

Ninewells Hospital, Dundee – Greenspace Case Study



Background

The Scottish Government's "Health Promoting Health Services"¹ and the "Good Places, Better Health"² framework recognise that poor environments may foster hopelessness and stress and discourage healthy behaviour, whilst the creation of positive physical environments may nurture better health and well-being. Furthermore, recent research³ has shown that improvements in the quality of greenspace can also decrease health inequalities.

Getting Started – Project Steering Group

Forestry Commission Scotland, NHS Tayside, Dundee City Council and Maggie's Centre formed a steering group in September 2009 to look at ways to encourage staff, patients, visitors and local people to make greater use of existing woodland and greenspace in the grounds of Ninewells Hospital in Dundee.

Aim: To optimise the provision of, and access to, woods and greenspace within the hospital grounds.

The hospital grounds extend to some 40 hectares including all woodland, open space, buildings, roads and parking areas. The area of woodland and greenspace is 23 hectares, comprising one main area of woodland (Arboretum Wood).

Scoping

Evidence linking environment and health is improving and there is growing interest in how the natural environment can be used to contribute to individual, community and population health and well-being, as well as sustainability and biodiversity⁴. Certain natural environments appear to promote mental and physical well-being⁵. Even a view of natural environments from one's hospital bed has been found to promote recovery following surgery⁶.

Ninewells Hospital, Dundee – Greenspace Case Study

Ninewells Hospital in Dundee was selected as a national pilot site because of the hospital grounds' potential to showcase joined up delivery between the environment and health sectors in Scotland. The purpose of the pilot was to demonstrate that by greening hospital grounds you can connect built and natural environments to create a health promoting hospital site.

The natural environment at Ninewells is an under-used asset, which has the potential to act as a green lung, providing staff, patients and visitors with accessible outdoor space. Volunteering opportunities within NHS Tayside have developed and grown over the last few years and this initiative will build on the associated benefits.

Following the publication of Better Health Better Care⁷ in 2007, with its clear emphasis on the role of the health service in preventative interventions, a Chief Executive Letter was issued to all NHS Boards⁸, which required action on hospital-based health promotion activity. This was a call to action for NHS Boards, and hospital grounds were seen as an obvious development opportunity for a health promoting health service.

Good places, better health²

In his foreword, the Chief Medical Officer for Scotland states:

"Today's issues are less about toxic or infectious threats but rather the capacity of ugly scarred and threatening environments to foster hopelessness and stress, discourage active healthy lives and healthy behaviours."



Equally Well⁹ – the report from the Ministerial Task Force on reducing health inequalities in Scotland, recommends:

The Government, NHS Boards and other public sector organisations should take specific steps to encourage the use and enjoyment of greenspace by all, with a view to improving health. Public sector organisations should provide materials, resources and training and evaluation of specific initiatives e.g. the prescription of 'greenspace use' by GPs and clinical practitioners.

