



VALUING NATURE

Session E Health Value of Green Space

Chair: Michael Winter

University of Exeter

Health Value of Green Space in Practice

Economic value of green spaces to the health sector

Euan Hall, The Land Trust

NHS Forest Initiative: links to clinical outcomes

Ben Williams, Centre for Sustainable Healthcare

Local government could change the way we pay for health gains within natural outdoor settings

Dan Bloomfield, University of Exeter

Questions & discussion: what are the priority areas for Valuing Nature?



Economic value of green spaces to the health sector



Euan Hall, CEO
18 October 2016



What's the issue?

Health and Wellbeing – the economic impacts

- **£7.4bn** – Annual costs on of **physical inactivity** on business and wider society
- **£27bn** – Annual costs of **obesity** to the wider economy
- **£5.1bn** – Annual costs of **obesity** to NHS
- **£105.2bn** – Annual wider economic cost of **poor mental health** in England
- **£26bn** – Annual cost of **mental illness** to wider economy



What's the solution?

Green spaces - part of the solution

- They are extremely beneficial to our physical and mental health
- They can reduce the burden on public health costs and the wider economy.

Our social value study demonstrates...

- How our green spaces are used / valued
- How they contribute to health & well-being
- Economic value our spaces contribute to the economy

Overwhelmingly positive results

- Not only understanding economic values
- But how they have changed and improved lives



How and why people use our green spaces...



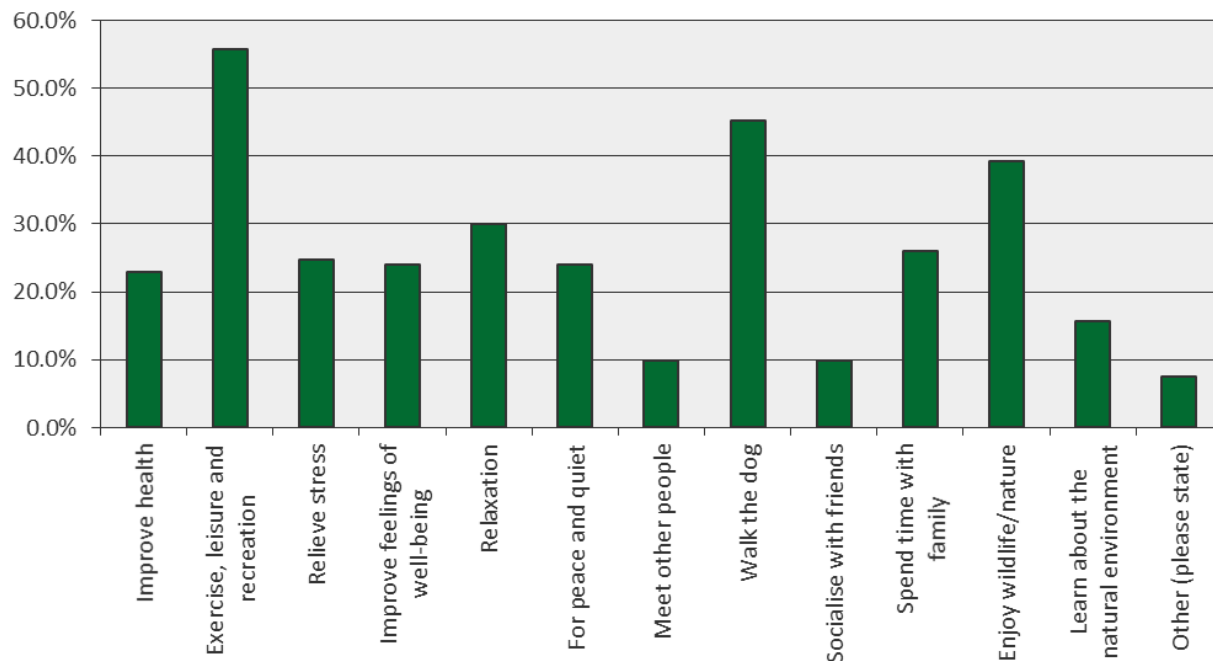
56% use our sites for exercise, leisure and recreation

39% use our sites to enjoy wildlife and nature

25% use our sites to improve health, relieve stress and improve feelings of wellbeing



Why do you use the site?



How our sites contribute to a local area...

