**Technology and Innovation in the NHS**

**RCGP SCOTLAND**

The Royal College of General Practitioners (RCGP) is the professional membership body for family doctors in the UK and overseas. We are committed to improving patient care, clinical standards and GP training. Its objectives, in concern for care for patients, are to shape the future of general practice, ensure GP education meets the changing needs of primary care throughout the UK, grow and support a strong, engaged membership and to be the voice of the GP.

The College in Scotland came into existence in 1953 (one year after the UK College), when a Scottish Council was created to take forward the College's interests within the Scottish Health Service. We currently represent around 5,000 GP members and Associates in Training throughout Scotland. In addition to a base in Edinburgh, the College in Scotland is represented through five regional faculty offices in Edinburgh, Aberdeen, Inverness, Dundee and Glasgow.

**1. What do you consider have been the main successes of the existing Scottish Government's eHealth and telecare/telehealth strategies and why?**

The existing Scottish Government's eHealth and telecare/telehealth strategies have allowed for the development of a range of technological innovations which have improved the care received by patients and the working practices of GPs. A good example of this is in the improvements made in remote access for GPs. The ability for clinicians to access clinical records and ePrescribing from tablets, laptops and smart phones could greatly improve GPs' ability to work effectively from out of office, especially during periods of on call working.

The advancements in communication methods available between patients and their GPs has also been recognised as a major benefit amongst RCGP members. For instance, patient online access has allowed patients to be able to create appointment bookings and submit repeat action requests online, creating a more streamlined system and reducing administration in GP practices. Developments in community pharmacy technology such as barcoding of prescriptions and the improved efficiencies created by the Chronic Medication Service (CMS) have also been welcome advancements. However, the pace of take-up of such technology across Scotland has been piecemeal with many surgeries not yet in the position to offer such technology (please see our answer to Question 2).

Developments of certain systems to maximise efficient working practices have also been noted as particularly successful. For instance, members report that the benefits of NHSmail cannot be understated as the existence of a centrally provided NHS email system greatly improves efficiency.

The creation of Key Information Summaries has allowed clinicians to share clinical information (including anticipatory care plans), on patients with the most complex health and social care needs, with the wider NHS. The development of Docman, Clinical Portal and ICE have also been effective in improving the interface between primary and secondary care and enabling more efficient diagnostics in the community. With the integration of health and social care such advancements have been warmly welcomed and utilised by clinicians and those working in the wider NHS.

Other successes are technological developments which have helped promote information sharing amongst clinicians. For instance, the PACS system which centralises x-rays and computed tomography (CT) scan results allows clinicians to share results and discuss these with colleagues within minutes and has been heralded as a real success. Alongside this, the development of RefHelp on the Lothian intranet, to guide management and referral decisions, and the development of SciGateway, to allow electronic referrals and some one-way email advice options, have also been singled out as particularly helpful improvements.

2. **What do you consider have been the main failures of the existing Scottish Government's eHealth and telecare/telehealth strategies and why?**

Although some advancements have been made in the communication tools available for healthcare workers, as described above, the present technology does not support GPs to communicate easily, effectively and safely enough to enable high quality patient care. General Practice is the hub of the NHS as it works across multiple interfaces to provide coordinated patient care. It is therefore imperative that colleagues from across primary and secondary care teams are able to share appropriate patient information effectively and safely. There has been a real failure to move on from the continued use of multiple, incompatible systems and various platforms used by the different agencies across the NHS. For instance, the systems in place for GPs are not compatible with those in place for District Nurses and this results in data requiring entry two or three times. The current technology in place to support the interfaces between primary and secondary care teams needs significant improvement to allow for quick and safe sharing of patient information across interfaces. Improving access to tools such as linked emails, global address books and social care access to Key Information Summaries (KIS) where appropriate would go some way to rectifying such shortcomings.

Significantly, the ability for clinicians working in the Out of Hours period to access the complete patient record remains very limited compared to that for 'in hours' colleagues, meaning that they are in a much more difficult position when treating patients and must work without easy access to all salient facts. As people in areas of deprivation are more likely to use the Out of Hours service, this lack of access is a diminution of the care available to them and exacerbates health inequalities.

