North Regional Asset Management Plan
2018 to 2028

Planning Regionally, Delivering Locally
NHS Scotland ‘20:20’ Vision

Our vision is that by 2020 everyone is able to live longer healthier lives at home, or in a homely setting.

We will have a healthcare system where we have integrated health and social care, a focus on prevention, anticipation and supported self-management. When hospital treatment is required, and cannot be provided in a community setting, day case treatment will be the norm. Whatever the setting, care will be provided to the highest standards of quality and safety, with the person at the centre of all decisions. There will be a focus on ensuring that people get back into their home or community environment as soon as appropriate, with minimal risk of re-admission.

The North Regional Asset Management Plan is also available in large print and other formats and languages, upon request.

We would like to express our thanks to all the North Region Partners for contributing to the production of this inaugural Regional Asset Management Plan.
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We in the North are committed to reducing the reliance on properties and making a case for significant investment in technology to support major service redesign, taking our services closer to our patients.
Executive Summary

The NHS in the North Region of Scotland has an overall aim to only occupy properties which are needed to support the delivery of effective and efficient services consistent with the model of care.

The North now:

There are eighty hospitals owned and operated by the NHS in the North of Scotland, including two tertiary teaching hospitals, one large general hospital, nine medium general hospitals and thirty five community hospitals.

The North estate represents 40% of the properties in Scotland reflecting the geographic scale and dispersed nature of the population, it represents 69% of the total land mass of Scotland and 26% of the population.

We in the North are committed to reducing the reliance on properties and making a case for significant investment in technology to support major service redesign, taking our services closer to our patients, whilst at the same time supporting the workforce issues and improving efficiency and patient care in a clinically safe manner.

Most of the building infrastructure in the North is over 30 years old, 23% of which are over 50 years old inevitably leading to buildings that are functionally unsuitable for the services being provided in them.

Backlog maintenance at unit cost is £331m, of which £192m is associated with Aberdeen Royal Infirmary, Raigmore and Ninewells hospitals and at project costs the overall investment required is more likely to be in the region of £1billion to remove the reported backlog which in many instances does not fully include all statutory compliance issues.

The current Medical Equipment replacement costs are recorded as £317m, with an average manufacturers expected length of life of 10 years, this would require an annual investment of over £31m just to stand still. (£16.4m invested last year)

The total combined budget for health and healthcare in the North of Scotland is £3.3 billion, but there is however an underlying recurring annual deficit estimated to be £95m as at 1 April 2018, together with a brokerage which requires to be repaid to the Scottish Government of £52m (this represents funding provided to Boards in previous years to meet a gap between income and expenditure) requiring financial savings in 2018/19 and over the next four years projected to be £452m.
The likely capital funding available (inc. e-Health, vehicles, medical equipment and property estate) for all six boards over this and the next four years is £584.9m.

The annual life cycle costs of the property estate alone for the north (assuming no backlog maintenance) are calculated to be in the order of £185m per annum. (£113m invested last year).

Medicines remain the most common health intervention; however with advancements and the ability to treat previously untreatable conditions the dependency and cost of some medicines has spiralled with acute services in the last 4 years spend having increased by 40%.

Despite the challenging fiscal environment that the NHS operates in, the north region has continued to make substantial progress in managing, investing and disinvesting in its asset base with a current property value of £1.356bn and an equipment replacement value of £317m.

As shown in the table opposite we have invested over £140m in infrastructure in the last 12 months.
### Investment in the last year:

<table>
<thead>
<tr>
<th>Item</th>
<th>Grampian</th>
<th>Tayside</th>
<th>Shetland</th>
<th>Orkney</th>
<th>Western Isle</th>
<th>Highland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical Equipment</strong></td>
<td>£8,670,000</td>
<td>£3,995,000</td>
<td>£57,319</td>
<td>£135,000</td>
<td>£1,652,163</td>
<td>£1,860,000</td>
</tr>
<tr>
<td>Projects worthy of note</td>
<td>Radiotherapy Equip-£282k</td>
<td>Ultrasound-£372k</td>
<td>Endoscopy Vacuum pack system-£370k</td>
<td>14 Renal Dialysis Machines-£225k</td>
<td>Radiology room upgrade-£773k</td>
<td>Cath Lab-£699k</td>
</tr>
<tr>
<td></td>
<td>Radiology-£789k</td>
<td>Low rise beds-£201k</td>
<td>Patient Monitoring-£1.189m</td>
<td>Endoscopes-£389k</td>
<td>Trauma Equip-£203k</td>
<td>Defibrillators-£597k</td>
</tr>
<tr>
<td><strong>Other Equipment</strong></td>
<td>£1,043,000</td>
<td>£691,000</td>
<td>£637,773</td>
<td>£100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projects worthy of note</td>
<td>Laundry/CDU-£170k</td>
<td>Meal trolleys-£360k</td>
<td>Vehicles-£319k</td>
<td>Instrument Washer-£556k</td>
<td>Autoclaves-£111k</td>
<td>Laundry-£43k</td>
</tr>
<tr>
<td><strong>IT Investment</strong></td>
<td>£2,164,000</td>
<td>£2,174,000</td>
<td>£150,000</td>
<td>£543,000</td>
<td>£262,523</td>
<td>£1,250,000</td>
</tr>
<tr>
<td>Projects worthy of note</td>
<td>Labs Hardware-£200k</td>
<td>Replacement PC’s-£1.1m</td>
<td>RFID Tracking-£121k</td>
<td>Trak Care-£318k</td>
<td>ICT Telephone system-£824</td>
<td>H&amp;SC IT Portal-£32k</td>
</tr>
<tr>
<td><strong>Property Investment</strong></td>
<td>£39,278,278</td>
<td>£21,396,000</td>
<td>£551,000</td>
<td>£40,245,000</td>
<td>£156,822</td>
<td>£12,300,000</td>
</tr>
<tr>
<td>Projects worthy of note</td>
<td>ARI Backlog-£4.975m</td>
<td>Start of ligature reduction works-£344k</td>
<td>Start of Baird Family &amp; Anchor centre-£1.464m</td>
<td>EOPD relocation-£4.084m</td>
<td>Stonehaven Renal-£1.063m</td>
<td>Stonehaven Renal-£1.063m</td>
</tr>
<tr>
<td>Other Investment</td>
<td>£446,000</td>
<td></td>
<td></td>
<td></td>
<td>£156,752</td>
<td>£100,000</td>
</tr>
<tr>
<td>Projects worthy of note</td>
<td>Waiting Times/Cancer Equipment</td>
<td>Labs IT solution-£136,752</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>£51,601,278</td>
<td>£28,256,000</td>
<td>£758,319</td>
<td>£40,923,000</td>
<td>£2,866,033</td>
<td>£15,610,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>£140,014,630</strong></td>
<td></td>
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</tbody>
</table>
Looking forward our immediate five year investment programme will continue to be focused on our backlog maintenance programme, medical equipment replacement and commissioning of new health facilities to meet the requirements of our regional delivery plan.

Current funded projects being taken forward include:

- Inverurie Health Centre, NHSG, Under Construction
- New CAMHS Centre, NHSG, Business Case
- North Corridor Health Centres, NHSG, Business Case
- Baird & Anchor, NHSG, Business Case
- Denburn HC Replacement, NHSG, Business Case
- ARI Phase 2 Building Fire Compliance, NHSG, Business Case
- Elective Care, NHSG, Business Case
- Cyclotron replacement, NHSG, Business Case
- Stornoway Health Centre - refurbishment, NHSWI, Business Case
- CDU redevelopment, NHSWI, Business Case
- Western Isles Hospital Refurbishment / upgrade, NHSWI, Business Case
- Badenoch, Strathspey and Skye Bundle, NHSH, Business Case
- Grantown Health Centre refurbishment, NHSH, Business Case
- Portree Hub reconfiguration, NHSH, Business Case
- North Coast Care home, NHSH, Business Case
- Elective Care Centre, NHSH, Business Case
- Raigmore CCU Project, NHSH, Construction
- Fort Augustus Health Centre, NHSH, Construction
- MRI Replacement, NHSH, Construction
- New Balfour Hospital, NHSO, Construction
- Ninewells Infrastructure Works (HV), NHST, Construction
- NHSS - Pharmaceutical Specials Service, NHST, Construction
- Elective Care Centre, NHST, Business Case
- Children’s Theatre Suite, NHST, Business Case
- Neonatal Intensive Care, NHST, Business Case

Given issues with an ageing estate, together with a growth in demand for services to be provided as locally as possible, this regional asset plan has identified the need for priority investment in a number of key areas within our acute, primary and social care sectors infrastructure.
Infrastructure investment required to support service improvement:

<table>
<thead>
<tr>
<th>Board</th>
<th>Projects:</th>
<th>Service</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHSG</td>
<td>Ambulatory Care Facilities, ARI</td>
<td>Acute</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSG</td>
<td>New and or refurbished Theatre Block and Surgical Wards at ARI</td>
<td>Acute</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSG</td>
<td>Replacement Mortuary and Laboratory Services to form a Blood Sciences Centre</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Refurbishment or replacement of Phase 2 Aberdeen Royal Infirmary</td>
<td>Acute</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSG</td>
<td>Collocate all Aberdeen Offices into one administrative centre in the city</td>
<td>Office</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSG</td>
<td>Ellon Health and Care Hub</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Banchory Health and Care Hub</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Danestone Health and Care Hub</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Keith Health and Care Hub</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Lochaber Health and Social Care Re-design, Fort William</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSH</td>
<td>Redevelopment of substantial areas of Raigmore Hospital</td>
<td>Acute</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSH</td>
<td>Upgrade Oncology at Raigmore Hospital</td>
<td>Acute</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSH</td>
<td>Phase 2 of the Highland Children's Unit</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Inverness Primary Care Redesign</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Rothesay Service redesign</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Dunnoss Service Redesign</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Fort Augustus Health Centre</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>MRI replacement</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Belford Hospital Replacement</td>
<td>Acute</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSH</td>
<td>Raigmore tower Block cladding</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Caithness General Reconfiguration</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSO</td>
<td>West Orkney Health and Care Hub</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSO</td>
<td>Stromness Surgery, Orkney</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSO</td>
<td>Eivie Surgery, Orkney</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSO</td>
<td>Flotta Surgery, Orkney</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSWI</td>
<td>St Brendans</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Mental Health Redesign</td>
<td>Mental Health</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Dental Redesign Uist</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Hospital Hub Uist</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Installation of Easy Heat plat heat exchangers WIH</td>
<td>Acute</td>
<td>Business case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Motor Controls variable speed drives</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Laboratory redevelopment WIH</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>BMS system WIH</td>
<td>Acute</td>
<td>Business case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Fire alarm System Stornoway Health Centre</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Backup generator sets GP practices</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Smart metering Whole estate</td>
<td>All</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSWI</td>
<td>GP clinic refurbishments</td>
<td>Primary Care</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Fleet replacement</td>
<td>All</td>
<td>Business case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Vehicle Electric charge points across whole estate</td>
<td>All</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Health Board offices Phase 1 External refurbishments</td>
<td>Office</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Health Board office Phase 2 Internal refurbishments</td>
<td>Office</td>
<td>Feasibility stage</td>
</tr>
<tr>
<td>NHSS</td>
<td>GBH – Ambulatory Care</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSS</td>
<td>GBH – CT Scanner Replacement</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSS</td>
<td>GBH – Replacement</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Kingsway Care Centre</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Critical Care Unit incl SHDU and ICU NW</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>MacMillan Haematology &amp; Oncology Unit</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Bridge of Earn / Carse of Gowrie</td>
<td>Primary Care</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Maternity Services Review ( incl theatres)</td>
<td>Acute</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Cardiac Cath Lab &amp; Coronary Care Unit Upgrade</td>
<td>Acute</td>
<td>Business Case</td>
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</tbody>
</table>
The regions assets have a significant role in facilitating service change and performance improvement as well as enhancing the environments in which we provide safe, effective and person centred care. The projects identified for investment within this plan are crucial for the continued improvement and delivery of service to the population in the North of Scotland.
The projects identified for investment within this plan are crucial for the continued improvement and delivery of service to the population in the North of Scotland.
The world is changing, much of how we go about our daily life has changed and if we want to attract the best young talented clinicians then perhaps the healthcare system in the North has to change
Introduction

The North Region is made up of six health boards, comprising Grampian, Highland, Orkney, Shetland, Tayside and Western Isles; ten Integrated Joint Boards; 1 Lead Agency; General Practice, Pharmacies, Dentists and Ophthalmologists. The Boards are ambitious and wish to care for their patients as best they can by optimising the use of all resources at their disposal as effectively and efficiently and in as safe a manner as possible. But to succeed will require innovation, creativity and hard work, along with a need to modernise and change the approach to service delivery.

Boards are asked by the Scottish Government to work more collaboratively and in this context the North Region are working together to identify where that should be targeted, and as the collaboration evolves, it is expected that the Regional Delivery Plan (Clinical strategy) will inform future iterations of this Regional Asset Management Plan and the data, narrative and use of available resources will become more refined, informative, and standardised in approach.

The North Region has a more dispersed population than any other region of Scotland with a population density of 28 people per km² covering the mainland and the ninety three inhabited islands, compared with Scotland as a whole which a population density of 67.2 people per km². The challenges that this alone presents should not be underestimated.

The North's aim is to eliminate all but the necessary travel from the islands and rural mainland areas to the three main hospital centres for clinical consultations and interventions, by providing services as local as possible and making use of technological advancements such as Attend Anywhere. This in itself will reduce the use of fossil fuels and CO² emissions leading to a more positive impact on the environment and consequently people's health.

The creation of Integrated Joint Boards (IJB’s) and the Highland Lead Agency, has led to the accountability for health and social care being a key focus of this plan. Currently IJB’s do not have the powers to own assets which will be held either by the Health Board, or the Local Authority. Therefore the assets discussed within this plan will focus on those under the control of the NHS Boards.

Other key factors which will influence this and future plans, is that of the technology and how we might use this to our advantage, particularly given the workforce challenges which vary only marginally from area to area, but none the less creates pressures in itself that demands a change of approach. However, to take advantage of these technologies will require investment to further enhance the 4G coverage across the North of Scotland. Plans are in place to commence a £25m Mobile Infill Project to boost 4G coverage, but undoubtedly whilst this will assist greatly, more will need to be done if we are to make best use of technologies to improve efficiency and reduce travel.

The world is changing, much of how we go about our daily life has changed and if we want to attract the best young talented clinicians then perhaps the healthcare system in the North has to change, to improve efficiency and sustainability and this Regional Asset Management Plan requires the flexibility to respond by providing better more effective and efficient assets where needed, and perhaps move away from traditional solutions including that of bricks and mortar.

The North of Scotland Health and Social Care Regional Asset Management Plan is one of a suite of documents which aim is to clearly set out the challenges that face the North region and identify the key investment requirements and future plans with the aim of improving quality, efficiency, and progression towards a more sustainable health service. The plan does not attempt to describe the detail of each project being taken forward in the North of Scotland, but it does focus on the priority areas where the partners, working in collaboration can add most value.
The plan aims to reflect the contributions and information received from each of the Health Boards in the North and set out the strategic intent of the partners, the need for change, the model of care, and the investment required in our aging assets to enable change in a more coordinated and collective manner than previously was the case.

