

Emergency care

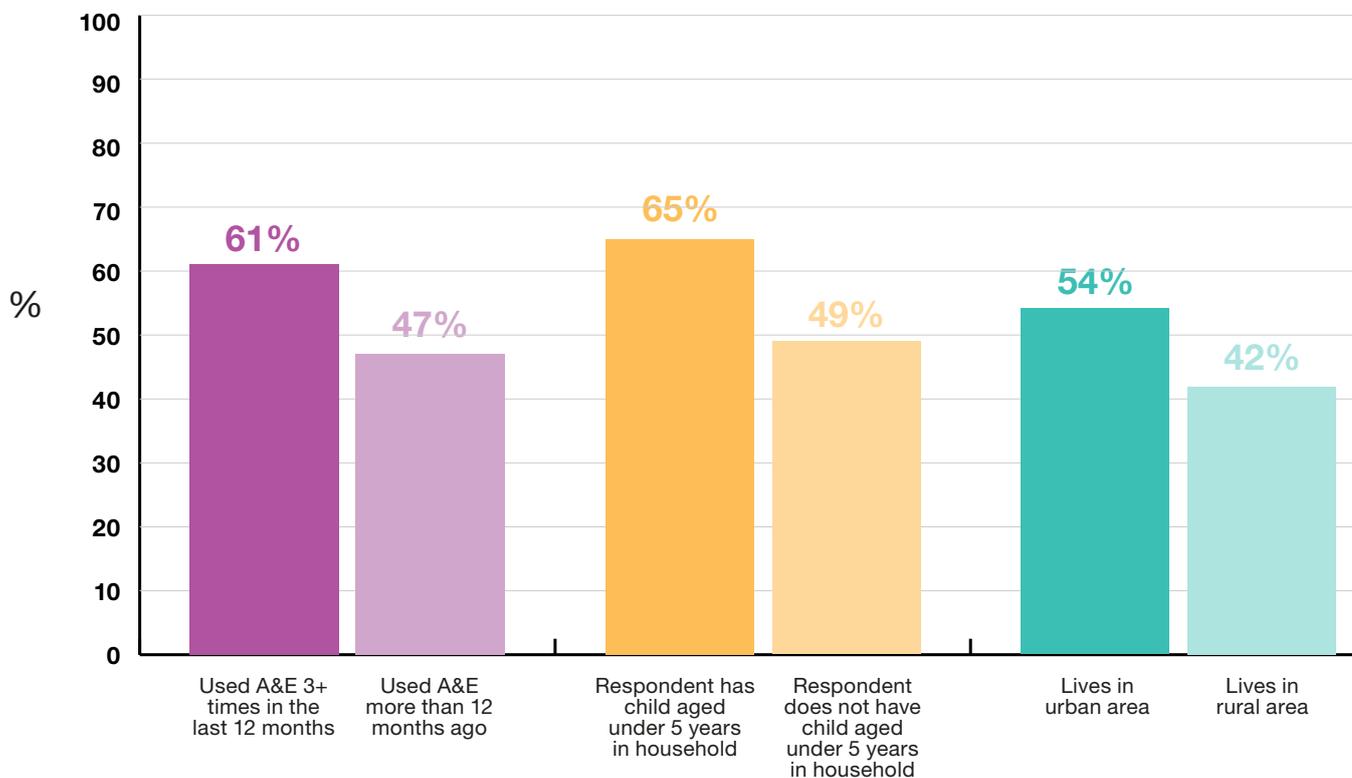
What do attitudes tell us about demand for services and how it might be reduced?

Rising demand for emergency health services in Britain is well documented and may be having an impact on the quality of service provision such as waiting times. This chapter explores attitudes towards calling 999 for an ambulance and going to A&E. It considers whether people share policy makers' concerns about over-use of these services and whether public attitudes and perceptions suggest strategies put forward to tackle this issue might be successful.

Spotlight

Half (51%) say they find it hard to get a GP appointment; the level of agreement varies for different groups in the population.

Those who agree "it is hard to get an appointment with a GP at my GP surgery"



Overview

Most think people over-use emergency care

Attitudes chime with policy makers' concerns about the over-use of A&E and 999 ambulances.

- Nearly everyone thinks that too many people use A&E and 999 ambulances when they are not needed: 86% say people use A&E unnecessarily and 86% say the same about 999 ambulances.
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Views of NHS services may help explain A&E demand

Views about the advantages of A&E and negative perceptions of GP services may attract people to A&E services.

- 36% prefer NHS services where no appointment is needed; the proportion rises to 48% of those living in the most deprived areas and 48% of those with no educational qualifications.
 - 51% find it hard to get a GP appointment, suggesting access is an issue for many. This is a view held by 65% of parents with a child under 5 in the household, and 61% of those who have visited A&E three or more times in the previous 12 months.
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Strategies have potential to reduce high demand

There is considerable scope to increase public use of online tools to help tackle demand, while awareness of services could be improved in certain groups.

- 58% of those with internet access say they would look online to help understand a health problem, while 47% would use the internet to decide what to do about it.
 - While most people are aware of the services available when they have an unexpected health problem and how to access them, those aged 18-24 have lower levels of awareness, particularly about how to access a GP out of hours (64% would know how to do this, compared with 81% overall). This group would benefit from better knowledge of the different options.
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Introduction

Policy makers and service providers are concerned about demand for emergency health services. Between 2009-10 and 2015-16, the number of ambulance calls increased from 8 million to 11 million in England (National Audit Office, 2017). The Care Quality Commission, a body monitoring quality of services in England, concluded that “Winter 2017/18 saw an unprecedented demand for health and care support services. Emergency departments bore the brunt of this demand” (Care Quality Commission, 2018). Emergency health services have struggled to meet demand due to workforce recruitment difficulties and not receiving increases in resources to match the increases in demand (National Audit Office, 2017). This is likely to have affected waiting times for patients. For example, in January 2019 it was reported that the proportion of patients spending more than four hours in A&E was at the highest level recorded since the data collection began (Nuffield Trust, 2019) while the 85% of patients seen within four hours in April this year was considerably below the current target of 95%, which hasn’t been met since July 2015.¹

Among those who call 999 for an emergency ambulance or attend A&E, a sizeable proportion ultimately do not require the emergency care these services are established to deliver. A recent study using routine data in England showed that 15% of A&E use was classified as ‘non-urgent’ – with the implication that these people could have been treated at an alternative service such as general practice (O’Keefe et al, 2018). A recent study of staff perceptions of reasons why people attend A&E identified concerns about demand from the ‘worried well’ (Mason et al, 2017).

