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Fuel Poverty Interventions and Healthcare Usage: Insights from Warm Wales

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Warm Wales (WW) is a community-based programme addressing fuel poverty and its broader impact on health and well-being. Interventions combine tailored energy advice, practical support, and education with wellbeing and social prescribing projects to improve health outcomes. Fuel poverty is closely linked to poorer health, making evaluating such programmes using housing and health linked data crucial. To describe the demographic, socioeconomic, health, and housing characteristics of individuals supported by WW and examine the programme's impact on primary care interactions. Methodology: An observational longitudinal cohort study linking WW service data with routinely collected electronic health record and administrative data in the Secure Anonymised Information Linkage (SAIL) Databank. Descriptive statistics summarised the WW supported population. Difference in Differences (DiD) compared primary care interactions rates

between cases and Coarsened Exact Matched controls. WW supported 4,083 individuals living across 1,317 properties (January 2021–December 2023). Most WW-supported properties were older (65% built before 1966 vs 60.7% in Welsh housing stock) and socially rented (62.3% vs 19.2% in Welsh housing stock 2021). The cohort mirrored Welsh population sex and ethnicity distributions but was notably younger (aged 18 and under 40.1% vs 25.8%), in the most deprived quintile (40.9% vs 24.0%), and predominantly urban (81.5% vs 73.1%). Health characteristics and DiD results are pending approvals. Warm Wales supports younger individuals living in most deprived areas and older housing. These characteristics are consistent with groups at risk of fuel poverty. DiD analyses are ongoing and will assess the intervention's impact on healthcare utilisation.

