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# National Survey for Wales 2021-22

## Technical Report

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.

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National Survey for Wales 2021-22  
Technical Report

**Authors:**

Dani Evans, Elena Stylianopoulou Office for National Statistics

Views expressed in this report are those of the authors and not necessarily those of the Welsh Government

For further information please contact:

Chris McGowan

National Survey team

Welsh Government

Cathays Park

Cardiff

CF10 3NQ

Email: [surveys@gov.wales](mailto:surveys@gov.wales)

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## Glossary

<b>Term</b>	<b>Definition</b>
Blaise	Statistics Netherland Blaise Enterprise 4.8
CAPI	Computer assisted personal interviewing
CASI	Computer assisted self-interviewing
DOB	Date of birth
FWMT	Fieldwork management tool
HRP	Household Reference Person
IM	Interviewer manager
KtN	Knock to nudge
LA	Local authority
LHB	Local Health Board
National Survey	National Survey for Wales
NISRA	Northern Ireland Statistics and Research Agency
NSDEC	National Statisticians Data Ethics Committee
ONS	Office for National Statistics
PAF	Royal Mail Postcode Address File
SPSS	Statistical Package - IBM SPSS Statistics
WG	Welsh Government
WIMD	Welsh Index of Multiple Deprivation

## **1. Introduction and survey overview**

- 1.1 An interim version of this report was produced before the end of the survey year to be available alongside the National Survey Invitation to Tender for 2023 onwards. This updated report now covers the data from the whole survey year 2021-22, including final response rates and DEFF/DEFTs.
- 1.2 The National Survey is a survey commissioned by the Welsh Government (WG) and is currently carried out by the Office for National Statistics (ONS). For the last six years the National Survey has incorporated survey questions from three of WG's sponsored bodies (Natural Resources Wales, Sport Wales, Arts Council of Wales).

### **Overview of the 2021-22 National Survey for Wales**

- 1.3 The National Survey has gone through some significant changes over the last 2 years, moving from face-to-face, to telephone, changing selection methods for the person in the household, an increased number of questionnaire changes and data deliveries, and more recently trialling an online element.
- 1.4 The sixth year of the National Survey, carried out by the Office for National Statistics (ONS), ran from the beginning of April 2021 to March 2022. The National Survey for Wales 2021-22 involved conducting interviews with people aged 16 and over based on a randomly selected sample of residential addresses across Wales. Between April and March 2022, 12,576 interviews took place exceeding the target of 12,000 for the full survey year.
- 1.5 Telephone interviews were carried out by ONS field interviewers. The duration of the telephone interview was 32.3 minutes mean average, 34 minutes median interview length.
- 1.6 Online interviews were part of the online trial. The duration of the online interview was 15.5 minutes mean average, 13.2 minutes median interview length.
- 1.7 The National Survey consisted of a total of 50 main modules. These were designed to cover the range of topics specified by WG and its sponsored bodies. Some topics were sub-sampled which still allowed us to collect robust estimates at a national level and was an efficient use of survey time. The topics included:

- health (e.g. diet, alcohol consumption, smoking, physical activity, dentist and hospital appointments, pregnancy, BMI, long-term illnesses, eye care, hearing impairment, and active travel)
- child education, educational aspirations, child physical activity and children's rights
- training, employment and volunteering (e.g. skill development, support, and barriers to work)
- arts events (e.g. attendance, participation, Welsh language, barriers and attitudes)
- sports activities (e.g. participation, demand)
- local authorities and councils
- use of and satisfaction with public services
- material deprivation, universal credit, food poverty
- community cohesion, safety, local environment quality, and noise
- views on climate change
- wellbeing and loneliness
- use of the Welsh language
- heritage, museums, libraries, and archives
- internet use and skills
- companion animals

1.8 The exact questions can be viewed either in the 2021-22 questionnaire or in an interactive question viewer, both at [www.gov.wales/nationalsurveyquestions](http://www.gov.wales/nationalsurveyquestions).

1.9 Between July 2021 and January 2022, there was an online trial. This is where some of the sample (approximately 6,000 addresses in selected sample) were asked to complete the telephone questionnaire followed by an online questionnaire, both sections had to be completed to receive the £15 incentive. This has allowed us to collect data on topics that are difficult to ask over the phone: some particularly sensitive, some that are more affected by social desirability bias (people tending to give the interviewer the answer they think they should give) and some due to length of questions and response options.

- 1.10 The response rate to the telephone section was significantly lower for those asked to complete both the telephone and the online section (41.3%), compared to those only asked to complete the telephone section (43.5%). Additionally, 89.8% of those who completed the telephone questionnaire went on to complete the online. The overall response rate to both sections was 37.1%.
- 1.11 The National Survey online questionnaire consisted of a total of 8 main modules. The topics included:
- Local services and facilities
  - Volunteering
  - Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)
  - Physical punishment of children
  - Gambling
  - Global citizenship
  - Climate change behaviours
  - Recycling
- 1.12 Respondents received a shopping voucher as a 'thank you' for taking part in the survey, which was sent to respondents after the interview. From April 2021 to June 2021, all respondents received £15. Between July 2021 and March 2022, an incentive trial was run where half the eligible sample (sample excluding those in the online trial) received £10 and half received £15 (see section 4 for more detail). The online trial sample received £15 for completion of both the telephone and online section.
- 1.13 The survey questionnaire and all supporting materials were available as standard in both Welsh and English (pilot and mainstage survey), with interviews also offered in other languages with the help of a translator if required.
- 1.14 A total selected sample of 30,593 addresses were used throughout 2021-22. This varied from the original sample size drawn. Due to the less stable nature of response due to Covid-19 and lockdowns, the monthly selected sample size was

monitored and adjusted throughout the year to ensure the required achieved sample was met.

- 1.15 A sample of 36,006 was initially drawn from the Post Office small users Postcode Address File for the 2021-22 survey year. The sample was stratified by the 22 Welsh local authorities (LAs) with survey effort approximately proportional to the LA population size, with oversampling to ensure minimum effective sample size of 250 in smaller LAs and 750 in Powys<sup>1</sup>. A reserve sample was selected in the same way. Where adjustments to the original sample were required, these were either systematically removed from an LA in a certain month, or systematically added to an LA in a certain month using the reserve sample.
- 1.16 The number of telephone interviews achieved in each LA between April 2021 and March 2022 ranged from 347 in Torfaen to 1,243 in Powys.
- 1.17 Usually, a small pilot survey is carried out the January before a new survey year. Due to the large amount of continual change during the pandemic, a pilot was not carried out for 2021-22. However, many changes were made to the National Survey from January 2021, and feedback was collected from field interviewers to ensure any issues were identified and addressed before the 2021-22 survey year.

### **Structure of the report**

- 1.18 This report is intended to provide a clear and accessible description of the approach taken to collecting and processing the data.
- 1.19 Following this introductory chapter, the report is divided into a further five chapters:
- **Chapter 2** ('Sampling') describes the process of selecting addresses for the survey.
  - **Chapter 3** ('Questionnaire content and development') looks at both the process of developing questions for topic areas to include in the survey, and the development and testing that was conducted on the survey questionnaire and its computer implementation.
  - **Chapter 4** ('Fieldwork') covers the process of preparing interviewers for fieldwork, fieldwork procedures, interview numbers, response rates, and interview timings.

- **Chapter 5** ('Data processing and output') gives an overview of the process of how the datasets were prepared and finalised.
- **Chapter 6** ('Weighting and non-response') describes the weighting process.

## 2. Sampling

### Sample design

- 2.1 The National Survey is designed to be representative of all adults aged 16 or over living in private households in Wales. The annual sample is therefore set up as a stratified, single-stage random selection of addresses across Wales.
- 2.2 The sample was drawn from the Royal Mail Small Users Postcode Address File (PAF)<sup>1</sup>, whereby all residential addresses and types of dwellings were included in the sample selection process as long as they are listed as individual addresses.<sup>2</sup> If included as individual addresses on the PAF, residential park homes and other dwellings were included in the sampling frame.
- 2.3 Sampled addresses were then clustered quarterly to ensure field work is allocated effectively.
- 2.4 The sample was stratified by LA using an allocation designed to ensure a minimum effective sample size was achieved in each LA, based on the estimated response rate (250 in each LA except Powys, where the minimum effective sample size is 750 in order to provide sufficiently precise estimates at local health board level).<sup>3</sup> Population density and size at LA level were taken into consideration when drawing the sample, but some areas (e.g. small LAs) were oversampled in order to achieve samples large enough to ensure robust estimates.
- 2.5 A reserve sample, of the same size as the main sample, is also selected using the sample methodology.
- 2.6 Further sampling is applied within the questionnaire where certain questionnaire modules are only asked of a sub-sample of respondents (see paragraph 3.21).

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<sup>1</sup> More information on PAF licensing Centre can be found at the [Royal Mail website](#).

<sup>2</sup> Residential addresses means private households across Wales. It excludes institutional accommodation (e.g. care homes, halls of residence, prisons, hotels and B&Bs, and army bases). People in institutional accommodation are typically not included in social surveys.

<sup>3</sup> The complex nature of the sample design must be taken into account when computing the potential range of sampling errors. The impact of the design is often represented by the 'design effect' statistic. For example, a design effect of 1.3 indicates that the actual sample size should be divided by 1.3 to obtain the statistically effective sample size. The statistically effective sample size is the equivalent simple random sample size that would yield the same magnitude of sampling errors. The design effect varies for each measure in the survey.