The international research literature on demand for emergency health services identifies a number of reasons for increasing demand. These include: poor access to, and low confidence in, primary care; anxiety and the need to seek reassurance from emergency health services; being told to go by family, friends, or healthcare professionals; convenience in terms of location; not having to make appointments; opening hours; individual patient factors such as cost; and perceived need for ambulance or hospital care, treatment, or investigations (Coster et al, 2017). Lack of awareness of alternative services has also been identified as a factor affecting use of A&E services (Penson et al, 2012).

What is less clear is what the public thinks about these issues. Do people share policy makers’ concerns about over-use of emergency health services? How prevalent are the attitudes or considerations identified in the literature which may explain higher demand for emergency healthcare? In addition to answering these questions, we examine whether these attitudes are held disproportionately by those

A recent study using routine data in England showed that 15% of A&E use was classified as ‘non-urgent’

¹ Data tables for A&E admissions can be found here: <https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/ae-attendances-and-emergency-admissions-2019-20/>

who have made greater use and, on account of their characteristics, are likely to make greater use of emergency care in the future.

NHS England, Scotland and Wales have policies and initiatives to manage demand for emergency health services and promote responsible use of these services. These include improving the use of digital tools, increasing self-care including use of pharmacies, and increasing the awareness of alternative services. All three of these strategies rely on changing people's behaviour or knowledge. Therefore, attitudes towards and practices in these areas are highly relevant in assessing whether such strategies are likely to be successful. In this chapter, we seek to establish what people already know, or do, in terms of using digital tools, self-care and awareness of alternative services. In doing so, we ask whether a better understanding of such knowledge, attitudes and behaviours would suggest any refinements to these strategies – albeit particular subgroups to be targeted, or certain policy responses where there is greater scope for expansion than others.

To set the scene, we begin by assessing what the literature and recent data tell us about which groups in the population use emergency health services most. Drawing on a new set of questions that explore attitudes to emergency care, we then turn to examine attitudes towards emergency care. This section has two main objectives. The first is to assess the extent to which the public is concerned about demand – and thus, whether its attitudes chime with those of policy makers. The second is to establish the prevalence and distribution of preferences for and attitudes about healthcare services to see whether the attitudes noted in the literature towards increasing demand are found in the general population as a whole, and in groups more likely to use emergency care. In the final section, we look at some of the policy responses suggested to tackle the problem, and for each, assess the extent to which attitudes, knowledge and practices suggest these might be successful strategies to pursue. Throughout the chapter, we look at how our findings vary both for those who have made recent use of emergency care and for some of the subgroups that are known to make higher use of it.

Who uses emergency health services?

We already know that use of emergency health services varies over the life course. In Scotland in 2015/16, although representing about 5% of the Scottish population, children under five accounted for 10% of emergency contacts (National Records of Scotland, 2017; National Services Scotland, 2017²). Analysis of data collected in London has shown that a third of children attending A&E get reassurance only rather than investigations, and many could be managed without attending an A&E (Viner et al, 2017). As people move into young

² Data tables for emergency health service usage can be found here: <https://www.isdscotland.org/Health-Topics/Emergency-Care/Emergency-Department-Activity/Statistics/>

Use of emergency health services varies over the life course

adulthood, rates remain high; young people aged 18-29 are more likely than older working-age groups to use A&E and less likely to visit their GP (BBC, 2018), while other research has shown that those aged 16-44 are more likely to use A&E for non-urgent reasons (O’Keefe et al, 2018). Sex is also important in understanding use of emergency healthcare. Men are more likely to self-refer to A&E and, among the under 65s, less likely to visit a GP (National Services Scotland, 2017; BBC, 2018).

Social and economic circumstances also seem to play a role in choices to access emergency care. People living in deprived communities make higher use of emergency health services than would be expected. For example, twice as many contacts to emergency health services are made by individuals living in Scotland’s most deprived areas, compared with the least deprived (National Services Scotland, 2017). Similarly, use of ambulance services for non-urgent conditions is higher in deprived areas (Booker et al, 2015). A review of international research found that people from deprived communities may prefer to access A&E over GPs (Coster et al, 2017) and health professionals have expressed concerns that these communities seem more likely to want immediate access to services, even after taking their higher levels of illness into account (O’Cathain et al, 2014). There are also potential differences across urban and rural populations shaped both by the availability of transport to an A&E and attitudes to using services, with health professionals believing that urban populations have higher expectations of instant access (O’Cathain, 2014).

To measure recent use of emergency health services, primarily to enable us to test our assumption that recent experiences of specific services are correlated with attitudes towards them (a relationship that has been found for NHS satisfaction previously (Appleby, Robertson and Taylor, 2015), we ask respondents when they last saw or spoke to someone at an A&E department, either for themselves or someone else, along with a comparable question about the 999 ambulance service³. For those who have used each of these services in the past 12 months, we ask how many times they have done this. The responses provided overall and for sub groups where significant variations in levels of use were identified are presented in the appendix to this chapter. Overall, one third of people (32%) report using A&E services for themselves or someone else in the previous 12 months and 6% have done so three or more times. Fewer people (13%) report using 999 ambulances in the previous 12 months, compared with A&E. Reflecting the literature, both services have been used more frequently by young adults, while A&E services have been used more frequently by parents with a child under five in the

One third of people (32%) report using A&E services for themselves or someone else in the previous 12 months

³ It should be noted that these questions were not designed to capture *over-use* of services: we do not have any data on why people attended, nor whether this was the ‘correct’ clinical course of action. They were also not designed to precisely measure prevalence of use overall or for specific sub groups. More precise data on levels of use of emergency services can be obtained from the Health Survey for England, which has a larger sample size than BSA, meaning its sub group analysis has greater statistical power.

household. Perhaps unsurprisingly, those reporting a long-term health condition are more likely to have used each of the services in the past 12 months; this is also the case for those living in urban areas, compared with those living in rural areas⁴. While use of ambulances is higher among those living in more deprived areas, in contrast to the literature and to other data sources this is not the case for use of A&E (please see note 1 on this in the appendix to this chapter). Unsurprisingly, the group most likely to report using 999 ambulance services at least once in the previous 12 months are those who rate their health as “poor”.

