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Evaluating the impacts on health outcomes of Welsh Government funded schemes designed to improve the energy efficiency of the homes of low income households: A comparison of individual level and area based schemes.

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Introduction

Living in a cold and/or damp house can damage health. To reduce fuel poverty in Wales, the Welsh Government developed domestic energy efficiency schemes - an individual-level scheme, Warm Homes Nest and an area-based scheme, Warm Homes Arbed. Both schemes provide improvements to those most likely affected by fuel poverty.

Conclusion/Implications

Providing home energy efficiency interventions has the potential to benefit population health; however, there is a scarcity of evidence comparing different methods of implementing schemes. Our findings will inform more effectively-focussed home energy efficiency schemes and potentially thus improve the health of people living in Wales.

Objectives and Approach

Overall aim: to evaluate the health impacts of Welsh Government funded schemes designed to reduce fuel poverty. Presented objective: to investigate the relative impact of the individual-level and area-based schemes on the health of recipients.

A longitudinal dataset was created using the anonymised residence that received improvements linked to residents' health measures (hospital admissions, GP prescriptions and clinical diagnoses) using routine health records held in the SAIL Databank at Swansea University.

We used difference-in-difference (DID) estimations to compare any changes in recipient health before and after intervention with any concurrent change in health in those yet to receive the intervention.

Results

An analysis of the Warm Homes Nest Scheme, published in 2017 and presented at the IPDLN 2017 conference found a positive impact of the scheme on the health of recipients.

This presentation will describe the further analysis (concluding shortly) comparing the area-based Arbed scheme with both the recipients of the individual-level Nest scheme and groups in comparable need that had not yet received the intervention. We will present results focussing on the relative impacts of the two schemes on cardiovascular, respiratory and general health.