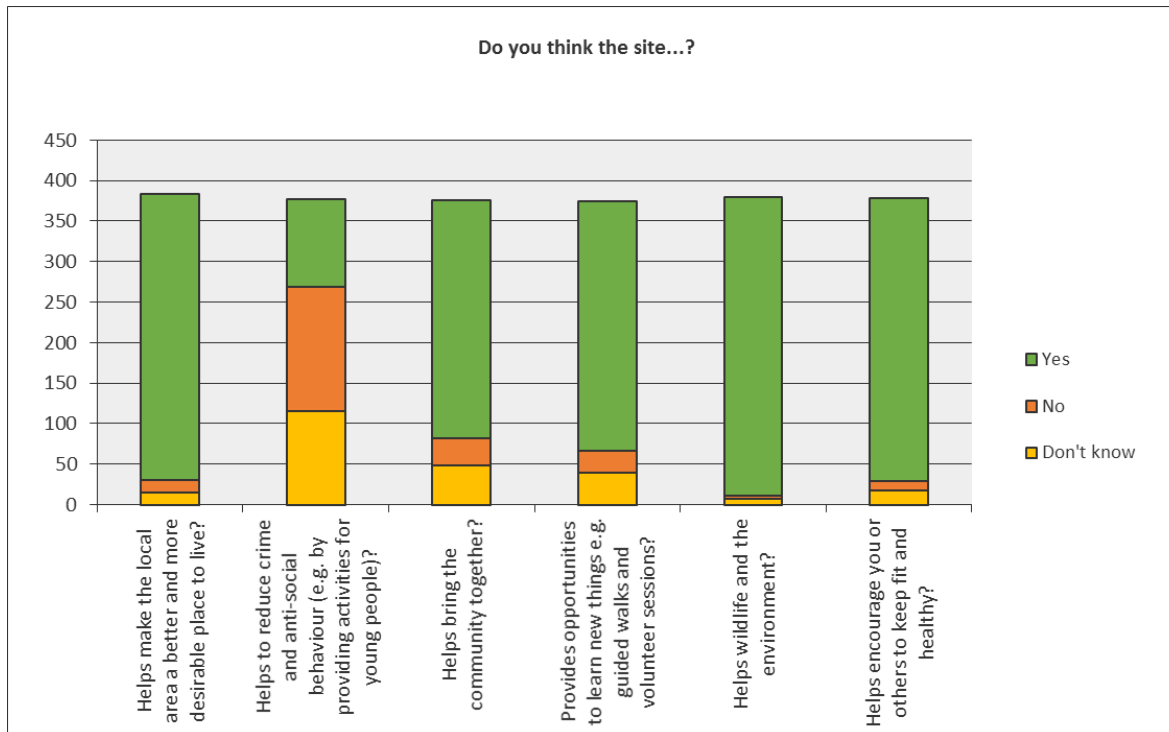


97% felt our sites helps wildlife and the environment

92% felt our sites help encourage them or others to keep fit and healthy

92% felt our sites help to make the local area more desirable (leading to economic growth)

