

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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Background

To reduce fuel poverty and its adverse health effects in Wales the Welsh Government developed programmes to improve the energy efficiency of homes. This includes the fuel poverty scheme: 'Warm Homes Nest'. The scheme was available to low income and vulnerable households in Wales from 2011 to 2015, and provided energy efficiency measures e.g. insulation and heating upgrades such as a more efficient boiler, aimed to maintain warmer homes.

Objectives

The overall aim was to evaluate the health impacts of Welsh Government funded schemes designed to reduce fuel poverty through the use of existing data linked to the routine health records held in the SAIL Databank at Swansea University.

Method

We created a longitudinal dataset of individuals living in residential dwellings in receipt of home energy efficiency improvements, then linked to their health records to create a summary of their health utilization measures.

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

Findings

We have built upon our previous work presented at the ADRN 2017 conference where we reported a positive impact of the Nest scheme on the respiratory health of recipients. We will show a significant impact on respiratory conditions leading to a change to the eligibility criteria for the successor scheme. We will discuss our ongoing work analysing the impacts of the Nest scheme on mental health outcomes. This will include the findings from the literature search demonstrating the need for more evidence using objective outcome measures, and on selecting and utilizing validated codes developed for administrative data to investigate any changes in common mental health issues such as depression and anxiety.

Conclusions

Providing home energy efficiency interventions has the potential to benefit population health. Our findings will inform more effectively-focussed home energy efficiency schemes and potentially thus improve the health of people living in Wales.

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