Fuel Poverty Dashboard

A Population Health Management Evaluation Study

By Fola Omotunde

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Executive Summary - 1

Overview

The aims of the study were:

- Inform the development of an evaluation framework that meets the needs of use cases locally and across integrated care boards (ICBs).
- Understand the adoption and scaling of population health management (PHM) solution (Fuel Poverty Dashboard) that enable the rapid identification of the disadvantaged and underserved population by health and care professionals.
- Increase the knowledge and understanding of the integrated preventative interventions to help improve patient health outcomes.

- Two groups were targeted, members of the Fuel Poverty Steering Group and Fuel Poverty Dashboard Users (clinical and non-clinical).
- Two evaluation methodology were implied - online survey and structured interview.

Fuel Poverty Steering Group: Key Findings

- 100% agree the fuel poverty dashboard provide an opportunity to **improve the quality of care** to high-risk patient experiencing fuel poverty.
- 100% agree the fuel poverty dashboard help **inform decision making** in fuel poverty project.
- 91% agree PHM **data analytics** help draw meaningful insight to address fuel poverty.
- 91% agree the **partnerships** established within the Fuel Poverty Project have contributed to
  - Addressing Fuel Poverty goals and objectives.
  - Increased access to resource for COPD and Asthma patients living in fuel poverty.
- 82% strongly agree that PHM provides opportunity for **addressing health inequalities** gaps.
- 55% agree there are measures in place to **sustain the partnership** beyond the duration of the Fuel Poverty project.

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Executive Summary - 2

Fuel Poverty Dashboard Users: Key Findings

The interviews focused on four themes, and they are as follows:

- Fuel Poverty Dashboard Usability, Functionality and Impact.
- Stakeholder Engagement (Patients).
- Effectiveness of Fuel Poverty Intervention.
- Adoption and Spread.

The key findings from interview respondents are:

- Fuel poverty dashboard provide actionable insight to support the design of preventative interventions.
- Required information is in one place.
- Provide an opportunity to review care plans of COPD and Asthma patients living in fuel poverty.
- Promotes understanding of social determinants of health and the delivery of holistic health and care services.

Conclusion

- **PHM approach** is helping the ICB tackle health inequalities, and the fuel poverty project model is scalable and transferable to other determinates of health.
- **PHM data analytics solutions** promotes knowledge sharing regarding social determinants of health; generates quick wins e.g., changes in clinicians' conversation with patient.
- **Integrated Care Partnership** promotes a continuous receptive environment for change at regional and local level.
- **Sustainability of Fuel Poverty Dashboard** will be dependent on management of change, learning networks and communities of practice that will support adoption and build capabilities.
- **Rolling out of lessons learned** for wider adoption will support the integration of best practice.
- **Developing new skills and change in outlook** is required to embrace new ways of working between different providers and professionals.
- **Acknowledging the personal commitment of staff (**both managers and professionals) who go the ‘extra mile’ to achieve the best results for their clients.

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Fuel Poverty Programme

Cheshire and Merseyside ICB

Partnership that Creates Receptive Environment for Change

Tackling health inequalities with Population Health Management Approach

Identification of COPD and Asthma Patients Living in Fuel Poverty

Integrated Preventative Interventions

Evaluation Findings

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All Respondent

- 36 people were targeted for the study.
- 21 (58%) people were sent the online survey link.
- 15 (42%) people were sent an invitation for a 1:1 structured interview.
- 11 (52%) respondents completed the online survey.
- 8 (53%) participated in the structured interview.
- In total, 19 (53%) people took part in the study.

