

Cwm Taf Morgannwg UHB

Title: Making connections to improve climate resilience for health

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Acknowledgements: Vicki Wallace (project sponsor), thank you for advice and support from individuals within health adaption networks in UK and Europe.

Topic Area seems to me that more categories below apply, no?

Adaptation <input checked="" type="checkbox"/>	Communications and engagement <input checked="" type="checkbox"/>	Estates and facilities (energy, waste, water) <input type="checkbox"/>	Food, catering and nutrition <input type="checkbox"/>
Funding and financial mechanisms <input type="checkbox"/>	Medicines <input type="checkbox"/>	Research, innovation and offsetting <input type="checkbox"/>	Strategic ambition <input checked="" type="checkbox"/>
Supply chain and procurement <input type="checkbox"/>	Sustainable models of care <input checked="" type="checkbox"/>	Travel and transport <input type="checkbox"/>	Workforce, networks and system leadership <input checked="" type="checkbox"/>
Green/blue space and biodiversity <input type="checkbox"/>	Digital transformation <input type="checkbox"/>	Sustainability education <input type="checkbox"/>	
Other (please specify):			

**Topics aligned with the 12 Greener NHS workstreams (NHS England) are shaded.*

Key message / aim

Climate change impacts population health, but also healthcare's ability to provide effective health services to their population. Health adaptation is the deliberate action taken to protect population health and well-being in response to the stress posed by climate change. The effectiveness of health adaptation depends upon the climate resilience of healthcare, defined as health services capacity to anticipate, respond to, cope with, recover from, and adapt to climate related shocks and stresses whilst continuing to maintain ongoing improvement in population health and well-being.

My project aimed to raise awareness of the need for health adaptation within CTM UHB, with aim of generating key considerations and recommendations for the health board to improve climate resilience for health.

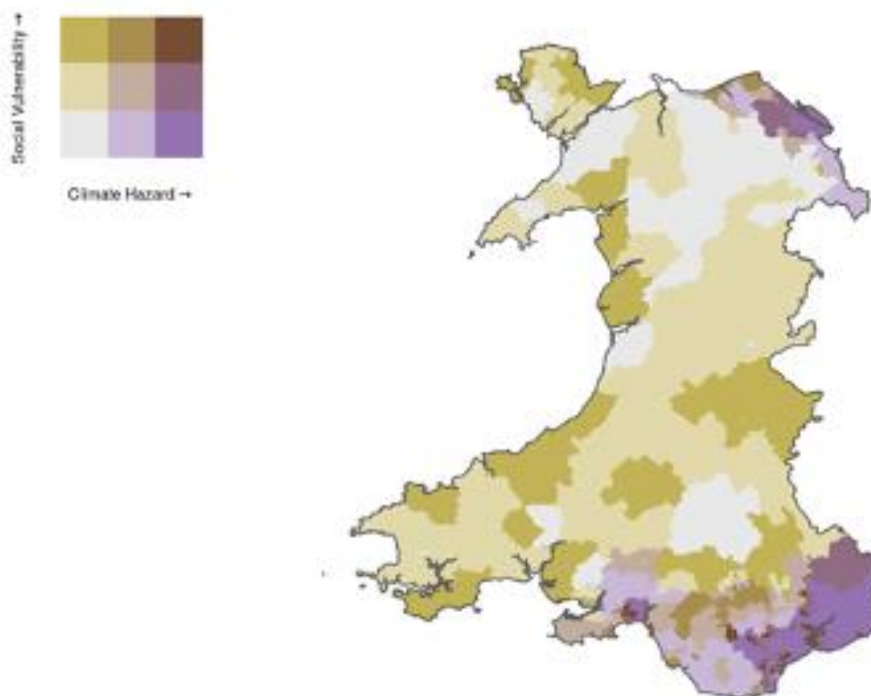
What was the problem?

Wales has a national climate adaptation plan, called a Climate Conscious Wales outlining over 30 actions between 2020-2025 towards achieving a Resilient Wales by 2030. The Well-being of Future Generations Act 2015 places a duty on public bodies including Health Boards to pursue the goal of a Resilient Wales. Welsh Government Health and Social Care Climate Emergency Programme aim is twofold to reduce emissions by over 34% by 2030 (outlined in NHS Wales Decarbonisation Strategic

Delivery Plan) and for a health and social care system resilient to climate change. The Chief Medical Officer for Wales 2022 report recommends for adaptation plans to be developed across the health and care system in Wales.

In the 21st Century healthcare faces compounding challenges to health and well-being that cannot be considered in isolation but as an interconnected and cumulative whole, each of which are stressing the resilience of healthcare services. Climate change is recognised as the greatest threat to health by the World Health Organisation and impacts health directly from extreme weather events, but also indirectly by the disruption to environmental systems and social systems, including disrupting healthcare delivery.

According to the most recent UK Climate Change risk assessment there is an adaptation gap between current planning and the action required to manage the risks of climate change in Wales, including an adaptation gap related to the disruption of health and social care services due to a greater frequency of extreme weather.



