

Fuel Poverty Programme

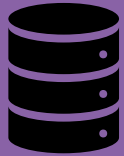
Using data to reduce health inequalities

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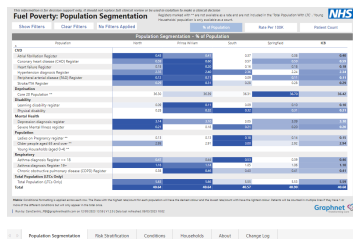
Fuel Poverty Storyboard

Data Sources



- ➔ CIPHA Primary care patient level data
- ➔ SUS data
- ➔ Local feeds from providers – Pregnancy register
- ➔ ONS - Fuel poverty by LSOA
- ➔ Department of Levelling Up, Housing & Communities Energy Efficiency

Dashboard



CIPHA data enable the stratification of the fuel-poor population using the risk of admission, mortality risk and other factors such as living alone. The ability to segment and stratify the fuel-poor population is essential to the identification of people at high risk.

Clinical Areas



The full list of NICE innovations and conditions on this project are:

Cardiovascular Disease (CVD)

Heart failure medication ([TA599](#), [TA623](#), [TA679](#), [TA773](#)),

Coronary artery disease ([TA607](#))

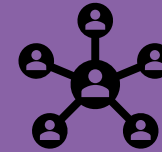
Lipid management ([TA694](#), [TA733](#))

Respiratory

COPD ([TA461](#))

Asthma ([TA479](#), [TA565](#), [TA671](#), [TA751](#)).

ICB System Intervention



A multi-agency collaborative intervention approach.

- ➔ Primary care network (PCN).
- ➔ Secondary care.
- ➔ Local authority.



Patient Outcomes



Short Term

- ➔ Rapid identification of high-risk patients.
- ➔ Reduced COPD exacerbations.
- ➔ Enable quicker eligibility checks of patients suitable for remote monitoring pathway.
- ➔ Improve primary care QOF targets.
- ➔ Reduce fuel poverty debt.
- ➔ Optimise COPD inhaler therapy.

Long Term

- ➔ Reduced health service utilisation – A&E attendance, hospitalisation, GP visits, 111/999 calls.
- ➔ Improved health and wellbeing of patients – mental health, smoking etc

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Executive Summary

NHS Cheshire and Merseyside, and partners are taking action to reduce the risk of death and ill health associated with living in a cold home.

In England, the government introduced a new definition of fuel poverty in 2021. Referred to as the 'Low Income Low Energy Efficiency' (LILEE) definition of fuel poverty, it defines a household as fuel poor if:

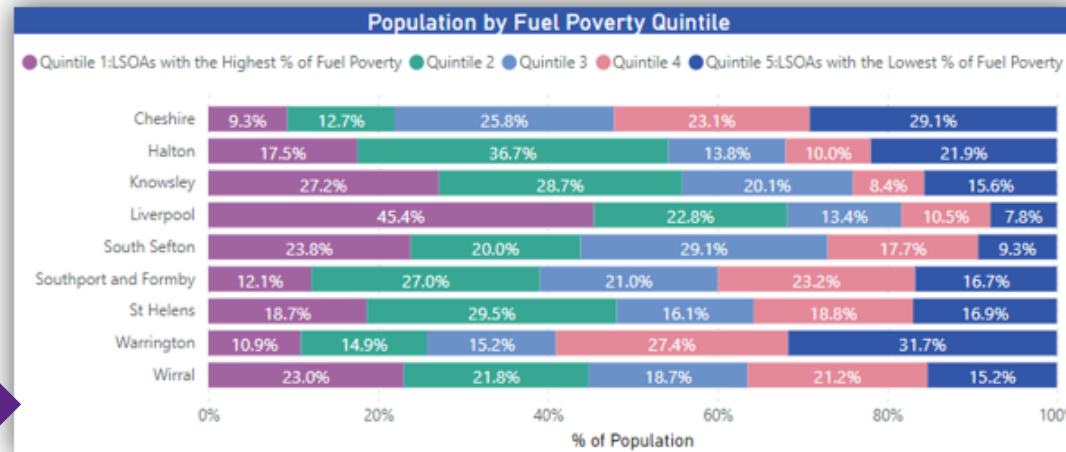
- ➔ They are living in a property a fuel poverty energy efficiency rating (FPEER) of Band D or below
- ➔ The household disposable income (income after housing costs and energy needs) is below the poverty line.
- ➔ A household is said to be in a state of relative low income if their equivalised income is below 60% of median income.

The Hypothesis

A population health management solution will help understand the citizens in places most likely to have fuel poverty. Citizens living in a household with an energy certificate rating of D-G will fall within the vulnerable group. Finding patients at high risk will improve how individual needs are connected to services. The first phase of the analysis covers five workstreams namely fuel poverty dashboard, high risk COPD patients, children with asthma and asset mapping.

The Solution

- Fuel poverty dashboard.
- Precision for finding patients at high risk.
- Interventions involves connecting patient needs to services.
- Proactive prevention of poor health and care outcomes.



Liverpool, Knowsley are the areas with the highest proportions of citizens with the worst fuel poverty likelihood (Quintile 1-2). Of the citizens living in the most fuel poor LSOA's, there are 409, 869 citizens living in a household with an energy certificate rating of D-G.

Fuel Poverty Project Benefits

Short Term

- ➔ Identification of people most at risk of poor health as result of fuel poverty.
- ➔ Making the patient known to other relevant/available services.
- ➔ Intervention is tailored to the need of individual patient.
- ➔ Identifying the range of services/organisation/assets in each Place across all sectors that will support people experiencing fuel poverty.

