HOUSING AND HEALTH: THE ROLE OF ENVIRONMENTAL HEALTH OFFICERS IN MITIGATING HAZARDS IN THE HOME

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INTRODUCTION

Housing is a key determinant of health and Environmental Health Officers (EHOs) are recognised as primary preventers of ill health. EHOs carry out housing health and safety rating (HHSRS) assessments and require that hazards that harm health in the home are mitigated. This applies to private sector and housing associations homes.

EHOs work with the wider determinants of health and have a critical role to play in prevention. They help achieve the broader Public Health goals.

Since April 2011 Islington Council and NHS Islington have joint funded the work of one Residential EHO. Using the Building Research Establishment (BRE) Housing Health Cost Calculator (HHCC) it is estimated that this post has saved the NHS £88,377 and society £220,944.

Most referrals for HHSRS assessments are made through Islington’s seasonal health and intervention network (SHINE - a single point of referral) and Help on Your Doorstep (a charity that door knock and make health assessments and referrals for vulnerable people). Since 2014 referrals are now received from GPs via locality navigators. Public Health data, census data and energy performance data is being used to identify homes with people in need of a housing health assessment. The provision of this intelligence and referrals have been achieved through nurturing partnerships with the Public Health department, healthcare, adult social care, third party charity organisations and universities.

<table>
<thead>
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<th>Tenures in Islington housing stock</th>
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<tr>
<td><strong>26,564</strong></td>
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<tr>
<td><strong>25,217</strong></td>
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<td><strong>25,014</strong></td>
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<td><strong>14,328</strong></td>
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Figures from 2011 Census data
THE JOINT-FUNDED EHO

Key objectives of the role

- Develop referrals from healthcare and social care agencies for HHSRS assessments
- Use Public Health and other data to identify vulnerable people and carry out housing hazard assessment
- Develop income streams and bid for commissioning funds for additional salaried EHOs
- Evidence the business case and public health case for EHOs being primary preventers of ill health

Key measures for reducing inequalities

- Mitigating significant hazards in the home after housing health and safety rating
- Preventing accidents and infections in the home
- Ensuring basic physiological and psychological requirements are met in the home
- Using intelligence and other data to inform effective pro-active housing interventions

HEALTH PREVENTION: MITIGATING HAZARDS IN THE HOME

The work of the EHO involves developing a range of initiatives to help mitigate hazards in the home:

1. Increasing referrals from health and social care providers

Referrals from GPs

- Referrals from GPs for HHSRS assessments via Age UK employed locality navigators. GPs nominate patients to locality navigators who co-ordinate multidisciplinary teams. Patients normally have a long term condition (LTC).

Referrals from hospital consultants

- Developing referrals from NHS consultants for HHSRS assessments of patients' homes prior to discharge to ensure their home is free from hazards e.g. free of damp, heating working, hand rail installed etc.
- Developing referrals from mental health primary care nurses for patients with complex health needs whose living conditions are contributing to physical and mental health conditions.
Referrals from SHINE

- A single point of referral hub that co-ordinates multi agency health interventions including HHSRS assessments for private sector and housing association tenants.

1. Using data to identify vulnerable residents:

Energy performance certificate (EPC) data base

- The G and F rated EPC data base is accessed and excess cold assessments are made. The BRE excess cold calculator is used to help justify improvements under housing act notices.

Public Health and 2011 census data

- The Public Health England outcomes framework is being analysed with the 2011 census data at the local super output level (LSOA) by the Public Health department to try and identify concentrations of health inequalities in housing association and private rented tenure.

2. Education and awareness raising: Making every contact count - education

- Delivering training to Islington GPs, pharmacists and opticians on making referrals for housing health assessments.
- Submitting articles to GP weekly e-bulletins promoting how referrals for their patients may help prevent accidents and infections in the home and subsequent visits to their surgeries.
- Delivering cross-disciplinary training to other public health practitioners including EHOs e.g. signposting for mental health and smoking cessation support.

3. Evidencing the business case

Using the Housing and Health Cost Calculator (HHCC) to make the business case for prevention

- Developed by the Building Research Establishment (BRE) and quantifies saving made to the NHS and society for every hazard mitigated in the home.
- EHO using HHCC for Clinical Commissioning Group bids for additional salaried EHO and to evaluate savings made from thermal insulation programmes and grant aided adaptations.
REFERRAL SOURCE FOR JOINT-FUNDED NHS - ISLINGTON EHO

Figure 1: Referral source for 98 hazard assessments in 2014

Most referrals for hazard assessments are from SHINE and most of these are made by social care and charities. The majority of these tenants are housing association.

Future Work

There is a need to develop referrals for assessments from healthcare professionals including GPs, the locality navigators, the clinical multidisciplinary teams and from hospital discharge planning teams.

The surveys from the EPC database need to be scaled up to increase prevention of excess cold hazards and tackle fuel poverty particularly in preparation for new legislation in 2018.

REFERRAL PATHWAYS INTO SHINE – SINGLE POINT OF ACCESS HUB

Figure 2: Source of 67 SHINE referrals in 2014

Single point of access intervention hubs like SHINE are models of good practice demonstrating that effective permanently joined up integrated care and collaborative efforts between social care, healthcare and public health practitioners can strengthen preventative health interventions.
Analysis of referrals

There is a significant gap in SHINE referrals from healthcare professionals and referrals regarding private sector tenants.

Barriers to making referrals from healthcare staff include multiple access points dependent on the tenure and the area in which local authority tenants reside.

