

# Blood pressure survey summary report

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# 1. Executive Summary

This summary report presents the 'Blood Pressure' online survey that was open from 6<sup>th</sup> September to 30<sup>th</sup> November 2022.

The survey was designed by Eastern AHSN to understand people's:

- a) Understanding of blood pressure/hypertension.
- b) Experiences of having high blood pressure.
- c) Experiences and preferences for monitoring blood pressure.
- d) Additional questions relating to experiences with cholesterol were also included.

In total, 723 were received and 60 to 79-year-olds were the largest cohort of respondents (males 49%, females 51%). The majority identified as being white British and responses were mainly received from within the East of England. Over half said they had high blood pressure (60%); 87% are prescribed medication and 92% self-report taking it as prescribed.

On average most people felt the reasons for being prescribed medication had been clearly explained, although there was room for improvement. Most respondents without a high blood pressure diagnosis had been checked in the last 12 months (92%) and 74% of people with high blood pressure said it had been checked twice or more in the last 12 months. 35% of respondents stated factors that cause high blood pressure were not very clear or not clear at all. Doctors and nurses were spoken to most frequently about high blood pressure (in the last three years), but a small proportion had spoken to a pharmacist or carer (1%). The more positive experience was associated with being seen by a pharmacist or nurse when compared to doctors and carers.

The majority (89%) had selected self-monitoring 'at home' as a preference for blood pressure monitoring and on average people scored 6 on a scale of 1 (extremely unconfident) to 6 (extremely confident), when asked about confidence in checking their own blood pressure. The most popular choice for submitting blood pressure readings was to send by email (53%); a dedicated phone app (to the doctor) was the second most popular method (38%), followed by recording in a private area on the doctor's website (37%). Challenges to submitting blood pressure readings included a lack of appointments to see a doctor, communication (e.g., clear instructions, patient-accessible email address and being able to communicate with a GP or staff outside of scheduled appointments); technical difficulties with submitting readings and getting followed up post-diagnosis.

Improvements for people with high blood pressure centred around the following themes:

**Public advice and education:** better understanding of causes of high blood pressure, including lifestyle and a need to focus on prevention. Clarity on what blood pressure levels is considered 'normal' and increased awareness of the consequences of untreated high blood pressure, better understanding, and support of managing (self-management) the condition. **Lifestyle:** non-pharmacological interventions, such as social prescribing for people with high blood pressure to access support (e.g., exercise, support weight loss/stress management; nutrition). **GP access:** better access to GPs and appointments and improved quality of contact with patients. **Approaches to monitoring:** early detection, more frequent, continuous monitoring, more home monitoring; regular appointments and annual check-ups, utilising other health care professionals, resources for the treatment of those at high risk, algorithms for detection and accurate diagnosis were cited as areas of improvement. In addition, a greater understanding of the genetic factors contributing to high blood pressure was considered important. Medication was frequently mentioned, particularly in relation to follow-up, and concerns about side effects.

## Our recommendations:

From the overall results of the survey, Eastern AHSN has made the following recommendations:

- Continue to promote the importance of a population approach to education and advice on the causes, prevention, and self-management of high blood pressure through initiatives such as '[Making Every Contact Count](#)', '[Know your Numbers!](#)', '[Calculate your heart age](#)'; and [NHS Prevention High Blood Pressure](#).
- Consider how quality and regularity of contact with patients can be improved, including utilising the wider workforce to maximise opportunities for risk stratification, assessments, signposting, education and BP conversations and tests into existing contact points.
- Consider the importance of healthy lifestyle changes for people's health and this can be done through social prescribing services (e.g., referral to healthy lifestyle services, weight/stress management, nutritional advice, and smoking cessation services).
- Reassurance to patients who are submitting regular BP readings that this is valued and is being used to inform medication reviews/follow-ups by health care professionals/pharmacists, including time to discuss concerns around side effects.

The focus going forward is to continue to support primary care and ICSs to utilise available tools to support the improvements of hypertension case finding and optimisation. This includes understanding the number of population health management digital tools available such as the [UCL Partners hypertension frameworks](#); [Ardens](#); [Eclipse Live](#); [CDRC](#) as well as a [patient search tool review paper](#) available to access [here](#). These include tools for searches and risk stratification, recommendations for the utilisation of the wider workforce and resources for education around lifestyle and self-management.

Promotion and adherence to other local hypertension programmes may be considered. This includes the [Hypertension case-finding service](#), and [BP@home programme](#) to allow for increased community and at home monitoring and clear, standardised processes for submitting readings and appropriate follow-ups.

## 2. Background

In January 2022, the AHSN Network launched the national blood pressure optimisation programme, which aimed to transform the prevention of CVD by optimising the clinical care and self-management of people with hypertension.

Eastern AHSN has been supporting primary care in the implementation of the UCLPartners Proactive Care Framework for hypertension in the East of England. The aim is to support primary care staff to optimise clinical care and self-management of people with hypertension through:

- Risk stratification to prioritise which patients to see first.
- Use of a wider workforce to support remote care and self-care.
- Adapting frameworks for local implementation.
- Supporting patients to maximise the benefits of remote monitoring and virtual consultations where appropriate.

To help improve patient care in the East of England, Eastern AHSN conducted an online survey, open to the public in the region, which aims to gain insight into people's understanding and perception of blood pressure and remote monitoring for blood pressure, to help support shaping the planning and delivery of the programme.

It is common knowledge that people's experiences of access to health and health outcomes are often affected by wider determinants of health, such as location, ethnicity, gender and age (Bibi, 2018). The survey results may provide valuable information about whether this is the same for blood pressure understanding and management. It will also be helpful to provide this insight to our NHS colleagues, particularly those at the system and primary care network level who are commissioned to adopt quality improvement and data-led decisions on commissioning and healthcare.

This summary report presents the results of every survey question from the Blood Pressure online survey that was open from 6<sup>th</sup> September to 30<sup>th</sup> November 2022.

### 3. Method

The survey was designed by Eastern AHSN to understand people's:

- a) Understanding of blood pressure/hypertension.
- b) Experiences of having high blood pressure.
- c) Experiences and preferences for monitoring blood pressure.
- d) Additional questions relating to experiences with cholesterol were also included.

The survey was disseminated through various channels, including:

- Neighbouring AHSN networks (Oxford AHSN covering BLMK and UCLP covering MSE)
- Stakeholder groups: CVDR network; ICB leads
- Health network health services
- Charity organisations
- A LinkedIn campaign and Facebook targeting.

The online survey was open to everyone aged 18 or over. It consisted of 35 self-report multiple choice questions, Likert scale questions and free text options to add comments and was expected to take respondents approximately 10 minutes to self-administer. The questions were created on Zoho surveys and could be accessed via an online link (See Appendix 1). There were no paper copies created, but there was an option on the welcome page to request a paper version or an alternative accessible format. For every completed response Eastern AHSN donated £3 to Blood Pressure UK (up to £1000).

A Data Protection Impact Assessment (DPIA) was completed prior to the survey going live to the public. Data was not identifiable, therefore no legal basis for processing is required under GDPR. Consent was captured at the start of the survey meeting requirements for transparent use and processing of data meeting requirements of the Common Law Duty of Confidentiality.

In total, 723 responses (673 completed responses and 50 partial responses) were received, and this report presents the results of the survey.

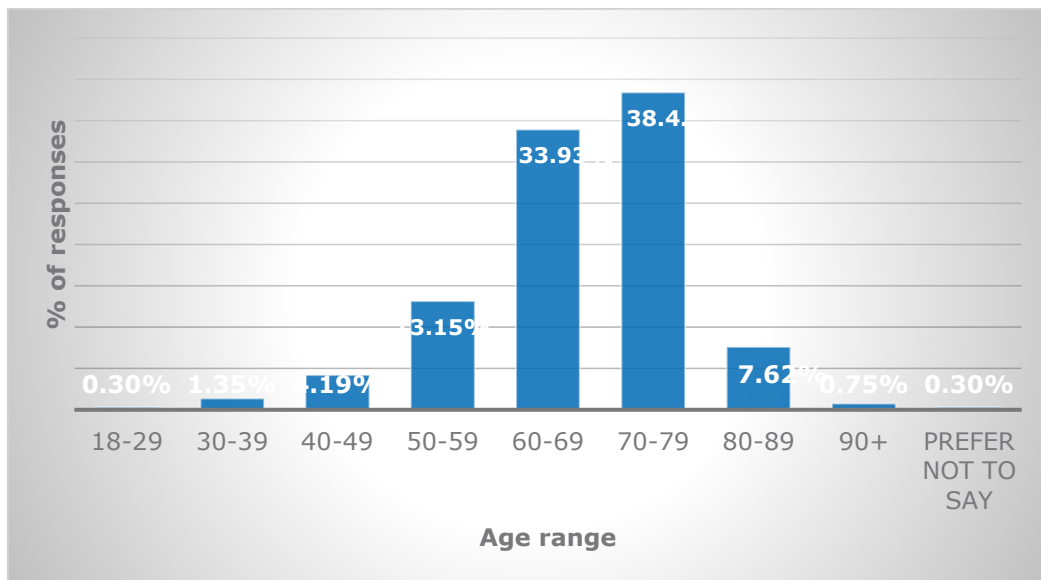
## 4. Survey Results Overview

The graphs below show the breakdown of results for each question of the survey.

### Demographics

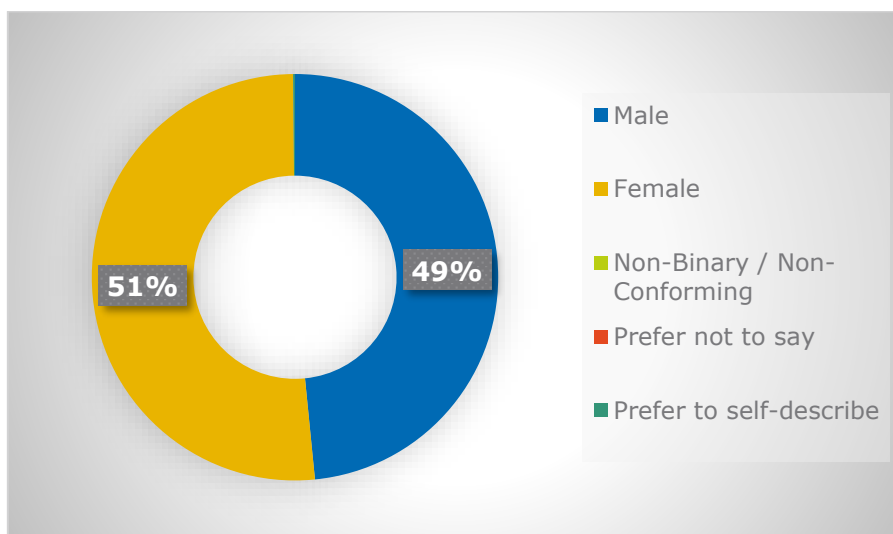
#### 1. What is your age range? Answered: 669

Figure 1 shows the age group breakdown with responses from 60-69 (35%) and 70-79 (38%) being the largest group.



