Kevin Lafferty, National Policy Advisor for Access, Health & Recreation at Forestry Commission Scotland (FCS) explains the impact of a unique project in Scotland to showcase how NHS estate can be designed, transformed and improved to support the creation of positive physical environments for health.

**Introduction**

Research into the impact of green spaces on health is well documented and studies show that outdoor spaces can significantly assist in patient recovery. The Greening the NHS Estate programme is a national demonstration programme that aims to leverage this research to promote greenspace design as an essential and integrated requirement for retrofitting existing healthcare facilities and in the creation of new healthcare facilities.

Through a number of demonstration sites at NHS locations across Scotland, the programme is improving hospital grounds for health and wellbeing purposes and encouraging more people to make greater use of outdoor spaces and woodlands. NHS Health Scotland, Scottish Natural Heritage and Forestry Commission Scotland are working together under the Green Exercise Partnership (GEP) to assess the value of greenspace and to influence the mainstreaming of green exercise into health policy and practice.

The programme has explored greening options with senior representatives from the estates and public health departments in most of the 14 Area Health Boards in Scotland and a key target is to develop demonstration projects at all of Scotland’s mainland Area Health Boards. The current demonstration sites have resulted in peaceful and attractive outdoor areas that have increased connectivity between the built and natural environment, increased use of outdoor space by staff, patients and visitors and use of greenspace for patient therapeutic activities.

**Background**

In 2007, NHS Health Scotland, Scottish Natural Heritage and Forestry Commission Scotland established the Green Exercise Partnership (GEP) to promote better health and quality of life for people in Scotland through greater use of the outdoors for physical activity and contact with nature. A key focus of the group’s work is NHS greenspace and in 2010 ‘Greening the NHS Estate’ was established to create and develop green assets at a number of NHS Scotland sites. Around £2.5 million, including £1 million from the Scottish Government, has been invested in the programme.

Currently, the inclusion of well-designed and maintained outdoor spaces and gardens at NHS sites is seen as a ‘nice to have’, not essential. However, if the aspiration is for a truly progressive healthcare system that
promotes good health and focuses on prevention, it is necessary to consider the impact and benefits of promoting a greener NHS.

**Greenspace for health**

Historically, nature has been an important part of NHS estate design and management. NHS facilities were built on the outskirts of urban areas where there is lots of greenspace; hospitals were built with large windows, balconies and gardens; and beds were taken outside for patients to enjoy the extensive grounds and gardens. It is not a new concept and there is a lot of research and evidence to underpin the positive impact of daylight, fresh air, nature and the outdoors in general on patient recovery and health. Evidence shows that greenspace can prevent ill health and is a cost effective solution to providing positive physical and mental health outcomes. Greenspace can be used in recovery programmes and studies of this nature have shown reduced heart rate and blood pressure, improved mood and self-esteem and increases in physical activity.

Since 2010, the GEP has been working with the estates and public health departments at area health boards, community organisations and third sector agencies to explore the potential for improving NHS greenspace. This has taken a two-pronged approach involving retrofitting, which brings underused land at existing NHS sites into active use: and new facilities, which involves greenspace planning and design at the start of new NHS building projects.

**Demonstration projects**

Currently, there are six live demonstration projects at NHS Scotland sites across Scotland. These projects are at varying levels of development and are being evaluated on an ongoing basis to assess the impact that improved and attractive green spaces are having on the health and wellbeing of staff, patients, visitors and local communities.

The projects have involved a range of works, based on collaboration with the estates and facilities and public health departments at area health boards in Scotland, as well as consultation with the wider staff, patients and local communities. As a result, the development of landscape plans are bespoke to each site and designed to meet the needs of those who use the NHS sites. Many of the projects have included the development of new path networks around hospital grounds or improvement to existing paths to encourage more walking and cycling; improved signage to encourage more people to use the outdoor spaces and planting of trees, wildflower meadows and vegetable and flower plots.

At NHS Forth Valley Royal Hospital, the grounds have been transformed to improve staff and patient health and the local woodland - Larbert Woods - hosted the UK’s first outdoor, woodland-based recovery programme for cardiac patients in hospital grounds. Ongoing work at Gartnavel Royal and Gartnavel General Hospitals in Glasgow includes restoration of many original outdoor gardens and features and a return to the 19th century idea of linking healthcare to exercise, fresh air and nature. Most recently, a new path network has been opened
at NHS Ayrshire & Arran University Hospital, providing attractive places for exercise, relaxation and recuperation.

**Evaluation**

Evaluation of individual demonstration sites has revealed signs that NHS greenspace is making a positive impact in a number of ways, including:

- Increased connectivity between the built and natural environment
- Increased awareness of - and use of - greenspace by staff, patients and visitors
- Use of greenspace as part of patient therapy activities and recovery programmes
- Increased use of NHS greenspace by other groups, such as local residents, community groups and on-site nurseries
- Improved habitats for wildlife and biodiversity.

As part of its ongoing monitoring and evaluation process, the GEP conducted a series of telephone interviews with planning and policy, estates and facilities staff within NHS Scotland to better understand their priorities and how NHS greenspace can help them deliver their priorities. The feedback shows that there is support for more NHS greenspace. However, many recognise that there are challenges in using and re-directing existing NHS estate maintenance budgets to focus on greenspace. In addition, there are concerns about the public perception of health boards spending NHS resources on ‘nice gardens’ rather than on medical equipment or more nurses. While this concern is understandable, active management of the green environment is a more sustainable approach than neglect, whilst investing in NHS Greenspace is a cost effective way of increasing opportunities for preventative, therapeutic and restorative benefits for staff and patients and strengthening the symbiotic relationship between health and the natural environment.

Other barriers tend to be cultural and attitudinal. For example, a key pressure at most hospital and health centre sites is car parking and transport. Improving access infrastructure for pedestrians and cyclists and reducing the dominance of motorised transport and car parking creates better physical environments for people and encourages physical activity. The challenge is to make walking and cycling a priority over driving.

**Future plans**

Despite a number of challenges, there is real potential for greenspace to be stipulated as an essential requirement for retrofitting and new build NHS projects. The GEP continues to develop demonstration sites at a range of different healthcare settings, including community health centres, and encouraging this work to become a mainstream priority. There are exciting opportunities to use the NHS estate far more effectively to promote better health outcomes for patients, staff, visitors and the wider community. Through a number of innovative and creative greenspace projects, Greening the NHS Estate is creating a model for the core integration of greenspace that can be used across NHS Scotland and beyond. Establishing good quality
greenspace design is a great way for the NHS to improve staff and patient health and to deliver positive environments for health and wellbeing.