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Fuel Poverty Steering Group

Online Survey

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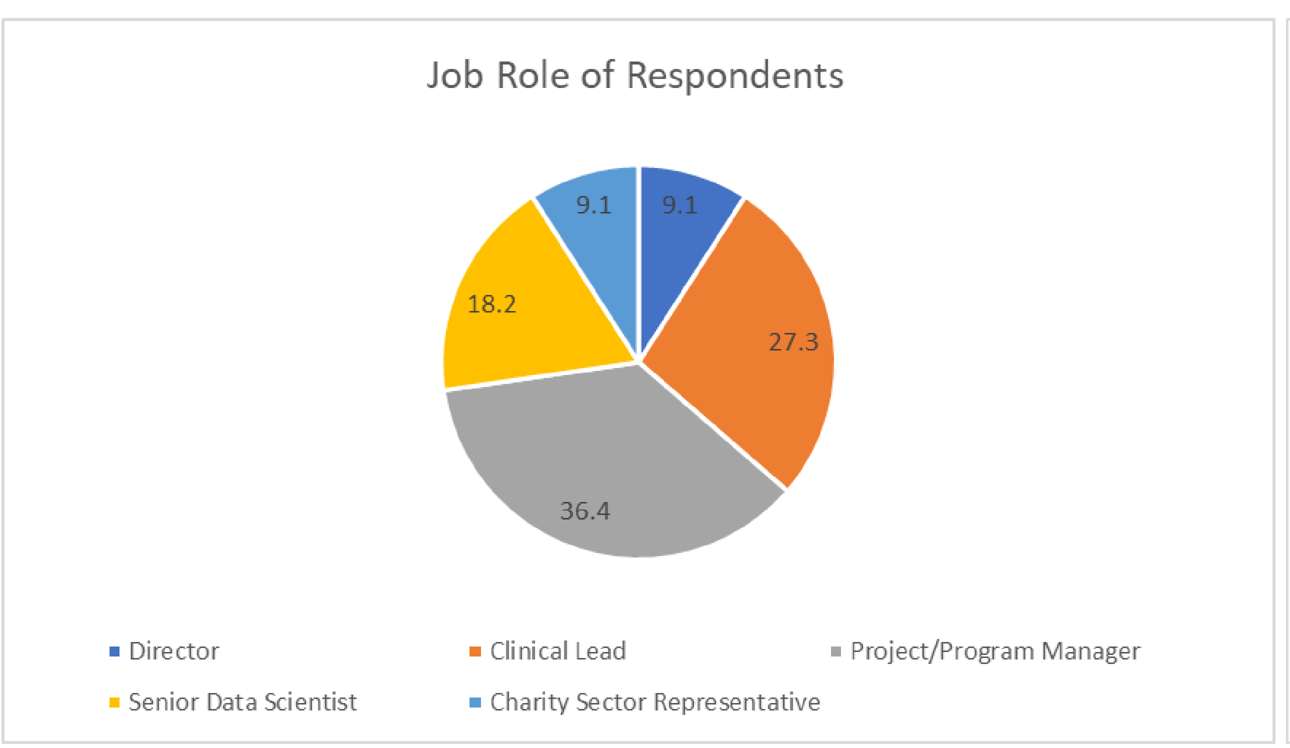
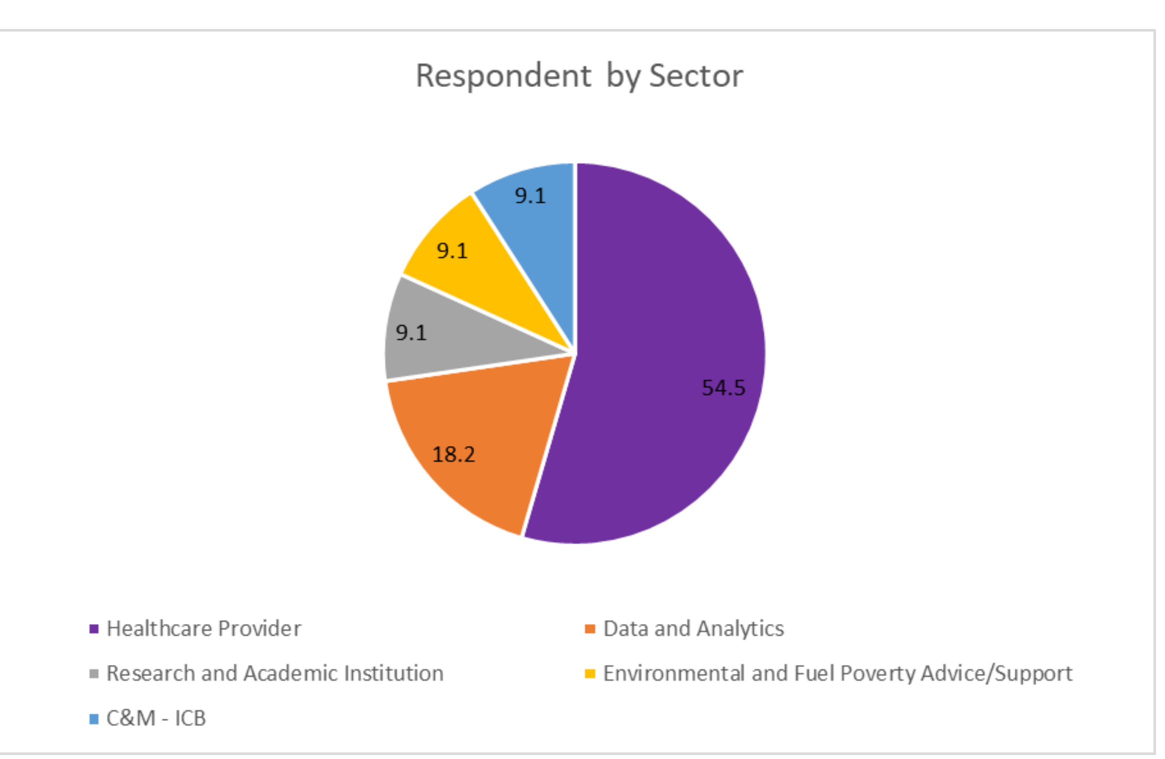
Online Survey

