The Modern Outpatient: A Collaborative Approach

2017-2020

At home or in the community
In Secondary Care
In Primary Care
The Modern Outpatient: A Collaborative Approach

2017-2020

At home or in the community
In Secondary Care
In Primary Care

Edinburgh 2016
Contents

Foreword

1. Executive Summary
2. Key Facts
3. Introduction
4. National Context
5. Transforming the Patient Experience
6. Optimising the Role of Existing National Programmes
7. Building on Existing Success
8. Creating The Modern Outpatient
9. Managing and Understanding Variation in Return Demand
10. Engagement
11. Governance
12. Measurement
Annex 1: Outpatient Attendances 2015/16
Annex 2: Demand Growth
Annex 3: Primary Care Vision and Outcome Framework
Annex 4: Video Clinics to Support the Delivery of Outpatient Services
Annex 5: Home and Mobile Health Monitoring
Annex 6: Mental health Access Improvement programme
Foreword

Each year, NHS Scotland delivers around 4.5 million outpatient appointments of which around a third are new and two thirds are return appointments. It is vitally important that people get fast access to advice and support, self-management information, and, where needed, get to see the right health professional as quickly as possible to ensure care is delivered in as responsive and person-centred a manner as possible, and, critically, as close to home as possible. We have also seen significant growth in Outpatient numbers – over 140,000 extra patients now being seen on an annual basis compared to 2009.

A Plan for Scotland sets out our clear commitment to shifting the balance of care to ensure that people get the right support from the right professional as close to home as possible. We are supporting this with a transformational shift in how we fund healthcare: by 2020/2021 more of the NHS budget (£500m extra) will be spent in the community than in hospitals. We are investing significantly to build capacity in community healthcare – general practice and wider multidisciplinary teams – to deliver our vision. This collaborative programme for the modern outpatient fits with this vision.

The National Clinical Strategy and Realistic Medicine sets out our approach to ensuring we make best use of all the resources available to us in NHS Scotland in the delivery of world class healthcare; importantly this includes all members of our multidisciplinary teams. This is particularly important in the face of rising demand for, and growing expectations of, what healthcare can do to resolve health challenges. Examples of where our pathways have been redesigned to manage this demand, and ensure people get to see the health professional best suited to their needs, are set out in this document. Our national Musculoskeletal and Orthopaedic programme is one such example of this approach as the largest outpatient service in Scotland. Patients can access immediate advice and support via NHS24 and are seen by an Allied Health Professional if needed, such as a physiotherapist or podiatrist in the community. This has freed up secondary care appointments for individuals needing a surgical opinion and effectively managed growing demand for orthopaedic appointments towards the correct health professional.

Looking to the future our approach must fit with our wider plans for transformation, in particular transformation of general practice, primary care and community health services. Our approach must not be about transfer of workload from hospital to community but about promoting collaboration between clinical teams in both primary and secondary care to develop solutions that best meet the needs of the local population and at the same time appropriately managing workload across the system, valuing the contribution of all staff. To ensure genuine collaboration we will need to focus our attention on the local interface between primary and secondary care, bringing local decision makers together to promote innovation and the solutions that best meet local needs.

The Modern Outpatient Programme will be progressed over a three-year time span starting with consultation in December 2016 and will build on the direction set within the Primary Care Transformation Programme and National Clinical Strategy. Science and Technology changes are moving at pace – we particularly need to harness digital technology to provide a more responsive service in the future. For example some Boards (as exemplified in this document) have already started to embrace new ways of working – if all Boards operated at the level of the best in managing return patients 150,000 Outpatient slots could be released with the potential to increase that to 400,000 when we consider the wider gains that could be made in reducing Do Not Attend rates and spreading the best practice examples in this document on a Scotland-wide basis.

We would like to know what you think – particularly if the ambitions and proposals within this programme are the right ones and to get your thoughts on how we can redesign services for the future benefit of patients.

Shona Robison MSP,
Cabinet Secretary for Health and Sport
1. EXECUTIVE SUMMARY

We currently see 4.5 million Outpatients in a Secondary Care/hospital based setting. Some specialties have seen the numbers of patients doubling since 2008/9.

There is evidence already in existence that shows the Outpatient Service in Scotland can transform to be more responsive, with less inappropriate visits to hospital and with patients signposted to the right clinician at the right time and right place.

Transforming the patient experience will rely more than ever on closer integration, planning and co-ordination of services across a spectrum of clinical settings at national, regional and local level.

Better access to clinical decision making support and specialist advice will make a significant impact on patients getting the right treatment and removing unnecessary steps from their journey.

Maximising the roles of the wider multidisciplinary team will be crucial to ensuring the patient has access to the right clinician first time and in removing unnecessary delays to their journey. Whilst some new roles have been adopted or extended this has not been at scale.

Extending the range of training and development opportunities will be essential in delivering a modern workforce which ensures the extended multi-disciplinary teams have the skills, confidence and capacity to work to the full range of their competencies.

Reducing the need for face-to-face consultant appointments by, for example, optimising E-health and digital solutions such as supporting self-management, managing patients more remotely or reviewing patients in the comfort of their own home using online tools will be essential to providing care closer to the patients’ home.

There are many examples of ‘redesign in action’ contained in this document. Taken together across the entire range of outpatient services up to 400,000 Outpatient appointments have the potential to be redesigned into a more appropriate and sustainable model of care.

One of the key objectives of any transformation programme must be to ensure that precious clinical time is used wisely and effectively both in Secondary and Primary Care. This is not about simply moving workload from one part of the Service to another. We expect that the aims of forthcoming report on Improving Practice Sustainability will be closely aligned with the work on transforming Outpatients.

The Modern Outpatient: Core Principles

- Strengthening knowledge exchange and self-management in the community with the patient at the centre;
- Accessing decision support, care planning and care services in the community wherever safe and appropriate;
- Emphasising competency-based roles in secondary care, to focus Consultant resource on more complex patients, and recognising the role of the GP as the ‘expert clinical generalist’ and raising the profile and enhancing the role of the wider multidisciplinary team of community-based practitioners;
- Optimising e-Health and digital opportunities at the primary/secondary care interface as the norm;
- Reducing widespread variation in secondary care return appointments and review processes, wherever clinically appropriate.
2. Key Facts

2.1 NHS Scotland delivers almost 5 million outpatient appointments every year. Patients attend outpatient appointments for one of three broad reasons:

• an initial referral to acute care to get more specialist opinion and diagnosis;
• for treatment, which may be a series of treatments over time; or
• for follow-up to check on outcomes and/or continuing symptoms.

During 2015-16 there were a total of 4,500,280 outpatient attendances, of which 1,486,522 were new and 3,013,728 were return appointments.

Return appointments accounted for 67% of all acute outpatient activity (see Annex 1).

During the period 2007/08 to 2015/16:

2.2 There has been an 8% increase in new outpatient attendances (all specialties (excluding A&E), (see Annex 2).

Some high volume specialties have experienced significant growth in new attendances:

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastroenterology</td>
<td>104%</td>
</tr>
<tr>
<td>Respiratory medicine</td>
<td>78%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>22%</td>
</tr>
<tr>
<td>General surgery</td>
<td>26%</td>
</tr>
</tbody>
</table>

2.3 Some high volume specialties have experienced significant growth in all attendances (new and return):

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastroenterology</td>
<td>63%</td>
</tr>
<tr>
<td>Respiratory medicine</td>
<td>44%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>15%</td>
</tr>
<tr>
<td>ENT</td>
<td>11%</td>
</tr>
</tbody>
</table>

Redesign in action:
Redesign which delivers results

Sustained service redesign which addresses the management of both new and return patients has reversed the growth trends in appointments. Fracture Pathway Redesign and the development of Musculoskeletal (MSK) services are having a positive impact in off-setting potential growth. Trauma and Orthopaedics new and return appointments have reduced by 13% since 2007/9 through clinically-led redesign of pathways.
3. Introduction

3.1 The Modern Outpatient Programme has enormous ambition: we want to transform our concept of both what an ‘outpatient’ is and what ‘outpatient services’ are. We want the default position to be that the Modern Outpatient is safely managed at home, or close to home – either by managing their own health or being supported by a member of the wider primary care team, and not just those based in GP practices; we want to revolutionise the way patients’ needs are addressed by hospital-based, but not necessarily hospital delivered, services if and when required; and we want to ensure that every return appointment is timely, appropriate and effective.

3.2 The initial outpatient appointment has always been critical to the patient and their journey through care; it allows for diagnosis, reassurance and definitive decisions on treatment – sometimes including treatment itself. In addition, we want to influence the way in which return outpatient appointments are managed and to influence a positive shift in the way that this is done.