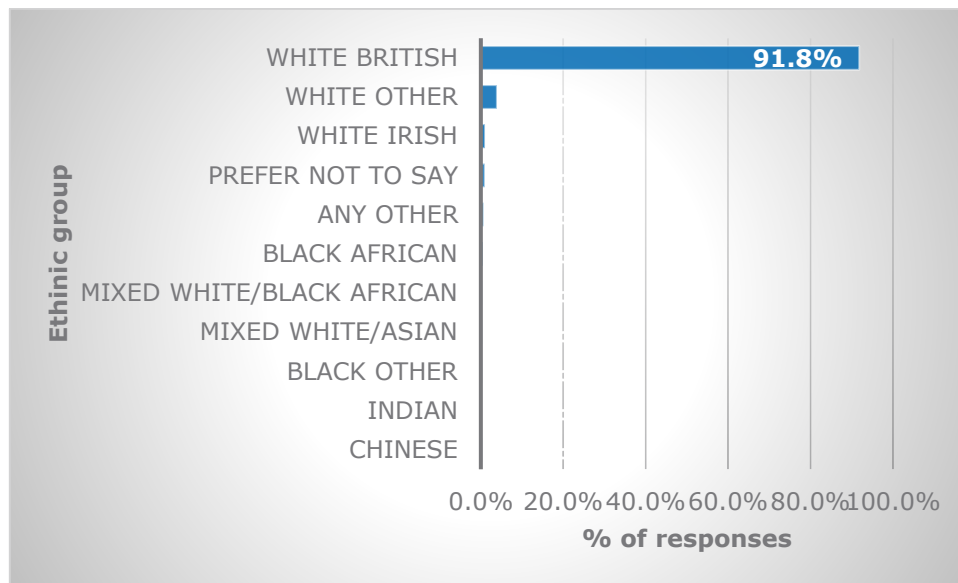
#### 2. How would you describe your gender? Answered: 669

Figure 2 shows slightly more females (51%) than males completed the survey.



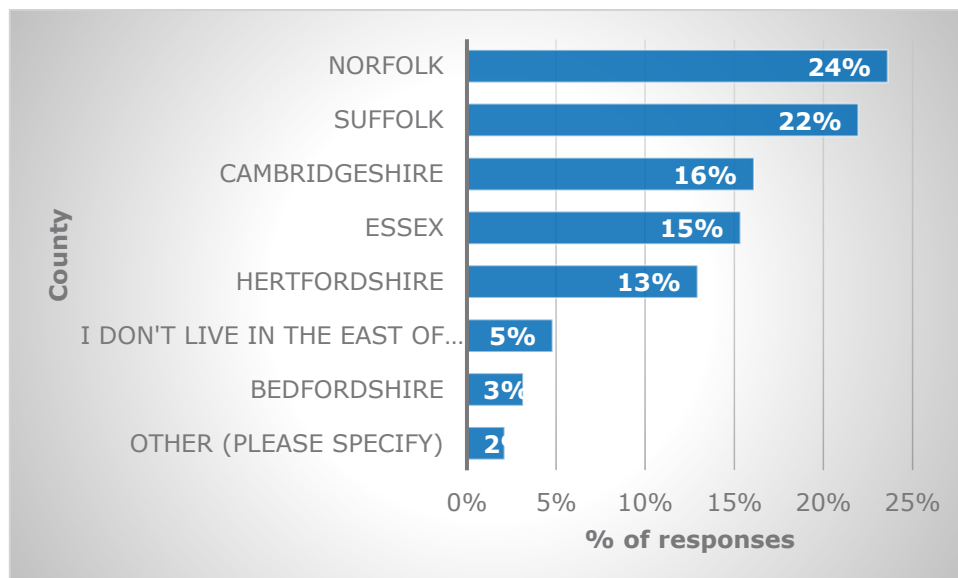
### 3. What is your ethnic group? Answered: 669

Figure 3 shows that the majority of respondents (92%) identified as being white British.



### 4. Which county in the East of England do you live in? Answered: 665

Figure 4 shows the percentage of responses from each county in the east of England. Responses were received from outside of the region, including Yorkshire, North Yorkshire, Lincolnshire, Tyne and Wear, Durham, Kent, and Wales.

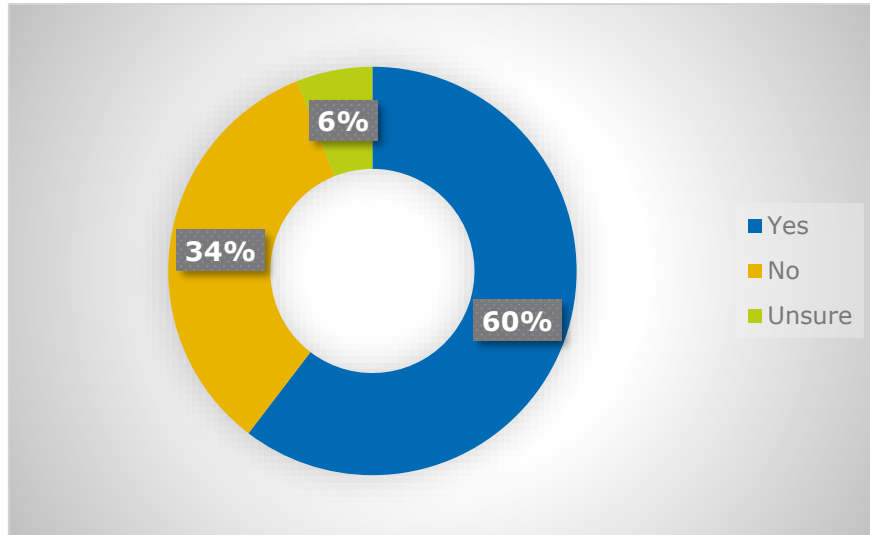




## Blood pressure status and medication

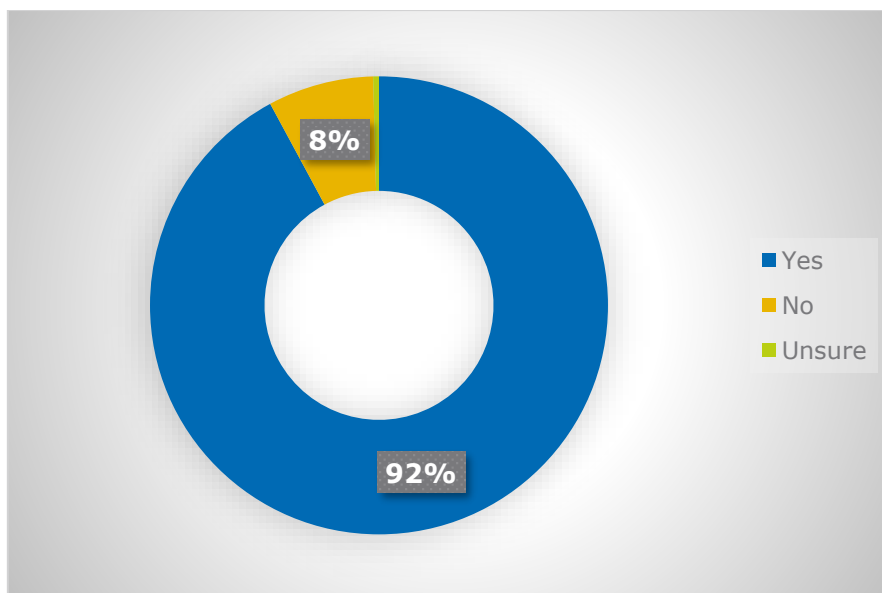
### 5. Do you have a high blood pressure diagnosis? Answered 679

Figure 5 shows that 60% of respondents said they had high blood pressure, with the remainder stating 'no' or 'unsure'.



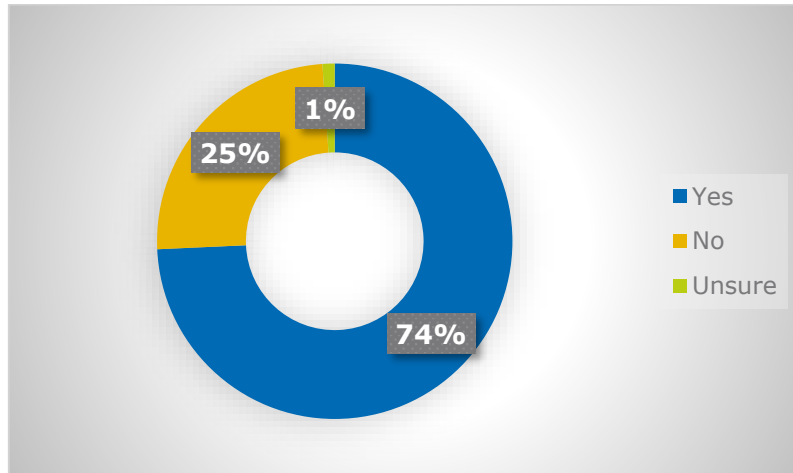
### 6. Has your blood pressure been checked in the last 12 months (all respondents)? Answered: 723

Figure 6 shows that 92% self-reported getting their blood pressure checked in the last 12 months.



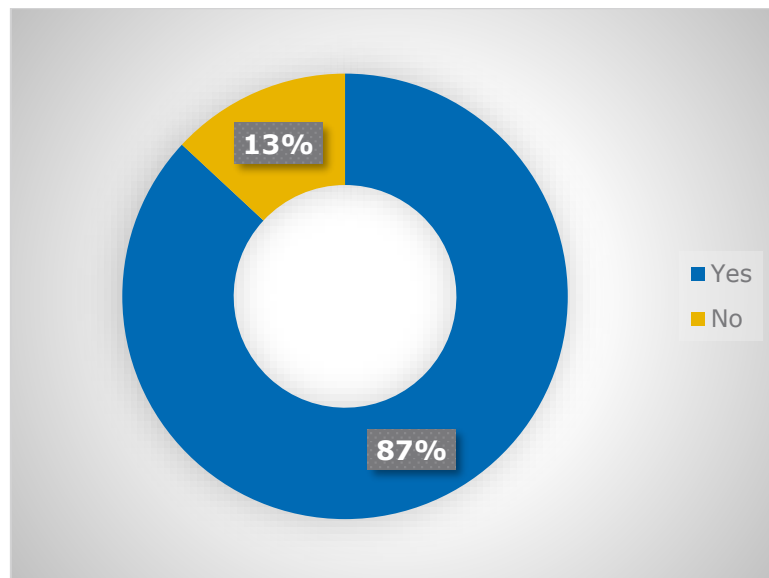
**7. In the last 12 months, has your blood pressure been checked twice or more (people with high blood pressure)? Answered 451**

Figure 7 shows the responses from people with a high blood pressure of which, 74% reported having their blood pressure checked twice or more in the last 12 months.