Long Term

- ➔ Reduction in hospital admissions.
- ➔ Reduction in attendances (A&E, GP, Others).
- ➔ Reduction in exacerbations.
- ➔ Patients experience reduced anxiety related to fuel poverty.

NICE guideline [Overview](#) | [Excess winter deaths and illness and the health risks associated with cold homes](#) | [Guidance](#) | [NICE](#)
Energy certificates sourced from <https://epc.opendatacommunities.org/>

National Context

England Fuel Poverty Statistics

National statistics report (2020) shows there were an estimated 13.2 per cent of households (3.16 million) in fuel poverty in England under the 'Low-Income Low Energy Efficiency' (LILEE) metric, down from 13.4 per cent in 2019 (3.18 million). In 2021 the Government redefined fuel poverty for English households.

The LILEE indicator counts a household as fuel-poor if they are living in a property with an energy efficiency rating in band D, E, F or G and their disposable income (income after housing costs and energy needs) is below the relative poverty line (that is, having an income 60 per cent below the median national household income).

The Key Drivers

Annual Fuel Poverty Statistics Report (2022) states a household's fuel poverty status depends on the interaction of three key drivers:

Energy Efficiency

Income

Energy Prices

NHS England Innovation for Healthcare Inequalities Programme (InHIP)

[InHip](#) addresses local healthcare inequalities experienced by deprived and other under-served populations. The programme aligns with the national [CORE20Plus5](#) approach to tackling healthcare inequalities. Respiratory is one of the five clinical priority areas. NHS England's InHIP programme is a unique collaboration between the Accelerated Access Collaborative (AAC), NHS England's National Healthcare Inequalities Improvement Programme and the Academic Health Science Network (AHSN) and delivered in partnership with integrated care systems (ICs).

By linking data from the national fuel poverty data set to the individual patient records within CIPHA, we can understand the proportion of citizens in a place likely to have fuel poverty.

[Annual Fuel Poverty Statistics LILEE Report 2022 \(2020 data\) \(publishing.service.gov.uk\)](#)



According to the Institute of Health Equity report 'Fuel Poverty, Cold Homes and Health Inequalities in the UK' cold homes are linked to an increased risk of health conditions, especially respiratory and cardiovascular, as well as poor mental health and unintentional injury.



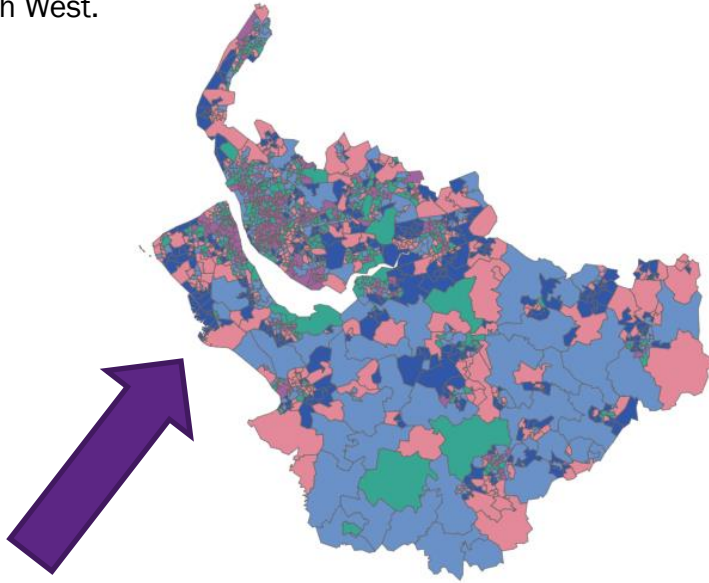
“Fuel poverty is a long-standing problem in the UK, and the number of households facing this form of inequality has increased substantially in 2021–22. With energy prices set to rise further in October 2022 and January 2023, it is estimated 55 per cent of the UK's households will be in fuel poverty at the coldest time of year.” - IHE

[read-the-report.pdf](#)
([instituteoftheequity.org](#))

Local Context

Fuel Poverty by LSOAs

In 2020 around 18.7% (approximately 41,297) households in Liverpool were living in fuel poverty, having to decide whether to heat their homes or put food on the table. This is above the national average (13.2%) and the second highest in the North West.



The map shows fuel poverty rated populations by the **Lower Layer Super Output Areas (LSOAs)**. The map shows the clustering of the most fuel poverty LSOA's in Liverpool city region with some smaller clusters in Cheshire. LSOA is useful geographic hierarchy which allows reporting at a level of approx. 1500 people or 650 households. Taken from <https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2022>



Cheshire and Merseyside

Fuel Poverty Quintile by Clinical Condition

Condition By Fuel Poverty Quintile		
Cold Homes Condition	Quintile 1:LSOAs with the Highest % of Fuel Poverty	Quintile 2
CVD		
Atrial fibrillation Register	2,424	2,620
Coronary heart disease (CHD) Register	5,025	4,983
Heart failure Register	1,552	1,457
Hypertension diagnosis Register	18,857	19,247
Peripheral arterial disease (PAD) Register	1,205	1,008
Stroke/TIA Register	5,560	4,635
Disability		
Learning disability register	1,298	1,175
Physical disability	3,534	3,048
Mental Health		
Depression diagnosis register	34,713	30,886
Severe Mental Illness register	3,070	2,212
Respiratory		
Asthma diagnosis Register <= 18	1,702	1,572
Asthma diagnosis Register 19+	9,688	9,336
Chronic obstructive pulmonary disease (COPD) Register	5,222	4,275
Total	61,705	57,641

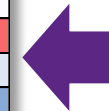
The power of CIPHA data

The ability to segment and stratify the fuel poor population is essential to the identification of people at high-risk. CIPHA data enable the stratification of the fuel poor population using risk of admission, mortality risk and other factors such as living alone.



