

The Catalyst Project, funded by the Higher Education Funding Council for England (HEFCE) and monitored by the Office for Students (OfS) is a partnership between the University of Essex, Essex County Council and Suffolk County Council.

Using cross-disciplinary expertise in data analytics, big data and evaluation, the University of Essex is supporting both County Councils to assess risks for vulnerable members of the community and provide evaluation techniques to fully understand the impact of Council initiatives.

Catalyst Evaluation Case study

Parish Safety Volunteer Pilot Programme

In 2017 the Catalyst Evaluation Team led by Dr Gina Reinhardt were asked by Essex County Council to evaluate one of the interventions launched as a result of its 2015-2016 successful bid for the Government's 'Transformation Challenge Award'. The overarching theme of the bid was to develop early intervention initiatives for vulnerable members of the community and the Parish Safety Volunteer (PSV) Pilot Programme was one such initiative.

Background

Essex County Fire and Rescue Service (ECFRS) serves more than 1.74 million people and operates 51 fire stations across Essex.

During 2009-2017, accidental dwelling fires (generally defined as a primary fire in a dwelling of accidental or unknown motive) were responsible for 8 in 10 fire casualties recorded by ECFRS. Accidental dwelling fires therefore account for a large proportion of the fire casualties in Essex. In addition to fighting fires, attending road accidents and dealing with major emergencies, the ECFRS educates community members to contribute to the safety and welfare of their communities.

The Parish Safety Volunteer (PSV) Pilot Programme aims

'Parish Safety Volunteers' (PSVs) is a joint initiative developed in 2016 by the Essex County Fire and Rescue Service (ECFRS) and Essex Police (EP) Community Safety Departments, in partnership with local authorities in Essex. The initiative was delivered by volunteers across 36 parishes in Essex with the aim of increasing community safety and resilience and to enable local people to take more responsibility for the safety of their own community.

How the PSV programme worked

The Parish Safety Volunteers (PSVs) were recruited from the local community and trained jointly by ECFRS and EP to deliver home safety visits to households in the County. Meanwhile, ECFRS ran a community education initiative to invite people to request a PSV visit. PSV programme objectives were to:

- Successfully recruit & train 72 Parish Safety Volunteers
- Deliver up to 240 home safety visits across the 36 parishes between November 2015 and May 2017
- Reduce the risk and number of accidental dwelling fires in the 36 targeted parishes
- Reduce the risk and number of domestic burglaries in the 36 targeted parishes
- Facilitate referrals to other support agencies (community agents, social prescription etc)
- Inform the design and provision of future services

Data collection

The Parish Safety Volunteers gathered information about residents' fire prevention equipment and habits during the Home Safety Visits, collected evaluations from residents about the quality of the PSV visits and any intended follow-up actions on the part of the residents, then followed up with phone calls to gauge whether the intended actions had occurred.

The Catalyst Evaluation Team cleaned, merged, and matched this data to data on accidental dwelling fire occurrence and demographic information provided by ECFRS.

Data analysis

A 'difference-in-difference' test was conducted to determine whether the rates of accidental dwelling fires in any parish before the PSV pilot (2015) differed from its occurrence rates after the pilot (2017), and whether the change in rates of occurrence in parishes that received PSV visits differed from the change in rates in parishes that did not.

Findings

Accidental Dwelling Fires went down overall from 2015 to 2017 (from before to after the PSV visits). The decrease showed 4 fewer accidental dwelling fires per local authority per 5-month period. **This overall decrease was due to a reduction in the number of accidental dwelling fires within the local authorities that received PSV visits.** Before PSV visits began (pre-2016), there was a significantly higher number of accidental dwelling fires in the areas that would receive visits than there were in the areas that would not receive visits. After the visit data ends (post-2016), there is no longer a difference between areas that have received PSV visits and those that have not done.

Essentially, the difference between parishes that received visits and those that did not has been eliminated. As can be seen in figure 1 below, before 2016 the two groups of parishes were significantly different in their accidental dwelling fire incidence. After 2016, there is no statistical difference.

