At Your Service



A proposal to reform general practice and enable digital healthcare at scale

Dr Sean Phillips, Robert Ede & Dr David Landau Foreword by Rt Hon Sajid Javid MP



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Acknowledgements

The authors would like to thank the following individuals and organisations who participated in this research, taking part in a semi-structured interview or sharing research from their respective organisations. Whilst their insights have informed this work, the output is wholly the responsibility of the authors and does not necessarily reflect the views of the following:

- **Liz Ashall-Payne**, Chief Executive Officer, Organisation for the Review of Care and Health Applications (ORCHA)
- Charlotte Augst, Chief Executive, National Voices
- Dr Steve Black, Chief Analyst, askmyGP
- **Jennifer Boon,** Deputy Director, Data Policy and Digital Oversight, NHSX
- Rob Brougham, UK Managing Director, Luscii Healthtech BV
- Paul Callaghan, Senior Policy Analyst, Healthwatch England
- **Andrew Davies**, Digital Health Lead, Association of British HealthTech Industries (ABHI)
- Dr Barbara Domayne-Hayman, Entrepreneur in Residence, Francis Crick Institute
- Ruth Ellenby, Senior Policy Officer (Policy and Campaigns), Royal College of General Practitioners
- **Dr Will Evans**, GP in Leeds; Clinical Lead, Mendelian
- Dame Barbara Hakin, Former Deputy Chief Executive, NHS England; Chair HealthTech Alliance
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- Dr Andrew Hilton, GP Partner, Carterknowle
 & Dore Medical Practice
- Dr Gary Howsam, Vice Chair (External Affairs),
 Royal College of General Practitioners
- Graham Kendall, Director, Digital Healthcare Council
- Dr Hina Lad, Honorary Senior Research Associate, University College London
- Jacob Lant, Head of Policy, Public Affairs and Research, Healthwatch England
- Urte Macikene, Policy and External Affairs Manager, Healthwatch England
- Paddy McGuinness CMG OBE, Oxford Digital Health (OXDH)
- Helen Milner OBE, Group Chief Executive, Good Things Foundation
- **Declan Mullaney**, Public Affairs Manager, Livi

- **Ruth Rankine,** Director of Primary Care, NHS Confederation
- Claire Rick, Head of Public Affairs, Assura plc
- **Tim Rideout,** UK Managing Director, Babylon Health
- Clive Richardson, Deputy Director, Technology Policy, NHSX
- Rachel Ross, Policy and Public Affairs Lead, Healthy.io
- **Vincent Sai,** Chief Executive Officer, Modality Partnership
- Dr Tom Sawyer, Chief Operating Officer, Cognetivity Neurosciences
- **Dr Mike Smith,** GP Partner, Knebworth Surgery
- **Dr Harpreet Sood**, General Practitioner in London and Non-Executive Director, Health Education England
- Sheinaz Stansfield, Practice Manager, Oxford Terrace and Rawling Road Medical Group; Board Member, NHS Confederation
- Matthew Swindells, Former Chief Information Officer, NHS
 England; Forme r Senior Policy Advisor to the Secretary of
 State at the Department of Health; Senior Adviser, Global Counsel
- **Matt Warman MP,** Member of Parliament for Boston and Skegness
- Dr Justin Whatling, Managing Director Global Health & Life Sciences, Palantir; Visiting Professor of Health Informatics, University College London
- **Dr Chris Whittle,** Chief Innovation Officer, eConsult
- **Peter Williams,** Head of Tech Policy, NHSX
- Dr Lesley Young-Murphy, Chief Operating Officer, North Tyneside Clinical Commissioning Group

About the Health & Social Care Unit

Policy Exchange is an independent, non-partisan educational charity which seeks new policy ideas to deliver better public services, a stronger society, and a more dynamic economy.

The Health and Social Care Unit at Policy Exchange looks to tackle the most pressing questions facing the NHS and social care sector today and looks to ensure that the needs of consumers are placed at the forefront of the national conversation.

The Unit is led by Robert Ede and includes Sean Phillips, Research Fellow and Dr David Landau, a clinical oncologist by background and Senior Fellow.

Previous and current research includes:

- A Wait on Your Mind Our assessment of the policy response required to address the waiting list for elective care in England. The report set out a series of practical proposals to address unknown clinical risks, and to introduce 'operational transparency' across waiting times in the NHS.
- <u>Realising the Research Effect</u> A long-read comment piece outlining opportunities to boost clinical research activity in the NHS.
- 21st Century Social Care Called for landmark reforms to social care
 in England. At its core was a simple realisation: that complex long-term
 social care should be financed principally out of general taxation and
 made available on similar terms to the services delivered through the
 NHS.
- The Wolfson Economics Prize 2021 The second biggest economics Prize in the world in cash-terms, this year's Prize is on the subject of hospital planning and design. We had 98 entries from 15 countries, with the finalists including a consultant in emergency medicine. The Prize is part of a broader series of work from the Unit on the hospital of the future, which aims to ensure that the 'biggest hospital building programme in a generation' from the UK Government delivers for patients, staff and the taxpayer.

Endorsements

Dr Harpreet Sood, General Practitioner in London and Non-Executive Director, Health Education England:

"I have long argued that we need to modernise primary care. The nature of general practice has fundamentally changed since I first became a GP; many of my colleagues are now seeking varied portfolio careers rather than going down the traditional partner route. The expectations of patients have also evolved and now diverged; some valuing speed and convenience and others, often with more complex needs, requiring time and a sense of continuity to their NHS experience.

The challenge is to bring forward reforms which can deliver against these different objectives, whilst making the most of digital technologies to redesign pathways. This report offers a credible roadmap to deliver this transformation. From bringing diagnostics into community settings, moving to new payment mechanisms, and introducing a package to retain and motivate our current workforce, Policy Exchange have set out a lot of exciting and implementable ideas that we should welcome."

Lord Patel, KT FMedSci FRSE, Crossbench Peer, House of Lords; President of the Royal College of Obstetricians and Gynaecologists (1995-1998):

"This is a timely and persuasive report from Policy Exchange. Back in 2017, the House of Lords committee on the Long-term Sustainability of the NHS which I chaired called for radical change in the design of services: the traditional small business model of GP services is no longer fit for purpose; professions need to be brought closer together; and the Government needs to go much further to enable the introduction of new technologies to deliver improved care in the surgery and the patient's home.

Today, the case for reform is even stronger. This report provides credible suggestions for reform and a roadmap to deliver them. I hope this report will catalyse a positive and open conversation about the future shape of primary care — and the essential role general practitioners will play in it."

Louise Ansari, National Director, Healthwatch England:

"The last few years have been particularly brutal for GP services. We know there aren't enough GPs and the workforce we do have has been stretched to the limit.

At the same time hundreds of thousands of patients have contacted us about their struggles to get the care they need. Millions more have been left confused and frustrated by the rapid changes to how care is delivered in recent years.

Reforming access to GP services in such a context is always going to be tough and it needs bold ideas, like those in this report, to kick off the conversation. The recommendations on continuity of care, recruitment and retention, and the introduction of 'NHS Gateway' are particularly welcome. It is now for the NHS and Government to work these through with both clinical staff and patients, and then resource them for the long-term.

GP services have changed fundamentally. We need to embrace what was good about the traditional family doctor model and merge it with new possibilities to deliver a service that is convenient, reliable and sustainable for the future."

Dame Barbara Hakin, Chair, HealthTech Alliance; Former Deputy Chief Executive, NHS England:

"This report should stimulate a lively debate about the future of general practice. Not everyone will agree with its proposals, but there is a need — as this report states — to take the opportunity to rethink how to support patients and staff across general practice so the service model is sustainable amidst rising demand.

Digital healthcare will have a vital role to play, and whilst virtual wards, the NHS App and a wealth of high-quality solutions are already in use across the NHS today, there is an urgent need to improve the overall infrastructure. This report contains a series of excellent suggestions which I am sure will contribute to the thinking in NHS England's Transformation Directorate as they look to streamline reimbursement and regulation and to accelerate the use of data."

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Published by

Policy Exchange, 1 Old Queen Street, Westminster, London SW1H 9JA

www.policyexchange.org.uk

ISBN: 978-1-910812-XX-X

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Foreword

Rt Hon Sajid Javid MP, Secretary of State for Health and Social Care

I recently toured the country, travelling more than 1,000 miles to meet with NHS and social care staff and local communities. I wanted to hear their concerns as the Government focuses on the huge challenges ahead. A consistent message from the public was the frustration they experience when accessing their GP. Patients spoke to me about feeling bounced around between primary, community and secondary care. I saw and heard a profound admiration for all those working in the NHS, but also a recognition of the huge recovery and reform challenge ahead.

From the receptionists to the GPs to the pharmacists, the brilliant people working in primary care have been working harder than ever and in innovative ways. Their huge contribution to the successful COVID-19 vaccine rollout is the clearest example of this and demonstrates the potential of the NHS working 'as one'. We need to find ways of capturing this culture of close working and shared objectives, and see it replicated across a wider set of priorities, from preventing people becoming unwell in the first place to addressing the long-standing health disparities across our country.

There is an exciting future for primary care and we need to think deeply about how services are designed and planned – not just within general practice, but across pharmacy and dentistry too. To provide a 21st Century offer to patients, we must give the front-line innovators the right tools to evolve to meet the needs of patients in the future.

It is a vital agenda for the patients who rely on the NHS and the people who work in it. This Policy Exchange report offers some credible ideas and insights – across digital transformation, workforce, and personalising care provision. I welcome the report as a pragmatic contribution to this vital debate on the future of the NHS.

Executive summary

General practice has always been the foundation and gateway to the NHS. However, this part of the healthcare system is now under strain owing to greater demand from an increasingly complex patient profile and a stretched workforce. Despite this challenging context, general practice (with community pharmacy) has administered over 70% of all COVID-19 vaccinations and is delivering more appointments to more patients than ever before. The GP profession has never been more important, but reform is required to ensure it thrives in the future. The current model is neither adequately staffed, nor optimally planned. This reality is reflected in a recent decrease in patient satisfaction. No systematic analysis or reporting of activity takes place across general practice, meaning a real-time, comparative assessment of demand, outcomes and service value is not currently possible. GPs have no way of knowing how their performance compares to their peers. The interface between primary and secondary care, and between general practice, community and social care remains too fragmented. The expert generalism of GPs is valuable and must be deployed more effectively. But rather than operating at the top of their licence, the remit of GPs has become too broad. In the face of pressure, discretionary effort is now demanded of GPs, rather than rewarded. Contracting and reimbursement mechanisms are confusing and dated. Many GP premises are no longer fit for purpose. GPs and their patients deserve better.

Policy changes to address these challenges are already underway, with a greater number of 'scaled' models and an expansion of the multidisciplinary teams within the general practice workforce. Further reforms should look to build upon, rather than disrupt, the direction of travel. Whilst the healthcare sector is rightly focused upon workforce concerns, reform to the underlying model of general practice should not be regarded as a distraction. Rather, we argue that elements of the partnership model and how it is reimbursed contribute to the current challenges.

Reform should not be driven by ideology. Instead, it must be grounded in a recognition of what matters most to patients and practitioners: quality, convenience, choice, and continuity. Changes to the model must enable improved recruitment and ensure the profession is best equipped to meet future need. The features that the profession value most in the current model: autonomy, the ability to innovate, and to build relationships with their patients, can be maintained. The pitfall of trying to design a 'one size fits all' approach to primary care should be avoided. Form must follow function.

This report calls for a model predicated upon 'layers of scale'. The objective is to ensure that the agglomerated benefits of scale (managing

estates, workforce, data and commissioning) are realised across the country, whilst preserving the unique assets of general practice, including continuity of care. The ultimate prize here is to link up the incentives and commissioning structures of primary and secondary care, and ensure the voice of primary care is strengthened at a system level. To achieve this, we envisage the phase-out of the small-scale independent contractor model across much of general practice. This will not happen overnight, but should be regarded as a ten-year transition, with a mixed economy prevailing, and alternative contracting models introduced and running in parallel to the 2024/25 five-year framework.

Under this arrangement we expect to see an increasing number of GPs salaried or employed by scaled providers. This is not a nationalising of general practice: independent provision will continue to play a central role across primary care, but with incentives to work at a greater scale and with reformed approaches to contracting and reimbursement.

Reform must lead to an improved experience and outcome for the consumer. To transform the primary care pathway, we propose the introduction of a unified entry point called NHS Gateway. Current entry routes would be maintained (including the practice telephone and NHS 111), but digital channels – principally the NHS App – would be significantly enhanced. High-quality symptom checking and service signposting (including a select and approved set of digital diagnostics and other digital healthcare solutions) would be introduced at the earliest point in the pathway. This should be regarded as an opportunity to make a 'smart' patient navigation and triage tool available to all - signalling a shift towards greater self-management and preventative healthcare.

NHS Gateway — alongside a host of wider reforms proposed in this report — should be regarded as an opportunity to make general practice the foundational layer for the best digital healthcare across the NHS. Expanding the use of digital should not come at the expense of in-person services. Instead, we must embrace the potential for digital healthcare to address long-standing access issues. Improving high-quality video consultation provision to under-doctored areas offers a pragmatic solution to place-based doctor disparity. As part of a series of solutions covering the health system as a whole, we propose the introduction of a Digital Health and Care Bill. The Bill would streamline reimbursement and regulation, unlock the use of data to plan services and to broaden its use for research purposes, as well as enabling doctors to deliver sessions from overseas.

This report proposes far-reaching reforms. We have not taken this decision lightly. Too often there is an inclination in Whitehall to pull the lever named 'big organisational change' without fully considering the consequences. That is why we have called for an orderly transition over the remainder of this decade, so that the impact of disruption can be minimised.

The intention is to move towards a model of general practice which can better meet the needs and interests of patients, the primary care workforce, and the taxpayer – so it feels increasingly at their service.

Key messages

Now is the time to reform general practice in England. The status quo is unacceptable to both the GP profession and their patients. Pressures predate the pandemic, but increased demand, combined with acute workforce pressures has moved GP access to the top-tier of public concerns. The fundamental issue is well understood: demand outstrips supply, with fewer GPs per capita than European countries with comparable population sizes and a reduction in the proportion of Full Time Equivalent roles. More GPs meanwhile are opting for 'portfolio' careers with greater flexibility over working hours and contracting. The profile of patients has also changed. Whilst an episodic user seeks speedy access and values convenience; those with complex needs (both clinical and social) require coordinated support both within and beyond the GP surgery. Caring for these distinct groups should be planned and resourced differently, yet GPs make do with a list-based system – a model which predates the formation of the NHS. Pressures are felt across the country, but not uniformly. Many practices deliver excellent care, but there are long-standing place-based disparities: general practice is comparatively underfunded in the areas of greatest deprivation, whilst there are fewer GPs per person in those areas.

Reform is not a distraction from tackling the biggest issues confronting the profession. In recent years, there has been substantial decline in the default model of general practice – small-scale, partner-led practices whose services are independently contracted by the NHS. In his 2019 independent review, Dr Nigel Watson concluded "the partnership model is not dead", but its decline has been hastened in the past two years.

Addressing the current model should be regarded as a means to tackle systemic challenges, including GP recruitment and retention. Whilst the number of salaried GPs increases year-on-year, the number of partners has decreased by 22% since 2016 and fell by over 1,000 in 2020 alone.

Retirement, workforce shortages, financial instability and bureaucracy are all cited as reasons for this decline. The operational independence of the partnership model is a strength, but on balance, the opportunities to transition to a model of general practice which is more financially sustainable, more attractive to an emerging workforce and which improves service provision for consumers must be considered. There is a political imperative to act too: with the Conservatives having made expanded GP access a manifesto priority.

A mixed economy should prevail, but with greater incentives for

workforce, data and procurement to become coordinated through 'layers of scale' in cooperation with the NHS. Over the past ten years, there has been a diversification in models of general practice, with more services planned at 'scale'. The most recent initiative at a national level has been the introduction of primary care networks (PCNs) of which 98% of practices are a part (most serving 30,000-50,000 patients). Through scale, there are considerable agglomeration benefits which can accrue. Scale presents the opportunity to align primary care more effectively with secondary and community services and in doing so, the means to ensure general practice has a stronger voice within integrated care systems.

Independent provision will continue to have a central role in primary care. Driving innovation at scale and enhancing service offerings for consumers, independent providers should be essential to primary care service provision. This will be particularly evident from the perspective of digital providers, whose solutions bring the patient into closer contact with their own treatment through connected devices, home testing kits and remote monitoring tools and which enable traditional providers to improve patient care. Commissioning and procuring services at a larger scale will allow for the purchasing power of the NHS to be felt, delivering improved value for the taxpayer. Whilst these services should be increasingly available in general practice, they should remain free at the point of use — upholding the founding principles of the NHS.

Reforms must mitigate against spill-over effects. This will not be an overnight transformation. There are many effective GP partnerships and horizontally-scaled models which provide excellent care — any transition should enable effective, scaled models of general practice to thrive. Moreover, reform must mitigate against spill-over effects: the possibility of GP partner retirements and the effects of incentives which deliver less capacity under a set-hours model. There is also a limit to 'change capacity' itself. A 'one size fits all' approach will not be effective. The Government has a pivotal role here and should set out a reformed vision for general practice prior to the next five-year contract term (2024-25 onwards). This will require an openness from the GP profession and wider primary care workforce to doing things differently. The widest possible consultation within the GP profession, wider primary care workforce and Integrated Care System partners should take place alongside engagement with innovative providers working as partners to the NHS.

New reimbursement arrangements will be required to deliver this transformation. This includes a move away from the national GMS contract and updates to the NHS constitution. Some changes may require primary legislation.

The primary care pathway should be redesigned to improve access by creating a more coherent 'first contact'. There is a need to improve access to general practice to reduce delayed diagnoses, tackle health disparities and improve consumer experiences. Access remains too variable, producing unacceptable levels of unmet demand, necessitating an

approach which provides greater consistency and coherence to the 'front door.' We propose the introduction of a new service called 'NHS Gateway,' an enhanced first contact and patient navigation system for primary care. Whilst the greatest benefits will emerge through enhancements to the NHS App, this should be a consistent offer, available to all and rolled out across GP practice triage systems and NHS 111. In the longer term, NHS Gateway should evolve to become a 'smart' triage tool for primary care. This would include using machine learning and AI (Artificial Intelligence) to direct consumers to services (including those delivered beyond the neighbourhood) based upon real-time service activity information and patient data. Such an approach is already commonplace in the commercial sector but will take time to be embedded in the NHS.

Ensure continuity of care is built into any new model. Careful attention is required to ensure that 'continuity of care' can be delivered in a reformed model of general practice. The idea of a 'family doctor' is embedded into many people's expectations of the NHS, but is a reality for fewer and fewer patients.

Patient demand necessitates a reformed approach so the needs of the continuous user with complex, long-term needs and the episodic user valuing speed and convenience can be met. 'Continuity of clinician' may be less important for the latter than the former. There is a compelling evidence base for the value of continuity of care (including continuity of clinician, where appropriate) in outcomes and overall satisfaction, but continuity is about more than seeing the same clinician again and again. It also means ensuring information available to staff about patients is consistent, up-to-date and travels with the patient, meaning everyone across the system deals with a 'single version of the truth.'

General practice should be the foundational layer for scaling digital healthcare in the NHS. Technologies to 'transform' healthcare are at our fingertips (from mobile apps to connected devices and telemedicine platforms which assist in the delivery of healthcare, or to act as medical devices in their own right). Talking about their 'potential' is a cliché; many are already delivering value for money and convenience and are meeting the highest regulatory standards. Yet substantial effort is still required to create an enabling infrastructure. At a national level, legislation is one lever through which the Government can enhance the existing infrastructure and we recommend the Government explores bringing forward a Digital Health and Care Bill.

General practice has the most to gain from seizing the opportunities digital healthcare presents, but it can also create the broad and strong foundations for digital transformation across the NHS. These benefits are multifaceted: the insights generated by data from more than 350 million GP appointments each year could transform approaches to population health and clinical research. Embedding the highest-quality tools will save consumer and clinician time and enable consumers to feel more informed in managing their conditions. Digital healthcare can deliver equitable access that is high-quality but unconstrained by geography. High-quality video

consultation represents a means to 'level up' general practice in areas that have remained under-doctored over many years and could allow NHS-trained practitioners who are based overseas to carry out sessions. There are regulatory and legal hurdles to enable remote care across jurisdictions, but there is an opportunity for the UK to be a first-mover and world-leader in setting a new global standard in remote consultations.

These proposals cover the future model of general practice, the primary care workforce, contracting and reimbursement and digital healthcare both in general practice and across the NHS.

Policy Recommendations

The Future Model

The Government should commit to reform general practice over the next decade. A mixed economy should prevail, which will include high-performing and scaled partnerships, but will increasingly see GPs salaried by scaled providers.

- 1. General Practice should transition to an at-scale model with specific elements delivered through 'layers of scale'. Responsibility for leases and workforce planning should lie at an integrated care system (ICS) or scaled primary care provider level to enable the reconfiguration of estates. Practice-level data should be jointly controlled for key use cases, such as demand analysis and service planning. A diagram which details this 'layers of scale' model can be found on p. 27. These changes should be underpinned by a £6bn rescue package, to gradually buy-out the GP owned estate and fund the transition to scaled models over the remainder of the decade.
- 2. To align incentives across primary and secondary care, GPs should become predominantly salaried and contracted by scaled providers (trusts, provider collaboratives, or large-scale primary care operators). New core NHS contracting arrangements for general practice will be used with amendments to the NHS constitution reflecting these changes. Further detail of these recommendations is outlined in the section entitled Contracting and Reimbursement.
- 3. Continuity of care must be safeguarded. Interpersonal continuity the trusted relationship between doctor and patient carries significant benefits for certain patients. Maintaining this could be a challenge in the move to general practice at scale. Focus should be directed toward policies which promote the stability of GPs within their patient community where appropriate. We believe this is achievable under predominantly salaried and scaled models. Informational and longitudinal continuity which are equally important should be strengthened through the effective use of technology. The ultimate objective should be to achieve frictionless continuity of relationship between a patient and the entire NHS, delivering on a consumer driven approach.
- 4. NHS England should enhance the NHS App to provide a

broader and more coherent range of first-contact services to consumers. A 'smart' first contact primary care navigation programme called 'NHS Gateway' should be introduced. NHS Gateway should aim to deliver a more coherent, convenient and personalised 'front door' to the NHS, whilst enhancing patient navigation and triage. Detail is provided later in this summary.

Workforce

A relentless focus upon recruitment and retention — albeit with distinct strategies — is required to meet workforce challenges in general practice. Consultation with a greater cross-section of the current workforce and a wider variety of stakeholders across primary care from pharmacists to the nursing profession is required to develop a longer-term workforce strategy. Routes for primary care staff to deliver a broader range of services and to embed clinical research should become commonplace. Our proposal to incentivise common contracts for hospital and GP doctors is also designed to reduce the friction (both in the clinical and cultural sense) between these two care settings, and partners in the community. This is a broader topic which Policy Exchange will explore in further detail in a forthcoming paper.

- 5. The Government should announce a package to support and retain current GP Partners. Specific interventions could include earn-out clauses (aligned to length of service), and changes to the pension taper, reflecting similar exemptions introduced in the legal profession. Details are outlined in the section on Contracting and Reimbursement.
- 6. The NHS and Government should make better use of technology to tackle GP shortages in deprived areas. This can also contribute to meeting the existing Conservative Party manifesto commitment to deliver an extra 50 million GP appointments each year. The challenge of recruiting doctors into 'under-doctored' (and often deprived) areas has persisted since the foundation of the NHS. There are regional disparities, but also disparities across current clinical commissioning group boundaries which are under-reported, complicating this issue. Policymakers should leverage remote consultation which is unconstrained by geography as a viable tool for expanding access rapidly. Having a remote consultation between a doctor based in Birmingham and a patient in rural Essex (which has some of the lowest GP numbers in England) would become commonplace. Existing measures such as the 'Targeted Enhanced Recruitment Scheme' could be maintained in parallel provided they can demonstrate longer-term effectiveness.
- 7. NHS England should introduce changes to Primary Care Networks (PCNs) as part of the new five-year framework. Since 2019, PCNs have brought together general practices to collaborate

at scale and deliver enhanced services. A core purpose is to expand the multi-disciplinary nature of general practice, delivered through the Additional Roles Reimbursement Scheme (ARRS). This is a welcome measure to diversify the skills mix in primary care, but it is unlikely to meet its current recruitment targets, having filled only 10,000 of the 26,000 allocated roles. The interim national target is to have 15,500 FTEs by the end of 2021/22. There have also been complaints over the restrictive recruitment rules, and a view that ARRS have thus far done little to reduce GP workload. The PCN contract comes up for renewal in two years and must now evolve, with the following changes incorporated as part of the contractual arrangements introduced from 2024/25:

- a. Primary care networks should be maintained, but with an acknowledgement that groups of PCNs should be formally required to collaborate at both 'place' and 'system' level to achieve wider benefits of scale, with a possible shift to more formal ties in due course.
- b. The ARRS scheme should receive increased funding (as part of our recommended £6bn rescue package) to expand multi-disciplinary roles in general practice. Recruitment rules (which were recently relaxed to include band 4 roles within the eligibility) should be relaxed further still to allow for adaptive planning to suit the needs of the local population. This is best achieved by a group of PCNs working at a system level.
- c. ARRS recruits must not be spread too thinly spread across sites and must be afforded time to train.
- d. Enhancements to the NHS App and NHS 111 through NHS Gateway could support a redistribution of current GP case volume towards other primary care professionals. Studies over the past five years show that between 20-30% appointments could be avoided if coordination were stronger between GPs and hospitals (or across community care) and if a wider array of primary care staff were utilised and technology enhanced to streamline administration.
- 8. The Government should examine opportunities to enable NHS-trained GPs to deliver remote sessions from overseas. Remote consultation represents a possibility for GPs trained in the NHS but have since emigrated to deliver sessions from abroad. Almost a thousand GPs are currently in this position. This would require amendments to current GMC (General Medical Council) rules but offers possibilities to simplify existing revalidation requirements. The Government could also explore the mutual recognition of select third countries. Priority countries would include Australia, Canada, New Zealand and South Africa. The viability of any scheme would depend on agreed limits on the number of remote sessions per physician per week, and patient safety measures.