The 2018/19 Regional Asset Management Plan (RAMP) underpins the vision of the North of Scotland Health and Social Care Delivery Plan and will be reviewed annually. It is entirely consistent with Scottish Government's Chief Executive Letter CEL35(2010): setting out our future investment priorities and our financial planning assumptions, along with how performance, management and utilisation of the North of Scotland Boards entire asset base will be monitored. It also follows the requirements of the “Strategic Property and Asset Management Guidance for NHSScotland” which was released in December 2016, and includes vehicles, equipment, information and technology and property.

There is a consensus amongst the partners to be clear about the scale of the challenge in the north, this means we will have to create an understanding of the need for change. The plan therefore outlines:

- The increasing need for treatment and care that will have an impact on local authorities, general practice, community services, secondary and tertiary services arising from the growing elderly population (over 75s will increase by 35% by 2035) and the dispersed nature of the population (93 inhabited islands and remote rural communities).
- The financial efficiency savings that need to be achieved over the next five years (£450 million).
- The condition of the health estate in the region and the need for capital investment to eradicate a unit cost of backlog at £331m and at a project cost likely to be c £1bn + statutory standards (the three main hospital sites estimated at a unit cost of £192m).
- Medical equipment replacement estimated at £317m.
- The challenges associated with workforce supply (GP numbers reduced by 2.4% in the last two years compared to 1.9% in the rest of Scotland), and an ageing workforce (39% of the workforce are over 50 years old).
- The gap between demand and capacity for elective care (9% per year in relation to outpatient referrals and 13% per year for inpatient and day case treatment) are clearly stated as challenges that need to be met.
- 61% of the properties in the North Region are over 30 years old, of which 23% are over 50 years old.
Aims of the Regional Asset Management Plan

The Regional Asset Management Plan supports the delivery of the National Clinical Strategy, whilst supporting the requirements of the National 20:20 Vision and the world leading desires of the Healthcare Quality Strategy for NHSScotland, it also aims to:

- Demonstrate the appropriate governance and management structure to effectively manage the North of Scotland’s assets.
- Identify all the issues driving the need for change and ensure all assets are used in such a way as to support the existing and future requirements of the service and the change required.
- Manage all assets within the North of Scotland, by maintaining, enhancing, replacing or disposing of; ensuring the plan takes us towards the national ambitions of care which is person centred, safe and effective.
- Provide/maintain an appropriate number of quality affordable assets complementing and supporting the high quality services which meet the population needs and are financially sustainable over the long term.
- Address backlog maintenance and essential equipment replacement where there is a high, significant or moderate risk likely to impact on the North of Scotland’s ability to deliver current and future services.
- The Plan covers the period 2018 to 2028, with investment proposals covering the next five financial years, and indicates where investment may be required in the longer term covering the 5 to 10 year period and beyond.
Developing the Plan

The Plan involved wide consultation with many key members of staff responsible for modernisation, service delivery, finance, facilities, medical equipment and asset management as well as our many stakeholders including the Local Authorities. The Plan has involved collaboration with all the North Health Boards and has involved information, direction and management from each of the Boards and Senior Management to ensure it reflects the requirements of the NHSScotland Clinical Strategy, Health and Social Care Delivery Plan and the 20:20 Vision.

The North Regions Health Boards have continued prioritising and monitoring current and future capital and revenue projects through the Scottish Capital Investment Manual (SCIM) process. This has been further supported with the development of Strategic Assessments and the Capital Planning System. Strategic Assessments and public consultation continue to be developed through workshops with stakeholder and public representation, ensuring that development plans are open, transparent and outline the need for change; describing thoughts on potential investment proposals and allows a methodology of prioritising all projects to be developed for the North Region.

A summary of the high level models of care are being developed for further engagement together with an indication of the key issues that need to be addressed to move towards decentralising access to treatment and creating sustainable approaches, which is likely to include the need for the whole health and social care system including primary and community health and social care, and hospitals working as a single system.

A specific issue of concern given the geography and population distribution of the North of Scotland is the key role that general practice, community healthcare, social care and hospital care play in the social and economic life of communities, and balancing the challenges associated with meeting the financial and workforce challenges which may make it difficult to maintain the current pattern of service delivery.
Travel times to 3 main specialist acute hospitals in the North:

- Stornoway: 94 miles (40 mins flight), 114 miles (2 3/4 hrs drive)
- Ulapool: 78 miles (2 1/2 hrs ferry), 111 miles (2 1/2 hours drive)
- Portree: 108 miles (45 mins flight), 103 miles (2 1/2 hrs drive)
- Inverness: 114 miles (2 3/4 hrs drive)
- Thurso: 108 miles (45 mins flight), 103 miles (2 1/2 hrs drive)
- Dundee: 194 miles (5 1/4 hrs drive)
- Campbeltown: 94 miles (40 mins flight), 103 miles (2 1/2 hrs drive)
- Lerwick: 154 miles (7 1/4 hrs ferry), 189 miles (1 hr flight), 216 miles (12 1/2 hrs ferry)
- Kirkwall: 138 miles (3 hrs drive), 124 miles (50 mins flight)
- Aberdeen: 189 miles (1 hr flight), 216 miles (12 1/2 hrs ferry)

North Regional Asset Management Plan 2018 to 2028
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Changes are underway in the North as well as the rest of the country to make sure that NHSScotland is in the best possible shape to meet future health needs and improve people’s wellbeing.
North Regions Ambitions

Changes are underway in the North as well as the rest of the country to make sure that NHSScotland is in the best possible shape to meet future health needs and improve people’s wellbeing. There are a number of national and local policies and initiatives aimed at making NHSScotland more effective and efficient such as the NHSScotland National Clinical Strategy; Better Health, Better Care: Action Plan; the NHSS Quality Strategy; the Efficiency and Productivity Framework and “Achieving Sustainable Quality in Scotland’s Healthcare – A ‘20:20’ Vision”.

These strategic documents all have a major influence on our healthcare infrastructure, from the number and location of properties, the IT infrastructure required to provide clinical information to our staff, the transport links to make our services accessible and to the equipment required to diagnose and treat the population of the North of Scotland.

![Healthcare Provision Hierarchy](image-url)
The National Clinical Strategy for Scotland published in February 2016 and the Scottish Government’s Health and Social Care Plan published in December 2016 outline the vision for health and social care services in Scotland up to 2030. It sets out the case for:

- Planning and delivery of primary care services around individual communities.
- Planning hospital networks at a national, regional, or local level based on population models.
- For services to be integrated.
- For services to focus on prevention, anticipation and supported self-management;
- Where hospital admission is required it will make day-case treatment the norm, where it cannot be provided in a community setting;
- Focusing on care being provided to the highest standards of quality and safety, whatever the setting, with the person at the centre of all decisions; and
- Ensuring people get back into their home or community environment as soon as appropriate, with minimal risk of re-admission.
- Providing high value, proportionate, effective and sustainable health and social care.
- Transformational change supported by investment in e-health and technological advances.

The National Clinical Strategy and Health and Social Care Delivery Plan also sets the direction of travel for developing the North of Scotland Clinical Strategy (2017-2022). It guides our planning by focusing on:

- Ensuring quality, safety, clinical effectiveness and a patient-centred approach.
- Integrating health and social care and working in partnership with communities.
- Enhancing clinical roles and greater use of technology.
- Establishing networks of specialist services regionally and nationally.
- Supporting “Realistic Medicine” where patients are informed partners in choosing appropriate care and treatment.
Regional Context

The North is developing a regional clinical strategy that links with national and local board strategies so that we have a common vision for the provision of healthcare services for the future. The strategy will continue to be developed as we continue to consult with all stakeholders and move forward with a regional focus.

The configuration of the north's health and social care services in five years' time is likely to be very different from how it is today. The changing demographics of the population and the likely continued shortage of traditional healthcare staff will mean we have to do things differently. While many of the hospitals in the north are likely to be here five years from now, the way we plan and deliver services within these buildings will need to be dramatically different.

The principles that will determine what the future looks like are as follows:

- Care will be delivered close to the patient’s home when this can be done safely.
- Clinicians and their teams will ensure that their patients receive a person-centred approach which best delivers what is most important to their patient.
- Quality and safety and the need to eliminate unnecessary harm will be foremost in decision making.
- Collaboration and joint working will be unconstrained by present geographical and professional boundaries.
- We will plan services on a population basis with our local and national partners and agree which services should be planned on a regional basis for the north.
- These agreed regional services will be delivered as locally as it is appropriate and safe to do so.
- The financial, staff and clinical governance for these services will be at a regional level.
- There will be no ambiguity or doubt about the lines of accountability for these services.
- Where staffing levels are too low to make a regional model of care sustainable, a national or national/regional hybrid model will be explored.
- Barriers to regional and national working will be removed and key back room functions such as IT, HR, Finance and Laboratories will be planned on a ‘Once for Scotland’ basis.
- Staff will be able to work seamlessly across the north of Scotland (either virtually or in person) to ensure their patients do not have to travel unnecessarily to receive treatment or for a consultation.
- Maximise access for all staff to educational opportunities and ensure a culture of life-long learning and continuous service improvement within our workforce.
- With partners we will have developed a robust infrastructure for the transport of patients and staff to the most appropriate point of care.
- We will look after the wider needs of our staff and champion the North of Scotland as a place where staff will want to live and work and bring up their families.
- We will embrace the role of the generalist and those who are best placed to provide holistic care, not just in remote and rural locations but also as a valuable resource to all primary and secondary care.
Local Context

The North Health and Social Care System currently supports a population nearing 1.4m, which by 2039 is expected to rise to 1.5m. The geography of the area is as diverse and challenging as is the conditions of our patients. Sustainable service models underpinned by the availability of workforce and finance, supported by technology will lead in the future to a requirement of different proportions of asset investment compared to that of the past.

We need to build effective alliances of equal partners to meet the challenges – not only involving the partner organisations in the North of Scotland, but also involving staff, patients, individuals, professionals and communities. Effective alliances need a realistic assessment of the challenges and a common understanding of what needs to change.

NHS Boards Clinical Strategy Links:-

- NHS Grampian – NHS Grampian Clinical Strategy
- NHS Highland – NHS Highland Care Strategy
- NHS Orkney – NHS Orkney Clinical Strategy
- NHS Shetland – NHS Shetland Clinical Strategy
- NHS Tayside – The Board are currently developing an Integrated Clinical Strategy, which will be reported to their Board later in 2018/19
- NHS Western Isles – NHS Western Isles Clinical Strategy

The aims of the Strategies are to:

- Confirm the direction for clinical services over the next five years and beyond.
- Identify the objectives across the health system to improve patient outcomes.
- Confirm the change that is required to support the health system to work more effectively.
- Outline areas of shared benefit across the system.
The Strategies underpin the National 20:20 Vision, the Quality Ambitions described in NHS Scotland’s Quality Strategy and the NHS Scotland Clinical Strategy and guides the infrastructure needed to meet the future health needs for the North of Scotland.

The North’s Clinical Strategies take their place alongside the strategic plans of the Health and Social Care Partnerships (H&SCPs) or Integrated Joint Boards (IJB’s) or Lead Agency (LAge) for the Region. The IJB’s came into place in 2016 in shadow format and became legal entities on the 1st April 2017 and are responsible for the planning and delivery of adult health and social care services, whereas the LAge was set up in 2012. The IJBs/LAge have a partnership arrangement: working with voluntary services, private sector partners, and alongside local communities; whilst working closely with the Local Authorities and NHS Boards to improve the quality and effectiveness of health and social care services.

The IJB's/LAge strategic plans describe how they intend to improve the health and wellbeing of adults in the geographic areas through the design and delivery of integrated services. The principles that underpin these strategies are all aligned with the National Clinical Strategy.

Links to the Health & Social Care Partnership’s Strategic Plans:-

- NHS Highland – Highland H&SCP Strategic Plan, Argyll and Bute H&SCP Strategic Plan,
- NHS Orkney – NHS Orkney Strategic Commissioning Plan Refresh 2017-19
- NHS Shetland – Shetland Islands H&SCP Strategic Commissioning Plan 2017
- NHS Tayside – Dundee IJB Strategic Plan, Angus IJB Strategic Plan, Perth & Kinross IJB Strategic Plan
- NHS Western Isles – NHS Western Isles Integration Joint Board Strategy
The information below paints an important picture of the potential characteristics of the population in the North of Scotland Region. The information is essential in helping us plan for our future Health and Social care provision.

Nationally
- Persons with dementia are likely to rise by 75% and the number of people living with cancer could rise by 28% in 2022.
- Hospital care could rise between 16-31% over the next 20 years if we do not make substantial changes to the traditional model of care.

NHS Grampian
- The population aged 65-84 will rise by 39% and those over 85 by 123% over the next 20 years.
- Currently there are 27,000 people living with diabetes in Grampian – by 2034 that could reach 35,000.

NHS Western Isles
- Currently 25% of the Western Isles population is aged 65+, by 2036 it is estimated to be 35%.
- By 2028 dementia cases is likely to rise from 613 persons to around 1000.
- Cancer diagnosis currently shows 1000 persons, by 2027 this is likely to rise to 1600 persons.
- ISD prevalence figures for Stroke (from QOF) suggest a rise in the over 65s category of 28% in the next 20 years.
- Similar prevalence figures for Coronary Heart Disease (CHD) shows a rise in over 65s of 28%.

NHS Shetland
If we assume that ‘age’ is one of the indicators of likely demand for services, it can be noted that by 2027, it is expected that
- over 85 population will have grown by 343, or 63%, and
- the 75-84 population will have grown by 642, or 44%, and
- the 65-74 population will have grown by 328, or 12%.
NHS Orkney

Orkney’s population is aging rapidly and is likely to place a greater demand on adult health and social care services.

- The working age population is reducing.
- The population is ageing rapidly with potential for an associated rise in conditions such as sensory impairments, mental ill-health, hypertension, asthma, diabetes, dementia and multiple chronic disorders.
- By 2037 long term projections indicate a significant increase in the number of people with dementia, especially in older females.
- Recorded smoking cessation rates are poor and the rate of smoking related admissions in Orkney is higher than Scotland.
- The death rate for Chronic Obstructive Pulmonary Disease (COPD) is substantially higher than the national average.
- Young people in Orkney drink more than their Scottish counterparts.

NHS Highland

- Over the next 20 years the population of the Highlands aged over 75 will increase by 38%.
- There are expected corresponding rises in Dementia, diabetes and other chronic diseases, this will also give significant rises in co-morbidities.
- The working age population is projected to increase by 5% as a whole, but over that same period however, remote and rural parts of Highland are expected to see continued falls in working age population. This presents considerable sustainability challenges over service delivery in these rural areas which are already being felt and are likely to worsen.
- There are significant pockets of deprivation and poor health in the Highlands.
- Life expectancy is at least 4 years lower than the national average.
On an average North of Scotland Day

- **37** Babies are born
- **763** Attendances at ED
- **2108** Radiology tests
- **356** Specialist mental health consultations
- **37** People given advice to quit
- **358** Patients have elective surgery
- **362** Patients admitted in emergency
- **2997** Outpatient appointments
- **50** Alcohol brief interventions
- **8219** Miles travelled to mainland clinics by islanders
- **9223** People in care homes
Investing in new ways of working

Buildings, Equipment and Information Technology (IT) are key components of our clinical infrastructure and essential to support the quality of clinical care provided. If the North Region is to fulfil its desire of improving the quality of health and wellbeing for the population of the North of Scotland, further focused investment will be required to enable these major changes and implement new models of care.