Respondent

- 21 people were sent the online survey link.
- 11 (52%) respondents completed the online survey.





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Online Survey

Strength of the Integrated Care Partnership

Communication Channels

100%
- Sharing information.
- Coordinating efforts.

Partner Roles and Responsibility

82%
- Alignment with expertise and resources.

Decision Making Process

73%
- Inclusive and transparent among the partners.

COPD and Patients Affected by Fuel Poverty

91%
- Increased access to resources.

82%
- Contributed to better patient outcomes.

Sustainability of Fuel Poverty Project

18%
- No measures in place to beyond the duration of the Fuel Poverty Project.

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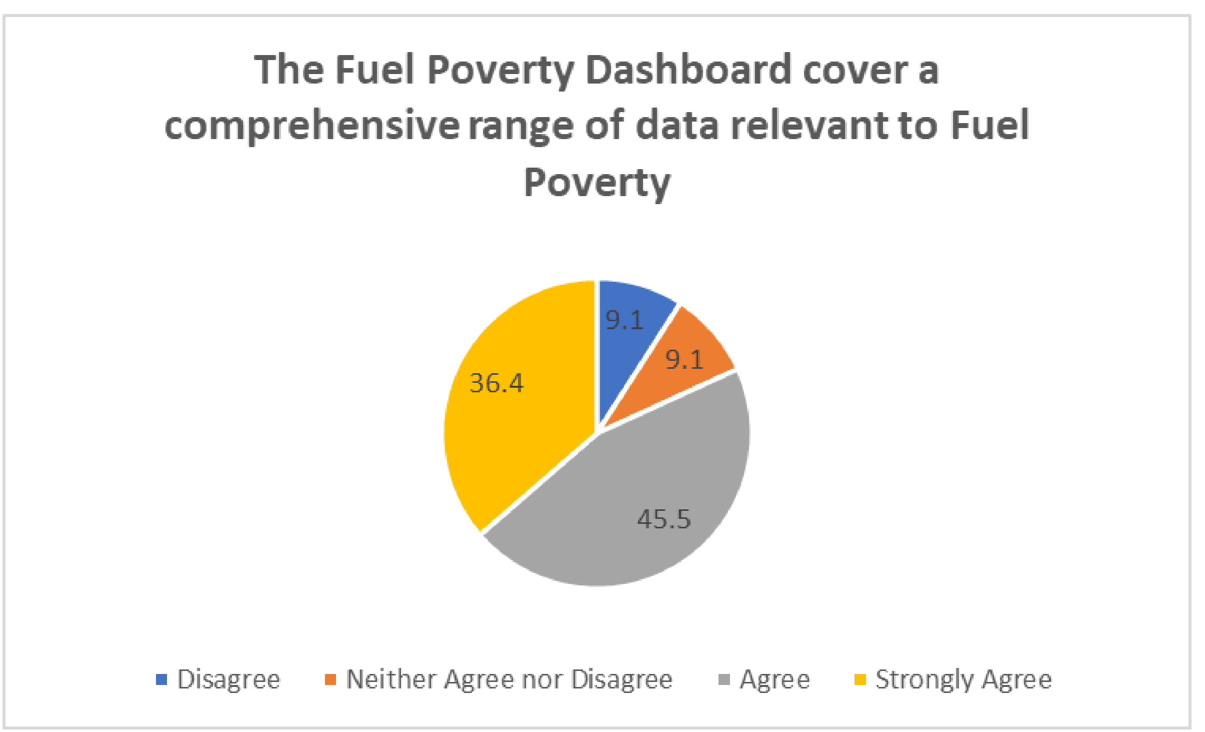
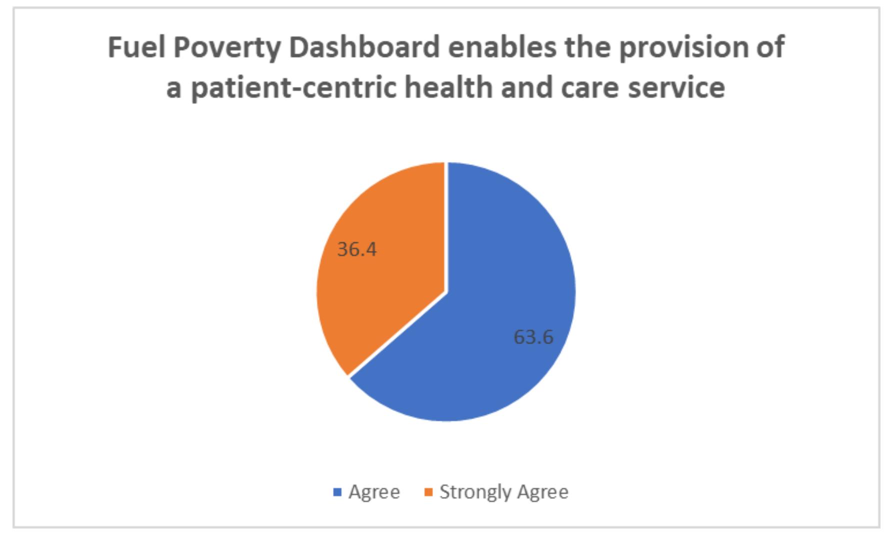
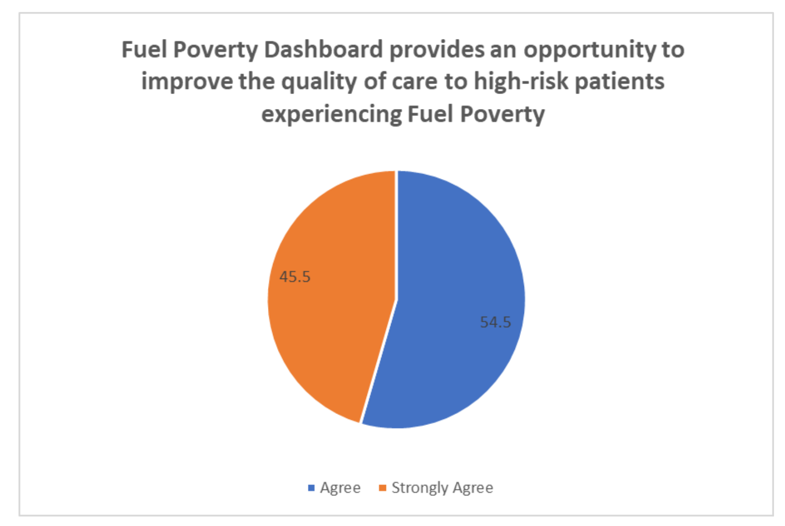
Online Survey