Appropriate NHS on-boarding must also be introduced to support any third country practitioners. If taken forward, this would represent both a pragmatic solution to short-term workforce issues and an opportunity for the UK to be a world leader in setting new regulatory standards with international partners for cross-jurisdictional remote consultation in primary care.

9. The Government and NHS England should work with the Royal College of General Practitioners, British Medical Association, and medical schools to establish a common strategy to make careers in general practice attractive to new and junior doctors. Measures to enable flexible working and to ensure that training in digital healthcare (including the delivery of video consultation) should sit within core GP training. Continuing Professional Development accredited modules should become commonplace as part of the ongoing digital 'upskilling' of the workforce. Approaches to boost the porousness of professionals working across primary and secondary care should be explored. This is a topic which will be explored in greater detail in a forthcoming Policy Exchange paper.

Contracting and Reimbursement

The partnership model has been a distinctive feature of general practice and has both enabled the delivery of excellent care and allowed GPs to pursue autonomous and rewarding careers. Yet we have now reached a point where this model – for all its historical advantages – is likely to hold back urgent reforms to general practice. This is not a novel realisation; the partnership model was described in a 2017 House of Lords inquiry into the future of the NHS as 'no longer fit for purpose'.

A shift in contracting and reimbursement to enable transition will be complex and must be predicated upon an acceptable timeframe. The upsides must ultimately justify the short-term difficulties. The transition should therefore involve the following:

- **10.** A commitment to phase out the GMS Contract by the end of the decade. The last five-year contract framework was agreed in 2019/20 and runs until 2023/24. Ahead of the next contract being introduced from April 2024, NHS England should outline its intention for this to be the final five-year GMS Contract period, to be replaced by a series of one-year top up contracts until its eventual phase out by the mid-2030s.
- 11. An offer of full employment for current GP partners. A directemployment scheme should be introduced in parallel with the new GP contract negotiation. The scheme must be sufficiently generous, creating parity of pay in line with hospital consultants to incentivise GPs who had been seeking partnership or would be approaching retirement. The use of a five-year earnout clause in a new contracting arrangement may further enhance

- retention. Such clauses are common in the commercial sector. A financial incentives framework should be established, detailing reimbursement possible under the new model through increased working hours and through a simplified series of incentives.
- 12. Support the gradual release of owner-occupier primary care estate. Many independent GP practices lease their surgery premises, with the rent reimbursed in full by NHS England. Around half own their buildings outright or hold mortgages. The value of this owner occupier estate is roughly £5bn. We propose that the liability for these buildings would gradually pass onto the new NHS primary care provider body for management and eventual release. Lease and tenant arrangements (including third party development) would be allowed to continue for both vertical and horizontal scaled models. From a national policymaking perspective, we believe that premises should increasingly be organised at 'place' or 'system'. This approach would help to tackle the associated premises challenges of becoming the 'last partner standing', enable system-wide planning of the primary care estate and tackle the growing issue of poor-quality premises. The 2017 Naylor Review into NHS property and estates stated that up to 30% of GP practices with list sizes under 4,000 patients were "unlikely to be large enough to meet the vision of personcentred care set out in the Five Year Forward View.
- **13.** The Government should commission a review of reimbursement frameworks in primary care. The current logic and incentives of the partnership model work against a drive to integrated care. Around half of practice income is delivered through a block contract (global sum) with funding supplemented by the QOF (Quality and Outcomes Framework) scheme and payments for enhanced services. An increasing proportion of funding is now channelled through primary care networks (PCNs). The review should explore means of creating iterative frameworks, which incentivise cooperation between primary and secondary, community and social care aligned to a set of agreed outcomes at place level. This is consistent with the approach set out in the recent Integration White Paper.
- **14. Greater weighting should be given to service quality when commissioning digital healthcare**. Rather than simply assessing technology credentials or cost savings, the criteria encompassing the Digital Solutions Catalogue should be reassessed so they consider quality more holistically, including assessing clinical outcomes and patient experience more explicitly. For instance, The Digital First Online Consultation and Video Consultation (DFOCVC) should be revised so that a holistic assessment of quality and user satisfaction is built into the framework and so that its payment schedules do not disincentivise innovative suppliers.

- 15. NHS England should publish guidelines which define demand pressures in clear terms so that GP practices can report to LMCs against a national baseline. Currently, there is no consistent and systematic reporting of demand in general practice. Nor are there common definitions of what constitutes extreme pressure or unsustainable demand. An equivalent to the Operational Pressure Escalation Level (OPEL) used in hospital settings should be established across general practice to generate a national framework to assess demand. Similar approaches have already been piloted in areas such as Surrey Heartlands.
- **16. Primary care should monitor and set out proposals to reduce 'failure demand.'** 'Failure demand' is unnecessary demand generated through inefficient, flawed or duplicated processes. A common example would include a patient failing to get through when calling their GP reception and choosing to instead present at A&E for a minor complaint. At a national level, expertise from within the NHS and commercial sector should be brought together to examine common causes, based upon regular monitoring by primary care networks who should be encouraged to report upon causes of failure demand at the neighbourhood level. Responsibility for interventions should sit at place level, echoing our principles of 'layers of scale'.

Delivering Digital-First Primary Care

General practice should become the foundational layer upon which digital services are built and scaled across the NHS, further justifying the need for primary care services to be coordinated at ICS level as part of a wider digital ecosystem.

- 17. Whenever clinically appropriate and desired by the consumer, general practice should be digital-first. Currently, there is strikingly low use of high-quality video consultation in general practice. Whilst NHS England have commissioned a review into remote consultations it is already clear that not all forms of remote consultation are equal: the best deliver cost savings, save clinician time and do not compromise patient safety. GPs should meanwhile be encouraged to 'prescribe' high-quality solutions particularly those which support remote monitoring and home testing. One example is to encourage greater uptake of solutions to monitor diabetes with high-quality blood glucose meters and app solutions.
- 18. Uptake of the highest-quality video consultation platforms should become commonplace in areas with fewer GPs or with the highest patient figures per GP. There is an enormous opportunity to boost the provision of care to areas with fewer doctors and greater deprivation through high-quality remote consultation in such a way that the risks of exacerbating the 'digital divide' are

mitigated. A recent pilot study from North Tyneside demonstrated that demand (and overall satisfaction) with a high-quality form of video consultation was highest in areas with the greatest deprivation. Lessons can be learnt from best practice in the banking sector where in the space of a decade, online services have become commonplace, with initiatives introduced to effectively support the digitally excluded.

19. A 'smart' first -contact, patient navigation tool called NHS Gateway should be developed to enhance the patient pathway and consumer experience of primary care.

- a. In the short term, enhancements to NHS 111 and the NHS App would transform first-contact with primary care, encouraging the consumer to log conditions and to manage appointments with general practice, as well as introducing improved signposting to services offered across the NHS as well as voluntary sector and independent providers (such as high-quality mental health app solutions for example)
- b. In the medium term, enhancements would enable consumers to book (or be directed) to services beyond their local GP practice which are planned at an ICS level within their neighbourhood, including 24hr walk-in centres (co-located with A&E departments) and community diagnostic hubs, high-quality video consultations would also be offered via this channel. Extended access services planned at an ICS level should also be integrated and made available to consumers.
- c. The NHS App should become a resource linked to (or navigating the consumer toward) other digital health solutions that can support the monitoring and management of chronic conditions and which can encourage healthy behaviours. A dedicated team within the Transformation Directorate, working in collaboration with organisations, such as Organisation for the Review of Care and Health Apps (ORCHA) should monitor and appraise the quality of these linked and recommended solutions
- d. NHS Gateway should be developed and implemented by a cross-departmental 'delivery unit' consisting of personnel within NHS England's Transformation Directorate and the Central Digital and Data Office.

The establishment of NHS Gateway should be regarded as a vehicle for digital transformation across primary care. In parallel, a series of systemwide measures should be brought forward.

20. The Government should consider introducing a Digital Health and Care Act in this Parliament. Primary legislation will be required for NHS Digital to be formally merged within NHS England. When this Bill is brought forward in due course, it should

act as a vehicle for streamlining the regulatory and reimbursement routes for digital healthcare. The Bill could also reform approaches to data controllership and usage across the NHS. Duties could be placed upon organisations (including across primary care) to deliver digital maturity, coinciding with the ICS maturity targets set out in the recently published Integration White Paper.

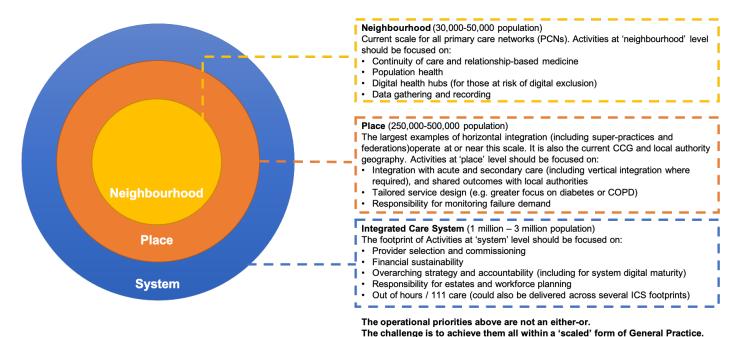
- 21. Real-time, open-access 'Trip Advisor-style' patient review and feedback for service users should become commonplace and should inform commissioning decisions and service design. Rather than simply producing an additional feedback bank, this information should inform commissioning decisions. Much of this data already exists as it is collected by digital providers, so can be quickly optimised.
- 22. The Transformation Directorate within NHS England has been greatly expanded. Priorities for the new Directorate should be as follows:
 - **a. Strengthening the interface with primary care.** Much of the work of NHSX focused on the secondary and tertiary sector. As part of the incentives for existing GP practices to shift to scaled models, support should be offered from the Transformation Directorate (for example through emerging ICS networks) to boost digital maturity across general practice and to more effectively scale high-quality digital healthcare.
 - b. Produce guidance and standards for all Trusts, ICSs and scaled primary care organisations to measure the performance of their digital strategy. Each ICS, Trust and primary care organisation should report annually upon their performance against these standards which should be made publicly available.
 - c. Establishing the former NHSX team as a 'taskforce' within the Directorate. This taskforce should adopt a 'mission based' approach to improving digital maturity and data security, agreed with the Government and set out each year as part of the new flexible Mandate to the NHS, set out in the Health and Care Bill. Teams should be assembled and 'seconded' to support trusts awarded 'Digital Aspirant' status and to PCNs struggling to reach an appropriate level of digital maturity, and to ensure that the Cyber Essentials Plus standard is implemented.
 - **d.** Creating a clear, single entry-point for innovative organisations looking to scale in the NHS. The publication of the What Good Looks Like and Who Pays for What frameworks as well as a 'Delivery Plan' which includes the introduction of a single API platform for suppliers to access data were welcome initiatives from NHSX in defining good practice and common approaches to introduce and scale solutions in the NHS. These initiatives are suggestive of the positive

role the Transformation Directorate can play in streamlining entry to the NHS for innovators. An expanded approach could include the development of a 'match-making' service, with entrants paired with relevant primary care or trust leadership (such as chief information officers) to boost engagement and connectivity across the service and so solutions are introduced in places with clear demand and appetite.

23. ICSs should work with local authorities, the voluntary sector and independent providers to plan and commission 'hubs' across their footprint to deliver services which upskill the workforce and reduce the 'digital divide' in the community. Each premises would be multi-purpose and could assist in social prescribing and in the delivery of broader public health priorities. They would enable visitors to access digital health services (such as remote consultations) and to receive technical assistance and advice from a small multi-disciplinary team. These would also be sites where primary care staff could deliver remote consultations from suitably equipped booths.

'Layers of Scale' in Primary Care

This report calls for a scaled model of General Practice. There is little consensus on what 'scale' is, yet our research demonstrates that certain services lend themselves to delivery at specific scales – 'layers of scale' as we describe it. The figure below demonstrates the different elements of service organisation and the optimal scale these should be planned from. It is deliberately intended to achieve better consistency between primary care and the wider integration agenda, to be formalised through the Health & Care Bill and advanced further through the recently published Integration White Paper.



A 'Rescue Package' for General **Practice**



New Contractual Investment

£750million

Introduced and run in parallel to the 2024/25 GMS. Equating to an extra £150 million per year uplift, the package would smooth out the transition to a blended payment model and fund additional ARRS roles.



Properties Plan Owner-Occupier Estate Buy-Out

£5 billion

A scheme to gradually buy-out the owneroccupier estate. Roughly 1,000 properties would be expected to qualify.



NHS Gateway

£250 million

To fund enhancements to the NHS App and interoperability with other access routes (including NHS 111).

Total £6 billion

One off, non-recurring investment.

Introduction

Since its foundation, general practice has acted as the front door and gateway to hospital and specialist care in the NHS.¹ Over the course of the past two years, general practice has achieved remarkable things: it delivered over three million consultations a week in 2021, whilst GPs (together with community pharmacy) have administered more than 70% of COVID-19 vaccinations.² General practice also adapted its service model in Spring 2020 at great speed to deliver consultations to patients remotely. By July of that year, GPs were conducting 85 per cent of consultations by phone, video and messaging.³

Despite these achievements, general practice has operated under sustained and increasing pressure, owing to a changing patient and workforce profile and increased demand.⁴ This report sets out a proposal to remedy this situation, recognising that the status quo is unacceptable for the general practice workforce and their patients alike.⁵ This is a clinical as well as a political challenge, with public's perception of the NHS often shaped by their experience of general practice. Little recent discussion has considered what the future end-state of general practice should be, to ensure that it is sustainable and successful in the face of society's changing needs. There is a unique opportunity to ensure that primary care is seen through the lens of integrated care and that reforms to contracting, incentives and pathways create an improved end-state for clinicians and consumers.

This report appraises the current model of general practice before proposing a series of solutions to manage future demand and to put the workforce on a more sustainable footing. For the consumer, these proposals seek to make the NHS feel increasingly 'at their service' through the transformation of the primary care pathway, partially enabled by boosting the provision of high-quality digital healthcare.

This research has been informed by a comprehensive literature review, accompanied by a series of structured interviews with sector-specific experts. We interviewed more than 40 experts including GPs and practice managers, present and former NHS leadership, patient group representatives, trade bodies and representatives from digital health companies between August 2021 and February 2022. A list of interviewees who wished to be acknowledged are detailed in the front matter.

- The remainder of the Introduction examines the key issues facing general practice and sets out the rationale for reform.
- **Chapter 1** appraises current models of general practice which have

- Simon Hodes & Shan Hussain et al., 'If general practice fails, The NHS fails', The BMJ Opinion, 14 May 2021 [link]
- 'RCGPNI: exceptional achievement for general practice as half a million receive booster jab in community', Royal College of General Practitioners, 12 January 2022 [link]
- 'Coping with the rapid shift to remote GP consultations during the coronavirus pandemic', National Institute of Health Research, 18 March 2021 [link]
- 4. On the history and evolving role of general practice, see 'Improving the quality of care in general practice: Report of an independent inquiry', The King's Fund, 24 March 2011 [link], pp. 13-19. Useful context on the development of general practice within the broader healthcare system prior to the foundation of the NHS can be found in the 'Dawson Report (1920)', The Nuffield Trust [link]; British Medical Association and the National Health Service Bill', 292/847/4/40, Trades Union Congress Collection, University of Warwick Digital Collections [link]
- Concerningly, the latest evidence shows that public perception of the management of and access to services has declined, see 'Public has bleak view of government's NHS policies with high concern about workforce challenges', The Health Foundation, 3 February 2022 [link]

- increasingly been planned 'at scale'. Whilst there is consensus that scale is the future, the plurality of models which have emerged begs the question: what is the optimum scale to plan services going forward?
- **Chapter 2** sets out a series of principles upon which to design a new model of general practice, based upon the requirements and desires of both the current and emerging GP workforce and consumers.
- **Chapter 3** provides an explanation of 'NHS Gateway': our proposal to enhance patient navigation across primary care through enhancements to existing entry points, including the NHS App, NHS 111 and the practice telephone.
- **Chapter 4** explains how general practice can become the foundational layer for high-quality digital healthcare in the NHS. Getting this right could help deliver against NHS and Government priorities for 'levelling up' general practice to improve access it is an opportunity that should be grasped.

What Is General Practice?

General practitioners (GPs) provide "a generalist medical service which integrates preventative and curative care for a defined population".⁶ In the traditional sense, general practice refers to the family doctor's surgery with GP practices independently contracted and commissioned by the NHS. Many remain small businesses, but their influence across the system is large, with over 350 million general practice consultations a year.⁷ General practice is synonymous with primary care, which can be thought of as first-contact care and includes four independent contracting services: general practice, community pharmacy, dentistry and optometry but also includes nurse-led 'walk in' clinics, health visiting, paramedic and urgent care services (Fig. 1). 90% of all NHS activity occurs in primary care.

What Is Digital Healthcare?

Digital healthcare refers to mobile apps, connected devices and telemedicine platforms which assist in the delivery of healthcare services, or act as medical devices in their own right. It can be differentiated from 'digital transformation', which encompasses these themes but speaks more closely to issues associated with health IT, such as the interoperability of computer systems and cybersecurity.

Denis Pereira Gray, 'Down with "primary care," up with "general practice", BMJ Opinion, 13 March 2017 [link]

 ^{&#}x27;Plan set out to improve access for NHS patients and support GPs', NHS England, 14 October 2021 [link]

What Challenges Does General Practice Face Today?

For many years, general practice has been under pressure. An ageing population which has greater care demands to manage complex and long-term conditions, combined with a changing workforce profile and changing user expectations of the service have created acute pressures at the 'front door' of the NHS. The COVID-19 pandemic has only made this situation worse. The publication of the government's Winter Access Plan in October 2021 provided £250m to tackle issues in the short term, with funding to upgrade communications systems through cloud-based telephony and targeted support for the worst-performing practices.8 The plan also committed to an expansion of digital provision in general practice, with the funding allocated through new integrated care systems (ICSs). Encouraging ICSs, and the anticipated legal entities Integrated Care Boards (ICBs) to take a more active role in commissioning these services is welcome and represents the direction of travel. Yet what is now required is a systematic appraisal of the current model of general practice, and a national debate on what general practice should look like in the years ahead.

The remainder of the introduction sets out the major issues currently facing general practice, of which any future model and reform must address.

A changing patient profile and increased demand – In the next twenty-five years, the number of people older than 85 will double to 2.6 million. That population will live with an increased number of long-term conditions requiring multiple interactions with the healthcare service. Whilst GPs are managing more complex patients, the overall volume of demand has shot up. GPs are now seeing on average 37 patients per session - far more than the 28 patients thought to be the safe daily limit. One in ten GPs see 60 or more patients a day. 10 The 2019 Commonwealth Fund survey (which compares perspectives from GPs across 11 high-income countries) found a high proportion of GPs plan to quit or reduce their working hours in the near future. 49% planned to reduce their weekly clinical hours in the next three years; just 10% planned to increase them. 11 The Institute for Fiscal Studies projects that demand for general practice will increase by 22.6% (from 2018/19 figures) by 2023/24.12 This demand can be separated

- Our plan for improving access for patients and supporting general practice, NHS England, 14 October 2021 [link]. See Policy Exchange's appraisal of the measures: Sean Phillips, 'Less emotion, more evidence – that is what's needed to tackle the challenges in general practice', Policy Exchange, 15 October 2021 [link]
- 9. Ann Raymond & Nuha Bazeer et al., Our ageing population: How ageing affects health and care need in England, *The Health Foundation*, December 2021 [link]
- Nicola Merrifield, 'GPs working average 11hour day, major survey reveals', Pulse, 1 April 2021 [link]
- 11. Rebecca Fisher, Catherine Turton et al. 'Feeling the strain: What the Commonwealth Fund's 2019 international survey of general practitioners means for the UK', *The Health Foundation*, March 2020 [link]
- 12. Anita Charlesworth & Paul Johnson (eds.) et al., Securing the Future: Funding health and social care to the 2030s, The Health Foundation and Institute for Fiscal Studies (2018), p. 86 [link]

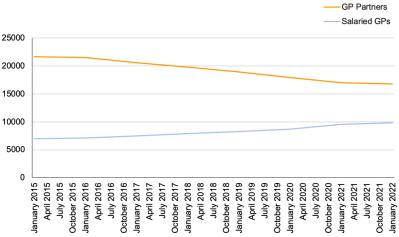
- into three types of user: a group with complex needs, requiring continuing care and expertise from a broader primary care team; a group requiring episodic care, who place greater value upon convenience and a third, socially complex user who benefits from GP support, but whose needs may be best met in other community settings. There is a tension within the confines of present general practice design in managing these cohorts.
- The access challenge and system fragmentation A febrile debate has caricatured the GP surgery as sealed-off from patients eager to see their GP in-person.¹³ It has been characterised by a focus upon two binary (and false) presumptions: the first, that patients exclusively favour face-to-face consultation (and are against any form of remote consultation); second, that face-to-face consultation will always represent a superior format for clinical care. Neither are true. A silent majority of consumers has become accustomed to remote consultation methods and have determined consultation method preference based upon a greater number of factors than format alone: timeliness and convenience for instance are factors which have encouraged consumers to opt for a highquality video consultation instead of a face-to-face appointment (although the total number of video consultations remains stubbornly low at around 4%).14 Timeliness of care is for instance one factor which infrequently features in the public debate. A strengthened evidence base concerning patient preference, choice and demand is required to plan services effectively. The blanket use of the term 'remote consultation', which covers any interaction with a GP which does not take place in the surgery, ranging from sending images over messaging software, speaking on the telephone to having a video consultation is misleading and unhelpful. Conflating all forms of remote consultation misses the fact that visual clues which could be missed on a telephone call could be noticed in a video consultation, whilst there will be many patients satisfied with simply messaging a GP asynchronously or sending images. 15 Access issues however - both perceived and real - have real effects across the NHS. Approximately 15% of A&E presentations are estimated to be for non-urgent conditions that could be managed in primary care. 16 These presentations have increased, as more patients are inefficiently 'bumped' around the system from the practice telephone to NHS 111 to A&E, meaning that many patients are accessing services which do not necessarily represent the optimum place for the care they need. Only a fraction of the cases that Pathways (the algorithmic software used by NHS 111) diverts to emergency services are appropriate – as few as 10% according to a 2018 analysis. 17
- A changing workforce While the total number GPs rose from 39,114 in March 2016 to 42,585 in March 2021, the number of full time equivalent (FTE) GPs only increased from 33,219 to

- Eleanor Hayward, 'Shift from face-to-face appointments is 'disastrous': Only 3% of doctors think remote consultations are better for patients, study finds', *Daily Mail*, 2 November 2021 [link]
- 14. 'NHS Digital General Practice Workforce Statistics (up to November 2021)' [link]
- Jasmine Rapson & Hayley Kirton, 'Concern raised over death of five patients seen remotely by GPs', Health Service Journal, 9 September 2021 [link]
- 16. Geraldine Clarke, 'How are total triage and remote consultation changing the use of emergency care?', *The Health Foundation*, 3 December 2020 [link]
- 17. Phil Whitaker, 'NHS 111 is a political project and proof providing healthcare on the cheap only makes matters worse', *New Statesman*, 16 June 2021 [link]

- 33,752 in the same period.¹⁸ Fewer GPs are working full time: some are conducting research or teaching as part of a 'portfolio career', whilst there's a gendered dimension to consider. Women now represent almost 60% of the workforce, and are more likely to pursue flexible working arrangements than their male counterparts.¹⁹
- The partnership problem Another significant shift in recent years has been in the employment status of GPs. From a very small share of the GP workforce just ten years ago, salaried GPs now account for one-third of all GPs (excluding locums, registrars and retainers). In contrast, the number of GP partners working in England has decreased by 22% since 2016, falling by 1,000 in 2020 alone.²⁰ Retirements, pressures from wider workforce shortages, financial instability and bureaucracy have all been cited as factors for the decline.²¹ This trend shows no signs of reversing. Research in 2018 by the Kings Fund found that only 37 per cent of GP trainees planned to become partners, although that intention would likely grow over time.²² In his independent review of the GP partnership model in 2019, Dr Nigel Watson concluded that "the partnership model is not dead", yet its decline has been hastened by the experience of the past two years, with the trend from GP partners (with ownership of the practice) to salaried GPs (employed by the partnership) continuing to increase yearon-year (Fig. 2).²³ Partnership has become less attractive as the differences in renumeration between partners, salaried and locum GPs has reduced. Whilst there are limitations to the partnership model, the speed of these shifts poses existential questions for the GP profession. The British Medical Association suggests that the fall in GP partners (alongside a shift in working patterns) means that the equivalent of three salaried and sessional GPs will be required to replace the comparable hours delivered by one outgoing GP partner.²⁴ Others warn that the unpredictability of demand is "not economically serviceable without the flexibility of partnership to take up the slack when problems arise". In short, the autonomy and business-motive of the partnership model results in discretionary effort which some GPs claim may not be incentivised under alternative arrangements.²⁵
- Lucina Rolewicz, 'What does the GP workforce look like now?', Nuffield Trust, 12 February 2021 [link]. For GP workforce data, see General Practice Workforce Official statistics, NHS Digital [link]
- These figures are detailed in Graham Atkins, Anoushka Kavanagh, Marcus Shepheard et al., 'Performance Tracker 2021: Assessing the cost of Covid in public services', *Institute* for Government [link]; Chantal Simon, Emer Forde & Adam Fraser, 'What is the root cause of the GP workforce crisis?', *British Journal of General Practice*, Vol. 68, No. 677 (2018), 589–590 [link]
- 20. Awil Mohamoud, 'Number of GP partners falls by over 1,000 in a year', *Management in Practice*, 2 September 2020 [link]
- 21. General Practice Workforce Official statistics, NHS Digital [link]
- 22. Mike Nosa-Ehima, 'Through the eyes of GP trainees: workforce of the future', *The King's Fund*, 16 August 2018 [link]
- 23. Nigel Watson, 'Independent report GP partnership review: final report', gov.uk [link] (p.7)
- 24. General Practice Workforce Statistics, NHS Digital [link]
- 25. 'Partnership the 4th law of the universe', British Journal of General Practice, 28 May 2021 [link]

Fig. 2 - Changes in Numbers of Full Time Equivalent (FTE) GP numbers, 2015-2022.