The table below shows the counts of patients across an ICB with a fuel poverty vulnerable condition, who live in a fuel poor LSOA with a home which has an energy rating of D-G. There are **119,346 people**.

	Fuel poverty LSOA Q1	Fuel poverty LSOA Q2	Total	% of Total
Cheshire	6304	9501	15805	13%
Halton	2104	4860	6964	6%
Knowsley	4360	4400	8760	7%
Liverpool	24672	12417	37089	31%
South Sefton	4708	3440	8148	7%
Southport and Formy	2066	4405	6471	5%
St Helens	3421	5821	9242	8%
Warrington	2599	2959	5558	5%
Wirral	11471	9838	21309	18%
Total	61705	57641	119346	100%

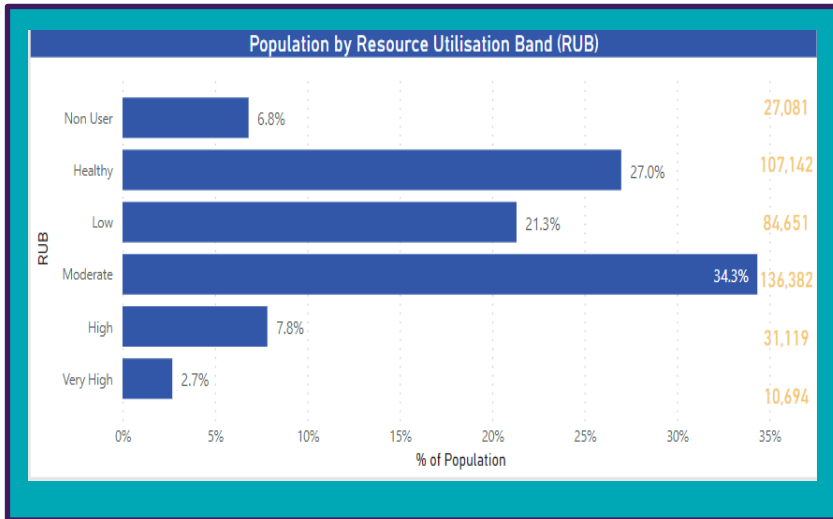


The table shows the total count of fuel poverty homes in quintile 1 & 2 by place. The majority of the condition / fuel poverty vulnerable patients live in Liverpool.

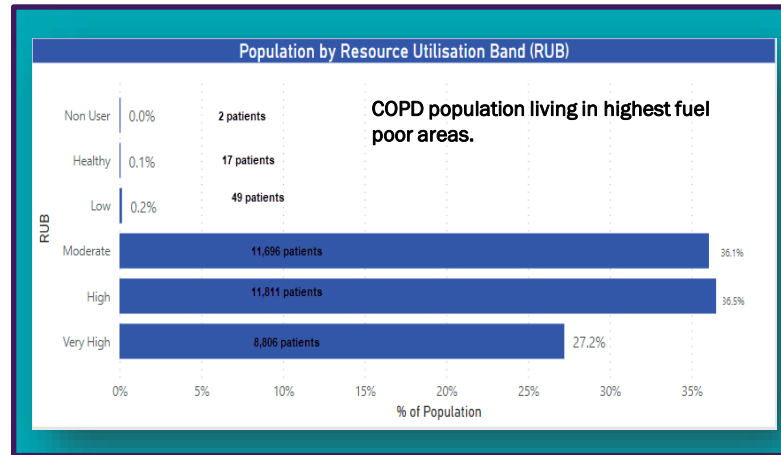
Local Context

Fuel Poverty and Resource Utilisation Band (RUB)

The RUB graph below shows **41,813** patients living in the most fuel poor LSOAs with the worst energy ratings on their homes have High or very High Resource Utilisation Bands which may mean they require a significant amount of health care resource compared to other citizens in the ICB. **26,171** of these patients are multi-morbid with 2 or more long term conditions. The population can be stratified further by use of mortality risk and emergency admission risk.



A worked example:
Patients with COPD with > 50% chance of emergency admission living in the most fuel poor geographies



- ➔ **20,617** of these patients have high or very high resource usage.
- ➔ **9485** have an energy certificate linked to their house which is rated worst at D-G**
- ➔ **985** patients with a >50% risk of emergency admission* in the next 12 months who have COPD. **43** of these patients flag the highest relative mortality risk score* across the ICB.
- ➔ Many of these patients are multi-morbid with Cardiovascular disease and mental illness being key co-morbidities.

This example could be worked for all of the Nice recommended disease groups. Further stratification could identify patients without a recent clinical review.

	Cold Homes Condition	Quintile 1:LSOAs with the Highest % of Fuel Poverty	Quintile 2
CVD			
Atrial fibrillation Register		167	164
Coronary heart disease (CHD) Register		292	258
Heart failure Register		159	137
Hypertension diagnosis Register		284	281
Peripheral arterial disease (PAD) Register		99	94
Stroke/TIA Register		168	177
Disability			
Learning disability register		0	5
Physical disability		122	104
Mental Health			
Depression diagnosis register		234	214
Severe Mental Illness register		57	50
Respiratory			
Asthma diagnosis Register <= 18		0	0
Asthma diagnosis Register 19+		96	124
Chronic obstructive pulmonary disease (COPD) Register		508	475
Total		509	476

The power of CIPHA data

Using the Johns Hopkins ACG algorithms within the CIPHA platform the ICB population is sliced by Resource Utilisation Band (RUB) which enables the slicing of the patient by their expected and actual usage of health care in acute and primary care settings. *Risk of emergency admission and Mortality risk are part of the Johns Hopkins ACG algorithms incorporated into CIPHA. Mortality risk is the Ontario model, developed by Austin et al www.HopkinsACG.org

**This analysis could also identify those citizens living in low fuel risk areas with a poor energy efficiency rating certificate.

