

Briefing February 2017

# Nuffield Winter Insight

## Briefing 2: NHS 111

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### Key points

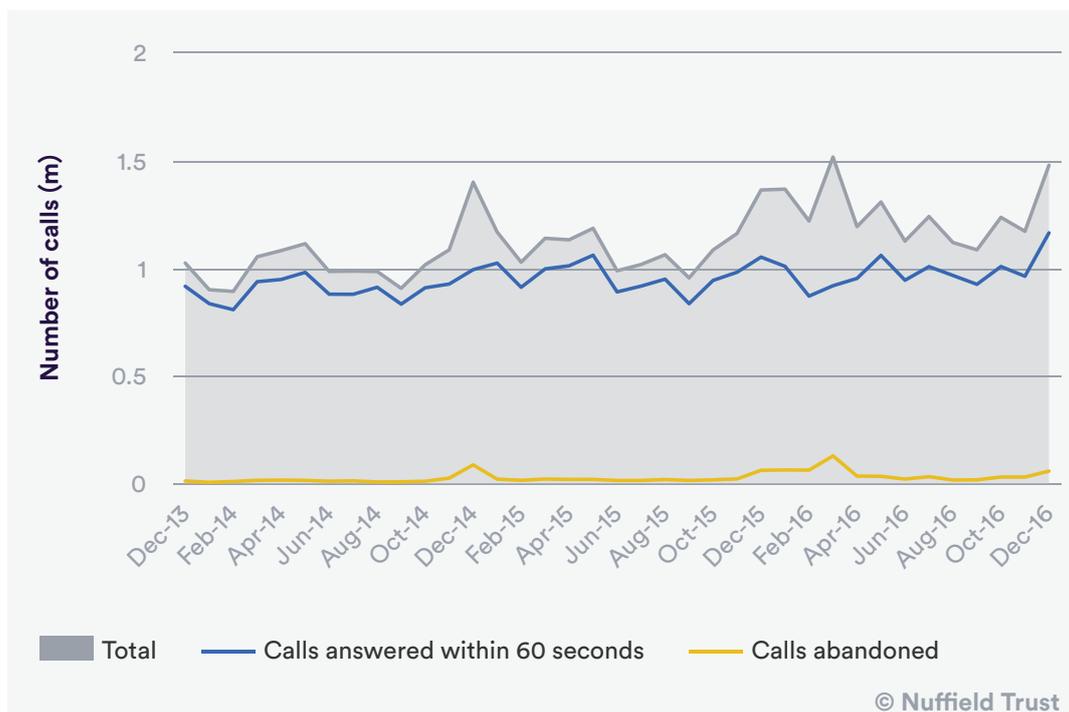
- The proportion of callers being dispatched from NHS 111 to emergency services over the last three years has risen. There has been a particular rise in the share of people who are passed to ambulances.
- There is great variability between different areas in how likely NHS 111 is to send people to A&E or the ambulance service. This might suggest that some areas are too likely, or not likely enough, to send people to emergency services. NHS 111 is also more likely to dispatch an ambulance than to simply send people to A&E – which is the reverse of the usual pattern of NHS use. This lends credence to claims that the service is too risk-averse in some cases.
- However, contrary to criticism that it adds to the pressure on A&E, the service overall seems to steer people away from emergency services. Patient surveys suggest as many as 8 million more people would have gone to A&E and the ambulance service over the last three years without 111. The call line also soaks up extra demand during winter, when it becomes less likely to refer people to urgent services.
- NHS 111 still answers the vast majority of calls within a minute, and few people hang up after having to hold for more than 30 seconds. However, it has not met its target of answering 95 per cent of calls within 60 seconds for two-and-a-half years, and it seems prone to serious under-performance when calls spike after Christmas and the New Year.

## A brief history of NHS 111

NHS 111 is a 24/7 call line in England for people whose health needs are urgent, but don't require the emergency services accessed through calling 999. Most callers are dealt with by call handlers with no clinical background working to a set script, although around a fifth are referred to nurses or paramedics. The service was piloted starting in 2011 and was up and running across England by the end of 2013, following a chaotic and patchy rollout. Call lines in Scotland and parts of Wales use the same number, but are essentially separate services.