The group most likely to report using 999 ambulance services are those who rate their health as “poor”

Throughout the remainder of the chapter, we consider how the recent use of emergency care might inform and be influenced by attitudes both to these services and the available alternatives. However, in doing so, we note that our analysis cannot be used to explain *over-use* of these services (i.e. which isn’t medically needed or urgent), as our variable simply measures recent use.

Views about emergency health services

We next look at attitudes to emergency health services in a number of different ways. We start by examining overall views of services, looking at how levels of satisfaction with A&E have changed over time. We move on to examine current views about over-use of A&E and 999 ambulances, to see whether people are concerned about the issue of high demands on these services. Finally, we present a number of attitude statements about A&E and general practice, to assess whether there is any evidence that people’s perceptions about the different services may suggest a preference for emergency provision.

Satisfaction with A&E

Since 1999, the British Social Attitudes (BSA) survey has tracked satisfaction with A&E services. Given the rising demand for emergency health services in recent years, increases in average waiting times in A&E departments and decreases in meeting targets to deal with all patients within four hours⁵, we can use this time series to see whether these trends may have led to rising concern about these services in recent years. We ask respondents:

From your own experience, or from what you have heard, please say how satisfied or dissatisfied you are with the way in which each of these parts of the National Health Service runs nowadays...

...accident and emergency departments?

⁴ Our variable identifying urban/rural areas in Scotland is not directly comparable with the variable for England and Wales, and due to the small sample size in these subgroups in Scotland, the analysis in this chapter is restricted to England & Wales for this variable. The same applies to the variable for IMD (Index of Multiple Deprivation) in Wales and Scotland, and again, the analysis in this chapter is restricted to England for that variable.

⁵ For more details please see King’s Fund analysis of A&E waiting times, available at <https://www.kingsfund.org.uk/projects/urgent-emergency-care/urgent-and-emergency-care-mythbusters>

Satisfaction with A&E has remained fairly stable. Around half (53%) report that they are satisfied

As shown in Table 1, satisfaction with A&E has remained fairly stable⁶. Around half (53%) report that they are satisfied (either “very” or “quite” satisfied) with the service (this proportion has not changed significantly since 2015), while the proportion who are “very satisfied” has fluctuated somewhat, but has generally been higher in the last ten years than it was in the 2000s – the figure in our latest survey stands at 20%.

Table 1 Satisfaction with NHS A&E services, 1999-2018

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	%	%	%	%	%	%	%	%	%	%
Satisfied	52	52	43	43	45	46	51	46	51	53
Very satisfied	15	15	13	13	14	13	16	15	16	17
Quite satisfied	37	36	30	30	31	33	35	31	35	36
Neither	17	15	18	17	17	17	20	22	21	19
Dissatisfied	24	29	32	32	31	31	22	24	21	21
<i>Unweighted base</i>	3143	3426	2188	2287	2293	3199	3193	2143	3078	3358
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	%	%	%	%	%	%	%	%	%	%
Satisfied	59	61	54	59	53	58	53	54	52	53
Very satisfied	20	19	18	18	16	17	21	20	19	20
Quite satisfied	39	42	36	41	37	41	32	34	34	32
Neither	16	16	18	16	20	21	22	18	23	18
Dissatisfied	21	19	21	21	23	18	22	24	23	24
<i>Unweighted base</i>	3421	3297	1096	1103	1063	971	1062	974	1002	973

⁶ For more details see King’s Fund and Nuffield Trust analysis of the full set of BSA NHS satisfaction data, available at https://www.kingsfund.org.uk/sites/default/files/2019-03/Public_satisfaction_with_NHS_social_care_in_2018.pdf

Are people concerned about over-use of services?

While the overall question about satisfaction shows little movement in recent years, it does not tell us what people think about the demands placed on emergency care. We addressed this gap by developing questions explicitly about over-use, asking respondents whether they agree or disagree that:

I think too many people use A&E when they do not need to

I think too many people call 999 for an ambulance when they do not need to

Overall, most people agree with these two statements. Eighty-six per cent think too many people use A&E when they do not need to, while an identical proportion think this in relation to calling 999 for an ambulance. Interestingly, there is little variation by whether the respondent has used these services in the last 12 months, suggesting that experience of the service is not influencing attitudes towards over-use, and that simply holding (or not holding) these views may not be affecting people's use of these services.

Unsurprisingly, we consequently find few substantial or consistent differences in the views of groups defined by the demographic and area-based characteristics known to be associated with greater use of emergency care. Overall, these data suggest that the public is in step with policy makers on this issue, in terms of there being widespread agreement that people use services when they do not need to.

Do perceptions of health services suggest a preference for emergency health services?

As discussed previously, a recent review of the international research literature on demand for emergency health services has identified the importance of the attraction of aspects of emergency care such as convenience in terms of location, not having to make appointments, and opening hours, as well as concerns about primary care such as poor access and low confidence (Coster et al, 2017). However, hitherto we have not known how prevalent these perceptions are among the public, nor how they vary for groups with different characteristics. To understand how preferences for aspects of A&E vary, we pose a range of statements to people about what type of service they prefer – asking them to agree or disagree with each one:

I prefer NHS services where I don't need to make an appointment

I think doctors at A&E know more than GPs

I prefer A&E to a GP because I can get tests done quickly e.g. blood tests, x-rays

Eighty-six per cent think too many people use A&E when they do not need to

Over one third (36%) of people agree that they prefer NHS services where they do not need an appointment

The responses provided overall and for groups defined by demographic characteristics, for which significant differences were identified, are presented in Table 2. The most popular statement is the preference for not making appointments: over one third (36%) of people agree that they prefer NHS services where they do not need an appointment (30% disagree). Smaller proportions think that A&E doctors are more knowledgeable than GPs (19% agree, 36% disagree), or prefer A&E as they can get tests done quickly (17% agree, 48% disagree).

As shown in Table 2, levels of agreement with all three statements vary by subgroup: the key groups attracted to attributes of A&E departments are those considering themselves to be in poor health, people with no qualifications and those living in urban or deprived areas. Specifically, 43% of those who regard themselves as being in poor health, 48% of those living in the most deprived areas and 48% of those with no educational qualifications say they prefer NHS services when they do not need to make an appointment. The same set of characteristics are associated with the view that A&E doctors know more than GPs; most strikingly, this is held by 32% of those with no educational qualifications (compared with 14% of graduates). Frequent users – that is, those who have visited A&E three or more times in the past 12 months – are more likely than less frequent or non-users to agree with these perceived advantages of A&E, although differences are not statistically significant for the statement “I prefer NHS services where I do not have to make an appointment”.

The view that A&E doctors know more than GPs is held by 32% of those with no educational qualifications (compared with 14% of graduates)

Overall, while the fact that only minorities agree with each of these statements might suggest that they are unlikely to be a key driver of high demand for A&E services, it is worth noting the far higher proportions of certain subgroups – who themselves are more likely to use A&E – who hold these attitudes.

Table 2 Perceived advantages of A&E services, by socio-demographic characteristics and use of A&E

	% agree "I prefer NHS services where I don't need to make an appointment"	% agree "A&E doctors know more than GPs"	% agree "I prefer A&E to a GP because I can get tests done quickly"	<i>Unweighted base</i>
All	36	19	17	2309
Self-rated health				
Excellent	31	18	17	223
Very good	33	16	13	725
Good	37	20	18	799
Fair	45	25	21	360
Poor	43	26	20	163
Highest educational qualification				
Degree	30	14	13	640
A-levels or equivalent	33	16	16	616
GCSEs or equivalent	38	19	16	590
No qualification	48	32	26	427
Urban or rural area (England & Wales)				
Urban	37	21	19	1613
Rural	30	15	8	492
Index of Multiple Deprivation quintile (England)				
1 - (20% most deprived areas)	48	28	29	351
2	37	21	20	354
3	31	19	13	397
4	30	16	11	470
5 - (20% least deprived areas)	27	15	11	426
Use of A&E services				
3 or more times in the past 12 months	40	29	27	129
1-2 times in the past 12 months	37	20	20	584
Last used more than 12 months ago	34	16	13	1196
Never used A&E	39	23	20	390

As many of these characteristics associated with attitudes towards A&E are themselves correlated, we undertook multivariate analysis, in the form of logistic regression, to examine whether personal or area-based characteristics or frequency of use are better predictors of having positive attitudes about A&E. The results of these analyses are presented in the appendix to this chapter (Tables A.3-A.5). After controlling for the other characteristics shown in Table 2, having no formal educational qualifications and living in a deprived area were both still associated with preferring NHS services where appointments are not needed, feeling that tests are done more quickly (and believing that A&E doctors know more) though for deprivation the association was weaker – just missing the cut-off for significance – for the latter statement). No other characteristic was consistently associated with all three statements. After controlling for the social and area-based characteristics shown in Table 2, frequency of use of A&E in itself is no longer significantly associated with any of the three statements.

Around half (51%) of people agree that it is hard to get an appointment with a GP

Although the numbers using 999 ambulances frequently are too small to have sufficient statistical power, indications are that levels of use of 999 ambulances varied similarly according to attitudes to NHS services.

While perceived advantages may attract people to A&E, alternatively, people may choose emergency health services because they do not feel they will get the treatment that they need from general practice. To test this theory, we ask respondents whether they agree or disagree with the following two statements about their experience of GPs – one about access, and one about confidence in GP's knowledge – both factors identified in the literature as being related to rising demand for emergency care (Coster et al, 2017):

It is hard to get an appointment with a GP at my GP surgery

I do not have much confidence in GPs at my GP surgery

Overall, as shown in Table 3, around half (51%) of people agree that it is hard to get an appointment with a GP (33% disagree) and around one in ten (11%) do not have much confidence in GPs at their surgeries (while 65% disagree with this view). The proportions of different demographic groups agreeing with the two statements vary significantly. Negative views of general practice are most common among parents of a child aged under five in the household. Nearly two thirds of this group think it is hard to get an appointment with their GP, while 20% do not have much confidence in their GP. Those reporting poor health, with lower or no educational qualifications, or living in urban or more deprived areas, are also more likely to have negative views of GP services.

Negative views of general practice are most common among parents of a child aged under five in the household

We also find a strong relationship between frequent recent use of A&E and experiences of GPs, with those who have used A&E services most frequently being more likely to report negative

attitudes. 57% of those who have visited A&E once in the previous 12 months and 61% of those who have been three or more times feel it is hard to get an appointment with their GP, compared with 47% of those who have last seen their GP more than 12 months ago. Similarly, 26% of those who have visited A&E three or more times in the past 12 months say they do not have much confidence in their GPs, compared with 9% of those who have not visited A&E within that timeframe. While it is not clear if recent experience of A&E influences attitudes about GPs, a review as part of this wider research project concluded that, conversely, negative experiences of GPs sent people to emergency care when they didn't clinically need to go (publication forthcoming). This is an area where further research would be helpful.

Table 3 Perceived disadvantages of GP services, by socio-demographic characteristics and use of A&E

	% agree "It is hard to get an appointment with my GP"	% agree "I do not have much confidence in GPs at my surgery"	Unweighted base
All	51	11	2309
Self-rated health			
Excellent	46	11	223
Very good	49	7	725
Good	53	11	799
Fair	52	16	360
Poor	61	19	163
Respondent has child aged under 5 years in household			
Yes	65	20	223
No	49	10	2075
Highest educational qualification			
Degree	45	8	640
A-levels or equivalent	54	12	616
GCSEs or equivalent	55	11	590
No qualification	52	16	427
Urban or rural area (England & Wales)			
Urban	54	12	1613
Rural	42	6	492
Index of Multiple Deprivation quintile (England)			
1 – (20% most deprived areas)	59	18	351
2	52	12	354
3	51	10	397
4	47	7	470
5 – (20% least deprived areas)	47	8	426
Use of A&E services			
3 or more times in the past 12 months	61	26	129
1-2 times in the past 12 months	57	13	584
Last used more than 12 months ago	47	9	1196
Never used A&E	51	10	390

Again we undertook multivariate analysis (in the form of logistic regressions) to examine whether demographic or area-based characteristics, or use of A&E are more closely associated with negative views of GP services. The results are presented in the appendix to this chapter (Tables A.6 and A.7).

The regression analysis confirmed that after controlling for the other factors in Table 3, people with lower or no educational qualifications, parents of children under 5, and people living in urban areas were more likely to agree with both these statements. For the second statement – lacking confidence in the GPs at their local surgery – this was also the case for people who say their health is poor and those living in the most deprived areas. For both statements, being a frequent user of A&E (3+ times in the last 12 months) was still associated with these negative perceptions of GPs, even after controlling for the other characteristics shown in Table 3. For some, the perception or experience of their local GP surgery may be acting as a ‘push factor’ towards A&E over and above their personal or area-based circumstances. Our analysis cannot confirm the direction of this relationship, nor shed light on the way in which attitudes may influence decisions about which source of healthcare provision people choose. However, other related research as part of this wider research project is investigating these research questions⁷.

At the overall level, the most striking finding is that as many as half the population perceive access to GP appointments to be difficult, suggesting that this issue is widespread.

Do attitudes and behaviours support policy responses to managing demand?

In this final section we consider policy responses to managing demand for emergency health services. NHS England, Scotland and Wales have developed policies and initiatives to manage demand for emergency healthcare and to promote responsible use of these services. In this section, we examine three policy responses – improving the use of digital (online) tools, increasing self-care, and raising awareness of alternative services – through the lens of people’s attitudes and current behaviours, to see what light these can shed on the likely success or otherwise of these initiatives.

Improving the use of digital tools

NHS England aims to increase access to digital help for health and health care⁸ and NHS Scotland promotes the introduction of apps for self-care (Pulling Together, 2015). These initiatives are built on the

⁷ This wider research project was funded by the National Institute for Health Research and involved interviewing recent users of the ambulance service, A&E and GPs for unexpected health problems about why they made contact with a service and why they chose that specific service. The report will be published later in 2019.

⁸ NHS England’s transforming digital health website can be found here: <https://www.nhs.uk/transformation/>

In this final section we consider policy responses to managing demand for emergency health services

assumption that people will become ‘digital health citizens’ (Powell, 2019) by taking on new roles and responsibilities to use the internet and digital tools to facilitate diagnosis, treatment and finding the most appropriate service to contact. The literature indicates that there are different types of digital citizens: learners (to understand health better), pragmatists (to decide whether it is worth seeing a doctor), sceptics (to solve health problems doctors seem not to be able to), worriers (who find online information frightening), delegators (who use it as a source of information), and a-digitals (who do not see the internet as suitable for health care) (Powell, 2019). Concerns have been expressed about inequity in terms of access to digital sources, and initiatives have been established to address inequities. NHS Digital has funded a programme to widen digital participation and reduce inequity.⁹

BSA allows us to track internet access over time, as well as to examine current inequity of access. The proportion of people who do not have access to the internet (whether at home, work or elsewhere) has continued to decline, falling most recently from 14% in 2015 to 9% in 2018. Most of this digital exclusion is among the older population with 29% of those aged 65+ currently reporting not having access to the internet.

More specifically, we wanted to assess the prevalence of turning to online resources both to help understand what health problems might be and then to help make decisions about where to seek help or care (a behaviour that is associated with ‘digital learners’ and ‘digital pragmatists’ (Powell, 2019). To do this, we ask the following questions:

Now imagine you have an unexpected health problem that is not life threatening. How likely, if at all, is it that you would...

...look on the internet to decide what the problem might be?

...look on the internet to decide what to do?

It should be noted that our questions did not ask *which* online resources people use; these could be highly variable in their reliability. In our analysis, we excluded respondents who do not have internet access, as otherwise the patterns we find, to a large extent, simply reflect the fact that some groups are disproportionately less likely to have access to the internet.

The overall responses to these questions, and those provided by groups defined by demographic and area-based characteristics, are presented in Table 4. Overall, we find that there is a gap between the likelihood of using the internet to investigate what a health problem might be (58%) and going online to decide what to do (47%). Younger age groups are much more likely to say they would both use the internet to investigate a health problem and to decide what to do. Those aged 18-24 are twice as likely to both research a health

We find that there is a gap between the likelihood of using the internet to investigate what a health problem might be (58%) and going online to decide what to do (47%)

⁹ Details of the ‘NHS Widening Digital Participation’ programme can be found here: <https://www.goodthingsfoundation.org/projects/nhs-widening-digital-participation-phase2#phase1>

Those aged 18-24 are twice as likely to both research a health problem online (62%) and to use the internet to decide what to do (47%), compared with those aged 75+

problem online (62%) and to use the internet to decide what to do (47%), compared with those aged 75+ (30% and 23% respectively). However, other characteristics are also associated with using the internet to decide what a health problem might be and what to do about it. Women, parents of children aged under five in the household, those with higher educational qualifications and those living in urban areas are all more likely to indicate that they would use the internet for both of these purposes.

Table 4 Likelihood of using the internet to investigate a non-life threatening health problem among people with internet access, by socio-demographic characteristics

	% likely to use the internet to decide what the problem might be	% likely to use the internet to decide what to do	Unweighted base
All with access to the internet	58	47	2542
Age			
18-24	62	47	167
25-34	72	61	378
35-44	67	53	460
45-54	56	46	449
55-64	51	42	470
65-74	45	33	406
75+	30	23	207
Sex			
Male	54	44	1111
Female	62	49	1431
Respondent has child aged under 5 years in household			
Yes	72	59	298
No	56	44	2229
Highest educational qualification			
Degree	71	57	742
A-levels or equivalent	57	46	708
GCSEs or equivalent	52	42	684
No qualification	42	34	368
Urban or rural area (England & Wales)			
Urban	61	49	1825
Rural	53	43	495

Base: all respondents with internet access

It seems clear from this evidence that there is considerable potential to expand the use of digital tools for those who have internet access (alongside the plans already in place to address digital inequity).

There are two parts to this. First, there is the gap between those who look online in the first place, but do not use the internet to work out what to do, which could be addressed (although we found these two behaviours to be highly correlated, suggesting a focus on this gap would have fairly limited impact). Second, there are many people who have internet access but who do not currently use it for working out what a medical problem is or what to do about it. Further research in this area might be helpful in order to find out what sites and tools people use, and whether there are any particular barriers that are stopping people using digital tools at the moment.