- 2.7 The sample was initially allocated using a proportionate allocation, meaning that the sample size in each LA is proportional to size based on the number of addresses in that LA. To ensure the minimum effective sample size in each LA, the allocation was then modified as follows:
- a) LAs where the minimum effective sample size was not likely to be achieved were identified.
  - b) In those LAs, the sample size was set to this minimum and the rest of the sample was allocated with probability proportional to size.
  - c) Steps (a) and (b) were conducted iteratively until the minimum effective sample size was achieved for all LAs.
- 2.8 The only LA that was oversampled in this way in 2021-22 was Powys.
- 2.9 Within each sampled household, an individual interview was attempted with one adult aged 16 or over. Where a household contained more than one adult (aged 16 and over), a single adult was randomly selected.

### **Selection of addresses (including reserve sample)**

- 2.10 Before the Covid pandemic, the annual sample size was around 24,900. However, during the pandemic, response rates reduced. Using the most up to date data on likely response rates, a sample of 36,006 was selected for the main sample, stratified by LA (see previous section).
- 2.11 To select addresses for inclusion in the survey, the PAF was ordered by postcode and a systematic sample<sup>4</sup> of addresses was selected from each LA using the target sample size in each LA. Addresses sampled within the last four years for any ONS social survey or for years 2017-18, 2018-19, 2019-20 or 2020-21 of the National Survey were excluded using the ONS Social Survey Used Address File, a list of addresses sampled for social surveys that are run by the ONS.<sup>5</sup>
- 2.12 Given the uncertainties around variation in response and eligibility rate, plus the usual requirement for a pilot, a reserve sample equal to that of the main sample was

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<sup>4</sup> Addresses are ordered by postcode, followed by randomly choosing a starting point in this list and subsequently selecting every nth address (depending on the required proportion within each LA).

<sup>5</sup> The exact period for which addresses are excluded from re-selection varies from survey to survey.

drawn, also stratified by LA, through the method outlined above, albeit independently from the main sample. The sample was drawn of equal size to provide the opportunity to boost the main sample at any given point and in any area required as it was unknown at the time the reserve sample was drawn, in which area additional cases may be required. The reserve sample was used to boost samples for a given month in required LAs, if achieved response rates were lower than those anticipated when drawing the main sample. The reserve sample was used more in 2021-22 than in previous years due to the unpredictable nature of response during Covid 19 and lockdowns.

- 2.13 From July 2021, the selected sample sizes were adjusted monthly with the aim of being more in line with the LA targets at the end of the year. Each month, the current achieved number of interviews per LA, were used along with the most up-to-date data on LA response rates and ineligibility rates to predict the final number of achieved interviews. The selected sample was then adjusted either up or down, where the predicted achieved rate was different to the target. This method ensured value for money, the field resource was used in the most efficient way to ensure we hit the required targets to produce robust estimates.
- 2.14 If a sample needed to be reduced, addresses were systematically removed across the whole LA sample to ensure no bias was introduced. If a sample needed to be increased, the reserve sample would be used.
- 2.15 Table 2.1 shows an overview of the sample distribution across LAs, for the originally selected sample and the final sample used throughout the year. This distribution has changed since pre-pandemic years due to the change in local authority response rates and ineligibility rates during the pandemic, but the aim was to still achieve 12,000 interviews across Wales.

**Table 2.1: Number of addresses included in main sample by LA**

<b>Local authority</b>	<b>Original selected sample size</b>	<b>Final issued sample size</b>
Blaenau Gwent	1,113	998
Bridgend	1,464	1,280
Caerphilly	1,763	1,641
Cardiff	3,528	3,305
Carmarthenshire	2,024	1,563
Ceredigion	1,127	1,079
Conwy	1,346	1,152
Denbighshire	998	1,008
Flintshire	1,535	1,502
Gwynedd	1,524	1,287
Isle of Anglesey	1,078	1,094
Merthyr Tydfil	1,014	1,182
Monmouthshire	1,022	967
Neath Port Talbot	1,513	1,292
Newport	1,529	1,405
Pembrokeshire	1,498	1,279
Powys	3,185	3,589
Rhondda Cynon Taf	2,463	2,282
Swansea	2,563	2,217
Torfaen	1,008	826
Vale of Glamorgan	1,357	1,083
Wrexham	1,354	1,228
<b>TOTAL (National)</b>	<b>36,006</b>	<b>33,259</b>

### **Sample batching and allocation**

- 2.16 The main 2021-22 sample was divided into quotas (address clusters) and then allocated to months. The quotas were allocated based on their average WIMD<sup>6</sup> score, ensuring that there was a mixture of high, low, and medium scoring quotas within each quarter for each LA. It was deemed that the spread across LAs and WIMD scores would ensure that the quarterly sample is representative of the population. As not all areas are covered in each quarter, the quarterly sample is clustered.

<sup>6</sup> Welsh Index of Multiple Deprivation

- 2.17 These quotas were allocated by Interviewer Managers (IMs) to Field Interviewers who would then work to achieve response from these issued addresses across the month.
- 2.18 An average quota contained around 26 cases. The largest quotas allocated in 2021-22 included 39 cases. The number of addresses allocated per month from the main sample ranged between 2,642 (February 2022) and 3,013 (April 2021).
- 2.19 For the online trial (between July 2021 and January 2022), addresses were selected by using systematic sampling where the sample was ordered by Quota and Address number. This effectively resulted in a proportionate stratified sample by LA.
- 2.20 For the incentive trial (between July 2021 and March 2022), addresses were also selected using systematic sampling where the eligible sample (i.e. all addresses not selected for the online trial) was ordered by Quota and Address number. This effectively resulted in a split sample, which was a proportionate stratified sample by LA, split between the £10 incentive and the £15 incentive group.

### **Selection of dwelling units, households and individuals**

- 2.21 In circumstances where an interviewer discovered at the start of the telephone call or during a Knock to Nudge (KtN) visit that more than one dwelling (e.g. a block of flats) or more than one household (e.g. two or more bedsits) existed at a sampled address, a single dwelling/household was randomly selected using a Kish Grid<sup>7</sup>. Interviewers were instructed to inform head office in such circumstances for head office to update the sample register (in the instance of multiple addresses) and also to provide support, if necessary, where it was not clear how the random selection should be carried out (e.g. where flats or household units were not numbered).
- 2.22 Within the sampled household, one adult (aged 16 and over) is interviewed for the survey. If there is more than one person aged 16 or over resident at the address a respondent is randomly selected. Since January 2021, the National survey moved to the next birthday selection method instead of the Kish selection used in previous years. Some of the reasons for the change include:

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<sup>7</sup> A Kish Grid is a table of random numbers in this case used as a method of randomly selecting residential units within a dwelling. See Appendix A.

- 2.22.1 The next birthday method is simpler to apply than a Kish grid, it is brief and less intrusive as it does not require us to ask for lots of personal information about the household before the household have even agreed to take part and is therefore easier to carry out over the phone.
- 2.22.2 90% of households are made up of 3 people or less and so it is likely that most people will know the birthdays of everyone else in the household.
- 2.22.3 It is less effort for the household member and for the interviewer – this makes it quicker and easier to apply.
- 2.22.4 The next birthday method still ensures a representative sample by generating a random selection.
- 2.23 The next birthday method has been adopted to make the process as straightforward as possible for respondents in order to try to maximise response rates while still maintaining a random sample.
- 2.24 If the household member who the interviewer is talking to does not know all of the birthdays in the household, they are asked “out of the birthdays you know, who has the next birthday?”
- 2.25 Table 2.2 shows the accuracy of the next birthday selection method. 94.3% of cases showed that the respondent was selected correctly using the next birthday selection method. In 0.9% of cases the accuracy can’t actually be measured i.e. the date of birth (DOB) was refused by respondent in the household, only a partial DOB was obtained, or 2 or more people in the household were born the same day. 4.9% of cases are where the wrong person was actually selected, this could have been either because the next “known” birthday was used at the point of selection and the respondent then knew different birthdays to the original person involved in the selection, or a genuine incorrect selection.

**Table 2.2 Accuracy of the next birthday selection method**

	<b>Frequency</b>	<b>Percentage</b>
Person with next birthday selected correctly	11,821	94.0%
Person with next birthday not selected correctly	613	4.9%
Partial DoB or someone in household born on same day	112	0.9%
<b>Total</b>	<b>12,580</b>	

### **3. Questionnaire content and development**

#### **Overview of the questionnaire**

- 3.1 The survey design is based on a telephone questionnaire administered to one randomly selected adult aged 16 or over in each sampled household. In 2021-22 a sub-sample of respondents were also asked to take part in an online survey following completion of the telephone element. The questionnaire content for both telephone and online modes was developed by WG and the three sponsored bodies. An annual questionnaire review and stakeholder consultation is carried out by WG to establish new policy needs and determine the questionnaire content for the new survey year. The core [questionnaire](#) from April 2021 covered a range of different topics, including public services, wellbeing, personal health, arts, sport activities, childcare, and child education, volunteering and employment, material deprivation, the Welsh language, transport, and internet. A full list of modules included in the final questionnaire is published on the [WG website](#).
- 3.2 Usually, a small pilot survey is carried out the January before a new survey year. Due to the large amount of ongoing change during the pandemic, a pilot was not carried out for 2021-22. However, many changes were made to the National Survey in January 2021, and feedback was collected from field interviewers ensuring that any issues were identified and addressed before the 2021-22 survey year began.

### **Questionnaire content and development**

- 3.3 In 2021-22, questions for the National Survey were comprised of topics asked in previous years but with questions adapted to work in telephone mode. New questions were also developed with reference to questions asked in other large scale surveys. Changes for consecutive years will include small up-dates to individual questions that are continued from year to year, discontinuing or pausing certain questionnaire modules that do not need to be asked every survey year, as well as introducing new questionnaire modules and individual questions.
- 3.4 Following the change in mode of collection due to the pandemic, several modules were excluded from the telephone questionnaire as not suitable for this collection mode; for 2 main reasons. Some questions were previously located in the CASI (Computer Assisted Self Interview) section of the face-to-face interview, and respondents could complete these questions privately due to the sensitive nature and higher likelihood of social desirability bias (i.e. gambling and physical punishment of children). There were also some questions that were removed as either the questions or response categories were too lengthy to read over the phone and are better collected when the respondent can read these themselves.
- 3.5 As a result, the online trial was initiated in July 2021 (and lasted until the end of January 2022). For the trial the respondent first completed the telephone survey with the interviewer, and then independently completed the online section covered the questions that were no longer asked in the main telephone questionnaire.
- 3.6 Further information on the content of the final 2021-22 questionnaire and the background to questions asked in the survey can be found on the [WG website](#).

