What can be done to reduce false alarms?

Although (the Department for Communities and Local Government’s ‘Fire statistics’ reveal) the number of such incidents has fallen every year since 2006/07, UK fire and rescue services still attended over 312,400 ‘false fire alarms,’ i.e. instances where, on arriving at a site, they found no fire, in 2011/12. Such incidents have been a significant concern for healthcare facilities teams, and for the fire and rescue services serving them, for many years, and, although the past decade has seen determined efforts to substantially reduce the number bearing fruit, many believe far too many still occur. HEJ editor, Jonathan Baillie, reports on a recent London roundtable discussion staged by two leading fire detection and alarm equipment specialists, Apollo Fire Detectors, and Static Systems Group, with IHEEM, which brought together experts to discuss what more can be done to minimise false fire alarms.

False fire alarms – i.e. incidents where the local fire and rescue service receives a call to a reportable fire and attends, only to find there is, in fact, no fire, have been a significant issue in healthcare, as elsewhere, for many years. Fortunately, however, close liaison between many local fire services and, for example, in healthcare, the Responsible Persons for fire safety within NHS Trusts, have seen the number across all sectors in Great Britain continue to fall over the past decade.

While in 2000/1 (the Department for Communities and Local Government’s (DCLG’s) ‘Fire statistics, Great Britain, 2011-2012’ publication reveals) there were (rounded up to the nearest 1,000), around 450,000 false fire alarms, a decade later the number had fallen to around 312,400, itself an 8% reduction on the previous year, while false alarms in 2011/12 attributed to ‘problems with apparatus’ were 9% lower than in 2010/11.

DCLG statistics on false fire alarms in hospitals, medical centres, and care homes, also show a downward trend; falling from 28,691 in 2009/10, to 27,236 in 2010/11, and to 23,586 in 2011/12. The corresponding figures for care homes were 18,872 in 2009/10, 17,374 in 2010/11, and 16,019 in 2011/12.

The reductions suggest that efforts to reduce false alarms continue to have a marked effect in the healthcare sector, but Apollo Fire Detectors, which co-staged the London roundtable with IHEEM, acknowledged, in the January/February 2013 issue of its in-house newsletter, Monitor, that the whole industry ‘recognises that these figures could be so much better’. The article went on to say: “Technology exists that, when applied and installed properly, means false alarms really could be a thing of the past. False alarms place a huge time and financial burden on fire services around the world."

The recent roundtable, entitled ‘Reducing false alarms,’ was held in central London, and chaired by IHEEM’s CEO, Julian Amey. Lending their expertise, experience, and views, were Paul Pope, business innovation manager, at Apollo Fire Detectors; Chris Smith, fire systems engineering manager at Static Systems; Peter Aldridge, fire safety manager at Leeds Teaching Hospital NHS Trust (also representing the National Association of Healthcare Fire Officers (NAHFO)); and John Allwork, head of estates operations at the Pennine Acute Hospitals NHS Trust – which runs North Manchester General Hospital, The Royal Oldham Hospital, Fairfield General Hospital in Bury, and Rochdale Infirmary, which together serve a local population of around 800,000.

Expertise described

Each began by briefly outlining their own professional background and expertise, and giving some initial thoughts. Chris Smith of Static Systems explained that he had worked for the firm for 27 years, starting as an apprentice, and that the company itself had been involved with the ‘fire in healthcare’ arena for over 30 years. His role today was to help develop products that met customer requirements, and to look after current projects, from early design stage, to handover and commissioning. He pointed out that, as ‘a very significant user’ of automatic fire
Top of the fire service register

John Allwork of Pennine Acute Hospitals NHS Trust, a Chartered Engineer, Fellow of IHEEM, and member of CIBSE, who is the Responsible Person for fire within the Trust (see also panel below), noted that healthcare facilities were ‘top of the risk register’ for fire and rescue services, but also acknowledged that they were ‘very difficult facilities within which to maximise fire safety, requiring a delicate balance between keeping patients safe, and reducing false alarms’.