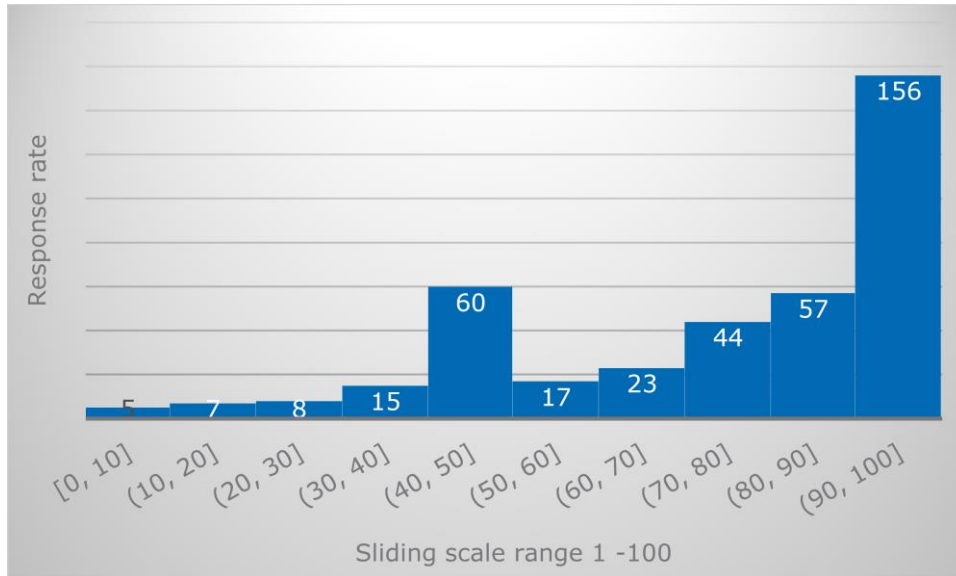
**8. Are you currently prescribed medication for high blood pressure (people with high blood pressure)? Answered 451**

Figure 8 shows 87% of respondents with high blood pressure are prescribed medication, but 13% reporting high blood pressure are not prescribed medication.



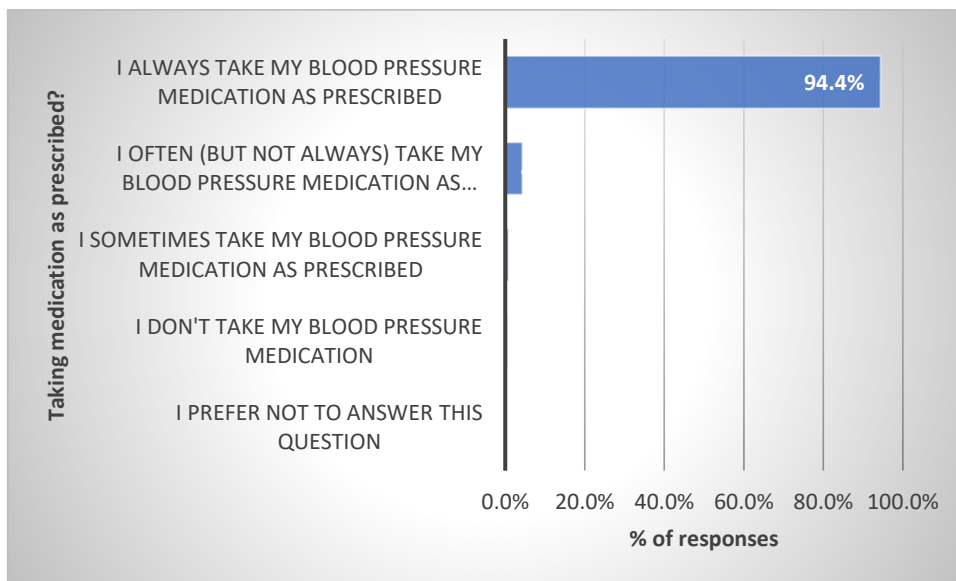
**9. Has the reason (s) you have been prescribed medication been made clear to you? (Move the slider to reflect your opinion, on a scale 1-100) Answered: 392**

Figure 9 shows response rates to prescribed medication being clearly explained. This question was presented on a sliding scale of 1 – 100; the slider started at 50, of which 60 responses remained at the starting position of the slider. The mode score was 100, with a median of 84 (SD:24).



**10. Do you currently take medication for blood pressure as prescribed medication - Pick an option below that best describes you (people with high blood pressure)? Answered: 392**

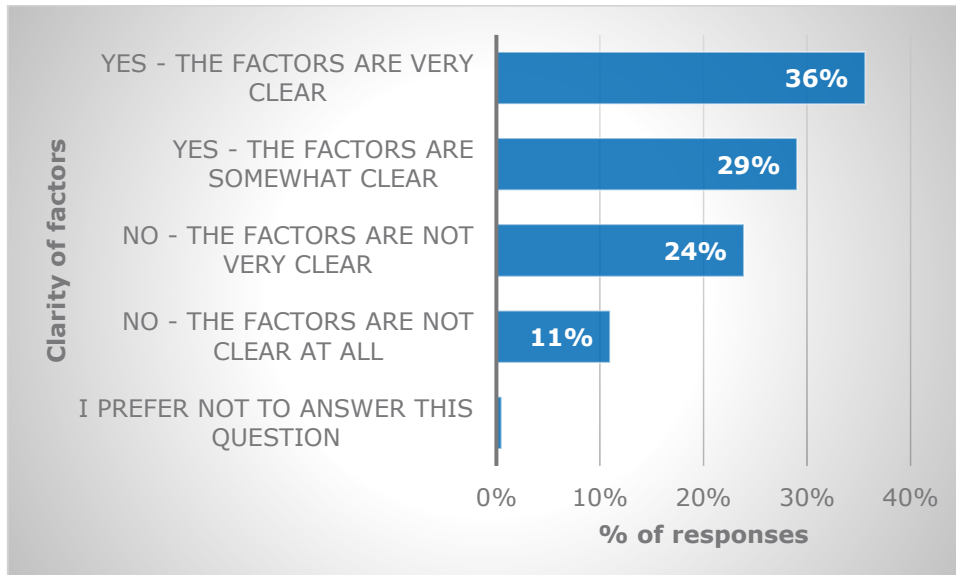
Figure 10 shows 94% of people taking medication for high blood pressure report taking it as prescribed.



## Understanding of blood pressure

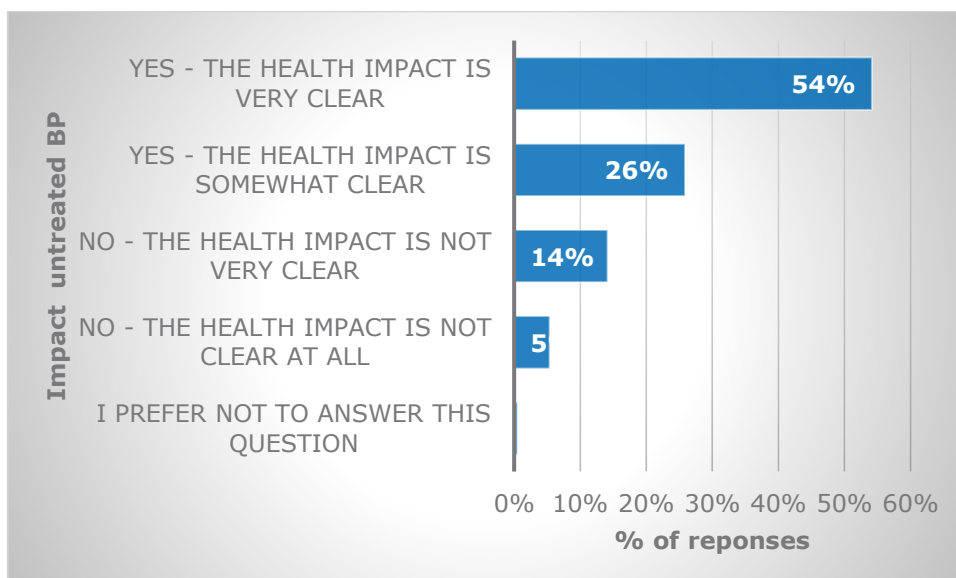
### 11. Have the factors that cause you to have high blood pressure been made clear to you (people with high blood pressure? Answered: 410

Figure 11 shows 36% of respondents stated factors had been made very clear; 29% were somewhat clear. A total of 35% of respondents stated factors were not very clear or not clear at all.



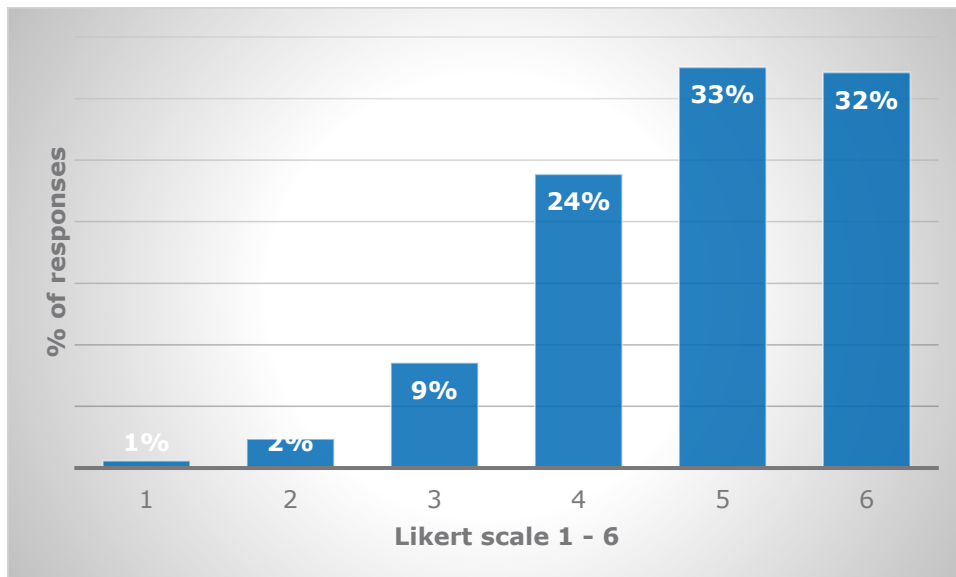
### 12. Has the impact that untreated high blood pressure can have on your health been made clear to you? Answered: 410

Figure 12 shows that 54% of respondents stated that the impact of untreated high blood pressure on health had been made very clear and 26% said it was somewhat clear.