### **Questionnaire programming and testing**

- 3.7 The telephone questionnaire was scripted by ONS and administered using Statistics Netherlands Blaise Enterprise 4.8 ("Blaise 4").
- 3.8 WG identified a number of questionnaire modules where survey estimates are only required at national, local health board, or regional level. Therefore, some telephone questionnaire modules were not asked of all respondents, which helped to keep the average interview length down to around 35 minutes. Relevant sections were

programmed to be asked of a randomly selected sub-sample of respondents only, and occasionally within bespoke geographies. Appendix B provides an overview of sub-sampled modules, the required annual sample size, and geographical considerations.

- 3.9 The online questionnaire was scripted by ONS and administered using Statistics Netherlands Blaise Enterprise 5 (“Blaise 5”).
- 3.10 When programming the questionnaire script in Blaise for both telephone and online modes, ONS included a number of soft and hard checks so that interviewers/respondents would be alerted to cases where a combination of answers would be unlikely or unfeasible. Where a combination of answers was unlikely, a soft check alerted the interviewer/respondent to the answers provided and asked them to double check the response before proceeding - but allowed them to proceed if this information was confirmed to be correct (e.g. enters a date of birth giving an age of 110 years). A hard check was triggered when it was apparent that the combination of answers provided was not possible (for example a son/daughter had been coded as being older than their mother/father). In these cases, the interviewer/respondent could not proceed through the rest of the questionnaire until this information had been corrected. These checks ensured that inconsistencies in the data would be dealt with at the interviewing stage improving the quality of the data.
- 3.11 To ensure that the final script was running smoothly and was set up according to specification the following checks were conducted by ONS and WG:
- **Question text** – that this matched the questionnaire specification throughout.
  - **Question routing** – that the script had been programmed in accordance with the specified routing – this was tested by using a number of different household and response scenarios.
  - **Question numbers/names** – that these matched the numbers/names in the questionnaire specification where relevant.

- **Screen display** – that questions were formatted according to ONS standard and displayed clearly avoiding any unnecessary scrolling for interviewers/respondents.
- **Response lists** – that these matched the questionnaire specification and were displayed clearly avoiding any unnecessary scrolling for interviewers/respondents.
- **Interviewer/Respondent instructions** – that these were clear and matched the questionnaire specification.
- **Text fill** – that any questions or text within questions were being displayed correctly.
- **Computer assisted person interviewing (CAPI) checks** – that all soft and hard checks in the CAPI were being triggered when applicable.
- **Script movement/reliability** – that in the telephone questionnaire, the script allowed interviewers to move forwards (and back, if they needed to amend the information entered) without loss of data or other errors. In the online questionnaire, that respondents could not return to previously completed modules to ensure the security of their data.
- **Language selection** – that the data collection tool allowed interviewers to select a language at the beginning of the interview and remain in this language, and toggle between English and Welsh if required by the respondent.
- **Translation** – that the questionnaire flowed well in both Welsh and English.

3.12 In addition to the above checks, ONS also ran a 'data flooding' exercise on the final main stage script, which generated a number of dummy interviews. This acted as a final check that all questionnaire sub-sampling, based on randomisation, was set-up as specified.

3.13 A raw SPSS<sup>8</sup> data set (.sav) based on the first 250 interviews was also provided to WG to check the frequencies at each question and the sub-sampling fractions. These stages of checking were used to identify potential problems with the CAPI script.

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<sup>8</sup> Statistical Package for the Social Sciences. IBM SPSS Statistics

## **Welsh translation**

- 3.14 WG provided a questionnaire specification that was translated into Welsh. The aim was to have a Welsh language version of the questionnaire that could be understood across all parts of Wales. The translated version was provided to ONS once the specification for the English version of the questionnaire was finalised. Where questions were taken from previous bilingual surveys, established translations were used for consistency and continuity purposes. For any new or amended questions, WG used certified translators ensuring that the same terminologies were used throughout the questionnaire. Both ONS and WG research teams had access to Welsh speakers for quality assurance of the translation, as well as minor clarifications and alterations.
- 3.15 ONS used the English questionnaire specification to set up the questionnaire routing. The Welsh text was later included in the relevant place holders within the script, with relevant adjustments made to text fills to accommodate Welsh grammatical differences. The English language and the Welsh language version of the CAPI were tested independently.
- 3.16 Interviewers coded the respondent's preferred language at the start of the interview. The Blaise program allowed interviewers to toggle between English and Welsh for any question at any point throughout the questionnaire. This was intended to help in situations where respondents choosing to do the interview in one language but requiring an instant translation of a question or specific wording for anything that they may have had trouble understanding in the chosen interview language.
- 3.17 If the interview needed to be delivered in a language other than English or Welsh, interviewers read out the questions in English and an interpreter translated accordingly. This would either be another member of the respondent's household, or the interviewer could use a telephone translation service to complete the interview. When a translator was used, certain modules considered as sensitive were not asked to avoid issues around confidentiality through disclosing information to a third person.

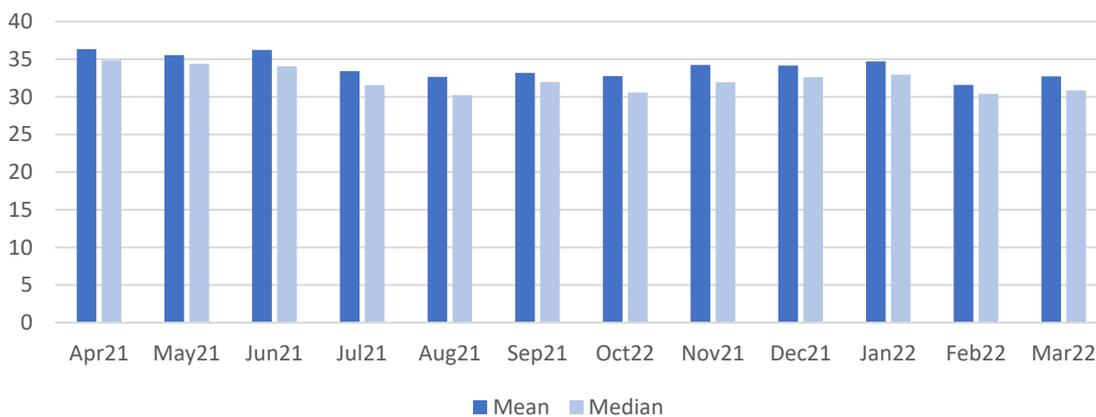
3.18 The questionnaire and advance materials were translated by a WG contractor. Further tweaks/small changes applied to either questionnaire or advance materials were made by both the WG and ONS teams.

**Interview timings**

3.19 A number of timing points were included in the questionnaire to measure the length of each section. In addition to that, audit trail data were used to estimate the total questionnaire length as well as length of individual questions where timing points were not accurate enough. Figure 3.1 shows the change in mean and median questionnaire length for the telephone questionnaire over the course of the survey year<sup>9</sup>. Figure 3.2 shows the change in mean and median questionnaire length for the online questionnaire over the course of the trial.

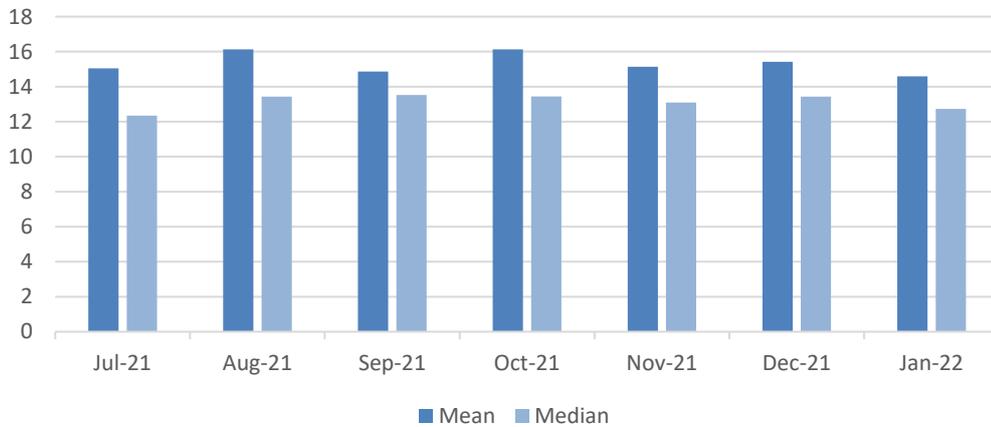
3.20 Annex C provides an overview of the median and mean length of each section of the questionnaire. These figures represent the average timings for each section across the full sample, which means that where certain questions were not asked (e.g. as a result of sub-sampling) of a respondent, the question time was set to zero for relevant cases.