Fuel Poverty Dashboard







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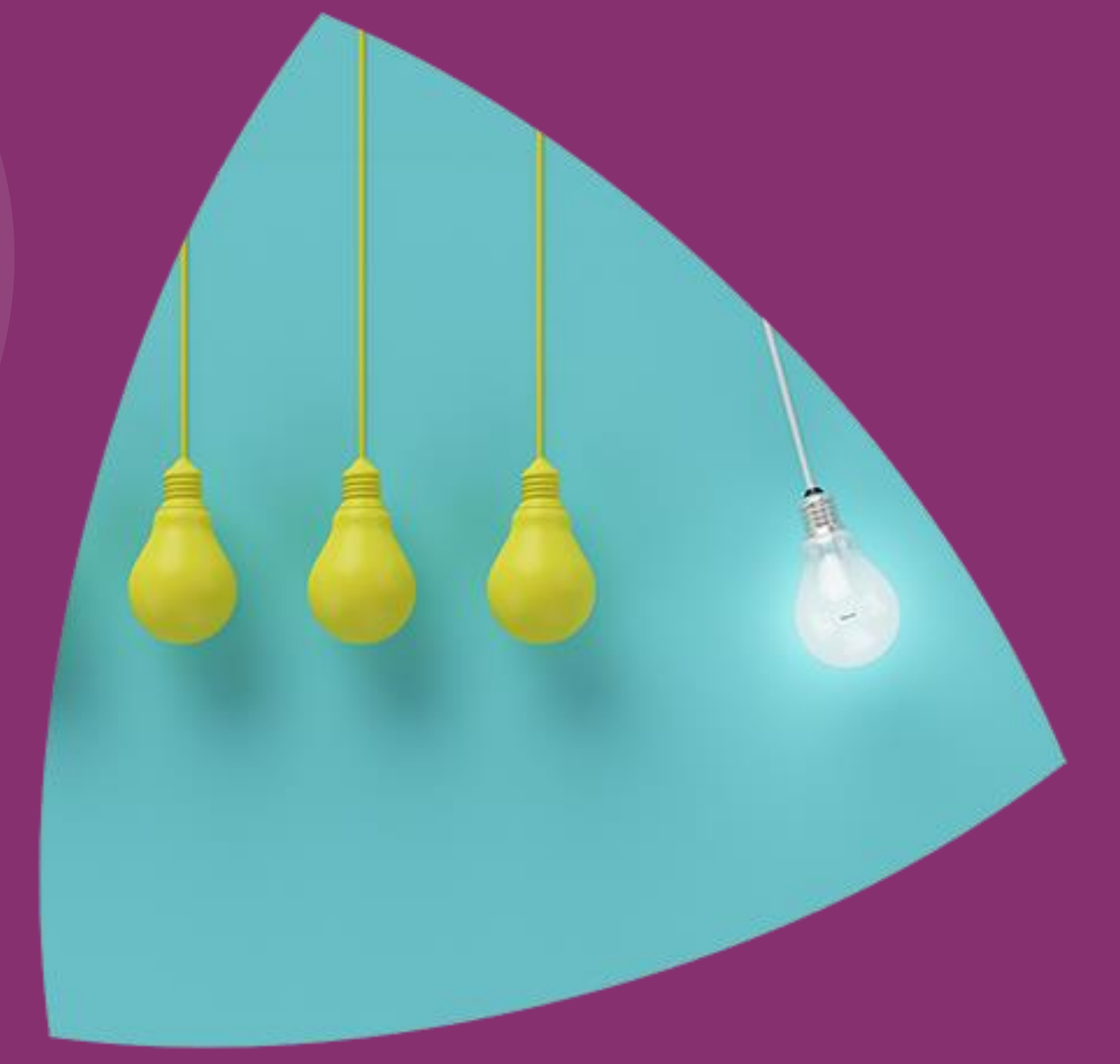
Fuel Poverty Dashboard