Fuel Poverty Dashboard

This information is for decision support only, it should not replace full clinical review or be used in isolation to make a clinical decision

Fuel Poverty: Population Segmentation

Registers marked with ** are not available as a rate and are not included in the 'Total Population With LTC'. *Young Households population is only available as a count.

[Show Filters](#)
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	% of Population	Rate Per 100K	Patient Count		
Population Segmentation - % of Population					
	North	Prince William	South	Springfield	ICB
CVD					
Atrial fibrillation Register	0.43	0.41	0.37	0.38	0.40
Coronary heart disease (CHD) Register	0.59	0.60	0.57	0.59	0.59
Heart failure Register	0.18	0.20	0.16	0.18	0.18
Hypertension diagnosis Register	2.35	2.40	2.36	2.24	2.34
Peripheral arterial disease (PAD) Register	0.12	0.11	0.09	0.11	0.11
Stroke/TIA Register	0.29	0.31	0.28	0.28	0.29
Deprivation					
Core 20 Population **	36.30	36.39	36.31	36.70	36.42
Disability					
Learning disability register	0.09	0.11	0.09	0.10	0.10
Physical disability	0.28	0.32	0.32	0.31	0.31
Mental Health					
Depression diagnosis register	3.14	3.10	3.05	3.09	3.10
Severe Mental Illness register	0.21	0.18	0.21	0.20	0.20
Population					
Ladies on Pregnancy register **	0.13	0.13	0.18	0.14	0.15
Older people aged 65 and over **	2.95	2.91	3.00	2.92	2.94
Young Households (aged 0-4) **					
Respiratory					
Asthma diagnosis Register <= 18	0.47	0.44	0.53	0.39	0.46
Asthma diagnosis Register 19+	1.16	1.14	1.05	1.06	1.10
Chronic obstructive pulmonary disease (COPD) Register	0.38	0.46	0.40	0.41	0.41
Total Population (LTCs Only)					
Total Population (LTCs Only)	5.63	5.66	5.55	5.53	5.59
Total	40.64	40.64	40.57	40.90	40.68

Matrix: Conditional formatting is applied across each row. The Place with the highest rate/count for each population will have the darkest colour and the lowest rate/count will have the lightest colour. Patients will be counted in multiple lines if they have 1 or more of the different conditions but will only appear in the total once.

Run by: CareCentric_PBI@graphnethealth.com on 12/05/2023 13:58 | V1.2.0 | Data last refreshed: 08/03/2023 10:02

[Population Segmentation](#)
[Risk Stratification](#)
[Conditions](#)
[Households](#)
[About](#)
[Change Log](#)

This information is for decision support only, it should not replace full clinical review or be used in isolation to make a clinical decision

Fuel Poverty: Population Segmentation

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	% of Population	Rate Per 100K	Patient Count	
Age	0-107	IMD Quintile	QOF LTC Count	Primary Care Contact Flag
Sex	All	LA, Ward, LSOA	QOF Condition	Medication, Flag
Place, PCN, Practice	All	Ethnicity	Expanded Diagnostic Cluster (EDC)	All
Nursing Home Flag	All	Fuel Poverty Quintile	Risk of Emergency Admission	All
Household Occupancy	All	Household Energy Rating	MRS Quintile	All
Emergency Admissions Count (Last 12M)	0-37	Emergency Admission Speciality (Last 12M)	Patient Need Group	All
		Optimum Inhaler Therapy (Last 12M)	Gold Standards Framework Register	All

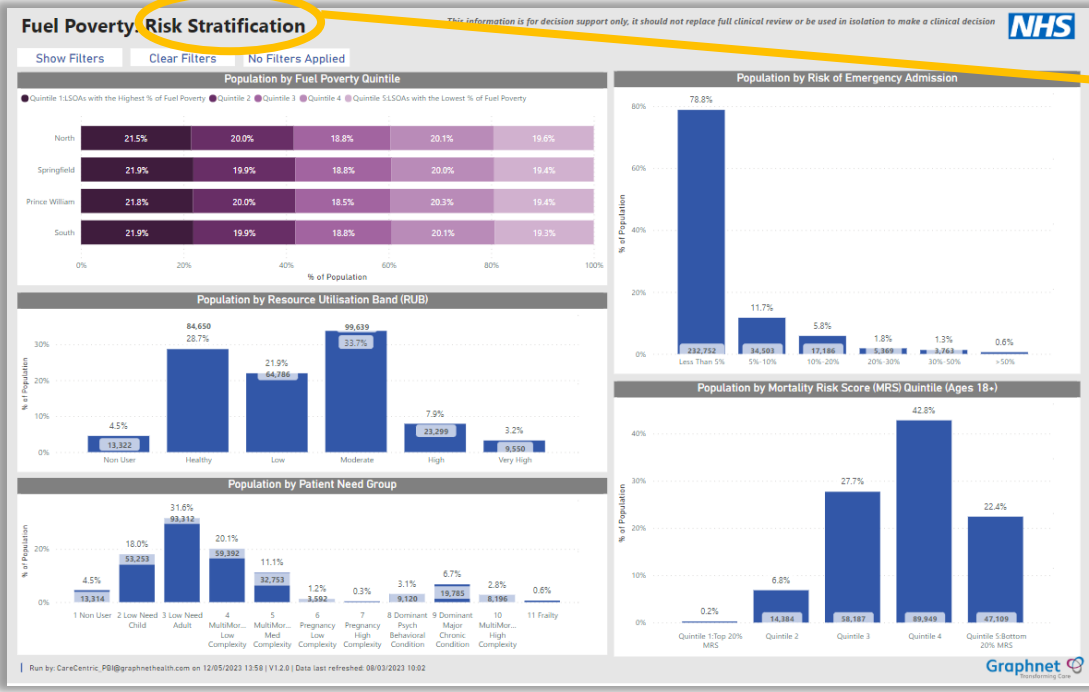
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Right-click on every row enable access to patient list.