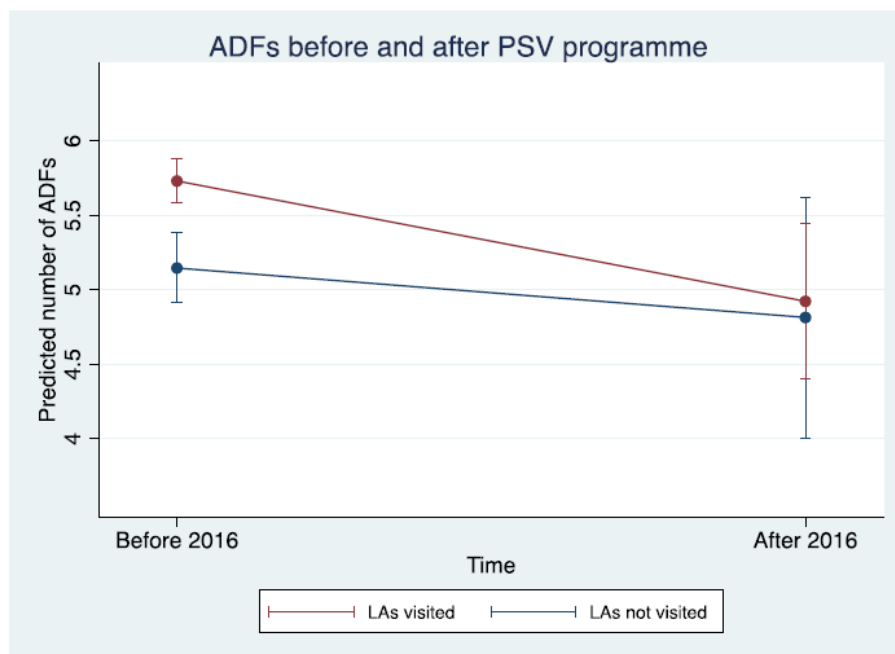


Figure 1 indicates the number of accidental dwelling fires (ADFs) before and after the PSV programme was conducted across Essex

Potential Financial Benefit

The Catalyst Evaluation report indicates a clear decrease in the number of accidental dwelling fires in parishes that received PSV visits. Accidental dwelling fires in PSV-visited locations decreased by **0.81** per visited area per month, and the study covers 65 area-months. In 2011, the [Manchester New Economy Model](#) estimated that one accidental dwelling fire costs taxpayers **£51,129***. If we believe this is the public cost of an accidental dwelling fire in Essex, we can estimate the cost savings due to the PSV programme as:

$$51129 \times 0.81 \times 65 = £2,691,941.85$$

Since the cost of programme implementation was £77,544, we can estimate the total benefit of the PSV programme as:

$$£2,691,941.85 - £77,544 = \mathbf{£2,614,397.85}$$

Demonstrating system change post Catalyst Project Evaluation Team's PSV evaluation

Since the PSV evaluation was conducted, ECFRS are now integrating evaluation mechanisms into their management and programme plans. The Catalyst Project Evaluation Team's [Accidental Dwelling Fires](#) and [Parish Safety Volunteer Programme](#) evaluations prompted a redesign of ECFRS's new *Safe and Well* initiative, including building in formal evaluation processes from its inception.



ECFRS Home Safety Operations Manager Kieron Moir, states, that following working with Dr Reinhardt:

“ there has been increased interest in the evaluation of prevention activity at ECFRS and the Home Safety Team are hosting a further workshop to examine the prevention activity that we currently undertake.”

Kieron Moir refers to the *Safe and Well* changes as a significant step in championing effective evaluation throughout ECFRS, *“an exemplar model of both evaluation and collaborative working for the benefit of Essex communities.”*

Andrea MacAlister, Head of Community Safety, adds that Reinhardt's team's work has made it possible to consider *“how collaborative partnership work between police and fire nationally could look.”*

To learn more about the Catalyst Project, the work streams and initiatives we have carried out, please visit our [website](#)



The Catalyst Project works in partnership with:

