Byrne-Davis, LMT and Marchant, D and Bull, ER and Gyles, D and Dean, E and Hart, JK (2018) How do members of a fire and rescue service perceive expanding their roles to deliver more health care services? Journal of Public Health. ISSN 1741-3842

Downloaded from: http://e-space.mmu.ac.uk/621545/

Version: Accepted Version

Publisher: Oxford University Press (OUP)

DOI: https://doi.org/10.1093/pubmed/fdy148

Please cite the published version

https://e-space.mmu.ac.uk
How do members of a fire and rescue service perceive expanding their roles to deliver more health care services?

Dr LMT Byrne-Davis. Senior Lecturer in Assessment and Psychometrics. Division of Medical Education, University of Manchester, Manchester, M13 9PT, UK. Corresponding author. lucie.byrne-davis@manchester.ac.uk
Ms D Marchant. Medical Student. Division of Medical Education, University of Manchester, Manchester, M13 9PT, UK
Ms ER Bull. Research Associate. Division of Medical Education, University of Manchester, Manchester, M13 9PT, UK
Ms D Gyles. Partnership Liaison Officer. Greater Manchester Fire and Rescue Service, GMFRS Headquarters, Swinton, Salford, M27 8US, UK
Dr E Dean. Associate Partner - Research & Evaluation. Greater Manchester Fire and Rescue Service, GMFRS Headquarters, Swinton, Salford, M27 8US, UK
Dr JK Hart. Reader in Health Professional Education. Division of Medical Education, University of Manchester, Manchester, M13 9PT, UK
Abstract

Background

Increasingly, public sector workers are being required to expand their roles into public health. Fire and Rescue Services, as part of the Emergency Medical Response trial, are at the forefront of role expansion, with increasing capacity due to reducing numbers of fires in recent years. Firefighter roles, successfully implemented, include responding to cardiac arrests and conducting checks on health and wellbeing in people’s own homes. In this study, we explored fire service members’ perceptions about this role expansion, to increase understanding of how role expansion can be introduced and supported.

Methods

We interviewed 21 fire fighters and team members about their perceptions of new roles. Interviews were conducted, transcribed and thematically analysed until reaching thematic saturation.

Results

Perspectives differed for responding to cardiac arrests and wellbeing checks. Cardiac arrests were seen as aligned with core roles and thus more acceptable. For both types of new role participants wanted more training and opportunities to provide feedback on implementation.

Conclusions

How team members viewed role expansion depended on new role alignment with core role, training and being able to give feedback to management to shape future services.
Background
The National Health Service (NHS) in England is under significant financial strain due to many factors (1–4), including increasing numbers of patients living longer with long term conditions (5). It is well documented that targeted preventative interventions for health threatening behaviours can affect health outcomes and can be more cost effective than the treatment of chronic disease (6–8). Despite this, only 4% of the NHS England budget is spent on prevention (9). Ambulance services are experiencing unprecedented levels of demand. Category A calls, life threatening emergencies, have risen from 2.5 million in 2011/12 to just less than 3.4 million in 2015/16 (10,11). Category A calls include a ‘Red One’: cardiac arrest or cessation of breathing and ‘Red Two’: any other life-threatening emergency (12). 75% of Category A calls should have a response within eight minutes. This target has not been met for the past 36 consecutive months, as of March 2017; the percentage of responses within eight minutes has been steadily decreasing (11,13–15). There is a need both to improve prevention and to reduce strain on emergency and acute services.

There are a burgeoning number of solutions being proposed and trialled to meet both of these needs. One of these is the diversification of the existing public workforce by task shifting and expanding existing roles, e.g., shifting some doctor responsibilities onto non-physician health professionals (16). Making Every Contact Count (MECC) is the strategy to using every contact between a public health worker and a member of the public, patient or service user as an opportunity to improve health. Introduction of MECC includes training in having brief, meaningful conversations about health behaviour change and signposting to relevant services (17,18). It can be challenging for workers to begin and hold conversations about health (19,20) but training has been shown to improve the knowledge, confidence and practice of some members of the public workforce in having brief conversations about health (21–23).