The dashboard features four tabs. The population segmentation tab shows population percentage with clinical condition by places. This information can also be viewed by rate per 100K and patient count. The filter menu above shows how users of the dashboard can further drill through the data by patient list, demographics, fuel poverty quintiles, household energy rating, emergency admissions count (last 12 months), risk of emergency admission, medication flag and more. A right-click on any row opens a drop-down menu to patient list. The filter menu feature can be used across all the tabs.

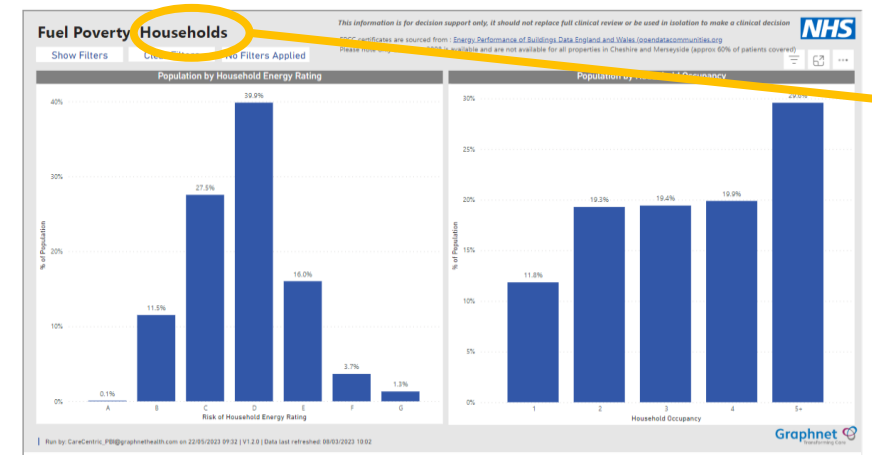
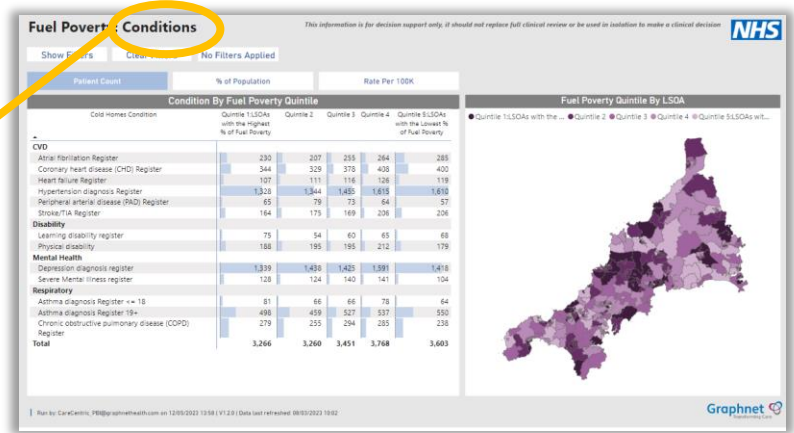
Fuel Poverty Dashboard



The risk stratification tab shows population by

- Resource utilisation band.
- Patient need group.
- Risk of emergency admission.
- Mortality risk score (Quintile ages 18+)

The Conditions tab shows clinical conditions by fuel poverty quintiles and LSOAs.

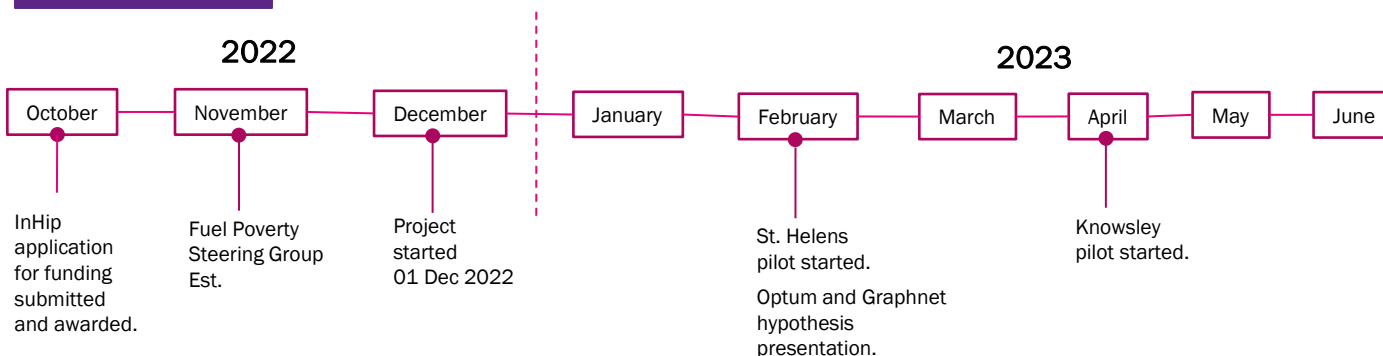


The EPC is sourced from [Energy Performance of Buildings Data England and Wales \(opendatacommunities.org\)](https://www.opendatacommunities.org)

