



Response to consultation on the NHS SDU Sustainable Development Strategy for the Health, Public Health and Social Care System

May 2013

ABOUT US

ARCC CN is an initiative funded by the Engineering and Physical Sciences Research Council to co-ordinate a suite of projects involving researchers and stakeholders looking at adaptation and resilience to climate change in buildings and infrastructure (www.arcc-cn.org.uk). ARCC CN is hosted at UKCIP (formerly known as the UK Climate Impacts Programme, www.ukicp.org.uk) which since 1997 has supported organisations adapting to the unavoidable impacts of a changing climate. ARCC CN and UKCIP are located within the Environmental Change Institute at the University of Oxford.

Two projects in the ARCC CN portfolio have considered the impacts of climate change on the health and care sector, and their findings are particularly relevant to this consultation.

Built Infrastructure for Older People's Care in Conditions of Climate Change (BIOPICCC) took a whole system perspective on adaptation to climate change in the health and social care sector. The research focused on health and social care systems supporting older people's care and hazards relating to extreme weather events that are expected to become more frequent in future. Outputs from this research project included an online toolkit to assist local authorities, partner organisations, and neighbourhood and community groups with local level resilience planning:

www.dur.ac.uk/geography/research/researchprojects/biopiccc/

www.dur.ac.uk/geography/research/researchprojects/biopiccc/toolkit/

BIOPICCC contributed significantly to the consultation and drafting of the NHS SDU report on 'Adaptation to Climate Change for Health and Social Care organisations' at

www.sdu.nhs.uk/documents/publications/Adaptation_Guidance_Final.pdf

Design and Delivery of Robust Hospital Environments in a Changing Climate (DeDeRHECC) investigated economical and practical strategies for the adaptation of the NHS Retained Estate to increase its resilience to climate change without compromising its capability to achieve its emissions targets. This research project has gathered a substantial database of on site measurements of the environmental performance across

a wide selection of hospital building types. The likely performance of the buildings is modelled against predictive climate data, and almost all types are vulnerable. Diagnosis of the underlying lack of resilience has informed the design of detailed refurbishment strategies based on practical examples, all costed in detail. Adaptation measures emerge as being potentially economic, in line with current back-log maintenance budgets and quick to implement with unexpected mitigation benefits. The work is summarised in a film available at: <http://sms.cam.ac.uk/media/1446036>

In this response, we have drawn on the experience of ARCC CN and UKCIP on adaptation more generally, and the BIOPICCC and DeDerHECC projects for detailed comments relating to health and care services.

GENERAL POINTS

We would like to draw attention to the different demands of responses to extreme weather events, such as heavy rainfall and flooding, heatwaves and storm surges and to longer term and more incremental changes which establish the 'new normal', for example higher average temperatures.

Climate change projections suggest that there will be more extreme events in future, and that they could become more extreme (e.g. hotter heatwaves). Extremes are thus likely to be a greater burden than at present, so a coping or resilience response may not be appropriate for the longer term. Similarly, trends, for instance to heavier rainfall and subsequent flooding, may require altered behaviour to accommodate the climate change (e.g. more frequent drain maintenance), while coldwaves will continue to be a problem.

Thus, our society will need to adapt not only by coping better with climate extremes, but also by adopting new strategies to handle the long-term shifts that will be a result of climate change.

For further discussion, see Oven, K., Curtis, S., Reaney, S., Ohlemuller, R., Riva, M., and Dunn, C. for the BIOPICCC Team (2011) Climate Change and Human Health: Defining Future Hazard and Vulnerability Relevant to Older People's Health Care in England. Published online; in press for special issue of the Journal of Applied Geography on the "Health Impacts of Global Climate Change: A Geographic Perspective." 33, 16-24. An open access briefing is available at: www.dur.ac.uk/resources/geography/BIOPICCC/Toolkit/biopiccc_toolkit_appendix_1a.pdf

RESPONSES TO CONSULTATION QUESTIONS

Q1 Is a new strategy for sustainable development needed to co-ordinate and guide the next phase of action to 2020?

ARCC CN welcomes the principle of a new strategy, particularly the proposal to go beyond carbon reduction, and to embrace a wider sustainability goal which we believe should encompass adaptation to a changing climate.

Q2 Which elements of the health and care system should be included in the scope of the next strategy?