In offering his initial thoughts, Peter Aldridge, fire safety manager at Leeds Teaching Hospitals NHS Trust, and NAHFO secretary, said: “Concern about unwanted fire signals within healthcare is widespread; we all accept that the number must be reduced. However, we also acknowledge that reducing false fire alarms in healthcare premises is by no means always straightforward.” One of NAHFO’s particular current concerns is the potential introduction of charging by fire and rescue services for healthcare facilities with high levels of unwanted fire signals. Peter Aldridge said: “I feel one of the keys here is for wards and departments to take ownership of fire safety; it is not something the estates department can resolve alone. I also believe the issue goes much deeper than just the fire alarm going off, and the time wasted for the fire brigade; it’s also about the impact on patient care delivery.”

NAHFO had recently, he explained, been looking at calculations of ‘the true financial cost’ of false fire alarms to the NHS, and the potential patient risks.

A family affair

Paul Pope, business innovation manager, EMEA, for Apollo Fire Detectors, explained that his father had been in the London Fire Brigade all his life, in charge of fire safety for Westminster, and had worked on many British standards around LFB policies.

He said: “I followed in his footsteps, but in my case in the fire detection business, and have worked in various major companies on installation, specialising in standards. I joined Apollo 13 years ago as technical sales manager responsible for global product support, international standards, and being a voice on trends and technology. Today I work with new technology and innovation, and with architects, consultants, and industrial organisations, to try to benefit the sector, and to ensure that our products are suitable for the risks they are deployed in.”

Apollo’s strategy had always, he explained, been “to be innovative”, the company was “extremely keen” to play its part in reducing unwanted fire alarms. He said: “The reliability of our products is one of our highest priorities. As a manufacturer, we are not prepared to develop products that compromise good detection regimes.”

He warned that fire detectors came with ‘a massive risk of non-detection’ if not designed and manufactured well, adding: “As a manufacturer, it is extremely important that we understand the current problems, to enable us to solve them in a way that detection is guaranteed when necessary.”

Fuller discussion

Julian Amey then initiated the fuller discussion by firstly asking what more the industry could do to minimise false alarms. Chris Smith acknowledged that technology could ‘help significantly’, there were now ‘a wide range of fire detection and alarm products available to meet different requirements’, and, in many instances, if ‘the right products were installed into the right environment’, they would automatically achieve the correct level of detection both to pick up fires, and reduce false alarms. Key, however, was the equipment’s design; using the right technology to ensure that products were fit-for-purpose, and suitable for each installation, was critical, placing considerable emphasis on thorough consultation at design stage. He said: “As a system designer, one needs to look at what individual rooms will be used for – to ensure not only that you provide the right sort of detection, but also minimise false alarms.”

Overseas practice

Julian Amey asked about the growing use of technology, and how this might help end-users.

Speaking as an estates manager in charge of fire safety at a sizeable NHS Trust, John Allwork said: “Technology is great provided it is user-friendly. We in the NHS have to operate these systems, and need a simple-to-use front end, and equipment that we can easily make changes on, for instance when particular premises’ or rooms’ names or functions change. Each system and area in a hospital must be looked at independently.

Definition of the ‘Responsible Person’

Referring to the term, ‘Responsible Person’ alluded to during the event by John Allwork, the DH’s fire safety lead, Paul Roberts, pointed out: “Within the Fire Safety Order, the term Responsible Person has a specific meaning, which is: (a) in relation to a workplace, the employer, if the workplace is to any extent under his control; (b) in relation to any premises not falling within paragraph (a) – (i) the person who has control of the premises (as occupier or otherwise) in connection with the carrying on by him of a trade, business or other undertaking (for profit or not); or (ii) the owner, where the person in control of the premises does not have control in connection with the carrying on by that person of a trade, business or other undertaking.

Paul Roberts added: “Effectively, the Responsible Person in an NHS Trust is likely to be the body corporate. However, it could also extend to any person who has control of the premises to any extent, so it could be John Allwork, but not as the sole Responsible Person.

In some circumstances, it could be the ward manager, or even the staff nurse on duty at night in charge of a ward.”
The key is to have equipment we can use without having to call in the manufacturer every two minutes.”