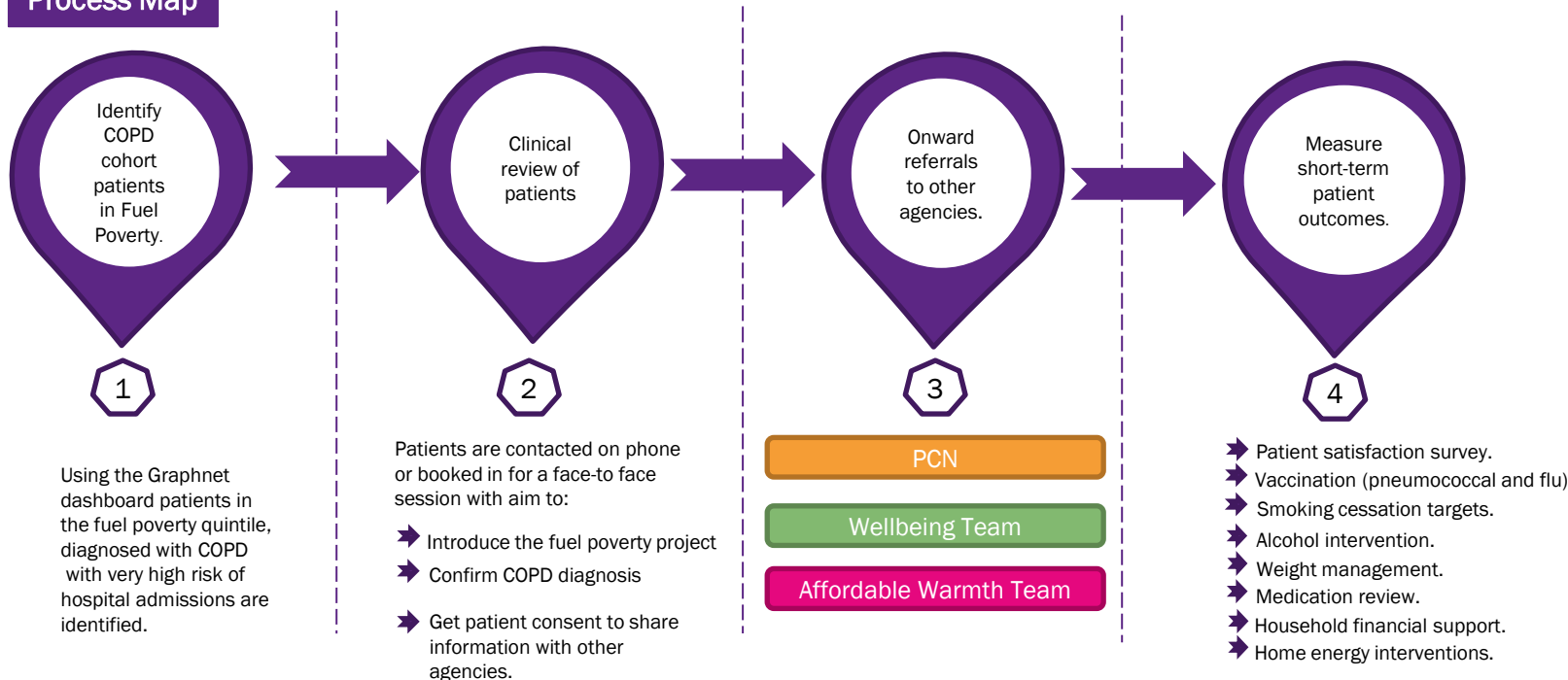
The households tab shows household by energy rating and occupancy.

Trailblazer Projects

Project Timeline



Process Map



Fuel Poverty Pilot Projects

- 📍 St. Helens started in March 2023 with a care coordinator model. A telephone call is made to the patient to start the engagement process.
- 📍 Knowsley started in May 2023 with a physician associate model. Patients are invited for a 1-hour face to face session.
- 📍 Warrington is yet to start. An advance nurse practitioner model has been agreed.

Universal cohort selection criteria

- 20% most Fuel Poor quintile neighbourhood.
- COPD diagnosed in Primary Care.
- 50% or higher risk of emergency admission via John Hopkins algorithm.
- Not in a Care Home.

St Helens WarmHomes for Lungs Project Report

As 21st November 2023

159

Patients contacted by Community COPD Team since it went live (13th February 2023).

- ➔ 100% (159) referrals to Wellbeing Team.
- ➔ 100% (159) referrals to Affordable Warmth Team.
- ➔ 11% (18) referrals to Pulmonary Rehabilitation (PR) Team (since PR became part of the project on 01 June 2023).
- ➔ 13% (20) patients were onboarded to COPD Telehealth Service.
- ➔ 84% (133) patients received £500 payments from household support funds. Further payments are being sent from Oct-23
- ➔ 64% (101) patients sent feedback forms and 26%(26) returned .

100% patients received Winter Warmth Pack.

A total of **£66,500** paid to households to date.