ARCC CN believes that it will be necessary to extend the new strategy to cover the wider health and care system. The growing diversity of health and social care providers in different sectors may make services increasingly difficult to coordinate and more difficult for users to understand. It is important to adopt a 'whole system' approach to adaptation of health and social care systems to ensure that these are well integrated and 'joined up'. A conference organised in collaboration by BIOPICCC and ARCC outlined key issues including the need for: a cross-sector approach at different levels of administration; support and guidance from central agencies to local organisations; long as well as short term planning for climate change; and attention to the risk that climate change may most severely effect certain vulnerable groups, exacerbating inequality of health and wellbeing www.dur.ac.uk/resources/geography/BIOPICCC/ARCC_SCIE_cross_sector_symposium_report_final.pdf

BIOPICCC underlined the need for a whole systems approach to sustainable development in order to roll out national policy effectively at local level encouraging continued engagement with a range of partners. See the BIOPICCC toolkit for suggestions on how this might be taken forward www.dur.ac.uk/geography/research/researchprojects/biopiccc/toolkit/

Successful adaptation also needs to take account of the impact of climate change on the adapting organisation and also those stakeholders with which it works, e.g. suppliers, users or its own staff. One such issue is the interdependencies between service providers, and how climate risks for one provider can contribute to operational risks for others, for example school closures due to adverse weather may increase absenteeism in other sectors, as parents stay at home to look after their children. Working together will help to uncover the interdependencies and find ways to plan for them.

Q3 Should the health and care system set itself challenging ambitions with regard to sustainability?

ARCC CN supports the creation of a sustainability strategy that understands and takes action on adaptation. Leadership by such a significant public service will be invaluable in promoting the merits of adaptation throughout the health and care sector. ARCC CN considers that it would be helpful to have a more specific ambition around the need for planning strategies that build a robust and resilient health and care service for the future. This would not necessarily be limited to climate change, but might also include issues such as demographic change and technological development.

We believe this is necessary as decisions with long-term implications, for example relating to buildings, can offer the opportunity to be well-adapted to future conditions. However, decisions that do not take account of realistic future scenarios risk locking the health and care sector into poorly performing practices and may restrict future adaptation options.

Findings from BIOPICCC suggested that Joint Strategic Needs Assessments and Health and Well Being Boards should include in their remits measures to support the integration of sustainability across the whole system of health and social care delivery. Given the plurality of providers of health and social care services, enhanced standards across the system might include more attention to preparedness for extreme weather events in health and social care commissioning contract requirements.

Q4 Should sustainable development be measured more broadly than through carbon reduction only?

ARCC CN welcomes additional measures that move the strategy beyond carbon reduction. ARCC CN believes that adaptation to a changing climate is a key part of sustainability, and will be critical for an organisation as complex as the NHS, which has such a widespread impact on much of UK society.

None of the proposed measures specifically include a reference to adaptation, although adaptation might be expected to be embedded in several of them, such as within a sustainable development management plan or as one of the responsibilities of a sustainability champion. It is generally the experience of UKCIP that adaptation is not as well-understood as measures relating to carbon reduction. Because of this, it would be helpful to see a distinct adaptation measure. It is an emerging area, although guidance is already available www.ukcip.org.uk/adaptme-toolkit/

Adaptation does not readily lend itself to universal quantitative measurement (akin to reduction in carbon dioxide emissions), as climate change-related vulnerabilities and responses will vary from location to location. However, shared approaches can provide useful lessons for others: for example, DeDeRHECC was able to propose broadly applicable recommendations because of the limited number of building types used for the NHS hospitals.

Attempts to monitor progress on adaptation in the public sector have generally been associated with process-based measures. Most notably, from 2008 to 2010 individual local authorities were asked by Government to report their progress on adaptation in line with National Indicator 188. A guidance note is still online at www.gov.uk/government/uploads/system/uploads/attachment_data/file/166274/ni188-guidance.pdf. We would propose that those working on adaptation in the health and care sector could look to this as a starting point, as it addresses the needs of complex organisations with a combination of estates, services, staff and policies. At the time of writing, there is still a substantial amount of online information available about NI188.

BIOPICCC underlined that preparing for climate change extends beyond making buildings more carbon efficient to making them resilient to extreme weather events. The built infrastructure that supports the delivery of health and social care services extends beyond buildings to utilities and transport networks that link these buildings and ensure they keep functioning, and organisational processes are important for adaptation and resilience.

