



University of the
West of England

Health: The Design, Planning and Politics of How and Where We Live

- **Paper / Proposal Title:**

Built and natural environment planning principles for promoting health: An umbrella review

- **Format:**

Presentation (in-person)

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- **Abstract (300 words):**

Aim: This umbrella review aimed to assess relationships between the built and natural environment and health, concentrating on five predefined topic areas: neighbourhood design, housing, food environment, natural and sustainable environment, and transport.

Background: The built and natural environment and health are inextricably linked. However, there is considerable debate surrounding the strength and quality of the

evidence base underpinning principles of good practice for built and natural environment design in promoting health.

Methodology: A structured search was conducted for quantitative systematic reviews and stakeholder documents published since 2005. Seven databases and the websites of 15 relevant and respected stakeholder organisations known to publish review-level documentation were searched. Searches were limited to English-language publications and duplicate references were removed. Evidence quality and strength was appraised using validated techniques. Findings were used to develop a diagram for each topic area, illustrating relationships between built and natural environment planning principles and health-related outcomes.

Results: A total of 178 systematic reviews and review-level documents were eligible for inclusion. The quality of evidence was mixed, making it difficult to draw clear causal links. Fourteen actionable planning principles associated with positive health-related outcomes were identified across the five topic areas. For example, for the neighbourhood design category, neighbourhoods that enhanced walkability, were complete and compact in design, and those which enhanced connectivity through safe and efficient infrastructure were associated with improvements in health-related outcomes including physical activity, social engagement, mental health, perceptions of crime, and road traffic collisions. Evidence for the effectiveness of planning principles on reducing health inequalities was sparse and inconclusive.

Conclusions: Findings provide an up-to-date overview of relationships between the built and natural environment and health and present logical, evidence-based messages to aid communication between public health and planning professionals.

- **Author(s) Biography (200 words each):**

Emma Bird is a Senior Lecturer in Public Health in the Faculty of Health and Applied Sciences at UWE. Her research focuses on understanding how the environment influences health behaviours and health behaviour change. Emma has five years' research experience and has skills in quantitative, qualitative and systematic review methodologies. She recently completed work on the EPSRC funded iConnect (Impact of Constructing Non-motorised Networks and Evaluating changes in Travel) project which explored the effects of infrastructure change on walking and cycling.

Janet Ige is a Research Associate in the Faculty of Health and Applied Sciences at UWE. She has experience of conducting systematic reviews, including those relating to the wider determinants of health. She is also a researcher on the Wellcome funded project, "Moving health and sustainability upstream into strategic urban decision making".

Andre Pinto is a qualified MRTPI accredited planner with a MA in Planning Policy and Practice. He is currently working for PHE as Public Health Manager (Healthy Places), within the Health Improvement Directorate, and is PHE's national advisor on spatial

planning issues. Andre has over 12 years' experience working as a planner, particularly on spatial planning policy development, development control, Health Impact Assessments and S.106/CIL negotiations. He has been a guest lecturer at London Metropolitan University on Health Impact Assessments, guest editor of TCPA's Nov. 2016 Special Edition journal on health. Andre's career in the Health sector started 6 years ago when he first joined a London PCT as Regeneration Manager, applying his knowledge and understanding of the planning system, to improve public health outcomes. He worked as Social Determinants of Health Specialist for a local public health team, before joining PHE.

Paul Pilkington is a Senior Lecturer in in the Faculty of Health and Applied Sciences at the University of the West of England (UWE). His specialist research area is public health and the environment. Paul is a member of the UWE WHO Collaborating Centre for Healthy Urban Environments and Lead for the Environment and Sustainability for Health Improvement research theme in the Public Health and Wellbeing Research Group. He has a wide range of project management experience, including research and knowledge exchange activities alongside public sector partners such as local authorities and public health teams. Paul was a core team member on the NICE Collaborating Centre on Spatial Planning and Health programme of work at UWE, and is public health lead on the soon to commence Wellcome funded project "Moving health and sustainability upstream into strategic urban decision making". He was involved (alongside Adrian Davis) in developing an innovative web resource, Traffic Choices (www.trafficchoices.co.uk), aimed at improving decision making in the road environment. Paul has strong links to the service public health community. Paul is a Fellow of the Faculty of Public Health.