the case. In 2017 they also partnered with an ambulance service to train and equip them to effectively manage cancer emergencies and patients receiving palliative and end of life care.

Relevance

Macmillan is a wonderful partner and one the NHS undoubtedly relies heavily upon.

Macmillan broadly falls in to the category of care navigation and social support. To me, Macmillan demonstrates the value of having highly specialized support that is easily accessible and embedded within the delivery system.

Employers have predominantly focused on providing digital, telephone and video-based care navigation. Services like Grand Rounds offer second opinions but also external medical advice when you are already in an acute care setting.

Companies like Docent Health[3] and CareThrough[4] partner with provider organizations to combine a technology enabled approach with embedded staff at the point-of-care to assist patients. Could employers embed such staff at organizations where there is enough member volume for it to make sense?

1 Macmillan cancer navigators 2 Macmillan 2017 annual report 3 Docent Health 4 CareThrough

eConsult

Overview

eConsult is a commercial software platform that was originally developed by a GP practice to help them assess patients online.

Practices that use the platform put a link to the service on their website. Patients can then access self-service advice or get advice from their GP by completing a series of carefully designed questions. Once submitted, it generates a PDF that is sent to the practice administrative staff and can then be reviewed by a GP in the practice. According to eConsult, most requests can be addressed without the need for an in-person visit.

It is used by over 400 GP practices across 46 CCGs, and available to 4.2m patients.

Impact

NHS England cites a practice[2] where they dedicated the equivalent of one day a week of a salaried GPs time to attend to eConsults. In order to make it worthwhile they would have to save 18 appointments a week yet their reports estimate they save between 55-80 appointments a week, also saving patients a significant amount of time in the process.

Another practice that implemented eConsult in January 2017 completed over 5,000 eConsults in a 1 year period. Only 1,000 required GP involvement of which 30% were admin related. Patients were avoiding unnecessary trips and 90% of patients were recommending the service to others[3].

A review by the Health Innovation Network reviewed eConsult and found that it had the potential to improve patient access, deliver cost and process efficiency improvements and improve health outcomes[1].

Relevance

Modernizing primary care through a retrofit technology platform seems to be the theme here, and in the UK this approach is now in direct competition with new entrants such as Babylon Health. One interesting aspect of the eConsult model is how it has been designed specifically to integrate into existing GP workflows.

Companies like Aledade similarly are focused on retrofitting existing practices to work in a primary care led ACO model. Companies like Luma Health and Chiron Health help existing practices communicate with their patients over video and asynchronously.

1 Health Innovation Network SW London: Online GP consultation services: understanding the opportunity 2 NHS England – New ways to work in General Practice: New types of consultation 3 eConsult: Chelston Hall Surgery caser study

Summary

- Both the US & UK are grappling with the same issues, trying to control costs, improve efficiency, deliver better outcomes and improve patient experience.

- Many of the innovations and initiatives in the NHS have close analogs in the US, with endless cross-learning opportunities. With the NHS further along the path to value and increasingly organized around primary care, it provides a unique window in to what is possible but also how things could be improved.

- I hope these 25 examples have been interesting and useful. They're really the tip of the iceberg

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