NHS 111 ultimately replaced NHS Direct, a service which used far more nurses, and in many areas it has also become the only way to access GP out-of-hours phone lines. It is provided by ambulance trusts, private firms like Care UK, and groups of GPs.

Figure 1



NHS England publishes monthly updates on 111's performance as part of its Combined Performance Summaries, and weekly updates in winter situation reports. As the graph above shows, the helpline has become widely used, with more than a million callers each month – more than twice as many as NHS Direct had in its last full year. Most calls are answered within 60 seconds and a relatively small number are abandoned by callers after they have to

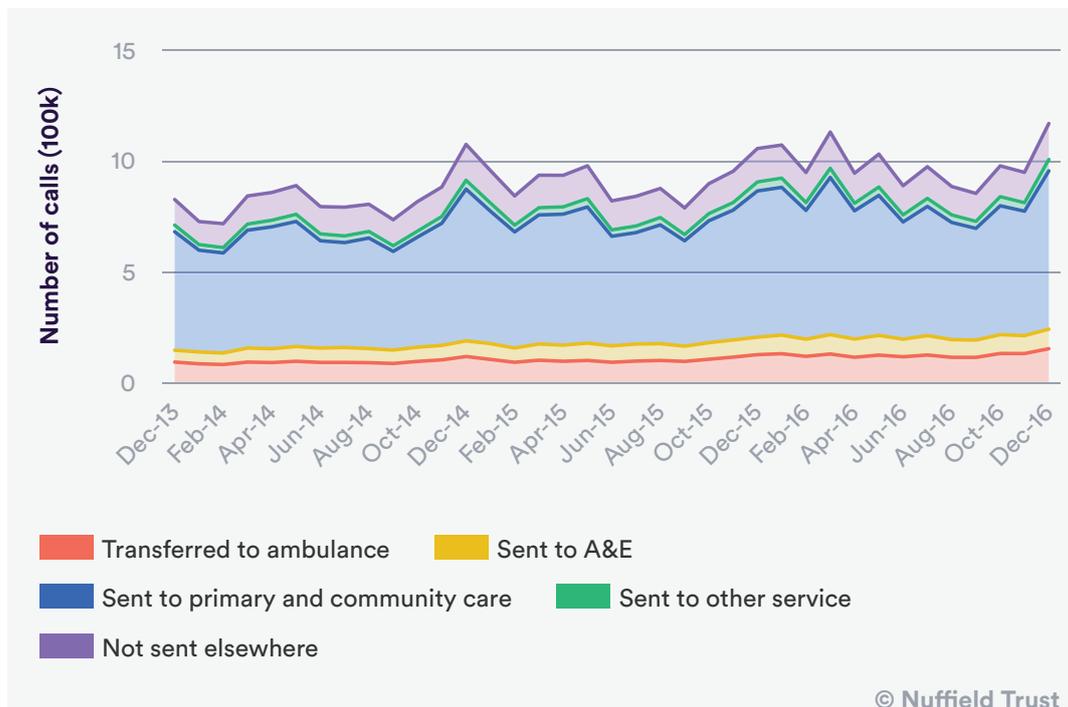
wait more than 30 seconds. Winters tend to see these indicators head in the wrong direction. In theory, there is a target that 95 per cent of calls should be answered within 60 seconds. Like many NHS targets, sadly, this now seems a long way off: it has not been met since the summer of 2014.

## Where is 111 sending patients?

A look at the figures on where patients are sent and referred shows that the largest number by far are sent to primary and community care – told to call their GP, sent to a dentist or pharmacist, or transferred to an out-of-hours service.

Notably, it was also primary care that acted to soak up the spikes of demand that occurred in the winters of 2014/15 and 2015/16. Calls were hundreds of thousands higher in the months from December during these years, and the same appears to be happening as we enter another winter now.

Figure 2



NHS 111 has been widely criticised for directing “more people” to A&E and the ambulance services. Is this fair?