**Figure 3.1: Average telephone interview length by survey month in minutes\***



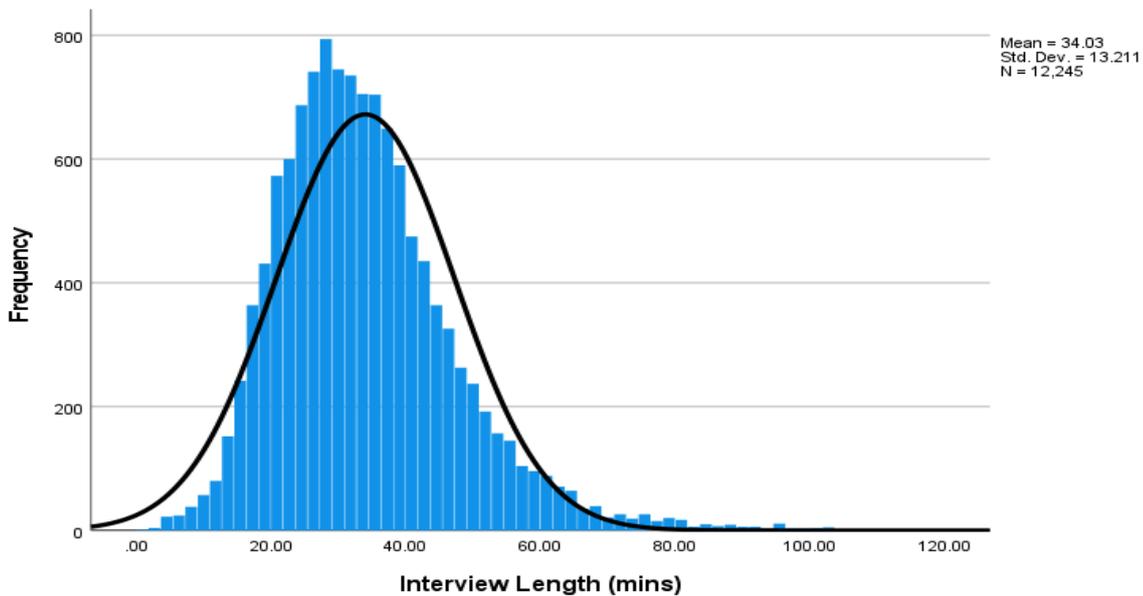
<sup>9</sup> In July and September, the timestamp usually used was not recorded for all respondents. Therefore, the closest timestamp to the original was used in calculating the timings. The position of the new timestamp is slightly in front of the original and therefore July and August timings will appear artificially lower due to slight change in methodology

**Figure 3.2: Average online interview length by survey month in minutes**



3.21 A sub-sampling approach was applied to the survey, resulting in certain modules being asked of some respondents but not others. Figure 3.3 provides an overview of the distribution of interview length of the telephone questionnaire. The median interview length was 32.3 minutes (mean 34.0 minutes), with 50% of respondents having an interview lasting between 24.9 and 40.9 minutes.

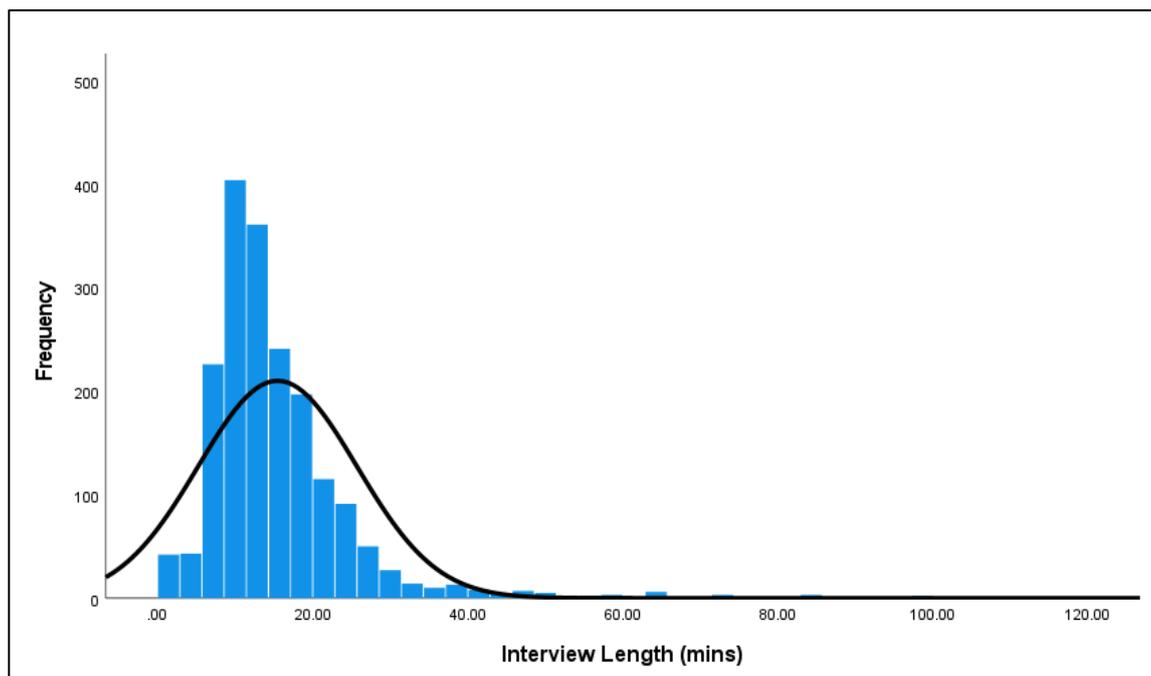
**Figure 3.3: Distribution of telephone interview length in minutes\***



\* In July and September, the timestamp usually used was not recorded for all respondents. Therefore, the closest timestamp to the original was used in calculating the timings. The position of the new timestamp is slightly in front of the original and therefore July and August timings will appear artificially lower due to slight change in methodology

3.22 Timing analysis was also carried out on the online trial data. Figure 3.4 provides an overview of the distribution of interview length for the online questionnaire. The median interview length was 13.2 minutes (15.5 mean minutes), with 50% of respondents having an interview lasting between 9.7 and 18.5 minutes.

**Figure 3.4: Distribution of online interview length in minutes**



### **Changes to the Blaise questionnaire script**

3.23 A number of changes were introduced to the questionnaire script during the survey year; most of them related to up-dating sub-sample fractions to ensure the target sub-sample sizes could be achieved by the end of the survey year. The subsampling proportions had to be monitored closely during 2021-22 and were more likely to require adjustments throughout the year due to the unknowns around response rate in relation to the pandemic, and the changing monthly sample size (see section 2). The main questionnaire changes consisted of the following:

- May 2021 – Hard check introduced to ensure a DOB could not be entered where respondent was less than 16 years old
- June 2021 – Subsampling removed from the Active travel module.

- July 2021 – Incentives modules changed due to the incentives trial
- July 2021 – Ending of the questionnaire altered for the online trial
- July 2021 – subsampling proportions adjusted due to different than expected achieved sample to date (April and May):
  - Increase in Cwm Taf local health board (LHB) for the hospital appointments module
  - Increase in Powys LHB for the dental appointments module
  - Increase in Betsi Cadwaladr University LHB for the dental appointments module
  - Decrease in percentage of non-parents selected for children’s rights module
  - Decrease in percentage of non-parents selected for satisfaction with education module
  - Increase in Mid Wales for the satisfaction with WG module
- August 2021 – Removed the information around donating voucher to charity and this was no longer an option from the voucher supplier.
- October 2021 – subsampling proportions adjusted due to different than expected achieved sample to date (April to August):
  - Increase in Betsi Cadwaladr University and Cwm Taf local health board (LHB) for the hospital appointments module
  - Increase in Cwm Taf LHB for the dental appointments module
  - Increase in percentage selected for companion animals
  - Increase in all regions for the satisfaction with WG module
- January 2022 – subsampling proportions adjusted due to different than expected achieved sample to date (April to November):
  - Decrease proportion in Betsi Cadwaladr University, Cardiff and Vale University and Cwm Taf local health board (LHB) for the hospital appointments module
  - Decrease proportion in Powys LHB for the dental appointments module
  - Decrease proportion in companion animals

- Decrease proportion in non-parents for children's rights
- Decrease proportion in satisfaction with health
- Increase proportion in North Wales, Mid Wales and South West Wales for WG satisfaction
- March 2022 – subsampling proportions adjusted due to different than expected achieved sample to date (April to January):
  - Increased proportions in Aneurin Bevan and Betsi Cadwaladr University LHB for hospital appointments
  - Decreased proportions in Cardiff and Vale University LHB for hospital appointments
  - Increased proportions in Aneurin Bevan LHB for dental appointments
  - Decreased proportions in Cardiff and Vale University and Hywel Dda LHB for dental appointments
  - Increased proportion in Cwm Taf LHB for GP services and health
  - Increase proportion in Aneurin Bevan LHB for Eye care and Hearing impairments
  - Decreased proportion in Powys LHB for Eye care and Hearing impairments
  - Reduced the proportion for companion animals
  - Decrease in proportion of non-parents for children's rights
  - Decrease in proportion of non-parents for satisfaction with education
  - Decrease proportion in satisfaction with health
  - Increase proportion in South East Wales, Mid Wales and South West Wales for WG satisfaction

## 4. Fieldwork

### Recruitment of interviewers

- 4.1 All ONS interviewers are directly employed members of staff, who are salaried based on their contracted hours (this includes interviewing time as well as time for travelling and administrative purposes). They are not paid specific fees per achieved interview and other specific survey activities. Instead, their salary covers, all duties associated with their posts including training, preparation of work, travelling to locations, etc. Furthermore, interviewers are flexible in the hours they work to fit in with demand and calling patterns required to optimise field work and promote data quality.
- 4.2 Interviewer vacancies are advertised on the Civil Service Jobs<sup>10</sup> site. Typically, after an initial round of application screening and selection, successful candidates are invited to a competency-based interview held by telephone, in order to speed up the process of getting suitable people into posts.
- 4.3 Recruitment, training and briefing of new interviewers continued throughout the survey period. Before new interviewers were briefed on the National Survey, they had to complete standard ONS interviewer training, which included working on quotas for other surveys run by ONS such as the Labour Force Survey.
- 4.4 A total of 106 interviewers and eight interviewer managers have been briefed on the National Survey since April 2019, with between 74 and 91 interviewers working on the survey every month (Table 4.1). There were seven Welsh speaking interviewers and one Welsh speaking interview manager

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<sup>10</sup> <https://www.civilservicejobs.service.gov.uk>

**Table 4.1: Number of interviewers by months of survey\***

<b>Month</b>	<b>Number of interviewers assigned to the survey **</b>
April 2019	80
May	76
June	77
July	79
August	81
September	79
October	74
November	79
December	76
January 2020	79 (19)***
February	80
March	76
Average	78

\* Number of interviewers in the table below refer to head counts rather than full-time equivalent (FTE) numbers. Interviewers' hours are, on average, 0.6 FTE.