In contrast to the increasing demands on the health services, the fire and rescue services in England have seen a decline in fire incidents in recent years, with a decrease of nearly 60% from the 1998-2008 average callouts per year to the 2015/2016 level (24). The reasons for this decline are many, including the success of fire prevention strategies (25). In light of the declining demand on the fire service, in contrast to the strain on other public-sector
services, there is a view that there is a need for diversification and role expansion in the fire service (26). As all fire fighters are trained in basic life support, fire services throughout the country are expanding their roles to attend Red Ones. Greater Manchester Fire and Rescue Service were the first brigade in England to begin attending Red Ones in September 2015(27) with other services now doing this (28,29). Other services have co-responded with the ambulance services, prior to 2015 (e.g. Devon & Somerset have been doing so since 1997). The fire service has expanded the successful ‘Home Safety Check’ into the broader ‘Safe and Well check’: a holistic approach to identifying and addressing fire risk within the home. The Safe and Well visit establishes how health and lifestyle factors impact on fire risk, signposting advice to improve health, wellbeing and safety. The role expansion into responding to Red Ones and having more brief conversations about health is increasing and expanding across the UK but it is not known how fire fighters have experienced these additions to their roles.

How an individual perceives the practices they are asked to undertake will impact on how they make those changes and how sustainable those changes are (30,31). In other areas of role expansion, professionals report feeling inadequately trained and lack confidence in having sensitive conversations about health and wellbeing, fearing that conversations will take too long, detract from their core roles, and potentially damage relationships with service users (32,33). This has been clearly shown for midwife and health visitors around discussing smoking and weight with pregnant women (34,35) and health and social care staff discussing alcohol (36) amongst others. Expansion of roles into public health therefore requires consideration of workers’ view of their fit within their new roles, skills and confidence: understanding perceptions of firefighters about their role expansion might give an insight into how to make these, and other, role changes possible and sustainable. In this study, we aimed to understand firefighters’ experiences during role expansion, to identify ways in which successful role expansion can be achieved and sustained.

Methods
This was a qualitative study in which we talked to fire fighters about their experiences of role expansion and thematically analysed their responses to generate insights into successful role expansion.
Participants
Members of Greater Manchester Fire and Rescue Services were recruited. Participants included active firefighters, watch managers, a community support adviser and members of the fire service extended leadership team. It was a convenience sample as we had no a priori reasons for sampling specific groups of firefighters and access to the participants was through the liaison officer who was available at certain times and days. We continued to recruit until we reached theoretical saturation in the interviews.

Procedure
Participants were recruited by a partnership liaison officer, who first recruited watch managers and through them accessed their teams. A researcher (DM) attended a fire station, distributing information with an opportunity to ask questions. The participants were excused from their duties to take part in one-to-one interviews. Interviews were recorded and transcribed verbatim. The University of Manchester Research Ethics Committee approved the study.

Materials
The interviews were semi-structured, including inviting descriptions of roles related to health and wellbeing, commenting on the changes and the success of those changes. Participants were asked a range of questions starting with ‘what does your role include’, asking about what roles they have in promoting or maintaining health and then asking specifically about how their role has changed, and when and why. We asked how they felt about the role changing, exploring any feelings mentioned for their depth and intensity. We asked them how successful they perceived any changes to have been and what other people think, including their peers and the public.

Analyses
Transcripts were analysed by a researcher (DM). Analysis began with a content analysis, coding text according to an emerging list of categories, continuing into a thematic analysis, moving forward and backward through the transcripts, in line with the principle of constant comparisons (37) looking for disparities and consistencies with the emerging themes. Analysis was ongoing alongside data collection, so as themes arose, these were discussed with subsequent participants to explore these themes further. Analysis discussed extensively with EB and refined in light of these and further discussions with LBD and JH. These four investigators read several of the transcripts. For all extracts, square brackets
containing three dots [...] indicate short sections of omitted speech and square brackets containing text are explanations added during transcribing. While original transcription recorded hesitation less than one second, overlapping speech and disfluency, for ease of reading we removed most of these markers from presented data extracts. We present the analyses grouped in themes, using illustrative quotes where appropriate.

Results

Participants
The participants were 3 members of headquarters, 1 community safety advisor, 16 firefighters and 1 trainee firefighter (4 female, 17 male). Of the firefighters interviewed 5 were watch managers and 2 were crew managers. The ages of participants ranged from 24 to 53. The length of service range was from 4 months to 29 years. Frontline staff were from 7 different stations.

Themes
Different themes emerged about the experience of role expansion into responding to Red Ones and doing more Safe and Well Checks. For Red Ones, the themes were around the importance of agreeing with the premise, the potential for impact on mental wellbeing and a perception of lack of training. For safe and well checks, the themes were about a lack of training; a lack of the opportunity to feedback to management; and the tension between usual roles and new roles. These themes will be presented below.

