

Cheshire & Merseyside Digital Exclusion Mapping Tool

Thrive by Design have worked alongside Cheshire and Merseyside Health and Care Partnership to map digital exclusion across the Cheshire and Merseyside region.

The aim of this project was to create a heat map to highlight areas where the population are at risk of digital exclusion to inform ways to improve access to digital services and aid in targeting support where most required.

Local and national data sets were collated and we worked with cross-sector partners to create the digital exclusion heat map. It visualises the risk or likelihood of digital exclusion for every Lower Super Output Area (LSOA) in Cheshire and Merseyside. It allows for a starting point to understand better where digital inclusion efforts should be targeted across the region in order to focus on the greatest need or build on and support existing capacity.

In order to understand the level or likelihood of digital exclusion, it was imperative to carry out initial research and data collating. The data collated was used to build the map focusing on these questions:

1. What areas of Cheshire and Merseyside are most at risk of their populations being digitally excluded?
2. What areas are at risk of digital exclusion for factors such as age, deprivation, rurality or type of internet use?
3. What digital inclusion activities are already underway in Cheshire & Merseyside and where?
4. Where are the existing places that could be 'activated' to deliver inclusion activities?
5. Where is the health-related first points of contact which may be able to refer to digital inclusion activities?

In the tool there are 8 reports created to explore digital exclusion. These are:

1. The Index of Digital exclusion
2. Multiple deprivation
3. Rurality
4. Housing
5. Broadband coverage
6. Health and social care resources – GP's, pharmacies, hospital, community centres, libraries
7. Ranked data – all data ranked
8. Digital exclusion by primary care networks (PCNs)

Other factors to be considered – ethnicity.

You can [read about how the values and datasets have been weighted on the heatmap introduction page](#).

We have completed digital inclusion mapping work previously with other ICSs across different regions. However, more questions required exploration with this project which meant trialing and testing new tools to visualize data in a better way. This journey consisted of facilitating co-design workshops with colleagues from health care and social care.

This helped to identify data sources such as the Office of National Statistics (ONS) Index of Multiple Deprivation (IMD), local service directories, the NHS Website and Local CCG websites. Data was shared across partners using secure networks and live accessible formats to ensure collaborative working and time effective updates.

Developing a prototype

The first prototype was built using Google Maps – this included testing and iterating by sharing the map widely and obtaining feedback.

Informed by the feedback, the second prototype was developed using Microsoft Power BI.

The prototype heat map allows you to explore and analyse key factors that impact on the risk of digital exclusion. It divides the data into two groups; the first looking at risk – relating to demographic and socioeconomic factors and the second looking at capacity – relating to local existing inclusive health and digital inclusion support.

The digital inclusion heat map is currently being used by Cheshire and Merseyside Health and Care Partnership to evaluate and explore changes that can be implemented within the framework to reduce digital poverty across the region.

An evolution in digital exclusion mapping

This particular project followed on from previous mapping work carried out with Norfolk and Waveney ICS and Connected Nottinghamshire. We are further exploring and testing other mapping tools and assets to support the accessibility, functionality and insights these tools can offer. We have shared our learning via our website, case studies and repository on NHS futures to allow other services and care systems to benefit from this work as well as co-produce and work on further projects collaboratively for inclusive digital transformation.

We're continuing to work with Norfolk and Waveney ICS and Connected Nottinghamshire to explore how the heat map can be turned into actionable insights and changes in digital health inclusion support across their populations.

Challenges

As we continue to iterate and test the heat map, we're identifying some limitations that we need to recognise and overcome including the accessibility of the data and the PowerBI tools and the need to keep the data sets up to date such as updating to use the latest Census data from 2021.

It can serve as a great benefit to staff and patients as once areas of digital exclusion and poverty have been identified and improvement strategies have been implemented; it can further enhance user experience of services they may not have been able to access before or as easily. Staff can reach out to wider population where historically there may have been a pattern of delayed and missed care provided. It helps health and care staff to take practical steps to increase access to digital services.

Karen Swan – Director of Influential

“The digital exclusion heatmapping tool, made it really clear where we needed to focus our resources when it came to interviewing and gaining insight into the barriers to digital inclusion for people across Cheshire and Merseyside. We used the tool to determine the places where we would focus street surveys and pharmacy intercept interviews, in order to hear the voices of people who are truly digitally excluded, listen to what their barriers are and test ideas for possible interventions to support digital adoption”.

VOLA Merseyside, working with the Liverpool City Region Combined Authority, found the tool to be very useful and timely.

“The tool provided data to help target neighbourhoods and areas with the highest risk of exclusion scores for the City Regions new UKSPF Digital Connectivity Grants Programme. They described the tool as a really useful data point for charities and voluntary sector organisations”

If you have any questions about this project or would like to find out more please get in touch on thrivebydesign.lypft@nhs.net.