Overall, the problem of poor connectivity, both in terms of access to high speed broadband and the delivery of 3G / 4G signals, has hampered the progress of the existing eHealth strategy and will continue to slow progress if it is not improved. There are still many instances of doctors working on the ground without internet access or mobile phone signal when visiting often vulnerable and complex patients in the community, meaning that it is impossible for them to access even the simplest online tool to assist with those patients. The issue of poor connectivity is not one that is limited to rural communities, with colleagues working in towns and cities also citing similar problems.

There is a feeling on the ground that IT in general practice has failed to keep up with current technology. For example, there are still aspects of network incompatibility between NHS and academic networks (JANET) around videoconferencing. Many members are still using 'clunky' and outdated systems which are not user-friendly, have recently been shown to be insecure, and which often do not support crucial patient safety operations. This is supported by feedback from frontline clinicians who consistently report that the 'basic' IT systems will have to be addressed and improved for any eHealth strategy to be successful.

Overwhelmingly, clinicians cite that their eHealth priority lies in using technology to ensure that patient records are accessible, accurate and up to date, and that daily tasks are made more efficient, through the creation of compatible systems which remove the existing need for multiple data entry. Conversely, investing in new models of telehealth and telecare appears to be rather less of a priority.

### 3. How well does the Scottish Government's draft <u>Digital Health and Social Care Vision 2017-2022</u> address the future requirements of the NHS and social care sector?

The overall Vision of the strategy appears to be positive and may go some way to meeting the future requirements of general practice. The College has sought to aid its development through co-writing *A digital strategy for Scotland 2017 and beyond: A view from the professions*, in collaboration with the Allied Health Professional Federation Scotland, Community Pharmacy Scotland, Optometry Scotland, the Queens Nursing Institute Scotland, the Royal College of Nursing Scotland and the Royal Pharmaceutical Society Scotland.

RCGP Scotland especially welcomes the Vision's focus on assisting and supporting self-management and care in people's homes and communities. The Vision also successfully emphasises that whilst technology is useful to facilitate greater integration of services, it also presents opportunities to enable involvement and engagement of service users. However, RCGP Scotland holds real concern that the *Digital Health and Social Care Strategy 2017-22* will fail to be meaningfully implemented if the basic problems being experienced with technology and connectivity in the sector are not addressed. In short, a single unified system across all interfaces is essential to effective communication.

**4. Do you think there are any significant omissions in the Scottish Government's draft <u>Digital Health and Social Care vision 2017-2022?</u>**

The strategy needs to acknowledge that health and social care in Scotland needs to deal with constantly changing expectations from both service users and those who seek to transform the services.

GPs are trying to embrace progress with new technologies, while still providing a consistent level of service and resisting changes that will exacerbate the 'digital divide'. The strategy needs to be mindful of both the opportunities and restrictions that come from eHealth and telehealth, and to be explicit in how it will be used to reduce health inequalities. Technology provides real opportunities to improving health literacy, however an over-reliance on technology may leave, for example, those living within financial constraint, or people with a lack of digital confidence, less able to communicate with their GPs. In that respect, the Vision could bear the unintended consequence of leaving some further behind in improving their health and in accessing appropriate healthcare. Careful consideration must be given to ensure that a suitable balance is struck in the development of digital health in Scotland. RCGP Scotland believes that the vision should be explicit in how patient interfaces will be designed to maximise patient involvement that is responsive to their health literacy and eHealth literacy needs.

The principle of patients' appropriate, informed consent must be expressed within the Vision. It would be helpful if the Vision showed how technology could be used to promote patient feedback to inform service improvement and co-production.

The overall strategy must also be reactive and supported by easily accessible eHealth support. For instance, as GPs become ever more reliant on IT to provide patient care in a modern NHS, an eHealth service desk which is only available from Monday to Friday, 8.30pm – 5pm will simply not be adequate for modern working practices.

**5. What key opportunities exist for the use of technology in health and social care over the next 10 years?**

Telehealth presents substantial opportunities to improve patient's health literacy and there is a growing recognition that varying health literacy is a key source of health inequality. EHealth and telehealth have real potential to improve the care received by those who are diagnosed with, for instance, visual, hearing or mobility impairments. However, comparatively these groups currently are far less likely than the UK average to have access to the high-speed broadband required to benefit from such advancements.