Increasing use of self-care

NHS England aims to promote self-care generally¹⁰ and to increase patients' ability to manage their own health and wellbeing¹¹. NHS Scotland aims to increase self-care by promoting health literacy and increasing awareness and use of pharmacists to reduce demand for other health services.¹²

We explore which types of people feel most confident and which struggle with aspects of caring for their health problems by asking about three different aspects of self-care: confidence in decisions about whether a health problem requires medical attention; having support networks when ill; and whether or not people would take medication for pain. Specifically, we ask respondents:

When you have an unexpected health problem that is not life threatening, how confident, if at all, would you say you are in deciding when you need to go to a doctor, and when you can look after a health problem yourself?

Do you have family, friends or a partner who could look after you if you have an unexpected health problem that is not life threatening?

Now imagine that you have an unexpected pain that is not life threatening. How likely, if at all, is it that you would take medication to stop the pain?

Most people report being confident that they know when to see a doctor regarding a health problem (90%)

The responses provided overall and for groups defined by demographic characteristics of interest are presented in Table 5. Most people report being confident that they know when to see a doctor regarding a health problem (90%) with little variation across sub-groups. Only young people (aged 18-24) have lower levels of confidence (81%, not shown in the table), presumably as they make the transition to adulthood.

Large majorities – slightly more than four in five – also report that they

¹⁰ For details see: <https://www.england.nhs.uk/2017/11/encouraging-people-to-embrace-self-care-for-life/>

¹¹ For details see: <https://www.england.nhs.uk/ourwork/patient-participation/self-care/patient-activation/>

¹² For details see: <https://www.gov.scot/publications/main-report-national-review-primary-care-out-hours-services/pages/0/>

The largest difference is between those living in the most deprived areas, of whom 76% say they have friends and family to look after them, compared with 91% of those in the most affluent areas

have family or friends to look after them, if they have a non-life-threatening health problem; or that they would be likely to take medication to stop an unexpected pain. We might expect certain groups to be less likely to have family and friends who could look after them, including those who are older, who would also be more likely to live on their own, to experience poor health and so on. While 85% of people say that they could rely on friends and family, this falls slightly to 80% among those aged 75+. This is similarly lower among those who live on their own (73%) – also likely to be older – those who report being in poor health (78%), those with a limiting health problem or disability (81%) and those with no qualifications (80%). Interestingly, the largest difference is between those living in the most deprived areas, of whom 76% say they have friends and family to look after them, compared with 91% of those in the most affluent areas.

For the measure of being likely to take medication to stop an unexpected pain that is not life threatening, there are few differences by demographic characteristics. Only men and those considering themselves to be in excellent health are a little less likely to say they would take medication in these circumstances (78% and 73% respectively).

Table 5 Attitudes to self-care, by socio-demographic characteristics

	% has family or friends who can provide care	% confident deciding when to see a doctor	<i>Unweighted base (for both questions)</i>	% would take medication to stop pain	<i>Unweighted base</i>
All	85	90	2309	81	2906
Sex					
Male	84	89	974	78	1257
Female	86	91	1335	83	1649
Highest educational qualification					
Degree	90	94	640	83	763
A-levels or equivalent	86	92	616	78	760
GCSEs or equivalent	82	90	590	81	750
No qualification	80	85	427	81	582
Index of Multiple Deprivation quintile (England)					
1 – (20% most deprived areas)	76	83	351	80	487
2	83	91	354	85	476
3	86	92	397	80	474
4	89	94	470	81	566
5 – (20% least deprived areas)	91	92	426	79	507
Self-rated health					
Excellent	89	88	223	73	223
Very good	91	95	725	81	725
Good	84	91	799	83	799
Fair	82	89	360	82	360
Poor	78	86	163	84	163

There is little evidence here to suggest changing the current strategies for increasing the use of self-care – although, given most people already have confidence in self-care, any improvement as a result of these strategies may not be extensive. The one notable gap we found is in terms of support from family and friends when ill, which is lower for people living in deprived areas, but which government initiatives around improving self-care do not – and could not easily – aim to address.

Awareness of services

Lack of awareness of alternative services has been identified as a factor in the use of emergency healthcare for minor problems (Penson et al, 2012). NHS policy makers address this through their Choose Well campaigns, offering information to people to help them access the service most appropriate to their needs¹³ as well as to raise awareness of the range of services available locally¹⁴.

We ask a range of questions to understand whether people feel they know about the health services available to them. Our approach covers both existing knowledge and being able to find out the information, as, in practice, the ability to find such information is more important than knowing these details at the outset. We ask respondents to:

Imagine that you have an unexpected health problem that is not life threatening. You have decided that you need to get help quickly from a health service. How confident, if at all, are you that...

...you know the range of NHS services you can use, for example, walk in centres, chemist or pharmacy, or calling 111?

...you know, or can easily find out, when NHS services are open?

...you know, or can easily find out, what tests are available at different NHS services, for example x-rays and blood tests?

...you know, or can easily find out, how to contact a GP when GP surgeries are closed?

Around eight in ten are confident they could find out what tests are available at different NHS services and know, or could easily find out, how to contact a GP when GP surgeries are closed

Responses to these questions are presented in Table 6. Nine in ten people report knowing the range of NHS services they can use and are confident that they could find out which NHS services are open, when they have an unexpected health problem that is not life threatening. Around eight in ten are confident they could find out what tests are available at different NHS services and know, or could easily find out, how to contact a GP when GP surgeries are closed.

13 For instance, see <http://www.choosewellwales.org.uk/home>

14 See <http://www.choosewellmanchester.org.uk>

Differences emerge in people's knowledge and confidence to access the right services when they need them. Access to the internet is clearly associated with knowing which NHS services are available and the ability to find out when NHS services are open or what tests are available. While overall 91% of people feel they could easily find out when NHS services are open, this falls to 82% among those who do not have access to the internet. Similarly, while 78% of people feel confident they could find out what tests are available this falls to 72% among those with no internet access. Internet access also partly, but not entirely, accounts for lower confidence in finding out when NHS services are open among those aged 75+, in poor health or with no qualifications (86% - not shown in the table).