Community COPD Rapid Response Team

“The dashboard is very beneficial. Things we have never thought of before. It is working in a different way, for these patients who are socio-economically deprived and living in poor housing. We now know the quintile of deprivation patients are living in and flagging that”

Dianne Green

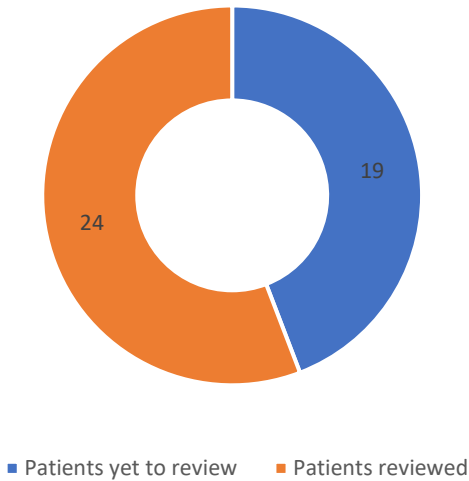
Lead COPD Nurse / Service Manager
St Helens Community COPD Rapid Response

Knowsley COPD Winter Warmth Project Report

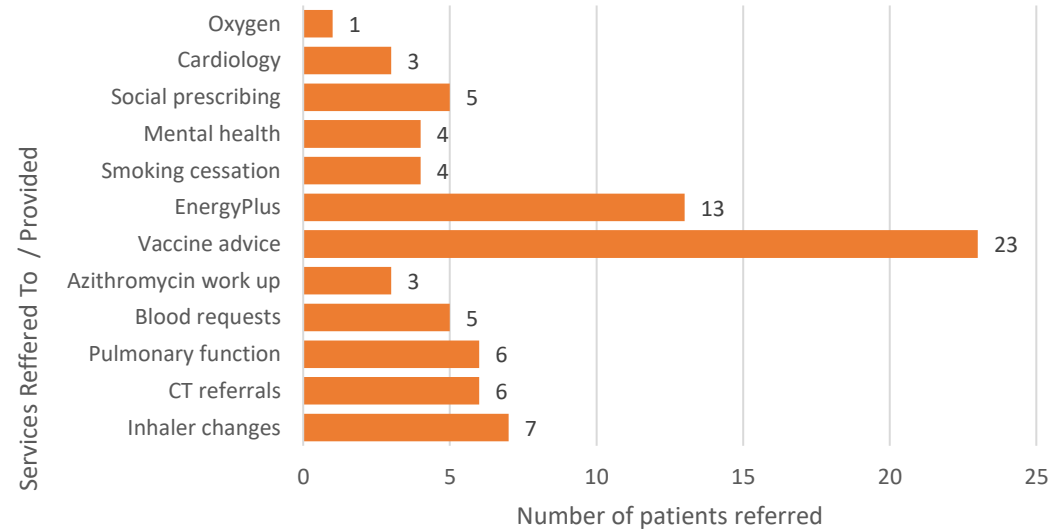
As of 18th September 2023

43 patients were identified in West Knowsley. 56% (24) patients have been reviewed and invited to consultation.

'A Total of 43 Patients Identified'



West Knowsley Fuel Poverty Project - Onward Referrals



54% (13) patients were referred to Energy Plus.

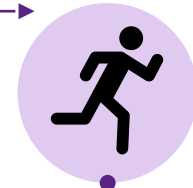
100% patients received vaccination advice.

St Helens WarmHomes for Lungs Project Report



Meet Mary

- 47 years old.
- Poor living condition.
- Rat infestation.
- Medical history of COPD, mental health, substance misuse and alcohol.
- Smoker.
- 4 hospital admissions in last 12 months.
- Unvaccinated for COVID-19 and Pneumococcal.
- Non-complaint with hospital appointments.



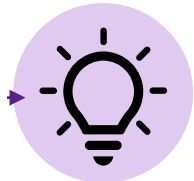
Lifestyle Optimisation

- **Wellbeing** – for social prescribing and smoking cessation.
- **Weight management** – post malnutrition score /assessment identified high BMI.
- **Think wellbeing** – due to long standing history of mental health.
- **Pulmonary rehabilitation classes** (physical and online) for improvement of QOL.



Medical Optimisation

- **Vaccinations** – Covid-19 and pneumococcal vaccination were requested via PCN ANP.
- **COPD management and inhaler optimisation.**
- **Masks & filters** provided for nebulised therapy.
- Type 2 respiratory failure **oxygen alert pack** provided.
- **Advance care planning** discussed.
- Polypharmacy discussed and a **medicine management review** requested.
- Encouraged patient to make further links with **Change, Grow, Live (CGL)**.



Affordable Warmth Team

- Assessment by Household Improvement Team.

Effect of Fuel Poverty Dashboard and Interventions on Short Term Outcomes

- ✓ Rapid identification of high-risk patients.
- ✓ Improve primary care QOF targets.
- ✓ Reduced COPD exacerbations.
- ✓ Reduce fuel poverty debt.
- ✓ Enable quicker eligibility checks of patients suitable for remote monitoring pathway.
- ✓ Optimise COPD inhaler therapy.



Meet Jo

- Dual diagnosis of COPD with primary condition pulmonary fibrosis.
- Require high flow oxygen 24 hours per day.
- Living in a cold home, can't afford rising energy bills.
- Self-managing a deteriorating condition.
- Needs a bespoke ramp, struggling to get out of the house in his scooter.
- Wife and son feel isolated, stressed and anxious.
- Having to choose between heating his home or using his oxygen.



WarmHomes for Lungs

- Referred to Affordable Warmth Team for household assessment.
- Referred for an OT assessment for a stair lift and ramp assessment.
- Assisted to register on the Priority Services Register with energy provider.
- Medication review - introduced oxygen saturation probe, oxygen concentrator and provision of a fan for fan therapy.
- Household health education approach around his deteriorating condition including DNAR support.
- Advanced care planning discussion including end of life and SR1.
- Refused referral to pulmonary rehabilitation and well-being service.
- Wife referred to St Helens carer society for support.

Patient Outcome

- ✔ Better self-management of condition.
- ✔ Financial savings because of new prescription oxygen concentrator for 8 hours and then using more cylinder in the day .
- ✔ Safer home reduced fire and harm risk.
- ✔ £500 household warmth fund paid towards improvements. This fund will also be paid again in October 2023 for preparation for winter.