3.3 New outpatient appointments are a key element of the whole patient pathway standard, assuring 18 weeks from referral to treatment; they are also an important stage on the way to delivering the Treatment Time Guarantee of 12 weeks from decision to treat to the start of treatment; they are a critical point in the pathway to diagnosing cancer early – or providing reassurance that there is nothing to worry about. This is therefore a time when patients need to be seen without delay. For example, there is significant evidence of the importance of early diagnosis and treatment for certain patients, particularly those with urological, head and neck or skin cancers. Doing things differently, often in a different setting, will help speed the flow of patients through the whole system to ensure that they can access the right level of care, in the right setting at the right time.

3.4 Custom and practice has meant that the outpatient appointment has become a fixed item delivered in secondary care. Patients expect to be referred by a GP to a hospital-based consultant in a specialty, see that consultant and remain under their personal care until treatment is complete, follow-up has happened and/or we are discharged. We have designed and developed services that fit this model.

3.5 This is not sustainable or patient centred. The pressures on all parts of NHS Scotland of an increasing older population, the welcome improvements in the availability of treatments for many conditions and the ambition to deliver better care, faster, are putting a strain on outpatient services and may impact negatively on patients’ experience of those services. Therefore we need to transform the way in which we understand, diagnose and manage care and also risk. This is not just about a transformation in secondary care but about transformation across the whole of the local health and social care system; expectations of general practice and other community-based professionals are changing too. Fostering a co-production culture, whereby patients are engaged more effectively and consistently in determining the right care for them will be fundamental to managing expectation and new ways of managing rising demand.

3.6 NHS Scotland is already developing innovative and ambitious approaches to outpatient services. Many illustrations of the potential transformation these can bring are set out in this document. In short, this programme aims to enable clinicians from all professions to work with patients to:

- bring together all of the existing good practice and ensure it is spread as widely as possible;
- encourage the wider ‘skilling up’ of staff to deliver the most appropriate care from the most appropriate person;
- support the introduction of further evidence-informed approaches;
- develop and test more innovative ideas;
- provide outpatient services as close to home as practical; and
- use technology to enable clinicians to deliver these modern patient focused services.
3.7 The clear intention of the Programme is to shift our focus from an outpatient appointment in a hospital to The Modern Outpatient themselves, empowering them to manage their own health and wellbeing but able to access the appropriate support quickly, as and when it is required. This however, is not about adding to the burden on services or moving bottlenecks to a different part of the care continuum. We recognise the significant pressure that GPs and other community-based professionals are facing. So this is not about a transfer of workload but is about working together across the primary/secondary care interface to provide the best care in the most appropriate setting for each patient at the point of need.

3.8 This is not a ‘one size fits all’ approach, in that some of the new ways of delivering outpatient care may not always be suitable for all patients. Some patients may be vulnerable, have comorbidities or be unable to access services in these ways. Not all patients are equipped to self-manage, nor empowered to access the care systems in ‘modern’ ways.

3.9 To measure success in a complex programme such as this is not straightforward; it will require qualitative feedback from those delivering and receiving care in the new ways set out by the Programme. However, supporting the aim of increasing care in primary/community areas and self-management, we aim to reduce the number of hospital-delivered outpatient appointments by up to 400,000 by 2020, including reversing the year-on-year increase. More detail of how we aim to do this is illustrated throughout this document. We know, for example, we can reduce the number of avoidable referrals and appointments by doing things differently, to the benefit of our patients.

3.10 These improvements will free up real resources that will be re-invested in community-based services or in parts of the healthcare system requiring greater capacity. We will build these opportunities in each specialty, determining achievable improvement aims by the end of the first year of the Programme.

3.11 The Programme is therefore designed to inspire a new model which reduces the need for routine face-to-face appointments by predicting risk, providing support only when intervention is necessary, whilst maximising the role of all clinicians across the healthcare system and delivering care in the community or in the patient’s home whenever safe and practical to do so.

3.12 The dramatic increase in referrals to secondary care in a number of specialties is driven by increased disease prevalence, increased patient expectation and an increased range of treatments. A large number of referrals, however, do not result in any diagnosis being made (up to 30% in some specialties). Not all referrals are made for diagnostic purposes, and not all referrals result in changes to care and treatment as a whole.

3.13 We need to do more to support clinicians to manage risk appropriately and confidently, especially in the face of multi-morbidity. Realistic Medicine can deliver change by reducing population ‘health anxiety’ and by fostering a culture which supports clinicians to have more informed conversation and decision making with patients.

3.14 The Programme will support clinicians and other health and social care staff to develop robust approaches to deliver improvements in outpatient services to achieve the aims of the Programme. Working towards the transformational changes that are required will necessitate local clinical leadership and ownership. A number of healthcare systems worldwide have developed approaches that will be shared in order to support the Programme across Scotland.
Development of The Modern Outpatient model which avoids the need for routine planned care by predicting risk, enabling self-management, providing support and intervention only when necessary, while maximising the role of all clinicians across the healthcare system.

Key Transformation Areas

- Prevent unwarranted attendance/admission/referral
- Optimise what should be done inside hospital only
- Prevent delay and create community capacity

Current State

- New outpatient consultant referral as default for assessment, diagnosis and treatment
- Consultation-led, hospital-based services which are predominantly face-to-face consultation and generate routine return appointments
- Under-utilisation of extended multidisciplinary team skills, independent practitioners and community-based assets

Transformational Activities

- Digital patient management/clinical decision support applications which supports the extended MDTs to manage patients in the community
- Access to digital imaging software/virtual mediums/diagnostics which enhance referral quality and primary care/secondary care dialogue
- E-advice feedback and advice only referrals which provides more timely access to treatment for the patient
- E-consultation video call web-based management software which enables consultation in the patient’s own home
- Patient self-scheduling tools/software and patient i-triage assessment which allows the patient to access care when required
- Planned return lists which ensures patients are seen at the right clinical interval by the right clinician
- Digital health technologies/wearable devices which enable remote monitoring and supports the patient to self-management
- Condition specific pathways which triages patient to the right clinician first time and reduces unnecessary delays
- Training and e-learning which enables the wider MDT to support patients more holistically

Future State

- Primary care/Community service led care for non complex care
- Virtual consultation and patient initiated review
- Standardisation of return demand variation generated in secondary care
- Extended scope practitioners/Advanced nurse practitioners/Specialist nurse complex care management
- Maximisation of the roles of the extended MDTs Pharmacy/Optometry/AHPs and other independent practitioners
4. National Context

4.1 This paper has been written for stakeholders, for clinicians and managers and for service providers. Its main purpose is to herald a change in approach that is both necessary and inevitable. It is therefore essential that we understand, plan and design a service that is fit for The Modern Outpatient. At present this is not in place; in three years’ time, we aim to have established a robust and reliable infrastructure that will be set to truly deliver a modern outpatient service.

4.2 The Scottish Government has published a number of documents that set out the policy framework for NHSScotland. Over the course of the next few months we will also develop an overarching strategic plan that will identify the way forward for the next five to ten years. The Modern Outpatient: A Collaborative Approach programme will play a crucial role in the delivery of these ambitions.

4.3 The most significant policy drivers for this work include the National Clinical Strategy for Scotland which sets out the challenges facing healthcare and some of the principles surrounding our approach. The strategy was produced following extensive consultation with clinical and other stakeholder groups before publication in 2015. NHSScotland has led the world with its work on quality and safety in acute settings, and this programme will contribute to furthering one of its quality aims in this area, namely that:

‘Services will be based around supporting people rather than single disease pathways, with a solid foundation of integrated health and social care services based on new models of community-based provision.’

4.4 The Chief Medical Officer’s Annual Report for 2014/15, Realistic Medicine, has been welcomed as a bold, new vision for healthcare in Scotland. Amongst its guiding principles, the commitment that we must deliver value in NHS Scotland is significant for this programme. The report sets this out clearly saying:

‘We must deliver healthcare that focuses on true value for the patient. Waste in healthcare should be assessed not in terms of what might be thrown away, but in interventions that don’t add value for patients. This includes avoiding unwarranted variation in clinical practice and resultant outcomes.’
4.5 The Joint Integration Boards and Integration Partnerships will play a pivotal role in commissioning services which deliver better outcomes for the population they serve, with particular recourse to population health and the wider determinants of health, both preventative and anticipatory and meeting the needs of people with multiple, complex, long-term conditions. The existence of large social and geographical inequalities in mortality and increasing co-morbidity will require of the Programme evidence that new ways of working encourage access to outpatient care by making it more user-friendly and accessible, and ensuring no patients ‘slip through the net’. Tests of change or new ways of delivering outpatient interactions will ensure that any mismatch of available resource, be it skills, staffing numbers or skill mix, are remedied.