Our models of care for the North are informed by the plans and strategies of the partner organisations, which underpins the National Clinical Strategy (2016). The models of care are simple, but require significant change to ensure that they respond to the need for change. The information below outlines the key elements of the model for a citizen of the North of Scotland.

We aim to:

- Create opportunities for the prevention of illness and promotion of health and wellbeing.
- Support people to have the knowledge and skills to stay healthy.
- Provide people with different ways of getting advice, treatment and care.
- Provide as much support to allow people to live at home, or as close to home as possible, if ill, frail or living with long term health condition.
- Organise for diagnosis and treatment to be provided as locally as possible to minimise travel from home.
- Ensure that the stay in, or visit to, hospital is as short as possible to give the best treatment outcome.
- Ensure that the return home from hospital is organised and coordinated with community services.
- Organise effective clinical networks of professional staff to provide support for those complex.
- Treatment and care needs.
- Provide specialist services in the North of Scotland as far as possible.
- Coordinate the treatment and care effectively if the condition or illness requires travel outside the North of Scotland.
This will mean:

- Progressing existing work through the Community Planning Partnerships, linked to the Health and Social Care Partnerships, to develop capacity close to home.
- Developing partnerships with individuals, communities, patients and the population to take responsibility for their own health and wellbeing.
- Maximising the use of digital technology to support self-management, video clinics and accessing information using the health portal.
- Delivering more care through networks of social care and clinical professionals.
- Developing new ways of providing diagnosis and treatment in communities.
- Strengthening general practice, primary and social care and supporting the implementation of the new GP contact.
- Making decisions about what services can be provided, where; taking account of population needs, workforce availability and changing clinical practice and technology.
- Balancing the social and economic impact that health and social care services have on communities with the ability to sustain services and good outcomes for smaller populations.
- Reviewing our buildings and facilities to ensure that they are fit for purpose and in the right place to support the delivery of modern treatment and care.
- Agreeing which specialist/tertiary services can be sustained in the North of Scotland and how they should be organised.
- Working with the South East and West Regions, and the National NHS Boards, to plan for services nationally to ensure the best access possible for the North of Scotland population.
Developing the Model(s)

There needs to be continuous dialogue between the partners and with the public about how to develop our models and get the best outcomes for the population from the resource available to us. Most issues that will shape the model of care need to be considered within local systems by community planning partners, Health and Social Care Partnerships, Lead Agencies and NHS Boards.

The following is a summary of issues that require to be considered by the partners collectively to ensure that the models of care across the North supports the needs of the population:

- Action will be taken to decentralise access to services – this will be done by re-designing services to maximise the use of existing technology, and expand the use of new digital technology to access services remotely to support self-care.

- The sustainability of primary care and general practice is a major priority for Health and Social Care Partnerships and NHS Boards – the successful implementation of the new General Practice contract will make a major contribution to the future wellbeing of primary care, the delivery of health and social care locally and avoiding the need for hospital care.

- The partners in the North are taking forward a range of initiatives through service re-design to provide more local access to diagnostic and treatment services – the Angus care model in Tayside, the proposal for diagnostic and treatment hubs in Grampian, the Investigation and Treatment Rooms in Highland, together with redesign in the Islands. These initiatives are entirely consistent with the models of care that will be developed to ensure that unnecessary travel to hospital is eliminated.

- The roles of the main acute hospitals – Raigmore, Belford, Balfour, Western Isles, Gilbert Bain, Dr Gray’s, Aberdeen Royal Infirmary/Woodend, Ninewells Hospital, Kings Cross, Stracathro and Perth Royal Infirmary – will continue to be reviewed to ensure that the range of services they provide meets the needs of the populations they serve – these hospitals need to have an increasing focus on what only they can provide i.e. specialist and complex care which requires the concentration of skills and equipment.

- Clinical practice and medical technology has changed what acute hospitals have done since establishment – the hospitals will increasingly be organised as a resource for the whole of the North and there will continue to be relocations of activity between the hospitals in line with patient pathway development, to assure quality and safety, and to manage the impact of workforce constraints.

- The rural and island general hospitals play a valuable role in sustaining communities and minimising the need to travel long distances for treatment and care. Like the larger specialist acute hospitals there will need to be clarity about how their role should change to ensure they can be sustained as part of the model for the North.

- New partnerships will be forged with the aim of developing sustainable approaches – this could include the closer alignment of Dr Gray’s Hospital in Elgin to the larger more specialised Raigmore Hospital in Inverness. Raigmore and DrGray’s face some similar challenges and their close proximity provides opportunities for collaboration.
• Many of our facilities in the North are modern but some are not in the best location to serve the population, are not configured to support the delivery of modern treatment and care, or have significant maintenance requirements – being clear about the role of our hospitals, clinics and primary care premises becomes more important, ensuring limited funds for capital investment are targeted effectively.

• Unlike the West and East regions, the North has two tertiary centres at Aberdeen and Dundee, and it will be necessary to determine how small volume specialist services should be configured to assure long term quality, safety, sustainability and good access for the population of the North.

• The model in the North also requires high volume elective activity to be delivered in a dispersed way – the aim is to ensure that routine orthopaedic, ophthalmology, general surgical, urology etc. procedures that cannot be delivered in the community will continue to be delivered in our acute hospitals. It is not the aim in the North to centralise the delivery of high volume routine treatments and procedures but it is a priority to achieve the best outcomes from treatment and care.

• The North NHS Boards have in the past benefited from the use of the Golden Jubilee National Hospital which has provided capacity during peaks of demand or, more recently, capacity to support the Boards to manage a deficit in capacity in order to meet access standards. The strategic intent of the North NHS Boards is to provide capacity in the North of Scotland to avoid the need for patients to travel long distances for routine treatment – the development of this capacity will be over a 5-10 year period and will take account of how Highland, Grampian and Tayside establish additional elective care capacity and improve efficiency and productivity.

• There has been a significant move towards the integration of health and social care services at local level – a feature of the collaboration between the partners in the North will be the increasing integration of health services across NHS Board boundaries e.g. in relation to elective care where there will be a move towards unifying pathways and access policies, and cancer treatment where the three Cancer Centres – Inverness, Aberdeen and Dundee – will work within a single cancer system in the North. The aim of this is to support treatment and care locally and assure the sustainability of cancer services within the North of Scotland.

• The model of care needs a more flexible workforce – the development of the workforce will be a major feature of our workforce plan. New and adapted roles are developing and the ability of staff to support services across current organisational boundaries will be facilitated.

• The development of the model of care in the North will require new approaches to governance i.e. in relation to how the partners consider challenges and agree solutions, how decisions are made across a number of separately accountable organisations, and how clinical governance is organised to support the delivery of services across organisational boundaries.

• The model of care will also be supported by the integration of supporting services including finance, workforce, planning, and eHealth – this will provide consistent support for clinical services, and better value for money.
Acute hospitals provide a wide range of specialist care and treatment for patients. Typically, services offered in the acute sector is diverse, and includes: consultation with specialist clinicians (consultants, nurses, dieticians, physiotherapists and a wide range of other professionals); emergency treatment following accidents; routine, complex and lifesaving surgery; specialist diagnostic procedures; and close observation and short-term care of patients with worrying health symptoms.

Another major part of the work of many acute hospitals involves the treatment of patients who have a health problem that requires urgent attention. Many of these patients will be treated within an Accident and Emergency (A&E) department and will not require a hospital admission. A patient will be admitted as an emergency inpatient if their condition is considered by a doctor to be serious enough to warrant urgent hospital care and treatment.

Over the last 10 years, over 20 clinical services, in the north of Scotland, have benefited from a regional approach to planning service delivery particularly in our acute hospitals. It is recognised that all services should be planned at a national, regional and local level with an emphasis on “Planning Regionally, Delivering Locally”. Historically the regional approach to planning was often engaged only when services were about to ‘fall over’. Now it is clear that regional should be given equal consideration alongside national and local when services are being planned.
**NHS Grampian:**

**Foresterhill Health Campus** - The health campus requires significant further investment to fulfil the Foresterhill Development Framework (approved by Aberdeen City Council Planning Authority in 2008 and updated 2014). The Framework provides strategic design guidance for the future needs and development of the Foresterhill site, and includes development zones agreed with the University of Aberdeen (joint owner) creating certainty for future projects.

This framework facilitates the development of new elective care facilities: the Baird Family Hospital and ANCHOR Centre along with the Infirmary becoming one of the four major trauma centres in Scotland, which collectively will form a national network; extending planned care and trauma which provides a real opportunity to transform NHSG’s approach to acute care.

In the longer term solutions are required for the re-provision of the remaining in-patient accommodation and theatre services currently located in east end 2 and phase 2 (100 years old and 50 years old respectively), a longer term solution is also required for the provision of ambulatory care, mortuary services, laboratory medicine services, medical physics and the relocation of the central decontamination unit, laundry services and facilities services.

Backlog maintenance risks continue to be managed as best they can within limited finance.

**Backlog Unit Cost:** ARI £75m; Maternity Hospital £6m; Royal Aberdeen Children’s Hospital £212k

**Dr Gray’s Hospital** - Managed by the Moray H&SCP it provides a range of acute hospital services, the site is also occupied by Mental Health Services, where the clinical environment requires significant work to meet safety concerns. The Acute Care of the Elderly and General Medical Ward also requires significant refurbishment if it is to provide a modern day clinical service for patients. Investment is required to enhance the Diagnostic and Outpatient facilities in the Hospital to support the Elective Care Strategy. This will be targeted to improve the quality and effectiveness of services such as day surgery procedures as well as supporting the avoidance of unnecessary admissions to hospital. The development of the Moray Clinical Alliance under the direction of the Moray Integrated Joint Board will progress the work that will inform this ambition and our asset strategy therein.

**Backlog Unit Cost:** £4.087m

**Woodend Hospital** - Managed by the Aberdeen H&SCP where services are being developed, and in addition provides a community base for Care of the Elderly Services in Aberdeen. The site is occupied by buildings dating from 1901, some of which are no longer able to provide a suitable modern day clinical environment. Care of the Elderly Services located in the South Block requires a more appropriate setting for modern clinical care of patients. Within the Staff home the remaining services located there are now likely to relocate and facilitate the closure and disposal of this building dated from 1901.

**Backlog Unit Cost:** £6.3m
Royal Cornhill Hospital – To improve the patient environment (including patient safety) a three year refurbishment programme has commenced in the six acute admission wards.

The Learning Disability service inpatient ward accommodation located in a remote part of the Cornhill site requires to relocate to a more appropriate and safer setting for patients and staff closer to the clinical core of the Royal Cornhill Hospital that would improve response times in the event of emergencies, which due to these patients presenting with more challenging conditions is occurring more frequently.

There is a requirement to re-locate the Child and Adolescent Mental Health Service (CAMHS) from three dispersed inappropriate buildings which contribute to service delivery challenges as well as health and safety risks into a new single “Centre of Excellence” on the former City Hospital site.

Backlog Unit Cost: £14.7m
**NHS Western Isles:**

**Western Isles Hospital** - The central decontamination unit will be redeveloped and upgraded. Replacement autoclaves, clean steam generators and washer disinfectors were purchased in 2018. The construction element and equipment installation phase of the project is expected to commence in 2018/19 and will span two financial years. A new CT scanner will be installed in 2018/19.

The rolling programme of backlog maintenance and refurbishment works will continue for the next 5 years and includes the main entrance and reception area in 2018, with the redevelopment and refurbishment of the maternity department in 2019/20.

A mental health service redesign for the site is underway. It is anticipated that a care of the elderly review will result in those suffering from dementia being relocated into the community resulting in there being no hospital in-patient services. This offers an opportunity to change the use of one inpatient ward. The full implications of asset requirements will not be known until the mental health service redesign, work streams have gone through the option appraisal process and developed a list of required outcomes. The results of this process are expected in 2018/19.

**Backlog Unit Cost:** £1.566m

**Uist & Barra Hospital** - Plans are progressing to redesign the Hospital in Benbecula providing a more streamlined service for the community and one that is more appropriate for today’s patient pathways. This includes modernising dental services, a GP surgery aligned with medical officer provision at the hospital and a fit for purpose resuscitation area. Phase 1, to re-develop part of the Hospital to accommodate a dental department and centralise dental services in Uist onto the hospital site. Phase 2, to relocate the Benbecula GP practice to the hospital site. In addition to the two main projects above, several other leased admin properties in Uist will be either relocated to the Hub site or staff will be co-located with local authority premises as part of the integration process.

**Backlog Unit Cost:** £1,265

**Isle of Barra** - The new hospital/health care hub site is still awaiting OBC approval. If the OBC is approved construction could commence May 2019 with completion May 2020. This is a joint project with the local authority and includes a care home. NHS contribution is estimated at £15.222m with the Comhairle nan Eilean Siar funding £2.9m.
**NHS Shetland:**

**Gilbert Bain Hospital** – The hospital first opened in 1961. The approach is to invest in technology within Gilbert Bain Hospital supporting the repatriation of activities and care pathways to Shetland, resulting in patients having to travel less for unnecessary appointments.

Investment is required in an extended Ambulatory Care facility within the hospital, improving the quality and effectiveness of day surgery procedures and to avoid unnecessary admissions to hospital.

A series of Scenario Planning workshops has been undertaken to shape the future of health and care services in Shetland. That work will help inform our asset strategy and specifically the number, location and use of our buildings. This is done in partnership with the Integration Joint Board. Within the life of this plan consideration of replacement of key infrastructure will have to be considered or alternatively developing a new hospital which would facilitate many more opportunities to redesign services.

**Backlog Unit Cost:** £1.062m

**NHS Orkney:**

**The Balfour** - A £60m new hospital and healthcare facility is currently under construction in Kirkwall. This purpose-built, state-of-the-art facility will enable more services to be provided at the hospital, this will ensure some of the most remote communities having to travel less for routine care. It will include the establishment of a small high dependency unit, a consultant led staffing model and a CT scanner to support service repatriation. The Hospital is due for completion in April 2019.

**Backlog Unit Cost:** £6.85m (Existing Balfour)
NHS Highland:

Raigmore Hospital - A £39m development to update and redesign Critical Care services in Raigmore Hospital is underway and is due for completion by end of 2018. This is the single biggest investment the Inverness hospital has had since it was built. It provides an opportunity to co-locate wards and ensure that the board can deliver first-class healthcare in modern facilities. It will bring all critical care services, which includes the Acute Medical Assessment Unit, the Intensive Care Unit, Surgical High Dependency Unit, CCU, Cardiology and Theatre suite, adjacent to each other over two floors. The operating theatres at the hospital will be refurbished and an additional theatre will be added to bring the total number of theatres in the suite to 10, seven of which will be equipped with specialist laminar air flow, ensuring the air within the theatre environment is at the cleanest possible standard.

Backlog Unit Cost: £45m
NHS Tayside:

Ninewells - The current arrangements of the main and standby electrical power systems on the Ninewells site are no longer fit for purpose in terms of a resilient power supply. The original and current reduced capacity standby arrangement requires electrical control systems and electrical switchgear to manage the electrical loading in the event of a power failure to ensure that no overload occurs on the standby system. The current main electrical distribution system also has many single points of failure, where some areas are served by single main transformer with a single cable sub-main wiring system and reduced capacity single standby generator. An approved programme of works to rectify these electrical deficiencies is underway. The proposed model of delivery is a phased programme of works up to and including 2025/26. There are 11 Zones across the entire Ninewells site to be delivered, all prioritised to reflect the current capital plan and to address the existing deficiency within the current primary electrical infrastructure.

