

# Do the Scottish public value NHS outdoor spaces?

## Estimating the health and wellbeing value of the NHS outdoor estate

Name of Author(s): Luis Loria-Rebolledo<sup>1</sup>, Dwayne Boyers<sup>1</sup>, Mélanie Antunes<sup>1</sup>, Verity Watson<sup>1</sup> and Neil Chalmers<sup>2</sup>

1. Health Economics Research Unit, University of Aberdeen, Polwarth Building, Foresterhill, Aberdeen, AB25 2ZD, Scotland

2. Public Health Scotland, Gyle Square, 1 South Gyle Crescent, Edinburgh, EH12 9EB, Scotland  
Neil.chalmers@phs.scot



### Logos of collaborators



## Introduction

Urban heat has been identified as one of the most serious effects of climate change and urban areas will need to adapt using various measures such as the provision of more green, blue and open spaces<sup>1</sup>. There is a large body of evidence showing greenspace exposure has a positive effect on health and wellbeing<sup>2,3</sup>. Many NHS facilities provide such spaces, however, understanding the monetary value placed on these spaces by the Scottish public will demonstrate if such spaces are subsequently valued. This highlights to policymakers what NHS estates are being valued thus providing examples of good practice in provision of green space.

### Research questions

How are NHS outdoor spaces used?

What is their health and wellbeing value to different users?

What is the value to the Scottish public?

## Methods

This work has created surveys based on non-market valuation to obtain monetary values for NHS Scotland outdoor spaces. These surveys are being completed by a representative sample of the Scottish population (approximately n=2,538).

This work will generate values based on contingent valuation and the Office for National Statistics's exposure method for different users and non-users. An average monetary value will be generated for local primary care sites (if this has an open space) and local hospital sites. The values should be interpreted as the total economic value (which includes health benefits) of the respondents local NHS sites – with the caveat that there is great heterogeneity between them. As with all non-monetary valuations, it is very difficult in practice to disentangle the health benefit from the total value

Figure 1 – room for a graphic: Outdoor space in the Foresterhill Campus (opposite Aberdeen Royal Infirmary with the University of Aberdeen's Suttie Centre in the back)



## Acknowledgement

Special thanks to Jodi Dean, Michelle Wilson Chalmers, Charles Bestwick, Ivan Clark and Pete Rawcliffe

## Results

The survey is currently being answered by the Scottish representative sample and the results will be arriving shortly.

We will estimate and explore the monetary value and the health and wellbeing value of the NHS outdoor spaces to different users/non-user:

- positive values are a result of direct use of sites/option to use sites/value to others.
- negative values are a result of not caring/not perceiving value/not using.

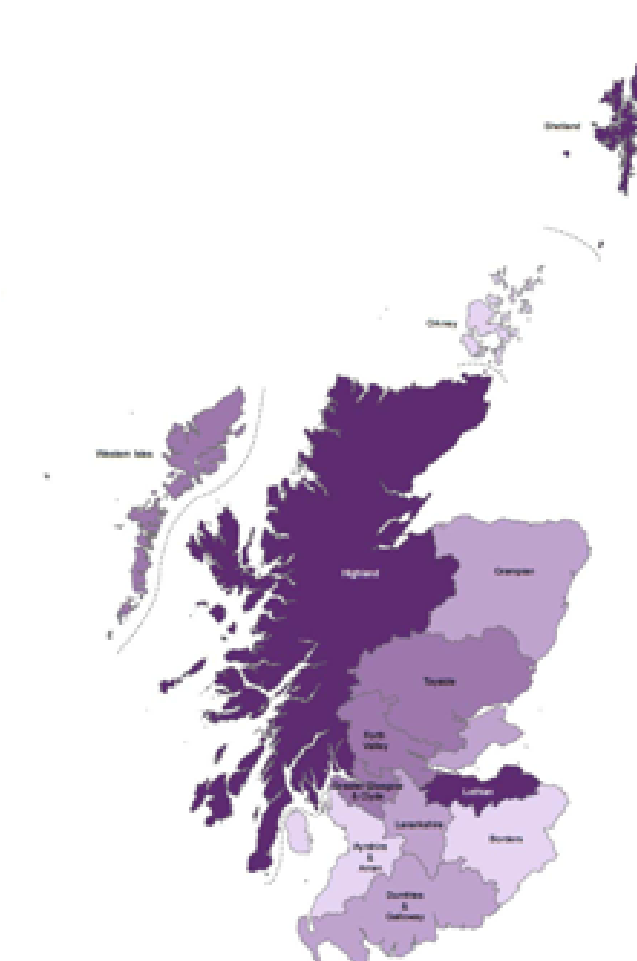
## Next steps

The data from the survey will be collected and analysed to estimate the monetary value placed on different NHS sites' open spaces and allow for estimation Quality Adjusted Life Years (QALY) potentially gained from site use.

PHS will then create a dashboard detailing the data by healthboard area and is envisioned to look similar to Figure 1.

Figure 1 Next steps for creating dashboard

## Potential Dashboard Mock-up (1)



Region: National  
Demography: Over 18s  
Site: Local Hospital

### Unitary Monetary Value (CV)



### Unitary Monetary Value (Exposure Method)



## Conclusions

The results will provide information on whether, and how much, the Scottish public value NHS open spaces.

The results will also be useful for NHS Scotland with regards to the following areas:

- Describe how NHS open spaces are used in specific sites
- Explore potential use of NHS open space:
  - Reasons why open spaces are not used
  - Explore next best alternative (substitute) recreation site use

### References

- 1 - Tong, S., Prior, J., McGregor, G., Shi, X. and Kinney, P., 2021. Urban heat: an increasing threat to global health. *bmj*, 375.
2. Public Health England. 2020 Improving access to greenspace: A new review for 2020.
3. Saraev, V., O'Brien, L., Valatin, G. and Bursnell, M. 2021 Valuing the mental health benefits of woodlands.



sefari.scot



info@sefari.scot



@SEFARIScot



Scottish Government  
Riaghaltas na h-Alba  
gov.scot