Peter Aldridge of Leeds Teaching Hospitals NHS Trust agreed, arguing, in particular, that both the main panel, where estates officers and fire service personnel tended to obtain their primary data, and the repeater panels, needed to use ‘very user-friendly addresses that staff can understand.’ This not only enabled the right personnel to ‘get to an incident quickly’, but also assisted with call filtering.

He said: “I quite often find fire alarm systems have become overly complicated. One of the consequences is that, to carry out a local maintenance job, and avoid an unwanted fire signal, rather than taking one detector out, people remove the entire loop, leaving the whole area vulnerable, because this is the easiest option.

The more user-friendly, however, that systems are, the lower the vulnerability during any downtime, and the better the chances of people using the technology to properly manage unwanted signals.”

Chris Smith agreed; with hospitals seeing regular changes, fire alarm systems also needed to be easily re-configurable.

Risk of obsolescence
Peter Aldridge said one of his concerns was that, with technology now moving so quickly, users of a system just 5-6 years old might now find a new detector head design incompatible with the equipment. Adding components as systems got older could thus potentially become difficult. He said: “Sometimes you might find you have to put an entire new system in, which, with scarce financial resources, can be a major issue.”

Paul Pope said Apollo had maintained backwards compatibility for all its systems; it was thus possible to take one of its latest detectors and put it on an Apollo system manufactured in 1986. “One of the things Apollo did, back in 1986,” he explained, “was to choose a very forward-thinking digital protocol, which has enabled us to keep our technology state-of-the-art right up to today. In addition, our equipment’s robustness, and length of service in the field, are well-proven, coupled to which we intend to continue using the same protocol for future new products.”

Good algorithm design was another key contributor to the reliability of fire detection and alarm equipment, he argued, before adding: “As with all software, should you change the parameters in your device without the in-house wherewithal or expertise to evaluate the impact within a fire test room, you cannot be sure of the outcome. Investing in in-house test house facilities has been key to us in verifying ongoing changes of software and algorithms. Validation and verification are vital to ensuring that any changes within algorithms do not see real fires missed.

Care after moving
‘Critically,’ Paul Pope added, “estates personnel must remember that work on fire detection and alarm systems, such as contractors without the necessary proficiency or expertise moving detectors, does happen. Since each device will be addressable, it is vital that the detector is verified afterwards. With some systems, if equipment is moved around, the component’s address changes.”

In Apollo’s detectors, he explained, an ID tag in the detector’s base assumes the location of the base if detectors are ‘swapped around’. He added: “The tag will also ‘know’ where the detector was located previously, and what type it was. These features are vital in a hospital environment, where fire strategy tends to depend heavily on the location of the various devices.”

‘Unique’ issues
Moving to another key question, Julian Amey asked the participants to comment on the fire prevention issues ‘unique’ to healthcare. John Allwork said: “Every hospital environment, and indeed the environment in different hospital types, presents different challenges; you have theatres, medical gases, and we tend, of course, to ‘manage’ people in the event of some fires – rather than always evacuating them – using compartmentation. In mental healthcare facilities, meanwhile, some patients are more likely to be allowed to smoke, presenting an additional risk, and a cause of many false fire alarms. Hospitals’ location also has a major impact.” For instance, he added, his experience was that city centre hospitals tended to see more patients with drug issues. There was also the issue of those who like to set fire to waste bins and start fires deliberately.

Chris Smith added: “There is also staff accommodation, such as nurses’ accommodation, to consider. Here staff might, for example, burn joss-sticks, and cook in close quarters, presenting a fire risk, but may sometimes fail to consider the potential implications of their actions.”

Call points
Peter Aldridge said that while those responsible for fire safety often focused on detectors, and on items such as joss-sticks causing false alarms, proper operation of call points also needed to be carefully considered; for instance a call point might be triggered by somebody moving a tug down the corridor. He said: “People sometimes also accidentally hit the call point instead of the door release button. Some of the things that would be fairly easy to resolve in another public building are not in a large hospital.”

He had also encountered fire alarms being set off by burning of joss-sticks or scented oils in palliative care environments. He added: “Often people do not cause problems deliberately; it is simply that healthcare is being delivered in extremely complex buildings.” In fact, he said, especially given the number of call points in his Trust’s buildings, there were actually very few malicious activations. “Far more common,” he explained, “is people hitting call points because they believe they are something else, such as a door release button. One of the problems may now be that, in new build properties particularly, the door release button, light switch, and fire alarm call point, tend to be in close proximity. Paul Pope said: “They are invariably the same style too.”
A matter of perception
Peter Aldridge interjected, “is that while call points used to be made of clear glass, and often incorporated the words, ‘Break here’, they now tend to feature white glass with a white dot. Psychologically, because they no longer incorporate ‘Press’ or ‘Break here’, not many are broken. Instead staff ring us and tell us that the fire alarm call point has no glass in it, and we then have to explain that this is indeed how the design now is.”

Chris Smith said: “From a wider standpoint, there is perhaps more we could do in terms of making people aware of new technology and training on it, possibly without having to always stage formal sit-down sessions. We have recently used video to assist with this.”

John Allwork said that, at his Trust, those whose job involved hands-on patient activity typically received face-to-face training annually, and others online training every other year. He said: “We also use videos, with the themes regularly changed. This works well, but it can be difficult to ensure that people attend. We nevertheless managed an 86% attendance rate last year.”

Peter Aldridge said: “Consideration of how to minimise unwanted fire signals may well, however, only form a small part of the fire safety / prevention training experience, especially if you’re in a room with nine intensive care nurses. What they really want to know, when the fire alarm sounds, is: ‘Is it a continuous or intermittent signal?’ Does it relate to their part, or another part, of the hospital?, and What are the key considerations for getting the patients out, including swapping from static to portable equipment? By the time you’ve covered all this, you might only have 2-3 minutes to devote to unwanted fire signals, which makes clarity of message key. At Leeds we are looking at making a series of 3-4 minute highly focused video clips for our intranet. One will be on unwanted fire signals, but our film-makers are still refining the words, ‘Break here’, they now tend to feature white glass with a white dot. Psychologically, because they no longer incorporate ‘Press’ or ‘Break here’, not many are broken. Instead staff ring us and tell us that the fire alarm call point has no glass in it, and we then have to explain that this is indeed how the design now is.”

View from the Department of Health

Paul Roberts, risk management adviser and fire safety lead within the Department of Health’s NHS Estates and Facilities Policy Division, could not attend the event, but told HEJ during a subsequent telephone discussion: “The DH is encouraged that the number of false fire alarms and unwanted fire signals continues to fall. This is largely due to greater vigilance by estates and facilities and other NHs personnel, increased focus on good management of the operation and maintenance of fire detection and alarm systems, and work to ensure that NHS staff understand the financial and practical consequences of false fire alarms, and how to minimise the number. For instance, at a practical level, one now sees far fewer toasters with wads in them, and What are the key considerations for getting the patients out, including swapping from static to portable equipment? By the time you’ve covered all this, you might only have 2-3 minutes to devote to unwanted fire signals, which makes clarity of message key. At Leeds we are looking at making a series of 3-4 minute highly focused video clips for our intranet. One will be on unwanted fire signals, but our film-makers are still refining the words, ‘Break here’, they now tend to feature white glass with a white dot. Psychologically, because they no longer incorporate ‘Press’ or ‘Break here’, not many are broken. Instead staff ring us and tell us that the fire alarm call point has no glass in it, and we then have to explain that this is indeed how the design now is.”

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Sensitivity required
Peter Aldridge went on to briefly discuss differences in approach when confronting staff and, say, relatives of a very unwell patient, who may themselves be very anxious or upset, over false alarm incidents. He said: “At one hospital, we have 25 ‘Travelodge style’ rooms for parents wanting to be close to their sick children. Sometimes, on returning to their room, the parents cook themselves a bacon sandwich. Who is then going to explain that this is indeed how the design now is.”

Julian Amey asked whether participants felt the simple measure of putting up posters drawing attention to the practical and financial costs of false fire alarms might help raise the issue in staff’s, patients’, and visitors’ minds. John Allwork said that, while the hospitals he worked in featured numerous posters on, for example, hand-washing regimes, similar ones on fire safety were not prevalent. Switching topic back towards equipment, he said: “With different fire risks at different times of day, detection systems need to be adaptable. For instance when everybody is cooking, you do not want a smoke detector operating, but, when this dies down, then let the equipment change back to smoke detection.”

Paul Pope stressed that modern fire detection systems already automatically offered such capabilities.

Separate signals
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Is accurate data available?
I asked Peter Aldridge, in his NAHFO capacity, whether the Association had up-to-date statistics on the number of false fire alarms in healthcare facilities UK-wide. “This is an interesting topic,” he responded. “Until recently, NHS organisations had to centrally report false fire alarm activity to the Department of Health annually. However, there was no requirement for NHS Foundation Trusts to produce such data, and, bearing in mind the DH’s ambition for all Trusts to achieve Foundation status, it was subsequently determined, about four years ago, that Trusts as a whole would no longer need to report centrally on unwanted fire signals. In addition, from April 1 this year, NHS Trusts will no longer even need to centrally report fires. The only true figures (available from within the NHS) now are the ERIC...
returns, which simply ask how many unwanted fire signals/false alarms, and actual fires, a Trust has had; there is no breakdown of the causes. To my knowledge, I don’t believe the NHS could now accurately tell you the number of unwanted fire signals, or indeed fires, that have occurred within its buildings in a given year; the only way to get this data is to ask each individual NHS organisation. You might think that the fire and rescue services would have the most accurate figures, but in some cases their figures are fairly generic. They may be able to tell you of an activation, but not necessarily the cause.”

**Different interpretations**

Peter Aldridge said the fire service’s ‘interpretation’ of what constituted NHS premises might also differ from the official NHS view. “The upshot,” he said, “is that I don’t believe the Department of Health, the NHS, or the fire and rescue services could ever come up with a list that would tally on the number of calls to healthcare premises. This is an area where there needs to be work done; it may be that an organisation such as NAHFO can do this, but it won’t be an exact science.” Julian Amey felt that, if given some resource, NAHFO could assemble this data, but agreed that the whole issue needed highlighting, as the apparent lack of uniform data represented ‘quite a high level of risk’.

Peter Aldridge’s view, moving to consider how much of a role central Government, and the DH in particular, now had in determining fire strategy at a Trust level, was that the Department would probably suggest that, where a local Trust had a ‘particular issue’ with unwanted fire signals, the matter was principally now between it and the local fire and rescue service; the DH would generally only intervene over major ‘differences of opinion’. He said: “I think the Department is now far more likely to get involved where a fire safety issue might affect the entire sector nationally.”

**Is there any legislative driver to reduce?**

One participant pointed out that there was currently no real legislative driver for individual Trusts to cut unwanted fire signals. However, Peter Aldridge countered: “In fact every article within the Fire Safety (Regulatory Reform) Order is, by default, an implicit aspiration that, if you are complying with the Order, you will be reducing your unwanted fire signals.”

When, following the roundtable, I spoke to the DCLG statisticians who produce the annual ‘Fire statistics’ publication, they made clear that the data relating to the number of ‘false alarms’ relates to instances where an alarm was raised, and at least one fire tender attended. Peter Aldridge, however, pointed out, during the roundtable, that the fire and rescue services now distinguished between ‘unwanted fire signals’ and ‘false alarms’. He explained: “An ‘unwanted fire signal’ is the term used where the activation of a fire alarm is passed on to the fire service and they attend, whereas a ‘false alarm’ is an activation that fire officers are generally (but not always) not
called to. Thus an NHS organisation that doesn’t routinely send for the fire service every time that the fire alarm goes off may have 200 false alarms annually, but, of these, 15 might be unwanted fire signals. The terminology needs to be right when discussing performance levels with the fire and rescue services.”

Success of partnership working

Julian Amey next asked whether ‘partnerships’ were working strongly enough between equipment suppliers, installers, and facilities managers. John Allwork said: “The only major area where I feel there is significant room for improvement is in some systems’ user-friendliness. We must also remember that many large acute hospitals have numerous different types of equipment in place, and that the instances where a large acute facility will be in a position to replace its entire system are becoming fewer and farther between. New fire alarm components must generally ‘slot’ into other systems, and be networked, making it essential to have the right protocols etc. I think the message is getting through that we cannot be locked into one particular manufacturer’s technology.”