This heat stress vulnerability map shows that CTMUHB covers an area of particular vulnerability in terms of heat stress, particularly due to the social vulnerability of our population group <https://akaresearch.shinyapps.io/heatstressvulnerability/>

Climate hazards relevant to population health and service delivery in CTMUHB include heat, flooding, wildfires, drought and changing geographic range of vector borne disease. Our population demographic is particularly vulnerable to the health impacts of climate change due to high levels of disability, ill-health and low income. CTMUHB is in a unique position compared to other health boards in Wales, with specific vulnerability and opportunity to improve resilience to climate change based on the demographics of our population, this includes high social deprivation, and being a key anchor institution with the majority of our workforce living within the health board area.

What was the solution?

The project involved reaching out to those with an interest in health adaptation within the health board. This included our health board Green Group, as-well as reaching out to public health colleagues, and gathering ideas and input from them. This was a useful process for raising awareness, but also shared learning, and allowing those with a particular interest and for whom this was relevant for their role to get more involved, and to stay up to date. This process meant I ended up working closely with one of the Public Health registrars. This process also helped to understand what work was already going on within the health board which was relevant to improving climate resilience, such as our Health Boards Anchor Institution Plan, and where this work would sit within the structure of our health board.

The project also involved making connections with informal and more formal networks within Wales and beyond. This was very helpful for gathering case studies, and learning from health facilities that have been impacted by climate change, as-well as from organisations and groups that were further along with their thinking and action on adaptation. I was invited to become a member of Wales' National Health Adaptation Steering Group to represent our health board, as-well as signing our health board up to the European Scaling Network for Healthcare Climate Resilience.

What were the challenges?

The project was slow initially to get off the ground. This was made somewhat slower by me being new to the organisation, and my limited knowledge of the topic. I found it initially challenging to talk about adaptation, there seemed to be better awareness of need for decarbonisation in healthcare being supported by national and regional strategies, but less understanding of the need to adapt to climate change and improve climate resilience. Communication was made more difficult because there wasn't a shared understanding of what the terms health adaptation and healthcare climate resilience were.

There were many different avenues for my project to take, which included exploring creating a toolkit for health workers to feel more engaged in health adaptation, and looking at a specific climate hazard and how this was impacting a specific patient group or service within our health board. However after discussions with my project sponsor what was deemed to be most useful at this stage of our health board's adaption journey was for my project to take a broad approach, and introduce the topic at a high level within the health board so that health adaptation could be considered strategically across the organisation as a whole.

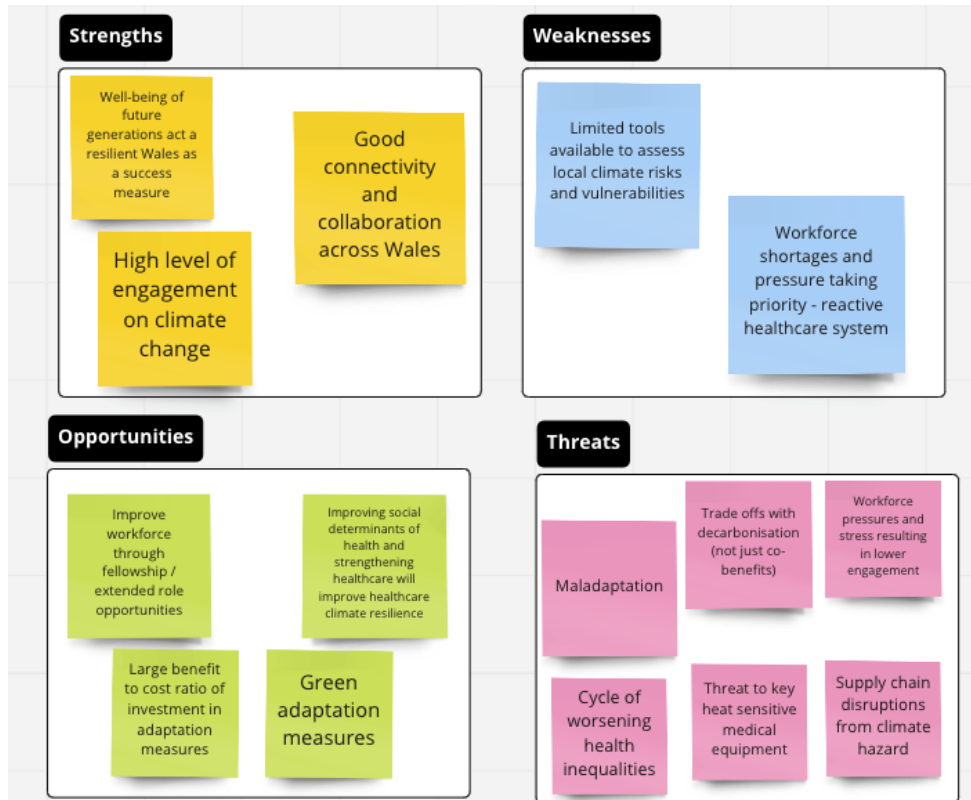
Personally I noticed there was less structured support for doing a project on health adaptation, compared to a decarbonisation QI project. It was also a challenge to quantify impact due to the element of systems convening and long term aim for the project it was harder to quantify the impact of my project compared to a sustainability quality improvement project with carbon savings. I also had the challenge of doing my project alongside a busy A+E junior doctor job during winter, which helped to emphasise the balance needed between immediate and long term challenges.