Interviews



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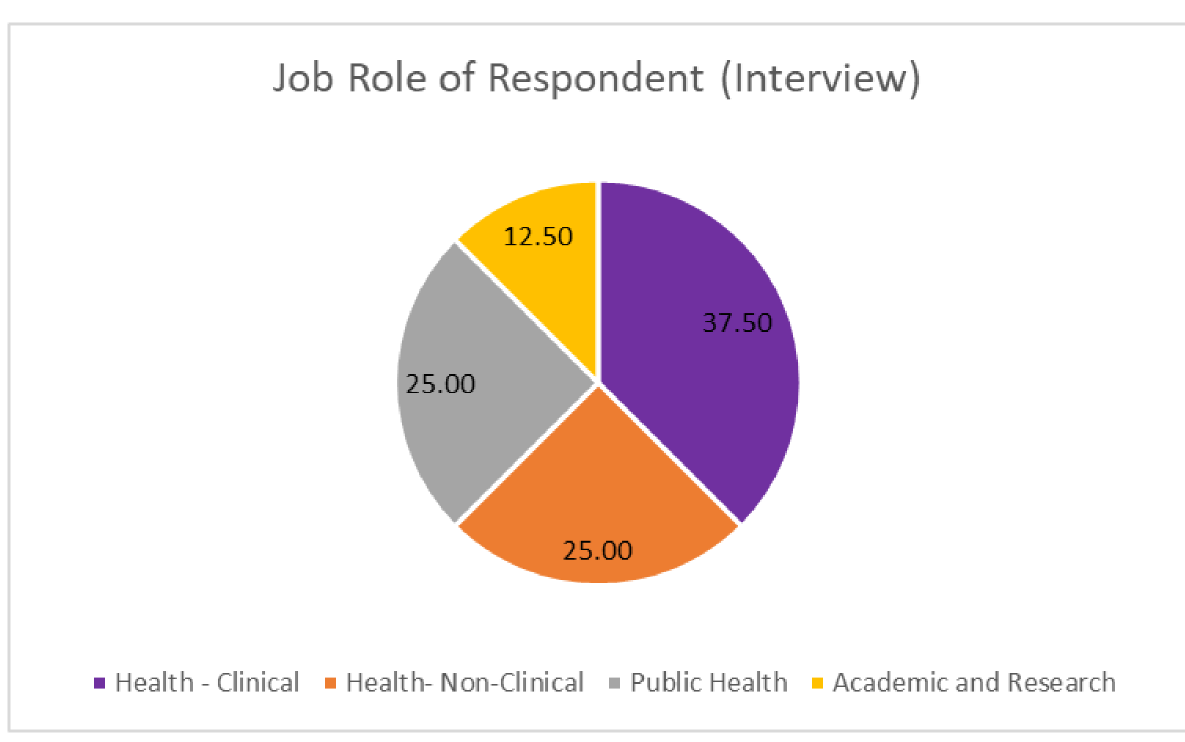
Interviews Respondent