4.6 From 2017 onwards GP practices and GP clusters will have oversight and direct involvement in improving the quality of health and social care services, including the current chronic disease management programme and use of secondary care services. This work explicitly acknowledges the pressure faced by GPs and so recognises the imperative to ensure the balance of care is appropriate, equitable and focused on the care delivered where it needs to be, and not about displacing workload. It is envisaged that the ‘ground up’ and national collaborative approaches to improving access and quality will be complementary rather than conflicting. The Programme outputs and deliverables will be revisited and refined as GP clusters evolve and new ways of improving access and quality emerge.

To ensure this equitable and balanced approach the development of this work will support the delivery of the recommendations of the GP Improving Practice Sustainability Short Life Working Group, established by the Cabinet Secretary for Health and Sport in Spring 2016. As included in those recommendations, we would expect to see robust local structures at the primary/secondary care interface to underpin local collaboration. This should build on good practice supported by the Royal College of General Practitioners and promoted in the recent joint statement with Royal College of Nursing and other Professions.

4.7 The Modern Outpatient Programme will contribute to the delivery of these ambitions by supporting greater patient self-management, shifting the provision of services and resource into the community and improving the value of interventions in secondary care services where they are required to the individuals who need them.

4.8 New ways of managing outpatient services will have a positive impact on reducing the workload of GPs and Consultants, thus releasing their time to see patients with more complex needs and ensure they see patients who need to be reviewed on time.
5. Transforming the Patient Experience

5.1 Based on the intention to move from routine-based care to anticipatory care, enabling clinicians such as Consultants and GPs to manage patients with more complex care needs, The Modern Outpatient Programme will focus on strategies which support the management of patients across the spectrum of clinical need, with a particular emphasis on providing care closer to the home through community-based multidisciplinary teams.

The commitment to patients in implementing this programme are:

1. Patients will receive timely access to advice, treatment and support.
2. Patients will not incur unnecessary inconvenience when accessing outpatient services.
3. Patients will gain access to outpatient review services when it is clinically necessary appropriate.

Commitment 1: Patients will receive timely access to advice, treatment and support.

<table>
<thead>
<tr>
<th>What happens now</th>
<th>What will happen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advice only referral options are available but are not used as often as they could be. When used appropriately, they have made a significant impact on reducing the time patients wait to get onto the most appropriate treatment or management plan.</td>
<td>GPs will continue to manage the patient and offer advice on self-management. They may wish to ask a secondary care specialist for advice about the patient’s care using ‘Advice only’ referral options.</td>
</tr>
<tr>
<td>GPs currently seek and receive advice on care, using a range of communications, such as email or telephone, but it is not always recorded in the patient’s record.</td>
<td>If the specialist feels they do want to see the patient, the advice referral will be converted to an outpatient appointment.</td>
</tr>
<tr>
<td>Patients have a GP appointment and are often referred on to secondary care.</td>
<td>The advice and decision will be recorded in the patient’s record.</td>
</tr>
<tr>
<td>Patients experience multiple appointments for multiple purposes and undergo a plethora of diagnostic investigations often resulting in over medicalisation of their care.</td>
<td>Public awareness of self-management, advice and triage options will be increased (such as NHSInform and NHS24). Self-referral and GP referral to community based assessment and treatment options (such as physiotherapy) will be increased.</td>
</tr>
<tr>
<td>We will work together to ensure a more integrated approach to managing patients more holistically rather by disease group and condition</td>
<td></td>
</tr>
</tbody>
</table>
**What happens now**

Ordering certain diagnostic tests is often restricted to clinicians in an appointment-based secondary care setting resulting in patients waiting for this appointment before any tests can be organised.

The results of these tests may indicate that an appointment in secondary care was not needed and has introduced delays to the patient seeing the right clinician first time.

Extended Scope Practitioners and specialist nurses currently review some referrals to ensure the patient is seen by the most appropriate clinician. This practice is not as widespread as it could be.

**What will happen**

To support the referral process, access to certain diagnostic tests, which have been approved as part of collaborative pathway redesign, will be available to primary care clinicians. This will help determine if a referral is needed and to which service the referral should be made.

The referral once received in secondary care will be sent on to the most appropriate clinician. This may not always be a Consultant.

We have been extending the roles of nurses and other professions such as physiotherapist. It may be one of these clinicians will assess referrals and decide on the best course of action.

Referral guidelines and management pathways are useful tools designed to assist clinicians in making referral decisions. To make this more effective, we will need to combine peer review and specialist feedback whereby GPs work together to look at referral patterns both within their own practice and neighbouring practices.
Commitment 2: Patients will not incur unnecessary inconvenience when accessing outpatient services

What happens now

Most consultations take place in a hospital environment and are in person. This can result in inconvenience to the patient, both in travel costs and time and may result in unnecessary travel costs for the referring NHS Board and patient. We already use some technologies to help patients self-manage or which help monitor their health remotely. However, these technologies are not extensively used.

What will happen

If patients need to be seen in secondary care, following the first appointment there are several outcomes:

- they may be discharged with no follow up;
- they may be given further follow up appointments but not necessarily with a consultant. It will be with a consultant or another hospital clinician if their on-going care needs are complex and require to be managed closely;
- any follow up care needed may take place in the comfort of the patient’s home or in another community setting; and
- patients may be discharged but with supported self-management as they still need to be kept informed.

We will extend the range of technologies we use to support patients at home or provide remote monitoring services where clinically appropriate. If the patients’ needs change and the supported self-management is not working they will be able to initiate their own review.

Commitment 3: Patients will gain access to outpatient services when it is clinically appropriate

What happens now

Routine return appointing is the predominant means of bringing patients back for a review. High demand for return appointments means that patients do not always get seen when the clinician has requested. Routine appointments may also be seen as a means of just ensuring patients are doing well. This may be of no benefit to the patient or the clinician with regard to the assessment of their health care needs.

A large number of return appointments are made to give patients results and may result in unnecessary anxiety.

What will happen

We will avoid unnecessary return appointments routinely (unless ongoing care needs require it). We will provide patients with the means to book an appointment if they feel they need it.

When a GP receives results it is likely they will contact patients to advise on them and discuss next steps. This is more convenient to patients. This is often not common practice in consultant led care. We will work to encourage consultants to work in this way.

To ensure that patients are seen or given advice by the right clinician, a mechanism of self-assessment will be included in the booking system.
5.2 It is anticipated that unless ongoing care needs are more complex and the patient is required to be managed closely by a hospital-based clinician, the care will be managed in the patient’s home or community settings by a range of appropriate clinicians. If care needs changed, patients will be able to gain timely access to the right clinician.

5.3 By putting patients at the heart of the healthcare system The Modern Outpatient Programme will ensure patients:

- are kept well informed and empowered;
- will get access to the right clinician at the right time;
- will receive care and support in or near their own home; and
- will be looked after by multidisciplinary teams based in the community.

5.4 It is important that patients see the right clinician for their clinical need first and without unnecessary delays being introduced to the journey. If, for example, a patient has very complex healthcare need we will ensure they have timely access to a consultant or practitioners who has been trained in more advanced skills specific to the problem. Patients, on the other hand, may be more than capable of managing their own care and we will ensure they have access to the right information and tools to help them remain as healthy as possible.

The exhibit below gives an example of the range of practitioners who may come into contact with a patient depending on their needs. Of course needs may change and vary over time and we will ensure that patients can be referred onwards to the right clinician.
6. Optimising the Role of Existing National Programmes

6.1 Organisationally, The Modern Outpatient Programme will draw on existing Scottish Government programmes of work, namely the Delivering Outpatient Integration Together (DOIT) Programme’s Dermatology and Gastroenterology collaborations, and outpatient aspects of the highly successful Orthopaedic and Ophthalmology Access Programmes, examples of which are highlighted throughout this document.

6.2 Beyond this the Programme will work strategically with:

6.2.1 The Technology Enabled Care Programme to extend the scope of Home and Mobile Health Monitoring and use of video consultations presents opportunities across multiple specialties and opportunities to fully utilise and further develop technological solutions to support outpatient transformation.

6.2.2 Existing Scottish Government innovation bodies who can harness and accelerate the process of developing new technology at pace and provide leverage and funding which builds on the potential benefits of digital transformation in outpatient services. Examples include The CAN DO Innovation Forum (Programme for Government and Scotland’s Economic Strategy) and the CivTech® pilot (Digital Scotland Strategy).