The safety of patients and the ability of GPs to communicate effectively and securely with colleagues in both primary and secondary care are of paramount importance and technology presents an opportunity to vastly improve such workings. Secure cloud based technologies present an opportunity for GPs to be able to access and store information in a far more sophisticated manner than present, allowing for patient information to become instantly available and shared between health

professionals. This may enable welcome advancements in the working practices between primary and secondary care professionals, and between 'in hours' and Out of Hours GPs. It is still the case that in many instances information cannot be shared easily and safely between such teams and technological advancements may well present the solution to this. However, all parts of the health and social care sector need to be at the same phase of technological development for such improvements to become reality.

Technology presents opportunities to enhance the two-way communication between clinicians and patients. It also allows for more enhanced care and support planning, ensuring that personalised information and goals, rather than just biomedical data, can be recorded to inform personalised action plans and support. Such data could also be used to inform strategic commissioning of community support, allowing for a more integrated and tailored service for the patient. Social media and other digital platforms also present an opportunity to gather truly representative patient feedback and digital participation.

[RCGP Scotland's 2016 Scottish parliamentary election manifesto](#), called for, 'increase(d) resourcing of existing IT structures to enable safe and efficient communication across the interfaces, especially that between primary and secondary care and Out of Hours care.' Improving such resources will go some way to promoting the interface and ensuring effective and coordinated technological advancement and communication between health and social care teams.

Technology also presents key opportunities for aspects of patient services to become fully electronic. Simple but extremely important administrative tasks such as patient registration, verification and patient preferences and wishes could all be added electronically onto a cloud based system to allow for safer and more simplistic storage of files. This would also allow for a more effective transfer of patient files to new practices.

In terms of prescribing medication, technology presents ample opportunities for all written prescriptions to be communicated electronically and allows for all prescribers to be working from the same, interoperable system. This would allow for quicker and safer prescribing of medication and enhanced communication, for example between care homes, general practices and pharmacies. There are also opportunities for patients to have the option of holding their prescriptions on their smart phones and viewing their prescribing record with accompanying decision support and laboratory results.

Essentially, the currently conceivable opportunities presented by technology in health and social care are abundant, with this contribution only scratching the surface of possibilities. However, a crucially important priority in technological advancement for GPs must be improved connectivity. There is concern, particularly amongst those GPs working in rural locations, that poor connectivity will hamper any form of technological advancement in the sector. In November 2014, RCGP Scotland published *Being rural*, a policy paper outlining the challenges of remote and / or rural general practice. *Being rural* called for Scottish Government to 'ensure rural areas have effective digital links for health care delivery, learning, commerce and leisure'. That call for action remains unmet. As previously stated,

overwhelmingly GPs would like to see the 'basics' of technology improved across the country before any particularly advanced model of e-technology or eHealth is introduced.

### 6. What actions are needed to improve the accessibility and sharing of the electronic patient record?

The integration of health and social care requires greater, appropriate patient record sharing between primary and secondary care professionals and within multi-disciplinary teams. It is of the upmost importance that all health professionals involved in a patient's care have access to the most accurate information available about that care through a unified or universally accessible system.

In addition to this consultation submission, the College has also contributed to a group response, *'Principles for a technology-enabled health and social care service – A view from the health professions working in primary care'.* It states:

> 'Read and write access to relevant information in patient health records where all essential information is stored would enable more informed and therefore safer decisions to be made by practitioners and patients. It would minimize duplication along the patient journey, support system improvements in patient care and outcomes, including assessment, care and treatment.'

In order to release patient information appropriately and securely, RCGP Scotland members have commented that it would be helpful to receive further clarification on the GP's role as Data Controller to ensure that GPs have a high degree of confidence in their ability to securely share appropriate information.

A move towards a 'once for Scotland' approach is also required to ensure that all registered health and social care professionals directly involved in patient care have appropriate read and write access to health records in order to improve the patient journey and to minimise duplication of resources and duplication of patient data entry.