Note: General Practice Workforce statistics first published in current format following the creation of the workforce Minimum Data Set (wMDS) [link]

- **The premises problem** A decline in GP partners is exacerbating a pent-up premises problem. Nearly 800 GP surgeries have closed in the last eight years, forcing millions of patients to move to a different doctor.²⁶ The GP publication, Pulse, found that between 2013 and 2020, 778 practices shut their doors. Around 100 practices closed in 2020 alone. Rural locations in Devon, Cornwall and Somerset have been particularly adversely affected.²⁷ impact was raised in Watson's Partnership Review which also detailed the issue of the 'last partner standing', in which partners at a practice retire (or leave) practice over a short time period, meaning the risk and liability for the partnership ends up shouldered by a single partner. The financial risk, whether real or perceived, largely sits with premises ownership or lease holding, but is also associated with medical indemnity and the personal financial risk of an unlimited liability partnership. 28 There is also an ongoing premises quality issue. The 2017 Naylor Review into NHS property and estates stated that up to 30% of GP practices with list sizes under 4,000 patients were "unlikely to be large enough to meet the vision of person-centred care set out in the Five Year Forward View. Roughly 3,000 practices are in this position.²⁹
- **Place-based disparity** Since the founding of the NHS, the issue of regional disparity in the provision of GPs has been evident. During his speech at the second reading of the NHS Bill in 1946, Bevan claimed that "one of the chief problems… was the
- 26. Awil Mohamoud, 'Almost 800 GP practices have shut over the past eight years practice closed shut', *Pulse*, 30 April 2021 [link]
- Nick Howley, 'Britain's disappearing GP surgeries: A special report', Top Doctors, 19 July, 2019 [link]
- 28. Nigel Watson's partnership review accessible via 'Independent report - GP partnership review: final report', govuk [link] (p. 17). For a rebuttal of the review's findings, see Jessica Arnold, 'The promise of a GP partnership review has not been kept', Health Service Journal, 10 April 2019 [link]
- Robert Naylor, NHS Property and Estates: why the estate matters for patients (2017), p. 11 [link]

distribution of the general practitioner service throughout the country."30 It has been long understood that practices in areas of the greatest deprivation remain relatively underfunded, whilst possessing fewer GPs per person. Today, there is one GP per 2,761 people in Hull, compared to one per 1,688 across Oxfordshire for instance.31 A recent Health Foundation report quantifies the issue, finding that despite an increased workload for practices serving the most deprived areas, those practices receive 7% less funding per patient than those serving more affluent populations.³² The global sum allocation formula (Carr-Hill) which was introduced in 2004 has not effectively addressed this imbalance given it does not assess need. Because of a dearth of data, variation within clinical commissioning group (CCG) footprints is not captured. Recent evidence demonstrates the complexities of place-based disparities. Some systems, including West Yorkshire and Birmingham and Solihull, have managed to grow their GP numbers significantly in recent years, however, systems covering Kent and Medway, Bedfordshire, Luton and Milton Keynes, and Mid and South Essex have all seen relatively sharp declines.³³ Many places remain stubbornly 'under-doctored', despite multi-generational attempts at encouraging GP redistribution (Fig. 3). Whilst the Medical Practices Committee used to veto appointments in oversubscribed areas, more recent attempts, such as the Targeted Enhanced Recruitment Scheme have centred on financial incentives. Neither approach has made significant headway in tackling this longstanding issue.34

- 30. Bevan's speech on the Second reading of the NHS Bill, 30 April 1946, Socialist Health Association [link]
- 31. David Lynch, 'One GP for every 2,000 patients in England, survey finds', The Independent, 11 October 2021 [link]; Claire Nussbaum, Efthalia Massou & Rebecca Fisher et al., 'Inequalities in the distribution of the general practice workforce in England: a practice-level longitudinal analysis', BJGP Open, Vol. 5, No. 5 (October 2021) [link]
- 32. Rebecca Fisher & Phoebe Dunn et al., 'Level or not? Comparing general practice in areas of high and low socioeconomic deprivation in England', *The Health Foundation*, September 2020 [link]; Rebecca Fisher, Lucinda Allen & Akanksha Mimi Malhotra et al., Tackling the inverse care law: analysis of policies to improve general practice in deprived areas since 1990', *The Health Foundation*, January 2022 [link]
- Shruti Sheth Trivedi, 'The underserved areas losing more GPs', Health Service Journal, 1 February 2022 [link]
- Rebecca Fisher, 'Levelling up' general practice in England: What should government prioritise?', The Health Foundation, 21 May 2021 [link]

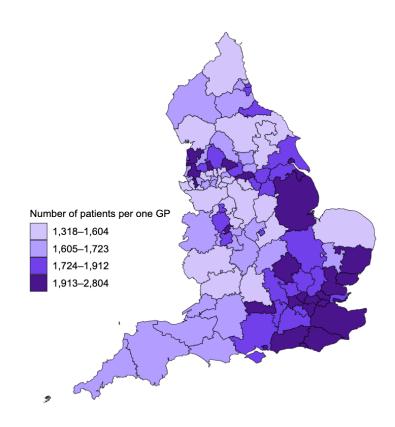


Fig. 3 - Which areas of England have the highest number of patients per GP?

Lucina Rolewicz, 'Which areas of England have the highest number of patients per GP', Nuffield Trust, 29 October 2021 [link]

Contracting - The most recent England LMCs conference called on the British Medical Association to negotiate a new GP contract. 94% of delegates believed the current GMS contract to be 'outdated and inadequate'.35 Each year, the British Medical Association General Practitioners Committee (GPC) in England and NHS Employers negotiate the terms of the GMS contract, the national standard GP contract as well as the terms of Network Contract Directed Enhanced Service (DES), 'Enhanced DES' and Quality and Outcomes Framework (QOF).³⁶ A broader framework is negotiated every five years. By their very nature, these negotiations are adversarial, pitting BMA versus the Government and NHS in which a way which is counterproductive. Moreover, these negotiations now represent a limited contingent of the modern general practice workforce - both amongst the wider GP profession, but also amongst those comprising the ARRS roles, such as clinical pharmacists and nurse associates. Moreover, there is fundamental misalignment in the incentive structures of general practice and the rest of the healthcare system. The GMS contract

^{35.} Caitlin Tilley, '94% of LMC leaders believe current GP contract 'outdated and inadequate' GP contract', Pulse, 26 November 2021 [link]

^{36.} A five-year framework for GP contract reform to implement The NHS Long Term Plan, NHS England [link]

is underpinned by capitation, standing in contrast to the fee-forservice (and the possible introduction of blended) arrangements which underpin hospital-based care, impeding the ability to deliver integrated, 'end to end' care.

Table 1 - Comparison of Current GP Contracts

Name	Description	Year Introduced	% Of Practices Holding Contract
The General Medical Service Contract (GMS)	Contract between general practice partnerships and NHS England to deliver primary care services.	2004	70%
	Negotiated nationally each year between NHS England and the General Practice Committee of the British Medical Association, the trade union representative of GPs in England. It includes:		
	The Global Sum – which covers the cost of running the practice and delivering essential services.		
	The Quality and Outcome Framework (QOF) – a quality initiative focused on public health and clinical areas such as diabetes and hypertension.		
	Enhanced services – which covers additional services that the practice may choose to provide, such as minor surgery and extended opening.		
The Personal Medical Service	Introduced to provide greater local flexibility than GMS Contract.	1998	27%
(PMS) Contract	Unlike GMS contract, often negotiated locally by CCGs		
	The PMS contract is currently being phased-out		
Alternative Provider Service (APMS) Contracts	Contract designed to commission external organisations (such as independent or voluntary sector providers) to deliver primary care services.	1998	2%
	Used to commission other types of primary care beyond 'core' general practice.		
	 Contract period of 5 – 10 years Not obligatory for employer to offer the model salaried GP contract. 		

Network	The 'PCN Contract' introduced in July	2019	n/a
Contract	2019, sets out core requirements and		
Directed	entitlements, including core funding		
Enhanced	- (£1.50 per registered patient per		
Service (DES)	year), clinical director contributions,		
	staff reimbursements, extended hours		
	access and a 'care home premium'		
	Supported by the PCN Development		
	Programme which is centrally funded		
	and locally delivered.		

The voice of General Practice in integrated care – Amidst broader changes to the organisation of healthcare services, there is concern that general practice will come to possess a weaker influence and voice in integrated care systems.³⁷ In Summer 2021, the ICS: Design Framework called for one GP provider to sit on the integrated care board that replaces CCGs as commissioners.³⁸ NHS Confederation warned that this represented a 'tokenistic offer'. 39 It is not certain that the positive elements of CCGs including a strong clinical voice and local decision-making will be maintained in the emerging structures. Only 12% of primary care leaders who responded to a Pulse survey stated they were always involved in discussions at system level; 50% stated that they were 'unclear' or 'very unclear' about the role that primary care networks (PCN) would play in ICSs. 40 Having only been introduced in 2019, PCNs have not had the time, nor space to mature as organisations, whilst their future inter-relation with GP Federations also remains unclear. 41 The requirement to clarify the responsibility and status of primary care in the new model of integrated care has now been acknowledged by NHS England. In November 2021, Chief Executive Amanda Pritchard appointed Dr Claire Fuller, CEO-designate of the Surrey Heartlands ICS, to set out the next steps for primary care, and specifically how PCNs can support ICSs to address inequalities and improve the health of the population. Dr Fuller is due to report in Spring 2022.42

^{37.} Ibid, p. 18

Costanza Potter, 'Just one GP required on ICS boards that will replace CCGs as commissioners', Pulse, 16 June 2021 [link]

^{39. &#}x27;The role of primary care in integrated care systems', NHS Confederation, 27 May 2021

^{40.} Emma Wilkinson, 'Pulse PCN: Seat at the ICS table' *Pulse*, 25 June 2021 [link]

^{41.} Nils Christiansen, 'GP Federations and PCNs: Can they co-exist?', *Dr Solicitors*, 6 August 2021 [link]

^{42. &#}x27;NHS chief announces next steps for local health systems', NHS England, 11 November 2021 [link]

Chapter 1 – A Bigger & Better Future? Current Models of General Practice

"We need whole scale change if we are to restore the jewel to its crown." 43 Clare Gerada, President, Royal College of General Practitioners

In response to the challenges faced by general practice, new models of primary care which are delivered 'at scale' have developed over the past decade (Fig. 4.) Rather than the development of a uniform approach and definition of scale, a constellation of collaborations have emerged, including 'super-partnerships', 'GP federations', 'GP networks', and 'multi-site practice organisations'.⁴⁴ Table 1 (p. 42) profiles and compares these.⁴⁵ Whilst they differ in size, structure and legal status, they are united by a similar set of goals:

- Providing first-contact care to a population size larger than individual GP practice lists;
- Making reductions in the per capita cost of care through pooling resources and expertise;⁴⁶
- Seeking to provide the conditions to support multi-disciplinary recruitment and workplaces. Multi-disciplinary teams have expanded greatly in general practice in recent years. It is a far cry from Bevan's caricature of GPs 'practicing in loneliness'. GPs now increasingly lead a larger primary care team which includes pharmacists, physiotherapists as well as non-medical professionals such as social prescribing link workers. Where effective team-working is introduced, positive clinical outcomes often follow.⁴⁷ The current Additional Roles Reimbursement Scheme (ARRS) scheme which supports these new roles seeks to recruit an additional 26,000 professionals by 2024. It should be noted however that the scheme is not currently reversing the increasing tendency for GPs to reduce hours or to leave general practice altogether. New staff often require supervision by GPs and additional training to expand their roles.⁴⁸
- Facilitating new partnerships and redesigning pathways A number of ICSs are already developing new models of care, based upon greater primary care collaboration. In West Yorkshire and

- Clare Gerada, 'General practice in crisis: stop skinning the cat', *British Journal of General Practice*, Vol. 71, No. 708 (2021), pp. 292-293 [link]
- 44. Natasha Curry & Stephanie Kumpunen, 'A guide to GP provider organisation terminology, Nuffield Trust, November 2015 [link]. Another excellent overview is Teresa Bienkowska-Gibbs et al., 'Organisational models of primary care', RAND (2015) [link]
- 45. Is bigger better? Lessons for large-scale general practice, Nuffield Trust, July 2016 [link]; Stephanie Kumpunen, Natasha Curry, Madeleine Farnworth & Rebecca Rosen, 'Collaboration in general practice: surveys of GP practices and clinical commissioning groups; Nuffield Trust & RCGP [link]; Lindsay JL Forbes, Hannah Forbes & Matt Sutton, How widespread is working at scale in English general practice? An observational study', British Journal of General Practice, Vol. 69, No. 687 (October 2019), e682–e688 [link]
- 46. James Kingsland, 'Primary care at scale', Integrated Care Journal, 4 January 2021 [link]
- 47. Gianfranco Damiani, Giulia Silvestrini & Bruno Federico et al., 'A systematic review on the effectiveness of group versus single-handed practice', *Health Policy*, 113(1-2) (2013), 180-7 [link]
- 48. 'Understanding primary care networks: Context, benefits and risks', *The Health Foundation*, July 2019 [link]

Harrogate 4,000 patients have avoided unnecessary hospital inpatient visits and received specialist support remaining in primary care after three hospitals and 64 GP surgeries established a new Shared Referral Pathway. 49

All of these collaborations are defined by a form of either 'horizontal' or 'vertical' integration. Neither concept is new. In commercial settings, 'vertical integration' describes the strategy whereby a company acquires or merges with a supplier or distributor. 'Horizontal integration' meanwhile represents suppliers of a similar type who work together seeking economies of scale. England is no international outlier in pursuing this strategy. In Canada, Primary Care Networks (PCNs) were established in 2005, consisting of groups of GPs working with other health professionals through a 'provincial health authority'. 50 In Italy, healthcare sector amalgamation has reduced the number of Local Health Units (659 in 2012) to 101 'Local Health Authorities' by 2018. 51 'Vertically integrated' health systems have become increasingly prominent in the United States (defined as hospitals and physicians who agree common ownership or joint management). A study published in Health Affairs found that between 2010 and 2016, the percentage of Californian physicians working in practices owned by a hospital increased from 25% to over 40%.52

^{49.} Ben Lawman, 'The shared referral pathway at Mid Yorkshire NHS: a joined-up approach', Hospital Times, 6th July 2021 [link]

^{50.} Primary Care Initiative: Policy Manual, Government of Alberta [link]

^{51.} Gianfranco Damiani, Domenico Pascucci, Alessandro Sindoni et al., 'The bigger, the better? A systematic review on the impact of mergers on primary care organizations', European Journal of Public Health, Vol. 31, No. 2 (April 2021), pp. 244–252 [link]

Richard M. Scheffler, Daniel R. Arnold & Christopher M. Whaley, 'Consolidation Trends in California's Health Care System: Impacts on ACA Premiums and Outpatient Visit Prices', Health Affairs, Vol. 37, No. 9 (2018) [link]

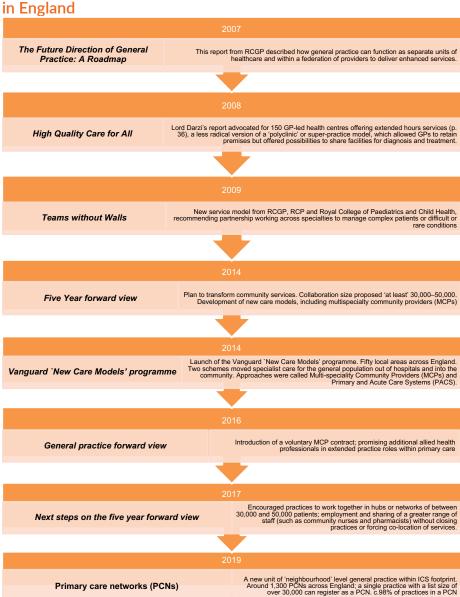


Fig. 4 – Timeline of Movement to Scaled forms of General Practice in England

There are a variety of trade-offs when 'scaling-up' general practice: all the aforementioned schemes have oscillated between mandating collaboration or encouraging voluntary uptake; some collaborations have ended up significantly larger than others. There are differing layers of scale. To enable the most effective data management and to monitor trends across a population, large, registered lists of 200,000 or more patients have been deemed optimal. However, there are advantages of keeping a registered patient population under 50,000 (and staff teams under 150 people). As Professor James Kingsland has suggested this can keep transaction costs low and to ensure that teams know each other (and their patients) to ensure 'continuity of care'. 53

^{53.} Luisa M.Pettigrew, Stephanie Kumpunen & Rebecca Rosen et al., 'Lessons for 'large-scale' general practice provider organisations in England from other inter-organisational healthcare collaborations', *Health Policy*, Vol. 123, No 1 (January 2019), pp. 51-61 [link]; see also a worldwide systematic review of the evidence of scaled forms of primary care: Gianfranco Damiani, Domenico Pascucci et al. 'The bigger, the better? A systematic review on the impact of mergers on primary care organizations', *European Journal of Public Health*, Volume 31, Issue 2, April 2021, pp. 244–252 [link]

Table 1 - How do 'at scale' forms of General Practice differ?

Organisation True	Description	Example List Size &	Contractual Arrangement
Organisation Type	Description	Population Served	Contractual Arrangement
GP Federation	A group of practices (2+) sharing responsibility for a range of functions, which may include developing, providing or subcontracting services, training and education, 'back office' functions, safety and clinical governance.	e.g., Birmingham GP Federation ⁵⁴ - 100,000 patients (17 practices)	Collaboration can be informal or formalised as a legal entity.
Super Partnership	Several partnerships merge to form a "super partnership" covering multiple sites across a wide area. The super partnership operates much like a regular partnership, albeit at larger scale.	e.g., Modality - ca. 440,000 patients (49 practices) (Note: Modality is the largest Super Partnership in the country)	Two or more practices merged to form a new partnership; individual practices may run their own GP contract; responsibility lies with 'umbrella' partnership. Practices can hold a GMS, PMS or APMS contract, but this may eventually be in addition to another structure, such as company limited by shares
Practice Network	May set common goals between practices, but operationally independent; partnership of local general practices, community care teams, and local third-sector providers	e.g., The Poplar and Limehouse Health and Wellbeing Network - Ca. 40,000 (4 practices)	Contractually independent practices, who voluntarily collaborate to deliver services across a neighbourhood
Multi-Site practices	Practice taken over by another (or organisation) which holds many GP contracts.	n/a	Single partnership with services delivered by GPs across multiple premises
GP Alliance	Group of partner-led practices, voluntarily working together across a neighbourhood or area.	e.g., Bromley GP Alliance ⁵⁵ - Ca. 378,000 patients (42 practices)	Voluntary association
Trust sub-contract / vertical integration	Venture in partnership between local GP practices and hospital trust offering a range of professional support services to primary care. In Northumbria, three local primary care partners serving over 20,000 patients were offered the choice of a range of tiered services to support their practice. Practices could determine the level of support required with regard to quality, governance and compliance, payroll management, financial services, human resources and organisational development and estates maintenance.	e.g., Northumbria Healthcare NHS Foundation Trust - 20,000 patients (3 practices)	Agreement for acute trust to deliver services to support a GP surgery. In some instances, GPs offered consultant contracts under Agenda for Change terms.

The task of each of these organisations has been to balance the benefits of scale whilst preserving the localism and 'expert generalism' of general practice. Experience from similar initiatives in the UK and internationally highlight important trade-offs. They highlight that giving GPs autonomy and engaging them in decision-making often increases the likelihood of collaborations forming successfully; however, autonomous decision-making may result in duplicated efforts and complexity of organisational forms.

Is bigger, actually better? Evidence of recent years would suggest that the

^{56.} Rebecca Rosen, Stephanie Kumpunen & Natasha Curry et al. 'Is bigger better? Lessons for large-scale general practice', *The Nuffield Trust*, July 2016 [link]

^{54. &#}x27;Improving access to General Practice: Improving access to general practice through innovative working, Birmingham', NHS England [link]

^{55.} Bromley GP Alliance [link]

official policy view is "yes". A National Audit Office report showed NHS England anticipated its new care 'vanguard' models would secure £324 million in net savings between 2018-2021 but has not continued measuring returns.⁵⁷ Each of the thirty-six 'Vanguards' predicted net savings over the five-year period to 2020/21, as shown in the table below.

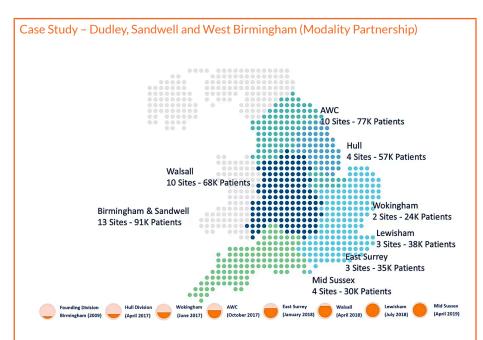
Table 2 - 'Vanguard' new care models and predicted cost savings

Model type	Net savings for every £100 spent (prediction)
Acute Care Collaboration (ACC)	£154
Enhanced Health in Care Homes (EHC)	£103
Integrated primary and acute care systems (PACS)	£96
Multispecialty community provider (MCP)	£75

Source: Developing new care models through NHS vanguards, National Audit Office, 29 June 2018 [link], p. 36

In clinical terms, when scaling works, it can reduce unwarranted variation in clinical practice, standardise procedures and improve access. More convincing however are the operational benefits scale brings: bargaining power in tendering; sharing of administrative capacity, premises, staff and facilities.

^{57.} Developing new care models through NHS vanguards, *National Audit Office*, 29 June 2018 [link], p. 36



- In March 2015, NHS England selected nine sites to become integrated primary and acute care system (PACS) "vanguards". Their aim was to provide populationbased models of care encompassing acute, primary, community and mental health services
- One of these was a collaboration between Modality Partnership, Birmingham Community Healthcare NHS Foundation Trust and Birmingham and Solihull Mental Health NHS Foundation Trust.
- Since 2009 when it was founded, Modality has expanded to become England's largest super-practice.
- In the West Midlands, primary care services offered across fifteen practices to a population size of over 70,000.
- As part of the 'vanguard' scheme, they sought to extend services and to develop multidisciplinary teams to better manage patients with complex needs.
- Challenges were however reported in attempting to pool budgets. Modality
 offered to establish a joint venture with other providers and to act as the lead
 provider (with services sub-contracted)
- Modality has continued to expand and has become one of the most effective primary organisations at embedding and scaling digital healthcare, piloting – for instance – with Mendelian and Healthy.io.

