

CHESHIRE FIRE & RESCUE SERVICE

MEETING OF: SERVICE MANAGEMENT TEAM
DATE: JULY 2020
REPORT OF: NICK EVANS
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SUBJECT: SAFE AND WELL – EVALUATION OF IMPACT OF ATRIAL FIBRILLATION AND AFFORDABLE WARMTH

Purpose of Report

1. To provide SMT with an overview of an evaluation and impact research report for two elements of the Services' Safe and Well work: Atrial Fibrillation and Affordable Warmth screening.

Recommended: That:

- [1] the content of the research report be noted;
- [2] SMT consider and offer a view on publishing the research report and potential media and press release; and
- [3] note plans for further Prevention research.

Background

2. From 1 February 2017, the Service refocused and rebranded the long established Home Safety Assessment programme to Safe and Well visits. This work was in line with a national shift in emphasis in fire and rescue services to expand traditional fire safety visits to vulnerable households to include work to support identified local health priorities.
3. Following extensive consultation with NHS England (Cheshire and Merseyside Sub-Region) and Public Health England Directors of Public Health (Cheshire region) during 2015 and 2016, the work was introduced in three phases. Phase 1 comprised: slips, trips and falls, bowel cancer screening awareness, smoking cessation, alcohol reduction, and atrial fibrillation (initially in Halton only), and is delivered by all advocates and fulltime operational firefighters.
4. Phase 2 of the work commenced on 1 April 2018 and added Atrial Fibrillation (pan-Cheshire) and work to screen people at risk from fuel poverty to the Safe and Well initiative. Phase 3 was introduced on 1 April 2019, adding Blood Pressure testing and loneliness and isolation to the work.

Safe and Well Evaluation – Phase 2

5. In 2017 the Public Health Unit at Liverpool John Moores University (LJMU) was commissioned by CHAMPS (Cheshire and Merseyside Directors of Public Health) to evaluate the Safe and Well work delivered by Cheshire and Merseyside FRSs between 2017 and 2018, focusing on Phase 1 of the work: falls prevention, bowel cancer screening, alcohol consumption and tobacco use. The LJMU research was published in late 2018. Whilst broadly supportive of Safe and Well work it made a number of recommendations for both FRSs and health partners on issues such as tailored training for staff to effectively deliver the work and better client engagement. The research did not consider the impact of Safe and Well visits on reducing demand on health services and health budgets.
6. From the outset of the development and introduction of the Safe and Well work, the Service recognised the importance of evaluation in terms of effectiveness and efficiency and the need to be able to provide robust evidence to partnership working with health. The Service was therefore keen to build upon the LJMU research and evaluate Phase 2 focusing on the delivery, effectiveness and impact of atrial fibrillation and affordable warmth screening work.
7. Dr Julian Clarke (Edge Hill University) has previously conducted work for the Service on issues such as the Migrants Impact Fund. Now retired from Edge Hill University, Dr Clarke agreed to undertake an evaluation of Phase 2 of Safe and Well on a voluntary basis at nil cost.
8. The evaluation comprised qualitative and quantitative interviews with Cheshire FRS staff delivering the work, with NHS England managers, and analysis of Cheshire FRS data. The research looked at impact over 2017/18 and 2018/2019.

Research Findings and Conclusions

9. The research found that the Service had successfully restructured Home Safety Assessments into Safe and Well visits to support a wide range of health interventions for the local population. Based on assumption and estimates, it further found that the Service atrial fibrillation screening work had averted between 2.42 and 12.1 strokes for the period evaluated. This has potentially saved the NHS up to £500,000 in gross treatment costs and provided potential annual benefits worth up to £720,000 (using current Quality Adjusted Life Year valuation). Similarly, using figures used by the Department for Transport (and widely used by Government Departments for cost benefit analysis) for the cost of a serious injury, the research found the potential public financial benefit can be assessed at £2,500,000.
10. The research also found benefits from the affordable warmth screening work amounting to an overall figure of £19,495 savings across all households assisted in terms of moving to more advantageous fuel tariffs and access to fuel poverty benefits and grants.

11. Health partners agreed that the Service has been able to make a valuable contribution to the local health agenda by signposting people who have asymptomatic atrial fibrillation to their GP for further investigation and potential anticoagulant therapy. Similarly, the affordable warmth screening work has a value beyond reducing fuel poverty. It has the potential to reduce cold related ill-health.
12. The delivery of atrial fibrillation and affordable warmth screenings have highlighted some training, management and partnership challenges. For example, there were mixed views from Service staff of the value of adding atrial fibrillation to Safe and Well. A minority thought the atrial fibrillation work detracted from the main messages about fire safety. However, following a training review that resulted in additional training being provided, staff were three times more likely than not to be in favour of atrial fibrillation screening work and its benefits to the community.
13. The report makes a number of recommendations for embedding and improving the work when it is safe to recommence Safe and Well work. Prevention policy will consider these and action as necessary.
14. The overall conclusion is that atrial fibrillation and affordable warmth screening work have been an important addition to the Services' Safe and Well visits and can be shown to be a worthwhile use of Services' resources and of benefit to the health of the population of Cheshire.

Endorsement by Health Partners

15. In early 2020, Cheshire FRS was invited to join the Cheshire and Merseyside Cardiovascular Disease Sub-Group. The invite was made in recognition that the Service was supporting, through Safe and Well visits, two of the three areas of interest for the Sub-Group, namely: atrial fibrillation and hypertension.
16. A draft of the research report was circulated to the group for comment. A number of senior health colleagues provided feedback, which was supportive for the work and its findings. In particular, Professor Gregory Lip (Liverpool Heart and Chest Hospital) was enthusiastic about the research report. He has asked that a short academic paper be produced on the work and its findings for publication in medical journals in the UK and the USA.

Publication of Report

17. The report is now ready for publication. It is recommended that it be published on the Cheshire FRS website, supported by a media press release. Once published we recommend that the report be circulated widely to local NHS and PHE health partners; NFCC Health Group; and key support groups such as the Atrial Fibrillation Association and fuel poverty charities.

Update on other Prevention Research Projects

18. The Prevention Team has commissioned several other research projects to help inform policy direction. Dr Clarke is currently evaluating the blood pressure element of Safe and Well. This work is due to complete by early 2021. A procurement exercise was undertaken for work to look at potential future fire deaths in Cheshire over the next 10 to 15 years. Greenstreet Berman Ltd were awarded the work. And finally the Prevention Team is seeking funding of £10k from the Fire Services Research and Training Trust to fund research to evaluate the fire safety element of Safe and Well visits. We believe all three projects will provide a strong evidence base of the Services' prevention work and support for future HMICFRS inspection visits.

Financial Implications

19. The evaluation of blood pressure will cost in the region of £3k. The Greenstreet Berman Ltd research into future fire deaths will cost £15k. It will be paid for from 2019-20 underspend from prevention budgets.

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APPENDIX 1 – SAFE AND WELL – EVALUATION OF IMPACT OF ATRIAL FIBRILLATION AND AFFORDABLE WARMTH