Reviewer’s report

Title: The long-term health and wellbeing impacts of Healthy New Towns (HNTs): protocol for a baseline and feasibility study of HNT demonstrator sites in England

Version: 0 Date: 17 May 2019

Reviewer: Susan Thompson

Reviewer's report:

This is an important project with its focus on application of the (well known) research evidence for health supportive environments. This study when it gets underway and starts to produce results will be of significance to a global audience faced with the current epidemics of chronic disease. The 'how-to' implement the research in this area is the key question now!

So there is no doubt that it is important and useful to present this overview of the proposed longitudinal and comprehensive research. Nevertheless, for an international audience, and I suspect for many in the UK as well, the level of detail about the principles and nature of the research is lacking. I know there are references given to other reports which detail this, but the basic information is needed in the current paper. I do not consider that the considerable information about the specifics of participant selection, data generation and data analysis, is so important to this paper. This information generally reads like a research grant and needs to be synthesised for the current paper. Higher level principles should be detailed so that the reader understands the nature of the HNT study and how the existing work will be expanded and built upon in the proposed research. This is an important project and will be of great interest to those working in healthy cities.

I have some specific suggestions for how the authors can address these identified issues.

Abstract: Clarify what is meant by 'protocol' in the abstract. Is this the aim of the paper?

Background: Clarify / be consistent in relation to use of the terminology 'whole systems' (which is critically important in this work, as you so rightly state) - later in the paper you refer to 'systems theory / systems approach'.

P3 from line 57 - this statement is not clear to me - edit for clarity.

P4 from line 3-4 - this needs further elaboration about the nature of the HNT programme - this might come later in the paper, and can be referred to in the background. More details about the nature of the developments to be assessed (images perhaps), geographical locations (a map would be helpful).

Need more detail about the HNT programme priorities and better links between this section in the
Background and the ones before and following.

P4 from line 45 - the reference to 'how these effects come about' is not clear - what effects? This statement needs further information to be clear to the reader.

Sections on Aim / Research Questions / Objectives - these need further detail and linkages - they read as though they are straight from a research proposal, rather than a paper explaining all details of the research to be undertaken.

Methods / Overview: at the end of this section there is an 'error' message regarding a reference. This needs to be fixed.

Establishing a research partnership with HNT stakeholders: this section starts to give further detail about the HNT sites, which is good and can be better linked to the initial mention of the sites in the background. This is also where it becomes critical to provide additional detail about the nature of the sites, the development, their geographic and demographic context, etc.

P6 - from line 17 / 18 - what sort of 'experiences' (of what?) - this is not clear and needs clarification.

Also P6 - I found it difficult to follow the differences between the 5 and the 10 HNTs. Needs clarification.

The table on P6/7 - which of these are the 5 of the 10 sites (mentioned at line 34/35?). Further, this table is where much more detail about the HNTs can be revealed. The information needs to be consistent for each HNT (EG: nature of site - brownfield or other; location of new development - I certainly don't know where the John Radcliffe Hospital in Barton is - is this central to the town?). This needs to be thought out carefully so that the reader has a thorough understanding of what is proposed at each of the sites. We also need to know the type of housing proposed (including its tenure and construction type). Some images to demonstrate typologies would be helpful.

P7 - the 10 healthy design principles need more detail - some are clearer than others - but overall this list is very rudimentary and not very informative. The principles need some introduction and a context as well. The paragraph below the list does mention some examples of how the principles are 'illustrated' - the reader needs these examples clearly linked to each principle.

Participatory Systems Mapping: this needs a better link from the previous section of the paper. the latter part of this section (Participants, sampling and recruitment) needs to be better synthesised - the reader does not need this level of detail given the nature of the current paper. The following sections on data collection and data analysis need further work so that the broader principles are fully explained, as well as some of the specific terminology (EG: P9 - line 54/55 - 'standardised proforma'; P10 - line 7/8 - 'protected characteristics').

Page 10 - line 17/18 - need more detail on the nature of the data held by the different authorities listed.

The entire section from P8-10 on data collection and analysis needs to be re-thought so that it is clearer in term of the broader principles of the evaluation study.

P12 - Health economic evaluation: lines from 29/30 - need references for these data sources.
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An article of importance in its field

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