It is also important to remember that any developments of technology involved with the patient record should be carried out through the perspective of service users rather than those delivering the service. For instance, logon details for the record should be simple but secure, to ensure ease of access, and the digital interface should be simplistic in design to cater for people's differing levels of digital literacy. Additionally, patients should be given the appropriate permissions to safely update their own records and care plans.

### 7. What are the barriers to innovation in health and social care?

General practice has provided crucial innovation throughout the history of the NHS in Scotland. Indeed, it was in some large measure a result of the work of Dr Lachlan Grant, and the evidence he gave towards what became the 1912 Dewar Report,

which led to the establishment of the Highlands and Islands Medical Service, the model used in the NHS White Paper of 1944 through the Beveridge Commission.

A key barrier towards innovation in health and social care is the funding deficit which exists for general practice. In the face of over a decade of consistent cuts to the percentage share of NHS Scotland spending being made available through which to provide general practice services, RCGP has been calling consistently for 11% of the annual budget of NHS Scotland to be delivered to general practice. This call mirrors that of the College in England, Wales and Northern Ireland.

The First Minister's announcement of 15 October 2016 that 'By the end of this parliament, we will increase spending on primary care services to 11% of the frontline NHS budget. That's what doctors have said is needed. And it is what we will deliver. And let me be clear what that means. By 2021, an extra half billion pounds will be invested in our GP practices and health centres' appeared to meet that call. £500 million additional funding would bring general practice to approximately 11% of NHS Scotland spending. However, delivery of her commitment has been confused and delayed by later statements from Scottish Government and Scottish National Party representatives elected to Westminster. A joint Scottish Government and BMA Scotland letter to practices, sent on 01 May 2017, said that, 'We know additional investment is critical. We have agreed that this additional investment, in direct support of general practice, will reach an extra £250 million per year by 2021.' RCGP Scotland does not yet have understanding of what 'in direct support' may mean and the point has been raised with Scottish Government that the term is too broad and lacks sufficient clarity. On 22 May 2017, Dr Philippa Whitford MP, SNP Westminster Health Spokesperson, gave an interview to Pulse magazine in which she confirmed that, 'Scottish Government has committed to reversing the decline in the share of the health budget that general practice has had and bringing it up to 11% by the end of parliament.' Yet on 01 June 2017, in answer to Question S5O-01067 of the Scottish Parliament, the Cabinet Secretary for Health and Sport, Shona Robison MSP, said, 'This forms the first stage of the Scottish Government's commitment to provide an extra £250 million in direct support of general practice per year by 2021 - increasing the overall investment in primary care by £500 million.'

A review of the NHS Information Services Division's (ISD's) *Cost Book* shows, in its R300 report (April 2015-March 2016), that primary care services already receive around 23% of NHS Scotland funding. Against the First Minister's statement that 'By the end of this parliament, we will increase spending on primary care services to 11% of the frontline NHS budget … And let me be clear what that means. By 2021, an extra half billion pounds will be invested in our GP practices and health centres', it is clear that the First Minister must have meant for the full £500 million additional funds to be delivered to general practice services, assuming she cannot have intended a cut to primary care of 12% of NHS Scotland spending.

General practice is in severe need of a clear, positive future, illustrated by adequate governmental investment, if it is to attract sufficient numbers of medical graduates to general practice specialty training. If the longstanding underfunding and confusion that we are currently experiencing is to continue, we will keep witnessing a considerable number of general practices closing and transferring the running of their practices to Health Boards due to insufficient resource through which to remain

solvent. Patients will continue to be found queuing outside practices for the uncertain opportunity merely to register with a GP. It is a major deficit to bear such long-standing underfunding and confusion. The funding situation in Scotland is illuminated by comparison with that in England. Though England's approach to general practice is at least imperfect, it is noticeable that the percentage share of NHS England funding for the delivery of general practice services, prior to the GP Forward View programme announcement with its delivery of £2.4 billion additional funds by 2021, stood at 8.79% of NHS England funding. The GP Forward View will deliver over 10% of NHS England funding to general practice services. An additional £250 million for general practice in Scotland will be less than 9% of NHS Scotland funding, that is, roughly the level of GP funding in England prior to the GP Forward View. In a situation where the profession is continually reminded that Scotland provides a higher headcount of GPs per patient than other parts of the UK it is noticeable that the percentage funding for GPs in Scotland is lower than that in any areas.