Q5 What areas of sustainable development need to be prioritised in the next strategy?

Proposal 1: DeDeRHECC recommends refurbishment and retrofitting that will meet carbon reduction targets yet also provides a hospital environment that will continue to be fit for purpose well into this century. The research used a diagnosis of the underlying lack of resilience in hospital buildings to inform the design of refurbishment strategies based on practical examples, all costed in detail. Adaptation measures emerge as being potentially economic, in line with current back-log maintenance budgets and quick to implement with unexpected mitigation benefits. Thus, mitigation and adaptation objectives can be achieved through the same activity.

Proposal 2: BIOPICCC shows that a whole system is required to address the challenges of climate change on health and social care. Adaptation needs to be appropriate for locally variable conditions around the country. Action by central government and administration will be needed to support local agencies and communities responding to national policy and to help them to plan for adaptive strategies that will be suitable for local conditions. BIOPICCC illustrates how to adopt this approach, working with partners at various 'levels' of the system www.dur.ac.uk/geography/research/researchprojects/biopiccc/toolkit/

Proposal 3: ARCC CN welcomes proposal 3, although this work should go beyond just considering resilience to extreme events. While extremes are important for health impacts and service delivery, it will also be necessary to consider how the health and care sector will adapt its services to a new 'normal': by mid-century, an average summer may be 2 to 3°C warmer, with the warmest summer day being around 4°C hotter (<http://ukclimateprojections.defra.gov.uk/>). This will help to address the risks identified in the UK's Climate Change Risk Assessment (www.gov.uk/government/publications/uk-climate-change-risk-assessment-government-report)

Ensuring that adaptation practice is established throughout an organisation can be a long-term process that has an effect on all parts of an organisation's functions and operations. There are tools to assist this process, but when the benefits of adaptation may be many years into the future, it will need consistent and high-level endorsement to ensure that it retains an appropriate level of action. UKCIP reviewed a several adaptation tools as part of a study on the attributes of well-adapting organisations www.ukcip.org.uk/wordpress/wp-content/PDFs/UKCIP_Well_adapting_organisations.pdf which may offer some guidance.

Q6 What areas of research need to be prioritised to enable a more sustainable health and care system?

We consider that adaptation to climate change is a priority element in achieving a sustainable health and care system. One of the biggest challenges for this strategy will be to incorporate adaptation into existing practice, and there may be lessons to learn from other sectors and other issues. The role of the Living With Environmental Change (LWEC) initiative (www.lwec.org.uk) in drawing together expertise will provide be a focus for sharing knowledge, developing links and considering new areas of study, which could be beneficial to the NHS strategy and practice.

Human knowledge, behaviour and organisation are important to consider when developing strategies to adapt built infrastructure for older people's care to extreme weather events. Local civic intelligence and informal, community-based capacities need to be combined more effectively with scientific and expert knowledge and with the resources of professional agencies in order to build resilience, as illustrated in BIOPICCC case studies using participative mapping methods: www.dur.ac.uk/geography/research/researchprojects/biopiccc/toolkit/neighbourhood_planning/

Q7 Are there any questions, issues and opportunities missing from this consultation document?

Points which the BIOPICCC project identified as important in two local authorities (and are likely to have more general relevance) are as follows.

- Disruption to health and social care is often caused because transport and utility networks are interrupted, so that preparedness for extreme weather events needs to take into account these parts of the infrastructure system. This underlines the need for a whole system (multi-sector) approach.

- Challenges of service integration and resource pressures on the health and social care sector are raising new issues for planners, underlining the need to enhance preparedness for continuity and contingency when services are disrupted during extreme weather events.
- Discussion with local residents and 'frontline' service providers can provide local intelligence about the parts of the health and social system that are most likely to be disrupted by extreme weather events, and the infrastructures and services that are most important to users. This information may help to guide cost-effective investment in priority projects for adaptation and resilience to extreme weather.
- Developing appropriate health and social care services will require strong partnerships between formal service providers in different sectors as well as informal carers.
- Both short-term and long-term planning for climate change and extreme weather events are required. It is important to ensure that health and other social inequalities are not created or exacerbated as a result of changing risks of extreme weather.