\*\*Interviewer numbers in this column only cover interviewers working on the survey during the field months.

\*\*\*In January 2021, 19 interviewers were working on the pilot test for the 22-23 survey.

### **Briefing of interviewers**

4.5 All interviewers attended a virtual briefing day. The content of the briefing day covered:

- **Background to the survey** – explaining the progress made on the survey, highlighting achievements and any new developments on the survey.
- **Call requirements and documents** – reiterating fieldwork procedures, in particular where they differed from ONS standard procedures such as the use and administration of survey materials.
- **Questionnaire content** – providing an overview of all areas in the questionnaire plus some background information on sub-sampled modules, specifically highlighting sections that required more detailed briefing on how they needed to be administered.

- **Overview of trials** –
  - Online trial - explaining the content and sensitivity of questions in this section, explaining the importance of self-completion where possible, and how to help respondents feel comfortable completing the online questionnaire independently.
  - Incentive’s trial – explaining why the trial is important, and how to administer the correct materials and information for each group.
- **Data protection and linkage** – highlighting a General Data Protection Regulation (as a successor of the Data Protection Act) and its meaning, explaining the importance and benefit of linking survey data with other administrative records, providing background information of planned data linkage for National Survey data, explaining the handling of the data linkage show card, leaflet and flow chart.
- **Field administration** – covering general information on survey administration.

**Alongside the briefings, interviewers were provided with learning material in the form of training cases, and a guidance document containing details of the survey scope, stationery, field periods, questionnaire help notes and survey administration information. For further information on the scope of the survey please refer to the [WG website](#).**

### **Supervision and quality control**

4.6 ONS uses an established set of measures to keep track of the quality of their interviewers’ work. The key features of this approach are:

- using clear targets against which interviewer performance can be monitored
- quality control checks of live interviews to understand how the interviewer carries out their interviews
- regular performance reviews to get a more qualitative understanding of how interviewers are doing

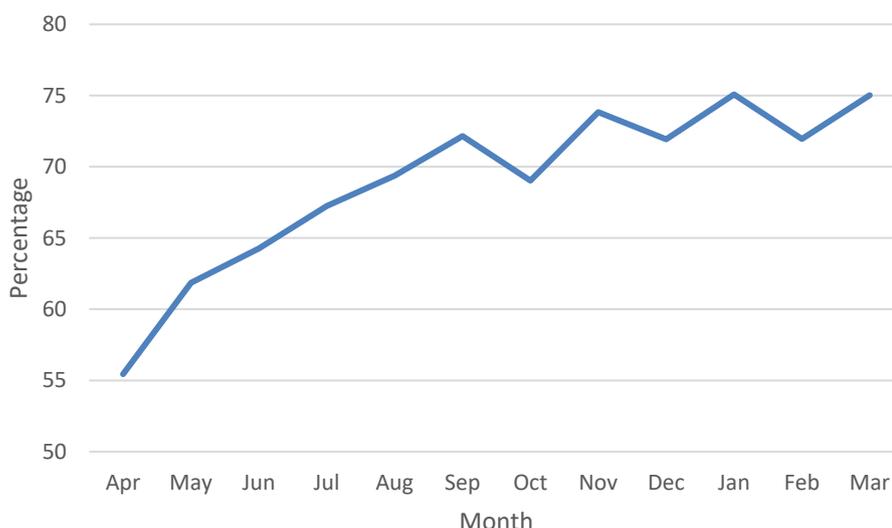
### **Fieldwork dates, management and procedures**

4.7 Fieldwork started at the beginning of April 2021 and ended on 31<sup>st</sup> March 2022. Advance letters and survey leaflets were sent by ONS field office approximately 10

days prior to the start of each monthly field period. Interviewers were responsible for sending out follow up postcards to the addresses in their assigned quotas. This ensured that delivery of the materials could be timed to coincide closely with when interviewers planned to make their calls and can personalise the postcard with interviewer name and phone number.

- 4.8 Respondents were asked to provide their phone number on an online portal which they enter using a unique access code provided in the advance letter that they receive. The whole sample was also tele-matched, a process by which phone numbers are obtained from a commercially available source called the REaD Group, who provide a facility to match telephone numbers against the sampled addresses. (Please see table 4.2 for success rates)
- 4.9 Interviewers were encouraged to start their assignments as soon as possible in the month of issue using portal numbers initially, followed by tele-matched phone numbers. Where a phone number could not be obtained or contact could not be made, “Knock to nudge” (KtN) was carried out. This is where interviewers visit the sampled addresses in an attempt to make contact and obtain a phone number for the respondent. KtN also has the benefit of interviewers seeing sampled addresses and being able to identify where an address is ineligible or unoccupied.
- 4.10 During 2021-22 the percentage of the sample that was included in Knock to Nudge increased from 55.4% in April 2021 to 75.0% in March 2022 (See Figure 4.1). This change was largely due to interviewer concerns over Covid easing over time as the vaccination programme was rolled out and Covid cases fell. In addition, interviewers had previously been using the online telephone directory to gain phone numbers, however the search facility was changed so they were no longer able to use this method.

**Figure 4.1: The percentages of selected sample which was included in KtN**



4.11 Interviewers were allowed to carry out KtN up to 3 times to any given address, ensuring that each visit was at a different time of the day to maximise success rate. On average, 39.6% of addresses required 1 KtN call, 16.6% required 2 KtN calls, and 10.8% required 3 KtN calls (31.7% did not have KtN).

4.12 Looking at productive interviews, the majority of phone numbers were obtained from using KtN followed by those numbers from the portal and then where a respondent had contacted the interviewer directly (See table 4.2).

**Table 4.2: The percentages of interviews by each method of phone number collection acquisition**

Contact method	Percentage of full interviews
Contacted interviewer directly	20.1%
Knock to Nudge	45.4%
Portal	24.7%
Tele-matching	4.1%
Other	5.6%

4.13 Although the largest proportion of interviews were gained from collecting phone numbers during KtN, the response rate for those which were KtN is 41.1% which is only slightly higher than the group where we gained a number via tele-matching (36.8%). Response rates are much higher (over 80%) for those who provide their

phone number via the portal or by directly contacting the interviewer (See table 4.3). (This is based on the variable “which method interviewer obtained the phone number, on which you made contact, therefore some cases recorded as portal, contacted directly or KtN may have also had a tele-matched number, however this was unsuccessful and so other methods were tried. As a result, the response rate for tele-matched numbers may appear artificially high).

**Table 4.3: Response rate by phone number acquisition method**

Contact method	Response rate
Contacted interviewer directly	83.2%
Knock to Nudge	41.1%
Portal	81.7%
Tele-matching	36.8%

- 4.14 Interviewers were given one calendar month to cover each assignment and send back their final outcomes. However, the exact fieldwork period set for an interviewer to work each assignment varied depending on the number of addresses assigned and extensions granted to complete quotas or scheduled appointments.
- 4.15 Where a phone number for an address was obtained, interviewers called at different times of day and on different days of the week, including weekends and evenings. Interviewers should aim to make minimum of six calls during a mainstage month, with at least two calls on a weekday evening (after 6pm) or at the weekend before cases could be coded as non-contact. There was no maximum limit on the number of telephone calls with interviewers being instructed to continue to call at addresses while they felt there was still a chance of making contact. Where interviewers were not able to make enough calls, or felt that there was value in pursuing the case further for other reasons (e.g. respondent currently ill or on holiday), the case could be extended into the beginning of the next fieldwork month to ensure that hard-to-reach cases were covered in the survey population. A record of the time, date and outcome of the call was documented, and calling patterns were regularly checked as part of the interviewer’s performance management review.

4.16 Fieldwork was managed on a daily basis by a team of Interview Managers working with an overall Field Project Manager. Members of the ONS National Survey Field and Research teams oversaw fieldwork and monitored the rate of progress on a daily basis. Fortnightly updates were sent to WG including the overall rate of progress against targets, and a breakdown of the figures at LA level.

### **Fieldwork documents**

4.17 For Q1 2021-22, we had one version of all materials listed in Table 4.4.

4.18 Between July 2021 and January 2022, there were 3 versions of the materials: 2 versions of the main for the incentives trial (one saying £10 incentive, the other £15), plus online versions of many of the materials.

4.19 The only changes in the incentive's materials were the incentive amount – everything else remained unchanged

4.20 For the online materials, there was a significant change to the advance letter to optimise it for the new survey design. For the remaining materials, there were only slight changes describing the survey process.

4.21 The WG-branded advance letter and leaflet were posted centrally by the head office 10 days before the start of the mainstage month. Interviewers were furnished with a stock of the new A5 postcards, which were posted by the interviewer a week before their first visit to the addresses of their assigned quotas.

4.22 The latest versions of the most important survey materials used on this survey during 2021-22 are included in Appendixes C to J.