6.2.3 NHS24 and NHSInform regarding the potential expansion of telephone triage services and healthcare information and self-care advice.

6.2.4 The Primary Care Directorate with recourse to the opportunities presented in the new GP Contract, General Ophthalmology Services Contract and Pharmacy Contracts.

6.2.5 The Mental Health Access Improvement Programme delivered by Healthcare Improvement Scotland in partnership with Information Services Division of National Services Scotland. Further support is available to Boards for the development of the mental health workforce to enhance supply and training of workforce to deliver evidence-based therapies, delivered by NHS Education for Scotland (see Annex 6).

6.2.6 The Primary Care Outcome Framework’s (see Annex 3) aspirations provide an excellent platform to work collaboratively on workforce issues and solutions, be more integrated and better co-ordinated with community and secondary care services as part of the ‘virtual’ network of care provision for those patients who have complex needs, those who require to be managed by clinicians other than consultants and GPs and patients who are kept informed through supported self-management. The primary care digital transformation and GP IT re-provisioning, alongside the development of the Patient Portal will open up further opportunities to integrate patient journeys.

6.3 Through Making it Easy: A Health Literacy Plan for Scotland, the Scottish Government has recognised the need to address the impact that low health literacy has on the ability to access, understand, engage and participate in our health and social care system. By systematically addressing health literacy as a priority in our efforts to improve health and reduce health inequalities, there is an opportunity to impact on the volume of primary care interactions regarding potential referrals, maximise the appropriateness of referrals and where appropriate reduce the overall volume of referrals to outpatient services.
6.4 The new programme will work more effectively with primary care to realise the benefits of supporting patients with low health literacy more effectively with a view to reducing demand in both primary and secondary care.

6.5 In addition, working with independent contractors such as optometrists and pharmacists, further shifts of care into local settings, managed by a wider healthcare team, will be a key part of the Programme. For example, the ambitions of Prescription for Excellence: A Vision and Action Plan for the Right Pharmaceutical Care in Scotland include the increased use of community and other pharmacists to help patients and carers self-manage their conditions.

Redesign in action: Managing return patients differently

As part of the National Ophthalmology Workstream, a high proportion of post cataract return appointments are now undertaken in a community setting, in some cases by ‘high street’ optometrists. Further roll-out continues, with a small proportion of complex cases still requiring review by hospital eye services.

The Community Eye Services Review is underway and it is expected that other eye conditions will be subject to appointments in the community via shared care schemes with long-term conditions. Approximately 46,000 cataract treatments were undertaken in NHSScotland in 2015 – approximately 26,000 return slots have been released to date.
7. Building on Existing Success

7.1 The Programme will also build on work which has already demonstrated a positive impact on patient experience and outcome, or has the potential to do so.

7.2 Increasing uptake of advice only referral and e-advice feedback is important with regard to providing more timely access to treatment for the patient. Whilst advice only referral options are available, they are not universally used.

Redesign in action: Advice and triage

NHS Lanarkshire successfully trialled the use of advice only referrals and electronic feedback for patients with neurological conditions. An ‘advice only’ option was added to the existing referral system, enabling primary care clinicians to request advice from a secondary care clinicians and ensure the advice given is recorded as part of the patient record.

In addition, some referrals requesting an appointment were converted to advice only providing more timely access to treatment/management from the patient’s perspective. The use of advice only referrals in neurology has the potential to reduce the number of new outpatient appointments by 5,000 in Year 1 of the Programme.

7.3 Access to digital imaging software, virtual mediums and diagnostics is considered essential to enhancing referral quality and primary care/secondary care dialogue for patients with dermatological conditions. Similarly, once the report is available, GPs would benefit from having access to the radiology images which in turn can be shown to the patient and support the GP to manage the patient in the longer term.

Redesign in action: Maximising consultant time

The National Dermatology Collaboration recently launched a Small Business Research Initiative (SBRI) with Innovate UK. The Dermatology Challenge is ‘Optimisation of a four hour clinic session’ where the aim is to identify new technological solutions that can permit more diagnosis and ongoing management of skin conditions to be achieved outwith the conventional clinic setting, in order to then provide sufficient consultation time for patients who do require a personal consultation with a dermatologist.

The work is being led by NHS Forth Valley in partnership with NHS Greater Glasgow and Clyde and NHS Tayside. We have over 300,000 dermatology appointments a year. By reducing the number of patients who need to be seen and managing return patients in different ways, we can release around 30,000 appointments in Year 1 and 2 of the Programme.
7.4 Existing programmes have developed a range of condition-specific pathways which triage the patient to the right clinician first time and reduce unnecessary delays. Example pathways include Inflammatory Bowel Disease, Irritable Bowel Syndrome, Coeliac Disease, Abnormal Liver Disease, MSK and Ophthalmology pathways.

Redesign in action: The right clinician first time

The National Gastroenterology Collaboration has developed a National Pathway for patients with coeliac disease (CD). Currently, once diagnosed, patients are followed up in secondary care, for ongoing review, annual bloods and bone health status. The new pathway will triage patients to community-based dietetic services post positive CD diagnosis with subsequent annual review being undertaken by pharmacists as part of the existing Gluten-Free Food Scheme. The new pathway will be implemented in January 2017 in NHS Greater Glasgow and NHS Lothian. There are over 160,000 attendances a year. This work, once spread across Scotland, has the potential to divert 3,000 patients to more appropriate clinicians.

Redesign in action: Virtual clinics

Fracture Pathway Redesign (Initiated at Glasgow Royal Infirmary): Clinical pathways have been redesigned for patients presenting with non-operative fractures in ED. A standardised process is set up in ED for management, discharge or referral of all non-operative fractures patients. A proportion (38%) are discharged directly and do not need any further attendance. The remaining 62% of patients are then reviewed within 24 hours (seven days per week) at a virtual clinic led by a consultant surgeon and nurse and a management plan is developed, recorded electronically and discussed with each patient by telephone. A further 20% of patients are discharged with no planned follow-up. Only 42% of patients are required to attend an outpatient face-to-face clinic with a management plan in place to see the right subspecialist. This standardisation of the management plan continues and reduces the number of subsequent appointments required. Virtual Fracture Clinics have shown a clear benefit in reducing variation and improving patient flow. This process has been widely adopted across Scotland and although the proportion of patients discharged at each stage differs between sites, the general reduction in outpatient attendances has improved flow for the whole department.

Importantly an open door policy is available for patients to return if they wish at any point.

The virtual review principles are now being used within elective new patient referrals, thus reducing the need for face-to-face appointments and freeing up resources to deal with demand in other areas.
Redesign in action: Patient self-management

MSK redesign: NHSInform plays an important role in providing patients with evidenced-based information to allow them to manage their own musculoskeletal condition. It includes links to an app which provides exercise videos, exercise logging and reminder options.

Redesign in action: Advice and triage

Musculoskeletal Advice and Triage Service (MATS) is operated by NHS24 (operational in nine Boards, covering 70% of the population). Patients with MSK pain are taken through risk stratification questions to determine their clinical need for: self-management advice (e.g. exercises, footwear); supported self-management (e.g. for patients less able to self-manage); an Allied Health Professional call back (e.g. a physio or podiatrist); AHP referral for assessment; secondary care referral e.g. to Trauma and Orthopaedics and occasionally immediate A&E attendance. This leads to higher quality and a reduced number of referrals to Orthopaedics with patients on the right pathway for an optimal outcome (Exhibit 2).

Potential financial savings of £2m per annum from patients being seen by community AHPs rather than Orthopaedic services. (Based on 20,000 referrals routed to community MSK services directly rather than via Orthopaedics).

Redesign in action: Treating back pain in the community

The NHS Lanarkshire Back Pain Pathway achieved a 75% reduction in back pain referrals to Orthopaedics and a significant reduction in MRIs through use of a standardised protocol.
Exhibit 2 ‘Front-end’ Musculoskeletal Redesign

- 1m hits on NHSInform MSK website & 60,000 app downloads for self-management
- Alternative access web algorithms being tested
- 5% of demand triaged to Return to Work/employability programmes
- NHS24 MSK Advice & Triage Service
- GP Directed
- Other Directed
- Self-Referral

- Low Risk
- • 14% of calls pointed to self-management
- • Clinician call backs for supported self-management

- Medium/High Risk
- Red Flag Patients
- WHSS
- Other Referral
- Community AHP Referral Hubs
- Community AHP Assessment & Treatment
- Protocols result in up to 20% reduction in MRIs

- • Up to 20% reduction of referrals to Orthopaedics
- • ‘urgents’ identified

- Central booking = efficient slot fill and reduced DNAs
- Measurement of patient outcomes to inform evidence base

- Orthopaedics
- Pain Services
- Other
- Older Peoples
- Discharge NFT
- Leisure
- Mental Health
- Employability

- EXIT
- (Onward Referral)
7.5 A major focus for the Programme will be to reduce return appointments by ensuring only patients with a clinical need are seen at the right clinical interval by the right clinician. Redesigning the approach to accessing appointments and the planned return list provides a mechanism for seeing patients with a clinical need, proactively aligning capacity with demand and an approach to ensuring patients are seen at intervals specified by the clinician. Speedier triage and treatment reduces demand on community services and enhances the work experience for clinicians in outpatients.