However, evidence from the UK and elsewhere suggests that the size of a primary care organisation is not necessarily a strong indicator of improved clinical performance. A recent study from the Nuffield Trust examined fifteen quality indicators across eight organisations and was unable to detect marked differences in quality of care compared to the national average, nor reductions in variation within large-scale organisations. A more recent paper published in Health Policy reached the following conclusion: while positive impact seems plausible, evidence suggests that it is not a given that clinical outcomes or patient experience will improve. There is

- 58. Charis Wei Ling Ng & Kok Ping Ng, 'Does practice size matter? Review of effects on quality of care in primary care', *British Journal of General Practice*, 2013 Sep; 63(614): e604–e610.2013 [link]; Elaine Kelly & George Stoye,
 - 'Does GP Practice Size Matter? GP Practice Size and the Quality of Primary Care', Institute of Fiscal Studies, R101 (2014) [link]
- Rebecca Rosen, Stephanie Kumpunen & Natasha Curry et al. 'Is bigger better? Lessons for large-scale general practice', The Nuffield Trust, July 2016 [link], p. 2
- 60. Luisa M.Pettigrew, Stephanie Kumpunen & Rebecca Rosen et al., 'Lessons for 'large-scale' general practice provider organisations in England from other inter-organisational healthcare collaborations', Health Policy, Vol. 123, No. 1 (January 2019), pp. 51-61 [link]: See also a worldwide systematic review of the evidence of scaled forms of primary care: Gianfranco Damiani, Domenico Pascucci et al. 'The bigger, the better? A systematic review on the impact of mergers on primary care organizations', European Journal of Public Health, Vol, 31, No. 2 (April 2021), pp. 244–252 [link]

therefore a disconnect between "the policy ambition of integration and the difference it has made to patients." We still have a limited understanding of the medium to long-term impact of these structural changes, although – crucially – it is also clear that care is not being adversely affected.

Moving forward, structural changes should have a robust, on-going performance evaluation built-in to accompany their development, so that clinical outcomes, cost savings and practitioner as well as public opinion can be measured. Early opportunities to embed these features within the new primary care network (PCN) structures were missed. With CCGs (clinical commissioning groups) being dissolved into ICSs and extended access funding moving to PCNs, some of the services currently delivered by GP Federations in recent years may be regarded – at a national level at least – as the responsibility of other organisations. It is therefore imperative that integration ensures that siloed or duplicated working is minimised.

Hospital sub-contracting and 'vertical' forms of integration

Vertical integration schemes in which GP practices deliver services, subcontracted by the local hospital trust have also emerged — notably in Northumbria, at Royal Wolverhampton, Chesterfield Royal, Royal Devon and Exeter and in West Suffolk.⁶⁴ Contrary to the characterisation of these arrangements as 'hospital take-overs', they have in fact assumed a variety of forms, and have been predicated upon consensual relationships driven by GP, community and trust leadership at a local level.

- A significant driver of vertical integration has been in instances where GP practices have been under sustained organisation pressure or at risk of closure. 65 Vertical integration has, in these instances, provided a more stable financial platform for primary care. For an example of vertical integration operating in a rural location, where GP practices are often at higher risk of closer, the recent integration of West Suffolk Hospital Trust and Glemsford Surgery in Sudbury is worth keeping under review. 66
- Vertical integration can drive service improvement. In 2015, Northumbria Healthcare NHS Foundation Trust launched a venture in partnership with local GP practices to offer a range of professional support services to primary care. Three local primary care partners serving over 20,000 patients were offered the choice of a range of tiered services: practices could in essence determine the level of support they required with regard to governance and compliance, payroll management, financial services, human resources, organisational development and estates maintenance. Since integration, one practice recorded a 76 per cent improvement in routine access times from an average of 21 days to five days. Another practice saved £6,000 in monthly expenditure. 67
- Sarah Reed & Camille Oung et al., Integrating health and social care: A comparison of policy and progress across the four countries of the UK', Nuffield Trust, December 2021 [link], p. 65
- 62. Briefing Understanding primary care networks: context, benefits and risks, *The Health Foundation*, July 2019 [link]
- 63. Nils Christiansen, 'GP Federations and PCNs: Can they co-exist?', *Dr Solicitors*, 6 August 2021 [link]
- 64. Lewis Clark, 'Shake up to Tiverton GP practice as it joins Royal Devon & Exeter NHS Foundation Trust', Devon Live, 7 December 2017 [link]; 'Tenth GP practice hands over contract to foundation trust', Pulse, 8 November 2019 [link]
- 65. Manbinder Sidhu & Jon Sussex, 'How hospitals could step in to help manage GP practices', *Health Service Journal*, 1 December 2020 [link]
- 66. 'Forward-thinking GP surgery links with local hospital to improve patient care', West Suffolk FH, 24 June 2020 [link]
- 67. Northumbria joins forces with local GPs to launch 'Northumbria Primary Care Ltd', Northumbria Healthcare NHS Foundation Trust, 25 June 2015 [link]

- Vertical integration can reduce hospital visits. Whilst the evidence base still remains fairly limited regarding the medium-term outcomes of these forms of integration, an initial evaluation of three case study sites found reductions in the rate of unplanned hospital admissions. An evaluation of the impact of the Mid-Nottinghamshire Better Together Integrated Care Transformation Programme on hospital use in Mid-Nottinghamshire also showed promising results, providing evidence of reduced A&E attendance, emergency admissions, and average length of stay. Moreover, these results occurred within three years of integration. A systematic review of the literature found that vertical integration was associated with better quality, often measured as 'optimal care' for specific conditions. Few studies have so far evaluated patient-centred outcomes.
- Vertical integration may prove most effective in driving care coordination between primary and secondary care. There are few examples internationally where care coordination between primary and secondary care has been optimally aligned, but vertical integration could make a significant difference in bridging existing divides in England. A strong rationale for vertical integration is the ability to improve immediate secondary care reporting (communication between GP practices and hospital services). Just 26% of GPs receive a report with the results of specialist consultations within one week for instance, placing the UK in eleventh place in a recent Commonwealth Fund analysis.⁷¹ GPs attending the BMA's annual England LMCs conference recently proposed a motion to explore changes to the performers' list regulations with NHS England to "allow consultant staff to deliver care within general practice". There is therefore a growing body of support within the GP profession to foster closer organisational links between primary and secondary care.⁷² Lessons could be learned from Australia, where a model for integrating primary and secondary care using video consultation has been developed whereby the GP and patient and a medical specialists co-consult. Dedicated funding has been ringfenced to deliver these services which have been trialled principally in remote areas and in residential care homes, including amongst providers of Aboriginal medical services.73
- 68. Victor Yu & Steven Wyatt et al., 'Hospital admissions after vertical integration of general practices with an acute hospital: a retrospective synthetic matched controlled database study', British Journal of General Practice Vol. 70 (699) 2020, e705-e713 [link]
- 69. Geraldine Clarke & Paris Pariza et al., 'An evaluation of the impact of the Mid-Notting-hamshire Better Together Integrated Care Transformation Programme on hospital use in Mid-Nottinghamshire: challenges and outcomes of using synthetic control methods for evaluation', The Health Foundation (September 2020) [link]
- Rachel M. Machta & Kristin A. Maurer et al, 'A systematic review of vertical integration and quality of care, efficiency, and patient-centered outcomes', Health Care Management Review, Vol. 44, No. 2 (2019), pp. 159-173 [link]
- Rebecca Fisher, Catherine Turton et al. 'Feeling the strain: What the Commonwealth Fund's 2019 international survey of general practitioners means for the UK', The Health Foundation, March 2020 [link], p. 20
- 72. Costanza Potter, 'LMCs to debate hospital consultants working in GP practices consultants', *Pulse*, 10 November 2021 [link]
- 73. Guidelines for Interprofessional Collaboration Between General Practitioners and Other Medical Specialists Providing Video Consultations, Royal Australian College of General Practitioners (2014) [link]

Case Study – Castle Place Practice & Royal Devon and Exeter Foundation Trust



- In 2018, Castle Place Practice in Tiverton merged with the Royal Devon & Exeter NHS Foundation Trust (RD&E) with the aim of boosting primary and secondary health care integration.⁷⁴
- Practice of 50 staff, with 6 Principal GPs (former Partners) and 15,000 registered patients (roughly half of Tiverton's population)
- Staff continued in existing roles, but were sub-contracted by the trust
- Castle Place co-located with hospital so possessed working relationships with Trust's community teams.
- Leadership of practice reflected challenge of recruiting GP partners and balancing time for clinical care with the demands of running a business.

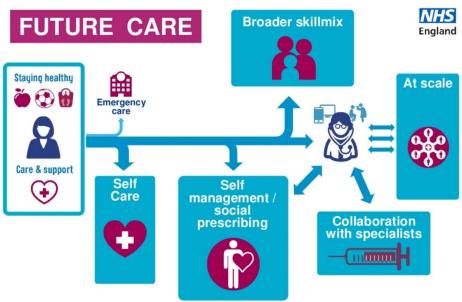
Chapter 2 – A New Model of General Practice

GPs provide relationship medicine for undifferentiated issues. That includes all common medical conditions, with GPs responsible for referring patients to hospitals and other services for urgent and specialist treatment. 90 percent of all contacts occur with a GP. That equated to over 360 million appointments in 2021 (more than 6 per year per person).⁷⁵ As it was put to us, they also act as a critical valve upon healthcare spending and can be regarded as 'financial underwriters'. This is a vast remit which rages – on top of providing consultations – from prescribing medications, leading mandatory training, producing medication reviews, administering jabs to conducting care home ward rounds. The full range of responsibilities varies from GP to GP, dependent upon the resources and personnel employed at practice-level to offer additional support, but in addition to the 'clinical' workload, partnership in particular often comes with a host of further responsibilities, including liaising with CQC as well as managing premises and human resources. As more and more GPs have sought 'portfolio' careers, non-clinical work has in many cases, expanded.

GPs perform a role which carries great intrinsic value for the NHS and its users. Much of it unseen by patients, nor compensated. Any changes to either the model within which the GP operates or to their future role needs to safeguard what they do best so they can operate at the 'top of their licence'. But GPs themselves do not agree upon exactly where these responsibilities should be limited. Some GPs worry that 'sifting off' simple, episodic work means they are left solely with complex chronic patient cases with limited appointment times to address multiple issues; others have fully welcomed approaches to delegate tasks and to share responsibility for patients with a broader team both within the practice and across a broader range of community services.

^{75.} Nick Bostock, 'General practice delivered an unprecedented 367m appointments in 2021', GP Online [link]

Fig. 6 - The Future of Primary Care



Robert Varnam, 'The Future of Primary Care', slide presented at the Practice Manager Development Conference, 9 April 2018 [link]

A model of general practice which is increasingly planned at scale and upported through greater collaboration and care coordination with specialists has been explored for some time. Dr. Robert Varnam's (Exnational director for Primary Care Improvement at NHS England) depiction of the 'future of primary care' from April 2018, sets out this vision with emphasis placed upon prevention, with self-care and social prescribing encouraged and a greater array of specialist services delivered earlier in the pathway than is currently commonplace. GPs remain the 'gatekeeper' to secondary care, but are set back in the pathway, coordinating a broader general practice team (Fig. 6). Ultimately, enabling this model would transition the primary care model at large from the 'top heavy' model of present, with the GP acting as single first contact point before triaging to a broader range of services toward a model with a 'broader base' with a broader range of entry points and offerings made at 'first contact'. See Fig. 7 for a depiction of this model.

Under the Primary Care Network DES contract, networks have been encouraged to recruit new roles to expand care teams to enable this approach, with a greater number of pharmacists, paramedics and mental health practitioners employed to broaden the general practice team. The Additional Roles Reimbursement Scheme (ARRS) which supports this approach seeks to boost the primary care workforce by 26,000 by 2024. A letter from NHS England setting out the GP contract arrangements for 2022/23 pointed to "excellent progress" towards the interim national target of 15,500 FTEs by the end of 2021/22. However our research has found however that many GPs see ARRS roles as offering limited help to manage or reduce their workloads. Too few roles have been recruited.

^{76.} Abdullah A. Alshehri & Ejaz Cheema et al., 'Evaluating the role and integration of general practice pharmacists in England: a cross-sectional study', International Journal of Clinical Pharmacy, Vol. 43 (2021), pp. 1609–1618 [link]

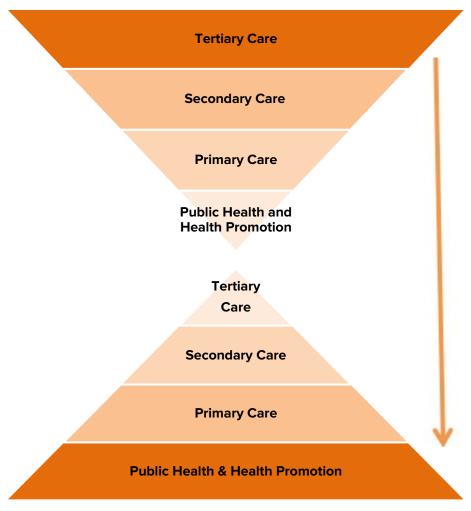
^{77.} Jess Hacker, 'Government not on track to fill 26,000 ARRS roles by 2024, claims RCGP', Pulse, 11 January 2022 [link]

^{78.} General practice contract arrangements in 2022/23, NHS England March 2022 [link]

We have also heard of instances with individuals spread too thinly across multiple sites with one community pharmacist for instance having to spread her work across seven GP practices. There is evidence that the GPs workload has in fact been increased due to the additional training to support those in ARRS roles to undertake a broader range of tasks.

As we look to adapt the role of the GP to safeguard the most valuable aspects of the service they provide, we also need to be prepared to reform the ARRS policy. The scheme's success will optimise the primary care pathway, whilst ensuring continuity of care, with GPs coordinating a broader team. Such an approach will also be advantageous as a workload control strategy which the BMA have called for in recent years.⁷⁹

Fig. 7 – The Healthcare Pyramid – transitioning from 'top-heavy to 'broad base'.



Resources, prioritisation in planning are currently 'top-heavy' despite primary care delivering the bulk of healthcare interactions. We want to encourage an inversion of this model. In future, the base of the pyramid (self-care, health promotion and remote management) should be given greater prominence.

 ^{&#}x27;Workload Control in General Practice: Ensuring Patient Safety Through Demand Management', British Medical Association, March 2018 [link]

What do GPs want?

- **A more sustainable workload**. Evidence from the British Medical Association states that the average number of patients each GP is responsible for has increased by 15% since 2015. 80 Total number of FTE GPs has failed to keep pace with increased demand. More than half of GPs have recently stated they are struggling to cope with their workload; a third state they are at 'high risk' of burnout. 81
- **GPs value autonomy and flexibility**. An increasing number are pursuing 'portfolio' careers this is an umbrella term describing GPs undertaking multiple roles during their working week. It means a greater number are reducing hours in clinical practice, but supplementing this with further medical education, opting to focus upon 'Out of Hours' work or working as a locum, where time-limited work can be lucrative. A greater number of trainees are also seeking to become GPs with Specialist Interest (GPSI, now termed 'Extended Roles'), developing specialist qualifications, such as in reproductive health or dermatology. ⁸² Similar to other professions, many younger GPs have enjoyed the flexibility which can be offered through providing video consultation sessions 'working from home'.
- **GPs want more time for clinical work and want bureaucracy reduced.** Many partners are balancing an increased workload with a greater level of bureaucracy: additional workload from GDPR changes, disputes between NHS Property Services or practice tenants and additional workload relating to CQC inspections, including the "registering and de-registering of partners, becoming a registered manager, and reported inconsistency in the inspection process for general practice". 83
- They want to build multi-disciplinary capability to coordinate primary care more effectively. An assessment of career development pathways could be enhanced with an exploration of means to create parity with roles in hospital settings. 84 This is a topic which is being explored in greater detail in a forthcoming paper from Policy Exchange.
- They want their voices heard in the design and organisation of integrated care. With 90% of healthcare interactions occurring in general practice, GPs have a unique insight into population health across the neighbourhood and should play a more prominent role in planning approaches to integrated care. As the healthcare system increases to meet need 'up stream', GPs should increasingly play a coordinating role in guiding 'care at home' and in monitoring select patients remotely as well as in the surgery.
- **GPs want the workforce to be expanded and measures introduced to retain staff.** GP recruitment has been encouraging of late: 4000 took up GP training places this year, an increase from 2,671 in 2014. There were 1,841 more full-time equivalents
- 80. 'Pressures in general practice data analysis', British Medical Association [link]
- 81. Luke Haynes, 'Third of GPs at 'high risk' of burnout as GMC reveals impact of unsustainable workload', *GP Online* [link]
- 82. Emiel J. Stobbe, Peter P. Groenewegen & Willemijn Schäfer, "Job satisfaction of general practitioners: a cross-sectional survey in 34 countries', Human Resources for Health, Vol. 19, No. 57 (2021) [link]
- 83. Dr Nigel Watson, GP Partnership Review: Final Report, 15 January 2019 [link]
- 84. Carolyn Wickware, 'Around 20 million GP appointments could be transferred to community pharmacy, says NHS England primary care boss', The Pharmaceutical Journal, 21 June 2019 [link]

in general practice in September 2021 compared with September 2019.85 Great strides are being made in boosting recruits, but focus is required upon retention: amongst trainees, the overall attractiveness of the position, compared to others in the system at large, is a "pivotal factor." 86 Whilst a limited sample, a study of a recent cohort of medical students at the University of Oxford, produced telling results. An article defined three factors which 'put them off' a career as a GP: first, a low perceived value of communitybased working and low status of general practice (linked to a prevailing medical school culture), second, observations of the wider pressures under which GPs currently work; thirdly, a lack of exposure to academic role models and primary care-based research opportunities. The report's authors recommended that medical schools should provide high quality placements in general practice and to expose students to academic role models.87 These are just some of the measures to be considered in the medical school context which influence whether GP careers are pursued, but a wide-ranging, 'end-to-end' examination of factors to retain staff whatever stage of their career they have reached needs to be considered. In the short to medium term, some more novel interventions in workforce planning should be considered. One underexplored opportunity is to boost numbers of physicians both those who have trained in the NHS and are now living abroad and those trained abroad to conduct sessions remotely (principally via video) from abroad. Considerations affecting this approach are detailed on pages 67-68.

What do consumers want?

gland, 16 November 2021 [link]

86. George Chater, Oliver Brewster & Hajira
Dambha, 'Why we don't want to be GPs: the
student perspective', British Medical Journal,

Vol. 349, 25 November 2014 [link]

85. Record number of 4,000 GPs accepted on training placements, Health Education En-

- 87. Sarah Barber, Rachel Brettell, Rafael Perera-Salazar, Trisha Greenhalgh & Richard Harrington, 'UK medical students' attitudes towards their future careers and general practice: a cross-sectional survey and qualitative analysis of an Oxford cohort', BMC Medical Education, Vol. 18, 4 July 2018 [link]; 'By choice not by chance: Supporting medical students towards future GP careers', Medical Schools Council, November 2016
- 88. Patient Access to GP Practices Report, Healthwatch Redbridge, September 2020 [link]
- 89. Beccy Baird & Anna Charles et al. 'Understanding Pressures in General Practice', King's Fund, May 2016 [link]: For a recent survey, see 'GP access review must be part of NHS COVID-19 recovery', Healthwatch England, 22 March 2021 [link]
- 'GP access review must be part of NHS COVID-19 recovery', Healthwatch England, 22 March 2021 [link]
- For services designed around their needs. Overall patient satisfaction with general practice is high, with quality-of-care often emphasised. But in recent years, fewer people have become satisfied with wait times for appointments and more patients are expressing difficulties reaching their GP practice via telephone. A recent study from Healthwatch Redbridge showed that patients were being kept on hold for ten minutes on average and it took three telephone calls to get through to practices.88 Frustration has been raised by patients feeling 'bounced around' services, such as the GP surgery, NHS 111 and even A&E, due to service fragmentation.89 As a result, a survey from Healthwatch England in December 2020 reported that around 75% of respondents reported a negative experience of accessing GP services – a figure up 20% on findings from 2019.90 Others reflect the dearth of information and support for people to self-manage or navigate the health system. There is an age-related divide to consider in perceptions of general practice too. A study from the Citizens Advice Bureau found that overall, younger patients are less satisfied with the service they receive

- from GPs than people aged 35 years and over.⁹¹ Between July and September 2021, data from the digital healthcare company, Livi, found that a substantial number of those aged under 34 (36%) would avoid going to their GP practice altogether.⁹²
- Improved provision and access to digitally-enabled healthcare **for all groups in society.** There is strong evidence of growing and consistent demand for high-quality digital healthcare to support their care.93 Whilst digital health puts healthcare 'into the hands' of the consumer, it is the existing link between practitioners and their patients that will enable (or inhibit) uptake of the best digital healthcare. 94 GPs typically recommend NHS-approved health apps to about one in 10 patients aged under 35 to help them manage their conditions between appointments, such as by reminding them to take medications or to monitor symptoms. 95 Yet they only recommend similar solutions to one in 25 patients over 55. Yet 55 per cent over 55-year-olds stated they would be happy to try using a health app (for instance) if it were recommended by their GP, while nine in ten over 55-year-olds stated that they felt satisfied or very satisfied with the experience having done so.⁹⁶ As one interviewee put it to us, there is a comparable conversation rate for clinicians 'prescribing' apps as for prescribing drugs in terms of patient uptake. There is more to do therefore to understand the desires of consumers and the types of services they are keen to use, but also scope to expand services where many patients who may not currently use digital solutions are willing to take them up to support their care through the trusted counsel of healthcare professionals.
- A participatory service, enhanced by patient feedback. In recent years, consumerism in healthcare been conflated with individualism, but a more pluralistic understanding associates it with the concept of a 'participatory' citizen. For This participatory dimension in healthcare should be further leveraged. Making greater use of real-time patient feedback can be of use and can assist professionals in service development and system reconfiguration across primary care and is one means of strengthening the consumer's say in the design of services. It should also be leveraged as a tool to measure performance: to reduce clinical variability and to improve care. Safeguards would have to be introduced however to ensure only those utilising services are able to assess services.

What does everybody want?

• To ensure 'continuity of care' is preserved. The evidence base demonstrating the value of 'continuity of care' is convincing. 100 Evidence shows that maintaining a relationship with the same doctor over many years is in fact associated with lower death rates. Seeing the same GP has also been shown to decrease the number

- 91. 'Evolving expectations of GP services: Gaining insight from the perspectives of younger adults', Citizens Advice Bureau, December 2014 [link]
- 92. Dr Harriet Bradley, 'Digital healthcare helps improve access to mental health treatment, Mobihealthnews, 15 October 2021 [link]
- 93. Simon Leigh & Rob Daly et al., 'Web-based internet searches for digital health products in the United Kingdom before and during the COVID-19 pandemic: a time-series analysis using app libraries from the Organisation for the Review of Care and Health Applications (ORCHA)', BMJ Open, Vol. 11, No. 10 (October 2021) [link]
- 94. Jens Lindberg, Robert Bhatt & Anton Ferm, 'Older people and rural eHealth: perceptions of caring relations and their effects on engagement in digital primary health care', Scandinavian Journal of Caring Sciences, Vol. 35, No. 4 (December 2021), pp. 1322-1331
- 95. Natasha Bernal, 'GPs urged to 'prescribe' apps to over 50s to tackle Britain's Ioneliness epidemic', *The Daily Telegraph*, 20 March 2019 [link]
- 96. Rosie Taylor, 'GPs think older patients cannot handle health apps on phones', *Daily Telegraph*, 24 October 2021 [link]
- 97. Glen O'Hara, 'The Complexities of 'Consumerism': Choice, Collectivism and Participation within Britain's National Health Service, c.1961–c.1979', Social History of Medicine, Vol. 26, No. 2 (2013), 288–304 [link]
- Donald M. Berwick, 'Era 3 for Medicine and Health Care', JAMA Network, Vol. 315, No. 13 (5 April 2016), pp. 1329-1330 [link]; Steve Iliffe & Jill Manthorpe; Medical consumerism in the UK, from 'citizen's challenge' to the 'managed consumer' – A symbol without meaning?', Health Expectations, Vol. 24, No. 2 (April 2021), 182-187 [link]
- 99. Elaine Maxwell, 'Patient feedback: how effectively is it collected and used?', *Nursing Times*, 16 November 2020 [link]
- 100. Hogne Sandvik, Øystein Hetlevik, Jesper Blinkenberg and Steinar Hunskaar, 'Continuity in general practice as predictor of mortality, acute hospitalisation, and use of out-of-hours care: a registry-based observational study in Norway', British Journal of General Practice, 4 October 2021 [link]

of specialist referrals made; makes it more likely that the patient will follow medical advice and increases patient satisfaction.¹⁰¹ Seeing a GP can be an emotive thing. It is not only the speed of access that people value when using primary care services; there are still many patients who have a preferred clinician. In the most recent GP Patient Survey, half of patients reported having a GP they preferred to see. 102 It is however, far too limited to define 'continuity of care' as simply seeing the same practitioner again and again (interpersonal). Continuity also exists in the transfer of information and data about you as a patient across the system (informational): a single set of x-ray scans and patient data being available to the multiple clinicians you may see across a pathway, meaning you don't have to repeat tests in different settings (also failure demand) where information has not been effectively transferred. 103 Large practices could improve continuity and reduce workloads by having patient lists 'chunked' into smaller groups of between 3,500 - 5,000 patients, meaning that scaled general practice and continuity of care should not be regarded as incommensurable. 104

Supporting continuity of care with a 'single version of the truth'

With a diversification of healthcare roles in primary care and a greater number of individuals responsible for the care of patients as well as the GP, it is essential to ensure that patient information — available through their Summary Care record above all — is visible (and where appropriate, amendable) by all members of the clinical team as well as the patient and nominated persons, such as their next of kin. The exemplar care record, depicted on the next page identifies the sections of the current record which could be amended in order to boost personalisation and continuity of care in an informational sense. Here, international best-practice should be adopted. In Estonia, citizens can 'lock' or 'unlock' their records with trust built into the system's design. Every time a patient's information is accessed, it is logged, meaning no doctor or organisation can simply access data out of curiosity without the patient knowing who has done so. As a result, just 500 people out of Estonia's population of 1.3m choose to 'close' their record each year. ¹⁰⁵

^{101.}Denis J Pereira Gray & Kate Sidaway-Lee et al., 'Continuity of care with doctors—a matter of life and death? A systematic review of continuity of care and mortality', BMJ Open, Vol. 8, No. 6 (2017) [link]

^{102.}Access to care, The King's Fund, July 2010 [link]

^{103.} Rebecca Rosen & Jonathon Tomlinson, 'How to improve continuity in general practice?' Nuffield Trust, 25 February 2019 [link]

^{104.} Jenny Cook, 'Chunking' patient lists boosts continuity of care, says GP super-partner-ship', GP Online [link]

^{105.} Amy Lewin, 'Inside Estonia's pioneering digital health service', *Sifted*, 8 July 2020 [link]

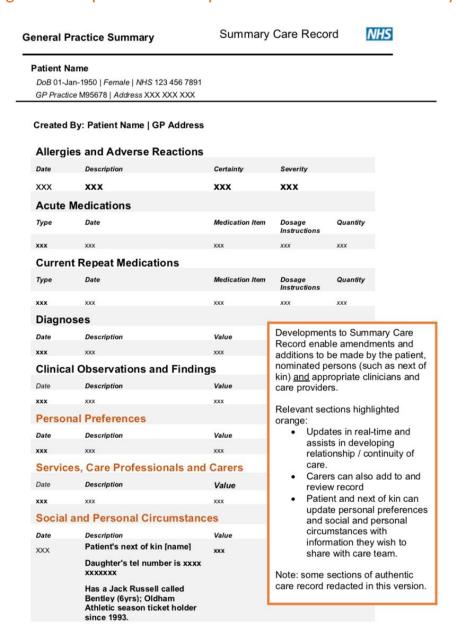


Fig. 8 - An adapted version of a patient's General Practice Summary

Detailing sections which could be switched 'on' and 'off' and could be amended by primary care team, patient and their next of kin.

