

Optimising access to urgent care in Cornwall using geographic modelling



In November 2016, the major public sector health and care organisations in England published an outline plan to improve services, based on the NHS England Five Year Forward View and Devolution Deal for Cornwall. This programme of work is now known as 'Shaping Our Future' and is the Sustainability and Transformation Partnership (STP) plan for Cornwall and the Isles of Scilly. One of the aims of the STP is to ensure that the urgent care services being delivered in the county are sustainable for the future.

The STP plan to establish a number of urgent treatment centres in Cornwall, that can provide a broader range of services than the current Minor Injury Units, and help to ease the pressure on the Emergency Departments. PenCHORD, PenCLAHRC's operational research team, was asked to develop a geographic model to determine the best locations for these centres (amongst existing sites) for different numbers of centres.

"This project is a key example of how mathematical modelling and computer simulation methods can help inform decision making, and ensure that service provision meets the needs of patients. Our work here has fed directly into the Cornwall Sustainability and Transformation Plan, and will help to ensure that urgent care services in Cornwall remain sustainable and effective for the future."

Dr Daniel Chalk, Senior Research Fellow, PenCLAHRC

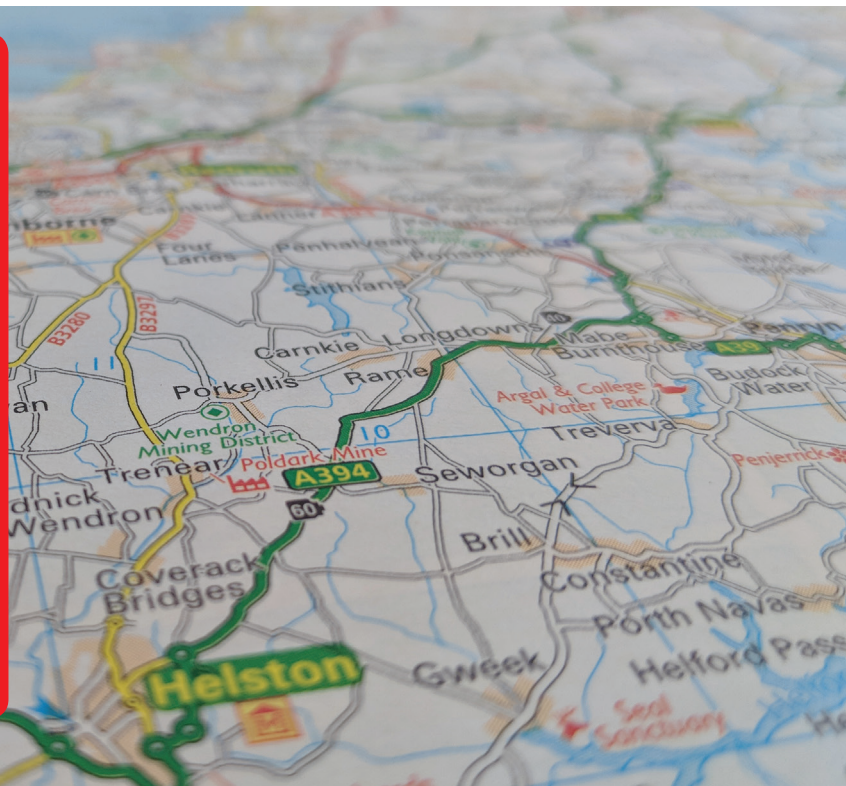
PenCHORD developed a model which showed that there are limited benefits of having more than five centres in terms of reducing the distance the furthest patients would have to travel to access them. The model also provided the combinations of locations that would lead to the lowest average and maximum travel time for those patients accessing urgent care services.

What happened next?

The evidence from the model directly fed into the urgent care stream of the STP.

As a result of the research conducted by PenCHORD, the STP decided to open three new urgent treatment centres at Bodmin Minor Injury Unit, West Cornwall Hospital and Treliske Hospital, as these sites were predicted by the model to minimise travel time for patients if there were three centres.

The plans to develop these new urgent treatment centres were unveiled to the public in October 2018.



Useful Links:

www.shapingourfuture.info/plans-to-create-a-community-based-model-of-care-unveiled/



For further information visit:

www.clahrc-peninsula.nihr.ac.uk

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