

# The natural environment, health and well-being

'The NHS can help tackle health inequalities and promote physical and mental well-being by encouraging a greater understanding of the value of spending time in the natural environment.'

Sir Liam Donaldson, Chief Medical Officer

**The natural environment** – everything from parks and open countryside to gardens and other green spaces – **can play an important part in promoting and maintaining good health and well-being.** It can also aid patient recovery. As part of the NHS's commitment to sustainable development, healthcare organisations can incorporate elements of the natural environment into the design of buildings and estates in ways that will contribute to a healthy community, economy and environment.

As an influential organisation in local decision making, the NHS can help tackle health inequalities and promote health and well-being by working with local partners to ensure that the natural environment is a prominent feature of the community and easily accessible to all. This can help to relieve the NHS and the wider economy of the financial burden of ill-health.

A healthier population with a greater understanding of the value of the natural world can help to reduce environmentally damaging behaviour and to preserve a healthy environment and healthy population for generations to come.



# THE NATURAL HEALTH SERVICE – our big opportunity

As the incidence of mental illness continues to rise, there is growing evidence that exposure to the natural environment can make a significant contribution to health and wellbeing. There are real opportunities for local authorities, spatial planners and NHS professionals to make this connection, helping to reduce the costs of ill-health to the NHS and economy.

With the largest property portfolio in Europe, the NHS can make the most of what's been called this 'natural health service'. The current NHS building boom is an unparalleled opportunity to ensure that healthcare buildings are constructed with access to or a view of the natural environment – be it gardens or trees.

This publication is the sixth in a series that explores the NHS contribution to sustainable development. It recognises the strong association between mental and physical health, but focuses on mental health and well-being, looking at how and why the NHS should promote contact with the natural environment.



# WHY DOES THE NATURAL ENVIRONMENT MATTER?

Sustainable development acknowledges that the natural environment is essential to a healthy society. Research shows that contact with the natural environment can help prevent ill-health by:

### **Improving mood**

Even short walks and looking at images of nature can reduce negative feelings, such as anxiety and anger, and increase positive feelings.

# Increasing social contact and building social capital

Useable green space in a neighbourhood can increase social interaction and reduce social isolation.

### **Assisting recovery from stress**

Taking a walk in a park or gardening can help reduce stress and improve concentration.

### Contributing to children's development

Regular exposure to the natural environment in childhood is important for social development and influences future physical, mental and social well-being as adults.

# Assisting personal development, resilience and sense of purpose

Leisure time spent in the natural environment can help to improve self-confidence, self-image, skills and mood.

### Promoting physical activity and health

An inviting, green environment close to home and work encourages regular exercise in the form of walking and cycling. Physical activity helps to reduce obesity, anxiety and depression and can improve mood and selfesteem.

As well as preventing ill-health, the natural environment can help to treat illness when it occurs:

### Treatment for children with poor selfdiscipline and Attention Deficit Hyperactivity Disorder (ADHD)

Outdoor activities in natural surroundings can improve symptoms of ADHD and improve self-discipline.

# Assisting patient recovery following health service procedures, such as surgery

Patients with a view of gardens or trees have been shown to recover more quickly, and require fewer and weaker painkillers. This may be because it reduces stress levels and better enables the patient to cope with the treatment.

### Elderly care and treatment for dementia

Contact with nature in shared areas can increase social interaction and mental wellbeing among the elderly; for patients with dementia it can reduce aggression and agitation.

### Green exercise programmes

Exercise programmes taken in the natural environment (e.g. Health Walks, Green Gyms) can increase levels of physical activity and provide psychological benefits. Participants report feeling healthier and more socially connected.

'We all tend to feel better in the natural environment - so why are we working so hard to destroy it? The NHS needs to make the most of our wonderful, free natural health service.'

Dr Michael Dixon, Chairman, NHS Alliance

Photo cradit: Natura's Health Service



Gateshead and Derwentside PCT are partners on the Chopwell Wood Health Project along with the Forestry Commission and the Friends of Chopwell Wood. This GP referral scheme involves a 13 week programme of activities in the woodlands – conservation work, cycling, walking or T'ai Chi. Ninetyone per cent of participants complete the programme, in contrast to the typically low rates for referrals to gyms or leisure centres.

### THE COST OF MENTAL HEALTH

- The total cost of mental health problems in England is estimated to be more than £77 billion a year, of which more than £12 billion is spent on health and social care.
- Mental health disorders affect 1 in 6 of the population.
   Anxiety with depression is the most common disorder.
- Depression is predicted to become the second most prevalent cause of disability worldwide by 2020.
- Mental health disorders are often associated with other health damaging behaviours such as smoking, over eating and alcohol consumption.

By promoting the health benefits of the natural environment the NHS can contribute to a healthier population and tackle health inequalities, helping to reduce the costs of mental health and secure its own financial future. This can be seen as a feature of good corporate citizenship using NHS resources to the benefit of the local community, economy and environment. However, the NHS cannot do this alone. Local authority planners have an important role to play, which the NHS can support. As members of local strategic partnerships, primary care trusts can help to promote the role of the natural environment in local health promotion.

- The cost of mental health to the economy in terms of loss of output from people being unable to work is estimated at around £23 billion a year, with a further estimated cost of £41 billion a year from reduced quality of life and loss of life.
- Stress, anxiety and depression account for the loss of around 60 million working days each year.
- The number of Incapacity
   Benefit claimants with mental
   health conditions has doubled
   in the last decade to nearly
   850,000 people.
- More than five million people in the UK suffer 'extreme stress' in the workplace. Longterm stress can contribute to cardiovascular diseases, infectious diseases, anxiety and depression.