Redesign in action: Using I-triage to manage return demand

At least 27,700 return appointments per annum could be saved by reducing the need for post-surgery Trauma and Orthopaedic appointments. Patients can be sent a questionnaire on their outcome (e.g. range of movement in their new joint replacement) at intervals following their initial 6 week and 1 year review. Their response to the questions determines if an X-ray and/or an appointment is required.

7.6 Clinicians across Scotland have been frustrated by the lack of subspeciality data available to them and are keen to ensure the data they require to inform subsequent redesign opportunities is collected systematically.

Redesign in action: Using data to enable service redesign

The National Gastroenterology Collaboration has developed a minimum data set and extended data set for patients with inflammatory bowel. Robust clinical data is critical to understanding what patients groups are being seen in secondary care and determining how many patients could be managed more effectively elsewhere.

NHS Grampian has developed subspecialty diagnostic codes and will test the collection of the IBD data and subspecialty codes within the existing Patient Management System. Once tested, these data collection fields will be available to all NHS Boards.
8. Creating The Modern Outpatient

8.1 The Programme will use and adopt technologies which enable more community-based care, promote anticipatory care and support self-management.

8.2 Patient management algorithms and clinical decision support applications are important tools for supporting the extended community-based multidisciplinary team in the ongoing management of patients in the community. The Programme will continually review the types of clinical decision support required by the multidisciplinary teams (MDTs) and support the rollout of any pilot work which has been evaluated well. Standardised and co-designed templates of clinical decision support systems would benefit Primary Care in their discussions with patients around the requirement for any referral to an outpatient service. Moreover, if this were interoperable with current Primary and Secondary care referral technology it would be auditable. This in turn could be used to standardise the quality of referrals, simplify the process of referral and help manage accountability for decisions relating to referrals.

Redesign in action: Clinical decision support

The National Dermatology Collaboration has developed 19 Condition Specific management pathways which were launched on the 22nd November 2016. Further to the launch, three regional educational support events are being held in December and will be streamed live to ensure maximum reach.

The programme is keen to harness the potential of digital and smart phone technologies by making sure the pathways are more readily accessible via Smart Phone App and web-based formats and hosted via a central facility.

8.3 Offering consultation in the patient’s own home or a setting close to their home will be key to developing a virtual model of care. The Programme will test, evaluate and roll out e-consultation, in collaboration with NHS24. The Attend Anywhere Video Call, is a web-based management software package which enables consultations to take place in the patient’s own home. It will initially be tested in 50 clinic setting across a variety of specialties (see Annex 4). This will offer video call access to patients who would otherwise have to travel to appointments and will support services to work more ‘virtually’ as part of their day-to-day operations.
8.4 Home and mobile health monitoring (HMHM) describes systems that use technology to support citizens to record and send clinically significant information about their health and wellbeing to an electronic storage system, where it can be accessed by themselves and healthcare professionals to support the management of their care (see Annex 5).

The Programme will look to extend the range of specialties who will benefit from the use of digital health technologies/wearable devices which enable the remote monitoring of care and supports patients on supported self-management pathways.

8.5 Many of the traditional ways of working which have no basis in evidence of better outcomes, such as the ‘routine follow-up appointment’ are very wedded to a risk averse medical model. Some of these appointments are used as a means of ‘keeping patients in the system’ thus avoiding the need for re-referral from the GP. This is not appropriate or efficient. When moving from a basis of managing patients by routine to anticipatory-based care, we will ensure that patients can gain access to secondary care whenever their clinical need requires it.

**Redesign in action: Personalised care, education and remote monitoring**

In collaboration with The CAN DO Forum, Highlands and Islands Enterprise and Innovate UK, the National Gastroenterology Collaboration will launch an SBRI Challenge for management with patients with inflammatory bowel disease (IBD) in January 2017. The challenge is to personalise care, education and remote monitoring for people living with IBD to drive productive use of planned health and social care consultations and interventions (face to face or remote) in order to sustain home-based living and care.

Scotland’s CAN DO Innovation Forum was announced in the Programme for Government and Scotland’s Economic Strategy. Improving Scotland’s innovation performance is a top priority; it will mean seeking to shift business perceptions of, and ambitions for, innovation, making best use of public sector levers and funding to drive change and developing a truly collaborative approach to tackling these issues.

**Redesign in action: Patient initiated review**

An Innovation Challenge will be launched in January 2017 in partnership with Civtech®, to ensure an accelerated process of concept/design to product availability and testing. The challenge is to develop patient self-scheduling tools/software which interfaces with existing systems and to provide patient I-triage assessment which allows the patient to access care when required and supports more effective triage to the right clinician or advice route.

From a patient’s perspective this will mean that they will be able to initiate when they feel that their condition is deteriorating, and will avoid the need for routine appointments for some patients.

The CivTech® pilot is harnessing new technologies to drive innovation into the public sector. It brings together private sector innovation, public sector organisations and citizens to develop more efficient and effective products and services, which will translate to new, better, faster and easier experiences for everyone.
Maximising the roles of extended MDTs by developing training and e-learning opportunities are paramount in building fit for purpose community-based services and supporting specialist nurses and AHPs to work at the top of their licence.

**Redesign in action:**

**Maximising the role of clinicians with enhanced skills**

NHS Ayrshire and Arran has Scotland’s only Specialist Nurse Hysteroscopist who carries her own caseload, can diagnose and refer onwards for specialist treatment and can, when working to her full skill span, carry out minor procedures such as biopsies and polypectomies that would otherwise have to await a separate consultant appointment. Hysteroscopy is a critical tool in the early diagnosis of a range of female cancers so this service supports the Detect Cancer Early programme and delivery of our cancer waiting times guarantees.

Currently we see nearly 200,000 patients in gynaecology. It is anticipated that diverting 10% of this work to nurse clinics can be realised by the third year of the Programme.

Intra-vitreal injection is a procedure normally conducted by consultant ophthalmologists. A number of NHS Boards are now releasing non-medical staff to undertake intra-vitreal injection training in the hospital setting via a competency framework shared between NHS Health Boards to ensure parity of training between all staff nurses.

Intra-vitreal injections have grown significantly over the last five to six years. In 2007/8 we undertook around 250 injections, by 2016/17 we are undertaking just under 4,000. By utilising the extended skills of trained nurses we will able to keep abreast of this growth over the three years of the Programme.

The university course is accredited at masters level, sponsored by the National Ophthalmology Workstream to ensure that the knowledge base of non-medical staff continues to expand in this specialty.
9. Managing and Understanding Variation in Return Demand

9.1 The number of return outpatient appointments in each specialty is subject to variability. This can be considered as being natural variation, the number of patients who have a clinical need for an outpatient appointment varies over time, and artificial variation, such as automatic appointments when there is no clinical need for them. It is widely recognised that many outpatient appointments add little or no value to the patients attending them, but the extent and precise nature of the issue is not well understood. Evidence from across the country points to areas where clinical variation can be reduced.

9.2 Published research indicates that many follow-up appointments could be in primary care and better discharge arrangements would support this transition. Moreover, a Scottish study of cardiology patients concluded ‘a substantial proportion of current cardiology return outpatients do not require regular outpatient review’. On the other hand the benefits of virtual clinics for many cases is supported by an increasing evidence base.

9.3 A paper on fracture redesign using virtual clinics concluded ‘The pathway reduced unnecessary re-attendance of patients at face-to-face fracture clinics for a review of stable, self-limiting injuries’.

9.4 The Whole System Patient Flow Programme will apply operations management techniques (Exhibit 3) to develop an approach to reduce variation in outpatient return appointments by reducing artificial variation and by managing natural variation better. This will build on existing work to better manage variability in acute inpatient flow and will be developed through collaborative working with one of the pilot sites for that work, Glasgow Royal Infirmary.