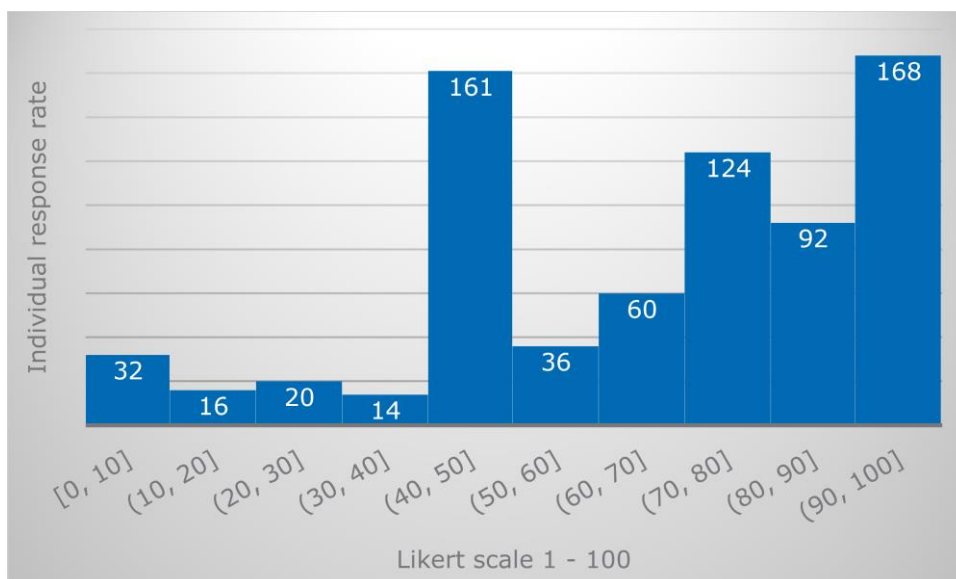
**13. How would you rate your understanding of high blood pressure on a scale of 1-6 (1: I don't understand what high blood pressure is at all - 6: I'm extremely clear what high blood pressure is)?**

Figure 13 the percentage of responses when asked about the understanding of high blood pressure on a scale of 1 (I don't understand) to 6 (I am extremely clear). 65% of respondents rated themselves 5 or above.



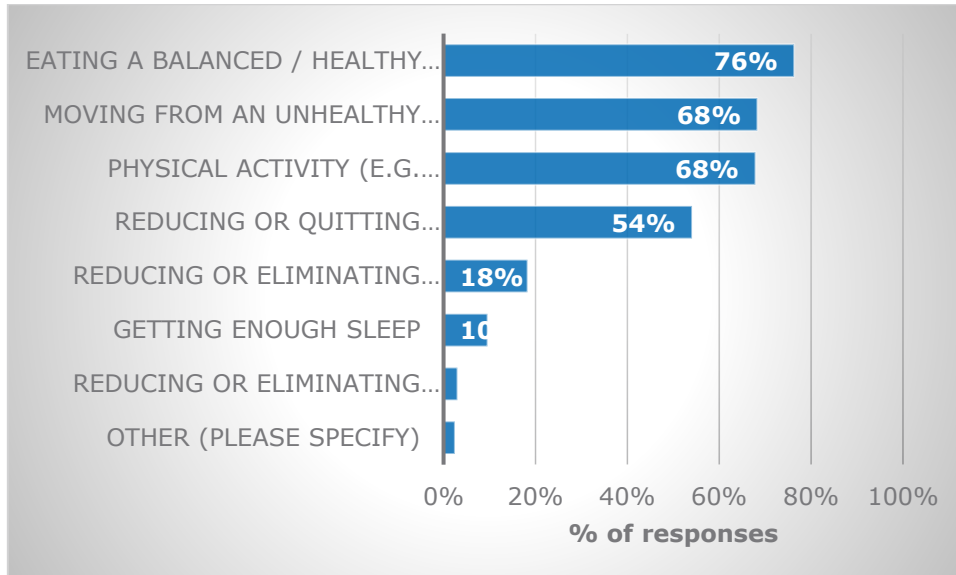
**14. In your opinion, how much are your everyday health behaviours (e.g. what you eat, or how active you are) linked to changes in your blood pressure (move the slider to show your opinion, on a scale 1-100) Answered: 723**

Figure 14 shows the responses when asked to rate opinions on links between everyday health behaviours and changes in blood pressure. The median and mode were 74 (*SD*:25). This question was presented on a sliding scale of 1 – 100 and the slider started at 50, of which 161 responses remained at the starting position of the slider.



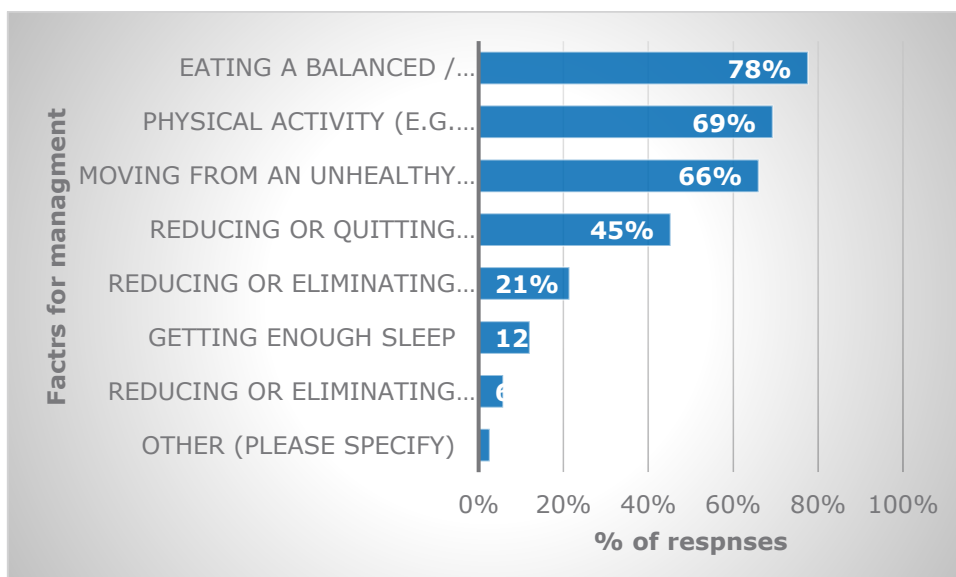
**15. In your opinion, what are the three most important things people can do to prevent high blood pressure? (pick three options from the list below)**  
**Answered: 723**

Figure 15 shows the percentage of responses when asked for the three most important factors in the prevention of high blood pressure.



**16. In your opinion, what are top three things that people can do to manage high blood pressure? (pick 3 options from the list below)**  
**Answered: 723**

Figure 16 shows the percentage of responses when asked for the three most important factors in the management of high blood pressure.



## Experiences related to blood pressure

### 17. In the last three years, which of the following have you spoken with about your blood pressure? (select all that apply) Answered: 723

Figure 17 shows the percentage of responses to whom they had spoken to about high blood pressure in the last three years, of which 66% stated they had spoken to a doctor; 58% had spoken to a nurse; 8% had spoken to a pharmacist and 1% had spoken to a carer. The remainder (15%) responded as either 'not spoken to anyone', 'other' or 'not applicable'.

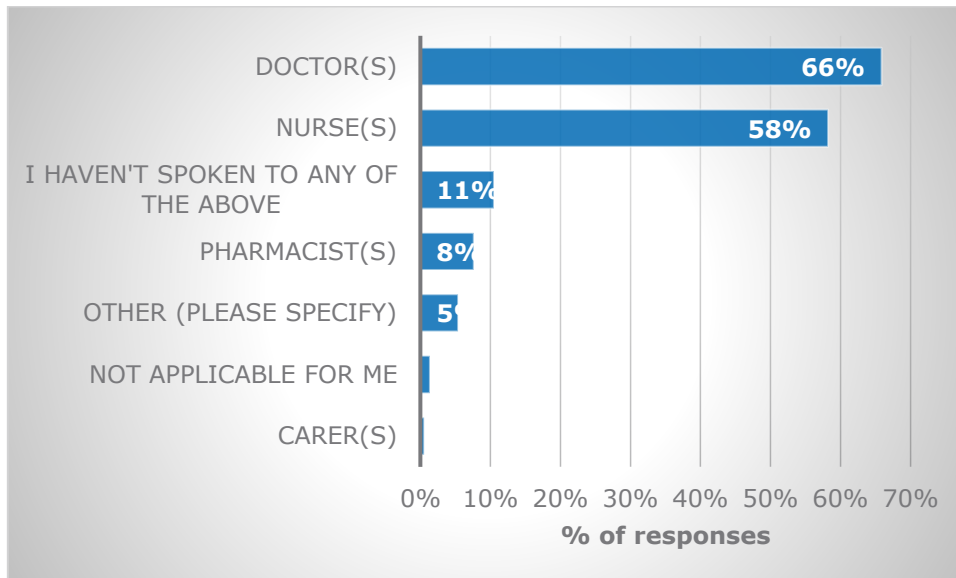
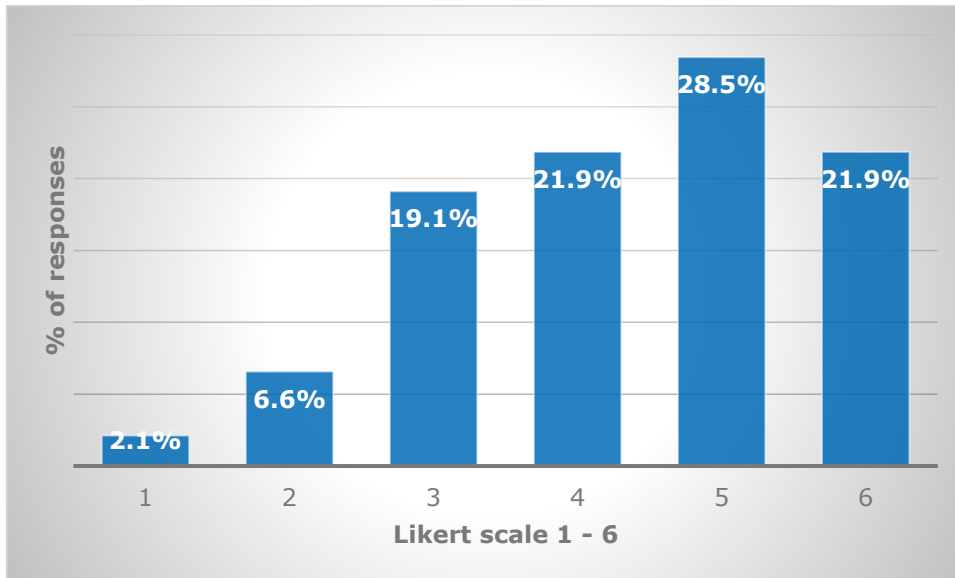


Figure 18 shows a bigram of the most used words where 'other (please specify)' was selected, which include; 'Hospital', 'Consultant', 'Friends', 'Family' and 'Spouse'.