Household Improvement

- Provision of replacement boiler.
- Risk assessment of home including storage of the oxygen , ventilation, fire breakers, care of the concentrator .
- Complete application for household support fund.
- Installation of bespoke ramp that could not be provided by the social services.

St Helens WarmHomes for Lungs Project Report



Meet PAUL

- Poor living condition.
- Mould in house.
- Diagnosed COPD patient.
- Smoker.
- Poor mental health.
- Poor mobility.
- Had a recent fall in bathroom.
- Social housing with Torus.



WarmHomes for Lungs

- A Rapid Response Service case.
- Referred to Smoking Cessation.
- Referred to Think Wellbeing Service.
- Booked Physiotherapy appointment via GP.
- Referred to Pulmonary Rehabilitation Service.
- Referred to Social Prescribing Service.



Household Improvement (2/3 Months)

- Home Improvement Officer assigned.
- House mould treated; walls replastered.
- New windows.
- Floor replacement.
- £500 household fund received.
- No hospital admissions since intervention.

*"..you have transformed our lives"
- Paul & Sheila.*



Affordable Warmth Team

- Assessment by Household Improvement Team.

Knowsley Fuel Poverty Project



Meet Anne

- 74 years old.
- Has stopped smoking.
- Severe breathlessness.
- Poor morbidity – rents a stairlift.
- Living in rented house, struggling with bills.
- Lives in one room in the house to reduce heating cost.
- Moulds on doors and windows.
- Experience loneliness.



Rapid Response Register

- Known to the rapid response team.
- Diagnosed with severe COPD, Osteoarthritis, Depression and Heart Failure.
- On maximum inhaler therapy.
- Long term antibiotics therapy - issued 7 courses of antibiotics in 12 months (Azithromycin MWF, LTOT, AOT).
- Cough with difficulty expectorating phlegm.
- Chest tightness.
- Had 6 hospital admissions prior to fuel poverty intervention.
- On last examination Oxygen higher than expected (88-92%).



Fuel Poverty Optimisation Clinic

- Vaccination advice.

Referred to the following services:

- Energy Projects Plus.
- Knowsley Access Team.
- Oxygen Team due to raised oxygen stats.
- Social prescribing service.
- Azithromycin monitoring (repeat bloods, ECG).
- Pulmonary rehabilitation service.

Short - Term Patient Outcomes

- ✔ Patient received new spacer.
- ✔ AOT changed and LTOT reviewed.
- ✔ Care plan include Home Pulmonary Rehabilitation service.
- ✔ New stairlift from Knowsley Access Team (KAT).
- ✔ Cardiology follow-up appointment booked.
- ✔ Received training in chest clearance technique, exercises and dealing with HTS challenge.

The following are the areas of learning and top tips for developing a Fuel Poverty Project.

● Access to Fuel Poverty Dashboard

Use the dashboard to define and identify the people that are most in need to ensure support is targeted. Training videos are available to support users.

● Focus on small numbers to start

Use the dashboard to define a realistic number of people to support. Starting small helps to get work underway and use the learning from this to grow the project and number of people to support. The dashboard filters enable the cohort to be refined.

● Allocate adequate time for engagement

It takes time to gather all the relevant stakeholders needed and then to build interest, relationships, common goals and refine a delivery plan. Planning for the support needed in winter should start in the summertime.

● Build on existing services

Connecting with existing services and projects that provide a broad range of health, wellbeing and financial support for people will create a holistic offer which makes best use of the resources available.

● Provide appropriate pre appointment information

Information leaflets to be shared with people before they have their appointment for the clinical review are now used to explain the background to the project, what will happen at the appointment and what the onwards referrals might include. It is hoped this will help to manage expectations and provide assurance that the service offers and stakeholders are genuine and connected.

● Build trust through consistent communication

We have learnt that maintaining a single point of contact for the project has helped to build the relationship and trust between the care-co-ordinator and patient. This means that patients have been more willing to open up and share information about the other issues or problems they are experiencing that may be affecting their physical and mental health, including housing and financial issues.

As the projects progress, more learning will be identified, especially through the planned evaluation

Evaluation – Key indicators

By considering the following factors in the evaluation process, it is possible to assess the overall effectiveness, impact, and sustainability of the CIPHA Fuel Poverty interventions across the ICB.



Health Outcomes

Measure changes in respiratory conditions (reduction in exacerbations), mental health, hospital admissions, emergency department visits, and overall well-being of individuals affected by fuel poverty.



Vulnerable Population

There is intelligence on the location of vulnerable population. Assess intervention's effectiveness in reaching and supporting vulnerable populations affected by fuel poverty.



Partnership and Collaboration

Assess the involvement of healthcare providers, social care organizations, energy suppliers, local authorities, and community-based organizations in addressing fuel poverty and achieving intervention goals.



Stakeholder Feedback

Gather feedback from patients, carers, healthcare professionals, community organisations, and other stakeholders involved in the fuel poverty programme. Identify areas for improvement and understand the perceived impact on health and care services.



Sustainability and Scalability

Assess whether the interventions implemented can be maintained beyond the project period, replicated in other settings, and integrated into routine healthcare practices.



Cost - effectiveness

Evaluate the cost-effectiveness of the intervention. Consider the investment required, the outcomes achieved, and potential savings in healthcare costs associated with improved health outcomes and reduced hospital admissions.



Policy and System-level Impact

Assess the intervention's influence on policy development, service delivery models, and integration of fuel poverty considerations into health and care systems. Consider the intervention's potential to drive systemic change and promote a holistic approach to addressing fuel poverty.



Energy Cost Reduction

Assess the effectiveness of the intervention in reducing energy costs for individuals and households. Measure changes in energy bills or financial savings achieved through energy efficiency measures, energy advice, or access to affordable energy tariffs.