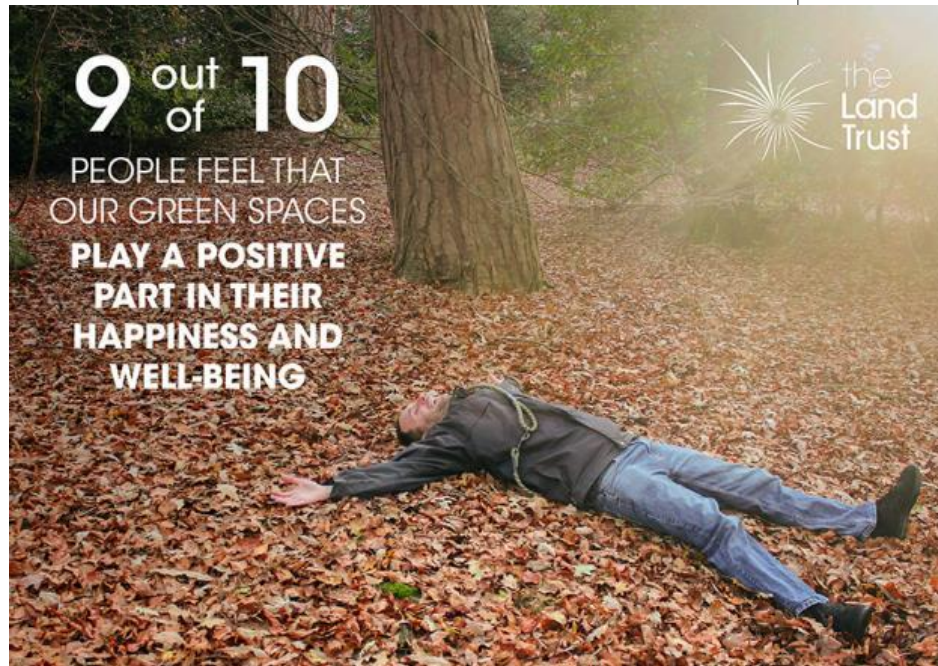
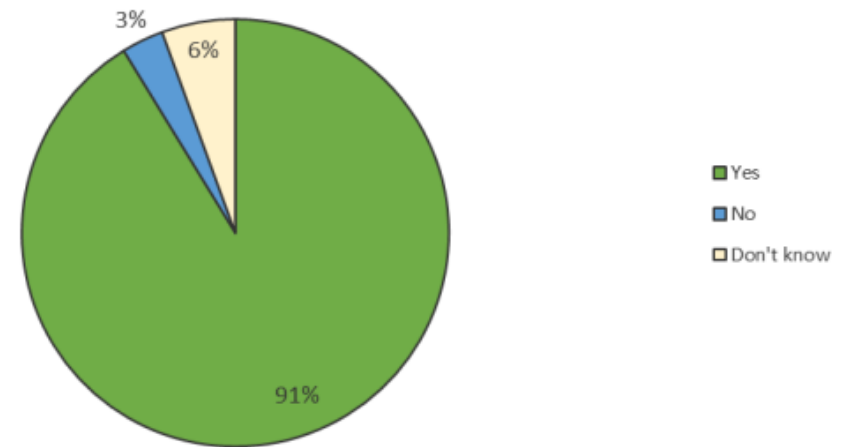
29% felt that our sites helps reduce crime and anti-social behaviour



Happiness and wellbeing



Does this site play a positive part in your happiness and well-being?



“Suffering mild depression and anxiety, I come to Elba Park to walk and jog to let off some steam. I enjoy how open it feels.”

Resident, Elba Park

Key messages



- Park users: **higher levels of satisfaction and wellbeing** than national average
- Park users: **lower levels of anxiety**
- **9 / 10** people think our parks have a **positive** impact on their satisfaction & wellbeing
- **9 / 10** people believe our spaces make their **area more desirable** and have a positive impact on their lives



In monetary terms...



Our green spaces help...

- Relieve pressures on public budgets (e.g. local authorities, health & services)
- Reduce work absenteeism - people feel happier and healthier

By providing people with free access to high quality, well maintained green spaces, our activities contribute the equivalent of **£94m** to society pa.

This is in line with the recent research by Exeter University...Green spaces worth **£2.2bn** to public health in England

The Land Trust's green spaces contribute the equivalent of

£53.2 million
PER ANNUM

benefits to the health and welfare sector.

FOR EVERY

£1 SPENT
PER ANNUM BY THE LAND TRUST,
 SOCIETY BENEFITS ON AVERAGE

£30.30
IN HEALTH CARE PROVISION



FOR EVERY

£1 SPENT
PER ANNUM BY THE LAND TRUST,
 SOCIETY BENEFITS

£23.30
TOWARDS THE COST OF CRIME
AND ANTI-SOCIAL BEHAVIOUR

The perceived reduction in crime and feeling safer, due to the Land Trust's activities, is equivalent to

£40.9 million
PER ANNUM

savings to society.

What people say...



“I feel like my life is like swimming underwater – and drowning at times. These sessions at Monkton Community Woodlands are my breathing holes and keep me going.”

“Greenwich Peninsula Ecology Park is a nice place to relax and get away from work”

“Through involvement with Port Sunlight River Park, my estate has become a community. I am getting to know people I have never spoken to before, even though they are my neighbours”

“Rabbit Ings has supported me with my fitness and weight loss in a pleasant and safe environment”

“Kiveton Community Woodland is very important to me as a form of exercise for me and our dogs as well as a good way to make friends and meet them regularly”



Thank you



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How do we achieve these economic benefits from natural health?

Ben Williams

Programme Lead, NHS Forest and Green Space



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SUSTAINABLE
HEALTHCARE
inspire • empower • transform



The NHS Forest

Established 2009

National network of 180+ NHS sites

40,000 trees planted

GP Surgery,
Walk in Centre



Larger site,
Mental Health
Trust



Major sites and
Acute Trusts



Achieving Health Benefits

Appropriate environment

Meaningful interaction

Appropriate Environment



Appropriate Environment



Appropriate Environment



Appropriate Environment



Appropriate Environment

Accessible

Diverse

Carrying capacity

Infrastructure

Facilities

NHS Forest

Green assets at the point of care



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HEALTHCARE

Meaningful Interaction



NHS Forest – Development Programme

Workforce Development

Occupational Therapy

Occupational Health

Green Health Routes



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HEALTHCARE

Priority One – Workforce Development



Image courtesy of Muddy Feet Training

Priority Two – Occupational Therapy



Image courtesy of EQE Outdoors Ltd.

Priority Three – Occupational Health

£2.4bn cost to NHS of staff sickness and absences:

- Stress and anxiety
- Cardiovascular
- Muscular/Skeletal

Priority Four – Green Health Routes

Based around participating sites and surgeries

Located within communities

Mapping and connecting green spaces and
community assets

Self guided or group options

Marston Green Health Route Map



The Centre for Sustainable Healthcare is registered as a Charity No: 1143189



CENTRE for SUSTAINABLE HEALTHCARE

Further Information

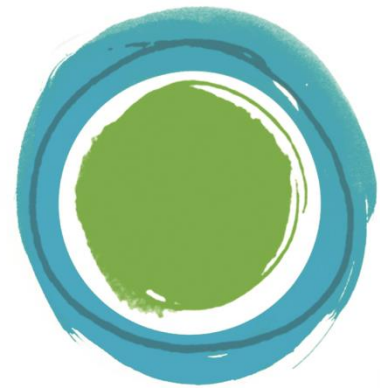
Mental Health and Dementia:

<https://www.eventbrite.co.uk/e/transforming-mental-health-and-dementia-provision-with-the-natural-environment-tickets-26751465353>

Naturally Healthy:

<http://ecosystemsknowledge.net/about/events/future>





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HEALTHCARE

inspire • empower • transform



www.sustainablehealthcare.org.uk

www.nhsforest.org

A Dose of Nature

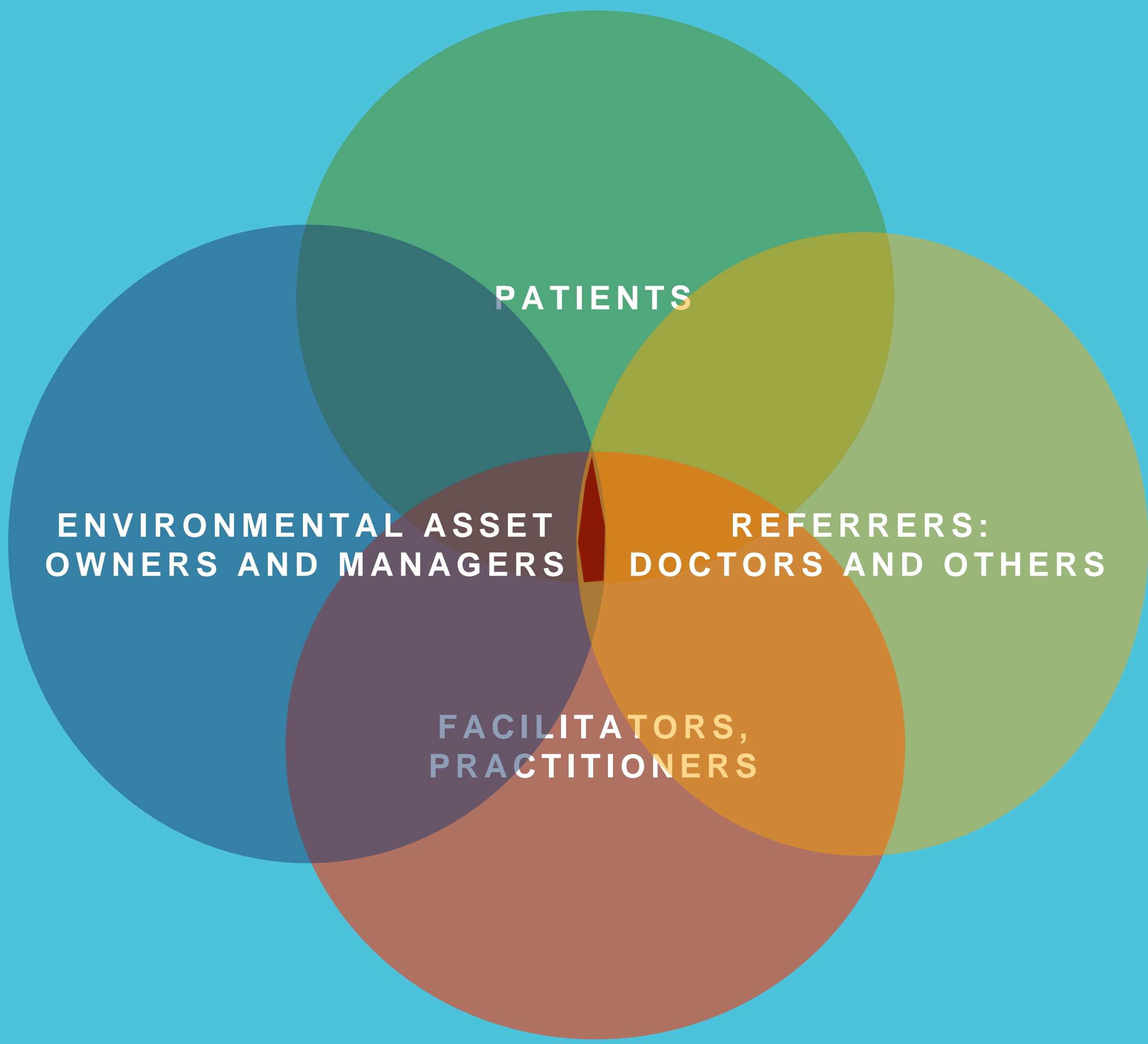
Nature-based Interventions on Referral

Local government could change the way we pay for health gains within natural outdoor settings

Dr Dan Bloomfield

RESEARCH ON NATURE-BASED INTERVENTIONS SUGGESTS:

- a social prescription from a GP results in patient benefits additional to GP care alone (Grant 2000)**
- spending time in forests reduces hypertension and improves immune function (Mao 2012, Li 2010)**
- group walks in nature are associated with lower depression, before and after controlling for covariates (Marselle 2014)**
- exposure to nature improves attention restoration (Berman 2008)**
 - greater biodiversity = greater health promotion effect (Lovell 2014)**
- exposure to nature reduces the experience of pain (Diette 2003)**



PATIENTS

**ENVIRONMENTAL ASSET
OWNERS AND MANAGERS**

**REFERRERS:
DOCTORS AND OTHERS**

**FACILITATORS,
PRACTITIONERS**

A Dose of Nature

Nature-based Interventions on Referral

- **Eight pilots across Cornwall, Devon & Bristol**
- **Each involving GPs, environmental partners and intervention practitioners**
 - **£317 per patient per 12 weeks average**
 - **WEMWBS average shift from 28 to 47 (+19; average UK is 51; n=39)**
 - **website, network, Crowdfunder**

FIRST PHASE:

- **NERC KE Fellowship, VNP Placement and Innovation Internship**
 - **Eight pilot partnerships referral schemes across Cornwall, Devon & Bristol**
 - **£317 per patient per 12 weeks average**
- **WEMWBS average shift from 28 to 47 (+19; average UK is 51; n=39)**
 - **website, network**

A DOSE OF NATURE

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A Dose of Nature is all about using outdoor natural environments to improve health and wellbeing. It's a service, a network and a research project.

BLOG.

Anything we think is interesting and relevant, whether from research, practice or the media. If you want to know when something's been added here, then why not sign up to receive email updates? It's free.



EMERGING QUESTIONS:

THE MONEY QUESTION

How can any social prescription service receive money from health?

THE CATEGORY QUESTION

Are nature-based interventions about preventing or treating health problems?

THE DEFINITION QUESTION

How specific should nature-based intervention actually be? What counts?

THE CO-BENEFIT QUESTION

What environmental gains can be made (and measured?)

SECOND PHASE:

- **Realist Systematic Review on social prescribing referral mechanisms (PenCLAHRC and NIHR)**
 - **Intervention Mapping proposal to NIHR (November)**
- **Nature and Health Hub: developing a business case for a service offer, with Cornwall Council and partners**