

# REDUCING VIOLENCE AND AGGRESSION IN A&E

THROUGH A BETTER EXPERIENCE





### **Headline evaluation findings**

Reducing violence and aggression in A&E: Through a better experience sought design solutions to make A&E departments calmer and safer for patients and staff.

Significant improvements in patient experience and reductions in non-physical aggression and hostility have been realised in two A&E departments following the introduction of solutions developed by design studio PearsonLloyd.

The design solutions

The Guidance project

Informing and guiding patients through their time in the department, using signage, leaflets and digital platforms. The People project

Working with frontline staff through reflective practices to support their interactions with frustrated, aggressive and sometimes violent patients.

Download the full evaluation report at:

www.designcouncil.org.uk/AEevaluation

of patients felt the Guidance project clarified the A&E process.

of patients said the improved signage reduced their frustration during waiting times.

Threatening body language and aggressive behaviour fell by 50% post-implementation.

3:1

For every £1 spent on the design solutions, £3 was generated in benefits.



Patients' complaints relating to information and communication fell dramatically post-implementation.

### Results and key impacts Post-implementation, only 11% of patients felt that other patients were frustrated compared with 16% pre-implementation. The percentage of patients' rating their waiting experience as 'very good' or 'excellent' increased by 5% postimplementation. Post-implementation, only 9% of patients felt they had been forgotten by staff compared with 17% pre-implementation.

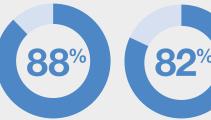
#### Improved patient experience



The design solutions have improved patients' experiences of A&E through clarification of the A&E process and improvement of the physical environment. These improvements have led to reductions in frustration and therefore a reduction in potential escalation into hostility.

Improvements in patient experience will not only reduce tensions and non-physical hostility, but prevent their potential escalation into more serious incidents, as aggression is often the consequence of accumulated frustrations. In recognition that poor patient experience is a key driver of patient frustration, patients' perceptions of the A&E process were assessed pre- and postimplementation, with reactions to the design solutions overwhelmingly positive.

Figure 1. Patients' perceptions of the Guidance project



The signs clarified the A&E process



The signs displayed the steps I actually followed during my time in A&E



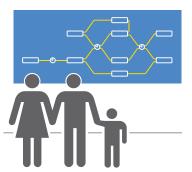
The signs made me feel I could trust that the hospital staff knew what they were doing



The signs made the wait less frustrating

## Threatening body language and aggressive behaviour fell by 50% post-implementation. Staff morale, retention and wellbeing have been improved. Photo: © ESRO/Andy Smith 2011

### Reduced hostility and non-physical aggression



The design solutions have reduced the amount of non-physical aggression and hostility experienced by both staff and patients, particularly relating to threatening body language.

The design solutions set out to address non-physical aggressive behaviour, which is a daily occurrence in A&E departments and places additional pressure on A&E staff. While severe aggressive and violent acts, such as the punching and kicking of staff are extremely detrimental when they occur, the number of reported incidents was low, in both pre- and post-implementation observations. However, it is believed that these incidents are under reported.

Since the design solutions were introduced, both patients and staff have observed significant reductions in acts of non-physical aggressive behaviour. Associated improvements in staff morale, retention and wellbeing have also been reported.

Figure 2. Impact of design solutions on hostility and non-physical aggression



Threatening body language or behaviour (including offensive gestures, unsuccessful physical assault, brandishing of a weapon)



Raised voice or being shouted at (including hostile or aggressive tone)



Offensive language or swearing



Uncooperative behaviour

Source: ESRO; Frontier Economics analysis



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### Good value for money



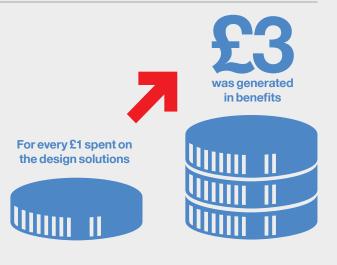
The design solutions have provided good value for money. For every £1 spent on the design solutions, £3 was generated in benefits.

To assess the social and economic returns associated with the design solutions, a value for money framework was used to compare the benefits of the solutions against their associated costs. The measurement of benefits focused on the reduction in non-physical aggression generated by the design solutions.

The benefits of the solutions outweighed the costs of implementation by a ratio of 3:1, meaning that for every £1 spent on the design solutions, £3 was generated in benefits. This is a conservative estimate of the potential benefits which could be realised from implementing the design solutions in A&E settings. Therefore, installing the design solutions represents considerable value for money.

Further details are available in the full evaluation report: www.designcouncil.org.uk/AEevaluation

Figure 3. Cost: benefit ratio



### The programme in context



A&E departments in England deal with more than 21 million patient attendances every year. Ever increasing patient numbers have put A&E departments under severe strain in the delivery of services to patients.

Pressures on A&E departments can lead to negative experiences for both patients and staff. Patients, who are already feeling vulnerable, can become frustrated and hostilities can easily arise. In the complex, high-pressure environment of A&E, escalating frustrations can be particularly difficult to manage and diffuse. With A&E staff bearing the brunt of these tensions, staff wellbeing in A&E departments can be particularly low.

Recognising the significant human and financial costs of violence and aggression towards A&E staff, the Department of Health partnered with the Design Council to explore how design could be used to alleviate tensions in A&E departments. Reducing violence and aggression in A&E: Through a better experience sought to improve both the patient and staff experience, thereby helping to reduce triggers of violence and aggression.

A nationwide design Challenge competition invited designers to propose solutions aimed at tackling violence and aggression in A&E departments. The Challenge sought solutions to improve patient experience, with an emphasis on understanding how processes and systems could be easily, and cost-effectively, retrofitted into existing A&Es.