Over time, there is an element of truth to the criticism. Looking at Figure 2, it is clear that although primary care is the main destination for 111 callers, the number sent to A&E and ambulances has risen over the last three years from around 150,000 each month to well over 200,000. The main reason is simply that there are many more callers. However, the call line has also started to send a slightly higher *proportion* of people to these emergency services. In its first years, 18 to 19 per cent of people were dispatched to ambulances or emergency departments: that has now risen to 20 to 22 per cent. This means around 20,000 more people a month are sent to emergency services than would be if NHS 111 had kept to its original pattern. It could be that this is in fact meeting patients’ needs better by sending more of them to ambulances and emergency departments. However, as we will see below, patients are no more likely now than before to evaluate themselves as needing emergency care.

When we look across the different providers of NHS 111 across the country, there is a high level of variation in these figures. In 2016, 17 per cent of all callers in North East England were transferred to an ambulance. In South Essex, only 8 per cent were – less than half the proportion. Meanwhile, the proportion of people who were not recommended on to another service ranges from 8.4 per cent in Hampshire and Portsmouth to 25 per cent in inner North West London.

It is possible that the make-up of callers varies across different regions, due to demographic reasons or just different habits in the use of the call line. But this is a very high level of variation, and it is a problem for emergency services and patients if some areas are too eager or too reluctant to send an ambulance. It would be worthwhile for national bodies to consider examining exactly what is driving it.

Another surprising fact is the consistently higher number of people sent to ambulance services compared to A&E. This is the opposite of what happens with patients in general, where far more people attend A&E than have an ambulance sent. It does lend some plausibility to the suggestion that NHS 111 is too risk-averse with people who have more urgent problems. Again, looking at the variability across areas deepens the mystery. The gap varies greatly

across England. Two areas, South-East and East London, reverse this pattern: they send more people to A&E than to ambulances. What are they doing differently, and is it something other areas should learn from?

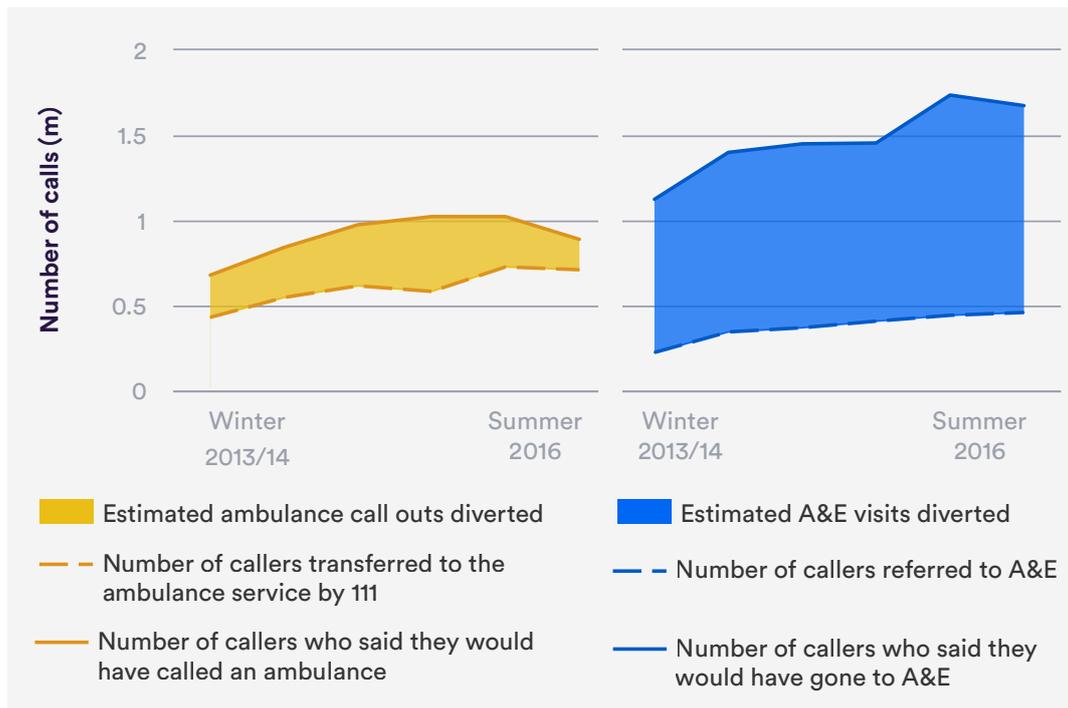
How does it compare to its predecessors? A **formal evaluation** of the service at the pilot phase found that a significant number of callers appeared to switch from NHS Direct to NHS 111. This switchover had very little effect on overall contacts with other urgent and emergency care services – except for a small increase in emergency ambulance incidents. Meanwhile, the existence of the new call line itself meant a significant rise in the total number of contacts people had with the urgent and emergency care system.