Paul Pope said: “There are ways of getting different systems to ‘talk’ to a mainframe, but during tendering, some health service personnel do not look sufficiently thoroughly at lifetime and maintenance costs. Consequently, the equipment may then not get properly maintained, because, say, one particular provider is charging too much for aftercare. It would be interesting to discover whether systems bought at a low initial cost, without much consideration of lifetime maintenance support, are causing more problems than those where specifications have properly considered the longer term.”

More emphasis on design

Chris Smith agreed, but added: “I would also like more emphasis placed on system design; this plays a critical factor. Equally, in some tendering projects you can be faced with a blank floor plan from the client, accompanied by a request to get a price to them within days – hardly the optimal route to a well-designed solution.”

Peter Aldridge added: “Sometimes relatively small NHS organisations may not have their own capital project teams, so the entire equipment specification for a building refurbishment – of which the fire alarm system is just one element – may be overseen by individuals within a framework agreement without good knowledge of either the latest technology, or the client Trust’s working practices or premises. Perhaps the NHS needs to be more realistic when it comes to what we want when tendering? Equally, when we have hugely complex systems, we need to work better with suppliers, to make clearer how we want the fire alarms addressing, since every Trust has a different way of addressing its rooms.”

In Leeds, he explained, his Trust had five acute hospitals, with one site alone equipped with 52 different fire alarm systems.

No ‘ownership’

Paul Pope explained that, while there was a proprietary protocol for fire detection equipment, almost every manufacturer had its own. He said: “There are systems that even when, say, the NHS Trust has paid for a service contract, they neither own the technology, nor have access to it. The key for users is to understand what they own, and what they can and can’t do, before having a system installed. For example, you should be confident of being able to take down a detector temporarily, and re-affixing it, and it still functioning. You equally need to be in control of your text; such elements, and the cost of changing detectors at the end of their life, should be evaluated before purchase. Equally, consider what constitutes a reasonable cost to, say, replace detectors after 10 years. If fire detection equipment is left running for 20 years, and becomes unreliable, the detectors may either give many false alarms, or detect fires later than they should.”

John Allwork asked whether, ideally, there should be a single standard in place to enable users of a particular system to, say, fit another manufacturer’s head or control panel to it, but Paul Pope said this would be hard to achieve. He added, however: “We have had relationships where NHS Trusts have had three or four of our product generations installed over 20-30 years, and we are always happy to work with them to help resolve particular issues. For instance, if a Trust has problems with oil burning setting off alarms in some areas, we can suitably recreate this, and assess which detector will resolve it. These ad-hoc tests are something regularly undertaken.”

Problem-solving activities

Chris Smith said that, as a fire panel manufacturer and installer, Static Systems worked closely with Apollo on such ‘application-specific’ problem-solving. Paul Pope added: “We ensure that clients realise that the fire detection equipment has been tested against a specific risk in a realistic environment, rather than just giving them a bit of paper certifying software compliance. We have, however, seen people playing around with algorithms during testing, where the verification has not been done afterwards, which we would strongly discourage.”

With the event nearing its close, Julian Amey asked participants to summarise ‘the greatest challenges’ in reducing false fire alarms from their own perspective. Chris Smith said he felt the initial challenge would be obtaining accurate data identifying the precise causes of fires and false alarms. Peter Aldridge said: “With the proviso that NAHFO’s officers do everything undertaken for the Association in their own time, I am happy to investigate us engaging in an exercise to collate such data, perhaps working with one or more other organisations.”

Better management of contractors

John Allwork said: “If I look at my own returns on reducing false alarms, I have an ageing system, but the management of contractors and users of our premises is a key concern; people are too often not following proper procedures.”