There are no differences by internet access in knowing (or being able to find out) how to access a GP out of hours. Here, it appears that experience of using services as an adult is most relevant. Only 64% of those aged 18-24 feel confident they know how to access a GP out of hours compared with 81% overall. Similarly, only 71% of 18-24 year olds feel they could find out what tests are available, compared with 78% overall.

Otherwise, although there are no differences by sex in feeling confident about finding out when NHS services are open or what tests are available, men are less confident than women that they know or can find out how to access a GP out of hours (76% compared with 85%).

Taken together, while confidence and awareness overall are high, both young adults and men might benefit from improved knowledge about the alternative services available (and especially how to access a GP out of normal working hours) – particularly as we know that both groups have relatively high use of emergency care.

Men are less confident than women that they know or can find out how to access a GP out of hours

Table 6 Awareness of NHS services, by internet access and socio-demographic characteristics

	% confident they know the range of NHS services they can use	% confident can easily find out when NHS services are open	% confident could find out what tests are available	% confident know or could find out how to contact a GP out of hours	<i>Unweighted base</i>
All	90	91	78	81	2906
Has internet access					
Has access	91	92	78	81	2542
Does not have access	83	82	72	79	364
Age					
18-24	85	89	71	64	169
25-34	91	94	78	82	384
35-44	91	92	76	84	467
45-54	90	93	79	81	469
55-64	93	92	78	86	508
65-74	93	92	83	86	499
75+	87	84	77	79	405
Self-rated health					
Excellent	94	96	81	83	223
Very good	92	93	79	83	725
Good	90	93	81	84	799
Fair	90	90	75	75	360
Poor	90	87	80	88	163
Sex					
Male	89	91	77	76	1257
Female	92	92	78	85	1649

Conclusions

A minority of people hold attitudes or beliefs that make A&E attractive and the key alternative to this service – general practice – problematic

The pressure on emergency health services is clearly a concern to policy makers and those who deliver the services. Our findings have confirmed that some groups of the population, historically known to make high use of emergency health services, continue to do so, notably parents of a child aged under 5 in the household. What is also apparent is that the public's views tie in with policy makers' concerns about the potential misuse of emergency health services, in so far as there is widespread agreement that both A&E and 999 ambulances are used by too many people when they are not needed. However, there is no evidence that these views, in themselves, are related to use of emergency healthcare.

There are also issues of access or convenience: over a third of people say they prefer a service where there is no need to make an appointment, while half think it is hard to get a GP appointment

Attitudes towards the perceived advantages or disadvantages of different health services may be playing a role in demand for emergency care. A minority of people hold attitudes or beliefs that make A&E attractive and the key alternative to this service – general practice – problematic. One area that appears to be particularly important is people's perceptions of doctors' knowledge levels: people in poor health, living in urban areas and socially deprived communities are more likely to believe that A&E doctors know more than GPs, and are more likely to lack confidence in their GPs. There are also issues of access or convenience: over a third of people say they prefer a service where there is no need to make an appointment, while half think it is hard to get a GP appointment. Taken together, these findings suggest that challenging beliefs held by some social groups about A&E, along with improving access to general practice, might help to manage demand for emergency health services (Tammes, 2017). This is an area where the findings would be greatly enhanced by more in-depth research which develops a better understanding of the different ways that attitudes and perceptions may contribute to decision making around seeking medical care. A related qualitative study addressing this objective is being undertaken as part of the research project of which this set of questions forms a part.

Policy makers are focussing on three strategies to help manage demand – promoting digital tools, self care and awareness of alternative services. Awareness of alternative services, their opening times and the tests they offer is high but initiatives could focus more on men and young adults' knowledge base, particularly how to contact a GP out of hours, because both of these groups have been shown to make high use of A&E. However, our findings suggest that there is still a considerable way to go with the promotion of digital tools because only around half of the population with access to the internet currently look online to diagnose their problems or decide where to go to have them dealt with. Some social groups are more likely to do this such as women, people in urban areas, young adults and parents of a child aged under five. More needs to be done to encourage middle aged and older people, men and those living in rural areas to use digital tools if these are proven to help people make good choices.

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Appendix

Note 1

The 2015 Health Survey for England¹⁵ showed a significant relationship between use of A&E and the Index of Multiple Deprivation (IMD). People in more deprived areas were more likely to have attended A&E as a patient – for example, 11% of those in the most deprived quintile had attended 1-2 times in the last 12 months, compared with 8% of those in the least deprived quintile (and 9% of all respondents).

Table A.1 Accessed A&E services in the previous 12 months, by demographic characteristics

	% used service at least once	% used service three times or more	Unweighted base
All	32	6	2906
Age*			
18-24	32	6	169
25-34	40	9	384
35-44	38	6	467
45-54	34	6	469
55-64	29	4	508
65-74	23	3	499
75+	21	6	405
Respondent has child aged under 5 years in household			
Yes	54	13	300
No	29	5	2591
Whether has long term health condition or disability			
No	31	5	1766
Yes, but not limiting	30	5	586
Yes and limiting	40	9	541
Urban or rural area (England & Wales)			
Urban	33	6	2064
Rural	27	4	578

*Please note the BSA sample does not include residents in institutions such as care or nursing homes, which means the age profile of A&E use shown here does not reflect use among those (typically) older people

¹⁵ NatCen Social Research, University College London, Department of Epidemiology and Public Health. (2017). Health Survey for England, 2015. [data collection]. UK Data Service. SN: 8280, <http://doi.org/10.5255/UKDA-SN-8280-1>

**Table A.2 Used a 999 ambulance in the previous 12 months,
by socio-demographic characteristics**

	% used service at least once	% used service three times or more	<i>Unweighted base</i>
All	13	2	2906
Whether has long term health condition or disability			
None	12	2	1766
Yes, but not limiting	13	2	586
Yes and limiting	21	4	541
Self-rated health			
Excellent	6	*	223
Very good	10	1	725
Good	14	2	799
Fair	18	3	360
Poor	22	4	163
Urban or rural area (England & Wales)			
Urban	14	3	2064
Rural	11	1	578
Index of Multiple Deprivation quintile (England)			
1 - (20% most deprived areas)	17	3	487
2	16	3	476
3	13	2	474
4	11	2	566
5 - (20% least deprived areas)	11	1	507

The multivariate analysis technique used for the models is a logistic regression. The results for 5 separate models are shown in Tables A.3 to A.7. The dependent variables for the first three models are three separate attitude statements about positive attributes of A&E; for the last two models the dependent variables are two attitude statements about negative perceptions of GPs (precise wording shown in the table titles).