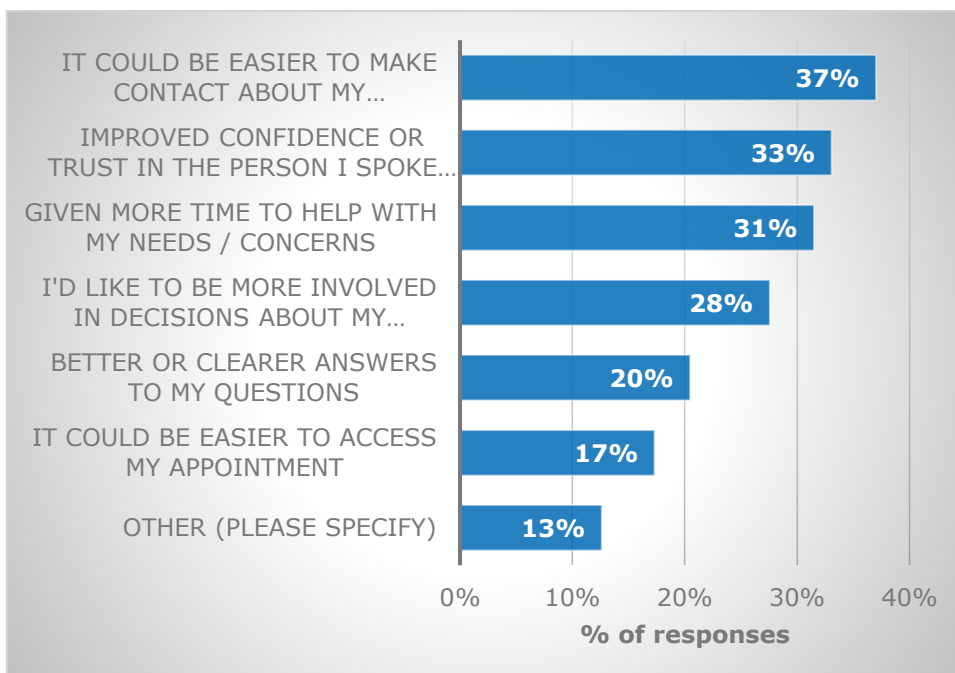
### 18. How would you rate your experience of speaking with this Doctor(s) about your blood pressure (on a scale of 1: very poor – 6: excellent)? (optional) Answered: 471

Figure 19 percentage of responses to the experience of speaking with a doctor about high blood pressure on a scale of 1 to 6. Over 60% rated 4 or above (median score was 5, SD: 1.3), but 27.7 % of respondents report a below-average (to their expectations) interaction with their doctor about their blood pressure.



**19. What could have been better about your experience speaking with this Doctor(s)? (optional) Answered: 127**

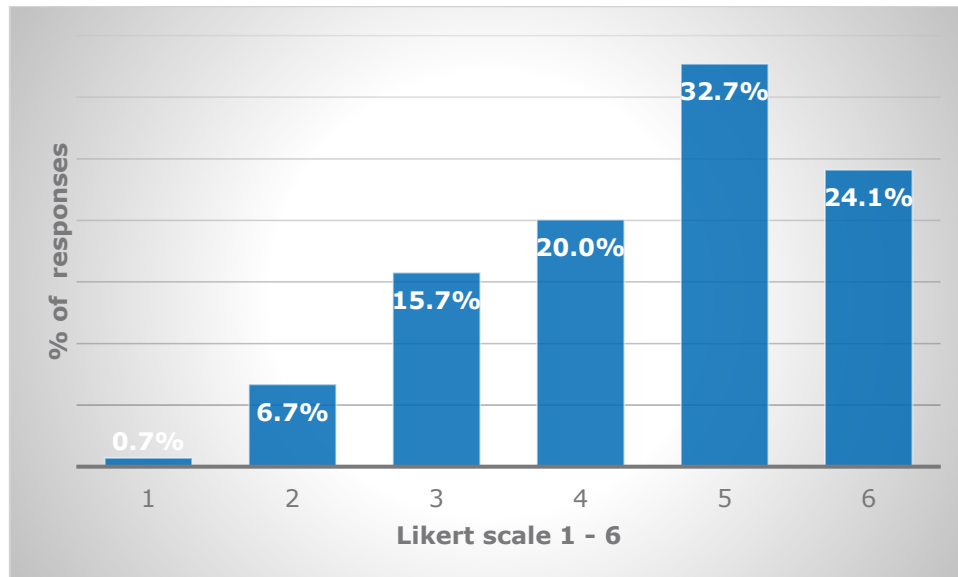
Figure 20 shows the percentage of responses when asked about what could have been better about experiences of speaking to a doctor.





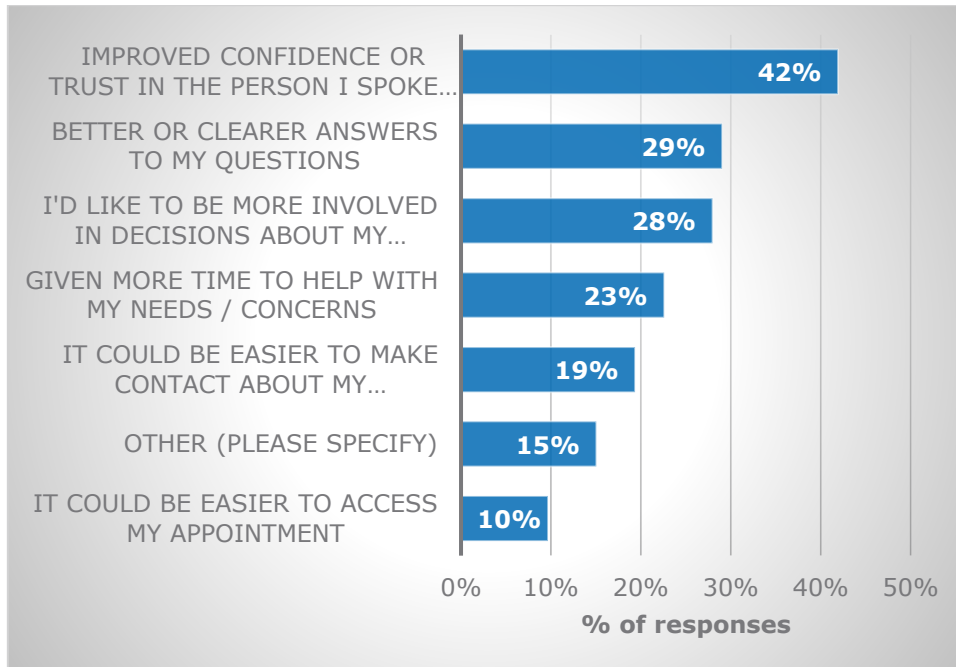
**20. How would you rate your experience of speaking with this Nurse(s) about your blood pressure? (on a scale of 1: very poor – 6: excellent)? (optional)**  
**Answered: 93**

Figure 21 shows the percentage of responses to the experience of speaking with a nurse about high blood pressure on a scale of 1 to 6. The median score was 5 (SD: 1.3).



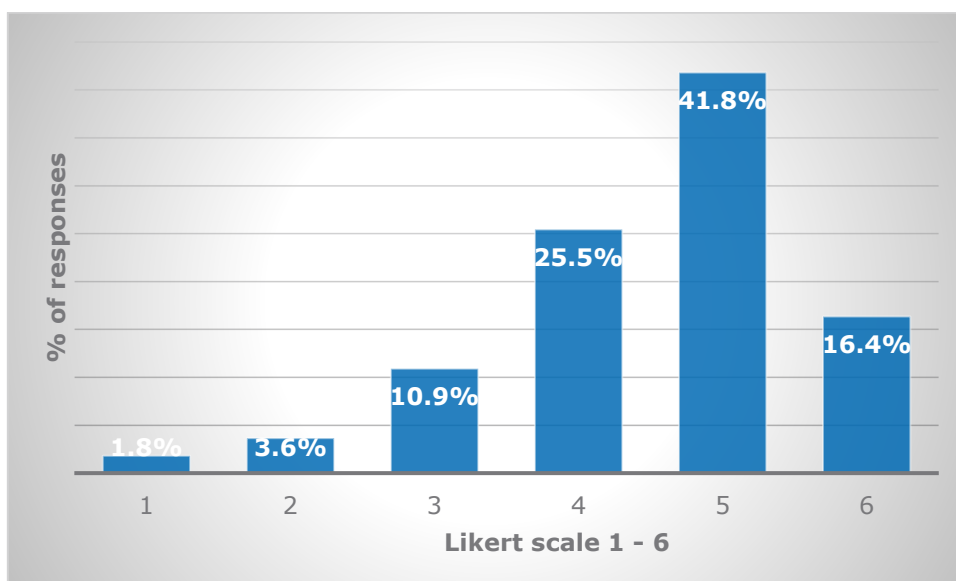
**21. What could have been better about your experience speaking with this Nurse(s)? (optional) Answered: 93**

Figure 22 shows the percentage of responses when asked about what could have been better about experiences of speaking to a nurse.



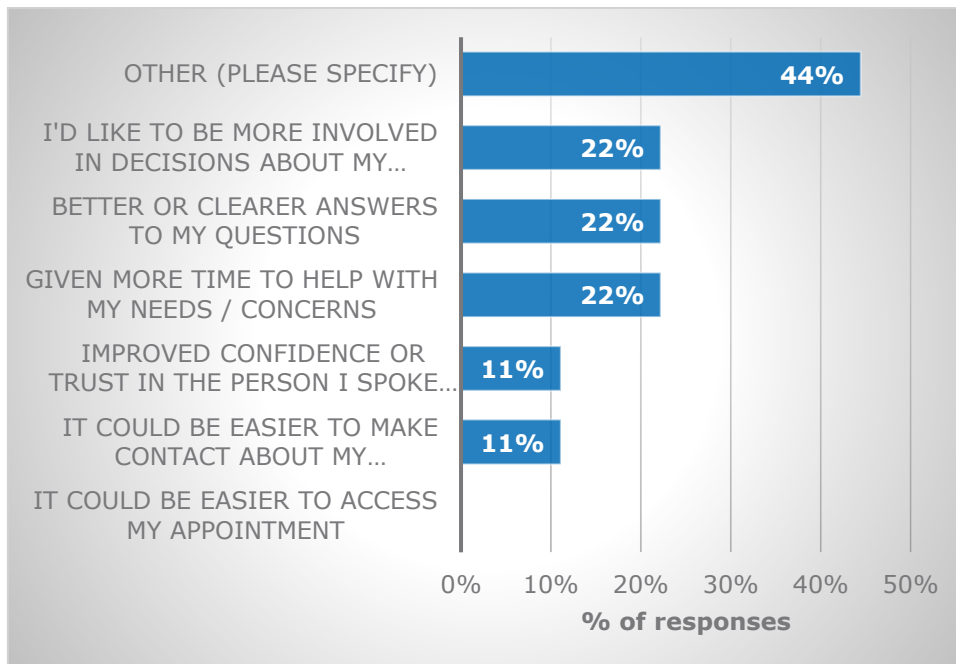
**22. How would you rate your overall experience of speaking with this Pharmacist(s) about your blood pressure? (on a scale of 1: very poor – 6: excellent)? (optional) Answered: 9**

Figure 23 shows the percentage of responses to the experience of speaking with a pharmacist about high blood pressure on a scale of 1 to 6. The median score was 5 (SD: 1.1).