Ideally one single access point for all housing issues that impact on health across all tenures and all local authorities would be a long term aspiration that may help increase referrals from health care.

MITIGATING HAZARDS IN THE HOME: SAVINGS TO THE NHS

Greater savings to society and the NHS can be realised from a targeted approach.

Savings are made by mitigating hazards such as excess cold in homes occupied by vulnerable people experiencing long term health conditions. Working closer with healthcare, social care and local authority Public Health can prevent ill health and realise some of the objectives of the NHS five year view. This could help start to tackle the causes of some of the biggest threats to health by ensuring greater co-ordination between different health and social care providers.

Figure 3: Approximate cost savings to the NHS using the Building Research Establishment Housing Health Cost Calculator
HAZARDS MITIGATED BY ENVIRONMENTAL HEALTH OFFICERS IN 2014

Hazards reduced reflect national trends for the most common hazards found in the UK housing stock. The preventative work of the NHS - Islington EHO targets those experiencing greater health inequalities and helps achieve broader public health goals; their work is programmed and planned to prevent ill health of tenants experiencing the greatest health inequalities.

The work of the joint–funded NHS-Islington EHO targeted excess cold hazards. Mitigating excess cold and falls hazard can often bring about the greatest savings to NHS and society.

The bulk of the referrals for assessments identify clients likely to experiencing fuel poverty, damp and mould and cold hazards.

These vulnerable clients are often experiencing long term health conditions and living in homes with conditions that can cause or exacerbate their poor health.

Figure 4: Comparison between Residential Environmental Health and NHS Islington EHO of hazards identified in 2014. Figures shown are the proportion of all hazard mitigated by Residential Environmental Health and the NHS Islington EHO.
FUTURE TRENDS CRITICAL ROLE FOR ENVIRONMENTAL HEALTH

- Growing private sector – more demand on Residential Environmental Health Officers
- Growing and aging population – increased population at risk of cold and falls hazards
- Welfare reforms - reduced benefits, more fuel poverty
- Increase demand on lower housing supply, worsening conditions
- Fewer new homes and fewer affordable housing units
- Closer working with multidisciplinary teams Clinical Commissioning Groups and Public Health.

EHO PARTNERS IN PREVENTION: THE BUSINESS CASE FOR PREVENTION

Case study – Health prevention
A social worker referred a house bound vulnerable 90 year old suffering from cardiovascular and a respiratory condition into SHINE. The joint-funded NHS-Islington EHO visited and assessed the premises for excess cold hazard and served a legal notice requiring thermal insulation. The landlord installed internal thermal insulation to reduce significant heat loss through the walls and floors. The tenant is safer, warmer, has lower fuel bills and the potential for hospital re-admissions have reduced.

Case study - Public Health mapping
Environmental Health Officers and the Public Health intelligence team have used data from the 2011 Census and the Public Health Outcome Framework to map out at the local super output area level the incidence of fractures in areas of high concentration of the private rented housing. This analysis can be considered for other hazards informing housing conditions and harm to health caused by, for example, cold; electrics and burns. This information can be used to inform street surveys and other proactive housing interventions to prevent ill health. Similar research work is currently being undertaken and co-ordinated by Middlesex University to attempt to express any relationship between heating type and mental health conditions.

Case study - Use of the Housing Health Cost Calculator
This evaluation tool can be used to quantify savings for every hazard that Environmental Health Officers mitigate or reduce in the home. It has been used to quantify savings to the NHS and society following an external wall insulation programme on an Islington housing estate. It is also being developed to quantify savings following disabled facilities grant funded adaptions to homes. The tool can also quantity the number of people now not requiring treatment following a hazard mitigated in the home.
FUTURE NEED- FUTURE WORK– FUTURE IDEAS

- Assessments of housing conditions for patients prior to discharge from hospital.
- Commissioned EHO posts mitigating hazards that are contributing to local health inequalities.
- Closer working with multidisciplinary teams with representatives from mental health, community nursing, social services, GPs and a community matron
- Greater use of Public Health data and other intelligence for health mapping by tenure.
- More referrals from healthcare and clinicians via locality navigators and other partners of GPs.

FURTHER INFORMATION

Health mapping tool kit Dr James Hunter Nottingham Trent University, Sian Buckley University of West England - [http://www.cieh.org/policy/public-health-mapping-toolkit.html](http://www.cieh.org/policy/public-health-mapping-toolkit.html)

Effective Strategies and Interventions: environmental health and the private housing sector, Jill Stewart—CIEH University of Greenwich - [www.cieh.org/policy/Effective_Strategies_and_Interventions_Environmental_health_and_the_private_housing_sector.html](http://www.cieh.org/policy/Effective_Strategies_and_Interventions_Environmental_health_and_the_private_housing_sector.html)

Building Research Establishment, Housing Health Cost Calculator - [https://www.housinghealthcosts.org/](https://www.housinghealthcosts.org/)

Building Research Establishment, Excess Cold Calculator - [https://www.excesscold.com/](https://www.excesscold.com/)


Figure 5 – example of health data mapping to inform proactive street surveys

Density of private rented housing (Census 2011) compared with hospital admissions for hip fractures, by GP Practice, (2008/09 to 2012/13, pooled rate)

Legend

Data_GP_HipFractures5Years

- Red: Top
- Pink: 2
- Orange: 3
- Light Green: 4
- Green: Bottom

LSOA’s rank, private renting density

- White: 1.00 - 25.40
- Light Blue: 25.40 - 49.80
- Blue: 49.80 - 74.20
- Dark Blue: 74.20 - 98.60
- Dark Green: 98.60 - 123.00