Organisations Represented

- Knowsley Council
- Mersey and West Lancashire Teaching Hospital NHS Trust
- Liverpool Council
- Liverpool Heart and Chest NHS Foundation Trust
- Liverpool Centre for Cardiovascular Science

The interviews focused on four themes, and they are as follows:

- Fuel Poverty Dashboard Usability, Functionality and Impact.
- Stakeholder Engagement.
- Effectiveness of Fuel Poverty Intervention.
- Adoption and Spread.

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Theme: Fuel Poverty Dashboard Usability, Functionality and Impact

Findings

Participants described the various features of the dashboard. The most frequently mentioned were

- Visualisation of information in one place.
- Drill down to patient-level data.
- Use of filters to specify criteria.
- Understand the impact of COPD and Asthma on a patient's health, e.g., the measure and frequency of steroid prescription.

The consensus was the dashboard provided needed information to identify COPD and Asthma patients at high risk living in fuel poverty.

Learning

- Missing and inaccurate data in the primary care record e.g., wrong COPD diagnosis, vaccination status, increases administrative time.
- Non-clinical staff require more training to navigate the dashboard effectively.
- Every search command is a new search.

Quotes from Respondent

"And it's made a big impact because most of the patients we've reviewed have had lots that we can offer them regarding support, the energy bills support, and changes to their homes.(Interview 7)

"We realised that we had a tool that we could use to help reduce, the pressures on the NHS and reduce people from getting ill due to poverty." (Interview 8)

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Interviews Respondent

Theme: Stakeholder Engagement - Patients

Findings

Patients were already known to staff, however there were patients that were unknown, and engaging them was through cold-calling.

- Communication scripts in use.
- NHS brand to build trust.
- Enhancement to generic messages.
- Patient feedback form.
- Well thought-out incentives for patients to encourage engagement (£5 Costa voucher, self-stamped envelope).
- Patient leaflet.

The integrated preventative intervention approach means all partners were involved in passing on the same messages to the patient in all settings.

Learning

- Care coordinator model is an additional resource approach that enables better patient engagement.
- Incentives from partners.
- Integrated approach means assess to more resources.
- Not all patients will accept the offer for different reasons.

Quotes from Respondent

"…because in a way you are cold calling these patients you know. We must make sure the governance was tight around that. And then we wrote some scripts, we wanted it to be done in a way that the patients could understand.(Interview 2)

"The Affordable Warmth Team, said when they go out, they will have the patient feedback forms, so they will give them to the patients as well and say, "don't forget to complete them".(Interview 4)

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Theme: Effectiveness of Fuel Poverty Intervention

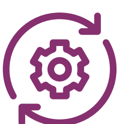
Findings

There are 2 pilot interventions, a care coordinator and physician associate model.

- Patients identified met the agreed criteria. The risk stratification on the fuel poverty dashboard is accurate.
- Design of intervention is dependent on allocated resources.
- Interventions offered referrals for home improvement, medical and lifestyle optimisation.
- Holistic review of patient care plans e.g., onboarding patient in virtual wards. Council Home Improvement Teams have different working procedures and protocols.

Currently, the tracking and monitoring of the impact of interventions are being logged by each project. The short-term impact include feedback from patients and the number of home improvement completed.

There is the opportunity to evaluate the impact of the fuel poverty project in reducing the burden of COPD exacerbation hospital admissions and health and care resource utilisation.