There has been **relatively little hard evidence** since 111 became a national system, so we can't be sure if these trends still hold. However, as we have seen, ambulance dispatches remain an area of some concern.

## **What would happen without 111?**

However, a more positive picture emerges when we look at how 111 might compare to not having a help line at all. We can get a sense of this by looking at the surveys NHS 111 sporadically carries out of its callers. These specifically ask what people would have done without NHS 111. Since the service went live nationally at the end of 2013, around 45 per cent of callers say they would have gone to A&E or called an ambulance without NHS 111. But once they call, only around 20 per cent are sent to these services. On the other hand, just over a third say they would have gone to primary and community services – yet as we have seen, this is where NHS 111 ends up sending the overwhelming majority.

Figure 3



In the two graphs above, the upper line shows the number of people who would have gone to an emergency service, assuming that they acted in line with what they told the survey. The lower lines show the number NHS 111 actually sent to these services. The shaded areas represent the people whom NHS 111 is likely to have diverted away from emergency care.

Of course, this is a rough estimate. Around one in six NHS 111 callers say they do not comply fully with the advice they are given, and people may be fallible judges of what they would do otherwise. But with these caveats, a look over the three years suggests that NHS 111 has in fact redirected a large number of people from emergency services to general practice, and a smaller number of people who would have used services not to do so at all. Summed up across those years, it could have prevented as many as 8 million people from presenting to emergency services. It may well be that this is no better, or worse, than NHS Direct or GP out-of-hours services would have done before. And there is still the risk that for many, 111 acts as an unnecessary extra contact with the NHS.

But overall, it is hard to conclude based on the evidence we have that the call line acts to drive people to A&E and ambulance who otherwise would not have gone. This is the basis for criticism which counts the number of people sent by 111 as if they were simply added on to the normal number of attendances.

In fact, it seems likely that many of those people would have come to A&E anyway, and indeed they would have been joined by even more if the helpline had not been serving as a filter.

Sharp-eyed readers might spot, however, that the area showing the number of people diverted from ambulances by NHS 111 has shrunk slightly in the most recent data. NHS 111 appears to be deflecting fewer people than it used to. This is largely what lies behind the tendency discussed above for a slightly higher proportion of people to be sent to urgent services over time.

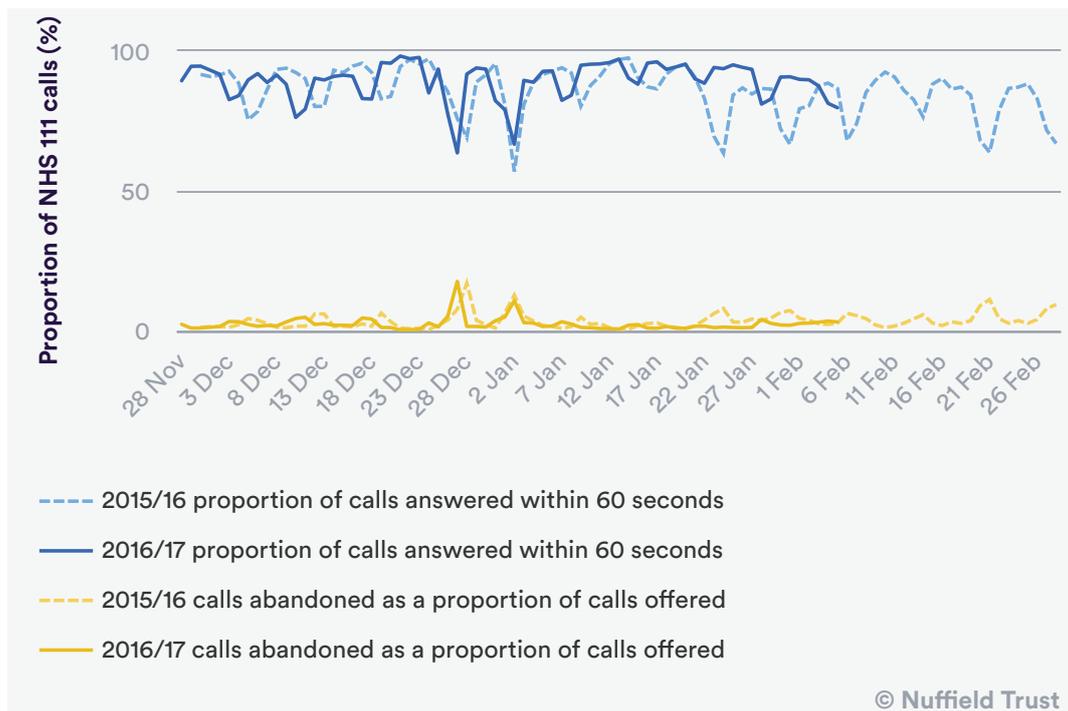
## Winter wobbles

Winter is the busy season for NHS 111. Calls spike by more than 50 per cent in the coldest months, hitting a peak last December of more than 80,000 on December 27.

NHS 111 has occasionally been blamed for contributing to the pressures experienced by A&E departments in winter. The figures, however, suggest the exact opposite: the call line actually soaks up extra need by referring a lower proportion of callers to A&E and ambulances in the winter months, keeping the total number constant even as calls rise. Over the last three years NHS 111 has sent only 16 per cent of people calling from December to March to the urgent services, compared to 20 per cent for the rest of the year.

A more legitimate criticism might be that NHS 111 seems to struggle to deliver the standards expected when it is hit with the combination of higher winter calls and higher calls around the weekend and on holidays. This is despite the fact that these are very predictable patterns, seen for several years. The blue line on Figure 4 shows the percentage of calls this winter and last winter which were answered within 60 seconds. The yellow lines show the percentage of all calls where a caller hangs up after having to hold for more than 30 seconds.

Figure 4



Weekends see a regular dip in the number of calls answered within 60 seconds, usually lowest on Friday and Saturday. In both years, there are sharp deteriorations in performance shortly after Christmas and shortly after the New Year. On January 2 last year, more than one in six callers hung up the phone after waiting for 30 seconds without getting an answer. In Devon and Lincolnshire, this happened to more than one in three callers.

As with the winter rise in demand in general, the additional volume of weekend callers is largely dealt with by passing more on to primary care. There is a fall in the percentage sent to A&E or ambulance. This could simply mean that weekend patients tend to have less serious problems – but it seems worth checking that it is not simply an attempt to keep down the numbers referred to urgent services for the sake of it.

## Summing up

NHS 111 is now well established, and a look at the data suggests it fills a valuable role in steering people away from A&E. Patient satisfaction is relatively high, and while winter meltdowns blot the record, overall most calls are still answered in a timely fashion.

However, as Simon Stevens recently made clear in a speech to NHS England's board, there is also plenty of room for improvement. The proportion of people being transferred to ambulances has crept up – despite patient surveys showing that callers themselves feel they are no more likely to need an ambulance than they used to be. Interestingly, it was also ambulance call-outs which NHS 111 seemed to drive up in its initial trial alongside NHS Direct. And like staff across the NHS, the hard-pressed call handlers at 111 continue to see demand for their services rise relentlessly, and notional targets for performance drift ever further out of sight.

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