Peter Aldridge said: “The NHS and fire and rescue services need to agree on what the key issues are. The NHS has to accept that we don’t want to reduce unwanted fire signals simply because this benefits the fire and rescue services via lower attendance. This is clearly one major factor, but it is equally about proper and efficient management, operation, and maintenance, of fire alarm and detection equipment in NHS premises, minimising risk, and protecting staff, patients, and visitors, and ensuring that staff are..."
properly trained to use the equipment. Equally, NHS personnel must reflect on their own responsibilities – for example recognising that burnt toast triggering an alarm could see the air flow to a laminar flow operating theatre shut down, with a massive potential implication on the patient being operated on.”

The danger of making changes
Paul Pope said: “I think the reliability of fire alarm and detection products is the highest it has ever been; however some systems’ complexity, and the inherent flexibility to change settings into a non-certified mode, are dangers. Deploying appropriate, certified technology, and then properly managing it, plus good training, are essential.” Paul Pope was also concerned that some companies and manufacturers promoted products that reduced false alarms, but were ‘inappropriate for the specified risk’.

“The sole purpose of suggesting people buy such equipment is to cut down on the number of false alarms without considering any of the other consequences, which, as a fire engineer, worries me,” he said.

The final question addressed (although figures obtained by HEJ from the DCLG suggest a continuing downward trend) was: ‘Why does the healthcare sector struggle to keep pace with the overall decline in false alarms?’ Chris Smith said: “I think one of the elements is funding, but it’s also the fact that there is quite a lot of ageing equipment in the healthcare estate not necessarily benefiting from the latest technology. Nevertheless, I don’t think this is a justifiable reason for us not to move forward.”

Highest risk sector
John Allwork said: “Healthcare premises are the highest fire risk classified by the fire service; we probably have more detectors than anybody else. We have cooking facilities all over our sites, and a very high risk client, and thus must ensure proper detection. We also use training that tells people: ‘If you smell smoke you don’t have to see fire, just hit the glass.’ We equally have numerous items of equipment that pose a fire risk.”

Peter Aldridge said: “The sheer number of NHS premises is probably the biggest factor in the sector’s higher number of false and unwanted fire signals. In Leeds alone we have over 250 assisted living accommodation facilities, doctor’s surgeries, and dentists. I would be interested to see proportionately how many premises are occupied by the NHS in comparison with the other types of organisation we are being judged against. “The other issue is that, as the RRO recommends, whenever we put in new fire alarm systems, we will always increase the detection. In, for example, putting a new fire detection system into a Nucleus designed facility, we have gone from three detectors to 65 per ward. Our number of false fire alarms hasn’t, however, increased. While staff in healthcare premises are actively encouraged to trigger the alarm if they think there is a fire, in many organisations staff would be encouraged to self-investigate first. Early activation really has to be the key in healthcare premises.”

Start-to-finish process
Paul Pope said: “The entire start-to-finish process – the consultation, the design, the risk assessment of what devices to use, and their location, and the way the system handles alarm conditions, are all key, as are the ongoing maintenance, management, and lifecycle cost management, of the equipment. Technology must be kept at peak performance, and not allowed to age excessively. Properly factor all these in, and while you may not eliminate false alarms, you will have one of the most reliable systems you can get. There is no single solution; we need a complete solution that everybody engages with. The investigation of alarms must also be thorough, to identify, and learn from the causes.”

In summing, up Julian Amey asked participants for any closing thoughts. Chris Smith said: “I think our discussion has highlighted the importance of partnership working to bring together all elements of design and technology, and to ensure that, whatever fire detection equipment is supplied, meets the needs of the installation environment. We also need to get to a situation where we can reduce false fire alarms in the sector to what could be deemed ‘an acceptable level’."

Further symposia planned
Static Systems Group and Apollo Fire Detectors add: “This roundtable has certainly opened up the debate. Clearly there are many issues arising, but there is no doubt about the scale of the problem, and the determination of all parties affected to work together to find effective solutions. Working alongside IHEEM and NAHFO, we plan a series of symposia/workshops throughout the country over coming months, aimed specifically at estates managers and those responsible for fire safety in healthcare premises. More information on dates and venues will follow. In the meantime, let us have your views on fire detection in the healthcare industry, to help to shape the workshops. Please email catherine.scotcher@proteuspr.co.uk with your comments or questions, or with any topics you would like the workshops to cover.”