Red Ones: Agreement with the premise and having the skills
Responding to Red One calls aligned with firefighters’ perceptions of their role as emergency responder and this meant they could accommodate it with ease. Participants overwhelmingly reported that responding to Red One calls was a positive addition to a Firefighters’ role. Many stated that they had the skills to respond well to Red Ones, for example “we have got the training, we have got the tools, we have got the personnel. Let’s just do it” -ID5. Many indicated that they were aware of the decrease in fire-incident calls and that firefighters answering Red One calls was a good idea, for example “it’s only ever going to be a good thing fire crews going to Red Ones” -ID13

Red Ones: Impact on mental wellbeing
Whilst positivity about answering Red One calls there were concerns about the impact on mental wellbeing:

“Now from a very low level of experience of these sort of things to an extremely high level and most of them feeling very futile, I think we won’t know for a while the impact this is having on our crews” –ID17.

“we’re finding, like, mental health issues within the service have gone through the roof”- ID11

Mental health issues were exacerbated by being deployed to patients or situations which were not aligned with firefighters’ expectations of the cases they would be attending. In one case, a firefighter reported teams being sent to emotive situations: “lads have been to things where there have been suicide attempts and where there’s been hangings and where there’s been kids. We weren’t supposed to be turning out to kids, some lads have been to that” -ID18

Another firefighter reported a recent experience of attending someone who was already dead: “just yesterday we went to two and one was a 90-year-old lady who... with rigor mortis, who had clearly been dead for some time” –ID11

It seemed that feedback on positive outcomes might be important to mitigate against the mental impact of responding to Red Ones, for example a firefighter said “When we get someone who has survived I think we need to have that information because it then comes back to the crews that’s a success, that’s a win, we can chalk that up as a good one. So any time we make an intervention we’d like to get an outcome”. ID 17

Red Ones: Lack of training

Many participants expressed the view that they required more training for communicating with families: “There was no input on how to deal with families” –ID18; and when to intervene in CPR when it might be futile: “So...but we never had any training for that, so you’re thinking and what you want to do to be, you know, humane is” - ID 11.

Safe and Well Checks: A mixed response
There was a whole range of opinions about delivering safe and well checks. A minority reported feeling positive about the changes to their role because promoting health in the community was a logical role progression for them: “anything that is rendering any sort of humanitarian aid I’m never going to have a problem with it” - ID13 and “any opportunity we can do to support somebody else then it’s the right thing to do”-ID12 and “because there could be people out there that do need help and need support and yeah I suppose we’re in there, we can get them into the other agencies” ID 8

These participants described enjoying doing the Safe and Well Check: “and I think secretly a lot ... are very proud”. ID 17 and could see a direct benefit of their Safe and Well Checks: “ultimately she came back and said ‘yes thank you for helping me’ because I got all these free grants, I got the house heated and it ultimately has probably kept her healthy”, ID 12

In contrast, others felt negative about the changes, reporting “it’s not my job” –ID9. These firefighters reported that they shouldn’t be having conversations about lifestyle, for example “On a personal level it’s something that I struggle with because...I don’t want to preach to people of how to live their life”. ID 6

Many aspects of lifestyle behaviours seemed to be challenging for these participants including mental health and alcohol: “For me personally, I find it very uncomfortable asking somebody if they have got any mental health problems or ... how much do you drink a week? It is nothing to do with me, if they want help, you know there is other places to find it. ID 5.

Other participants, in contrast, appeared to be comfortable with tasks that pertained to vulnerable people, for example: “if we go to a house and we can see the children not being looked after as they should do, I can see there’s a good in that” ID 14

Some firefighters were more ambivalent, stating for example “I understand we can help in some ways...I think they’re going a little bit too far with that” – ID9.

Safe and Well Checks: Should not detract from fighting fires
Many firefighters reported a need to expand their roles due to the decrease in fires. They were unanimous in the view that their new health roles “… shouldn’t take away from our core business, which is fighting fires” –ID5. Several participants reported they feel this was already happening and feared that they were becoming deskillled as a result “we’ve ended up in a position where we aren’t doing anything well”–ID21. A participant reported that they had a target of two Safe and Well Checks per day and if this target was not met due to firefighters working at fire incidents, managers expected them to “find time”. He said that he worried that this might be at the detriment of their physical fitness training: “we’re branching out left right and centre and its taking more and more time away from us training properly,” -ID6

Safe and Well Checks: Lack of training
The majority of participants stated they felt they had insufficient training to deliver Safe and Well Checks to the high quality they wanted. The amount of training they reported having had ranged from none (1 participant) through a few hours to a few days. Frequently this training was after they began delivering Safe and Well Checks: “I’m not saying the Safe and Wells isn’t a good thing, but I really think before it was bought in it was…we should have a lot more training than we did have, I really do”–ID14. The firefighters said that the training often focused on how to complete the form documenting their conversation with service users, rather than the complex communication required to carry out a Safe and Well Check and that “If we get the right information to give I would feel happier doing it and I think it would be a good thing” –ID5

