

## **Case Study**

*Outline, with reference to a specific case how you have taken action to address an issue and the impact this action has had.*

### **Summary**

Information about air quality is widely available but isn't always presented in a way that helps people engage with the issue. Croydon Council has responded to this by setting up **airTEXT**, a visionary, innovative, four-year pilot project, to provide timely information to vulnerable individuals. The service is aimed at improving people's health and quality of life, as well as helping reduce costs to the NHS.

Croydon Council was the first organisation in Europe, and possibly worldwide, to develop a service to alert people to air pollution. The Council wants and needs to keep residents who are sensitive to changes in air quality informed quickly and effectively. Air pollution alerts are delivered to people with asthma, bronchitis, emphysema and heart disease through the latest SMS text technology, voice messaging, and e-mail. The alert provides a warning of deterioration in air quality, with simple advice on minimising exposure and self-management of symptoms.

So you can see Croydon Council is at the forefront of new, innovative technology in an effort to make Croydon a better and healthier place for those who live, work or travel here.

airTEXT has attracted considerable interest in central and local government and wide coverage through national and international media. We believe airTEXT shows Croydon's commitment to raising awareness of air quality in the borough, making direct interventions to improve people's health and quality of life, and demonstrating strong leadership with this 'first'. Sixteen London boroughs have now signed up to a London-wide airTEXT scheme, led by Croydon. It is hoped the service could be extended to Brussels, Budapest and Rome. airTEXT has also been replicated by the Sussex local authorities.

### **Identifying the need and targeting participants**

It is widely acknowledged that there is a direct relationship between poor air quality and socially disadvantaged communities. airTEXT targets those most in need. Participants are identified and invited by their GPs to join. Registration forms have also been sent to homes in the borough in postcode areas with the highest incidence of the disease groups which airTEXT targets. It has also been publicised at chest and asthma clinics and the NHS Walk-in Centre. Seminars were held for GP practices and interested groups such as 'Breatheasy'.

The airTEXT alerts are triggered whenever air pollution levels are forecast to be moderate or higher. The alert follows the text of Department of Health pollution

forecasts. It includes a description of possible symptoms and necessary preventative/remedial measures; e.g. additional use of inhaler and avoiding strenuous outdoor activity, that people may need to consider.

The forecast is sent in the early evening of the day before the pollution episode, so that participants have time to prepare and make any changes to plans for the following day.

### **Evaluation**

In order to assess the value of the service and its impacts on self-management of symptoms or changes in behaviour to reduced exposure, participants are asked to complete a questionnaire each time they receive an alert, which are evaluated for:

- Usefulness and relevance of messages
- Modification of behaviour/management of symptoms
- Perception of air pollution on symptoms
- Functioning of messaging system
- Recommendations for continuation/extension of service to other users
- Cost benefits

Participants who have recently joined airTEXT are not using the evaluation forms, but will instead be contacted randomly for their views through a market research-type process.

Since the start of the project (30 July 2005) eight alerts have been issued. A summary of the evaluation shows that:

- 59% of responders did something different because of the alert;
- Of those who modified their normal activity patterns, 19% went out but avoided busy roads, 25% went out but did less strenuous exercise than usual, 28% spent more time indoors than usual, 19% stayed indoors all day and 10% ensured they had their medication with them;
- Of those who made changes to self-management of symptoms, 47% took their inhalers or medication in case they were needed; 16% took extra medication to prevent symptoms; and 10% took extra medication because they had symptoms.

In response to feedback on the needs of the elderly (some of whom were uncomfortable with mobile phone/SMS technology) the Council has extended airTEXT to include voice messaging to landlines.

### **Partnership and funding**

The airTEXT project partners are the Croydon Primary Care Trust, who advise on the selection of participants, the South West London Health Protection Unit who assist with evaluation, and CERC, who developed the computer modelling to provide Croydon with the air pollution forecast. It is currently being funded by

Croydon Council, Defra, and PROMOTE (a project of the European Space Agency). airTEXT has the potential to be a highly cost-effect intervention for such a targeted service. It has been estimated that the annual cost of the project will be €14 per participant once fully operational.

### **What others think of us**

Our private sector partners in airTEXT, CERC, have said of us:

***"My experience of Croydon Council suggests that they're pre-eminent in their field in the UK. Croydon are at the forefront of developing air quality services for local residents, health authorities and businesses, services that are now being copied and emulated by other local authorities. Most obvious of these is their area of collaboration with CERC to develop airTEXT.***

***This is an absolute world-first and has attracted coverage from media as far afield as Italy and the US. When fully operational this service could save Croydon PCT hundreds of thousands of pounds per year in reduced hospital admissions due to asthma alone and improve the lives of up to one fifth of borough residents who are vulnerable to air pollution episodes.***

***The Council has also distinguished itself by pursuing basic abatement measures very effectively, such as enforcement of idling vehicle regulations. This combination of basic services well-delivered and world-class innovation is a real example of excellent joined-up-thinking in local government."***