9.5 The aim is to:
- understand variation;
- develop urgency classification for returns;
- standardise booking processes; and
- use data to model optimal capacity against demand and implement optimised capacity.

Exhibit 3

- Reduce/eliminate unnecessary new appointments
- Reduce/eliminate unnecessary return appointments
- Reduce artificial variation
- Manage natural variation

- Understand variation
- Prioritise areas
- Develop urgency classification for returns
- Standardise booking processes
- Implement revised system
- Use data to model optimal capacity against demand
- Implement optimised capacity

1 M Hughes, S Gordon K McInnes, K McCormac, N Peden, Can we see more outpatients without more doctors? J R Soc Med; July 2003 vol. 96 no. 7 333-337.
10. Engagement

10.1 The Programme will drive a major cultural and operational shift in the understanding of what an ‘outpatient’ actually is across the health and social care landscape in Scotland. Accordingly, the engagement and consultation process must ensure that all relevant stakeholders have an opportunity to contribute to and shape the approach.

10.2 The document will be widely communicated to and discussed with stakeholders between December 2016 and February 2017. To allow sufficient time for broader stakeholder engagement and refinement to the Programme, a range of methods for engagement, consultation and collaborative input will be used prior to a formal launch in April 2017.

10.3 The engagement process will be used to:

- Test the assumption that change is necessary, develop solutions that are collaborative and ensure that outcomes will be beneficial.
- Ensure that the principles of patient safety and clinical decision-making fit with the model.
- Understand implications and interfaces with other national programmes of work, with particular regard to sequencing and timeframes for delivery.
- Identify any emerging concerns which need to be addressed in the short term.
- Identify any major risks or issues which may impact on the Programme in the mid to long term.

10.4 Engaging the wider network of stakeholders, as part of an iterative process, will be required to ensure a reflective, critical and collaborative approach to the design, implementation, and measurement of the Programme.

10.5 Key stakeholders will include:

- Patients, carers and service users
- Primary Care clinicians
- Chief Executives
- Joint Integrated Boards
- Medical directors and lead clinicians
- Nurse directors
- BMA
- Royal Colleges eHealth and other technological innovators
- Scottish Health Council (to assist with patient engagement)
- The Alliance (to ensure Third Sector engagement).

10.6 There has been significant clinical engagement in all of the Programmes and projects that are given as examples in this document. Clinical colleagues have been and will continue to be the key to driving change forward locally. This engagement and enthusiasm will continue to be built upon. The following are comments from clinicians:

‘With ever increasing demand and financial stress, traditional ways of doing things must be challenged. Technology enabled care and the use of Allied Health Professionals are pivotal to this change of mind-set. The historical referral patterns need to be challenged with care closer to home. Only those patients who need to be seen in the hospital setting should be seen there.’

Mr Edward Dunstan, Director Of Surgery, NHS Fife and Chair: Scottish Committee for Orthopaedics and Trauma

‘The National Ophthalmology Workstream has been a massive step forward for Scottish Ophthalmology. The focus on review (as well as new) patients marks a sea change in thinking that is directly benefiting ophthalmic patients.

‘The national peer review visits have generated a new focus on eye departments and shone a light into the difficulties created by the necessary growth in new treatments. This has helped in moving forward with innovations and efficiencies in the current systems of care and highlighted the need for governmental support with the ongoing challenges.’

Dr Graham Cormack – consultant ophthalmologist, NHS Tayside
11. Governance

The National Ophthalmology Workstream has identified clinician based concerns and Scottish Government has worked with clinicians to identify solutions. The thrust has been on sharing good practice between peers across the country with the focus firmly on patient focussed models of care.

Professor Carrie MacEwen – President of the Royal College of Ophthalmologists

I have had the fantastic opportunity to work alongside colleagues in Scottish Government as the National Lead for the Scottish Gastroenterology DOIT Collaboration. This has given me the opportunity to work closely with colleagues nationally across the clinical spectrum to design clinical models of care for gastroenterology patients that will be responsive to their needs, safe, sustainable and to the highest clinical standards. These models of care will only be deliverable however if we foster a culture of national, regional and local clinical leadership, engagement and cooperation between our clinical staff.

Historically, there has been a perception within the NHS that “changing anything is too difficult” due to the complexities of the organisation, limitations of budget making service change difficult, clinical pressures preventing protected service development time and the development of an “us and them” culture i.e. clinical staff not seeing themselves as being able to influence their clinical environment so it is therefore “not their problem. My hope is that through the Collaboration we can start to implement some of the required service changes identified in our supported working groups and this tangible outcome will encourage further engagement amongst colleagues who have not yet participated in our quality improvement programme. The implementation of such change will need strong leadership at all levels and all disciplines to drive this change forwards.

Dr Alan Clarke – Consultant Gastroenterologist, NHS GG&C, Clinical Lead National Gastroenterology Collaboration

11.1 The Modern Outpatient Programme will require buy-in from a wide range of professional and patient groups across NHS Scotland, hence the wide-ranging engagement strategy outlined above. Critically, it will need to be driven by clinical leaders working with others and Chief Executives will need to ensure the appropriate authorising environment is in place to drive success. Monitoring of delivery will be crucial in order to ensure the Programme’s ambitions are achieved.

11.2 The Modern Outpatient Programme will report into the National Clinical Strategy Implementation Board but will also have a reporting function into the Sustainability & Value Programme Board. However, local ownership of the Programme’s outcomes will be critical therefore this should be with the Board medical directors who can answer to both their NHS Boards and IJBs to ensure local accountability alongside coherence and consistency with national aims and outcomes.

11.3 National programmes and some activity in national support organisations that have a direct role in the delivery of the aims of the Programme may need to be realigned to support this coherent approach.
12. Measurement

12.1 Each element of the Programme will have a set of key metrics and associated outcome measures. The net effect will be an ambition to stem the growth in outpatient in-hospital appointments and reduce the overall numbers by 2020, releasing resources for reinvestment in out of hospital provision and enhance patient experience.

12.2 This is linked with an ambition to provide person-centred, safe and effective care in the most appropriate setting. Measurement of metrics and outcomes will ensure an evidence base to support optimal flows of patients, professionals and resource.
### Annex 1: Outpatient Attendances 2015/16

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Return Patients</th>
<th>New Patients</th>
<th>Return/New Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Specialties (excl. A&amp;E)</strong></td>
<td>3,013,728</td>
<td>1,486,552</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>All ACUTE Specialties</strong></td>
<td>2,553,081</td>
<td>1,396,248</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Acute Medical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Anaesthetics</td>
<td>22,195</td>
<td>14,807</td>
<td>1.5</td>
</tr>
<tr>
<td>– Cardiology</td>
<td>70,835</td>
<td>46,540</td>
<td>1.5</td>
</tr>
<tr>
<td>– Clinical Neurophysiology</td>
<td>52</td>
<td>8,290</td>
<td>0.0</td>
</tr>
<tr>
<td>– Clinical Oncology</td>
<td>94,434</td>
<td>13,732</td>
<td>6.9</td>
</tr>
<tr>
<td>– Clinical Radiology</td>
<td>545</td>
<td>2,986</td>
<td>0.2</td>
</tr>
<tr>
<td>– Dermatology</td>
<td>168,030</td>
<td>126,060</td>
<td>1.3</td>
</tr>
<tr>
<td>– Endocrinology/Diabetes</td>
<td>113,888</td>
<td>20,089</td>
<td>5.7</td>
</tr>
<tr>
<td>– Gastroenterology</td>
<td>97,409</td>
<td>77,131</td>
<td>1.3</td>
</tr>
<tr>
<td>– General Medicine</td>
<td>52,572</td>
<td>25,113</td>
<td>2.1</td>
</tr>
<tr>
<td>– Geriatric Medicine</td>
<td>23,561</td>
<td>18,430</td>
<td>1.3</td>
</tr>
<tr>
<td>– GP Other than Obstetrics</td>
<td>1,330</td>
<td>4,732</td>
<td>0.3</td>
</tr>
<tr>
<td>– Haematology</td>
<td>99,762</td>
<td>10,935</td>
<td>9.1</td>
</tr>
<tr>
<td>– Homeopathy</td>
<td>2,167</td>
<td>517</td>
<td>4.2</td>
</tr>
<tr>
<td>– Infectious Diseases</td>
<td>24,652</td>
<td>5,459</td>
<td>4.5</td>
</tr>
<tr>
<td>– Medical Oncology</td>
<td>42,526</td>
<td>5,652</td>
<td>7.5</td>
</tr>
<tr>
<td>– Neurology</td>
<td>49,671</td>
<td>45,089</td>
<td>1.1</td>
</tr>
<tr>
<td>– Paediatrics</td>
<td>92,133</td>
<td>33,468</td>
<td>2.8</td>
</tr>
<tr>
<td>– Palliative Medicine</td>
<td>6,548</td>
<td>1,132</td>
<td>5.8</td>
</tr>
<tr>
<td>– Rehabilitation Medicine</td>
<td>7,372</td>
<td>1,697</td>
<td>4.3</td>
</tr>
<tr>
<td>– Respiratory Medicine</td>
<td>83,684</td>
<td>42,253</td>
<td>2.0</td>
</tr>
<tr>
<td>– Rheumatology</td>
<td>91,539</td>
<td>27,287</td>
<td>3.4</td>
</tr>
<tr>
<td>Service</td>
<td>Return Patients</td>
<td>New Patients</td>
<td>Return/ New Ratio</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Acute Surgical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiotoracic Surgery</td>
<td>8,347</td>
<td>4,907</td>
<td>1.7</td>
</tr>
<tr>
<td>Ear, Nose &amp; Throat (ENT)</td>
<td>111,587</td>
<td>116,060</td>
<td>1.0</td>
</tr>
<tr>
<td>General Surgery</td>
<td>225,803</td>
<td>185,885</td>
<td>1.2</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>91,896</td>
<td>98,220</td>
<td>.9</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>11,614</td>
<td>9,175</td>
<td>1.3</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>307,966</td>
<td>129,986</td>
<td>2.4</td>
</tr>
<tr>
<td>Oral Medicine</td>
<td>6,535</td>
<td>5,483</td>
<td>1.2</td>
</tr>
<tr>
<td>Oral Surgery</td>
<td>26,301</td>
<td>19,189</td>
<td>1.4</td>
</tr>
<tr>
<td>Orthodontics</td>
<td>83,989</td>
<td>8,678</td>
<td>9.7</td>
</tr>
<tr>
<td>Paediatric Dentistry</td>
<td>12,713</td>
<td>6,550</td>
<td>1.9</td>
</tr>
<tr>
<td>Paediatric Surgery</td>
<td>8,659</td>
<td>8,898</td>
<td>1.0</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>50,633</td>
<td>23,658</td>
<td>2.1</td>
</tr>
<tr>
<td>Restorative Dentistry</td>
<td>47,216</td>
<td>11,273</td>
<td>4.2</td>
</tr>
<tr>
<td>Trauma &amp; Orthopaedic Surgery</td>
<td>277,164</td>
<td>173,099</td>
<td>1.6</td>
</tr>
<tr>
<td>Urology</td>
<td>77,003</td>
<td>57,937</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Learning Disability</strong></td>
<td>41,074</td>
<td>2,760</td>
<td>14.9</td>
</tr>
<tr>
<td><strong>Psychiatric</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child &amp; Adolescent Psychiatry</td>
<td>43,093</td>
<td>5,517</td>
<td>7.8</td>
</tr>
<tr>
<td>Forensic Psychiatry</td>
<td>1,968</td>
<td>945</td>
<td>2.1</td>
</tr>
<tr>
<td>General Psychiatry (Mental Illness)</td>
<td>201,073</td>
<td>33,239</td>
<td>6.0</td>
</tr>
<tr>
<td>Psychiatry of Old Age</td>
<td>62,841</td>
<td>15,040</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Obstetrics Group</strong></td>
<td>123,898</td>
<td>28,175</td>
<td>4.4</td>
</tr>
<tr>
<td>GP Obstetrics</td>
<td>96</td>
<td>24</td>
<td>4.0</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>123,802</td>
<td>28,151</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Non-Acute Other</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allergy</td>
<td>493</td>
<td>255</td>
<td>1.9</td>
</tr>
<tr>
<td>Chemical Pathology</td>
<td>1,575</td>
<td>452</td>
<td>3.5</td>
</tr>
<tr>
<td>Clinical Genetics</td>
<td>2,429</td>
<td>4,388</td>
<td>.6</td>
</tr>
<tr>
<td>Immunology</td>
<td>764</td>
<td>430</td>
<td>1.8</td>
</tr>
<tr>
<td>Integrative Care</td>
<td>1,976</td>
<td>483</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: ISD(S)1
## Annex 2: Demand Growth

**Specialty** | New Outpatient Attendances 14/15 | New Outpatient Attendances 15/16 | % Increase/Decrease
---|---|---|---
Respiratory Medicine | 40,007 | 42,253 | 6%
Gastroenterology | 74,339 | 77,131 | 4%
Dermatology | 122,252 | 126,060 | 3%
Gynaecology | 101,689 | 98,220 | -3%
ENT | 110,793 | 116,060 | 5%
General Surgery | 190,325 | 185,885 | -2%
T&O* | 174,195 | 173,099 | -0.6%
Ophthalmology | 132,168 | 129,986 | -1.7%

**Specialty** | Total Attendances 14/15 | Total Attendances 15/16 | % Increase/Decrease
---|---|---|---
Respiratory Medicine | 122,785 | 125,937 | 2.6%
Gastroenterology | 170,868 | 174,450 | 2.1%
Dermatology | 291,985 | 294,090 | 0.7%
Gynaecology | 191,699 | 190,196 | -0.8%
ENT | 230,226 | 227,647 | -1%
General Surgery | 425,598 | 411,688 | -3%
T&O* | 459,337 | 450,263 | -2%
Ophthalmology | 438,358 | 437,952 | 0.9%

**Specialty** | New Outpatient Attendances 07/08 | New Outpatients Attendances 14/15 | % Increase/Decrease
---|---|---|---
Respiratory Medicine | 22,493 | 40,007 | 78%
Gastroenterology | 36,410 | 74,339 | 104%
Dermatology | 100,427 | 122,252 | 22%
Gynaecology | 93,744 | 101,689 | 9%
ENT | 99,273 | 110,793 | 12%
General Surgery | 151,465 | 190,325 | 26%
T&O* | 183,491 | 174,195 | -5%
Ophthalmology | 121,541 | 132,168 | 8.8%

* Trauma and Orthopaedic new patients and total attendances declined from 2010/11 onwards
Source: ISD(S), SMR00 (DNA)
<table>
<thead>
<tr>
<th>Specialty</th>
<th>Total attendances 07/08</th>
<th>Total attendances 14/15</th>
<th>% increase/decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory Medicine</td>
<td>85,345</td>
<td>122,785</td>
<td>44%</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>105,147</td>
<td>170,868</td>
<td>63%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>254,490</td>
<td>291,985</td>
<td>15%</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>187,006</td>
<td>191,699</td>
<td>3%</td>
</tr>
<tr>
<td>ENT</td>
<td>207,456</td>
<td>230,226</td>
<td>11%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>375,647</td>
<td>425,598</td>
<td>13%</td>
</tr>
<tr>
<td>T&amp;O*</td>
<td>527,589</td>
<td>459,337</td>
<td>-13%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>406,019</td>
<td>438,358</td>
<td>8%</td>
</tr>
</tbody>
</table>

* Trauma and Orthopaedic new patients and total attendances declined from 2010/11 onwards
Source: ISD(S)I, SMR00 (DNA)
Annex 3: Primary Care Vision and Outcome Framework

NATIONAL OUTCOMES

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our children have the best start in life and are ready to succeed</td>
<td></td>
</tr>
<tr>
<td>We live longer healthier lives</td>
<td></td>
</tr>
<tr>
<td>Our people are able to maintain their independence as they get older</td>
<td></td>
</tr>
<tr>
<td>Our public services are high quality, continually improving, efficient</td>
<td></td>
</tr>
<tr>
<td>and responsive</td>
<td></td>
</tr>
</tbody>
</table>

We start well
We live well
We age well

PRIMARY CARE VISION

Our vision is of general practice and primary care at the heart of the healthcare system.

People who need care will be more informed and empowered will access the right person at the right time and will remain at or near home wherever possible.

Multidisciplinary teams will deliver care in communities and be involved in the strategic planning of our services.

HSCP OUTCOMES

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>People can look after own health</td>
<td></td>
</tr>
<tr>
<td>Live at home or homely setting</td>
<td></td>
</tr>
<tr>
<td>Positive experience of services</td>
<td></td>
</tr>
<tr>
<td>Services improve quality of life</td>
<td></td>
</tr>
<tr>
<td>Services mitigate inequalities</td>
<td></td>
</tr>
<tr>
<td>Carers supported to improve health</td>
<td></td>
</tr>
<tr>
<td>People using services safe from harm</td>
<td></td>
</tr>
<tr>
<td>Engaged workforce improving care</td>
<td></td>
</tr>
<tr>
<td>Efficient resource use</td>
<td></td>
</tr>
</tbody>
</table>

HSCP OUTCOMES

We are more informed and empowered when using primary care
Our primary care services better contribute to improving population health
Our experience as patients in primary care is enhanced

Our primary care workforce is expanded, more integrated and better co-ordinated with community and secondary care
Our primary care infrastructure – physical and digital – is improved
Primary care better addresses health inequalities
Annex 4: Video Clinics to Support the Delivery of Outpatient Services

Background
The use of video conferencing technologies has grown within both the consumer and the health sectors. Products such as Skype and Facetime are now in widespread use, while the number and range of clinical uses of video conferencing technology is growing.

Evidence from a systematic review carried out in Australia\(^2\) shows a significant increase in the development of video mediated services and details a wide range of specialties using the technology. These include mental health, oncology, geriatrics, endocrinology, orthopaedics and cardiovascular, along with a range of other specialties.

There is growing evidence to support the use of telehealth (including video conferencing) for patients and healthcare providers with outcomes showing: reduced length of stay; reduced demand on emergency services; improved access to healthcare; improved quality of services; improved clinical outcomes; decreased costs; reduced inconvenience; improved management of chronic and complex conditions; and provision of peer support, networking and education.

Use within Scotland
Since March 2016, it has been possible to establish point-to-point video links to a patient/citizen in their own home, using their own equipment. This is now being used in a number of specialties in Scotland including: speech and language therapy; treatment of diabetic leg ulcers; occupational therapy home visits; infant feeding; and paediatric counselling. A number of specialties such as bone marrow transplant, diabetes, oncology and sexual health are currently undertaking testing to assess its applicability in their environment.

Technology
Traditional video enabled services have largely been developed using point-to-point video conferencing solutions. These often require the use of expensive infrastructure, travel to a video conferencing suite, or complex scheduling to work around the limitation of only be able to set up single point-to-point links. Recent advances of web-based solutions and standards have facilitated the development of easy to use systems that allow the service user to simply click on a web link and take part in a video sessions. Combined with a back-end system to provide appropriate call management along with a range of deployment tools, guidance notes and training materials, this provides an easy to use, easy to deploy, full virtual clinic environment.

Deployment within Scotland
Following procurement, Attend Anywhere (working in conjunction with HealthDirect Australia) have been selected to provide an introductory video clinic platform for Scotland. Launching on 1 December 2016, this will provide capacity to support up to 50 units\(^3\).

Early adopters will include primary care (being formally evaluated by the University of Edinburgh following CSO grant) and TEC programmes in Borders and Dumfries and Galloway.

---


\(^3\) The licence model is per organisation unit. Each organisation unit can support a maximum of 10 distinct waiting areas or meeting rooms. Typically an organisation unit could be a GP practice or a clinical speciality (e.g. diabetes in Highland).
Support for outpatients
There is scope to utilise the service to support the delivery of outpatient services. Likely benefits of introducing video clinics include:

- Reduction in ‘Do Not Attends’.
- Reducing patient travel and associated costs.
- Reducing clinician travel bringing associated efficiency savings.
- Allowing for the re-design of services to incorporate a stepped approach to service provision that includes a wider range of technology solutions and face-to-face consultations with a wider range of clinicians and professionals.
- As the clinician would no longer be required to physically attend the clinic a more flexible approach to workforce can be taken. This could include working from home, working outwith the geographic area and working in collaboration with other boards.
Annex 5: Home and Mobile Health Monitoring

1. What is HMHM?
Home and mobile health monitoring (HMHM) describes systems that use technology to support citizens to record and send clinically significant information about their health to an electronic storage system, where it can be accessed by themselves and healthcare professionals to support the management of their care.

2. Why is HMHM important?
As our population gets older, the number of people that will need help from our health and social care services is projected to increase dramatically. We will not have extra health and care professionals to help. To create the capacity to address this additional demand we need new approaches to service delivery that remove work from care pathways and can, where appropriate:

1. Reduce the contacts required to match patients to professionals.
2. Shorten treatment times.
3. Increase the length of time between episodes of care.

HMHM can help to achieve this by:

1. Collecting clinical data that supports triage, diagnosis and assessment.
2. Encouraging greater adherence to treatments.

HMHM is not the whole solution but it can make a significant contribution, as part of stepped approach to provision that includes telephone, video and face-to-face consultations.

Example 1 – Diagnosis
A case study by NHS Western Isles documented the use of HMHM in the diagnosis of hypertension. HMHM had been introduced to support a reduction in Primary Care referrals to ambulatory blood pressure monitoring (requiring some 10 additional patient contacts and four patient journeys to complete). The number of referrals were reduced by 50%. Additionally, Primary Care appointments were reduced by an average of 1.6 per patient. A larger scale initiative in Lanarkshire has also demonstrated savings in excess of four appointments per patient. In both studies, patients received treatment faster that they would have under usual practice.

Example 2 – Adherence to treatment
An evaluation carried out on a computerised Cognitive Behavioural Therapy service in NHS Lanarkshire showed the positive impact of HMHM technology on patient adherence to the treatment. HMHM users showed a 46% higher adoption rate (registrations from referral) than the national average and a 30% higher completion rate for the first session. Work to refine the HMHM support component is ongoing.
3. Where can HMHM be used to support improvement?

Home and Mobile Health Monitoring – Scope of Application

Traditionally, HMHM has been used to support patients with complex or later stage long-term conditions to stay out of hospital (see Tier 4 above).

The recent introduction of low cost, simple yet flexible technology in Scotland has opened up a wider range opportunity and this includes the ability to support a wider range of services provided in ambulatory and primary care settings (tiers 3 and 2).

This increase in scope means that HMHM now has the potential to support system-wide capacity gains by facilitating simultaneous improvements in each tier.

Through the Scottish Government TEC Programme a range of pathways in outpatient and primary care settings are being tested for suitability as scalable services capable of delivering nationally significant impacts.

To date the strongest candidates for national scale are hypertension diagnosis (and early treatment) and blood sugar control for citizens with insulin-dependent diabetes.

Other promising pathways include dietetics and community-based wound care and there are a number of other pathways in early-stage development.
Annex 6

The Mental Health Access Improvement Programme
The Improvement Programme is delivered by Healthcare Improvement Scotland in partnership with Information Services Division of National Services Scotland. Further support is available to boards for the development of the mental health workforce to enhance supply and training of workforce to deliver evidence-based therapies, delivered by NHS Education for Scotland.

Background:
The Mental Health Access Improvement Programme was developed to help health boards to reduce waiting times for psychological therapies and child adolescent mental health services. The Programme is working with health boards to support them to meet the Scottish Government’s standard that 90% of patients should be seen within 18 weeks whilst maintaining or improving others dimensions of quality.

The Improvement Programme was included in the comprehensive package of support for mental health services announced by the FM in January 2016. This additional investment will improve access to psychological therapies for all ages including for children and adolescents’ mental health services.

The Improvement Programme is delivered by Healthcare Improvement Scotland (£4.8m SG funding) in partnership with Information Services Division of National Services Scotland (see below). Further support is available to boards for the development of the mental health workforce to enhance supply and training of workforce to deliver evidence-based therapies, delivered by NHS Education for Scotland (£24.6m SG funding).

The Mental Health Access Improvement Support Team (MHAIST) will work in partnership with NHS Boards with the work undertaken in two distinct phases:

Diagnostic work to identify the enablers and barriers to the Board being able to deliver on improved access for psychological therapies and/or CAMHS. This work will consider the wider contextual factors that may be impacting on progress such as leadership and management oversight as well as specific issues around demand and capacity analysis, staffing levels, implementation of tiered care and whether the process design enables effective and efficient delivery of services. As part of this phase, MHAIST will also work with services to capture case studies around any good practice examples.

The output of this diagnostic work will then be used to develop an improvement plan. The improvement plan will include an analysis of the projected rate at which waiting times will improve if the plan is implemented. It will also identify the key risk factors that could impact on delivering the projected improvements, including increases in referral rates. Both the diagnostic work and the work to develop an improvement plan will be delivered in partnership with the Board and will also support Boards to review their mental health access improvement plans in light of the findings from this diagnostic assessment. The Programme is delivered in partnership with ISD who are providing data and analytical support at a national level and with analyst support for each board. This support will develop and improve Boards’ capacity and capability to gather, analyse and report both clinical outcome data and operational management data, e.g. activity data.