4.23 The full set of documents used for this survey shown in Table 4.4, along with a brief description of each document.

**Table 4.4: Survey materials**

<b>Document</b>	<b>Description</b>
WG advance letter	<ul style="list-style-type: none"><li>• Sent in advance to all sampled addresses</li><li>• Informs household that address had been selected to take part in the survey</li><li>• Includes basic information about the survey</li><li>• Dual language</li><li>• During the incentive experiment, two different versions were used. During the online trial, a third version was used</li></ul>
WG leaflet	<ul style="list-style-type: none"><li>• Sent with the advance letter.</li><li>• Includes more detail on points covered in the letter, data infographics examples and contact information</li><li>• Dual language</li><li>• During the incentive experiment, two different versions were used. During the online trial, a third version was used</li></ul>
A5 postcard	<ul style="list-style-type: none"><li>• Sent by interviewers before calling at the address.</li><li>• Reminding the household that an interviewer will call at the address.</li><li>• Dual language</li><li>• During the incentive experiment, two different versions were used. During the online trial, a third version was used</li></ul>
KtN/Called today card	<ul style="list-style-type: none"><li>• Left at an address during KtN if called and no one available</li><li>• Dual language</li></ul>
Appointment card	<ul style="list-style-type: none"><li>• Left at an address during KtN if appointment is made. To be posted, not directly handed to the respondent in line with Covid rules</li><li>• Dual language</li></ul>
Chaser letter	<ul style="list-style-type: none"><li>• To be sent by IMs if no contact has been made with respondents.</li><li>• Dual language</li></ul>

Document	Description
Conversion letter	<ul style="list-style-type: none"> <li>• To be sent by IMs if an interviewer gets a refusal without giving them much chance to explain the survey.</li> <li>• Dual language</li> </ul>
Helpline leaflet	<ul style="list-style-type: none"> <li>• This is to send to all non-internet users (approx. 10% of the sample). (Internet users are provided a weblink to the helplines).</li> <li>• Dual language</li> </ul>
Survey envelope	<ul style="list-style-type: none"> <li>• Used for posting advance letters/leaflets, conversion letters, helpline leaflets and incentive compliment slips</li> <li>• Includes Welsh Government and ONS logo on the front</li> </ul>

### Web pages about the survey

- 4.24 The WG website hosts respondent-specific survey information (<http://www.gov.wales/nationalsurveyinfo>). This web address is highlighted in survey materials as an additional source of information for respondents and to reassure them that the survey is genuine.
- 4.25 In addition to that ONS have a webpage hosted on the ONS website (<https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/nationalsurveyforwales>) specifically for the National Survey, to inform respondents and the general public about ONS' role as the organisation commissioned to conduct this survey on behalf of WG.
- 4.26 A separate set of web pages aimed at survey users rather than respondents is hosted at <http://www.gov.wales/nationalsurvey>. This includes background information on the survey, a description of the survey method and questionnaire coverage, latest news (for example, when new data or reports are being release), results and reports from the development work, and further information on data linkage. [Electronic copies](#) of the survey materials are also included on the website.
- 4.27 Web pages are available in Welsh and English.

### **Welsh language and other language interviews**

- 4.28 All respondents were offered the opportunity to complete the interview in English or Welsh. To ensure that the survey was accessible in Welsh, all survey documents were provided in both Welsh and English. Furthermore, a number of interviewers were Welsh native speakers or learners at different levels. In total seven interviewers (and one IM) were trained to conduct Welsh-language interviews.
- 4.29 The survey leaflet provided a Freephone number for the Survey Enquiry Line (SEL). From December 2021 onwards, the ONS subcontracted PTI Cymru to deal with incoming Welsh calls. When a respondent phones the phone number, they get asked if they would like to speak to someone in Welsh or English. If they select Welsh, their call automatically gets transferred to PTI Cymru who deal with the request by completing a “National Survey call form” and sending it immediately to ONS SEL to action.
- 4.30 Respondents can call the SEL to arrange a Welsh-speaking interviewer. Welsh language interview requests where the original interviewer was a trained Welsh language interviewer were completed by the same interviewer. Alternatively, for cases where the interviewer assigned to the address was not trained in Welsh language interviews, the interviewer was instructed to contact the ONS Field Office to log the request. The record was then immediately passed to a Welsh-speaking interviewer who could contact the respondent directly and arrange to conduct the interview on a suitable day for the respondent.
- 4.31 In two cases respondents completed the interview in a different language to English or Welsh (Table 4.5). In these cases, the interview was conducted with the help of a household translator (aged 14 or over), who translated the questions into the respondent's chosen language and then passed their answers back to the interviewer in English.
- 4.32 In such situations, the questionnaire script automatically routed out a number of sensitive questions. These were questions that were felt to be inappropriate to ask in the presence of other household members or interpreters (e.g. Warwick-Edinburgh Mental Wellbeing Scale, experience of loneliness).

**Table 4.5: Language of interview**

<b>Language</b>	<b>Frequency</b>	<b>Percent</b>
English	12,225	97.2
Welsh	353	2.8
Other	2	0.0
Total	12,580	100.0

### **Process of making contact at a sampled address**

- 4.33 Interviewers were issued with address sheets for each address in their quota including the address information as well as a Kish Grid with the random numbers for the relevant address in their quota, to enable them to select the right household at the sampled address if required. In addition, interviewers used the “Field work management tool” (FWMT) on their iPhones to record call attempts made, as well as information on the household composition when contact was made.
- 4.34 Interviewers needed to go through the following steps when either making a phone call or if during KtN, when calling at a sampled address:
- 4.34.1 **Confirming the address:** The first task for interviewers was to confirm the address.
- 4.34.1.1 If over the telephone, they confirm this with the person on the phone when introducing the survey.
- 4.34.1.2 If during KtN, the interview can check for themselves before making contact, to ensure they were calling at the correct address and then to confirm this with someone living at the address when introducing the survey.
- 4.34.2 **Confirming address eligibility:** For each address interviewers needed to confirm that it was traceable, residential and occupied as a main residence.
- 4.34.3 **Recording number of dwelling units:** Interviewers needed to establish the number of dwelling units at the address. In most cases this was one; if it was more than one (most commonly when an address had been split into flats) they were asked to inform head office, who would up-date and re-issue the quota accordingly with one of the addresses selected at random.

**4.34.4 Recording the number of households:** In a small number of cases it may be possible that more than one household lives in a single dwelling unit. ONS uses the standard household definition from the Census for England and Wales, which defines a household as: *'a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area'*. In cases where there was more than one household at a sampled address, interviewers were instructed to use the Kish Grid to establish which household unit would be the correct one to select. Interviewers were advised to re-confirm their household selection with head office in particular if the selection process was unclear (e.g. if the units were not enumerated).

**4.34.5 Selecting the respondent from household:** Following the dwelling unit and household selection, the interviewer then needed to select the respondent from the household. This was done by after who had the next birthday in the household. If the household member did not know all the birthdays, they were asked for the next known birthday. In households where there was only one adult aged 16 or over, no person selection was required.

**4.34.6 Gaining parental permission:** In cases where the selected respondent was aged 16 or 17 and living with a parent/guardian, the interviewer needed to gain parental permission before undertaking an interview. To do this they needed to enter the name of the person giving permission and their relationship to the respondent into the CAPI questionnaire. No signature was required to support this.

**4.34.7 Recording the respondent's chosen interview language:** The interviewer confirmed over the phone or at doorstep (if during KtN) what the respondents preferred choice of language for the interview is. At the start of the interview the interviewer indicated the language of choice in the CAPI questionnaire, to ensure the remainder of the questionnaire appears in the correct language (Welsh or English). For languages other than Welsh and English, the questionnaire was displayed in English but delivered with the help of an interpreter (see section 3.16).

### **Sample outcomes**

4.35 The response rates referenced throughout are calculated as:

*Response rate = interviews achieved / (total addresses – ineligible cases)*

- 4.36 The index provides the fraction of eligible addresses that produced a successful interview.
- 4.37 Ineligible addresses are those that would not be eligible to take part in the survey. This only includes addresses that were vacant, non-residential or not occupied as a main residence (e.g. holiday homes) and those coded by interviewers as inaccessible or that they were unable to locate. It does not include addresses that have been attempted a number of times by interviewers but where no contact has been made, unless there is clear evidence that the address is vacant or not occupied as a main residence (e.g. by confirming this with neighbours). The overall level of ineligible addresses was 10.6%.
- 4.38 A total of 37.7% of the issued sample (41.6% of the eligible sample) resulted in full interviews (Table 4.6). The second most frequent outcome was refusals to interview, including broken appointments, which accounted for over 26.4% of the issued sample (29.1% of the eligible sample). Non-contacts accounted for around 21.7% of the issued sample (24.0% of the eligible sample).
- 4.39 During the year, both the online trial and the incentives trial were run. Tables 4.6 and 4.7 show the sample outcomes to the telephone section for all sampled addresses, plus a breakdown by trial group.
- 4.40 There is a statistically significant reduction in response rate between the £15 conditional incentive and the £10 condition incentive trial groups. This provides evidence that the additional £5 incentive is beneficial in terms of increasing the response rate to the telephone survey.
- 4.41 There was also a statistically significant reduction in response rate to the telephone section for those who were invited to take part in the online trial, in comparison with those who were asked to only complete the telephone section (where both offered £15 incentive). The reduction in response rate is unfortunate, however must be weighed up against the benefits of collecting the additional data on the online section, which otherwise we would be unable to collect. Table 4.7 shows the high-level sample outcome rates at local authority level broken down by the different trial

groups. Response, refusal, and no contact rates vary by LA and by trial group. However, it's important to bear in mind that the sample size of the online trial group was notably smaller than that for the other two groups and therefore the online group rates should be considered with caution.