Photo: © ESRO/Andy Smith 2011



The winning multidisciplinary design team led by PearsonLloyd, worked with the Design Council and three partner NHS Trusts to examine the typical patient journey through A&E, identifying major areas of frustration and potential triggers of violence and aggression. A set of design solutions emerged in the form of the Guidance and People projects. This impact evaluation has focused exclusively on these two projects.

A third output was developed as an online design toolkit, which offers recommendations to NHS Trusts seeking to make improvements within their estates.

#### Figure 4. The design solutions

The Guidance project

The People project

Informing and guiding patients through their time in the department, using signage, leaflets and digital platforms. Working with frontline staff through reflective practices to support their interactions with frustrated, aggressive and sometimes violent patients.

### **Evaluation** methodology



To understand whether the design solutions would successfully improve the patient experience and reduce tensions, they were installed and piloted at two A&E departments: Southampton General Hospital (University Hospital Southampton NHS Foundation Trust) and at St George's Hospital, London (St George's Healthcare NHS Trust). Comparator control sites, with similar characteristics to the two pilot sites, were also selected for the respective pilot hospitals.

Frontier Economics and ESRO developed a methodology that would robustly test the impact of the design solutions. The approach involved collection of primary patient and staff data through immersive methods, secondary A&E data collection, and cost-benefit analysis to reveal the impact of the design solutions.

Surveys and A&E data were collected just before the implementation of the design solutions, and again a year later. The pre- and post-implementation data were contrasted to each other, as well as to comparable A&E departments where the design solutions were not implemented.

To assess the full impact of the design solutions on patient and staff experience, the evaluators set out to answer three research questions.

#### Have the design solutions:

- improved patients' experiences of A&E?
- reduced the amount of hostility, aggression and violence experienced by staff and patients?
- provided good value for money?



#### What's next?



Photo: © ESRO/Andy Smith 2011

It is hoped that the findings of this evaluation will strengthen the evidence that cost-effective design solutions can play an important role in improving patient experience, by preventing the escalation of frustration and hostility in healthcare environments. It is hoped that learnings from this programme can be applied beyond healthcare, with the potential to demonstrate benefits in other public settings.

The positive results evidenced by this impact evaluation send a strong message that A&E departments who implement these design solutions could see tangible benefits to both patient and staff experience at a relatively low investment, to deliver a cost:benefit ratio of 1:3. It is recommended that other A&E departments in England consider implementing these design solutions to realise similar benefits.

In addition to the pilot Trusts, a number of sites across the UK have already adopted the design solutions. PearsonLloyd works with each Trust to customise the solutions to the requirements of each department, reflecting the different processes and cultures that exist.

Digital solutions are also in development to compliment the printed elements of the Guidance project. In addition to live information screens within departments, future applications would allow users to access information remotely to make informed decisions about which A&E department to visit.

To find out more about the solutions and how to implement them in your A&E, please go to: www.ABetterAandE.com or contact the team directly at info@ABetterAandE.com.

### Programme partners

### St George's Healthcare NHS Trust www.stgeorges.nhs.uk

St George's Healthcare NHS Trust is the largest healthcare provider in southwest London. The Trust's main site, St George's Hospital in Tooting is one of the country's principal teaching hospitals. With over 7,000 dedicated staff, St George's Healthcare serves a population of 1.3 million across southwest London. The Trust also provides care for significant populations from Surrey and Sussex, totalling around 3.5 million people.

The A&E department at St George's Hospital has a patient throughput of 120,000 per annum.

### Frontier Economics www.frontier-economics.com

Frontier Economics is Europe's leading specialist microeconomics consultancy, applying the highest quality economic analysis to advise clients across some of the most interesting, topical and high-profile issues in the public, private, and third sector. We use cutting-edge techniques and behavioural insights to measure the impact of policies on people and businesses, and to make recommendations to improve policy design, based on clear and robust evidence.

### University Hospital Southampton NHS Foundation Trust www.uhs.nhs.uk

University Hospital Southampton NHS Foundation Trust provides services to some 1.3 million people living in Southampton and south Hampshire, plus specialist services to more than 3 million people in central southern England and the Channel Islands.

The A&E department at Southampton General Hospital has a patient throughput of 110,000 per annum. Reducing violence and aggression in A&E is a priority for the Trust.

#### ESRO www.esro.co.uk

ESRO is an award-winning, full-service research agency, specialising in the applied use of cultural and behavioural research to understand clients' problems. Whether conducting focus groups or carrying out interviews, the team uses ethnographic principles to guide its work, going beyond 'what people say' to reveal life as it is truly lived. ESRO's research challenges assumptions and reveals new opportunities, turning complex findings into powerful and actionable insights.

### Department of Health www.dh.gov.uk

The Department of Health leads, shapes and funds health and care in England, making sure people have the support, care and treatment they need, with the compassion, respect and dignity they deserve.

The Department of Health is a ministerial department, supported by a number of agencies and public bodies.

The devolved administrations of Scotland, Wales, and Northern Ireland run their local NHS services separately.

### PearsonLloyd www.pearsonlloyd.com

PearsonLloyd is a multi-award winning London-based design studio. Its expertise lies in offering design knowledge and strategic thinking to industries that have demanding spatial, ergonomic and social needs, such as healthcare, aviation, the workplace and the public realm. Founded in 1997, the studio helps organisations to make strategic changes within these areas by exploring the relationships between people and the complex built environments which they inhabit.

### Design Council www.designcouncil.org.uk

The Design Council champions great design. For us that means design which improves lives and makes things better.

As an enterprising charity, our work places design at the heart of creating value by stimulating innovation in business and public services, improving our built environment and tackling complex social issues such as ageing and obesity.

We inspire new design thinking, encourage public debate and inform government policy to improve everyday life and help meet tomorrow's challenges today.



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