The Children's Theatre Suite (ARCHIE) Project will see the creation of a first class children's theatre suite designed and built for children and their families and with significant input from children and families. The contribution from the ARCHIE Foundation will ensure that a high quality, 21st century child family friendly environment will be provided.

Neonatal Intensive Care Unit Project is principally an infrastructure project and it does not concern any change to the service model. The overriding issues being addressed are those of safety for babies, parents and staff. Nonetheless, due to it being necessary for the Unit to decant for the duration of the building works, the opportunity will be taken to make several improvements within the Unit itself which will ultimately lead to improvements in the service experienced by babies and families.

Backlog Unit Cost: £75m
Primary Care and Community Based Services

The planning and development of primary care is delegated to each of the Integration Authorities under their Integration Schemes or in the case of Highland by NHS Highland as the Lead Agency. The development of Primary Care Improvement Plans (PCIPs) is a requirement of the new GMS contract which also sits with the Integration Authorities. However essential to the success of the plans across each partnership will be engagement with our primary care practitioners. It will be important to support the development of the role of General Practice and the wider primary care team if the new models of care are to be successful. This engagement, and sharing of good practice models, can become a useful focus for regional working whilst not detracting from the local focus of the Integration Authorities. A key area of focus in the early stages of implementation will be the exploration of how alliances can be developed within local systems between General Practice and hospital based clinicians to put in place coordinated change processes to manage the retention of appropriate activity in community settings.

There will also be a coordinated effort with partners to ensure training opportunities for medical staff are enhanced increasing the supply of new and flexible clinical roles to support General Practitioners and the development of primary care.

The new GP contract offers significant opportunities for:

- GPs to strengthen their lead role for chronic and complex disease and to build the clinical relationships across the wider system ensuring that the patient is managed in the best place
- Development of the extended multi-disciplinary teams by the Health and Social Care Partnerships freeing up GPs to concentrate on complex care whilst having the right team around every individual to address the broader aspects of care. There will be some opportunity for working on a bigger scale than single practices i.e. at “cluster” or locality level. The future configuration will be part of the local redesign ensuring services and delivery is fit for the future
- There are also some perceived risks in the new contract for more rural practices. This is obviously something for the whole system to work on with considerable parts of the North being of a rural nature
- Over the next three years the Government have set aside £10m per annum to support transitional arrangements for those GP’s wishing to get out of ownership or leased options. The Government through Health Boards will be inviting applications from Partnerships wishing to fully engage on transferring property risks to their Health Boards. This year there will be three windows of opportunities for practices to make their case to their Health board, who in turn will submit their priorities to the Government for consideration.
Strategic priorities for primary and community care

There has already been considerable change in the provision of GP premises whilst we move the balance of care to local communities. Larger integrated premises however may still be required to allow for prevention and self-management clinics, increased diagnostic and treatment services, training and community nursing teams. Conversely the increasing development of intermediate care facilities is changing the demands on general practice and that along with new technologies, and triage working becoming more the norm, all of which is being influenced by the availability of GPs, - the expectation being that this should reduce space requirements of GP premises. Increasingly integration and co-production is used to describe how we will work in the near future, and this may provide opportunities to make investment decisions which provide greater value for money for all parties.
Listed below are the current GP premises priorities for redevelopment. These will continue to be re-assessed and prioritised on an annual basis.

**NHS Grampian**
- Bucksburn/Dyce Medical Practices (Aberdeen) (part of £19m bundle)
- Denburn/Northfield/Mastrick Medical Practice (Aberdeen) (OBC stage)
- Banchory Medical Practice (Aberdeenshire) (emerging Bundle)
- Ellon Medical Practice (Aberdeenshire) (emerging Bundle)
- Keith Medical Practice (Moray) (Initial Agreement stage)
- Danestone Medical Practice (Aberdeen) (emerging Bundle)
- Kincorth Medical Practice (Aberdeen)
- Torry Medical Practice (Aberdeen)
- Fochabers Medical Practice (Moray)

**NHS Western Isles**
- All the dental clinics in Uist will be rationalised and re-provided as part of the Uist & Barra hospital clinical hub project. (Internal Planning/consultation stage)
- The GP clinic building on Barra will be disposed off once the Hospital/clinical hub project is completed. (Awaiting OBC Approval)
- A program of backlog maintenance issues, such as minor refurbishment in the form of floor coverings, windows, decoration, replacement heating systems, fabric insulation works and LED lights and sensors, etc. to all community clinic buildings. (In progress to take place over next 4 years)
- Benbecula Medical Practice will relocate to the Uist & Barra hospital site as part of the clinical hub development project. (no progress on this to date other than approved in PAMS)

**NHS Shetland**
- The NHS Shetland Scenario Planning exercise which is programmed for completion October 2018 is likely to prioritise expenditure, creating a bundle of works to the existing estate and enable potential localities which will lead to an increase in services which can be accessed.
NHS Orkney

There are several smaller properties within the Primary & Community Care sector that are in need of improvement and these are identified as follows:

- Stromness Surgery
- Eivie Surgery, Orkney
- Flotta Surgery, Springbank
- Stronsay Surgery, Geramount
- Westray Surgery, Trenabie House
- North Ronaldsay Surgery, New Manse
- Papa Westray Surgery

These properties will need to form part of a prioritisation of investment programme alongside any service change plans being considered.

NHS Highland

- Lochaber Health & Social Care Redesign, Fort William.
- North Coast Redesign, Kyle of Tongue area.
- Skye, Lochalsh & South West Ross,
- Badenoch & Strathspey

Many changes are affecting the services provided in community hospitals with this likely to continue as health and social care services integrate and focus on different care models including, prevention, self-care and care at home.

The detailed future configuration of community hospitals and community services will be the subject of comprehensive community planning work undertaken jointly by the NHS, Local Authorities, IJBs and the third sector using the existing Community Planning Structures.
Digital Transformation

The comprehensive application of digital technology is essential for the North of Scotland – we need to re-design how we provide services to remove the barrier of distance and rurality and equip staff to improve services and efficiency in supporting the people of the North to improve health and wellbeing. Given the geography and population distribution of the region we aim to be at the forefront in the application of digital technology. We already have a good foundation in the development of the electronic patient record (EPR), a range of digital health initiatives, and innovative clinicians who have a vision of a digitally connected health and social care system.

Some of the features of a digitally enabled system are outlined below:

- Digitally enabled homes will give people with medical conditions the ability to live at home with confidence.
- Video clinics will be routinely used for return outpatient attendances where no physical examination is required.
- Clinicians will be able to provide a range of alternative digital options in place of a standard outpatient appointment.
- Patients will own their health records and be able to access their information electronically.
- Patients will have direct access to test results and to book outpatient appointments.
- Tailored information will be available to individuals to support them to manage their long term health conditions.
- Real time clinical decision support will be available to practitioners and care staff in people’s homes and in care homes.
- Clinicians will be able to provide treatment and care to patients in all NHS Board areas through the use of systems and protocols.
3 million miles
Travelled each year by Islanders to attend outpatient clinics on the mainland.

= 120 times around the world

x7,275 trees to offset Co2 emissions of 1,455 tons

Patient travel from the Northern and Western Isles for treatment in the mainland costs c£7m every year. The cost is not just financial but also time – many hours and sometimes days for patients and their friends or relatives who accompany them.

However the travel by all mainland rural patients by road accounts for many more than the 3 million miles travelled by Islands patients annually. This travel to hospital from both the islands and the rural mainland is often essential for examination and treatment – however many return outpatient clinic attendances could be done by video using new technology called Attend Anywhere. This has been pioneered by NHS Highland through their “NHS Near Me” initiative, and by other Boards for specific clinics.
Our more urban areas are focussed around Inverness, Aberdeen and Dundee with remote and rural populations across all the Health Boards but especially the Highlands, Orkney, Shetland and the Western Isles
Our aim in the North is to eliminate all unnecessary travel from the Islands to the mainland i.e. where a virtual clinic attendance could be undertaken by using technology. This does not just require the right technology but also a change in the way of working for clinical staff and how clinics are organised. It is worth doing – if it works for the Islands it will work anywhere.

Our key areas of focus to move towards having a digitally enabled system of health and social care will include:

- Information Governance – the harmonisation of policies to support the connection of clinical information across organisational boundaries – essential to make digital connection effective.
- Telecare, virtual clinics and self-directed care – a range of initiatives aimed at supporting staff and the population to make decentralised access to treatment and care a reality e.g. triage of outpatient referrals, and the “No Delays” initiative to provide tailored support for individuals.
- Clinical Systems Workstream – the development and enhancement of a range of systems including Trakcare – the main patient management system – to create an integrated electronic patient record for use across the region.
- Hospital Electronic Prescribing Medicines Administration (HEPMA) Programme – to support the efficient management and dispensing of medicines and improvement of safety for patients.
- North of Scotland Portal Programme – a major programme to provide the connectivity between clinical systems and the people, who need access to information to improve treatment and care.
- Scottish Radiology Transformation – a specific initiative to modernise the approach to radiology and clinical imaging.
- Business Systems Workstream – support systems to help make the health and care organisations work as efficiently as possible, including human resources systems, procurement etc.
- Cybersecurity Workstream – ensuring that the best possible security is applied to keep information safe.
- Broadband – develop a partnership approach with the Local Authorities and other partners in the North, linking to a range of initiatives, to ensure that the best broadband coverage can be delivered as soon as possible.
- National Boards – work closely with the National NHS Boards to maximise the support that can be provided on a whole of Scotland basis to deliver the digital ambitions in the North.
The North of Region consists of 6 NHS Boards and 11 Health and Social Care Partnerships covering a land area of 54,345 km²
North Regions Current Position

Current Property Assets

Introduction

The North of Region consists of 6 NHS Boards and 11 Health and Social Care Partnerships covering a land area of 54,345 km² providing health and social care services to a population of 1,396,490 from an ownership of 74 hospitals and 243 Primary Care Facilities with a net book value of over £1.355bn. Over and above this there are services provided from 152 Independent GP Practices, 209 Dental Practices, 306 Pharmacies and 167 Optometrists.
The owned or leased property portfolio within the North varies considerably in condition, functional suitability and space utilisation. This is principally due to the age and the rurality of many of the buildings. As can be seen in the table below 61% of the buildings are over 30 years old, 23% of which are over 50 years old. This is a key concern despite the major developments and refurbishments in the North over the last 20 years. That said the planned developments due to complete in the next 3 years of Balfour Hospital, Baird Family Hospital, Anchor Centre and Denburn Health Centre will improve the overall picture.

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Age Profile (%)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over 50 years old</td>
<td>30-50 years old</td>
<td>10 - 29 years old</td>
<td>Up to 10 years old</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS Grampian</td>
<td>36%</td>
<td>24%</td>
<td>28%</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>21%</td>
<td>42%</td>
<td>23%</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>54%</td>
<td>25%</td>
<td>21.25%</td>
<td>0.37%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>38%</td>
<td>29%</td>
<td>32%</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>8%</td>
<td>13%</td>
<td>75%</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHS Highland</td>
<td>3%</td>
<td>59%</td>
<td>30%</td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Region</td>
<td>23%</td>
<td>38%</td>
<td>28%</td>
<td>11%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The geography and rurality and remoteness is undoubtedly challenging but also is the need for a clinically driven review of the health and care requirements across the region to assess the need to retain many of these aging facilities. The outcome of which should assist in ensuring investment and indeed disinvestment is focused correctly to ensure the longer term affordability of the estate meets the requirements of our Clinical Strategy(s).

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Total Number of Sites</th>
<th>Total Floor Area (000's sq.m)</th>
<th>Net Book Value (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospitals</td>
<td>Acute</td>
<td>Long Stay</td>
</tr>
<tr>
<td>NHS Grampian</td>
<td>91</td>
<td>429</td>
<td>477</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>64</td>
<td>449</td>
<td>485</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>21</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>27</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>38</td>
<td>32</td>
<td>43</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>163</td>
<td>252</td>
<td>321</td>
</tr>
<tr>
<td>North Region</td>
<td>404</td>
<td>1,206</td>
<td>1,356</td>
</tr>
</tbody>
</table>
Further analysis shows that functional suitability and space utilisation varies considerably across the region but that 19% of the estate is either empty or under-utilised and that 32% of the estate is functionally unsuitable for the services currently provided from them (see the table and charts below).

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Functional Ranking - % in each category:</th>
<th>Quality Ranking - % in each category:</th>
<th>Space Ranking - % in each category:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>NHS Grampian</td>
<td>11%</td>
<td>59%</td>
<td>18%</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>8%</td>
<td>76%</td>
<td>15%</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>1%</td>
<td>75%</td>
<td>21%</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>11%</td>
<td>39%</td>
<td>31%</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>10%</td>
<td>88%</td>
<td>2%</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>6%</td>
<td>25%</td>
<td>62%</td>
</tr>
<tr>
<td>North Region</td>
<td>9%</td>
<td>59%</td>
<td>26%</td>
</tr>
</tbody>
</table>

The under utilisation of accommodation across the region reflects the challenges of a large rural area with the requirement to provide and maintain critical healthcare facilities in locations with very low population centres e.g. The north region accounts for 26% of the total population of Scotland and 69% of the land mass. In contrast the rest of Scotland accounts for 74% of the population and 31% of the land mass. Within the north there is a large number of inhabited islands and the ability to provide local accessible services is extremely challenging. At the time of the 2011 census there were 93 inhabited islands with a combined population of 103,700. The population of each of the islands ranged from just one person living on each of Danna, Eilean da Mheinn, Inchfad, Inner Holm and Soay to over 21,000 people living on Lewis and Harris. These remote rural populations including that on the mainland still require access to high quality health and social care.

It should be no surprise that the condition of the estate is reflective of the property age profile.

The table below shows the backlog maintenance, by level of risk, which been adjusted to take account of inflation.
The North's Current Position

Backlog for the North Region is £331m, this figure does not include those buildings that are empty and awaiting sale which is currently accounts for a further £13m as a unit cost. The three main acute hospital sites in the North; Aberdeen Royal Infirmary £75m; Raigmore Hospital £45m and Ninewells Hospital £72m accounts for 58% of the total backlog of which £94m is identified as either significant or high risk issues. Clearly this level of risk in the 3 main acute hospitals requires to be addressed. Given the age profile it is of no surprise that after further analysis site infrastructure/site services is a major component of these risks. Other properties worthy of note are the Foresterhill site £36m (which provides the infrastructure to Aberdeen Royal Infirmary, Royal Aberdeen Children’s Hospital, Aberdeen Maternity Hospital and the Aberdeen Dental School) the Balfour Hospital £8.5m (New build replacement currently under construction), Stracathro Hospital £12m (Currently under-utilised), Argyll and Bute Hospital £7.5m (Currently Planned for disposal) and Gilbert Bain Hospital £1m (Statutory compliance not included and has major functional suitability issues), which it is unlikely can be overcome by the existing building.

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Low Risk Items</th>
<th>Moderate Risk Items</th>
<th>Significant Risk Items</th>
<th>High Risk Items</th>
<th>Total Backlog*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Grampian</td>
<td>81</td>
<td>40</td>
<td>22</td>
<td>5</td>
<td>148</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>3</td>
<td>16</td>
<td>39</td>
<td>48</td>
<td>108</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>17</td>
<td>25</td>
<td>12</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>North Region</td>
<td>106</td>
<td>89</td>
<td>75</td>
<td>60</td>
<td>331</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Total Backlog Cost (£m) - All Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Region</td>
<td>331</td>
</tr>
</tbody>
</table>

With 2018 (3.12%) Inflationary Increase

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Total Backlog Cost (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Region</td>
<td>331</td>
</tr>
</tbody>
</table>
Statutory Compliance and Reporting Tool:

Statutory Standards is one of the two facets which makes up backlog and considers statutory compliance relating to the estate including fire, health and safety, and Disability Discrimination Act (DDA). Health Facilities Scotland developed a Statutory Compliance Audit Reporting Tool (SCART), which is a national audit system used to support Health Boards assess their status with regard to compliance. It asks a series of questions relating to compliance, management arrangements, building up a picture of the level of statutory compliance to measure compliance of the estate.

All Statutory Compliance issues identified through SCART should have a programme of works identified and costed to rectify all the issues so as to ensure that each property meets the required statutory standards. These costs should be included in the backlog costs reported above. **Whilst it is recognised that some of these costs are included within the backlog, evidence suggests that majority of the compliance issues are either not costed or not included in the reported figures.**

It should be noted the £331m backlog in the table preceding is a unit cost, not a project cost, it therefore does not include; enabling costs (decant, scaffolding, temp services or testing and commissioning); Professional fees (design costs, building warrant, planning permission etc.) or VAT. It is estimated that on average the backlog cost should be multiplied by a factor of three to get a realistic project cost, this means that the funding required to deal with the **backlog in the North Region would be around £1bn** plus statutory compliance aspects.

There remains a disparity between available funds to maintain the size of the Estate in the North and reduce backlog maintenance. Investment in property that is essential to support the clinical strategy and divesting of assets which are not is essential within the current funding envelope if we are to continue to provide a safe and efficient clinical environment for patients, staff and visitors to enjoy in the 21st century.
Sustainability and Carbon Reduction

Boards in the North take their corporate responsibility towards sustainability seriously and significant efforts are undertaken to ensure the consumption of scarce resources are minimised. Resources are consumed: to heat and power buildings, to deliver goods and services throughout the region and in particular to the North Region, because of geographic necessity, to transport patients to and from remote locations to health services.

All NHS Boards in Scotland are expected to comply with the requirements of CEL 2 (2012); A policy on Sustainable Development for NHS Scotland 2012. This is supported by guidance from Health Facilities Scotland who have developed a Sustainable Development Strategy that provides guidance to NHS Boards when implementing policies and procedures.

In terms of energy consumption for heating, hot water and power needs, the North Boards account for 29.11% of NHS Scotland consumption but only account for 27.86% of floor area reported in EAMS. This reflects the northern geographic nature of the Boards, where external temperatures are typically lower than southern Scotland and this is particularly so in the winter months. Reductions in energy consumptions have been realised over the last few years through the installation of energy efficient plant and equipment. Examples of these include:

**NHS Grampian**

A contract with Vital Energi supported by the Carbon and Energy Fund (CEF) was signed December 2015. NHS Grampian will benefit from investment in infrastructure estimated at circa £15.6m over the 25 year life of the contract (£10.4m of initial investment with £5.2m lifecycle replacement of lights and chiller units throughout the contract period).

A significant component of the contract is the creation of an energy link between the Foresterhill Campus and Royal Cornhill Hospital which will allow all of these areas to be serviced from the main CHP plant on the Foresterhill Campus. This has permitted the east end boiler house to be demolished, eliminating £2.8m backlog. The contract also includes replacement of heating plant at Dr Gray’s Hospital which has eliminated a further £0.3m in backlog.

All infrastructure, including the energy link, is now operational and is expected to significantly reduce carbon energy emissions, and progress towards the national environmental targets set by the Scottish Government.

**NHS Tayside**

Following a review of the energy and infrastructure associated with Ninewells, Perth Royal Infirmary and Stracathro First Carbon and Energy Fund (CEF) project in the North Region reached practical completion on 28th February 2017. The 25 year contract is a partnership between NHS Tayside and Vital Energi. It is anticipated that this will reduce energy consumption and carbon energy emissions across these three acute sites and progress towards the national standards set by the Scottish Government.
NHS Highland

Working in partnership with HIE and UHI to achieve the Alliance for Water Stewardship standard in Caithness General Hospital. This takes a holistic look at water usage across all users of a water source, ensuring the impact of all uses is considered and managed. Many large multinational companies use this standard, NHS Highland would be the first health care organisation to achieve this standard.

The Board are developing a pilot project with the UHI Environmental Research Institute to understand the effect of pharma waste in the environment, an increasing source of concern for healthcare. This pioneering research is producing interesting results that are gathering significant interest.

NHS Highland is also working with Health Facilities Scotland (HFS) to pilot a waste awareness campaign to encourage correct segregation of waste. This campaign, if successful, will then be rolled out to the rest of NHS Scotland. It is intended to reduce the current levels of clinical waste; sampling suggests reductions of 25% are possible by improving segregation.

NHS Highland is working with Healthcare without Harm, a pan-European organisation dedicated to reducing the impact of healthcare activity on the environment. This organisation offers a wealth of experience to improve performance and many opportunities to collaborate and learn from other providers across Europe. NHS Highland recognises that it will be increasingly difficult to find significant funding for capital investment in carbon reduction, however that does not mean that this agenda cannot be progressed. By looking outside the NHS family, we can make significant progress on reducing the environmental impact of our activity without large scale investment.

NHS Orkney

Efforts are underway to promote sustainability throughout the Board and ensure the estate is fully utilised by creating and improving collaboration links with the Local Authority.

NHS Western Isles

A significant number of projects to reduce energy consumption have been completed and work is continuing to implement many more. Efforts to reduce heat loss from buildings that include increasing loft insulation in all buildings, replacing doors and windows and reducing the consumption of energy by replacing lighting in community buildings to LED’s will result in improved energy efficiency. In addition, estate rationalisation will provide reductions in energy consumptions, costs and carbon emissions.

The Board plan to install electric vehicle charging infrastructure across its estate over the next 8 years to allow it to replace the majority of the diesel/petrol fleet to electric or electric/hybrid vehicles.
NHS Shetland

The Boards heating and hot water for Lerwick is provided by Shetland Heat Energy and Power Ltd (SHEAP) – Lerwicks District Heating system.

Developments are being considered in collaboration with the Local Authority and Boards in the North Energy, Waste and Sustainability Groups that include the implementation of Corporate GREENCE®️, improving recycling of paper and plastics, and identifying potential use of sustainable single use medical instruments.
Due mainly to the introduction of the Zero Waste Regulations on 1st January 2014, all Boards are actively involved in recycling and the reduction of healthcare waste, ensuring the correct segregation of waste is maintained and that costs are minimised for this waste stream. All other waste not classified as healthcare waste is further segregated in line with the Zero Waste Regulations.

One of the most interesting aspects of sustainability in the North could be the development and use of electric transport vehicles. The geographic nature of the Region would seem to be able to provide significant benefits if an electric charging infrastructure could be realised. Analysis of journeys carried out by fleet transport vehicles is required to determine the viability of this alternative technology. In addition, the proposed ban on the sale of diesel and petrol vehicles in Scotland in 2032 presents an opportunity to carry out option appraisal studies for future investment in transport modes.

<table>
<thead>
<tr>
<th>Boards</th>
<th>2015/16</th>
<th>2016/17</th>
<th>2016/17 compared to 2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EAMS Floor Area (m²)</td>
<td>Energy (K Wh)</td>
<td>CO₂ Emissions (tonnes)</td>
</tr>
<tr>
<td>NHS Grampian</td>
<td>442,303</td>
<td>250,449,959</td>
<td>59,487</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>503,446</td>
<td>199,214,383</td>
<td>49,177</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>274,346</td>
<td>110,660,708</td>
<td>30,444</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>32,743</td>
<td>13,737,670</td>
<td>4,304</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>22,681</td>
<td>7,844,148</td>
<td>2,338</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>13,136</td>
<td>6,322,645</td>
<td>1,854</td>
</tr>
<tr>
<td>North Region</td>
<td>1,288,656</td>
<td>588,229,514</td>
<td>147,604</td>
</tr>
<tr>
<td>NHS Scotland</td>
<td>4,700,024</td>
<td>2,009,660,199</td>
<td>517,139</td>
</tr>
<tr>
<td>NoS Region % of NHS Scotland Total</td>
<td>27.42%</td>
<td>29.27%</td>
<td>28.54%</td>
</tr>
</tbody>
</table>

Comparison of Energy Consumptions, CO₂ Emissions and Costs

The table above does show improvements generally in the reduction of CO₂ emissions and consequently that of cost.

It should be noted that Corporate GREENCEDE® has been developed for NHS Scotland Boards as a Corporate Environmental Management System (EMS), this has been designed to achieve the same standard as ISO14001. Work within this area will continue to be progressed throughout the North Region.
Office Accommodation

The NHSScotland Smarter Offices Programme was established in October 2013 with the aim of improving utilisation of office accommodation across the NHS estate by supporting NHS Boards and Special Boards in the development of a strategic approach to their office accommodation. The following benefits are expected to be obtained:

- Provision of **affordable support accommodation** to the NHS that is better able to respond to future changes in strategic direction
- **Improved quality of working environment** which facilitates the retention and recruitment of staff
- Improved availability of **staff welfare facilities** promoting positive staff morale.
- **Flexible, well designed, efficient space** that is able to cope with uncertainty around future property needs, support opportunities to change working practices, and introduce new technology
- **Supporting Scottish Government environmental sustainability agendas** through the appropriate procurement, design and operation of its property assets.
- Maximise opportunities for **staff to develop and deploy their knowledge**, skills and personal qualities creatively to add value to the organisation
- More **integrated/collaborative working** and thereby encourage better use of skills and resources.
- Synergies from **shared use of accommodation** and support services.

Contained within this programme is the development of new ways of working.

The North plans to improve the utilisation of its office accommodation across the office portfolio by identifying opportunities for consolidation and rationalisation, increase agile working and shared use of space with other public sector partners.

The Boards are currently working alongside many of our Local Authority partners in a number of ways – (a) learning from their recent experiences of implementing Smarter Working; (b) implementing these same principles where appropriate; (c) co-location of office accommodation with the introduction of Health and Social Care Integration and whenever possible incorporating the Smarter Working principles and (d) Being proactive in identifying any opportunities that will reduce non-clinical space and improve the costs and efficiency of all office accommodation. That said, many of our offices are not of an open plan style and are in traditional cellular type buildings which restricts what can be achieved.
The success of the “Smarter Offices” initiative is being measured by:

- Improved communication for Health and Social Care Staff leading to improved patient outcomes;
- A reduction in office accommodation and running costs;
- Reduction in energy and water consumption as well as reduced carbon emissions;
- An improvement in the efficiency of how the space is utilised;

A summary of the main office accommodation within the north is set out in the table below.

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Space Standard (sq.m NIA)</th>
<th>Desk to WTE / FTE</th>
<th>Accommodation Budget Costs inc VAT: 2017/18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WTE/ FTE</td>
<td>Desks</td>
<td>%</td>
</tr>
<tr>
<td>NHS Grampian</td>
<td>12.5</td>
<td>12.4</td>
<td>101%</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>13.6</td>
<td>13.4</td>
<td>101%</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>10.7</td>
<td>10.7</td>
<td>100%</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>9.4</td>
<td>7.2</td>
<td>131%</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>10.3</td>
<td>8.8</td>
<td>117%</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>5.3</td>
<td>5.9</td>
<td>89%</td>
</tr>
<tr>
<td>NoS Region TOTAL/AVG</td>
<td>10.3</td>
<td>9.7</td>
<td>107%</td>
</tr>
<tr>
<td>NHS Board TOTAL/AVG</td>
<td>12.7</td>
<td>13.0</td>
<td>98%</td>
</tr>
</tbody>
</table>

A number of feasibility studies are taking place throughout the North. These studies have been implemented to demonstrate good practice, the investment required for medium and long term gain and the cultural change required to ensure success.

Quite simply whilst it is important to reduce costs from support services, this is not just about cost, but modernising work practices with a focus on staff outputs as opposed to inputs.

**Where are we going?**

The North will continue to improve utilisation of office space in order to provide more flexible working styles to employees and reduce costs. This includes ensuring the use of appropriate furniture, appropriate IT infrastructure, appropriate HR support for flexible working options, depersonalised desks, and limited physical storage which will create a flexible modern environment for everyone, anywhere, and at anytime.

“Worksmart” is about achieving the best utilisation of office space reducing costs and providing more flexible working styles to employees. It is also about a cultural change where work is thought of as being something you do and not somewhere you go – not to focus on the place but on the task.
How will we achieve the change required?

We are targeting a desk ratio of 7 desks to 10 staff across all office locations.

A number of projects in the region have been implemented in the last few years which are having a significant impact on how we do business:

- **NHS Grampian** has vacated a leased city centre office to alternative owned accommodation, freeing up the revenue.
- **Aberdeenshire HSCP** has introduced “Worksmart” which had already been adopted by Aberdeenshire Council. This flexible style of working has already demonstrated a significant change in the culture of the HSCP, the ability to work from different locations, its travel patterns, use of technologies and use of space.
- **NHS Shetland** has carried out an internal reconfiguration of office accommodation at the Gilbert Bain Hospital and Montfield. This has provided onsite training to staff at the Gilbert Bain Hospital and has collocated Finance with the Executive Management Team.
- **NHS Highland** champions the use of video conferencing (VC) with over 200 VC units in daily use which is enabled with the use of Skype and Jabber on all Laptops; it is now rare to attend a meeting in Highland where it is not being used.
- **This is now extending to personal VC on desktops and it is becoming more widely used through systems like WebEx and Jabber.** This also enhances home working and mobile working.

The ICT infrastructure is laying the foundation for much of this change programme to be implemented:-

- **Wi-Fi** is now in most offices, community hospitals and many GP premises.
- **Implementation of ‘Microsoft Direct Access’ in some Boards** allows access to the NHS Intranet Network with an NHS PC/Laptop from any internet point anywhere.
- **The replacement of the N3 contract, which ended two years ago, with the Scottish Wide Area Network (SWAN),** introduces greater speed, bandwidth and improved links with other public sector colleagues.
- **IP telephony in office accommodation allows flexibility for staff to work at any desk and login to their own telephone extension; this will continue to be introduced.**
- **Introduction of the “Morse” Software system in the Western Isles.**

If the North is to maximise the benefit of these opportunities we must promote ourselves as a modern forward thinking employer providing modern fit for purpose accommodation that will allow us to recruit and retain the best young graduates. Worksmart will provide an important element to activate that success.
Information and data is gathered from each of the Boards in the North as well as from the national imaging and radiotherapy equipment groups to gain a full understanding of the scope and value of medical equipment across the region. There is a significant variety of medical devices used for the provision of clinical care, and much of it is identified as “coming to the end of its life” and requiring prioritisation for investment. Further detailed work is required to model the replacement profile of medical equipment (out-with the major national programmes for major imaging, PET and radiotherapy equipment) taking into account major hospital infrastructure requirements and the investment in the last 10-15 years. There is also a need to review the various funding options available to support investment in addition to using scarce capital or revenue funding, e.g. managed service contracts and social enterprise ventures.

The Following table provides an overview of the current status of the North regions medical assets.

The table shows medical equipment replacement across the north as estimated to be £317m with the average life span of assets increasing due to the challenges around the availability of capital funding. A particular area of concern is the Renal Dialysis Equipment, 54% of which is beyond its life cycle age with an estimated cost to replace of £2.8m.

Dialysis machines and their accessibility are critical to those patients suffering from renal disorders and has a significant effect on their quality of life. They are available within the acute and community hospital setting and increasingly in some patients’ homes. The Renal Service is always striving to improve the patient’s quality of life resulting in the introduction of night-time dialysis sessions within some acute hospitals as well as at home. It is therefore of vital importance that the Renal equipment continues to be in a serviceable condition.

<table>
<thead>
<tr>
<th>Medical Equipment - Condition and Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information and data is gathered from each of the Boards in the North as well as from the national imaging and radiotherapy equipment groups to gain a full understanding of the scope and value of medical equipment across the region. There is a significant variety of medical devices used for the provision of clinical care, and much of it is identified as “coming to the end of its life” and requiring prioritisation for investment. Further detailed work is required to model the replacement profile of medical equipment (out-with the major national programmes for major imaging, PET and radiotherapy equipment) taking into account major hospital infrastructure requirements and the investment in the last 10-15 years. There is also a need to review the various funding options available to support investment in addition to using scarce capital or revenue funding, e.g. managed service contracts and social enterprise ventures.</td>
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### Current status of North Region Medical Equipment

<table>
<thead>
<tr>
<th>Medical Equipment</th>
<th>Replacement Cost* (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiotherapy equipment</td>
<td>20</td>
</tr>
<tr>
<td>Imaging equipment</td>
<td>71</td>
</tr>
<tr>
<td>Renal dialysis equipment</td>
<td>5</td>
</tr>
<tr>
<td>Cardiac defibrillators</td>
<td>3</td>
</tr>
<tr>
<td>Flexible endoscopes</td>
<td>27</td>
</tr>
<tr>
<td>Infusion devices</td>
<td>9</td>
</tr>
<tr>
<td>Other high value medical equipment</td>
<td>151</td>
</tr>
<tr>
<td>Other low value medical equipment</td>
<td>32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>317</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Equipment</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Radiotherapy Equipment</strong> (linear accelerators &amp; CT simulators)</td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>12</td>
</tr>
<tr>
<td>Proportion within minimum lifecycle age</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Imaging Equipment</strong></td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>637</td>
</tr>
<tr>
<td>Proportion within minimum lifecycle age</td>
<td>61%</td>
</tr>
<tr>
<td><strong>Cardiac Defibrillators</strong></td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>1,337</td>
</tr>
<tr>
<td>Proportion within minimum lifecycle age</td>
<td>68%</td>
</tr>
<tr>
<td><strong>Infusion Devices</strong></td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>5,504</td>
</tr>
<tr>
<td>Proportion within minimum lifecycle age</td>
<td>74%</td>
</tr>
<tr>
<td><strong>Flexible Endoscopes</strong></td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>792</td>
</tr>
<tr>
<td>Proportion within minimum lifecycle age</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Renal Dialysis</strong></td>
<td></td>
</tr>
<tr>
<td>Number of items</td>
<td>269</td>
</tr>
<tr>
<td>Proportion within minimum lifecycle age</td>
<td>46%</td>
</tr>
</tbody>
</table>
Imaging continues to play a significant and important role in the provision of healthcare to patients within both the acute and primary care sectors. Diagnostic, interventional and therapeutic radiology services provide a key diagnostic and treatment function in the support and delivery of a number of patient pathways. Equitable access to a robust quality and timely service is vital for clinicians delivering both emergency and elective care to ensure optimal outcomes for their patients. Magnetic Resonance Imaging (MRI) and Computerized Tomography (CT) are modalities of diagnostic equipment that are essential in almost all patient pathways and in meeting waiting time targets associated with accident and emergency, oncology and diagnostics. The North’s Imaging Inventory has an estimated replacement value of c. £71m. The objectives of the regional radiology programme are aligned to the national programme with the aim of implementing a sustainable diagnostic radiology service to improve patient access across the North of Scotland. There is currently a requirement to replace the CT scanner at the Western Isles Hospital; this replacement is planned for 2018/19.

The three Cancer Centres in the North also provides care to NHS Orkney, NHS Shetland and NHS Western Isles and has had a co-ordinated national equipment replacement programme in place since 1998. This has been instrumental in ensuring the efficient and timely replacement of radiotherapy equipment across the region. This equipment has a replacement value of around £20m.

It is intended to have a single system of cancer care developed in the North to maximise the opportunities for sustainability. This will see the implementation of innovative solutions across the three cancer centres – Dundee, Aberdeen and Inverness – tailored to the geography of the north and the distribution of population. The Scottish Government has agreed to fund a replacement cyclotron at ARI in April 2019 (the cyclotron is a particle accelerator used to produce radioactive isotopes for medical imaging purposes). This replacement has the potential to reduce revenue costs by producing radiopharmaceuticals within the NHS as opposed to the NHS purchasing this from commercial suppliers. The new cyclotron will increase capacity, allow for more flexible working, broaden the range of services that can be offered, and reduce production cost per unit dose.

Department of Health figures state that 70% of all clinical decisions are informed by diagnostic testing. A well-equipped, modern technologically advanced and efficient laboratory service is required to provide early diagnosis and treatment for patients and critical in the support to allow clinicians to work optimally. The financial, workforce, geographic and demographic challenges require new models for the delivery of laboratory services that will offer patient-centric services on a shared basis. The case for change was set out in the NHS Scotland Shared Services Laboratory Programme strategy paper in 2017. The Distributed Services Model (DSM) is identified as one that will deliver the future vision for laboratory services within NHS Scotland. One of a number of challenges specific to the provision of regional laboratory service is the fact that laboratory services are highly dependent on IT systems for requesting tests, analytical processing, and the final reporting of test results. Currently there is a lack of standardised operating systems across the Health Boards and across a range of key functions including Laboratory Information Management Systems (LIMS).
To enable the provision of a regional laboratory services programme the North will focus on the following initiatives:

• The formation of a North Laboratory Services Board to govern the provision of the six Health Boards’ laboratory services with a clear mandate for governance and overall management.

• Similarly the creation of a single Laboratory Services Budget for the North Region will be considered to support the transformational change needed.

• Investment in a single Laboratory IT system across the North (estimated cost c. £6 million) to enable full interoperability of laboratory requesting and reporting between laboratory sites. This is absolutely essential to support a North Region Laboratory Service.

• Planning investment in modern, fit for purpose laboratory buildings is necessary on a North of Scotland basis to facilitate consolidation and expansion, new ways of working and the implementation of modern practices.

• Addressing the predicted 40% shortfall in cellular pathologists by making the service attractive to newly qualified pathologists.

• Support and investment for Biomedical Science dissection and reporting projects across the three large Health Boards.

• Modern, fit for purpose, audio-visual provision to enable the relevant multidisciplinary team (MDT) meetings to be functional across sites.

• The provision and development of digital pathology techniques to enable pathology image transfer across the North, Scotland and the UK.
Fleet Vehicles - Condition and Performance

Providing services in the community invariably results in a dependency on transport, whether it is moving patients from their home to hospital or delivering essential drugs, equipment, catering, mail, phlebotomy, cytology specimens and pharmaceutical deliveries.

In addition clinical waste collection and disposal is provided by the Boards to and from GP surgeries, dentists, pharmacies and other healthcare users.

To support all of this activity and more the north has a commercial fleet of 1288 vehicles, 992 of which are leased and 279 are owned vehicles, ranging from HGV lorries to 2 seat cars.

608 lease cars are used by staff who qualify as essential users on the basis that this is the most cost-effective means for staff to travel. Staffs qualifying as essential users are required to pay for the lease costs associated with all personal use and this is automatically deducted from their monthly salary payments. This is constantly kept under review and opportunities are continually sought to minimise staff travel through use of alternative methods, such as video-conferencing.

<table>
<thead>
<tr>
<th>Current status of North Region Medical Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Vehicles</strong></td>
</tr>
<tr>
<td>Owned*:</td>
</tr>
<tr>
<td>Leased:</td>
</tr>
<tr>
<td>Staff Car Scheme:</td>
</tr>
<tr>
<td>Long term hire:</td>
</tr>
<tr>
<td><strong>Total</strong>:</td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>% less then 5 years old</td>
</tr>
<tr>
<td><strong>Total Mileage (000's)</strong></td>
</tr>
<tr>
<td>Owned:</td>
</tr>
<tr>
<td>Leased**:</td>
</tr>
<tr>
<td>Staff Car Scheme**:</td>
</tr>
<tr>
<td>Private Car Business Travel:</td>
</tr>
<tr>
<td><strong>Total</strong>:</td>
</tr>
<tr>
<td><strong>Fuel Type</strong></td>
</tr>
<tr>
<td>Petrol:</td>
</tr>
<tr>
<td>Diesel:</td>
</tr>
<tr>
<td>Alternative:</td>
</tr>
</tbody>
</table>

The table above shows 74% of our owned and leased vehicles are less than 5 years old, indicating that investment is currently maintaining reasonable vehicle reliability.
The type of fuel used by all our vehicles is an important consideration and the table further shows a reliance on diesel fuel (69% of vehicles). However, the north has 51 alternatively fuelled vehicles that are operated within the fleet and as the technology improves, and vehicles are replaced at the end of their lifecycle this number will increase and greatly reduce the carbon footprint. There is thinking within the north to move towards electric vehicles, subject to the charging infrastructure being available to support this, with specific projects in the Western Isles, Orkney and Grampian. Detailed analysis of journeys by fleet transport vehicles as well as staff members is required to determine the viability of this alternative technology fully.

Due to the vast geography in the north region over 7 million miles are travelled per annum on the road by NHS owned, leased and privately owned vehicles 3 million of those by our commercial fleet.
eHealth/ICT encompasses much more than the deployment of computer technology. It requires both hardware and software within a compatible environment, including: desktops, networks, storage, backup systems and resilience built in throughout. It is an essential element in supporting modern healthcare and provides advances to both healthcare professionals and patients.

The North of Scotland eHealth Plan 2018-2021 details planned priorities and provides insight into the approach to regional eHealth. The north will share data and information across boards and join up with other public sector bodies to collaborate on patient care and safety, clinical effectiveness and a person-centred approach to care.

Technology is an enabler and will support key health initiatives such as self-management of care at home, decentralising access to services by the use of technologies such as Attend Anywhere, and ensuring the ability for staff to efficiently work remotely.

Implementing a common architecture across the north will require investment to facilitate integration at network level, allowing staff to roam effectively across board borders.

The Electronic Patient Record System (EPR) will make a significant contribution to a comprehensive clinical and social care information system for the population of the North of Scotland by removing paper records and allowing all clinicians for the first time, to see real time data on a patient without the need for awaiting the patient file. Implementation requires a cultural change to working practices of all clinical staff to ensure maximum benefit can be achieved. This includes systems in heath records and health IT, and redesigning the use of support staff, as the use of paper based records reduces, and electronic information becomes the sole source of patient information for all clinicians.

As well as setting out an ambitious regional vision, there are a number of national strategies and programmes currently underway. Any regional plans must ensure that interdependencies and resource requirements for these are considered.

These programmes include replacement of the Community Health Index (CHI) and national child health systems, replacement GP IT system, a national approach to implementing Office 365, Labs integration and an architecture for a national Health and Social Care data sharing platform.
The North of Scotland e-Health leads will continue to refine the vision for e-Health in the north by progressing with specific work streams, these include:

- Technical Workstream.
- Cybersecurity Workstream.
- Information Governance Workstream.
- Telecare, Virtual clinics and Self-directed Care Workstream.
- Clinical Systems Workstream.
- Business Systems Workstream.
- Hospital Electronic Prescribing Medicines Administration (HEPMA) system.
- North of Scotland Portal Programme.
- Scottish Radiology Transformation Programme (STRP).

A workshop for eHealth senior staff across all 6 boards is planned. This will give staff the opportunity to contribute to a future model of eHealth delivery for the North, and also network with their peers to discuss potential synergies, challenges and opportunities.

The comprehensive application of digital technology is essential for the North of Scotland – we need to remove the barrier of distance and equip staff to improve services, and support the people of the north to improve their health and wellbeing. Given the geography and population distribution of the region we aim to be at the forefront in the application of digital technology. We already have a good foundation in the development of the EPR, a range of digital health initiatives, and innovative clinicians who have a vision of a digitally connected health and social care system. There is no doubt that further investment nationally in 4G coverage would enable many of these technologies to be used to a greater extent.
Some of the features of this digitally enabled system that we aim to provide are outlined below:

- **Digitally enabled homes** will give people with medical conditions the ability to live at home with confidence.
- **Video clinics** will be routinely used for return outpatient attendances where no physical examination is required.
- Clinicians will be able to provide a range of alternative **digital options in place of a standard outpatient appointment**.
- **Individuals will own their health record** and be able to access their information electronically.
- **Patients will have direct access to test results** and to book outpatient appointments.
- Tailored information will be available to **support individuals to manage their long term health conditions**.
- **Real time clinical decision support** will be available to practitioners and care staff in people’s homes and in care homes.
- Clinicians will be able to provide **treatment and care to patients** in all NHS Board areas through the use of systems and protocols.

![Attend Anywhere front screen](image-url)
Clinicians will be able to provide a range of alternative digital options in place of a standard outpatient appointment.
Developing long term sustainable regional service plans that will evidence better health outcomes
How do we get there?

North Region, Delivering Service Change

Having stakeholder engagement from inception through delivery of our Clinical Strategy and Asset Management Plan will ensure the North delivers the appropriate services that best meet the needs of the population.

Delivering change is difficult, but we have to be progressive and make our healthcare system in the North the best it can be. The following are some of the ways which will drive and shape that change:

- Property and Facilities are now working more collaboratively with this, the first version of the RAMP evidencing such progress. Future support arrangements and investment needs will be considered on a Regional basis.
- Developing long term sustainable regional service plans that will evidence better health outcomes which should not be dependent on buildings to support and enable delivery – “Planning Regionally, Delivering Locally”. This may then change the focus of where investment needs to occur in order to improve patient care.
- Building a “Learning Health System” by capturing and analysing health data, essentially involving “Big Data” to empower clinicians and managers to learn and innovate through the development of a data platform.
- Through Public Health and supporting such initiatives as self-care and educating our patients we aim to create a knowledge culture creating opportunities for prevention of illness, promoting health and wellbeing and providing the necessary networks for people with long term conditions to manage their own illness and condition – but with expert clinical advice when required.
- Developing successful and sustainable communities in conjunction with our partners. This will be evidenced in a number of progressive ways including fully participating in Local Authority Local Development Plans.
- Developing safe, sustainable services will result in an investment need using the latest equipment and technologies to improve diagnostics and in a manner that supports and enables the current workforce challenges whilst improving patient access in the North of Scotland.
- The introduction of Integrated Joint Boards for Health and Social Care in April 2017 along with the Highland Lead Agency model in 2012, will allow these developing organisations to focus resources in a more joined up manner working with the acute hospitals, health and social care and performing as a single system.
- Through working collaboratively with the Integration Authorities and the Highland Lead Agency, and as a consequence of the new General Medical Services contract developing Primary Care Improvement Plans (PCIP’s) through engagement with General Practitioners.
- Providing safe and accessible primary, secondary and tertiary care for children who are unwell, injured or in need of continuing care due to longer term health conditions.
- A single system of cancer care will be developed in the North to maximise the provision of care.
• Provision of sustainable elective care capacity which supports greater efficiency and quality through the development of elective care centres in Inverness, Aberdeen and Dundee as part of the Regional Elective Care Programme which will be regarded as one resource for the population of the North.