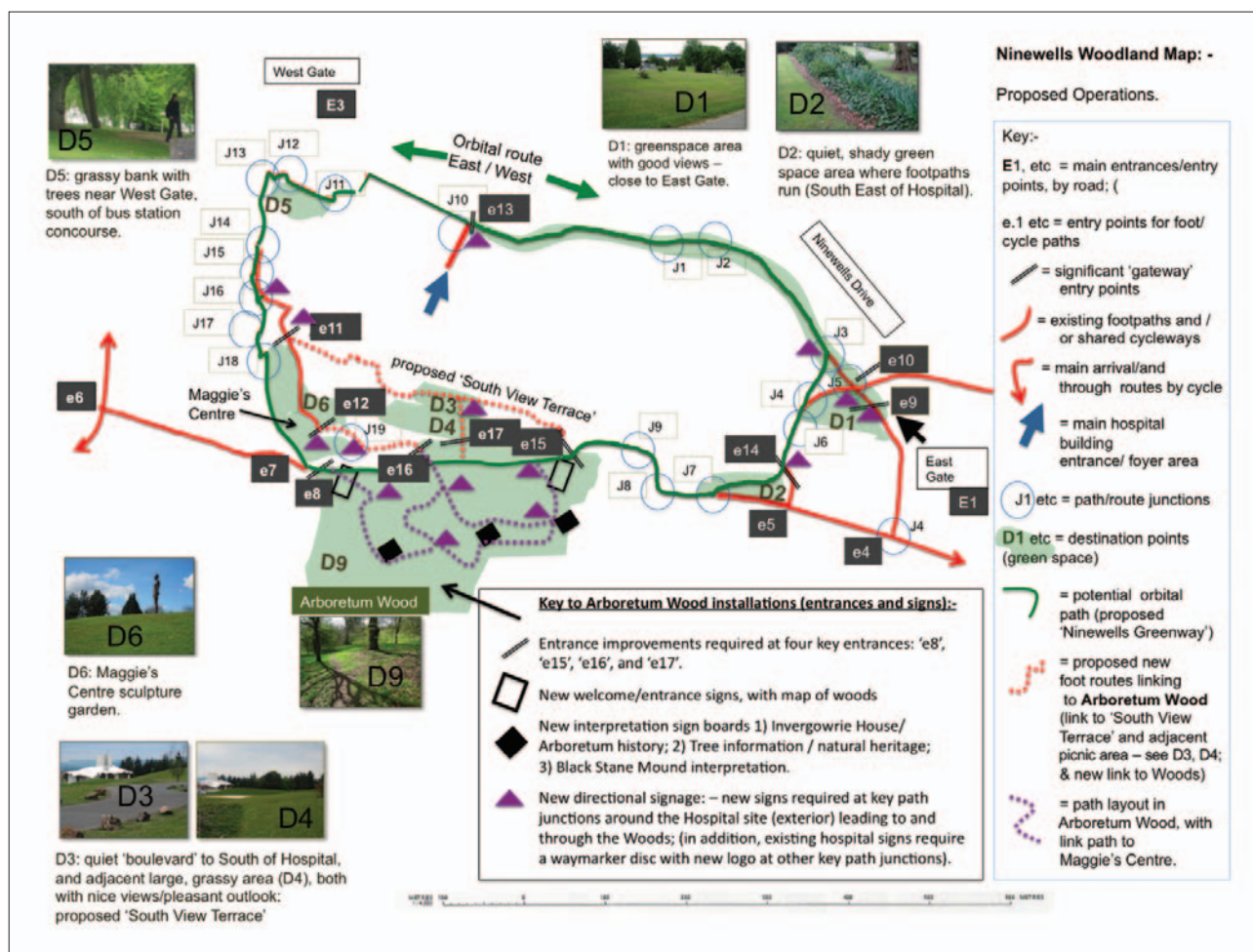
Why NHS Greenspace?

Government Policy encourages health and environment sectors to work together to increase the number of people visiting the outdoors.

Woodlands and greenspace can provide a therapeutic alternative to hospital buildings, and with good design and access improvements, hospital grounds can be used by everyone for physical activity, recreation, recuperation, viewing nature or simply to spend time relaxing or convalescing in peaceful surroundings.

Following a review of the evidence and examination of what was relevant and actionable on the Ninewells site, the next step involved identifying key influences, incentives and barriers. An important element of this work was the potential to improve the wellbeing of staff and embody community development with the aim of improving the social capital of staff, frequent users and nearby residents.

Ninewells Hospital, Dundee – Greenspace Case Study



Phase 1: Consultation Exercise

A baseline survey of 676 staff, patients, visitors and local residents was carried out. Volunteers, including retired staff, the Health Shop and local students, helped to conduct the survey. Patients in wards and at out patient clinics were involved. Children and young people's views were also collected. Staff were surveyed on NHS Tayside's intranet pages, and a market research company carried out face-to-face interviews with local residents within 500 metres of the hospital grounds. Focus groups were conducted with staff and patients and a public display was held in the hospital concourse and canteens using participatory appraisal techniques. This exercise helped to maintain stakeholder engagement and build working relationships with external partners.