**Table 4.6: Sample outcomes to telephone questionnaire at national level by trial group**

	Conditional Incentive £10			Conditional Incentive £15			Online Trial Group*			Total		
Outcome Code)	Total Addresses	% of issued sample	% of eligible	Total Addresses	% of issued sample	% of eligible	Total Addresses	% of issued sample	% of eligible	Total Addresses	% of issued sample	% of eligible
Full interview	3,431	38.1%	42.1%	6,926	37.7%	41.7%	2,194	37.3%	40.7%	12,551	37.7%	41.6%
Partial interview	5	0.1%	0.1%	19	0.1%	0.1%	5	0.1%	0.1%	29	0.1%	0.1%
No contact with anyone at address	2,108	23.4%	25.8%	3,386	18.4%	20.4%	1,092	18.6%	20.3%	6,586	19.8%	21.8%
Contact made but not with any member of sampled dwelling/household	42	0.5%	0.5%	90	0.5%	0.5%	31	0.5%	0.6%	163	0.5%	0.5%
Contact made at sampled dwelling/household but not with any responsible resident	30	0.3%	0.4%	51	0.3%	0.3%	14	0.2%	0.3%	95	0.3%	0.3%
Contact made with a person, but not the sampled person	116	1.3%	1.4%	198	1.1%	1.2%	71	1.2%	1.3%	385	1.2%	1.3%
To the office before contact by interviewer	103	1.1%	1.3%	166	0.9%	1.0%	58	1.0%	1.1%	327	1.0%	1.1%
Sampling Unit information refused - information was refused about the number of dwellings/households at address	0	0.0%	0.0%	1	0.0%	0.0%	0	0.0%	0.0%	1	0.0%	0.0%
Sampling Unit information refused - information was refused about persons within the household	9	0.1%	0.1%	14	0.1%	0.1%	4	0.1%	0.1%	27	0.1%	0.1%
To the interviewer before any interviewing started - by respondent	1,391	15.5%	17.1%	3,612	19.7%	21.7%	1,237	21.0%	23.0%	6,240	18.8%	20.7%

To the interviewer before any interviewing started - by proxy	207	2.3%	2.5%	435	2.4%	2.6%	126	2.1%	2.3%	768	2.3%	2.5%
Sampling Unit information refused - refused access to the site	0	0.0%	0.0%	0	0.0%	0.0%	1	0.0%	0.0%	1	0.0%	0.0%
To the interviewer during the interview	7	0.1%	0.1%	31	0.2%	0.2%	9	0.2%	0.2%	47	0.1%	0.2%
Broken appointment, no re-contact	301	3.3%	3.7%	803	4.4%	4.8%	262	4.5%	4.9%	1,366	4.1%	4.5%
Full interview achieved but respondent requested data be deleted	0	0.0%	0.0%	0	0.0%	0.0%	1	0.0%	0.0%	1	0.0%	0.0%
Ill at home during survey period - Notified by Head Office	2	0.0%	0.0%	3	0.0%	0.0%	2	0.0%	0.0%	7	0.0%	0.0%
Ill at home during survey period - Notified to interviewer	68	0.8%	0.8%	177	1.0%	1.1%	61	1.0%	1.1%	306	0.9%	1.0%
Away/in hospital throughout field period - Notified by Head Office	1	0.0%	0.0%	2	0.0%	0.0%	0	0.0%	0.0%	3	0.0%	0.0%
Away/in hospital throughout field period - Notified to interviewer	43	0.5%	0.5%	102	0.6%	0.6%	31	0.5%	0.6%	176	0.5%	0.6%
Other non-response - Physically or mentally unable/incompetent - Notified by Head Office	5	0.1%	0.1%	5	0.0%	0.0%	1	0.0%	0.0%	11	0.0%	0.0%
Physically or mentally unable/incompetent - Notified to interviewer	122	1.4%	1.5%	268	1.5%	1.6%	99	1.7%	1.8%	489	1.5%	1.6%
Interview discontinued due to language difficulties	12	0.1%	0.1%	33	0.2%	0.2%	2	0.0%	0.0%	47	0.1%	0.2%
Interview discontinued due to comprehension difficulties	4	0.0%	0.0%	3	0.0%	0.0%	0	0.0%	0.0%	7	0.0%	0.0%
Interview discontinued due to other difficulties	12	0.1%	0.1%	9	0.0%	0.1%	4	0.1%	0.1%	25	0.1%	0.1%
Lost interview	3	0.0%	0.0%	4	0.0%	0.0%	3	0.1%	0.1%	10	0.0%	0.0%
Other non-response	109	1.2%	1.3%	206	1.1%	1.2%	61	1.0%	1.1%	376	1.1%	1.2%
Issued but not attempted	4	0.0%	0.0%	3	0.0%	0.0%	2	0.0%	0.0%	9	0.0%	0.0%
Inaccessible	4	0.0%	0.0%	8	0.0%	0.0%	3	0.1%	0.1%	15	0.0%	0.0%
Unable to locate address	7	0.1%	0.1%	25	0.1%	0.2%	2	0.0%	0.0%	34	0.1%	0.1%

Unknown whether address is residential due to non-contact	3	0.0%	0.0%	9	0.0%	0.1%	0	0.0%	0.0%	12	0.0%	0.0%
Unknown whether there are eligible residents due to non-contact	7	0.1%	0.1%	32	0.2%	0.2%	9	0.2%	0.2%	48	0.1%	0.2%
Not yet built/under construction	7	0.1%		21	0.1%		6	0.1%		34	0.1%	
Demolished/derelict	27	0.3%		47	0.3%		10	0.2%		84	0.3%	
Vacant/empty	426	4.7%		898	4.9%		257	4.4%		1,581	4.8%	
Non-residential address	157	1.7%		349	1.9%		79	1.3%		585	1.8%	
Address occupied but no resident household	176	2.0%		367	2.0%		124	2.1%		667	2.0%	
Communal Establishment/institution	50	0.6%		63	0.3%		17	0.3%		130	0.4%	
Directed not to sample at address	2	0.0%		11	0.1%		3	0.1%		16	0.0%	
<b>Total</b>	<b>9,001</b>	<b>100.0%</b>		<b>18,377</b>	<b>100.0%</b>		<b>5,881</b>	<b>100.0%</b>		<b>33,259</b>	<b>100.0%</b>	

\* Online refers to the telephone data of those in the online trial group

**Table 4.7: High level sample outcome rates to telephone questionnaire at local authority level and trial group**

Local Authority	Conditional incentive £10				Conditional incentive £15				Online trial group*				Total			
	Response rate	Refusal rate	No contact rate	Ineligibility rate	Response rate	Refusal rate	No contact rate	Ineligibility rate	Response rate	Refusal rate	No contact rate	Ineligibility rate	Response rate	Refusal rate	No contact rate	Ineligibility rate
<b>Blaenau Gwent</b>	38.5%	48.2%	12.2%	7.6%	41.9%	35.3%	20.8%	8.7%	40.1%	44.1%	14.3%	9.5%	39.3%	40.4%	17.5%	8.5%
<b>Bridgend</b>	40.2%	32.6%	25.3%	7.1%	43.6%	25.3%	28.8%	7.6%	46.4%	28.0%	23.8%	7.0%	44.0%	27.7%	27.2%	7.3%
<b>Caerphilly</b>	40.4%	36.8%	21.4%	6.2%	43.4%	32.4%	22.3%	7.8%	35.2%	37.7%	25.7%	5.3%	40.5%	34.6%	22.8%	6.9%
<b>Cardiff</b>	39.8%	35.6%	22.1%	10.0%	38.8%	32.3%	25.7%	11.4%	41.4%	36.3%	20.0%	10.2%	39.6%	33.9%	23.8%	10.8%
<b>Carmarthenshire</b>	46.6%	35.6%	16.2%	9.0%	54.9%	29.2%	14.3%	9.7%	50.8%	33.1%	15.0%	6.7%	52.9%	31.5%	15.1%	9.0%