Safe and Well Checks: I can’t fix it
Several participants cited they struggle with Safe and Well Checks because they were not acute situations: “it’s very difficult for us then who are so used to fixing something, we turn out and we don’t come away until we think we’ve fixed the problem or at least made the situation safer”–ID17. They reported that this would be helpful, similarly to the feelings about Red Ones, if they received some sort of feedback report following up the people who had had the checks: “Yes, have I done enough? Could I have done something more?” ID 5

Dialogue about change
Participants stated there was little opportunity to give their feedback to managers in the service about the expansion of their roles: “Feedback is never really something we had the opportunity to give.” – ID16 and that it might not have an impact even if it is given: “if I’m honest I think its futile”-ID11

Many participants reported a suspicion that the quality of the Safe and Well Checks was not monitored: “it just seems to be about numbers at the minute...say if somebody at the top wants to say ‘we did this many Safe and Wells,’ and they’re not really about Safe and Wells” – ID20 and that there wasn’t enough regard for the practicalities of making the changes to their roles.

“we were never told why it had to be done straightaway. The same with Red One stuff, it was never said why we had to start it bang on the date we did. Why not get things right and then we’ll ease it in?” ID 18

There was a suspicion that the fire service was being called upon to support public services that were not being resourced appropriately, for example stating that they were “making up for all the other services that are underfunded” ID 9

Discussion

Main findings of this study

Firefighters were overwhelmingly positive about the addition of Red One calls, which seems to be driven by 1) the alignment with their original role: responding to emergencies and solving emergent situations and 2) their perception that they were well trained clinically (such as their CPR skills), if not emotionally, for this role. Where firefighters were less positive about Safe and Well Checks they reported that they did not believe it was their role and they did not think they were adequately trained. They had concerns that inadequate training impacted them personally, through reducing their mental wellbeing and their ability to do both the new tasks and their original or core roles. These findings indicate that role expansion is likely to be more successful when new tasks are closely aligned with existing skills and identity. When there is misalignment between the new tasks and what people feel skilled and expect to do, people can feel resentful and worried that their skills to do their original tasks might decline. Further, it suggests that where these conditions are not met that training in new roles, support for maintenance of old or core roles, and rationale
for changes are warranted. Where there were concerns, the participants stated that they would like the opportunity to feed back to senior managers, feeling that they understood the on-the-ground implementation of change in a way that management did not. A final finding was that seeing the beneficial outcome of new roles was important for the participants, in both responding to emergency situations and carrying out Safe and Well Checks.

**What is already known on this topic**
Many public-sector workers are being required to expand their roles to address an increased focus on prevention and to fill gaps in stretched services. The expansion of the fire services across England into responding to Red Ones and conducting Safe and Well Checks has been successful. Success of role expansion may rely on workers’ perceptions of their role and their skills and confidence.

**What this study adds**
Role expansion in the fire service seemed to be most successful where the new tasks were aligned with existing perceptions of roles and areas of capability. The ability to give feedback to the people making decisions about role changes was important for the motivation of the participants to make changes to their roles. Concerns were about the impact of role changes on both the participants themselves and the people they serve. These findings suggest that to implement new roles, FRS leaders and policy makers should focus on creating a narrative around the alignment between new and existing roles; as well as creating training in new tasks and providing opportunities for the workers to feed back to management about their experiences of engaging in the new tasks.

**Limitations of this study**
The participants were all part of a single fire and rescue service and therefore these views might not be representative of members of other fire services. As this is a study that asks the participants to reflect on their experiences and we have detailed those experiences, this limitation does not impact on the findings themselves. Additionally, we were only able to recruit a convenience sample of fire fighters from stations selected by the partnership
liaison officer. This means that fire fighters with particularly extreme views might have been excluded deliberately or otherwise from the sample.

Conclusions.
This research explored fire service members’ perceptions and experiences of role expansion. Role expansion was more positively experienced when the expansion aligned closely with existing skills and / or roles. Role expansion was experienced more negatively when outcomes of new roles were not reported back to the participants, when it seemed to detract from their ability to do their original role, where they had not received what they perceived to be enough training and where they were not able to offer feedback to management.

These findings offer insights for public sector employers seeking expand their employees’ roles effectively, whilst maintaining job satisfaction. They suggest that aligning new roles with old, offering training and engaging in listening about implementation would increase effective implementation.

References
25. Knight SK, Fifiree CQ. FACING THE FUTURE: Findings from the review of efficiencies and operations in fire and rescue authorities in England. The findings and recommendations in this report are those of the author and do not necessarily represent the views or proposed policies of. 2013.
27. Greater Manchester Fire and Rescue Service. Greater Manchester Fire and Rescue Service - Firefighters to respond to cardiac arrest calls. 2015.