Table A.3 Agree with “I prefer NHS services where I don’t need to make an appointment”, logistic regression

	Odds Ratio	Standard error	p value
Perceived health (Excellent)			
Very good	1.13	0.23	0.55
Good	1.37	0.27	0.11
Fair	1.39	0.33	0.17
Poor	1.22	0.32	0.46
Usage of A&E services (Never)			
More than 12 months ago	1.09	0.16	0.55
1-2 times	1.10	0.18	0.54
3 times or more	1.37	0.31	0.15
Highest education (Degree or higher degree)			
A-levels or equivalent	1.02	0.17	0.93
GCSEs or equivalent	1.30	0.21	0.11
No qualification	**2.01	0.35	0.00
Area (Urban)			
Rural	0.84	0.12	0.21
Deprivation quartile (least deprived)			
Most deprived	**2.09	0.42	0.00
Second most deprived	1.36	0.26	0.11
Third most deprived	1.13	0.22	0.55
Second least deprived	1.08	0.19	0.69
Constant	0.28	0.08	0.00

Weighted base: 1,859

Unweighted base: 1,865

* = significant at 95% level; ** = significant at 99% level

Table A.4 Agree with “I prefer A&E to a GP because I can get tests done quickly”, logistic regression

	Odds Ratio	Standard error	p value
Perceived health (Excellent)			
Very good	0.93	0.26	0.80
Good	1.12	0.27	0.64
Fair	1.02	0.31	0.95
Poor	0.91	0.30	0.77
Usage of A&E services (Never)			
More than 12 months ago	0.72	0.17	0.17
1-2 times	1.01	0.25	0.98
3 times or more	1.46	0.52	0.29
Highest education (Degree or higher degree)			
A-levels or equivalent	1.14	0.28	0.58
GCSEs or equivalent	1.08	0.29	0.79
No qualification	*1.92	0.54	0.02
Area (Urban)			
Rural	*0.54	0.13	0.01
Deprivation quartile (least deprived)			
Most deprived	**2.52	0.75	0.00
Second most deprived	1.61	0.42	0.07
Third most deprived	1.13	0.30	0.66
Second least deprived	0.90	0.23	0.69
Constant	0.15	0.05	0.00

Weighted base: 1,845

Unweighted base: 1,850

* = significant at 95% level; ** = significant at 99% level

Table A.5 Agree with “A&E doctors know more than GPs”, logistic regression

	Odds Ratio	Standard error	p value
Perceived health (Excellent)			
Very good	0.81	0.21	0.42
Good	0.95	0.24	0.84
Fair	1.13	0.30	0.64
Poor	1.16	0.39	0.67
Usage of A&E services (Never)			
More than 12 months ago	*0.68	0.13	0.05
1-2 times	0.77	0.17	0.23
3 times or more	1.27	0.44	0.49
Highest education (Degree or higher degree)			
A-levels or equivalent	1.16	0.21	0.40
GCSEs or equivalent	1.32	0.26	0.16
No qualification	**2.67	0.58	0.00
Area (Urban)			
Rural	0.79	0.13	0.16
Deprivation quartile (least deprived)			
Most deprived	*1.58	0.37	0.05
Second most deprived	1.21	0.25	0.36
Third most deprived	1.21	0.29	0.42
Second least deprived	1.01	0.22	0.96
Constant	0.22	0.07	0.00
<i>Weighted base: 1,834</i>			
<i>Unweighted base: 1,840</i>			

* = significant at 95% level; ** = significant at 99% level

Table A.6 Agree with “I do not have much confidence in GPs at my GP surgery”, logistic regression

	Odds Ratio	Standard error	p value
Perceived health (Excellent)			
Very good	0.78	0.26	0.46
Good	1.06	0.34	0.86
Fair	1.35	0.53	0.44
Poor*	2.48	0.96	0.02
Usage of A&E services (Never)			
More than 12 months ago	0.81	0.21	0.42
1-2 times	0.91	0.26	0.75
3 times or more	**2.75	0.86	0.00
Highest education (Degree or higher degree)			
A-levels or equivalent	*1.93	0.51	0.01
GCSEs or equivalent	1.71	0.48	0.06
No qualification	**2.44	0.75	0.00
Area (Urban)			
Rural*	0.54	0.14	0.02
Respondent has child aged under 5 years in household (No)			
Yes	**2.38	0.62	0.00
Deprivation quartile (least deprived)			
Most deprived	1.47	0.42	0.18
Second most deprived	1.05	0.32	0.88
Third most deprived	1.08	0.36	0.82
Second least deprived	0.81	0.26	0.51
Constant	0.06	0.03	0.00

Weighted base: 1,856

Unweighted base: 1,871

* = significant at 95% level; ** = significant at 99% level

Table A.7 Agree with “It is hard to get an appointment with a GP at my GP surgery”, logistic regression

	Odds Ratio	Standard error	p value
Perceived health (Excellent)			
Very good	1.14	0.27	0.59
Good	1.16	0.27	0.51
Fair	1.07	0.31	0.81
Poor	1.70	0.59	0.13
Usage of A&E services (Never)			
More than 12 months ago	0.98	0.16	0.91
1-2 times	1.37	0.25	0.09
3 times or more*	*1.78	0.50	0.04
Highest education (Degree or higher degree)			
A-levels or equivalent	1.37	0.22	0.05
GCSEs or equivalent	*1.39	0.21	0.03
No qualification	1.28	0.26	0.23
Area (Urban)			
Rural	**0.63	0.10	0.01
Respondent has child aged under 5 years in household (No)			
Yes	**1.75	0.31	0.00
Deprivation quartile (least deprived)			
Most deprived	1.23	0.24	0.28
Second most deprived	1.05	0.20	0.79
Third most deprived	1.11	0.20	0.55
Second least deprived	0.95	0.17	0.78
Constant	0.68	0.20	0.18

Weighted base: 1,865

Unweighted base: 1,881

* = significant at 95% level; ** = significant at 99% level

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