• A revised approach to ensure high-volume, low acuity (episodic) work vs more complex (continuous) patient cases are effectively managed. For more complex cases and general, routine check-ups, fifteen-minute consultations should become commonplace. A study from the University of Bristol found that an average GP consultation currently includes discussion of 2.5 different problems, whilst the average consultation less than 12 minutes. ¹⁰⁶ In a survey carried out by the Commonwealth Fund in 2015, UK GPs reported the second shortest appointment length

^{106.} Chris Salisbury & Sunita Procter et al., 'The content of general practice consultations: cross-sectional study based on video recordings', British Journal of General Practice, British Journal of General Practice, Vol. 63, No. 616 (2013), pp. 751-9 [link]

- (at just 11 minutes) compared to an average across countries surveyed of 16.45 minutes. A total of 73 per cent of UK GPs said they were somewhat or very dissatisfied with the amount of time they could spend with each patient, representing the highest dissatisfaction rate of all countries surveyed. GPs are also now increasingly seeing patients with multiple long-term conditions, which requires the manage complex processes and tough decisions under increased time constraints.
- Improved integration with the wider health system. ¹⁰⁸ A growing number of GPs recognise the optimum means of managing the frail elderly and patients with complex comorbidities is through multidisciplinary teams, which can bridge the gap between hospital, general practice, and home-based care. Attempts to strengthen the links between primary and secondary care by increasingly enabling 'enhanced generalists', such as in dermatology or cardiology to work in both a hospital setting and to work sessions in general practice should be pursued. A more sustained approach to enable hospital trainees to work 'in the community' should be pursued to further strengthen this interface. ¹⁰⁹

^{107.} Robin Osborn & Eric Schneider, 'International health policy survey of primary care physicians', *The Commonwealth Fund*, December 2015 [link]

^{108.} Jennifer L Johnston & Deirdre Bennett, 'Lost in translation? Paradigm conflict at the primary-secondary care interface,' Medical Education, Vol. 53, No. 1 (January 2019), 56-63 [link]

^{109.} Clare Gerada, 'General practice in crisis: stop skinning the cat', British Journal of General Practice, 71 (708) 2021, pp. 292-293 [link]

Gearing up for the 'Global GP'

Would the Government be advised to open the door to GPs and other primary care clinical staff practicing remotely across borders?

There has been an acute shortage of GPs for many years. Emphasis upon recruitment and retention, underpinned by a reformed model of general practice which is increasingly attractive to its workforce is essential, but bolder measures should be explored to support the service. Remote consultation offers significant possibilities.

We have already made the case that video consultation—unconstrained by geography—should be a key part in attempts to 'level up' and to reduce place-based disparities in GP provision. But there are possibilities further afield too.

In November 2021, 14 per cent of all scans including X-rays and MRI scans were 'outsourced', owing to a shortage of radiologists in the UK.¹¹⁰ Whilst there is a great difference between analysis of scans and delivering remote care, is there scope to broaden the use-case of remotely delivered healthcare services?

Over 700 GPs have left the NHS over the past six years to move overseas, according to GMC figures. ¹¹¹ But remote consultation offers a route for these UK-trained doctors to deliver care in the NHS, from abroad. There are further attractions given this may also offer a route to simplify or to improve the current appraisal and revalidation system, associated with current 'Return to Practice' criteria required by doctors based abroad who wish to remain on the Medical Performer's List. ¹¹²

Strengthening international recruitment meanwhile formed one part of the NHS's Long Term Plan to ensure the service has the staff it needs in the years to come. 113 Yet there are ethical implications to such an approach. 114 A remote approach represents a more ethical means of recruitment, given practitioners can continue to serve their own local health services, but with the potential to deliver a limited number of sessions in the NHS.

Currently however, few regulators worldwide have policies relating to the cross-jurisdiction regulation of remote services. ¹¹⁵ Many of those that do exist are inter-state, i.e., between Canadian provinces or US states. The current EU Directive on electronic commerce meanwhile determines the location of a remote service for regulatory purposes to be in the jurisdiction of the service provider rather than the service recipient. In the case of video consultation, there is a case to adopt an alternative approach.

According to the US Federation of State Medical Boards, the originating site (the location of the patient) is considered to be the "place of service", and therefore the provider must adhere to the licensing rules and regulations of the state in which the patient is located. The UK has therefore – through the General Medical Council (GMC) and its international partners – an opportunity to set a new international benchmark for regulatory standards in cross-jurisdiction remote consultation according to this principle.

The RCGP and GMC recently agreed – following a mapping review of Australian, Canada, New Zealand, South Africa GP training programmes – that they possessed close similarity to those undertaken in the UK (MRCGP). All are English-speaking; some, and these countries also possess medical colleges which received Royal Assent. These factors should make these priority countries for the negotiation of mutual recognition to allow those in possession of a Certificate of Eligibility for GP Registration (CEGPR), or a special purpose licence the ability to offer remote consultations. ¹¹⁶

There are however – as the law firm, Hogan Lovells has recently set out – many legal challenges relating to the regulation of cross-jurisdiction telemedicine, foremost of which are patient consent, data privacy, physician licensure and registration requirements, enforcement, reimbursement and liability. 117 The introduction of remote physicians also reinforces the need for robust and tailored regulatory framework to manage remote consultation, so as to avoid incidents, such as the recent case of an online GP service called 'Medicines Direct' prescribing drugs remotely from Romania without a CQC registration. 118

It is likely the case that any introduction of remote cross-jurisdictional care will be a necessarily limited offering, so as to minimise clinical risk and liability in the first instance. Texas has – for instance – established an out-of-state telemedicine licence which limits practice to select services, such as patient follow-up and diagnostic test interpretation. ¹¹⁹ In the UK, a similar principle could apply, where a defined set of services are outlined, complimentary to that offered by domestic GPs, but more limited in scope.

- 110. NHS sends X-rays abroad amid acute UK shortage of radiologists', *The Financial Times*, 7 November 2021 [link]
- 111.Beth Gault, 'Hundreds of GPs have left the NHS to move overseas, new figures show GPs moved overseas', *Pulse*, 14 April 2021 [link]
- 112. 'ROAN information sheet 6: Guidance for a GP planning to spend time abroad', NHS England (November 2017) [link]; GP Return to Practice Programme 2021, Health Education England [link]
- 113.4. International Recruitment, NHS Long Term Plan, NHS England [link]
- 114. Annabelle Collins, 'The Ward Round: Ramping up international recruitment in a pandemic', Health Service Journal, 4 March 2021 [link]
- 115. Regulatory approaches to telemedicine, General Medical Council, 1 March 2018 [link]
- 116.GP International Induction Placement following the Streamlined CEGPR Process for Australia (SPA), Canada (SPC), New Zealand (SPNZ) & South Africa (SPSA), Health Education England [link]
- 117. William Ferreira & Adilene Rosales, 'Deciphering International Telemedicine Regulations', Hogan Lovells, 13 April 2020 [link]
- 118.Caitlin Tilley, 'Virtual GP service to pay £13,670 for prescribing without CQC registration', *Pulse*, 18 February 2022 [link]
- 119. 'Telemedicine in Texas', Texas Medical Association [link]

How can this model be realised?

Transitioning to a model of general practice defined by 'layers of scale' will not happen overnight. The current landscape is a mixed and flexible economy of contractual models. As we have already said, it will be important to protect what is working well whilst at the same time delivering reforms which bring general practice into lockstep with the wider NHS. This must be the direction of travel over the remainder of the decade. Specific activity will be required within the following areas:

Contracting & Reimbursement

- The Government would signal its intention for the upcoming fiveyear GP framework (2024/25 onwards) to be the final five-year contract to be negotiated with the BMA, before moving to a series of one-year arrangements ahead of an eventual phase out of the independent contractor model by the mid-2030s.
- The NHS would extend the offer of employment to all current GP Partners under the Consultant Contract in England. Partners would be offered terms that are comparable to the wage bands to hospital consultants. Career progression would be enhanced, with additional 'top ups' available for GPs wishing to take on wider responsibilities, such as Clinical Director roles. Successful at-scale models would be allowed to continue but would be commissioned by the relevant Integrated Care Board(s).
- Alternative contracting models are not a panacea however, and it
 will be important to use the transitional period to experiment with
 forms of blended payment. Any new reimbursement framework
 must be sufficiently transparent and simple to understand.

Financing

- Ahead of the commencement of negotiations for the five-year framework, a review would be commissioned to investigate the core services delivered under the GMS Contract. This would result in published, transparent estimates of the itemised costs of activity delivered. Such a calculation could form the basis of the introduction of fee-for service or blended payments, as is commonplace in other parts of the NHS.
- A shift towards employment of GPs under core consultant terms, and away from the global sum and toward item for service and blended payments, will likely incur additional costs in the short term. However, over time we would anticipate that better transparency over running costs and wages will lead to more intelligent and efficient commissioning.

Premises

- There are currently substantial risks that are associated with GPs owning a practice building (either in its totality, or through mortgage and lease liabilities)
- We believe that England should follow Scotland and transition to a new ownership model which ends the presumption that GPs should own their own premises. Over time we would expect the relevant local health public board for example the foundation trust or Integrated Care Board to take the lease. Crucially this approach would still enable private-sector investment in premises, under third party development or local improvement finance trusts.
- The transition to the new system would also address the looming thread of the expiry of current lease arrangements for the first generation of LIFT buildings at the end of the 2020s.

The GP of Today



GP Partner

- Partnership represents a business role, rather than one defined by clinical experience
- Average salary (with expenses) £105,500¹²⁰
- A full-time working week of eight sessions (each 4hr 10mins), seeing (or calling) 18-20 patients a session.
- 25% currently working 50 hours a week or more. 121
- "Jointly and severally" liable for partnership; long term commitment and responsibility for running practice as a business, but with flexibility to manage it as desired
- Risk held in partnership capital, profit share



Salaried GP

- Salary £62,268 to £93,965 (depending on the length of service and experience)
- 'Joint and several' liability does not apply to salaried GPs; not eligible to share in practice profits
- Not responsible for estates planning, nor property ownership
- Minimum terms and conditions for employment set as part of the model contract for salaried GPs

^{120. &#}x27;Why you should think about taking on a GP practice partner', *British Medical Association*, 1 November 2021 [link]

^{121. &#}x27;Reality of GP working hours more complex than 'days worked', says College', Royal College of General Practitioners, 21 November 2021 [link]

The Future GP



General Practitioner

- Salary equivalent to hospital consultants (before private practice and Clinical Excellence Awards (CEA) at Band 8c-9 according to NHS Employers 'Agenda for Change' terms.¹²²
- Basic salary £84,559 to £114,003 (determined by years of experience and qualification)¹²³
- Local and national GP CEAs, include management, teaching, research
 equivalent value as consultants, currently £3,016 to £77,320
- Feeds into strategy and policy, future planning and service development at neighbourhood and place level
- May own the business (scaled provider) or have shares option but not liable for property
- Clear option for locum work



Trainee GP

- On standard NHS GP trainee contract which provides clear pay scale and guarantee of work and training needs
- Opportunity to undertake clinical sessions in local hospital
- Opportunity to develop specialist training with hospital team
- Part of a local multi-disciplinary care teams and integrated medical care
- Involved in development of digital advances in the GP practice

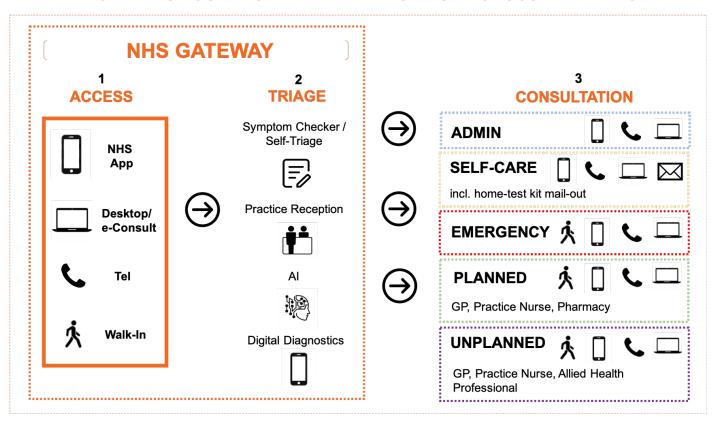
^{122.}Consultant contract (2003), NHS Employers, 8 October 2020 [link]

^{123. &#}x27;Pay scales for consultants in England', *British Medical Association* [link]

Chapter 3 – 'NHS Gateway': Reforming First-Contact in Primary Care

Fig. 9 - 'NHS Gateway'

ENHANCED FIRST-CONTACT PATIENT NAVIGATION ACROSS PRIMARY CARE



Whilst the underlying concept behind NHS Gateway was advanced independently, drawing upon the extant literature on first-contact patient navigation, this diagram amended and reproduced from a slide shared by Vincent Sai, CEO of Modality Partnership entitled 'The Digitally Enabled Learning Front-End'.

To support and enable a new model of general practice, Policy Exchange recommend the introduction of a reformed primary care pathway called 'NHS Gateway' to assist in delivering more coherent, convenient, and personalised access points at the 'front door' to the NHS, whilst enhancing

current patient triage.

In 2019, The NHS Long Term Plan set out a vision to offer digital-first primary care to all patients in England within 10 years. The ambition was to provide access to primary care services which help patients manage their own health better, enabling clinicians to focus on those with the greatest need. In her recent review of 'digital transformation' in the NHS, Laura Wade-Gery sets out a vision for a tech-enabled citizen centred healthcare service. These visions dovetail with The Council for Science and Technology's recent report, 'Harnessing technology for the long-term sustainability of the UK's healthcare system' which calls for a step-change in improving and maintaining population health, centred around digital engagement for improving health literacy and designing user-centred services alongside a re-engineering of the health system to support integrated 'pathways' for prevention and treatment. 124 A consensus has therefore emerged over the type of first contact, digitally enabled system and end-state the NHS, Government and wider health and care sector are keen to reach. 125 Achieving this vision will require investment, political focus and a vehicle for delivery. We propose: 'NHS Gateway'.

"The future tech-enabled citizen centred healthcare service is not hard to imagine. It means getting your questions answered by a trusted source at any time using your phone. And you being able to choose if the source is a customised webpage or a live person. You see your options for scheduling an appointment or a diagnostic test and you choose what works for you, avoiding the need to take a day off. Your mother's diabetes is monitored remotely and she only needs to see the diabetic nurse specialist when the data suggests her blood sugar levels are not adequately managed, removing that bus ride to the GP for the previously every 3-month scheduled check-up." 126

Laura Wade-Gery's letter to the Secretary of State for Health and Social Care, 23 November 2021

What is NHS Gateway and how would it work?

To systematically reform care navigation in primary care, NHS Gateway would first focus upon enhancements to NHS 111 and the NHS App (which now has over 24 million users) as first-contact points: the consumer will be able to check their symptoms, log conditions and to manage appointments with general practice which will remain the entry point for most users of NHS services. 127 These services would thereby become a more comprehensive place for information to help people self-triage and to manage minor conditions at home. These enhancements should also enable improved signposting to professional and person-led triage e-consultations, web platforms and telephone. It should be regarded as the consumer counterpart to GP Connect, introduced by NHS Digital in 2020 as a new system for clinicians to manage appointments and to share patient information. 128

^{124. &#}x27;Harnessing technology for the long-term sustainability of the UK's healthcare system: report', gov.uk, 23 August 2021 [link]

^{125.} See also Ben Dyson, 'Improving general practice – phase one report', NHS England, March 2014 [link] – chapter 2 sets out this ambition

^{127.}NHS App reaches 22 million users, *Health Tech Newspaper*, 7 January 2022 [link]

^{128.}GP Connect, NHS Digital [link]

^{126.}Laura Wade-Gery's letter to the Secretary of State for Health and Social Care about putting digital and data at the heart of transforming the NHS. 23 November 2021 [link]

Currently, there is scope to significantly boost the uptake and quality of the online offering to consumers: 56% respondents to the latest GP Patient survey, an independent survey run by Ipsos MORI on behalf of NHS England, claim they do not use any online services the NHS provides at all (such as booking an appointment, or reordering prescriptions). 129 42% of patients do not seek any information prior to booking a GP appointment and just 14% seek out information using an NHS online service, such as 111 online. There is huge scope therefore to encourage consumers to access the high-quality information that the NHS maintains and publishes as they seek advice and treatment. 130

Moreover, there is a need to redirect current telephone traffic from general practice receptions and NHS 111. 86% of patients currently try to book their appointments with general practice via telephone which has created conditions that many will be familiar with: the 8am scramble. 131 By comparison, between just 8-14% currently use the NHS App to book and manage their appointments. The most recent letter from NHS England to GPs, outlining proposed changes to the forthcoming annual GP contract for 2022/3, includes a call for at least 25% of appointments to be available for online booking. This would be a welcome development. 132 In the instance that patients are unable to secure an appointment on the day they call their practice, 32% don't seek any further support and will most likely try again another day, creating failure demand. Just 3% follow up with online services provided by the NHS after not securing an appointment, whilst 8% have suggested they will attend A&E, which - in most cases - will be an inappropriate clinical setting to manage their condition. 133 Whilst the option to call your GP surgery directly and to use other existing contact routes already in place across practices, such as Patient Partner (from EMIS Health), must remain in place in developing the Gateway approach, it should be underpinned by an attempt to encourage use of optimised digital channels.

^{129.} Response to Q3: Which of the following general practice online services have you used in the past 12 months?, GP Patient Survey, NHS England [link]

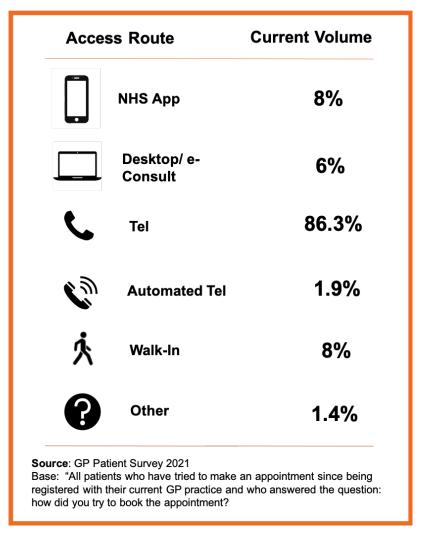
^{130.}Response to Q10: 'Before you tried to get this appointment, did you do any of the following?', GP Patient Survey, NHS England [link/link]

^{131.}Response to Q12. How did you try to book the appointment? GP Patient Survey, NHS England [link]

^{132.}Letter from NHS England to GP practices, NHS England, 1 March 2022 [link]

^{133.} Response to Q17. What did you do when you did not get an appointment? GP Patient Survey, NHS England [link]

Fig. 10 - Current Appointment Booking Methods in General Practice.



In the sample, respondents may have used a variety of channels, therefore adding to the tally of a number of channels

Under these proposed reforms, consumers would also be able to book and manage appointments across primary care and have access to improved signposting to solutions and services offered across the NHS as well as from voluntary sector and independent providers. There is a wealth of evidence that high-quality and tools such as health apps and patient portals can foster greater patient engagement and provide better support for patients, whilst effectively designed and implemented tools will deliver cost savings, improve patient navigation and reduce failure demand. There is also evidence to suggest that improving provision of tools can reduce inpatient admission if optimised.

In Rotherham, the recent introduction of the Rotherham Health App performs just this function, allowing users to assess symptoms, book and manage appointments with their GP surgery, view their medical records and test results as well as managing medications. A case study on the app

^{134.}Lisa Whitehead & Philippa Seaton, 'The Effectiveness of Self-Management Mobile Phone and Tablet Apps in Long-term Condition Management: A Systematic Review', Journal of Medical Internet Research, Vol. 18, e97 (2016) [link]; Tourkiah Alessa, Sarah Abdi & Mark S Hawle et al., 'Mobile apps to support the self-management of hypertension: systematic review of effectiveness, usability, and user satisfaction', JMIR mHealth, Vol. 6, e10723 (2018) [link]

^{135.} Geraldine Clarke, Paris Pariza & Arne Wolters, 'How are total triage and remote consultation changing the use of emergency care?', The Health Foundation, 3 December 2020 [link]

appears on p. 70.136

The NHS App should become a resource to access, download or order the best digital health tools (app solutions in particular) to support with monitoring and managing chronic conditions and to assist in encouraging healthy behaviours. Consumers should be signposted to a set of solutions which are continuously monitored for their quality by a dedicated team working within the Transformation Directorate at NHS England, working in collaboration with organisations, such as the Organisation for the Review of Care and Health Apps (ORCHA) who are already collaborating with seven ICSs across the Southwest of England. Evidence from 'Our Dorset' has demonstrated condition areas that have positive uptake across primary care, including weight management, smoking cessation and musculoskeletal condition management. 137 In December 2021, NHS England decommissioned its existing apps library, instead committing to include selections of the best solutions in dedicated sections on the NHS website. 138 This shift needs to be coupled with a reformed approach: continuous monitoring of recommended solutions and a dedicated approach to profiling the best new solutions for consumers when they are seeking out (or receiving) information about particular conditions.

In the medium term, enhancements to the NHS App would enable consumers to book (or be directed) to services beyond their local GP practice which are planned at an ICS level within their neighbourhood, including 24hr walk-in centres (co-located with A&E departments) community diagnostic hubs and the opportunity to access health and wellbeing coaches (HWBCs). High-quality video consultations should also be offered via this channel. The increasing uptake and success of remote care, such as the use of virtual wards, as a 'hospital at home' after discharge has shown great value for patients and clinical staff. Seen as a solution to hospital capacity issues, a recent evaluation reports low rates of re-admission, and reduced costs without compromising patient safety. NHS Gateway should be seen as a means to expand remote care options, including the ability to order relevant home-testing kits from approved suppliers.

Over the long term, the aim should be to create a 'smart' first contact primary care triage tool which uses Artificial Intelligence (AI) and machine learning to improve triage based upon consumer information input and data integration from connected devices and apps. Each of these would have the ability to enhance diagnosis, flag 'at risk' patients and to identify the most appropriate care pathway for a patient. This information would also feed into and improve the patient record clinicians have at their fingertips, so it increasingly becomes – as one interviewee put it to us – "a live, 'heads-up' display" and a single 'version of the truth' to work from.