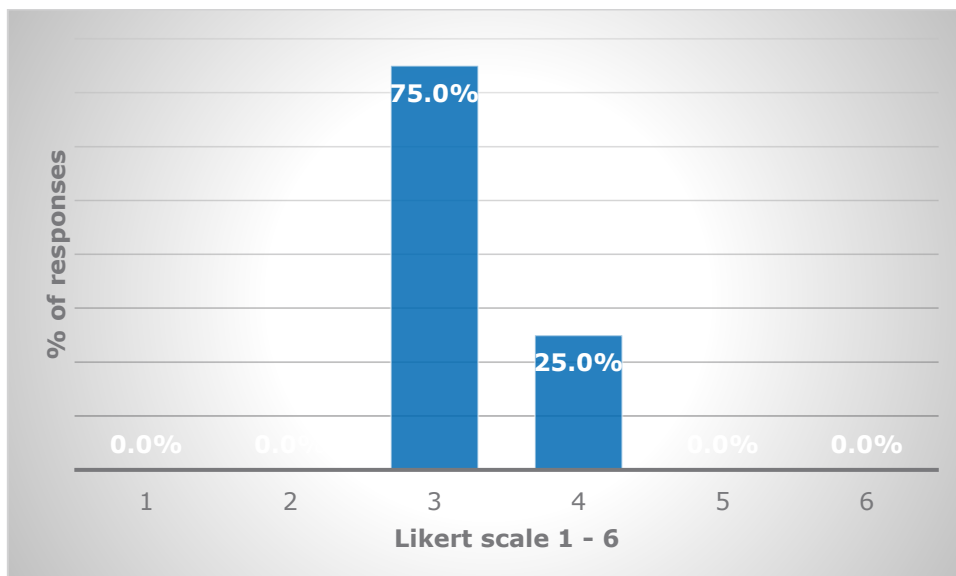
**23. What could have been better about your experience speaking with this Pharmacist(s)? (optional) Answered: 9**

Figure 24 shows the percentage of responses when asked about what could have been better about experiences of speaking to a pharmacist. Of the 9 responses, 44% (4 respondents) chose 'other' and comments specified themes of follow-up to medication and training for the interpretation of blood pressure results. Better clearer answers to questions, more time to help with needs and concerns and more involvement in decisions about treatment, were selected as areas where the experience could have been better.



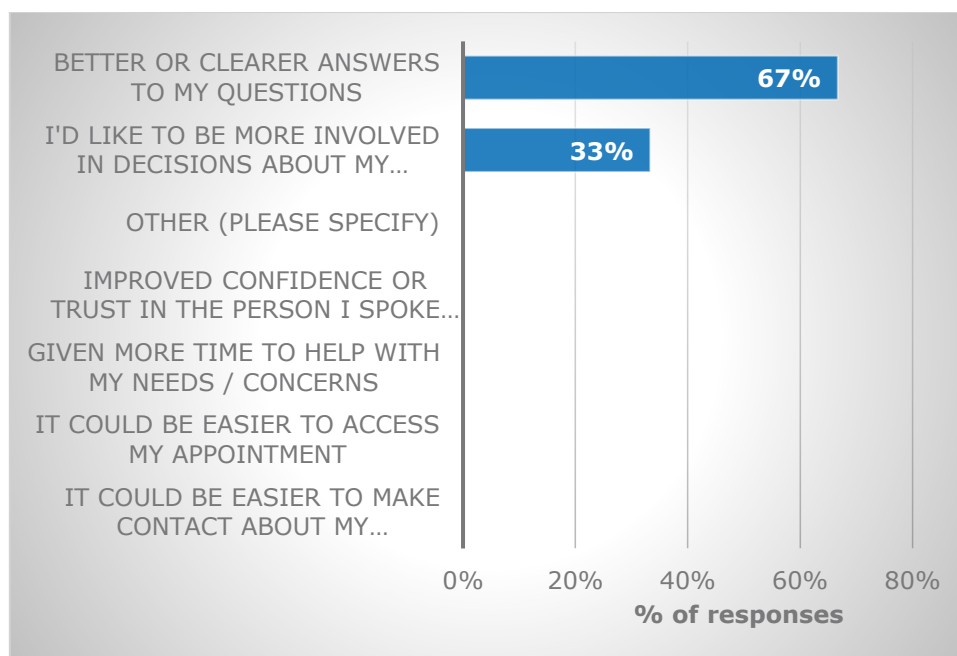
**24. How would you rate your experience of speaking with this Carer(s) about your blood pressure? (on a scale of 1: very poor – 6: excellent)? (optional) Answered: 4**

Figure 25 shows the percentage of responses to the experience of speaking with a carer about high blood pressure on a scale of 1 to 6. The median score was 3 (SD: 0.5).



**25. What could have been better about your experience speaking with this Carer(s)? (optional) Answered: 3**

Figure 26 shows the percentage of responses when asked about what could have been better about experiences of speaking to a carer. Of the 3 responses, better or clearer answers to questions and more involvement in decisions about treatment were selected as areas of improvement.



**26. In your opinion, what could be improved for people with high blood pressure? (response is optional) Answered: 344**

From the free text responses, the following themes were extracted from the comments:

**Public advice and education:** better explanation/understanding of causes of high blood pressure including lifestyle and a focus on prevention. Clarity on what blood pressure levels is considered 'normal'. Increased awareness of consequences of untreated high blood pressure. Better understanding and support of how to manage (self-management) the condition.

**Lifestyle:** non-pharmacological interventions such as social prescribing for people with high blood pressure to access support (e.g. exercise, support weight loss/stress management; nutrition).

**GP access:** better access to GPs and appointments and improved quality of contact with patients.

**Approaches to monitoring:** Early detection, more frequent, continuous monitoring, more home monitoring. "More access to BP monitoring without cost (e.g. at supermarkets, all pharmacies, workplaces; pubs etc.)". Regular appointments and annual check-ups. "A standardised approach to annual hypertension checks". Use of other health care professionals (other than GPs). Resources for optimising treatment of those at high risk, algorithms for detection and accurate diagnosis.

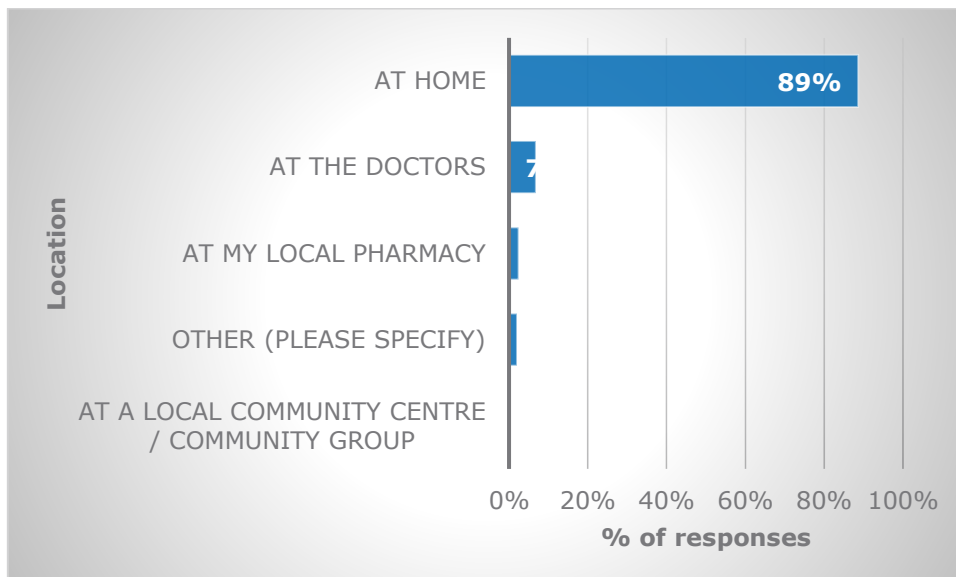
**27. Is there anything else you would like to share about high blood pressure?  
(response is optional) Answered: 172**

From the free text responses, the following themes were extracted from the comments: Prevention, lifestyle, genetics, public education and information. Medication was frequently mentioned in relation to follow-up, concerns about side effects or being on medication for many years. Some people feel medication had been effective and their high blood pressure is well controlled.

**Monitoring blood pressure**

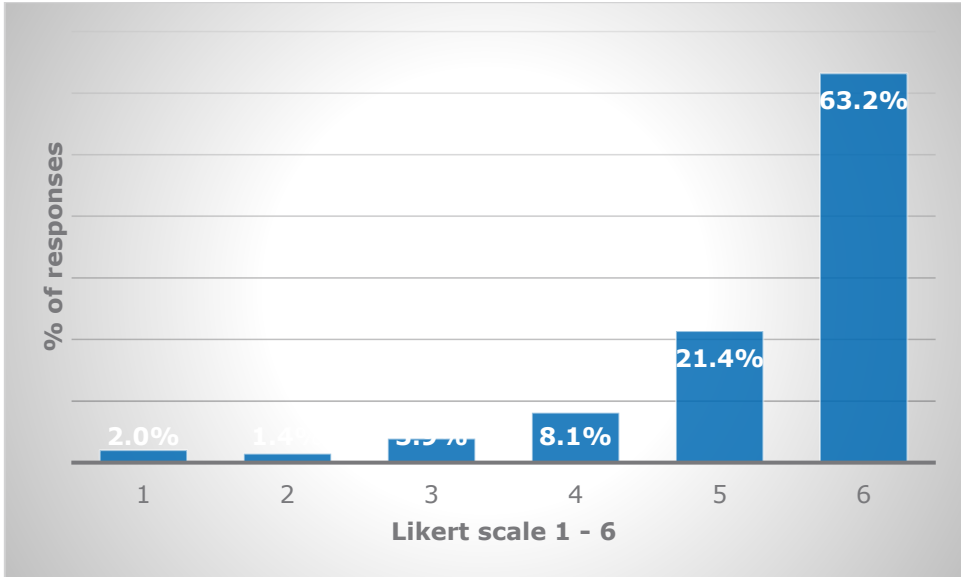
**28. If you were given an option to check your own blood pressure, where would you most like to do it? (please select one option). Answered 693**

Figure 27 shows the percentage of responses when asked about preferences for checking their own blood pressure the majority (89%) selected 'at home'.



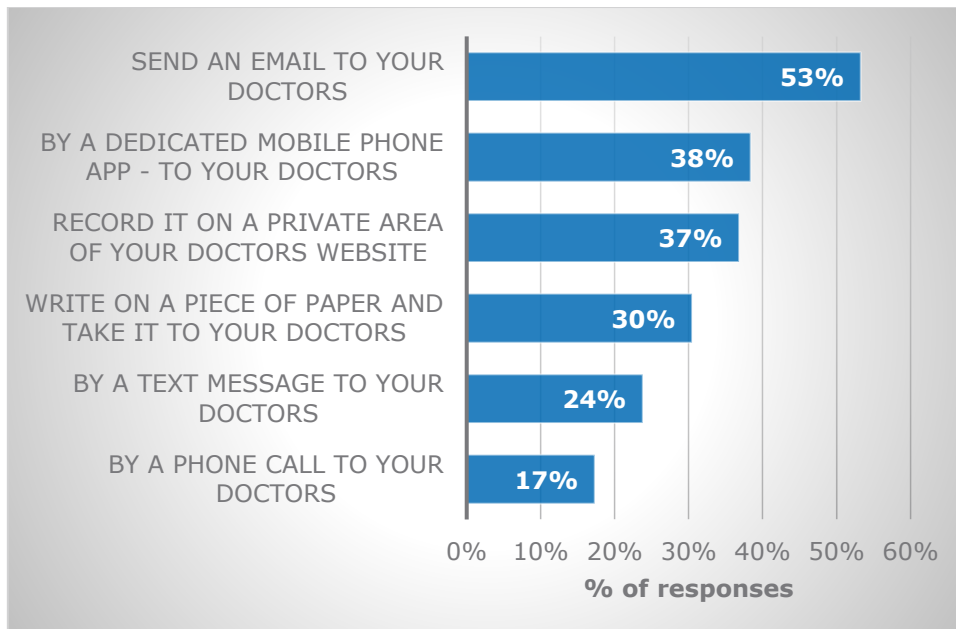
**29. If you had / have a blood pressure monitor (and instructions) at home, how confident are you about checking your own blood pressure (on a scale of 1: extremely unconfident – 6: extremely confident)?**

Figure 28 shows the percentage of responses to how confident people are to check their own blood pressure. The median score was 6 (SD:1.1).