• Reducing travel time from rural and island areas by ensuring that digital technology where appropriate is the norm for patients to access further clinical advice and support.

• Making the North the best place to work through engaging with and creating a vibrant modern healthcare system, empowering our staff, creating new more generic roles, training and development and supporting a team culture whilst preparing, foreseeing and better managing succession planning.

• Working closely with partner organisations and communities to maximise the investment opportunities available to deliver the best health and social care solutions for the community.
Investment and disinvestment planning and programme

Investment Planning:
This plan sets out the North's investment priorities to support the delivery of patient care and associated services across the north of Scotland across four main areas:

- Reduction in high and significant risk backlog maintenance in clinical areas and compliance with statutory requirements;
- Investment in infrastructure consistent with our strategic health priorities including initiatives to reduce carbon emissions;
- Replacement of essential equipment and ICT infrastructure
- Disposal of assets declared surplus to requirements.

Investment, past and planned, and the associated target of reducing high and significant backlog fits the following national and local strategies:

- The Scottish Government’s “Policy for Property and Asset Management in NHSS” issued in September 2010(CEL 35(2010) requires all NHS Boards to target backlog maintenance reduction as an integral part of their Property and Asset Management Strategy.
- A national requirement to reduce high and significant risk backlog in clinical areas where our total backlog maintenance costs for the north is estimated at £331m, £135m of that identified as significant or high risk.

The North’s five year investment plan reflects our ambition to address the high and significant risk contained within backlog by prioritising all available capital and revenue funding along with asset disposal proceeds, and further infrastructure support from the Scottish Government.

Specific objectives which we aim to deliver include:

- Taking into consideration the Functional Suitability of the building prior to investing in the said building.
- Need to improve how Functional Suitability is measured and collated to a common standard.
- The quality of the operational estate is measured through backlog maintenance costs/risks and by using annual patient quality surveys to identify investment needs not already identified.
- Improvements in statutory compliance and risk reduction is measured through reductions in non-compliance with statutory legislation, incident rates, and an increase in each property’s Statutory Compliance and Audit Reporting Tool (SCART) score.
- Improvements in energy performance (in line with mandatory targets for NHS organisations in Scotland) and compliance with Corporate Greencode.
- Reductions in the property footprint and revenue costs of the operational estate measured by mapping trends in maintenance costs, utility costs and the Board’s income-to-asset value ratio.
Investment Prioritisation

The Scottish Capital Investment Manual (SCIM) sets out requirements for how we should develop our investment prioritisation process with service planning central, and then moving through the business case stages to include: Strategic Assessment, Initial Agreement through to Outline and Full Business Cases.

The proposed regional approval process will add another layer to the processes already in place by each individual Board in the North which includes:

SBAR and Strategic Assessment submitted to the Board Asset Management Group or equivalent for consideration. If approved, the project will be given a project number and added to the project list.

Once approved the project will then be prioritised through the Capital Planning System (CPS) against national investment priorities as follows:

- Service planners will score the “Patient Centred” element against the National 2020 Vision and Quality Ambitions, the Boards Clinical Strategy and provide a rationale for the score.
- The project team submitting the Strategic Assessment will score both the “Effective Quality of Care” and “Health of the Population” based on the requirements of the project and provide the rationale for the score.
- Asset /Estates Team with specialist input as necessary will score the “Safe” ambition against the boards risk register, backlog maintenance, patient safety, service/business interruption, adverse publicity etc. and provide the rationale for the score.
- Finance department will provide the Value for Money score based on information available at the time, whether capital, revenue, endowments, fund raising etc. and provide the rationale for the score.
- All scores will be reviewed (up or down) by the Asset Management Groups or equivalent as more information becomes available. The resultant total score will then be fed into the Capital Planning System to give a prioritised order for all projects. The Strategic Assessment will then be forwarded to CIG for information.
- The Asset Management Group or equivalent will either reject, request re-submission with further detail or give approval to submit an Initial Agreement (IA). At this stage a formalised project structure (governance) to take forward the IA would be put into place, with named persons identified for the roles of Project Sponsor, Project Director, and Project Manager.
- If the IA is given approval by the Asset Management Group or equivalent, it will then require approval by the Regional Chief Executives Group, prior to submission to that NHS Board, before it can proceed to Outline Business Case (OBC) or Standard Business Case (SBC), projects over Boards Delegated Limits will also require Capital Investment Group (CIG) approval. Only when all of the approvals are in place can you formally move to the next stage.
- If the OBC is approved by the Asset Management Group or equivalent and its NHS Board, and exceeds the Boards delegated limit it will also require approval by CIG. If all approvals are in place you can progress to Full Business Case (FBC), projects over Boards Delegated Limits will again require CIG approval.

All projects will require either SBC or FBC approval by the Asset Management Group or equivalent and the NHS Board, and where delegated limits have been exceeded will require CIG approval. To allow projects to progress with minimum delay the groups approving these business cases should be configured to support and enable early progress of projects.
Our investment priorities for the next 5 years

The supporting financial plan incorporates the resources aligned against these areas of expenditure financed from revenue operating budgets, the capital programme and through asset disposals. The table below lists the current approved or committed projects in the North region.

Approved and or Committed projects:

<table>
<thead>
<tr>
<th>Board:</th>
<th>Projects:</th>
<th>Service:</th>
<th>Type:</th>
<th>Status:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHSG</td>
<td>Inverurie Health Centre</td>
<td>Primary Care</td>
<td>Hub</td>
<td>Construction</td>
</tr>
<tr>
<td>NHSG</td>
<td>New CAMHS Centre</td>
<td>Mental Health</td>
<td>Capital</td>
<td>Business Case</td>
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<tr>
<td>NHSG</td>
<td>North Corridor Health Centres</td>
<td>Primary Care</td>
<td>Hub</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Badenoch, Strathspey and Skye Bundle</td>
<td>Primary Care</td>
<td>Hub</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Grantown Health Centre refurb</td>
<td>Primary Care</td>
<td>Hub</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Portree Hub reconfiguration</td>
<td>Primary Care</td>
<td>Hub</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>Fort Augustus Health Centre</td>
<td>Primary Care</td>
<td>Other</td>
<td>Construction</td>
</tr>
<tr>
<td>NHSH</td>
<td>MRI replacement at Raigmore</td>
<td>Acute</td>
<td>Capital</td>
<td>Construction</td>
</tr>
<tr>
<td>NHST</td>
<td>NHSS - Pharmaceutical Specials Service</td>
<td>National</td>
<td>Hub</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSO</td>
<td>New Balfour Hospital</td>
<td>Acute</td>
<td>NPD</td>
<td>Construction</td>
</tr>
<tr>
<td>NHSG</td>
<td>Baird &amp; Anchor</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Elective Care</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Denburn HC Replacement</td>
<td>Primary Care</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>Cyclotron Replacement</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSH</td>
<td>North Coast Care home</td>
<td>Primary Care</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Stornoway Health Centre - refurb</td>
<td>Primary Care</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSWI</td>
<td>CDU redevelopment</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Elective Care Centre</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHSG</td>
<td>ARI Phase 2 Building Fire Regs</td>
<td>Acute</td>
<td>Capital</td>
<td>Construction</td>
</tr>
<tr>
<td>NHSWI</td>
<td>Western Isles Hospital Refurbishment / upgrade</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Ninewells Infrastructure Works (HV)</td>
<td>Acute</td>
<td>Capital</td>
<td>Construction</td>
</tr>
<tr>
<td>NHST</td>
<td>Children’s Theatre Suite</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
<tr>
<td>NHST</td>
<td>Neonatal Intensive Care</td>
<td>Acute</td>
<td>Capital</td>
<td>Business Case</td>
</tr>
</tbody>
</table>

Table – North Region Committed Projects
Projects which still require funding

Currently there is a list of projects that the North would like to proceed with in the next 5 years beyond that already committed, but currently no funding exists to progress these:

- Funding is required in the north to eradicate all Significant and High risks and negate growing risks as the estate ages year on year. Current backlog for these Significant and High risks for the north region, at **Project cost**, is estimated to be £400m.
- Replacement Mortuary in Aberdeen
- Collocate all Aberdeen Offices into one administrative centre in the city
- Redevelopment of substantial areas of Raigmore Hospital
- Upgrade Oncology at Raigmore Hospital
- Phase 2 of the Highland Children’s Unit
- Belford Hospital Replacement
- Raigmore tower Block cladding
- Mental Health Redesign in Western Isles
- Installation of Easy Heat plate heat exchangers in Western Isles Hospital
- Motor Controls variable speed drives in Western Isles Hospital
- Laboratory redevelopment in Western Isles Hospital
- BMS system in Western Isles Hospital
- Smart metering in Western Isles, Whole estate
- Fleet replacement, Western Isles
- Vehicle Electric charge points across whole estate, Western Isles
- Health Board offices Phase 1 External refurbishments, Western Isles
- Health Board office Phase 2 Internal refurbishments, Western Isles
- Ambulatory Care, Gilbert Bain Hospital
- CT Scanner Replacement, Gilbert Bain Hospital
- Critical Care Unit incl SHDU and ICU NW at Ninewells
- MacMillan Haematology & Oncology Unit at Ninewells
- Maternity Services Review (incl theatres), Tayside
- Cardiac Cath Lab & Coronary Care Unit Upgrade at Ninewells
3.2.9 Disinvestment

Investing finite resources to support the delivery of effective and efficient services in fit for purpose twenty first century accommodation in the North of Scotland requires us to also disinvest or demolish properties no longer fit for purpose. Progression with a very ambitious disinvestment programme and with the agreement of the Scottish Government to retain the financial benefit locally will provide some of the additional funding required to support managing the high and significant risks carried by the six North Boards. Some of these Sales include:-

- Raeden Land, Aberdeen
- Denburn Health Centre, Aberdeen
- Woolmanhill Hospital, Aberdeen
- Inverurie Health Centre, Inverurie
- Spynie Hospital, Elgin
- RCH Land, Aberdeen
- Old Balfour Hospital, Orkney
- St Vincents Hospital, Kingussie
- Argyll and Bute Hospital, Lochgilphead
- Ian Charles Hospital, Grantown-On-Spey
- Drs House - Gravir
- Drs House - Castlebay
- Scalpay / Berneray Clinics
- Trades Lane, Coupar Angus
- Liff Fields, Liff
- Whitehills Lodge, Forfar
- Aberfeldy Community Hospital
- Chapel Bond, Montrose
- Brechin Hospital and Field
- Maryfield House, Dundee
- Wedderburn House, Dundee
- Pitcullen House, Perth
- Hawkhill Day Hospital, Dundee
- Constitution House, Dundee
- Montrose Royal Infirmary
- Additional Ninewells Land
- Railway Cottage Kings Cross
Receipt from Disposals:

<table>
<thead>
<tr>
<th>Total Disposal Receipts</th>
<th>2018/19 (£m)</th>
<th>2019/20 (£m)</th>
<th>2020/21 (£m)</th>
<th>2021/22 (£m)</th>
<th>2022/23 (£m)</th>
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<tbody>
<tr>
<td>Total Value (£m)</td>
<td>26.184</td>
<td>9.102</td>
<td>7.759</td>
<td>6.428</td>
<td>3.05</td>
</tr>
</tbody>
</table>

Our 5 year financial plan's are fully committed with a balance on investment between estates backlog, essential equipment replacement and the enabling works/equipment costs associated with delivery of new projects such as the various hub schemes and the approved capital programme. There is no further scope within existing resource to progress additional priorities.

The current investment plan to March 2023 will still leave a considerable backlog risk in the estate. The largest areas of residual risk for clinical use will be Aberdeen Royal Infirmary, Raigmore and Ninewells Hospitals, that’s not to say other hospital sites do not carry risk, but because of the finances available the risk has been prioritised with funding only available for the perceived areas of greatest risk.

Construction inflation is currently outstripping inflation by c 2% per annum and with this in mind, it is difficult to see how these backlog risks can be managed effectively without further significant annual funding increases, not only for backlog, but also for planned preventative maintenance, essential medical equipment replacement and IT infrastructure.
Procurement Approach

The Boards in the north have the following procurement options available to them to enable the planned investment described:

**Framework2 Scotland** – this is a nationally procured framework, procured by Health Facilities Scotland on behalf of all NHS Scotland Boards. This framework is principally used for larger projects on acute hospital sites.

**Minor Works Framework** – this is a nationally procured framework, procured by National Services Scotland on behalf of all NHSScotland Boards. The Minor Works Framework agreement provides for lower value and lower complex works such as refurbishment and fills the gap in national contractual arrangements below the value of Frameworks Scotland 2 and hub thresholds and above the levels of local trade contracts available for Board use.

**Local Measured Term contract** – can be used within acute or community based projects

**hub** – the NHS Boards of Grampian, Highland, Orkney, Shetland and Western Isles are shareholders of hub North Scotland Ltd., with NHS Tayside a shareholder in East Central Scotland Ltd. (hubCo). All health boards signed a ten year exclusivity agreement with the hub programme giving the hubCo the first right of refusal for all community based projects in excess of £750k in hub North and £3m in East Central. hub North’s, and East Central’s ten year exclusivity expires on the 26th January 2021 and 6th February 2022 respectively.

**Traditional Tender** – Boards have the opportunity to offer procurement opportunities to the wider market though the traditional approach where companies are invited to tender against a defined set of design and specification criteria associated with individual projects. This can be applied across a range of values and sectors.
Investment priorities for 5 to 10 years by Board area

The north region are developing a formal mechanism for prioritising and monitoring capital and revenue to underpin the developing model of care.

Funding has still to be identified for the following investment priorities. However Strategic Assessments, as required under SCIM have been, or are in the process of being completed.

**NHS Grampian:**

- **Ambulatory Care** – Phase 1 has been identified as the future location for ambulatory care services in the medium term. Service configuration requires to be finalised.

- **New surgical wards and theatre block** – there is a requirement to replace or refurbish the outdated surgical wards and theatre accommodation with high quality accommodation that meets modern standards.

- **Cardiac Institute** - The strategic vision is for a new “Cardiac Institute” incorporating a 3rd hybrid Cath Lab, dedicated CMR and embedded enhanced clinical research accommodation. A joint NHS Grampian and Aberdeen University fundraising initiative is now underway in partnership with a major oil company and is expected to raise funds in the region of £12 million.

- **Medical Physics Accommodation** – The General Medical Equipment department requires to be relocated to accommodation more central to its core users, in the heart of our clinical accommodation. A short term solution is being considered within East End 3 at Aberdeen Royal Infirmary (ARI).

- **Laboratory Accommodation** - in the short term Labs will expand into East End 3 at ARI. The long term strategic vision is for an integrated Blood Sciences Service which would provide capacity to meet the demand for the service. This change can only be delivered through the provision of a new purpose designed and built laboratory facility, somewhere central to the clinical core and if at all possible integrated with the new Mortuary.

- **Nuclear Medicine** - will require to be relocated to accommodation on the Foresterhill Campus more suited to patient access which can accommodate the latest advances in nuclear medicine technology.

- **Clinical Research Facility** – A site has been identified adjacent to the new Foresterhill Health Centre to the west of the campus. This will be developed through the City Region Deal monies by Opportunity North East (ONE).

- **Learning Disability** – Currently located in a more remote part of the Royal Cornhill Hospital site, the in-patient service wish to move into vacant ward accommodation within Royal Cornhill Hospital. This would improve safety for staff by reducing isolation, provide a much quicker response to emergency calls and improve access for on-call staff during anti-social hours. Patient safety would also be improved by better quicker responses, as a consequence of clinical and nursing emergencies.