Survey findings:

- 66% of staff and 88% of patients were unaware of the Arboretum Wood.
- 78% of staff and 66% of patients would like to see accessible paths to woodland.

- 63% of staff would also like to see signage and waymarking on site.
- 70% of staff and patients would like to see seating areas to sit and relax.
- 43% of staff and 48% patients were interested in health walks in grounds.
- 63% of staff and 56% patients were interested in relaxation exercises in grounds.
- 39% of staff and 37% of patients were interested in environmental art activities in woodland.

Phases 2 and 3 of the project are based on feedback from staff and stakeholders.

Phase 2: Hard and Soft Works

A landscape design contractor will develop a site master plan with detailed cost and build specification based on the findings of the baseline consultation exercise. The hospital grounds are ready for the first stage of hard and soft works, which will include

access improvements to the hospital grounds, remedial tree work to the Arboretum Wood, and a botanical survey.

Access improvements will include all abilities paths, new signage and waymarking from hospital entrances and buildings, regular seating areas, picnic tables, site map, public information leaflet, entrance improvements to woodland and interpretive panels.

Phase 3: Led activities in grounds

The long-term plan is to introduce environmental art to the hospital grounds and create sheltered garden rooms for staff and patients to use for recovery and therapeutic activity. To maintain volunteering activity and introduce a programme of led activities including health walks, horticulture, garden therapy, conservation and art therapy. When the led activities are in place the baseline consultation exercise will be repeated with staff, patients, visitors and local residents and a summary report produced and disseminated to NHS Boards.

Concluding remarks and future plans

As well as treating illness, health services can, and should, invest more energy and resources in promoting and improving health across all settings, including the acute care sector. Greening hospital grounds is an important initiative that NHS Boards can take for hospital sites to address this objective.

This case study demonstrates that the environment surrounding healthcare facilities can be improved by connecting the built and natural environment. Working in partnership can help to establish a high quality greenspace resource that breaks down the barriers between places for the sick and places for the healthy, giving a sense of well-being to all.

References

1. "Health Promoting Health Services"
<http://www.healthscotland.com/uploads/documents/4576hphs%230intro.pdf>;
2. "Good Places Better Health"
<http://www.scotland.gov.uk/Resource/Doc/254447/0075343.pdf>
3. Mitchell R, Popham F. Effects of exposure to natural environments on health inequalities: an observational population study. *The Lancet*, Vol 372, Issue 9650, Pages 1655-1660, 8 November 2008.
4. Crawford F, McKenzie I, Kennedy J. What do we know about the health impacts of contact with nature? Research and literature review commissioned by SNH, June 2009.
5. Gesler, W., 1992. Therapeutic landscapes: medical issues in light of the new cultural geography. *Social Science & Medicine* 34 (7), 735-746.
6. Ulrich R. View through a window may influence recovery from surgery. *Science* 1984; 224:420-421.
7. Scottish Government. Better Health Better Care Action Plan. Scottish Government: Edinburgh, 2007. <http://www.scotland.gov.uk/Resource/Doc/206458/0054871.pdf>
8. CEL 2008, 14: Health Promoting Health Service: Action in Acute Care Settings.
9. Scottish Government. Equally Well: The Report of the Ministerial Task Force on Health Inequalities. Edinburgh: Scottish Government, 2008. <http://www.scotland.gov.uk/Resource/Doc/229649/0062206.pdf>

Contact

National Health Advisor

Tel: 0131 314 6187

Email: kevin.lafferty@forestry.gsi.gov.uk

Central Scotland Health Advisor

Tel: 01698 368555

Email: hugh.mcnish@forestry.gsi.gov.uk

Highland Health Advisor

Tel: 01349 862144

Email: angus.mcwilliam@forestry.gsi.gov.uk

www.forestry.gov.uk/scotland