NHS Gateway should be developed in such a way that milestones for its delivery echo current Government targets for digital maturity, ensuring alignment with the provision of single health and care records and minimum digital maturity across all health organisations by 2025. ¹⁴⁰ To enhance the digital offer to consumers, NHS Gateway should be tested

136.Rotherham Health App [link]

137. Seven Integrated Care Systems roll out ORCHA across the South West', ORCHA, 21 September 2021 [link]

138.NHS Apps Library, NHS Digital [link]

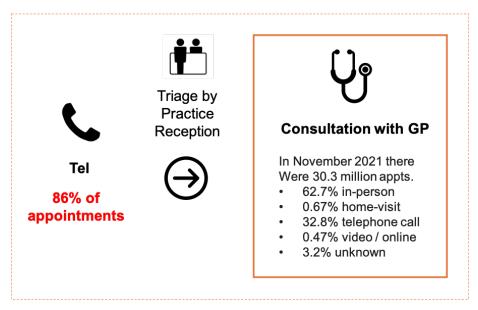
139. Jim Swift & Zoe Harris et al., 'An evaluation of a virtual COVID-19 ward to accelerate the supported discharge of patients from an acute hospital setting', *British Journal of Healthcare Management*, Vol. 28, No. 1 (2022) [link]

140. It is worth noting that the Secretary of State for Health and Social Care brought forward the target for electronic care record adoption at the HSJ Digital Transformation Summit on 24 February 2022 [link]

and optimised amongst the widest group of consumers. 'Continuity of care' should be a guiding principle in its design. As Charlotte Augst, CEO of National Voices has recently commented, triage forms should not be designed in such a way that consumers need to start their journey 'from scratch', but rather they are optimised so that this digital tool "supports an ongoing conversation".¹⁴¹

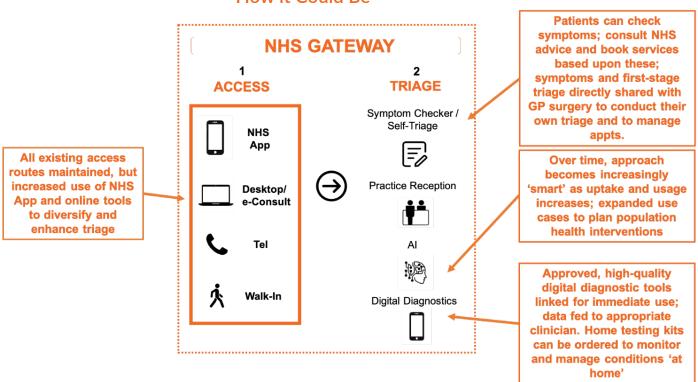
It is pertinent to note however that any redesign of the consumer's first contact must be coupled with reforms to the broader primary care service model. There is no use in introducing a new solution which simply pushes consumers around a primary care system that remains fragmented and into specialisms where staff numbers simply aren't available to support a 'smart' system. After all, this sense of being locked out, and of having to push at multiple doors – many of which may be inappropriate access points for the type of care required – has proven a major source of frustration amidst current systemic pressures.

Traditional GP Pathway



Source: Appointments in General Practice (December 2021), NHS Digital [link]

How it Could Be



Milestones to Deliver NHS Gateway

By 2024

- Ability to book all primary care appointments (physio, mental health, GP appt) online and through the NHS App
- Incorporation of condition information from NHS Website
- Approved apps and digital healthcare solutions from providers integrated or signposted
- Camera phone accepted and incorporated as diagnostic tool (e.g., UTI; dermatology)
- Signposting & patient navigation information (e.g., for planned procedures "My Planned Care") integration.¹⁴²

By 2026

- Data linked to allow 'single version of the truth' through App, linking primary and secondary care.
- Data from symptom input used to analyse population health, proactive detection localised events, feeds into pandemic planning and response.
- Access and book services delivered by community, or secondary care direct (negating need for GP referral)

A new way of thinking?

Several initiatives have sought to transform entry points to the NHS in recent years. The Rotherham Health App is a good example and is already demonstrating benefits to consumers and practitioners alike. However, in the longer term, it is sensible to try to bring initiatives such as these – developed through local and place-based initiative, in-house as part of a single technological offering (albeit with directions in the app to other apps and websites)

Case Study - Rotherham Health App



The Rotherham Health App allows users to assess symptoms, book and manage appointments with their GP surgery, ability to view medical record and test results and to manage medications.¹⁴³

Developed by 'Substrakt Health', with the Rotherham Clinical Commissioning Group and The Rotherham NHS Foundation Trust, the app was rolled out to every GP practice in the town and available to a patient population of around 260,000 people.

New functionality enables patients to see details of their hospital appointments as well as contact information for the relevant department if they need to change or cancel it.

According to Dr Richard Cullen, a GP and chair of CCG, since ability for consumers to self-refer to maternity services went live late last year, GP practices had saved hundreds of hours of admin time by reducing unnecessary appointments and the paperwork associated with the referrals.

App is also positioned as a way of reducing the 7-8% of outpatient appointments at the trust which were previously being missed per month, due to effective reminders issued from the app.¹⁴⁴

Four pilot schemes launched by NHS England in 2017 have also recently aimed to address urgent care demand by seeking to move demand for the NHS 111service to apps and websites, partly predicated on the successful launch of a symptom-checker Australia, which after launching in 2014 led to an estimated 33 per cent reduction in the predicted volume of calls within three years. 145 Pilots took place in Leeds (NHS Pathways Online) 146, Suffolk (Expert 24, branded as NHS 111 Online) 147, North London (Babylon) and the West Midlands (Sense.ly, branded as Ask NHS). The Health Innovation Network conducted a review, but its findings have not been made publicly available. 148 Among those patients that used NHS 111 Online, one in five were transferred to its telephone service. Overall, the online service was about as likely to refer patients to urgent care as the phone line, and slightly more likely to recommend self-care.

To date however, none of these offerings have been scaled on consistent basis throughout the NHS. ¹⁴⁹ The ability to move significant volumes of user interaction to a popular NHS-led digital channel should provide an impetus for innovation whilst stimulating deeper patient engagement. ¹⁵⁰

- 145.Ben Heather, 'One in three NHS 111 queries could be handled by algorithms', *Health Service Journal*, 12 January 2018 [link]
- 146.NHS Pathways, NHS Digital [link]
- 147.Laura Stevens, 'NHS 111 Online trial launched in Suffolk', *Digital Health*, 18 April 2017 [link]
- 148.NHS 111: Question for Department of Health, tabled on 21 December 2017 [link]
- 149. Stephen Armstrong, 'The apps attempting to transfer NHS 111 online', *British Medical Journal* (2018); 360 [link]. Approximately 13 million calls are made annually to the NHS 111 advice line.
- 150.Marco Ricci, 'Chatbot will help deal with calls to NHS 111', *Pharmaphorum*, 5 January 2017 [link]
- 143. Rotherham Health App [link]
- 144.Cora Lydon, 'App which links primary and secondary care is launched in Rotherham', Digital Health, 16 February 2022 [link]

Case Study - Ask NHS



About

- Positioned as a "front end" for use prior to seeking "higher-touch" primary or urgent care services;
- User interface includes a 'virtual health assistant' with voice recognition and chat functionality.
- Includes validated third-party clinical decision support system to signpost consumers. NHS Choices, Local Directory of Service and GP booking were integrated
- Available as mobile app in the West Midlands; more recently rolled out to selected surgeries across London and Buckinghamshire

Results

- Launched in April 2017 now has more than 200,000 registered users.
- As of July 2021, also provides information and connections to additional primary care services including opticians, physiotherapists, and dentists.
- Symptom-checking is most popular use case for app
- 51% of interactions occur when GP practices are closed.
- 41% of uses resulted in a "reduced or eliminated telephony requirement" during pilot.
- Patient symptom information can be transferred allowing urgent care providers to avoid repeating symptom-checking questions over the phone;
- According to post-usage survey data, Ask NHS saved the NHS 14.4% of spend by shifting patients to lower cost, more efficient services.

"Ask NHS" is just one example of a tech-enabled first-contact solution for primary care. ¹⁵¹ A number of studies have explored the effectiveness and usability of 'conversational agents' across care settings. ¹⁵² Stein et al. developed an AI-driven, and fully automated conversational health coaching app for obese adults. ¹⁵³ Results of their studies showed AI application could help the participants to achieve weight loss comparable to in-person lifestyle interventions. In some use cases, chatbots may in

- 151.Adam Baker, Yura Perov & Katherine Middleton et al., 'A Comparison of Artificial Intelligence and Human Doctors for the Purpose of Triage and Diagnosis', Frontiers in Artificial Intelligence (2020) [link]. It is worth noting some interesting international examples here, such as Ping An's 'one-minute clinics', small booths or pods, powered by Al: Dean Koh, 'Ping An Good Doctor launches commercial operation of One-minute Clinics in China', Mobihealthnews, 7 January 2019 [link]
- 152. Alex Burns, 'Where is the evidence for automated triage apps?', British Medical Journal, 28 February 2018 [link]; Adam Baker et al., 'A Comparison of Artificial Intelligence and Human Doctors for the Purpose of Triage and Diagnosis', Frontiers in Artificial Intelligence, 30 November 2020 [link]; Natascha C. M. Verzantvoort et al., 'Self-triage for acute primary care via a smartphone application: Practical, safe and efficient?', PLoS One, Vol. 13, No. 6 (2018): e0199284 [link]
- 153.Stein N, Brooks K, 'A Fully Automated Conversational Artificial Intelligence for Weight Loss: Longitudinal Observational Study Among Overweight and Obese Adults', *JMIR Diabetes*, Vol. 2, No. 2 (1 November 2017) [link]

fact be preferable where disclosure of personal information is sensitive or particularly challenging. Chatbots are less acceptable for health issues of higher severity, however. Some of these tensions were borne out in a review of a pilot of Babylon's first-contact patient triage trialled in Hammersmith and Fulham CCG. 154 As one study has recommended, future research should establish a set of topics and pathways which may be most suitable for chatbot-led interventions. 155 Given the volume of first contacts which occur in general practice, the potential for AI and machine learning tools to 'learn and recalibrate (and to benefit from the greater context-sensitivity that neighbourhood services provide) to become a smart tool, represents a significant opportunity and use-case for greater adoption.

- 154. Ipsos MORI & York Health Economics Consortium, Evaluation of Babylon GP at hand: Final evaluation report (May 2019) [link]
- 155. Madison Milne-Ives, Caroline de Cock & Ernest Lim et al, 'The Effectiveness of Artificial Intelligence Conversational Agents in Health Care: Systematic Review', Journal of Medical Internet Research (22 October 2020), e20346. [link]; Mary Carter, Emily Fletcher & Anna Sansom et al., 'Feasibility, acceptability and effectiveness of an online alternative to face-to-face consultation in general practice: a mixed-methods study of webGP in six Devon practices', BMJ Open, Vol. 8, No. 2 (15 February 2018:e018688 [link]; Oliver Miles, Robert West and Tom Nadarzynski, 'Health chatbots acceptability moderated by perceived stigma and severity: A cross-sectional survey', Digital Health, 7 December 2021 [link]
- 156. Poompong Sripa, Benedict Hayhoe & Priya Garg, 'Impact of GP gatekeeping on quality of care, and health outcomes, use, and expenditure: a systematic review', *British Journal of General Practice*, Vol. 69, No. 682 (2019), pp. e294-e303 [link]
- 157. Evaluation of the treatment of adult women under 65 years presenting with symptoms of uncomplicated urinary tract infections in community pharmacy using home-based urinalysis testing, East Midlands Academic Health Science Network, July 2020 [link]

158.Ibid., p. 5

- 159. Valerie L. Forman-Hoffman, Joseph C. Kvedar, Kristian Ranta, 'Potential Benefits of Remote Continuous Care for Depression', International Journal of Digital Health, Vol. 1 No. 1 (2021), p. 15 [link]
- 160. Joost Johan Godert Wammes, Patrick Paulus Theodoor Jeurissen & Lise Maria Verhoef et al., 'Is the role as gatekeeper still feasible? A survey among Dutch general practitioners', Family Practice, Vol. 31, No. 5 (October 2014), 538-544 [link]
- 161.Of interest is evidence shared by Ed Turnham, CCIO & Clinical Advisor for Digital Strategy, Norfolk & Waveney CCG, Twitter post, 30 May 2021 (21:39) [link]
- 162.Nadeem Badshah, 'Amazon Prime mentality' blamed for crowds at A&E, GP says', *The Times*, 26 October 2021, [link]
- 163. Denis Pereira Gray, Molly Dineen & Kate Sidaway-Lee, 'The worried well', British Journal of General Practice, Vol. 70, No. 691 (2020), pp. 84–85 [link]

What are the benefits?

NHS Gateway supports a reformed gatekeeping model and pathway redesign in primary care. Traditional gatekeeping has been associated with lower healthcare use and expenditure, producing high-quality care, but lower patient satisfaction. 156 NHS Gateway encourages a model which reforms the gatekeeper function of the GP, making greater use of self-care and home-testing so needs can be met upstream and some consultations avoided entirely as patients can are directed toward more appropriate care pathways directly to community services and secondary care. 157 In the case of urinary tract infections (UTI) which currently account for 1-3% of all GP appointments each year (between 3-10 million), a recent evaluation of Healthy.io's Dip UTI solution demonstrates how community pharmacy can safely treat UTIs without the need for a GP consultation through the use of a simple home-test. 158 There are some pathways meanwhile where it may be appropriate following an initial consultation to become digital-bydefault. Mental health and chronic disease management are two examples where there is particular scope. 159 Continuous, asynchronous solutions also have the potential to relieve some of the capacity problems exacerbated by face-to-face care, but a balance will ultimately be required. 160

It has been claimed that such an approach may simply increase demand: boosting the provision of diagnostics, emboldening the 'worried well' to pursue further consultation where it may not necessary, or demand increasing due to the ease of access to services generated by solutions which bring NHS services to their fingertips. It has been presumed this is the result, but the evidence base is limited. Recent evidence – albeit only a narrow sample – shared by Ed Turnham, CCIO & Clinical Advisor for Digital Strategy at NHS Norfolk & Waveney CCG demonstrates that the picture is more complex, with patients not simply flooding the NHS with demand because they have improved access. ¹⁶¹ Ultimately, NHS Gateway would represent an attempt at bridging the divide between the notion the 'worried well' place an unmanageable strain upon the system because of an "Amazon Prime mentality". ¹⁶² It instead recognises growing consumer expectation and treats a consumer approach as constructive in the redesign of services. ¹⁶³

It presents an opportunity to improve the way we record and tackle

demand in the system. In our previous research, Policy Exchange has emphasised the issues that 'failure demand' places upon the NHS: the cost created by poorly designed services which create pressures elsewhere in the system. For example, an unclear appointment letter can lead to extra phone calls from patients for clarification from members of staff elsewhere in the system, or appointments being missed altogether. ¹⁶⁴ In most service organisations, 'failure demand' represents the greatest lever for performance improvement. In financial services, it can account for "anything from 20 to 60 per cent of all customer demand". ¹⁶⁵ NHS Gateway is envisaged as a potential solution to a significant source of present 'failure demand' in the system: fragmentation of existing services and a flawed infrastructure of "insufficient and disconnected triage". ¹⁶⁶

Mis- or ineffective triage in primary care is a significant challenge, in attempting to improve it, it should become more consumer-friendly. By providing users a handful of easy-to-answer questions on their condition and history, automated symptom checkers and triage chatbots can direct consumers toward an appointment booking service, a telehealth visit with a remote clinician or key information that the user can use to make informed decision regarding their personal health.¹⁶⁷ The benefit to creating an entry point is that the equivalent of an online total triage is good for analysis of demand, since all a greater volume of demand entering the system is captured.

Currently, demand in general practice is neither well understood, nor systematically recorded and analysed. 168 For instance, for this research we found no studies which broke down the use of general practice by patients, broken down by complaint, resolution and other metrics such as length of consultation. Whilst some alert systems have been integrated over the past two years to flag acute pressures, many practices report they do not have the time to report upon demand patterns, whilst LMCs collect information on an individual practice and voluntary basis, meaning there is no unified understanding of pressures nationwide. Nor are there common definitions of what constitutes extreme pressure or unsustainable demand. Lacking this information is a major shortcoming and makes general practice an outlier compared to the rest of the NHS. Establishing an equivalent to the Operational Pressure Escalation Level (OPEL) framework which is used in hospital settings should be established across general practice alongside a national framework so that demand patterns can be more effectively reported and understood. In Surrey Heartlands, this is an approach is currently being trialled, but should become commonplace.

There are a wide variety of interventions which could follow to improve general practice through a more thorough examination of 'failure demand'. That could entail examining means to ensure fewer patients are 'bumped' between services: the practice reception, NHS 111 and A&E (which in turn creates further demand given their patient history and testimony does not travel with patients as they interact with each new part of the system, meaning they have to explain themselves again and again). 'Failure demand' could also mean addressing the number of 'did

- 164.Robert Ede & Sean Phillips, 'A Wait on Your Mind', *Policy Exchange* (July 2021) [link]
- 165. Paul Walley, Pauline Found & Sharon Williams, 'Failure demand: a concept evaluation in UK primary care', International Journal of Health Care Quality Assurance, Vol. 32, No. 1 (2019), pp. 21-33 [link]
- 166.According to Dr. Murray Ellender, GP partner and founder of eConsult, cited in Martin Barrow, 'Why the NHS needs more than a funding boost to save it', *Raconteur*, 15 December 2021 [link]
- 167. Dave Muoio, 'Al triage tools won't empower consumers without mastering convenient, personalized service', *Mobihealthnews*, 26 April 2019 [link]
- 168. Currently, NHS Digital publishes data which creates only a partial picture of demand, recording number of appointments, whether they were 'same day', the setting of appointment (face-to-face, video etc.) and which professional has seen a patient by type. See 'Appointments in General Practice', NHS Digital [link]

not attend' (or DNAs) in general practice. In 2019, NHS England reported that "missed GP appointments cost millions", calculating that 5% — more than 15 million — appointments across primary care were missed every year, of which 7.2 million were GP appointments. That equated to 1.2 million GP hours, with estimated NHS costs of £216 million annually. ¹⁶⁹ In tackling this, an approach whereby appointment data was shared with patients produced a significant reduction in missed appointments. As one study has recently put it, to reduce non-attendance, "the appointment system needs to change, not the patient". ¹⁷⁰

It can assist in expanding timely and appropriate access, underpinned by a focus upon digital health. Dr Tim Ferris, NHS England's Director of Transformation has recently stated that the NHS must not "turn off the old channels" when creating new "digital channels". This is a central challenge for policymakers. 171 There will, after all, be patients for whom remote consultation is less suitable: the very unwell or those with highrisk conditions; those who have difficulty communicating; have complex health; want or need a physical examination; need supervised check-ups, or do not own, or wish to use a smartphone to access services. Yet there is a tendency in the discussion to frame digital healthcare as a means of displacing existing entry routes. As a recent article puts it, "the drive towards digital health solutions may exacerbate social inequalities due to the displacement of any other solution by digital solutions."172 This need not be so, whilst the evidence to support causal links between increased digital healthcare provision and greater healthcare inequality are often more complicated. Prior to March 2020, patients in regions with more deprived populations were less likely to have access to and to use remote consultation routes to access their GP, but these gaps were reduced during the pandemic as general practice swiftly transitioned to a model of total triage. 173 The debate over the use of digital healthcare is meanwhile often pitched as a battle between convenience and continuity. This is a false dichotomy, given continuity of care can be built into high-quality remote consultations with patients given the option to choose a named doctor they may already have seen and through the consistent use of their information across healthcare settings.

- 169. 'Missed GP appointments costing NHS millions', NHS England, 2 January 2019 [link]
- 170. Tom Margham & Crystal Williams et al., 'Reducing missed appointments in general practice: evaluation of a quality improvement programme in East London', British Journal of General Practice, Vol. 71, No. 702 (2021), e31-e38 [link]
- 171.Reported from *Health Service Journal* Twitter feed, 16 November 2021, 10:51 AM
- 172.Emma Rich, Andy Miah & Sarah Lewis, 'Is digital health care more equitable? The framing of health inequalities within England's digital health policy, 2010–2017', Sociology of Health and Illness, Vol. 41, No. 1 (2019), 31-49 [link]
- 173. Supplementary Appendix in Mark A Green, Martin McKee & Srinivasa Vittal Katikireddi, 'Remote general practitioner consultations during COVID-19', The Lancet Digital Health, Vol. 4, No. 7 (January 2022), p. e7 [link]

Chapter 4 – Strong Foundations: General Practice & Digital Transformation Across the NHS

Digital healthcare is no longer a niche channel of healthcare delivery. The experience of the past two years in responding to a global pandemic has catalysed the uptake of remote health services, including downloads of the NHS App and e-prescription services, to the greater use of telemedicine platforms for remote consultation, wearables and at-home tests to monitor conditions or provide samples for clinical review.¹⁷⁴

Today, the use of digital healthcare spans every part of the patient pathway with many solutions acting as medical devices in their own right. There has also been a marked shift in the 'acceptability' of digital healthcare. According to a recent survey, whilst 65% of Americans were unsure about the quality of telehealth in March 2020, just one year later, almost 90% said they wanted to keep using telehealth for non-urgent consults after the pandemic, and 80% said it would be possible to receive quality care virtually. ¹⁷⁵

The benefits digital healthcare brings are multifaceted. It can save consumer and clinician time and money whilst enabling consumers to feel more informed and engaged in the management of their health and providing a more comprehensive (and continuous) portrait of health. ¹⁷⁶ Digital healthcare also creates opportunities for more equitable access to healthcare that is high-quality but unconstrained by geography, meaning it can be a tool in tackling place-based disparity in GP access. There are possibilities meanwhile to draw insight from data deriving from the more than 350 million GP appointments delivered in England each year to inform approaches to population health and clinical research. Talking about the 'potential' of digital healthcare is a cliché. Solutions are already at our fingertips, are delivering value for money, convenience and meeting the highest regulatory standards.

Yet a sustained focus upon ensuring the effective integration, scaling and management of digital healthcare across general practice is required. As the entry point to the NHS for the vast majority of patients, general practice – and primary care at large – is the part of the healthcare system that has the most to gain from seizing the opportunities digital healthcare presents. Driving transformation here can provide the template – and act as a foundational layer – for embedding digital healthcare across the NHS at large.

^{174.} Rachel Hutchings, 'Briefing: The impact of Covid-19 on the use of digital technology in the NHS', Nuffield Trust, August 2020 [link]

^{175.} How Americans Feel About Telehealth: One Year Later, Sykes, March 2021 [link]

^{176.}Nicola Blackwood, The Promise of Health-Tech, *Public.io* (2018) [link]

The Government has long understood these possibilities. Indeed, 'digital transformation' — an umbrella term which encompasses topics ranging from data sharing to IT security, the regulation of digital products, and their procurement — has been regarded a priority for all recent Health Secretaries and ambitions for delivery have been high. In 2016, the Wachter Review concluded that "it would be reasonable to expect all Trusts to have achieved a high level of digital maturity by 2023.¹⁷⁷ Whilst the best hospitals in the world, such as Sheba Medical Center in Israel have been 'paperless' since 2004, up to one-fifth of trusts in England still use paper based-systems according to evidence given by the current Chief Executive of the NHS at a recent select committee hearing.¹⁷⁸ Some are still using fax machines.¹⁷⁹ There is therefore a 'digital divide' both between consumers (which we shall shortly consider), but also between organisations within the NHS.

Yet 'digital transformation' defined principally in technological terms has historically been a siloed part of the NHS's operational and strategic agenda, often perceived as 'someone else's problem'. This is why Matt Hancock established NHSX in July 2019, a non-statutory body. Yet the Public Accounts Committee recently reported it remains "far from convinced" that the NHS had learnt lessons from previous nationalled approaches to 'transformation'. A National Audit Office report published in May 2020 meanwhile claimed NHS digitisation goals lacked clear plans, governance, and accountability. There are comparative challenges here with similar attempts to digitally transform Whitehall departments as Policy Exchange explored in its recent report, Government Reimagined. Reimagined.

The pandemic has prompted a revaluation of national strategy. The Wade-Gery review, published in November 2021 concluded that "the centre of the NHS (defined as NHSE&I, X and Digital), as currently constituted... remains too far away from being able to achieve the goal of a digitally enabled health system that makes use of modern technology and data sharing to create joined up services to support all citizens and improve outcomes," thereby recommending that NHSX and NHS Digital are folded into a Transformation Directorate in NHS England to create "fewer competing voices", as one interviewee put it to us. Recent organisational reform has been coupled with additional investment: £2.1 billion was committed to invest in IT, technology and digitisation of the NHS in the most recent Spending Review, coupled with new funding arrangements proposed by NHSX to allocate digital funding directly to ICSs from 2022/23. 186

'Digital transformation' has thus far emphasised the 'digital', but 'transformation' has been lacking; digitisation has proceeded in many parts of the NHS, but it has often been in the form of a transfer – a shift from paper referral letters to digital ones, but where fundamental processes remain unchanged, bar the channel of delivery. Achieving 'transformation' is clearly not just about technology. Progress depends on reforming the overarching infrastructure – culturally as well as technologically. The

- 177. Robert M. Wachter, 'Making IT Work: Harnessing the Power of Health Information Technology to Improve Care in England', Report of the National Advisory Group on Health Information Technology in England [link]
- 178.Sheba Medical Center [link]; Hannah Crouch, 'Health committee urges government to 'further progress' NHS digitalisation', Digital Health, 7 January 2022 [link]
- 179.'NHS told to ditch 'absurd' fax machines', BBC News, 9 December 2018 [link]
- 180.NHSX: new joint organisation for digital, data and technology, gov.uk, 19 February 2019 [link]
- 181.Digital transformation in the NHS: Twenty-Second Report of Session 2019–20, *Public Accounts Committee*, 2 November 2020
- 182.Digital transformation in the NHS, *National* Audit Office, 15 May 2020 [link]
- 183.Benjamin Barnard, Government Reimagined: A Handbook for Reform, Policy Exchange [link], p. 19
- 184.A good overview of recent developments in digital transformation in the UK is Aziz Sheikh & Michael Anderson et al., 'Health information technology and digital innovation for national learning health and care systems', The Lancet Digital Health, Vol. 3, No. 6 (June 2021), e383-e396 [link]
- 185. 'Laura Wade-Gery's letter to the Secretary of State for Health and Social Care about putting digital and data at the heart of transforming the NHS', gov.uk, 23 November 2021 [link]
- 186. 'Autumn budget and spending review 2021: what you need to know', *British Medical Association*, 30 November 2021 [link]

Topol Review (published February 2019) identified a number of factors in this regard, including ensuring that adequate provision is made to train and boost healthcare workforce expertise in digital healthcare and to encourage attempts to decrease the 'digital divide' between older and poorer groups in society.¹⁸⁷ A recent comparative study of approaches to 'digital transformation' by a variety of European countries by the Nuffield Trust emphasises these factors as central to success.¹⁸⁸

National direction, local delivery

The Transformation Directorate in NHS England should seek to clarify its strategic approach and priorities, including defining the role that personnel and expertise from NHSX and NHS Digital will perform within it at the earliest opportunity. The recent 'in housing' of the functions of Health Education England, NHSX and NHS Digital within NHS England and its Transformation Directorate represents an opportunity to ensure that there is unity at the national level for the delivery of 'digital transformation' in the NHS to ensure their work is mainstreamed, but without clarity of how this centralisation will mitigate against crossworking and will break down silos, challenges regarding the focus and accountability for the delivery of digital transformation will persist.