- **Foresterhill Laundry** – The current laundry facility needs to move primarily due to the condition of the building, backlog maintenance cost, and location. NHSG is engaged through the shared Services Programme, with colleagues from Highland, Tayside, and Fife in relation to a regional laundry / linen service. All of these Boards have significant property and asset investment needs regarding Laundry facilities in the next 1 – 5 years.
Collocated with the Laundry is the Central Sterile Services Department, which also needs to relocate for the same reasons as the laundry.

Improving Facilities for Older People in Grampian – Proposals will be developed to provide a community base for Care of the Elderly Services in Aberdeen. If an appropriate solution is found then this will enable NHS Grampian to vacate the South Block at Woodend Hospital.

Hospital Electronic Prescribing Medicines Administration (HEPMA) – The introduction of a HEPMA system could provide a significant change to current practice and improve patient outcomes. It would affect all hospital staff that prescribe, administer or handle medicines, improving levels of legibility, accuracy and prescribing decision support that cannot be achieved with the current paper-based systems.

Laboratory Information Management System (LIMS) - the existing LIMS system is in need of urgent replacement.

Patient Portal - A Patient Portal would allow patients access to safe, trusted information related to them personally and the management of their medical conditions, including appointments, correspondence, questionnaires etc. A Project Board has been formed to develop a model for the future and bring forward a Business case.

Dr Grays Hospital - General Medical and Acute Care of the Elderly Ward requires to be refurbished to meet current requirements as well as investment in enhanced diagnostic and outpatient facilities.

Banchory Medical Practice – a new joint health and social care facility is required. A site has been identified in the Local Development Plan. The current health centre has had temporary buildings onsite for twelve years with the latest 5 year planning consent (the maximum term that can be given for temporary buildings) due to expire in August 2021.

Ellon Health Centre – The Health Centre requires replacement or an extension. It has had temporary buildings on site for nine years with planning consent due to expire December 2018. NHS Grampian has completed the purchase of the former neighbouring academy site from formulae capital to enable a new build. Developer contributions will be available to support the financing of a new build.

Danestone Medical Practice – a new Medical Centre is required within the community as a result of large population growth and no space for expansion. Discussions are well advanced with the owners of the neighbouring site at Grandholm (7000 new residential units) to secure a site and provide further developer contributions. The site is available for purchase now.

Keith Medical Practice – a replacement to the Health Centre is required to embrace the concept of a modern joint health and social service with appropriate information and signposting services, as well as accessible, co-located diagnostic and treatment services. There is an appetite by The Moray Council to undertake a joint development to create a public sector hub for the community of Keith and surrounding districts.

Fochabers Medical Practice – a new Medical Centre is required within the community as a result of intrinsic population growth over a number of years and limited space for expansion. Developer contributions may be available.

Torry Medical Practice – an extension to the existing building is required to accommodate the large population growth within the Torry area of Aberdeen. Developer contributions may be available.
North Regional Asset Management Plan 2018 to 2028

How do we get there?

NHS Western Isles:

• Barra - The replacement of St Brendan's Hospital & Care Home on the isle of Barra with a new integrated hospital/healthcare hub site which will also house the local GP facility and community staff. The project also provides assisted living accommodation on the site. Current estimates for the project are £15m from the NHS and £2.5m from the Local Authority.

• Uist - Redevelop the Uist & Barra Hospital on Benbecula to form a hub site that includes the Benbecula GP's and centralise all dental facilities in the Uist's on to one site. The project would also include for the provision of a new emergency care and resuscitation area. The redevelopment of the site needs to be carried out in a phased development over 4 to 5 years. The various stages of these plans are still going through the option appraisal, local consultation and business case processes.

• Lewis & Harris - A project to refurbish and redevelop the Central Decontamination Unit at the Western Isles Hospital will span 2 to 3 financial years. The details design and tender for the construction element of the project will be completed in 2018 with construction starting later the same year and spanning into 2019. Some of the plant and equipment has been purchased and installed from the 2017/18 capital budget. The total estimated construction cost is around £500k.

• Western Isles - Mental Health service redesign will impact on the long stay dementia ward at Western Isles Hospital and the Acute Psychiatric Unit as the service model will shift to a community centred approach to care. The service redesign will therefore impact on Western Isles Hospital and community assets however the impact will not be known until the service model has been agreed.
NHS Shetland:

- Ambulatory Care – (£1.5m) improve flexibility in use, patient flows and the throughput capacity in the Day Surgical Unit (DSU) by increasing the number of chair / bed bays in the day case area.
- CT Scanner – (0.5m) replacement.
- NHS Shetland is currently carrying out a scenario planning exercise to develop its Clinical Strategy which is due to complete May 2019. The outcome of which will require capital monies to re-configure Gilbert Bain Hospital, or provide a new build perhaps including all Lerwick Primary Care services.
- Gilbert Bain Hospital – (£0.1m) the Capital Planning Tool has indicated that based on the level of backlog and the projected condition of the Gilbert Bain Hospital that the hospital would have to be considered for replacement before 2030. Assuming that a replacement will take at least seven years to progress through SCIM, land acquisition, design, tender, construction, etc. then NHS Shetland will commence early work and an option appraisal on completion of the Clinical Strategy, so as to avoid the risks associated with lift replacement and associated backlog including statutory standards.

NHS Highland:

- NHS Highland intends to continue work on its programme of service redesign across the communities we serve. It is essential we build on the consultation work already undertaken with communities to deliver service delivery models that work for each community to deliver safe and sustainable services.
- The redesign of Caithness services is subject to formal public consultation and work is ongoing with partner agencies to see what services and ultimately facilities can be shared. This programme of work is expected to take until at least 2023 to have all services operating fully to the new service model.
- Lochaber has been the proving ground for many of the service redesign principals being implemented elsewhere so the amount of service redesign needed in this locality is less than in other areas. Much of this early redesign work has also reduced the operational estate so this project is expected to take less time than others to complete. Work is ongoing with other public sector partners and some degree of partnership looks likely that will reduce the cost of investment.
- Inverness primary care redesign is progressing well with positive discussion with partners and stakeholders. We would expect to produce an Initial Agreement in 2019 with an implementation of the preferred solution phased over a number of years. Some work is required to assess what services could be moved out of Raigmore into the community.
- The OBC for the North elective Care centre in Inverness has been approved. This innovative facility is being built in partnership with HIE and UHI and looks to build on the proven success of the Centre for health science already built in Inverness. It is expected construction of this facility will begin in spring 2019 with completion in 2021.
• The North Coast care hub is currently being designed after an extensive public consultation on service redesign across the North Coast. This building is being built with partners and will be an innovative care home and graduated care housing solution. This is expected to open in 2020.

• Work continues on a programme of primary care building improvements needed to support the service redesign work that remains ongoing across our remote and rural communities. Given the scale of these works a method of funding a package of small scale modifications needs to be agreed with Scottish government and other partners.

NHS Orkney:

The full scale of NHS Orkney’s priorities for investment aimed at responding to both the current and future challenges it faces, and to deliver its emerging service model include:

• Improvements to primary and community care facilities to ensure they support the provision of safe and sustainable clinical services to each local community. There are several smaller properties within the Primary & Community Care sector that are in need of improvement and these are identified as follows:
  - Stromness Surgery
  - Flotta Surgery, Springbank
  - Eivie Surgery, Orkney
  - Stronsay Surgery, Geramount
  - Westray Surgery, Trenabie House
  - North Ronaldsay Surgery, New Manse
  - Papa Westray Surgery

• Ongoing capital and revenue based investment in backlog maintenance and statutory compliance matters.

• Rationalization of residential property in Kirkwall;

• Co-location of dental services to address the dispersed and substandard infrastructure, improve access to NHS dental services, and provide an enhanced emergency dental service

• The need to achieve adjacencies and flexibility which enhance service delivery and staff, patient and relatives’ experience.

• Development of a centralised decontamination facility for all dental, podiatry, endoscopy and medical instruments with capacity to support the future model of care.

• Implementation of a programme to reduce reliance on office space provision by introducing new ways of working.
NHS Tayside:

NHST are undertaking a review of risks via our Asset Management Group although all such investment identified would be aligned with any confirmed or developing service strategies. A list of projects are in development that would require scrutiny and the development of Strategic Assessments however early consideration should be given to the following:

- Anti-ligature – The roll out of the developed environment and room specification across the Mental Health Estate to provide optimum safety.
- Endoscopy – the investment in and upgrade of existing facilities on the Ninewells site.
- CSSD - the investment in and upgrade of existing facilities on the Ninewells site.
- E-Health - the investment in and upgrade of existing facilities across the Estate.
- Medical Equipment – The development of a risk assessed priority programme of replacement and investment in alternative technology across the estate.
- Site Retraction – the delivery of an estate aligned with changing and developing service strategies and models of care to ensure optimum patient care and effective resource utilisation.
- Low Voltage Electrical Infrastructure – the development and implementation of investment into the Low Voltage electrical infrastructure across the estates to ensure optimum resilience for the long term.
- Medical Gas System upgrades - the development and implementation of investment into the medical gas systems within the acute estate to ensure optimum resilience and patient safety for the long term.
- Fire safety measures - The continued delivery of ongoing investment informed via a risk assessed work plan to mitigate risk and ensure the continuation of a safe environment.
- Theatre Upgrades - the development and implementation of investment into the theatre facilities across the acute estate to ensure optimum resilience and patient safety for the long term.
- Undertake a full review of the existing Primary Care estate to align with emerging strategies.
- Transport – a full review of transport requirements to both align with regulations but the changing service requirements and property portfolio.
The north region are developing a formal mechanism for prioritising and monitoring capital and revenue to underpin the developing model of care.
Innovation and new ways of working will be encouraged to be considered as options.
The North of Scotland Regional Asset Management Plan will be directed through the Regional Delivery Plan, ensuring that investment/disinvestment decisions are making best and efficient use of all available resources.

**Resources**

Scottish Government Health & Social Care Department (SGHSCD)

- NHSO
- NHS
- NHSS
- NHSH
- NHST
- NHSG

NoS Regional Chief Execs Group

NoS Regional Directors of Finance

RAMP
North Region Asset Group

The role of the North Region Asset Group will be to:

- Review and update the Regional Asset Management Plan for each Board to approve;
- Monitor progress being made against delivery of the Regional Asset Management Plan, specifically identifying areas where regional solutions will bring about improvement to the population living in the North of Scotland;
- Work collaboratively with the limited resources available to make best use of people, skills, technology, and our physical assets to improve the health and social care provision in the north.
- Ensure the RAMP underpins the Regional Delivery Plan

The North Region Asset Group will achieve this by:

- Ensuring that the Regional Asset Management Plan is maintained and updated on an annual basis, is approved by each of the Boards and is consistent with the Regional Delivery Plan and the Developing Regional Clinical Strategy as well as each Boards individual priorities.
- Ensuring that there is a process for prioritising all identified projects within the North and ensuring each has been evaluated from a regional perspective to ensure we make best use of the funding available. The process will include:- bringing forward new projects for consideration by the group, monitoring and aiding the progress of projects through the SCIM process where requested, ensuring the relevant information is available to the group to enable the appropriate discussions to take place, demonstrate an open and transparent method of prioritising all capital and revenue projects that will require approval.
- Ensuring that post project reviews are undertaken and findings reported to the Group to inform continuous improvement of our processes.
Focus of Resources

Public engagement

- Involvement and participation in change – taking account of the public’s views and raise public awareness on the future of health and care services
- Implement a consistent decision making process – producing a consistent and rational approach to decision making and resource which is measured against organisational priorities

Formulating health and healthcare plans to improve and modernise

- Service reviews – formulate a process for Regional-wide service reviews.
- Locality reviews – along with the newly created IJB’s formulate a process for reviewing the needs of the population of localities and how those needs can best be met through service redesign.
- Managed Clinical Networks (MCNs) – to be re-focused to support planned and unplanned care and service integration.
- Joint commissioning plans – Enhance plans to support the integration of services for elderly people.
- Ensuring regional wide approaches to service delivery, predominantly with the acute and mental health sectors.
- Manage and develop our assets and planned investment more effectively by utilising expertise on a regional basis.

Developer Contributions
Investigate or enhance working in partnership with the local Authorities to mitigate the impact of new housing development by seeking developer contributions where appropriate. These funds could be used to develop joint community solutions working with the Community Planning Partnerships.

Business Case Development
Each case will be developed through the agreed prioritisation process in line with the new SCIM process. This includes a Strategic Assessment, an Initial Agreement through to Standard Business Case or Outline and Full Business case for every project. The focus will at all times be on improved patient access, outcomes and benefits. Innovation and new ways of working will be encouraged to be considered as options.

Public Procurement in Scotland
The implementation of the new EU Public Procurement Directives through the Public Contracts (Scotland) Regulations 2015, the Public Procurement Reform (Scotland) Act 2014 and through the Procurement (Scotland) Regulations 2016 places significant new duties on all public bodies with a procurement value above £50,000.

Each Boards Standing Financial Instructions (SFIs) will have been modified to reflect these changes.
The implementation of this plan will be supported and monitored through a robust governance and performance management framework, the key elements that will be required are set out below.

- Performance monitoring - an explicit and integral part of this plan is regular reporting of performance to each Asset Management Group and Performance Governance Committees of the Boards.

- The Project Director for projects in excess of £500k and the project lead for all approved investment projects in excess of £100k should prepare a highlight report for the board AMG or equivalent to demonstrate expenditure against budget, programme, change control, issues and opportunities and major risks to objectives. * The attached standard template could be used which will evolve as we move forward and as it needs to.

- Key Performance Indicators – key performance indicators identified in CEL 35 (2010) will be monitored by the boards AMG or equivalent to identify good practice and encourage improvement.

- Asset Condition Surveys – we aim to continue reviewing the north’s property condition and performance data through a five yearly cycle of re-surveys as required in CEL 35 (2010). The most cost effective way of progressing would be by employment of regional surveyors who could survey and record all of north’s 6 Facet Survey requirements including property condition on a five yearly cycle. Monies to progress employing these surveyors will require to be agreed including that of the monies provided to undertake these surveys through HFS.

- Through continued involvement in Structure and Local Development Plans as developed by Planning Authorities, identify sites required for healthcare and have them categorised for healthcare use; ensuring the Local Development Plan’s recognise that from time to time healthcare assets will become surplus and that alternative uses consistent with other surrounding uses would be acceptable; and to ensure that the NHS can benefit from Developer Contributions where appropriate.

- Undertake a critical review of the regions Asset Base by board area identifying surplus assets whilst also considering early identification of new sites for healthcare use.

The importance of investment in and maintenance of our asset infrastructure is crucial to the sustainable health and social care service delivery this plan aims to achieve.

Risks associated with our infrastructure are captured and monitored at a service level through each boards operational performance arrangements, with all risks and mitigating actions captured within the DATIX system. At an individual project level, detailed risk registers are also maintained and updated through the respective project boards established to monitor their progress from inception through to commissioning.
The importance of investment in and maintenance of our asset infrastructure is crucial to the sustainable health and social care service delivery this plan aims to achieve.
Appendix 1

Investment Plan

The tables below provides an extract from our infrastructure financial plans summarising the anticipated expenditure incurred on revenue, capital, backlog maintenance schemes and investment all other assets from April 2018 to March 2023.

5 Year Investment Plan (£ millions)

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