Learning

- Understanding some challenges that comes with having different preventative intervention offers.
- Alignment with other projects optimising patients at high risk of COPD exacerbations.
- Opportunity to include additional data set e.g., the type of social housing per patient.

Quotes from Respondent

"We could look at asthma, through the same lens and look at whether people are getting really good care."
(Interview 7)

"It is finding the right people and then helping them holistically. It's not just helping them with their COPD management, it's helping with the electricity bills, because we've had £500 payments going to each of the clients and it's been absolutely incredible.
(Interview 4)

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Interviews Respondent

Theme: Adoption and Spread

Findings

The consensus is that the fuel poverty project is already impacting lives of COPD patients living in fuel poverty. There is the need to make the fuel poverty data analytics accessible to already established COPD exacerbation optimisation clinics.

The following are the highlights from respondent feedback regarding upscaling the fuel poverty dashboard:

- Funding is an essential requirement.
- A better understanding of partners services and offers will improve resource sharing across settings.
- The promotion of fuel poverty patient stories across the ICB will showcase impact being achieved.
- The need for adequate and sufficient training in the use of the fuel poverty dashboard e.g., online tutorials.
- Understanding that Local Authorities and Primary Care Networks will do things differently.
- The fuel poverty steering group is a powerful platform to present and share best practices, preventative interventions that are addressing health inequality gaps across the ICS.

Learning

- Social prescribers have a better understanding of determinants of health and its impact on health inequalities.
- Opportunity for social prescribers to share their knowledge with frontline health and care practitioners should be explored.

Quotes from Respondent

"Holistically assessing patients when they first come could prevent multiple contacts as this provides opportunity to optimise patients and managed conditions effectively, more holistically at the start of the journey." (Interview 2)

" This opens different doors to getting into different population sets with different health conditions". (Interview 3)

"Yes, there is fuel poverty, but they might also be struggling with food poverty, even things like digital exclusion. I think we could have gone even further than the fuel poverty." (Interview 3)

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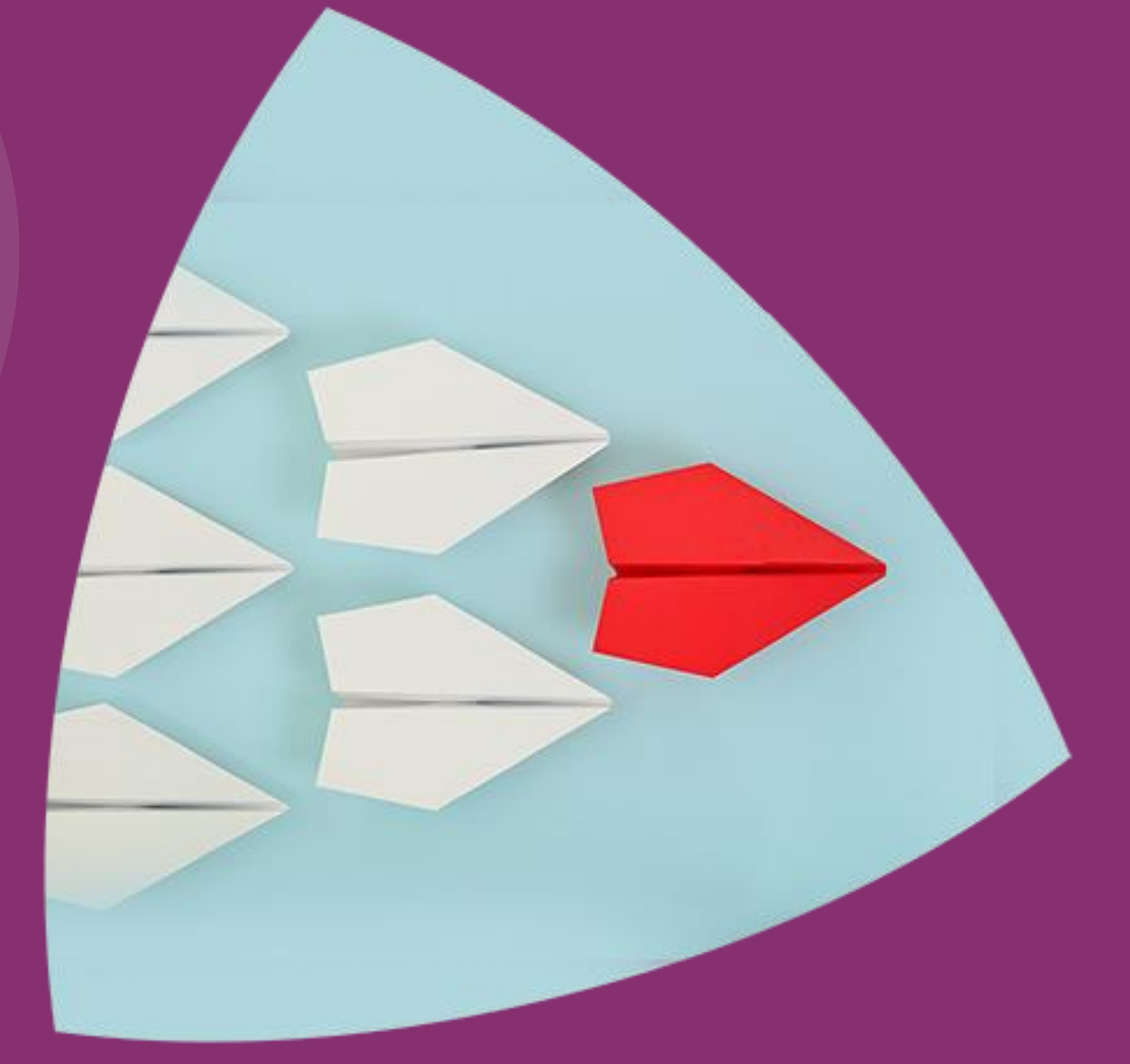
Recommendations