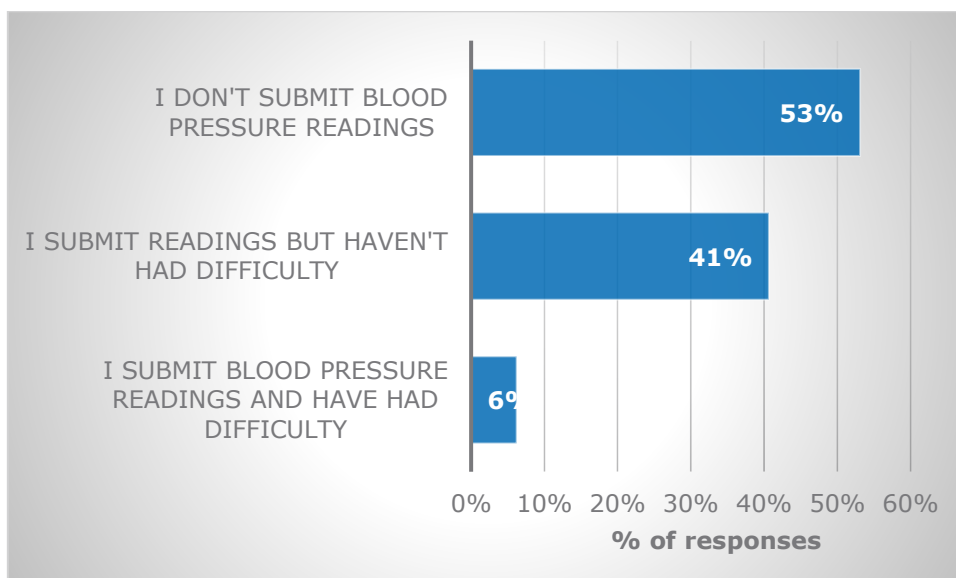
**30. If you checked your blood pressure at home, how would you want to get the reading(s) to you doctors? (select two options that suit you best)**

Figure 29 shows the percentage of responses to preferences for methods for submitting blood pressure readings to the doctor. The most popular choice was to send by email (53%). A dedicated phone app (to the doctor) was the second most popular method (38%), followed by recording on a private area on the doctor’s website (37%).



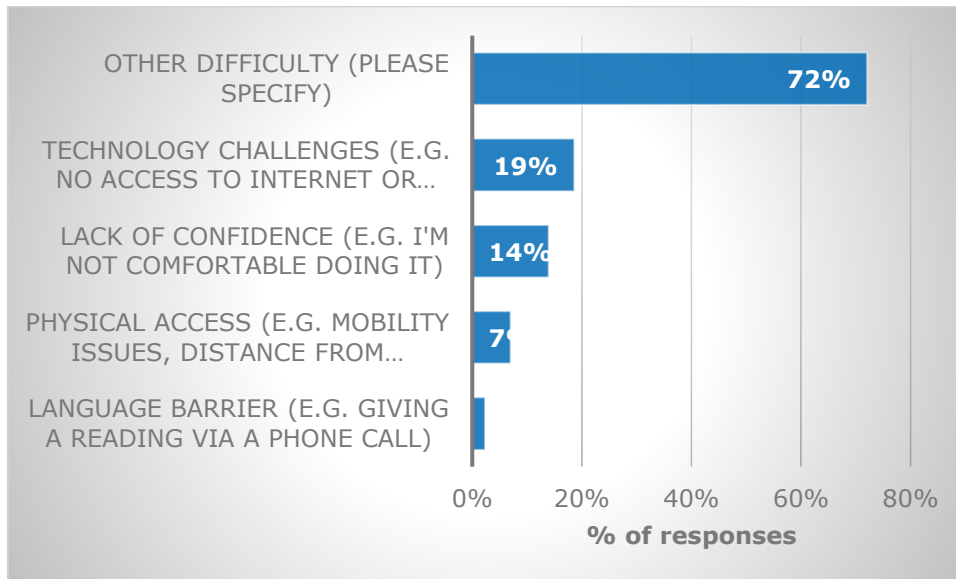
**31. Have you had any difficulty when submitting blood pressure readings?**

Figure 30 shows the percentage of responses about difficulties with submitting blood pressure readings. Over half (53%) said they did not submit readings.



**32. What difficulties have you faced when submitting blood pressure readings? (select all that apply). Answered 43**

Figure 31 shows the percentage of responses when asked about difficulties faced when submitting blood pressure readings. Of the 43 responses, 72% selected 'other difficulties' and the themes that emerged in the free text were: a lack of appointments to see a doctor and communication (e.g., clear instructions, patient-accessible email address and being able to communicate with a GP or staff outside of scheduled appointments). Technical difficulties with submitting readings and getting followed up post-diagnosis were common themes in the free text comments.



**Long-term conditions**

**33. Do you have any of the following long-term conditions? Answered 639**

Figure 32 shows the percentage of responses to having long-term conditions.

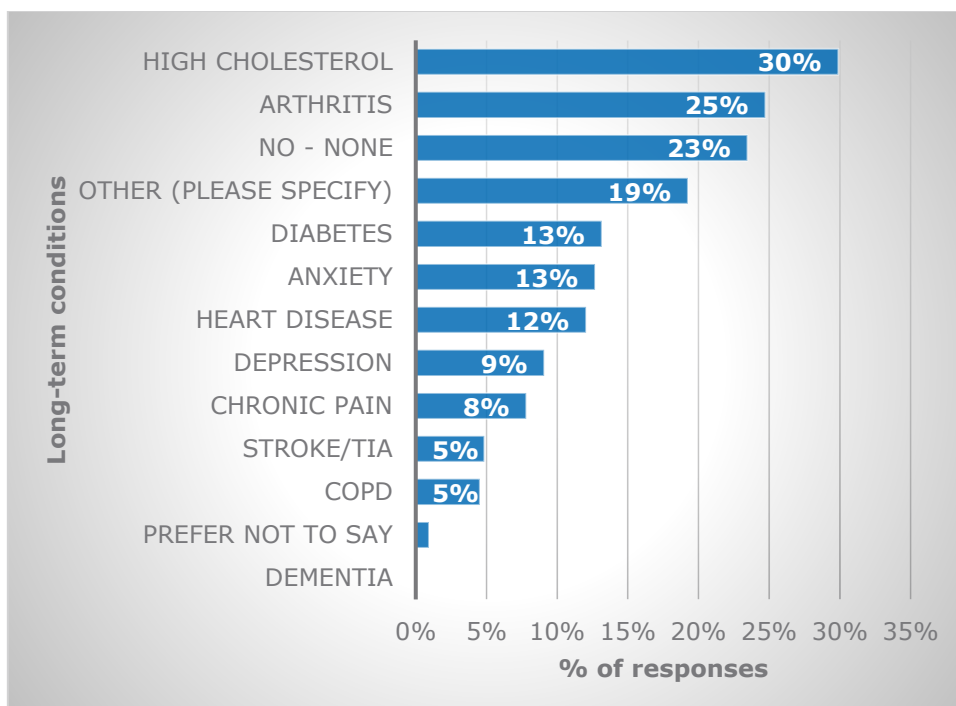




Figure 33 shows the percentage of responses to having long-term conditions, broken down by blood pressure status.

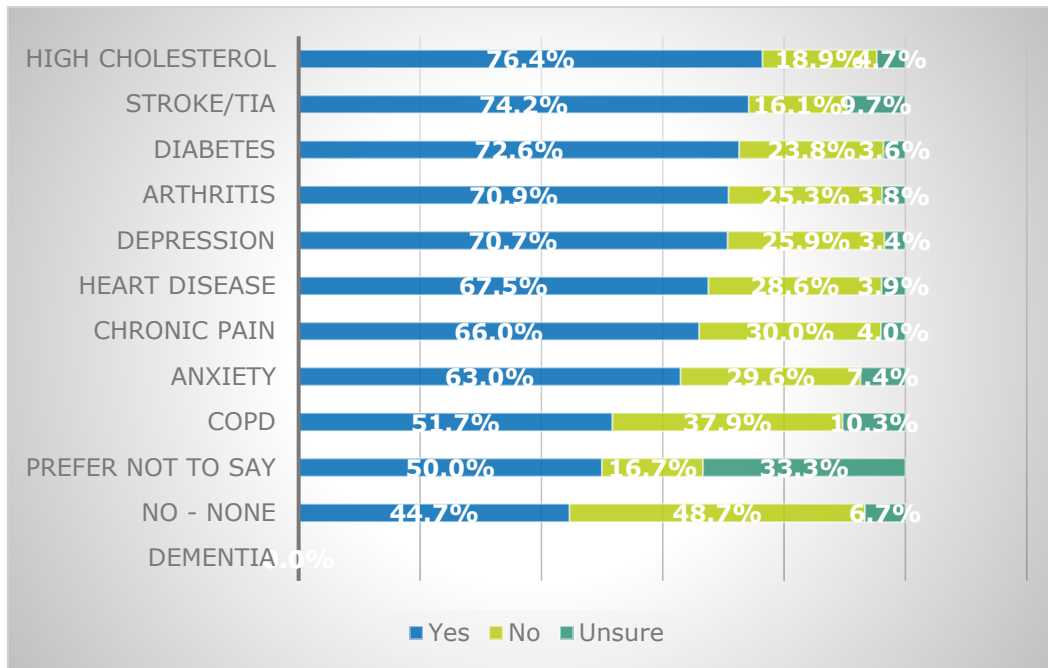


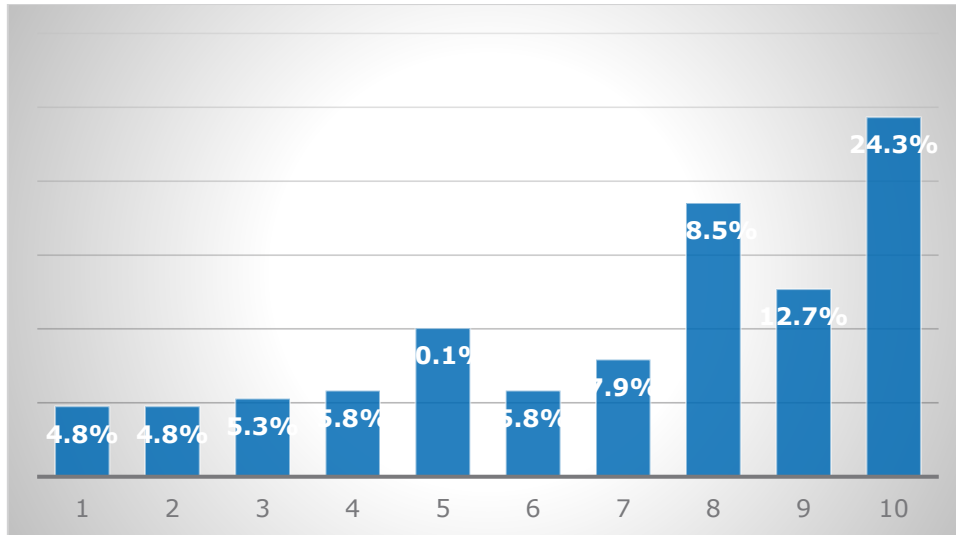
Figure 34 shows a bigram of the most used words in respondents' comments to the question where 'other (please specify)' was selected. Words related to other health conditions, such as 'asthma', 'atrial fibrillation', 'enlarged prostate' and 'Osteoporosis', were the most frequently used words.