What were the results/Impact?

The process of doing the project was valuable and action learning can be taken from doing the project. The project has meant bringing people together within our health board that have an

interest in the topic, and making sure the health board is better connected with national work on adaptation planning, as-well as part of scaling networks of good practice across Europe.

This hopefully has helped to set the ground for future work on adaptation within the health board and improving healthcare climate resilience.



This figure shows some of the learning happening around the Strengths Weaknesses Opportunities and Threats to adaptation within Wales, that I was able to feedback to national adaptation steering group based on conversations and input had as part of my project

The conversations I have had about my project will have helped to raise awareness and has helped to assess where the health board is in terms of adaptation planning, as-well as begin to understand what our local vulnerabilities are and what our current gaps in knowledge are.

The outcome of project being a paper for the health board, will be an initial step for them to take forward and develop their own Adaptation Plan.



This figure shows our proposed next steps for CTMUHB as part of a continuous cycle of improving healthcare climate resilience, which will be part of the final paper presented to the health board.

Next Steps

It will be important to use the four steps outlined above to enable co-production with stakeholders to populate the actions towards the key components of climate resilient healthcare. We have outlined three key components of climate resilient healthcare based on WHO framework; climate leadership and governance, infrastructure resilience, and health workforce preparedness. Building on this we recommend that the Health Board follows the Chief Medical Officer for Wales advice to develop their own adaptation plan.

What were the learning points?

- Health adaptation requires a different form of leadership to healthcare decarbonisation as it is a long term ongoing process of iterative service improvement and transformation with the aim of improving healthcare climate resilience.
- Healthcare climate resilience means being a safe haven in the storm of climate change. This means taking a comprehensive and systematic approach to knowing the intensity, duration, and location of each particular challenge posed by climate change and how this will effect each patient, staff and service. It also means strengthening health systems and addressing the social determinants of health.
- Before adaptation planning can be taken, awareness of need for adaptation and what it is has to be clearly communicated across the organisation, this first stage is where I feel we are currently at in CTM UHB and my project has helped with this initial stage
- There is a need for long term planning and for workforce development to improve adaptive capacity to climate change

- Health adaptation is not just about emergency preparedness but is about prevention and preventing incidents from becoming emergencies, and each member of the organisation will have a role in improving climate resilience
- It is important to consider impacts of climate change on workforce as-well as on patients, particularly when health workers have been impacted by floods for example within our health board
- There is a growing supportive network of people with expertise in health adaption across UK and Europe and opportunities for shared learning, particularly from health facilities that have been impacted by climate change

What the team and/or patients and carers had to say

“Health adaptation is about stopping incidences becoming emergencies” – Climate Resilient Network Member

“I realised from engagement with the project my knowledge of adaptation wasn’t much greater than knowing “climate change is the greatest threat to health”. I hoped that strong mitigation effort would reduce this threat, however this was wishful thinking as we are already feeling the impacts. I found it useful to drill down into the specifics of why climate change is the greatest threat to health, to understand the local effects to health and how we need to adapt now and into the future.” – Personal Reflections

“Healthcare means being a safe haven in the storm of climate change” – Healthcare Without Harm project partner of European Healthcare Climate Resilience Network

Resources and references

- England’s health and care national adaption plan: <https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/adaptation/>
- UK Climate Change Risk Assessment: <https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-2022>
- Climate change risk assessment for Wales: <https://www.ukclimaterisk.org/wp-content/uploads/2021/06/CCRA-Evidence-Report-Wales-Summary-Final.pdf>
- Climate change risk assessment brief for health and care: <https://www.ukclimaterisk.org/wp-content/uploads/2021/06/CCRA3-Briefing-Health-Social-Care.pdf>
- [Welsh Government](#) preparing for a changing climate: https://www.gov.wales/sites/default/files/publications/2019-04/preparing-for-a-changing-climate-starting-part-1_0.pdf
- Climate conscious Wales: <https://www.gov.wales/prosperity-all-climate-conscious-wales>
- WHO publications on building climate resilient health systems: <https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/country-support/building-climate-resilient-health-systems>
- Power outages and health paper: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3879211/>
- Planning for a resilient Welsh healthcare estate: <https://nwssp.nhs.wales/ourservices/specialist-estates-services/specialist-estates-services-documents/whbns-library/whbn-00-07-planning-for-a-resilient-healthcare-estate-pdf/>

- COP26 health argument for climate action: <https://www.who.int/publications/i/item/9789240036727>
- Most recent CMO report section on climate change: <https://www.gov.wales/chief-medical-officer-annual-report-2021-2022>
- IPCC adaptation report, chapter 7 health and well-being: https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf

Want to know more?

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- Partner organisations involved: **Health Care Without Harm Climate Resilient Network** <https://life-resystal.eu/> **Green Health Wales** <https://www.greenhealthwales.co.uk/>
- Has this project or story been made public in any form before? **No**