While innovation in health and social care towards new models of care includes the support of a wider multidisciplinary team, it is clear that patient safety demands adequate and appropriate GP roles within that team. Indeed, it is clear that such innovation is reliant on sufficient members of other professions being available, a point of concern given recent figures showing that Scotland currently endures around 2,800 nursing vacancies and the failure of boards to recruit sufficient numbers of pharmacists trained to work in general practices. Further, members of the enhanced team will require to be trained by GPs to fulfil appropriate roles for which their experience and training are suited. That will be difficult in the current circumstance of extreme stress on GP time. GPs have worked in multidisciplinary teams in their practices for decades. In proposed new models of care, members of the wider multidisciplinary team cannot be seen as a substitute for GPs. Recent changes to models of care made public by Highland Health Board have suggested that Advanced Nurse Practitioners, an as yet incompletely defined term in primary care, should provide care for patients in the absence of and without the appropriate support of, GPs. Such changes put patient safety at risk. In January 2016, Dr Miles Mack, Chair of RCGP's Scottish Council, commented that Scottish Government may view general practice as 'dispensable'. Assurances were offered that this was not the case. Such 'innovation' from Highland Health Board, developed in line with Scottish Governmental messaging, suggests that those assurances to patients may be required once again.

Existing pledges by the Scottish Government to expand the wider general practice team by 2021 are welcomed by RCGP Scotland and we believe that correcting GP workforce planning to provide sufficient numbers of GPs will aid innovation within the sector. Members of the wider general practice team should be kept as part of general practice structures to best safeguard patient safety and quality of care, and to allow for more streamlined and localised innovation of service delivery, and clarification should be provided to ensure that only GPs can be allowed to perform the role of GPs. The creation of enhanced multi-disciplinary teams allows for ideas sharing and the fostering of innovation. RCGP Scotland believes that, within the bounds expressed above, this is a step in the right direction in terms of improving the care and service provided to patients.

RCGP Scotland has consistently made clear its view that any new model of care or innovation must be based upon a sufficient increase in GP numbers. The College predicts a shortfall of 828 GPs across Scotland by 2021. It is notable that the Scottish Government's National Primary Care Workforce Plan, published on 28 June 2017, postpones delivery of its 'GP supplement' until after the current contractual negotiations towards the new Scottish GP contract are concluded, that is, until the end of 2017. This is a worrying approach, developing, as it does, new models of working only to include planning for GP numbers after the event. It risks an approach, which results in removing GPs from frontline, continuous patient care, of which the public are largely unaware. It is impossible for safe innovative approaches to integrated health and social care to be adequately planned until GPs have a stable footing of known funding and workforce numbers on which to build such plans.

Furthermore, innovation can only come where funds are appropriately managed. It has recently been suggested by BMA Scotland that the costs of running general practices managed by health boards are in some cases up to double that of those managed as independent contractors. To facilitate innovation in health and social care it is necessary to first adequately fund general practice to create a tangible improvement in the working environment which will attract GPs and help to retain those GPs who site the unsustainable workload as the main reason for leaving the profession.

Funding must also be appropriately increased in those areas where high levels of deprivation and health inequalities exist. The example of the Scottish Government funded Govan SHIP model shows clearly what can be achieved in terms of reducing health inequalities, improving staff morale, retention and recruitment, and improving patient outcomes when funds are proportionately allocated on a needs basis. The provision of such increase must form part of Scottish Government's planning for future general practice services.

In order for general practitioners to be innovative, they must have the time to do so within their working week. For over three years, RCGP has shown that rising workloads, a shortage of GPs and declining resources are putting intolerable pressure on GPs. Not only does this pose a threat to patient safety, it also increases the strain on GPs to fulfil their daily administrative tasks. It is often therefore difficult for clinicians to find the time required to think innovatively about the improvements that could be made within their practices to improve standards for patients and staff. Examples of GPs' work in Quality Clusters leadership illustrate the need for appropriate resource. For real improvements to be seen in this area, the workforce issues facing general practice must be rectified. In Scotland, as previously mentioned, we are facing a predicted shortfall of 828 whole-time equivalent GPs in Scotland by 2021 and this must be tackled urgently.