## Cholesterol

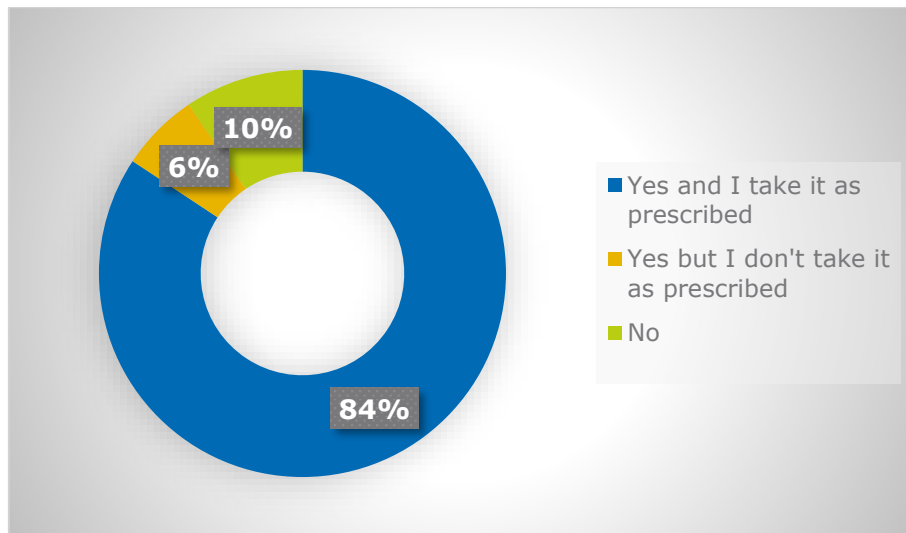
**34. How well informed do you feel about your high cholesterol? (1 = not at all, 10 = very well). Answered: 189**

Figure 35 shows that 63% self-reported they were well informed, but nearly 40% did not feel well informed about their high cholesterol. The mode score is 10 and the median score is 8.



**35. Are you currently prescribed medication for high cholesterol? Answered 191**

Figure 36 shows that most people taking medication for high cholesterol said they take it as prescribed (84%).



## 5. Discussion

In total, 723 responses to the blood pressure survey were received; 60 to 79-year-olds were the largest cohort of respondents (males 49%, females 51%); the majority identified as white British (92%) and responses were mainly received from within the East of England, with a small number outside of the region. Over half said they had high blood pressure (60%). Most respondents without a high blood pressure diagnosis or who were unsure (40%) said it had been checked in the last 12 months (92%). Of people with high blood pressure, 74% reported having their blood pressure checked twice or more in the last 12 months; 87% are prescribed medication and 92% self-report taking it as prescribed. On average most people felt the reasons for being prescribed medication had been clearly explained.

When asked about factors causing high blood pressure being made clear, 36% of respondents stated factors had been made very clear or were somewhat clear (29%). A total of 35% of respondents stated factors were not very clear or not clear at all. When asked about the impact that untreated high blood pressure can have on health, 54% of respondents stated that the impact of untreated high blood pressure on health had been made very clear or somewhat clear (26%). In response to questions asking about the understanding of high blood pressure, 65% of respondents rated themselves 5 or above on a scale of 1 (I don't understand) to 6 (I am extremely clear). When asked about opinions on links between everyday health behaviours and changes in blood pressure, most people indicated a high correlation between the two. The top three most important factors chosen in the prevention and management of high blood pressure were: eating a balanced diet, moving from an unhealthy weight to a healthy weight and physical activity; reducing or quitting smoking was also considered an important health factor.

Doctors and nurses were spoken to most frequently about high blood pressure in the last three years, but a small proportion had spoken to a pharmacist and or a carer (1%). The remainder (15%) responded as either 'not spoken to anyone', 'other' or 'not applicable'. When asked about their experiences of speaking to a doctor, nurse, pharmacist and carer about blood pressure on a scale of 1 to 6, on average more positive experiences were associated with being seen by a pharmacist or nurse when compared to doctors and carers, although the response rate was very small in the pharmacist and carer group a larger sample size would be needed to provide a statistically significant result.

The survey included questions about what could have been better about the experience of speaking to a doctor, nurse, pharmacist, and carers. Making contact about the appointment was chosen most frequently when considering experiences with doctors and nurses. In addition, improved confidence or trust and more time to help with needs and concerns would have improved experiences when speaking with a doctor or nurse. Overall, the experience of speaking with a doctor or nurse about high blood pressure, on average was rated 5 or above on a scale of 1 (very poor) to 6 (excellent), but 27.7 % of respondents report a below-average (to their expectations) interaction with their doctor about their blood pressure.

Of the 9 responses to what could have been better about experiences of speaking to a pharmacist, 4 respondents chose 'other'. Themes from the free text comments included follow-up to medication and training for the interpretation of blood pressure results; better clearer answers to questions; more time to help with needs and concerns and more involvement in decisions about treatment, which were selected as areas where the experience could have been better. Overall, the experience of speaking with a pharmacist about high blood pressure, on average was rated 5 on a scale of 1 (very poor) to 6 (excellent). Of the 3 responses to what could have been better about experiences of speaking to a carer, better or clearer answers to questions and more involvement in decisions about treatment were selected as areas of improvement. Overall, the experience of speaking with a carer about high blood pressure, on average was rated 3 on a scale of 1 (very poor) to 6 (excellent).

The survey asked questions about preferences for monitoring blood pressure, and the majority (89%) selected self-monitoring 'at home'. When asked about confidence in checking their own

blood pressure, on average people scored 6 on a scale of 1 (extremely unconfident) to 6 (extremely confident). When asked about preferences for methods for submitting blood pressure readings to the doctor, the most popular choice was to send by email (53%); a dedicated phone app (to the doctor) was the second most popular method (38%), followed by recording on a private area on the doctor's website (37%).

When asked about difficulties with submitting blood pressure readings, over half of the respondents (53%) said they did not submit readings and 41% said they submit readings but haven't had any difficulties. Of the 43 responses, 72% selected 'other difficulties' with the most frequently cited challenges being a lack of appointments to see a doctor and communication (e.g., clear instructions, patient-accessible email address and being able to communicate with a GP or staff outside of scheduled appointments). Some technical difficulties with submitting readings and getting followed up were common themes in the free text comments.

When asked about what could be improved for people with high blood pressure, the following themes were extracted from the free text comments:

**Public advice and education:** better understanding of causes of high blood pressure, including lifestyle and a need to focus on prevention. Clarity on what blood pressure levels is considered 'normal' and increased awareness of the consequences of untreated high blood pressure, better understanding and support of how to manage (self-management) the condition, were considered important.

**Lifestyle:** non-pharmacological interventions, such as social prescribing for people with high blood pressure to access support (e.g. exercise, support weight loss/stress management; nutrition).

**GP access:** better access to GPs and appointments and improved quality of contact with patients.

**Approaches to monitoring:** Early detection, more frequent, continuous monitoring, more home monitoring; regular appointments and annual check-ups, utilising other health care professionals, resources for the treatment of those at high risk, algorithms for detection and accurate diagnosis were cited as areas of improvement.

In addition, some respondents highlighted the need for a greater understanding of the genetic factors contributing to high blood pressure. Medication was frequently mentioned, particularly in relation to follow-up, concerns about side effects or being on medication for many years. Some people felt medication had been effective and their high blood pressure well controlled.

The survey included questions about long-term conditions: high cholesterol (30%) and arthritis (25%) were self-reported most frequently. Over half of the people with a diagnosis of high cholesterol said they felt well-informed about the condition, but nearly 40% did not feel well-informed about their high cholesterol. Those who took medication reported taking it as prescribed (84%).

It is important to note the limitations of the survey. The population of this survey were predominately white British and from the east of England and may not be representative of the views of the wider population, particularly minority groups or people living in other regions in England. The online survey method has clearly had limitations in reaching and engaging people from diverse ethnic groups. Online surveys suffer from two main methodological limitations: the population to which they are distributed cannot be described and respondents with biases may select themselves into the sample (Andrade, 2020). There are further limitations to consider when using self-report measures and the validity of the results (e.g., the potential for response and social desirability bias). The clarity of the items included may have led to different interpretations of the questions and variations in how the questions were answered.

## 6. Recommendations

From the overall results of the survey, Eastern AHSN has made the following recommendations:

- Continue to promote the importance of a population approach to education and advice on the causes, prevention, and self-management of high blood pressure through initiatives such as '[Making Every Contact Count](#)', '[Know your Numbers!](#)', '[Calculate your heart age](#)'; and [NHS Prevention High Blood Pressure](#).
- Consider how quality and regularity of contact with patients can be improved, including utilising the wider workforce to maximise opportunities for risk stratification, assessments, signposting, education and BP conversations and tests into existing contact points.
- Consider the importance of healthy lifestyle changes for people's health and this can be done through social prescribing services (e.g., referral to healthy lifestyle services, weight/stress management, nutritional advice, and smoking cessation services).
- Reassurance to patients who are submitting regular BP readings that this is valued and is being used to inform medication reviews/follow-ups by health care professionals/pharmacists, including time to discuss concerns around side effects.

The focus going forward is to continue to support primary care and ICSs to utilise available tools to support the improvements of hypertension case finding and optimisation. This includes understanding the number of population health management digital tools available such as the [UCL Partners hypertension frameworks](#); [Ardens](#); [Eclipse Live](#); [CDRC](#) as well as a [patient search tool review paper available to access here](#). These include tools for searches and risk stratification, recommendations for the utilisation of the wider workforce and resources for education around lifestyle and self-management.

Promotion and adherence to other local hypertension programmes may be considered. This includes the [Hypertension case-finding service](#), and [BP@home programme](#) to allow for increased community and at home monitoring and clear, standardised processes for submitting readings and appropriate follow-ups.

## 7. Appendix 1



Blood Pressure Survey\_template.pdf

## 8. References

Andrade C. The Limitations of Online Surveys. *Indian Journal of Psychological Medicine*. 2020;42(6):575-576.

Bibby, J. (2018) What makes us healthy? An introduction to the social determinants of health. Health Foundation ([www.health.org.uk/publications/what-makes-us-healthy](http://www.health.org.uk/publications/what-makes-us-healthy)).