At a national level, the current challenge is less stimulating innovation in digital healthcare – there is a mature network of world-leading universities and accelerator programmes which are aiding innovators and start-ups bring innovative digital health solutions to market, but what has proven more challenging is scaling the best of these within the NHS; 'translating' innovation into mainstream clinical practice. A reformed approach to the ways we replicate and scale the best solutions is required.¹⁸⁹

Organisational fragmentation is a significant barrier to innovation in the NHS, a problem exacerbated by current approaches to appraisal as one recent study puts it - that "are not sufficiently agile for rapidly evolving technologies or proportionate for SMEs". We have therefore, the "proliferation of eHealth technologies at the local level, very few of which are formally evaluated and more widely marketed". It concludes: "this leads to localisation in roll-out, inequalities in access and replication of investment in different local areas". These variations also create additional demands upon companies who may - for instance - have to pay for several application programming interfaces (APIs) for an identical product.¹⁹⁰ Speaking to independent providers, you will hear anecdotes that because a particular product has not been developed or evaluated - or if it does not have a clinical champion within a particular organisation – it is thereby unsuitable.¹⁹¹ Failure to solve these problems harms UK Plc, but more importantly, it means that patients do not benefit from access to the best solutions. Digital health is not alone in facing these challenges, as Kate Bingham has recently identified. 192

To make the most of the opportunities of scale that the NHS presents as a universal healthcare provider, the Transformation Directorate should seek to improve the interface (of information, personnel) between

- 190. Sheena Asthana, Ray Jones & Rod Sheaff, 'Why does the NHS struggle to adopt eHealth innovations? A review of macro, meso and micro factors', BMC Health Services Research, Vol. 19, No. 984 (2019) [link]
- 191.Sophie Castle-Clarke, Nigel Edwards & Helen Buckingham, 'Falling short: Why the NHS is still struggling to make the most of new innovations, The Nuffield Trust, 13 December 2017 [link]
- 192. Kate Bingham, 'Britain is driving away innovators in life sciences', *The Times*, 22 November 2021 [link]

^{187.} The Topol Review, *Health Education England*, February 2019 [link]

^{188.} Rachel Hutchings, Nigel Edwards and Sarah Scobie, 'Fit for the future: What can the NHS learn about digital health care from other European countries?' *Nuffield Trust*, November 2021 [link]

^{189.}Trisha Greenhalgh & Chrysanthi Papoutsi, 'Spreading and scaling up innovation and improvement', *British Medical Journal*, 365 (2019) [link]

national leadership, ICSs, trusts and PCNs. NHSX has set the tone in recent months with the August 2021 'What Good Looks Like' (WGLL) guidelines containing seven success measures.¹⁹³ The 'Unified Tech Fund' published in September 2021 meanwhile link existing pots of national tech funding into a single space, to make the applications process easier for innovators; the recently published 'Delivery Plan' sets out proposals to create a single API.¹⁹⁴ These are the building blocks for the creation of a coherent set of digital standards and reimbursement routes, meaning vendors can "plug and play".

It is sometimes remarked that the countries which have been most effective in 'digitally transforming' their healthcare system are smaller-scale, and therefore more easily integrated – such as Estonia with its population of 1.3 million, where an e-Prescription system links to every pharmacy and hospital in the country, and its e-Ambulance service can locate phone requests for an ambulance within 30 seconds. ¹⁹⁵ It is worth noting however, that despite the size and complexity of the system in England, this footprint is similar to ICSs which shall be placed onto a statutory footing with the passage of the Health and Care Bill.

'Digital transformation' requires strong leadership (both clinical and non-clinical) throughout the system. For individual organizations, the recent WGLL guidelines emphasise ensuring digital and data expertise as well as board-level accountability for digital transformation is developed across organisations. ¹⁹⁶ It may be appropriate for a trust to appoint a 'Chief Innovation Officer' or for an integrated care board to appoint a designated 'Innovation Lead' in addition to Chief Information Officers, whose remit will already encompass IT services and cybersecurity, for instance, but rather than a focus upon defining roles and pushing for uniformity, each part of the NHS should instead be able to point to those responsible for leading upon specific elements of digital transformation in their organisations. ¹⁹⁷

The Wachter (2016) and Topol (2019) reviews recognised skill-gaps both among front-line healthcare practitioners, senior-management and back-end officers in digital transformation. As a result, the Wachter Review led to the establishment of the NHS Digital Academy, delivered as part of Health Education England. This represents a successful, yet limited offering to the NHS workforce. A more systematic approach to embedding digital learning in training pathways is required. In the case of GPs, data analytics and remote consultation training should be incorporated within core GP training. 199

Within the Transformation Directorate, a 'taskforce' should be established to provide tailored support to ICSs, trusts and primary care networks lagging behind in digital maturity. One approach is to compliment the current Global Digital Exemplar (GDE) programme. Since launching in 2016, a number of acute, mental health and ambulance NHS trusts have shared £160million of national funding on digital transformation projects. This 'trickle-down' approach could however be coupled with improved support and the establishment of a 'Taskforce'

- 193. What Good Looks Like', NHSX, 31 August 2021 [link]
- 194.NHSX Delivery Plan, NHSX, 1 December 2021 [link]
- 195.E-Health Record, e-Estonia.com [link]
- 196.Martin Bardsley, Adam Steventon & Garry Fothergill, 'Untapped potential: Investing in health and care data analytics', *The Health Foundation* (May 2019) [link]
- 197. Why you need a CIO on your NHS Trust Board' [link]
- 198.NHS Digital Academy, Health Education England [link]
- 199.Tim Robbins, Kieran Zucker & Hatim Abdulhussein et al., 'Supporting early clinical careers in digital health: Nurturing the next generation', Digital Health, 19 January 2020 [link]

drawn from personnel within the Transformation Directorate. This offer should be made to all 'Digital Aspirants', a programme currently involving sixty trusts.²⁰⁰ Another rationale for such an approach is the need to accelerate the speed at which the NHS optimises its data security. These teams should work to ensure NHS trusts meet the Cyber Essentials Plus standard which was introduced after the 2017 WannaCry ransomware attack in which over 600 GP surgeries were also affected.²⁰¹ Only one of England's 236 NHS trusts had met the standard fully in 2020, according to a recent report, whilst 32 had not completed the assessment.²⁰² With the introduction of a greater number of scaled providers across primary care, this 'taskforce' should also work across primary care to assist scaled providers or PCNs struggling to reach digital maturity targets.

A regulatory and reimbursement revolution

To effectively scale high-quality solutions, a commissioning transformation is required so that the best-quality digital healthcare solutions are treated as mainstream products and services, rather than niche tech try-outs. Digital healthcare does not fit easily into current funding pathways which focus upon services, medicines, devices and diagnostics. Digital health companies have had therefore to align to these particular streams, often sitting uneasily within them or becoming subject to short-term contracting. For even the best digital health providers, it is a market of speculative grant applications, rather than an environment with clear routes to reimbursement. Many commissioners still look to innovations to produce short-term cash-releasing savings, rather than identifying where innovations can transform care pathways. ²⁰³ To remedy this situation, we recommend the following:

- The Transformation Directorate should set up a 'front door' service for providers looking to enter and scale in the NHS. Performing both an advisory and a regulatory function, it should facilitate targeted connections to relevant persons (at trust level for instance) that have registered interest in condition-specific solutions. Such an approach would remove the need for start-ups to go trust-to-trust (or practice to practice) to seek to set up a pilot scheme, whilst boosting confidence from commissioners as introductions are facilitated from a trusted source.²⁰⁴
- The Transformation Directorate should establish a streamlined national accreditation scheme for the best-quality solutions to encourage wider uptake in the NHS. Currently, there is no clear, streamlined route for digital healthcare to be commissioned. A 'national accreditation' scheme for solutions which have successfully piloted in the NHS should be regarded as a signposting mechanism for persons responsible for digital transformation and driving innovation across the NHS (at trust, PCN and even practice level). A national accreditation system should be adopted to instil confidence in the quality of products and to drive speedier

200. 'Digital Aspirants', NHSX [link]

- 201. Emma Bower, 'Nearly 600 practices were affected by NHS cyber-attack', GP Online [link]
- 202. The digital advantage: realising the benefits of interoperability for health and social care in England, *The Institution of Engineering and Technology* (February 2022) [link]
- 203.Leah Taylor Kelley & Jamie Fujioka, 'Barriers to Creating Scalable Business Models for Digital Health Innovation in Public Systems: Qualitative Case Study', *JMIR Public Health Surveillance*, Vol. 6, No. 4 (2020): e20579. [link]
- 204. 'Buying better: Improving NHS procurement with behavioural insights', *Behavioural Insights Team*, 16 June 2021 [link]

- uptake. It should not however represent an additional regulatory hurdle. Dedicated investment for digital healthcare technologies should be introduced via ringfenced multi-year budgets so that organisations can adopt these 'Accredited Applications', building on the recent 'Who Pays for What' proposals.²⁰⁵
- Commissioners need to consider a broader range of quality measurements. Quality, as one interviewee put it, "is a multiheaded beast" and should be determined by a variety of factors including clinical outcomes, patient experience, staff perspectives and functionality. In primary care, too much emphasis is placed upon cost, not enough value is placed upon quality of solutions. The new £75m Digital First, Online Consultation and Video Consultation (DFOCVC) Framework, launched in December 2020 illustrates this point. 206 The scheme was designed to expand GPs access to remote monitoring services, including video consultations. In recent months, it has been suggested that this framework may even be expanded to commission a wider array of digital healthcare products too, yet its current design is illustrative of the issues in how digital healthcare is commissioned. Such a framework can help drive innovation in the NHS by creating a more streamlined commissioning route for primary care, proposals to amend the payment mechanism so that suppliers are paid in arrears, risks exacerbating cash flow problems for what are often small, innovative home-grown companies seeking to scale in thew NHS. Moreover, quality is not sufficiently built into the framework's assessment. Review from real-time and continuous user feedback (both consumer and clinician) should be embedded into regulatory and commissioning decisions, so that services are determined both by their clinical quality and by consumer satisfaction.
- Regulation needs rethinking in digital healthcare. Given solutions must be regularly updated, a more dynamic mode of assessment and regulation is required in digital healthcare. Often, solutions fall into several regulatory domains - some will be classed as medical devices or diagnostics as defined by the Medicines and Healthcare products Regulatory Agency (MHRA) for instance. This necessitates strengthened cross-organisational working between regulators so that - for instance - the Digital Technology Assessment Criteria (DTAC) is aligned with National Institute for Health and Care Excellence's (NICE) Evidence Standards Framework. Such a model may emerge through the work of a 'Multi Agency Advisory Service', which will comprise NICE, MHRA, The Health Research Authority (HRA) and Care Quality Commission (CQC) which is due to launch in April 2022. Pilot agreements between the NHS and providers should be supplemented with blueprints for longer-term implementation and reimbursement frameworks to provide confidence and longer-term financial security to smaller,

^{205.} Who Pays for What' proposals', NHSX, 31 August 2021 [link]

^{206. &#}x27;Digital First online consultation and video consultation framework', NHS Digital [link]

- innovative suppliers where their solutions are safe, meet best practice and deliver value.
- The NHS should adopt a reformed, dynamic reimbursement system for digital healthcare. Greater flexibility in payment mechanisms is required. While some reimbursement mechanisms linked to healthcare technology exist (such as the MedTech Funding mandate), most are one-time, tech-only funding pots. There are not yet payment mechanisms in place which are tailored to enable digital healthcare to scale. Neither a 'payment-by-results,' nor 'capitated' modes of payment may be suitable, depending upon the solution at hand. Commissioners will need to be able to use both methods to make the most of digital healthcare. Consider the case of a company such as Mendelian, whose software solution MendelScan enables earlier diagnosis of rare diseases through the collection of health information across primary and secondary care, with investigation results able to identify patterns and suggesting cases for investigation. Relevant patients are reviewed by teams of clinicians straddling primary and secondary care to ensure that they enter the appropriate diagnostic pathway. 207 It is a solution which transforms the current clinical pathway and strengthens the interface between primary and secondary care, yet from a commissioning perspective, sits uneasily within current structures, given rare diseases are nationally commissioned. A move to Dynamic Purchasing Systems (DPS) and blended reimbursement should be considered as an expedient (and more appropriate) route to commission services in an innovative and fast-moving sector.²⁰⁸ Moreover, a prescription reimbursement model for digital healthcare should be considered. In primary care settings, consumers should be provided with a code (or use QR code) to download apps, enabling a 'free download' for patients, which is directly logged to reimburse providers.
- Healthcare IT providers must be able to respond to the interoperability and overarching data model requirements of the NHS. The end-state the NHS should be seeking to reach is a system which swiftly responds to changes in available technologies with speed, flexibility and cost-effectiveness. The NHS should leverage its scale and purchasing power to ensure that providers can deliver and adapt systems so they are cloud native, and meet the highest data security standards. Whilst there are advantages to limiting the number of suppliers across the system as a method of boosting interoperability, these suppliers must be able to meet (or demonstrate they can swiftly meet) industry best practice. It is essential meanwhile that they subscribe to a culture of convergence, and show a willingness to work to 'join up' existing IT services across the NHS. Ability to deliver upon these criteria should be factored into procurement and should be reflected in contracting.

^{207. &#}x27;The Mendelian and Modality NHS Partnership rare disease diagnosis program in the UK: an interview with Will Evans', Future Rare Diseases, Vol. 1, No. 2 (2021) [link]

^{208.}Digital Health Reimbursement Concepts, Association of British HealthTech Industries [link]

Dealing with data

The opportunities presented through the creation of an "integrated picture of care across the lifecycle for 67 million people" are often remarked upon. ²⁰⁹ The draft strategy 'Data Saves Lives: Reshaping health and social care with data' looks to ensure that patients have more control over their health data and to provide easier access to their test results, medication, and care plans from across all parts of the health system. ²¹⁰

There is still much to do however to clarify the overarching data model and end-state the NHS seeks to reach, with primary care further behind other parts of the system on its data journey.

The NHS Digital Secondary Uses Service brings together a large amount of data across secondary care, with data releases on A&E waits, and on waiting lists for elective care. Data usage and reporting in primary care is inconsistent in comparison, and characterised by variation between data presented at the national level and the reality at practice level.²¹¹ Whilst an approach to boost the overall granularity of data collection across primary care should be pursued, the greatest opportunity is in building a system which places primary and community services on the front foot: to use data to identify where need should be met and therefore engaging the most appropriate members of care team to proactively reach out. Establishing such a system, assisted by the introduction of NHS Gateway for instance can be enabled through the analysis of data points generated by patients inputting symptoms and monitoring their health conditions to inform population health management. An increasingly 'smart' system could also have use-cases which expand to pandemic planning, given the granular picture at the neighbourhood level that can be derived.

The recent introduction of GP Connect by NHS Digital which makes patient information available to all appropriate clinicians is an attempt to create this type of closer alignment in data usage and reporting across primary care, but GP practices remain the designated data controller and processor, thereby possessing responsibility to inform and seek consent from their patients for the use of their data by external entities. There are few examples of practices however who strategically utilise this information to map and manage demand, whilst expertise in data management and reporting is limited in small-scale practices where staff have wide-ranging responsibilities. With a shift to scaled practices of working more commonplace, a reformed approach to data in general practice is required. Without it, it will be impossible to create the type of first-contact triage and personalised health resource envisaged through NHS Gateway.

Recent national attempts at creating 'single versions of the truth' through 'central data lakes' have proven unsuccessful. In 2013, the 'care.data' scheme represented an attempt at extracting data from GP surgeries into a central database through a General Practice Extraction Service (GPES) but failed to win public trust or GP support. In the Summer of 2021, the GP Data for Planning and Research (GPDPR) scheme was halted, for similar reasons. The GP profession is unconvinced that adequate safeguards are

- 209.'A National Technical Framework to Underpin the UK Life Sciences Vision', *Palantir UK*, December 2021 [link]
- 210. Data saves lives: reshaping health and social care with data (draft), govuk, 22 June 2021 [link]. The full strategy is due to be published in Spring 2022.
- 211. Josh Keith, Fiona Grimm & Adam Steventon, 'How better use of data can help address key challenges facing the NHS', The Health Foundation, 26 January 2022 [link]
- 212. Paquita de Zulueta, 'Confidentiality, privacy, and general practice: GPDPR and the brave new world of 'big data', British Journal of General Practice, Vol. 71, No. 710 (2021), 420-421.
- 213. 'Can the NHS successfully deliver its GP data extraction scheme?', British Medical Journal, 374 (2021) [link]
- 214. Pam Carter, Graeme T. Laurie, Mary Dixon-Woods, 'The social licence for research: why care.data ran into trouble', *Journal of Medical Ethics*, Vol. 41, No. 5 (2015), 404-409 (link)
- 215. GP Data for Planning and Research: Letter from Parliamentary Under Secretary of State for Health and Social Care to general practices in England', NHS Digital, 19 July 2021 [link]

in place for the use of data connected to patients on their list. There is also a disconnect between the silent majority of the population who are supportive of the idea of the use of their data by the NHS to plan services and to conduct research, and more vocal, proactive safeguarders - just 20 percent of the population have concerns about the use of their data for planning and research uses.²¹⁶ But overall trust in patient data use has declined in recent years. Recent polling from Healthwatch England shows despite high levels of trust in the NHS overall, willingness to share data has dropped. 53% of people said they were happy to share their health data compared to 73% in a comparative study from 2018. 29% were undecided about 'opt outs'. Over half of respondents (54%) said they were not confident that companies that misuse data would be fined appropriately. Yet, 46% said they would be less likely to opt-out if this was addressed.²¹⁷ A more candid and transparent conversation with the public (and amongst a more wide-ranging cross-section of the population) is required so that progress can be made. There are clear examples of how this may be done. The success of the of ZOE App which has had over 4 million contributors across the globe and has supported research into COVID-19 is an example of multiple stakeholders including academia, a private sector organisation and the Government working in concert and using data in a safe and transparent way which generated trust and support for the appropriate use patient data for the greater good.²¹⁸

The Government should pursue a two-pronged approach. On the one hand, it must ensure that patients themselves have greater access and control of their data. Patients should be able to switch elements of their patient record 'on' and 'off' to healthcare professionals – or to determine which members of a team they wish to see it. They should be able to personalise and amend relevant sections of their records and to allow next of kin and nominated persons access and amendment rights too. With the introduction of shared care records, clear transparency over which healthcare professional has accessed a record (and which particular section) and when should be introduced. On the other hand, there is a great opportunity to accelerate trust in patient data use by expanding access to institutions where trust is particularly strong, such as those across the university sector.

A solution is to pursue a federated research network approach, such as a through civic data cooperatives. The Liverpool City Region Civic Data Co-operative which is run by a consortium of local research bodies under the banner of Liverpool Health Partners is one such example. The utility of such an approach is in the development of a place-based approach, the ability to create a sense of improving 'the health of your area'. The downside however is that this form of data management has limitations for scaling. A half-way house would be the development of a "logically federated and controlled cloud-based data infrastructure". This would enable local data owners (care providers) to maintain control over data, whilst also enabling greater opportunities to boost research activity. A move to a new model of joint controllership over personal data, which

^{216.}Shona Kalkman, Johannes van Delden & Amitava Banerjee et al., 'Patients' and public views and attitudes towards the sharing of health data for research: a narrative review of the empirical evidence', Journal of Medical Ethics, Vol. 48, No. 1 (Nov 2019) [link]

^{217. &#}x27;Building trust in how the NHS uses data is crucial says Healthwatch', Future Care Capital, 21 July 2021 [link]

^{218.}ZOE Covid Study [link]

^{219.} Mark Say, 'Liverpool plans civic data co-operative for health and care', UK AuthorITy, 20 January 2020 [link]

^{220.}A National Technical Framework to Underpin the UK Life Sciences Vision', *Palantir UK*, December 2021 [link]

also enables access to anonymised personal information for clearly-defined secondary-use purposes is another solution. This is an approach which has been recommended by organisations such as the ABHI and has already been proposed in the 2018 GMS contract in Scotland.²²¹ Ultimately, the silent majority and their desires and concerns should be respected and better addressed as part of a reformed approach to defining the NHS's data model.

Disconnection: bridging the 'digital divide'

To maximise the potential of digital healthcare, the 'digital divide' must be addressed.²²² The prize, as the Secretary of State has suggested, is that digital healthcare can become a 'great leveller', boosting the provision of high-quality services in areas currently under-served.²²³ But the 'digital divide' is significant. In 2019, 10 per cent of the adult UK population were classed as 'internet non-users'; an estimated 10.7 million people had limited or zero basic digital skills, according to Office for National Statistics.²²⁴ Given the size of this demographic, healthcare leaders have cautioned against scaling digital health at such a pace that it exacerbates inequalities. For some users, 'total triage' and the introduction of new types of remote appointments have introduced barriers to general practice. So how can we make sure this revolution works for everyone?

The 'digital divide' is more complicated than it first appears. Currently, the debate relies too heavily upon anecdote and caricature. 225 The evidence base linking the greater uptake of digital healthcare and increasing healthcare inequalities is limited. Evidence from a recent pilot study in North Tyneside revealed uptake of video consultations offered by the digital healthcare company Livi across the CCG dispelled "the suggestion of affluent locality bias and compounding inequalities for those from more deprived socio-economic backgrounds".226 As Dr James Woods explained in a recent Royal College of Physicians of Edinburgh online seminar, the uptake of video consultation has delivered huge benefits to older patients, especially in remote rural areas, given the sharp reduction in patients needing to travel. 227 Recent research from Healthwatch identified other useful functionalities of high-quality remote consultation to support patients. For those who are less physically able, being able to engage with a healthcare practitioner from home was a huge benefit. For those who have hearing impairments, viewing subtitles can enhance the consultation. The use of the chat function as a way of sharing links to articles and for discussion were also identified as positive features. Other respondents spoke of how remote appointments led to what felt like a more personal experience, whilst others claimed the consultation felt less rushed "because of the absence of a distracting waiting room or other patients". 228

In recent years there have been a wide variety of initiatives which have sought to reduce the 'digital divide' and to boost uptake amongst older and more deprived groups who are less likely to be comfortable using digital tools or lack access to devices or a stable internet connection. From 2017,

- 221. 'Digital Health Regulatory Concepts White Paper', Association of British HealthTech Industries [link]; GMS Contract (2018), Scottish Government [link]
- 222.Emma Rich, Andy Miah & Sarah Lewis, 'Is digital health care more equitable? The framing of health inequalities within England's digital health policy, 2010–2017', Sociology of Health and Illness, Vol. 41, No. 1 (2019), 31-49 [link]
- 223. 'Using the power of technology to make the world a safer and healthier place', speech from The Secretary of State for Health and Social Care at the Founders Forum Health Tech Summit, London Tech Week 2021, 21 September 2021 [link]
- 224. Exploring the UK's digital divide, Office for National Statistics, 4 March 2019 [link]
- 225. 'The Doctor Will Zoom You Now: getting the most out of the virtual health and care experience', Healthwatch [link]
- 226.Livi: Complementary GP Video Consultation Service Pilot Evaluation, North Tyneside CCG News, 28 September 2021 [link]
- 227.'Access to care: bridging the digital divide', British Medical Association, 13 May 2021 [link]
- 228. 'The Doctor Will Zoom You Now: getting the most out of the virtual health and care experience', Healthwatch [link]

a partnership between the Good Health Foundation and NHS England which trained over 220,000 people to use online resources to contact GPs, manage medical conditions, and choose services is worth profiling for its positive results.²²⁹ A series of 'pathfinder' hubs were established. One in Nailsea was led by the Town Council and supported by a range of local health and voluntary sector organisations, including the local CCG, GP practices, local library, Healthwatch, Citizens Advice, disabled people's groups and other self-care groups. That scheme demonstrated a £6 return for every £1 invested as part of the first phase of their Widening Digital Participation programme.²³⁰ These 'hubs', which could be based from a range of locations (including the existing general practice estate and community centres), could also become places where staff have access to quality and secure equipment to conduct video consultations and where they can attend training sessions. It is an approach which - conceived as part of wider primary care service design - is intended to boost the provision of social prescribing with premises, staffed by link workers and wellbeing coordinators as well as other members of the primary care workforce.231

These community-based services should be planned at the neighbourhood level, but should also be considered as part of system level plans to ensure there is a comprehensive offering to tackle the 'digital divide'. This approach should be coupled with national guidelines and coordination for a community hub model, building upon proposals in the recently published integration white paper. Digital healthcare companies can play a significant role in providing supportive and wraparound services given they will possess the data insights to provide appropriate, tailored support. Savings derived through greater uptake of digital healthcare could be partially ringfenced to enhance services specifically for the digitally excluded or for patient groups requiring additional support.²³² Lessons can be drawn from experiences faced by consumers with the introduction of online banking which has shrunk the premises footprint of banks over the past twenty years, but has made banking more convenient for consumers. Schemes such as the Barclays 'Digital Eagles' programme was effective in engaging older customers to take up the opportunities online banking presented.²³³

A Digital Health and Care Bill

The Government should consider whether primary legislation can assist in developing the infrastructure required to accelerate 'digital transformation'. We know that primary legislation will be required to formalise the merger of NHS Digital and NHS England. It would be logical to take the opportunity presented to deliver changes which can unlock digital care at scale. If used selectively, it could be a powerful mechanism to stimulate debate, to set direction for the market and to act as an enabler.