Concerted action is therefore required to put in place an incentivised strategy for rectifying this shortfall, with measurable targets set along the way. Medical students and trainees must be regularly exposed to general practice each year throughout their learning and fundamental changes should be made to ensure that general practice is viewed as an attractive option for medicine graduates. A single national GPs Performers List should also be implemented in Scotland as soon as possible. The status of healthcare professionals already working in Scotland and the UK must

also be safeguarded throughout the period of international negotiations to ensure that it is as easy as possible for doctors from the EU and other countries to move to the UK.

In order for the primary care workforce to be truly transformative, a shared understanding must first be realised throughout the workforce on what exactly its objectives are and upon what resource the realisation of those objectives will be based. By achieving a shared understanding, the risks of fragmentation, misunderstanding and conflict are significantly reduced. We believe that the definition of primary care offered in *The future of primary care in Scotland: a view from the professions*, a document created with those professional bodies outlined in answer to Question 3, offers an appropriate and agreed upon definition of 'primary care' amongst professionals in the sector. Scottish Government has been invited to accept this definition in order to further develop an environment of collegiate working and innovation amongst the primary care workforce, and to provide a stable and sound platform from which to develop primary care services, and we are hopeful that such a step will be taken at the earliest opportunity.

The integration of health and social care has provided and will continue to provide the sector with an abundance of opportunities to innovate. However, in order to fully grasp these opportunities, the interfaces that exist between general practice and the wider health and social care sector must be improved. RCGP Scotland believes that primary and secondary care interface leads should be developed within health boards, allowing their autonomy and for them to be charged with and become involved in leading system change. By establishing such a lead, innovation within the sector will become more inclusive and streamlined. Crucially, the technology and communication infrastructure must be in place to ensure that safe and efficient communication can be achieved between primary and secondary care, with Out of Hours care, among wider primary care providers and throughout the healthcare system. The development of such technological infrastructure will allow for a far more co-ordinated, safe and streamlined patient journey from one area of care into another.

At present, there is some concern over the level of best practice sharing that is embarked upon within Scotland's health and social care sector. As highlighted in the Scottish Government's *draft Digital Health and Social Care Vision 2017-2022* (as accessed in July 2017) there are multiple examples of best practice throughout Scotland in terms of digital innovation. However, it is often the case that best practice is not developed and adopted across the board, leaving some practices as beacons of excellence, while others are not involved in the sharing of knowledge that is required to come up to that standard. In order for true transformation to be achieved within the sector, consideration must be given to what can be done to improve the sharing of knowledge and best practice to ensure that necessary improvements are made across the board.

Many general practices across Scotland are performing admirably, in the face of considerable challenges. They remain largely unknown and unsung against the clamour for change as the crisis in general practice grows. It is to be hoped that the Health and Sport Committee will seek to understand what research into their methods of working and model of care is being done, in order to ensure that that

knowledge is valued and may be spread and implemented prior to any final decisions being taken on implementing any new models of care. Should no such research be being undertaken as a formal part of investigations surrounding the development of new models of care, RCGP Scotland suggests that the committee insist that it is undertaken urgently. Through such research and understanding, Scotland may be allowed to continue to benefit from the knowledge and best practice of those general practices and ensure that, as we approach new ways of working, successful general practice 'babies' are not 'thrown out with the bathwater'.

Technology will only be worthwhile and successful if it enhances personalised relational care rather than seeks to replace it, towards a realisation of *Realistic Medicine*.There is much to be gained by appropriate innovation in the delivery of health and social care in Scotland. Equally, there is much to be lost through the mistaken belief that any idea, change or new method is necessarily a positive innovation. General practice has long been an innovator to the NHS, maintaining and refining its *[Core Values](...)* as it has developed. It should be sufficiently supported, as described above, to allow such innovation to flourish again.