Mental health problems are not only a burden on the NHS; they also threaten the wider economy. To help reduce absenteeism and improve productivity, serious measures need to be taken to improve the mental health and well-being of the population. Living within environmental limits and having contact with the natural environment help to build and maintain a strong, healthy and just society. This is exactly what is meant by sustainable development.



Therapists at Cherry Trees Mental Health Resource Centre in Maldon (part of North Essex Mental Health Partnership Trust) use the Centre's therapeutic garden as part of treatment. They hold group sessions there to help patients take the first steps towards social reintegration.

'The natural environment is the great outpatient department where we can go for healing.'

William Bird, GP - Berkshire West Primary Care Trust

# **Valuing nature**

Valuing nature for nature's sake makes global sense. By valuing, protecting and promoting the natural environment we will help to enhance biodiversity, improve air quality, mitigate climate change and secure water supplies – all with positive health benefits. By acknowledging the value of the environment we can stimulate long-term changes in attitude towards the natural world and help to sustain our long-term health and that of the planet on which we depend.



Photo credit: David Mansell/Report digital.co.uk

The Green Gyms programme 'run by BTCV, ' helps people take exercise outdoors whilst participating in activities that improve the environment. Ninety percent of participants with poor mental or physical health show an improvement within seven months. For example, Bexhill and Rother PCT are working with BTCV on the Rother Green Gym. Up to thirty people attend each session with a measurable sense of accomplishment and a high retention rate. One participant said, 1 used to get depressed about the future, but now that is not the case. I have been on medication for eighteen years, but since doing this, I have halved the amount I take. My life is a lot better.'

'By promoting the value of both the built environment and the natural environment, the NHS can help change attitudes to help sustain our health and that of the planet.'

**Jonathon Porritt**, Chairman, Sustainable Development Commission

# What can the NHS do to promote the natural environment?

Contact with nature is comparatively cheap to provide and has very few negative side effects. Here are some ideas to help your NHS organisation improve health through the natural environment.

#### 'Green' the estate:

- Introduce and maintain features of the natural environment (e.g. trees, gardens, ponds) through NHS estate strategies in new and existing healthcare settings.
- Get involved in and help deliver your local biodiversity action plans.

# Promote engagement with the natural environment:

- Increase the use of green exercise referral schemes, e.g. Green Gyms, as part of treatment for mental ill-health.
- Promote local outdoor resources such as National Parks, Forestry Commission woods, and other local opportunities for free access and support.

#### **Influence local partners:**

The NHS is a powerful local player. With the increasing emphasis on partnership working, NHS organisations have the opportunity to influence local decisions, (for example, on planning), to benefit health and well-being through the natural environment:

- Be a proactive member of your local strategic partnership. Work with local partners, such as your local authority, on the sustainable community strategy and local area agreements to help deliver shared priorities that promote health through the natural environment.
- Recommend that planners incorporate features of the natural environment and green space for exercise, relaxation and wellbeing in new developments.
- Engage with local communities and environmental organisations to raise awareness of the health benefits of the natural environment and create more opportunities for engagement.

• Encourage schools to help children learn about the health value of the natural environment through everyday activities such as walking and cycling.

The Sydenham Garden Project aims to help mental health patients recover, and increase their skills and employability, through interaction with the natural environment. It operates on a referral basis from GPs and other health professionals in Lewisham and Bromley PCTs. The project is based within a nature reserve and community garden and provides training in horticulture, conservation and arts and crafts.



## Resources to help you make a difference

The **NHS Good Corporate Citizenship Assessment Model** helps NHS organisations identify, assess and improve their contribution to good corporate citizenship. www.corporatecitizen.nhs.uk

The NHS Estates Knowledge & Information Portal is an extensive source of guidance materials and case studies to support sustainable and efficient estates management in the healthcare environment. http://195.92.246.148/nhsestates/knowledge/knowledge\_content/home/home.asp

**BTCV's Green Gyms programme** helps people take exercise outdoors whilst participating in activities that improve the environment.

www2.btcv.org.uk/display/greengym

The **Walking the Way to Health Initiative** helps people get active and walking in their own communities. www.whi.org.uk

The **National Care Farming Initiative** is a partnership between farmers, health care providers and participants to use farms and agricultural landscapes for the promotion of health and well-being, www.ncfi.org.uk

Natural England has helped set up over 400 green exercise schemes and can help NHS organisations with the development and evaluation of new outdoor projects. www.naturalengland.org.uk/campaigns/health

The Forestry Commission's **Active Woods** – **Naturally Good for You** campaign aims to make the connection between health and well-being and trees, woods and forests. www.forestry.gov.uk/activewoods-england

Natural Fit: Can Green Space and Biodiversity Increase Levels of Physical Activity? Royal Society for the Protection of Birds report on the integration of health, green spaces and biodiversity conservation. **Natural Thinking** – a review of the natural environment and health to be published in Spring 2007. www.rspb.org.uk/policy/health

Environment and health: Is there a role for environmental and countryside agencies in promoting benefits to health? National Institute for Health and Clinical Excellence paper looking at the links between the natural environment and health. www.nice.org.uk/page.aspx?o=502521

Mental Health Foundation campaign promoting exercise referral schemes in treating mild to moderate depression. www.mentalhealth.org.uk/campaigns/mhaw/exercise-and-depression

**Every Child's Future Matters** – making the case for sustainable development in the delivery of Every Child Matters. To be published Summer 2007 http://www.sd-commission.org.uk/pages/edu\_cayp.html

The Sustainable Development Commission's *Healthy Futures* programme, funded by the Department of Health, helps the NHS to maximise its contribution to the health of individuals, communities and the environment. For more information visit **www.sd-commission.org.uk/health**. If you are involved in sustainable development in the NHS, or want to be, please email **larissa.lockwood@sd-commission.org.uk** or **maria.arnold@sd-commission.org.uk**.

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