Provisions of the Bill could include:

229.Dr. Emma Stone, Peter Nuckley and Robert Shapiro, 'Digital Inclusion in Health and Care: Lessons learned from the NHS Widening Digital Participation Programme (2017-2020)', Good Things Foundation, September 2020 [link]

230.Ibid.

231. Julie Bass, 'Community referrals can relieve burden on primary care', *Health Service Journal*, 5 January 2022 [link]

232.21/22 Priorities and Operational Planning, Surrey Heartlands Health and Care Partnership, 3 June 2021 [link]

233. 'Digital Eagles: Build your digital skills with us', *Barclays* [link]

- 1. A formalisation of the merger between NHS Digital and Health Education England with NHS England;
- 2. A reformed approach to data sharing in general practice, so that joint-controllership between GP practice and NHS England is introduced, with greater flexibility introduced for approved secondary-use purposes, such as research, commissioning and service planning. This should be coupled with a framework to give patients greater control over access to their records and the ability to track "who sees what, when" to boost trust and the safeguarding of patient data for secondary-use purposes. The NHS Constitution should also be amended to reflect this development.
- 3. Reforms to reimbursement mechanisms for digital health and AI solutions to create incentives to transform the market and to encourage adoption, such as creating an approach to directly reimburse app solution prescription and to create the conditions for blended forms of reimbursement to become mainstreamed in the NHS
- 4. Proposals to enable remote and cross-jurisdictional care from physicians, nurses and allied health professionals through amendments to current GMC rules and through the mutual recognition of third country qualifications. Provisions to streamline rules to enable UK-trained healthcare professionals to deliver remote sessions from abroad.

There are comparative lessons that can be learned from recent experiences in Germany. The Digital Healthcare Act (Digitale-Versorgung Gesetz or DiGa) which was introduced in November 2019 seeks to reimburse digital healthcare providers through statutory health insurance.²³⁴ To meet approval, solutions must pass data protection, interoperability and user friendliness assessment with the German Federal Institute for Drugs and Medical Devices (BfArM) to be listed in a directory of reimbursable applications (the so-called 'DiGA directory'). However, DiGa has increased the requirements developers are required to reach for reimbursement and many were unprepared for the changes.²³⁵ To date, the share of 'DiGA prescriptions' as a percentage of the overall total of prescriptions issued in Germany is just 0.125%. 236 Without clarifying standards therefore and giving developers the opportunity to adapt, ensuring the provision of additional training and information to give confidence to clinicians, it has meant that although there is a new reimbursement mechanism, there has been little to reimburse. This is an instance where legislation can provide the framework and the mechanisms for a new system, but is no silver bullet and must proceed in tandem with a broader transformation in how the NHS 'does digital'.

236.Ibid.

^{234.} Sara Gerke, Ariel D. Stern & Timo Minssen, 'Germany's digital health reforms in the COVID-19 era: lessons and opportunities for other countries', npj Digital Medicine, Vol. 3, No. 94 (2020) [link]

^{235.}Sven Jungmann, 'Is the Model of Reimbursable Health Apps in Germany a Failure? ICT&health, 1 December 2021 [link]

Chapter 5 – Conclusion: Delivering a Future Model of General Practice

"Doing nothing cannot be an option. The consequences would be clear - the widening of health inequalities, with areas of the country where general practice will struggle to continue, the inevitable rise in pressure and costs in the rest of the health and care system, worsening clinical outcomes, and falling patient trust in the NHS."

Nigel Watson, GP Partnership Review: Final Report (January 2019), [link], p. 40

This paper has set out a proposal for far-reaching reforms to general practice which we believe will ultimately be in the best interests of patients, the primary care workforce, and the taxpayer in the long-term.

We have not taken this decision lightly. Too often there is an inclination in Whitehall to pull the lever named 'big organisational change' without fully considering detractions. Context matters. Primary care faces growing demands, but is managing this with stretched workforce. Any restructure is likely to be disruptive. But this context cuts both ways. The existential nature of the pressures we have outlined create the conditions, and the necessity for genuine debate and openness to ideas, and to the potential of technology and digital solutions to positively disrupt our approach to care.

These proposals, if taken forward by the Government, would see General Practice organised through layers of scale, with a gradual phase out of the self-employed, independent contractor model over the remainder of the decade. A more detailed analysis of contractual and workforce considerations will be explored as part of a further upcoming paper. In Chapter 4 we have showed how these changes should be coupled with other reforms that would sweep away the barriers currently preventing the rollout and uptake of digital healthcare. Together, these present exciting opportunities to expand access and improve outcomes, including in areas historically underserved by healthcare. We believe it is important that the Government shows clarity of direction in this regard. This cannot be driven by ideology but must be grounded in a recognition of what matters most to patients. We need to avoid the pitfall of trying to design a 'one size fits all' model of primary care. Form must follow function.

Reform of primary care is arguably more important given the wider

changes underway in the NHS. It is widely accepted that the NHS is too oriented towards hospital-based care. The shift towards Integrated Care Systems under the current Health and Care Bill may help to address elements of that, and the permissive nature of the new legal framework is welcome. However very few people we have interviewed believe that the new structure will lead to an enhanced voice and position of influence for primary care. These reforms seek to redress that balance, by bringing the general practice community within the NHS family.

In his independent review of the partnership model, Dr Nigel Watson concluded that "doing nothing cannot be an option". Whilst our proposals would mark a radical departure to that review, we wholeheartedly agree with Dr Watson on this point. The Government needs to make primary care – and general practice – a priority for the remainder of this Parliament and beyond. The consequences of failing to do so are clear.

Summary of Recommendations

Policy Recommendations

The Future Model

The Government should commit to reform general practice over the next decade. A mixed economy should prevail, which will include high-performing and scaled partnerships, but will increasingly see GPs salaried by scaled providers.

- 1. General Practice should transition to an at-scale model with specific elements delivered through 'layers of scale'. Responsibility for leases and workforce planning should lie at an integrated care system (ICS) or scaled primary care provider level to enable the reconfiguration of estates. Practice-level data should be jointly controlled for key use cases, such as demand analysis and service planning. A diagram which details this 'layers of scale' model can be found on p. 27. These changes should be underpinned by a £6bn rescue package, to gradually buy-out the GP owned estate and fund the transition to scaled models over the remainder of the decade.
- 2. To align incentives across primary and secondary care, GPs should become predominantly salaried and contracted by scaled providers (trusts, provider collaboratives, or large-scale primary care operators). New core NHS contracting arrangements for general practice will be used with amendments to the NHS constitution reflecting these changes. Further detail of these recommendations is outlined in the section entitled Contracting and Reimbursement.
- 3. Continuity of care must be safeguarded. Interpersonal continuity the trusted relationship between doctor and patient carries significant benefits for certain patients. Maintaining this could be a challenge in the move to general practice at scale.²³⁷ Focus should be directed toward policies which promote the stability of GPs within their patient community where appropriate. We believe this is achievable under predominantly salaried and scaled models. Informational and longitudinal continuity which are equally important should be strengthened through the effective use of technology. The ultimate objective should be to achieve

237.Hogne Sandvik, Øystein Hetlevik, Jesper Blinkenberg & Steinar Hunskaar, 'Continuity in general practice as predictor of mortality, acute hospitalisation, and use of out-of-hours care: a registry-based observational study in Norway', *British Journal of General Practice*, Vol. 72, No. 715 (2022), e84 e90 [link]

- frictionless continuity of relationship between a patient and the entire NHS, delivering on a consumer driven approach.
- 4. NHS England should enhance the NHS App to provide a broader and more coherent range of first-contact services to consumers. A 'smart' first contact primary care navigation programme called 'NHS Gateway' should be introduced. NHS Gateway should aim to deliver a more coherent, convenient and personalised 'front door' to the NHS, whilst enhancing patient navigation and triage. Detail is provided later in this summary.

Workforce

A relentless focus upon recruitment and retention — albeit with distinct strategies — is required to meet workforce challenges in general practice. Consultation with a greater cross-section of the current workforce and a wider variety of stakeholders across primary care from pharmacists to the nursing profession is required to develop a longer-term workforce strategy. Routes for primary care staff to deliver a broader range of services and to embed clinical research should become commonplace. Our proposal to incentivise common contracts for hospital and GP doctors is also designed to reduce the friction (both in the clinical and cultural sense) between these two care settings, and partners in the community. This is a broader topic which Policy Exchange will explore in further detail in a forthcoming paper.

- 5. The Government should announce a package to support and retain current GP Partners. Specific interventions could include earn-out clauses (aligned to length of service), and changes to the pension taper, reflecting similar exemptions introduced in the legal profession. Details are outlined in the section on Contracting and Reimbursement.
- The NHS and Government should make better use of technology to tackle GP shortages in deprived areas. This can also contribute to meeting the existing Conservative Party manifesto commitment to deliver an extra 50 million GP appointments each year. The challenge of recruiting doctors into 'under-doctored' (and often deprived) areas has persisted since the foundation of the NHS. There are regional disparities, but also disparities across current clinical commissioning group boundaries which are under-reported, complicating this issue. Policymakers should leverage remote consultation which is unconstrained by geography as a viable tool for expanding access rapidly. Having a remote consultation between a doctor based in Birmingham and a patient in rural Essex (which has some of the lowest GP numbers in England) would become commonplace. Existing measures such as the 'Targeted Enhanced Recruitment Scheme' could be maintained in parallel provided they can demonstrate longer-term effectiveness.

- 7. NHS England should introduce changes to Primary Care Networks (PCNs) as part of the new five-year framework. Since 2019, PCNs have brought together general practices to collaborate at scale and deliver enhanced services. A core purpose is to expand the multi-disciplinary nature of general practice, delivered through the Additional Roles Reimbursement Scheme (ARRS). This is a welcome measure to diversify the skills mix in primary care, but it is unlikely to meet its current recruitment targets, having filled only 10,000 of the 26,000 allocated roles. The interim national target is to have 15,500 FTEs by the end of 2021/22. There have also been complaints over the restrictive recruitment rules, and a view that ARRS have thus far done little to reduce GP workload. The PCN contract comes up for renewal in two years and must now evolve, with the following changes incorporated as part of the contractual arrangements introduced from 2024/25:
 - a. Primary care networks should be maintained, but with an acknowledgement that groups of PCNs should be formally required to collaborate at both 'place' and 'system' level to achieve wider benefits of scale, with a possible shift to more formal ties in due course.
 - b. The ARRS scheme should receive increased funding (as part of our recommended £6bn rescue package) to expand multi-disciplinary roles in general practice. Recruitment rules (which were recently relaxed to include band 4 roles within the eligibility) should be relaxed further still to allow for adaptive planning to suit the needs of the local population. This is best achieved by a group of PCNs working at a system level.
 - c. ARRS recruits must not be spread too thinly spread across sites and must be afforded time to train.
 - d. Enhancements to the NHS App and NHS 111 through NHS Gateway could support a redistribution of current GP case volume towards other primary care professionals. Studies over the past five years show that between 20-30% appointments could be avoided if coordination were stronger between GPs and hospitals (or across community care) and if a wider array of primary care staff were utilised and technology enhanced to streamline administration.²³⁸
- **8.** The Government should examine opportunities to enable NHS-trained GPs to deliver remote sessions from overseas. Remote consultation represents a possibility for GPs trained in the NHS but have since emigrated to deliver sessions from abroad. Almost a thousand GPs are currently in this position. This would require amendments to current GMC (General Medical Council) rules but offers possibilities to simplify existing revalidation requirements. The Government could also explore the mutual recognition of select third countries. Priority countries would include Australia,

238.The 2016 General Practice Forward View claims 27% of appointments could be avoided. General Practice Forward View, NHS England [link] (p. 27)

- Canada, New Zealand and South Africa. The viability of any scheme would depend on agreed limits on the number of remote sessions per physician per week, and patient safety measures. Appropriate NHS on-boarding must also be introduced to support any third country practitioners. If taken forward, this would represent both a pragmatic solution to short-term workforce issues and an opportunity for the UK to be a world leader in setting new regulatory standards with international partners for cross-jurisdictional remote consultation in primary care.
- 9. The Government and NHS England should work with the Royal College of General Practitioners, British Medical Association, and medical schools to establish a common strategy to make careers in general practice attractive to new and junior doctors. Measures to enable flexible working and to ensure that training in digital healthcare (including the delivery of video consultation) should sit within core GP training. Continuing Professional Development accredited modules should become commonplace as part of the ongoing digital 'upskilling' of the workforce. Approaches to boost the porousness of professionals working across primary and secondary care should be explored. This is a topic which will be explored in greater detail in a forthcoming Policy Exchange paper.

Contracting and Reimbursement

The partnership model has been a distinctive feature of general practice and has both enabled the delivery of excellent care and allowed GPs to pursue autonomous and rewarding careers. Yet we have now reached a point where this model – for all its historical advantages – is likely to hold back urgent reforms to general practice. This is not a novel realisation; the partnership model was described in a 2017 House of Lords inquiry into the future of the NHS as 'no longer fit for purpose'. A shift in contracting and reimbursement to enable transition will be complex and must be predicated upon an acceptable timeframe. The upsides must ultimately justify the short-term difficulties. The transition should therefore involve the following:

- **10.** A commitment to phase out the GMS Contract by the end of the decade. The last five-year contract framework was agreed in 2019/20 and runs until 2023/24. Ahead of the next contract being introduced from April 2024, NHS England should outline its intention for this to be the final five-year GMS Contract period, to be replaced by a series of one-year top up contracts until its eventual phase out by the mid-2030s.
- **11. An offer of full employment for current GP partners.** A direct-employment scheme should be introduced in parallel with the new GP contract negotiation. The scheme must be sufficiently generous, creating parity of pay in line with hospital consultants

^{239.} The Long-term Sustainability of the NHS and Adult Social Care', HL Paper 151, Report of Session 2016–17 [link]

to incentivise GPs who had been seeking partnership or would be approaching retirement. The use of a five-year earnout clause in a new contracting arrangement may further enhance retention. Such clauses are common in the commercial sector.²⁴⁰ A financial incentives framework should be established, detailing reimbursement possible under the new model through increased working hours and through a simplified series of incentives.

- 12. Support the gradual release of owner-occupier primary care **estate.** Many independent GP practices lease their surgery premises, with the rent reimbursed in full by NHS England. Around half own their buildings outright or hold mortgages. The value of this owner occupier estate is roughly £5bn. We propose that the liability for these buildings would gradually pass onto the new NHS primary care provider body for management and eventual release. Lease and tenant arrangements (including third party development) would be allowed to continue for both vertical and horizontal scaled models. From a national policymaking perspective, we believe that premises should increasingly be organised at 'place' or 'system'. This approach would help to tackle the associated premises challenges of becoming the 'last partner standing', enable system-wide planning of the primary care estate and tackle the growing issue of poor-quality premises.²⁴¹ The 2017 Naylor Review into NHS property and estates stated that up to 30% of GP practices with list sizes under 4,000 patients were "unlikely to be large enough to meet the vision of person-centred care set out in the Five Year Forward View.²⁴²
- **13.** The Government should commission a review of reimbursement frameworks in primary care. The current logic and incentives of the partnership model work against a drive to integrated care. Around half of practice income is delivered through a block contract (global sum) with funding supplemented by the QOF (Quality and Outcomes Framework) scheme and payments for enhanced services. An increasing proportion of funding is now channelled through primary care networks (PCNs). The review should explore means of creating iterative frameworks, which incentivise cooperation between primary and secondary, community and social care aligned to a set of agreed outcomes at place level. This is consistent with the approach set out in the recent Integration White Paper.
- 14. Greater weighting should be given to service quality when commissioning digital healthcare. Rather than simply assessing technology credentials or cost savings, the criteria encompassing the Digital Solutions Catalogue should be reassessed so they consider quality more holistically, including assessing clinical outcomes and patient experience more explicitly. For instance, The Digital First Online Consultation and Video Consultation (DFOCVC) should be revised so that a holistic assessment of

^{240.} Ninon Kohers and James Ang, 'Earnouts in Mergers: Agreeing to Disagree and Agreeing to Stay', *The Journal of Business*, Vol. 73, No. 3 (July 2000), pp. 445-476 [link]

^{241.} Nick Carding, 'Ownership of hundreds of primary care buildings is uncertain, national estates chief warns', *Health Service Journal*, 27 October 2021 [link]

^{242.}Robert Naylor, NHS Property and Estates: why the estate matters for patients (2017), p. 11 [link]

^{243.} Network Contract DES, NHS England [link]

- quality and user satisfaction is built into the framework and so that its payment schedules do not disincentivise innovative suppliers.
- 15. NHS England should publish guidelines which define demand pressures in clear terms so that GP practices can report to LMCs against a national baseline. Currently, there is no consistent and systematic reporting of demand in general practice. Nor are there common definitions of what constitutes extreme pressure or unsustainable demand. An equivalent to the Operational Pressure Escalation Level (OPEL) used in hospital settings should be established across general practice to generate a national framework to assess demand. Similar approaches have already been piloted in areas such as Surrey Heartlands.
- **16. Primary care should monitor and set out proposals to reduce 'failure demand.'** 'Failure demand' is unnecessary demand generated through inefficient, flawed or duplicated processes. A common example would include a patient failing to get through when calling their GP reception and choosing to instead present at A&E for a minor complaint. At a national level, expertise from within the NHS and commercial sector should be brought together to examine common causes, based upon regular monitoring by primary care networks who should be encouraged to report upon causes of failure demand at the neighbourhood level. Responsibility for interventions should sit at place level, echoing our principles of 'layers of scale'.

Delivering Digital-First Primary Care

General practice should become the foundational layer upon which digital services are built and scaled across the NHS, further justifying the need for primary care services to be coordinated at ICS level as part of a wider digital ecosystem.

- 17. Whenever clinically appropriate and desired by the consumer, general practice should be digital-first. Currently, there is strikingly low use of high-quality video consultation in general practice. Whilst NHS England have commissioned a review into remote consultations it is already clear that not all forms of remote consultation are equal: the best deliver cost savings, save clinician time and do not compromise patient safety. GPs should meanwhile be encouraged to 'prescribe' high-quality solutions particularly those which support remote monitoring and home testing. One example is to encourage greater uptake of solutions to monitor diabetes with high-quality blood glucose meters and app solutions.
- 18. Uptake of the highest-quality video consultation platforms should become commonplace in areas with fewer GPs or with the highest patient figures per GP. There is an enormous opportunity to boost the provision of care to areas with fewer

doctors and greater deprivation through high-quality remote consultation in such a way that the risks of exacerbating the 'digital divide' are mitigated. A recent pilot study from North Tyneside demonstrated that demand (and overall satisfaction) with a high-quality form of video consultation was highest in areas with the greatest deprivation.²⁴⁴ Lessons can be learnt from best practice in the banking sector where in the space of a decade, online services have become commonplace, with initiatives introduced to effectively support the digitally excluded.

- 19. A 'smart' first —contact, patient navigation tool called NHS Gateway should be developed to enhance the patient pathway and consumer experience of primary care.
 - a. In the short term, enhancements to NHS 111 and the NHS App would transform first-contact with primary care, encouraging the consumer to log conditions and to manage appointments with general practice, as well as introducing improved signposting to services offered across the NHS as well as voluntary sector and independent providers (such as high-quality mental health app solutions for example)
 - b. In the medium term, enhancements would enable consumers to book (or be directed) to services beyond their local GP practice which are planned at an ICS level within their neighbourhood, including 24hr walk-in centres (co-located with A&E departments) and community diagnostic hubs, high-quality video consultations would also be offered via this channel. Extended access services planned at an ICS level should also be integrated and made available to consumers.
 - c. The NHS App should become a resource linked to (or navigating the consumer toward) other digital health solutions that can support the monitoring and management of chronic conditions and which can encourage healthy behaviours. A dedicated team within the Transformation Directorate, working in collaboration with organisations, such as Organisation for the Review of Care and Health Apps (ORCHA) should monitor and appraise the quality of these linked and recommended solutions
 - d. NHS Gateway should be developed and implemented by a cross-departmental 'delivery unit' consisting of personnel within NHS England's Transformation Directorate and the Central Digital and Data Office.

The establishment of NHS Gateway should be regarded as a vehicle for digital transformation across primary care. In parallel, a series of systemwide measures should be brought forward.

20. The Government should consider introducing a Digital Health and Care Act in this Parliament. Primary legislation will be

244.Livi: Complementary GP Video Consultation Service Pilot Evaluation, North Tyneside Clinical Commissioning Group, 28 September 2021 [link]

- required for NHS Digital to be formally merged within NHS England. When this Bill is brought forward in due course, it should act as a vehicle for streamlining the regulatory and reimbursement routes for digital healthcare. The Bill could also reform approaches to data controllership and usage across the NHS. Duties could be placed upon organisations (including across primary care) to deliver digital maturity, coinciding with the ICS maturity targets set out in the recently published Integration White Paper.
- 21. Real-time, open-access 'Trip Advisor-style' patient review and feedback for service users should become commonplace and should inform commissioning decisions and service design. Rather than simply producing an additional feedback bank, this information should inform commissioning decisions. Much of this data already exists as it is collected by digital providers, so can be quickly optimised.
- 22. The Transformation Directorate within NHS England has been greatly expanded. Priorities for the new Directorate should be as follows:
 - **a. Strengthening the interface with primary care.** Much of the work of NHSX focused on the secondary and tertiary sector. As part of the incentives for existing GP practices to shift to scaled models, support should be offered from the Transformation Directorate (for example through emerging ICS networks) to boost digital maturity across general practice and to more effectively scale high-quality digital healthcare.
 - b. Produce guidance and standards for all Trusts, ICSs and scaled primary care organisations to measure the performance of their digital strategy. Each ICS, Trust and primary care organisation should report annually upon their performance against these standards which should be made publicly available.
 - c. Establishing the former NHSX team as a 'taskforce' within the Directorate. This taskforce should adopt a 'mission based' approach to improving digital maturity and data security, agreed with the Government and set out each year as part of the new flexible Mandate to the NHS, set out in the Health and Care Bill. Teams should be assembled and 'seconded' to support trusts awarded 'Digital Aspirant' status and to PCNs struggling to reach an appropriate level of digital maturity, and to ensure that the Cyber Essentials Plus standard is implemented.²⁴⁵
 - **d.** Creating a clear, single entry-point for innovative organisations looking to scale in the NHS. The publication of the What Good Looks Like and Who Pays for What frameworks as well as a 'Delivery Plan' which includes the introduction of a single API platform for suppliers to access data were welcome initiatives from NHSX in defining good practice

245.See recent report from the Institution of Engineering and Technology for these figures, The Digital

Advantage: Realising the benefits of interoperability for health and social care in England, Institution of Engineering and Technology (February 2022) [link]

and common approaches to introduce and scale solutions in the NHS. These initiatives are suggestive of the positive role the Transformation Directorate can play in streamlining entry to the NHS for innovators. An expanded approach could include the development of a 'match-making' service, with entrants paired with relevant primary care or trust leadership (such as chief information officers) to boost engagement and connectivity across the service and so solutions are introduced in places with clear demand and appetite.

23. ICSs should work with local authorities, the voluntary sector and independent providers to plan and commission 'hubs' across their footprint to deliver services which upskill the workforce and reduce the 'digital divide' in the community. Each premises would be multi-purpose and could assist in social prescribing and in the delivery of broader public health priorities. They would enable visitors to access digital health services (such as remote consultations) and to receive technical assistance and advice from a small multi-disciplinary team. These would also be sites where primary care staff could deliver remote consultations from suitably equipped booths.²⁴⁶

246.For one existing example, see Amy Hearn, 'Digital Health Hub Launches in South Leeds', 100% Digital Leeds, 13 January 2022 [link]



£10.00 ISBN: 978-1-910812-XX-X

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