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Recommendation

Sustainability of Fuel Poverty Programme

- Funding for additional resource to upscale.
- Develop a sustainability plan for Fuel Poverty Programme.
- Expand the Fuel Poverty project model to other social determinants e.g., food poverty.
- Identify other partners across the ICB e.g., social housing organisations to join the fuel poverty steering group.

Adoption and Spread

- Develop use cases with focus on better quality of care for underserved population living with long term condition.
- Integration of fuel poverty analytics in a shared care record.

Sharing Lesson Learned

- New ways of working will be supported with experiential information and learning.
- Different integrated preventative interventions..
- Sharing of partner specific protocols and procedures to help streamline interventions.

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Quotes from Respondents

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Partnership that Creates Receptive Environment for Change

"So, it was great. It was a great system collaboration. I just loved it. Yeah, we had lots of different viewpoints, and we had lots of different people on the calls thinking about how we defined who the most at-risk people were to try and intervene with. And we had lots of discussions about it". (Interview 7)

"We are working with the pulmonary rehab team, smoking cessation, weight management, social prescribing, the affordable warmth team, the household improvement team. Also working with other agencies, the social services were involved, and our specialist nurses, counselling services, think wellbeing and some other charities" (Interview 2)

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Tackling health inequalities with Population Health Management Approach

"It's helped me understand the NHS side of things, and I hope it's helped the NHS staff to understand a bit more the wider determinant of health and what data is available". (Interview 3)

"I've understood for a long time about why the determinants of health were important, and that health care is only a very small part of that. But that feels like a very big issue to tackle. The fuel poverty project has really brought to light what you can do in a medical consultation to think about wider determinants of health. So now, I do ask patients during my standard consultations, you know, what's your home like? Is it cold?". (Interview 7)

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Identification of COPD and Asthma Patients Living in Fuel Poverty

“It helped us identify the population, yeah, it's the best tool available.” (Interview 6)

“So, it's picking up a very high-risk cohort. It's picking up some people that we didn't know before, but it's also picking up people that we'd identified through a separate mechanism who were at high risk of exacerbations. (Interview 7)

“I think it's a great tool. I think once you drill down through to your patient, the information that we get is all in one place. I think it's a positive thing and there's just a few tweaks that would even improve that process a little bit more”. (Interview 2)

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Integrated Preventative Interventions

"But I think the good thing is that we've been able to offer them an hour's appointment, so it's not been like a 10-minute phone call. It's kind of come in and sit down with us for an hour and let's have a holistic conversation about everything. (Interview 3)

"We've added telehealth monitoring for those patients because obviously, if they've had multiple admissions and been unwell and everything else, then we could monitor that to prevent future admissions. (Interview 4)

"You could effectively target the next wave of interventions because, hopefully, as we build upon this work, we can keep refreshing it and some people will have already been through the loop already, and some people will have had some of the social or medical interventions and only need certain aspects. The more data we can get about what's happened to them would be helpful". (Interview 5)

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Thank you.

For more information, please contact

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