<b>Ceredigion</b>	35.1%	35.6%	24.3%	16.7%	38.8%	28.5%	28.0%	14.2%	39.5%	32.1%	24.7%	12.9%	39.1%	31.1%	26.6%	14.7%
<b>Conwy</b>	41.3%	40.5%	15.8%	13.2%	41.5%	35.0%	20.8%	11.6%	37.7%	39.3%	20.8%	9.4%	40.3%	37.2%	19.7%	11.6%
<b>Denbighshire</b>	38.8%	41.9%	17.8%	8.2%	37.2%	29.7%	30.8%	7.2%	41.8%	36.3%	20.3%	7.6%	38.6%	34.3%	25.3%	7.5%
<b>Flintshire</b>	42.2%	42.2%	14.8%	5.4%	37.0%	32.3%	29.3%	4.5%	34.7%	47.5%	16.8%	5.1%	37.1%	37.9%	23.2%	4.9%
<b>Gwynedd</b>	51.9%	28.8%	14.6%	24.0%	48.2%	31.6%	14.7%	27.4%	48.8%	32.4%	14.4%	23.4%	50.5%	31.0%	14.8%	25.8%
<b>Isle of Anglesey</b>	36.1%	45.0%	14.7%	22.2%	46.0%	32.9%	17.0%	19.1%	45.9%	41.5%	9.4%	25.4%	43.3%	37.7%	15.2%	21.0%
<b>Merthyr Tydfil</b>	29.4%	37.6%	31.2%	5.4%	33.6%	35.3%	28.3%	8.9%	34.4%	35.9%	27.4%	7.5%	32.6%	36.1%	29.3%	7.6%
<b>Monmouthshire</b>	48.6%	28.7%	21.2%	6.7%	48.5%	24.2%	25.1%	8.0%	47.6%	32.7%	18.8%	4.5%	47.8%	27.0%	23.1%	7.0%
<b>Neath Port Talbot</b>	46.3%	35.8%	16.3%	8.7%	49.7%	27.8%	20.7%	8.3%	46.6%	32.6%	19.0%	8.5%	48.3%	30.8%	19.4%	8.4%
<b>Newport</b>	42.7%	36.2%	19.4%	8.1%	43.7%	38.7%	16.5%	6.4%	39.6%	40.5%	18.4%	7.1%	43.7%	38.3%	17.7%	7.0%
<b>Pembrokeshire</b>	55.0%	30.0%	12.7%	15.0%	49.3%	34.1%	13.8%	17.1%	44.2%	37.6%	15.0%	17.5%	49.5%	33.5%	13.8%	16.6%
<b>Powys</b>	35.5%	30.5%	30.3%	11.0%	41.6%	26.8%	27.6%	12.4%	38.3%	28.7%	29.8%	9.5%	39.6%	28.3%	29.1%	11.5%
<b>Rhondda Cynon Taf</b>	36.7%	33.1%	26.7%	11.6%	39.0%	30.9%	26.7%	11.4%	37.6%	32.3%	27.5%	8.7%	38.9%	31.7%	27.1%	11.0%
<b>Swansea</b>	49.1%	32.1%	16.4%	12.5%	45.5%	31.7%	20.4%	10.5%	43.1%	38.7%	16.5%	9.4%	46.7%	33.0%	18.8%	10.9%
<b>Torfaen</b>	40.5%	30.0%	26.0%	11.6%	48.4%	27.6%	22.1%	7.7%	47.3%	32.6%	18.4%	8.5%	47.5%	29.1%	22.8%	8.8%
<b>Vale of Glamorgan</b>	43.2%	36.8%	18.7%	6.3%	47.5%	38.3%	13.2%	7.3%	42.0%	43.2%	14.0%	5.6%	46.4%	38.7%	15.0%	6.7%
<b>Wrexham</b>	42.6%	32.9%	22.8%	6.9%	39.8%	31.9%	25.5%	10.1%	42.5%	35.6%	20.7%	5.6%	41.1%	32.9%	24.1%	8.4%
<b>Wales</b>	41.3%	35.2%	21.0%	10.6%	43.1%	31.3%	22.8%	10.9%	41.3%	35.7%	20.7%	9.6%	42.5%	33.2%	22.2%	10.6%

\* Online refers to the telephone data of those in the online trial group

## Achieved sample

4.42 In total 12,576 interviews were achieved in 2021-22. The breakdown of interviews between each quarter of 2021-22 is given in Table 4.8.

**Table 4.8: Achieved interviews by quarter**

Quarter	Interview dates	Interviews achieved	Cumulative interviews achieved
1	April '21 to June '21	3,436	3,436
2	July '21 to September '21	3,045	6,481
3	October '21 to December '21	3,193	9,674
4	January '22 to March '22*	2,906	12,580
<b>TOTAL</b>		<b>12,580</b>	<b>12,580</b>

**Table 4.9: Achieved response rate by LA (ranked by response rate)**

Local Authority	Total addresses	Interview target	Completed interviews	Ineligible addresses	Response rate (%)
Carmarthenshire	1,563	660	741	141	52.1%
Pembrokeshire	1,279	477	535	212	50.1%
Gwynedd	1,287	441	471	332	49.3%
Monmouthshire	967	405	435	68	48.4%
Neath Port Talbot	1,292	543	571	109	48.3%
Torfaen	826	347	348	73	46.2%
Swansea	2,217	900	910	241	46.1%
Vale of Glamorgan	1,083	443	459	73	45.4%
Isle of Anglesey	1,094	362	373	230	43.2%
Bridgend	1,280	474	512	94	43.2%
Newport	1,405	521	559	98	42.8%
Wrexham	1,228	432	462	103	41.1%
Caerphilly	1,641	576	627	114	41.1%
Conwy	1,152	400	415	134	40.8%
Blaenau Gwent	998	347	371	85	40.6%
Cardiff	3,305	1,110	1,166	356	39.5%
Powys	3,589	1,240	1,244	412	39.2%
Denbighshire	1,008	347	359	76	38.5%
Rhondda Cynon Taf	2,282	782	774	250	38.1%
Flintshire	1,502	506	544	73	38.1%
Ceredigion	1,079	347	349	158	37.9%
Merthyr Tydfil	1,182	347	355	90	32.5%
<b>TOTAL (National)</b>	<b>33,259</b>	<b>12,007</b>	<b>12,580</b>	<b>3,522</b>	<b>42.3%</b>

- 4.43 Response rates ranged from 32.5% (Merthyr Tydfil) to 52.1% (Carmarthenshire). The number of interviews achieved was at or above target in all bar one Local Authority. Rhondda Cynon Taf achieved 773 interviews, just 9 below the annual target of 782.
- 4.44 Large proportions of ineligible addresses were found in Gwynedd (25.8%), Isle of Anglesey (21.0%), Pembrokeshire (16.6%) and Ceredigion (14.6%). Lower degree of variation was recorded in other areas and the lowest ineligible rate was recorded in Flintshire (4.9%).

#### **Remedial action to low response**

- 4.45 ONS closely monitored the progress of survey response performance over the course of the fieldwork period and applied very strict performance management measures to ensure targets were met. Achieved interviews have increased each year from 11,354 in 2017-18, 11,922 in 2018-19 and 12,393 in 2019-20. There have been 12,576 achieved interviews in 2021-22 and so another increase in the annual number of achieved interviews.

#### **Online Trial outcomes**

- 4.46 Those in the online trial were asked to complete the online questionnaire after the telephone questionnaire. 89.8% of those who completed the telephone questionnaire went on to complete the online questionnaire. This results in a response rate to both sections of 37.1%.
- 4.47 For respondents who do not have internet access or have a lack of internet skills, there was the option to complete the online section over the phone with the interviewer. This occurred in 19.5% of online questionnaire completions.
- 4.48 Respondents were asked to complete the online section within 3 days. Table 4.10 shows the number of days between the telephone completion and the online completion

**Table 4.10 Number of days between telephone and online completion**

<b>Days</b>	<b>Percentage</b>	<b>Cumulative %</b>
<b>0</b>	48.0%	48.0%
<b>1</b>	11.4%	59.4%
<b>2</b>	5.3%	64.7%
<b>3</b>	3.3%	68.0%
<b>4</b>	3.0%	71.1%
<b>5</b>	2.4%	73.4%
<b>6+</b>	15.8%	89.2%
<b>Non response</b>	10.8%	100%

4.49 The response rate to the £15 conditional incentive group, telephone interview only, was 43.5%, the response rate to the £15 conditional incentive group, telephone followed by online, was 41.3%. The research trial found a statistically significant difference in the response rates achieved in the experiment group versus the control group, suggesting that the additional online element does have a statistically significant effect on deducing response rates to the telephone section (p-value of 0.013(3dp), 95% confidence interval (0.5%, 3.9%)). It's important to note that due to attrition there is a further reduction in response rate when considering both the telephone and online response rates together (37.1%).

### **Research trial to assess impact of different conditional incentive amounts on response**

4.50 Between July 2021 and March 2022 a research trial was conducted to explore whether a £5 difference (£10 compared to £15) conditional incentive would have an impact on response rates. The trial was run as a quasi experiment, whereby every other address in the eligible sample (i.e. not already part of the online trial) was selected to make up the control group (£15), and the remainder of the sample was the treatment group (£10). The groups had a total sample size of 9,188/9,189. The £15 incentive group got 3,547 interviews over this period compared to 3,379 for the £10 incentive group.

4.51 Respondents and interviewers received 2 versions of any material which mentioned the incentive amount. The materials were the same other than the incentive amount displayed.

4.52 The response rate to the £15 conditional incentive group was 43.5%, the response rate to the £10 conditional incentive group was 41.3%. The research trial found a statistically significant difference in the response rates achieved in the experiment group versus the control group, suggesting that the additional £5 does have a statistically significant effect on increasing response rates (p-value of 0.003(3dp), 95% confidence interval (0.7%, 3.8%)).

## **5. Data processing and output**

5.1 This chapter covers the data processing and delivery aspects of the survey. This includes the data coding and editing processes, production of derived variables, the data checking process and details of the outputs provided to WG.

### **Conversion of interview cases into a dataset**

5.2 When interviewers complete a telephone interview, the case is transmitted remotely through a secure connection to the ONS Field Office. This case is then received by the Object Management System collating individual cases into a Blaise datafile. The Blaise datafiles (BDB) are then converted from a Blaise format to an SPSS dataset with an accompanying .sps meta file through an in-house ONS designed VB6 package called 'DataDeliveryExpress'.

5.3 For the online data collection, the questionnaire was hosted by Northern Ireland Statistics and Research Agency (NISRA) and uses the Blaise 5 collection tool. The NISRA setup uses 14 web servers linked together in a server park and managed by an additional server which acts as a server park manager. All of these servers exist in a DMZ. The final server in the park holds all data and it sits behind additional firewalls in a secure environment. The web servers are virtual servers running Windows Server 2012 and all have a live backup so that a restore can be made quickly if needed. The system operates a reverse proxy system which directs users to web servers in a way that shares the load across all 14 servers. The system also employs Nagios server manager software which is set up to notify the NISRA Blaise team of any issues with any of the 16 servers in the park, thus minimising any downtime.

5.4 The respondent is provided with a URL link to access the online questionnaire, using a secure 12-digit Unique Access Code (UAC). During completion their data is

stored in a Blaise 5 database (.bdbx), which are downloaded on to a ONS system daily. The Blaise datafiles (BDB) are then converted from a Blaise format to an SPSS dataset with an accompanying .sps meta file through an in-house ONS designed VB6 package called 'DataDeliveryExpress'.

- 5.5 New SPSS datasets for both the telephone and the online data are produced daily and delivered to the ONS National Survey Research Team.

### **Data coding and editing**

- 5.6 Where relevant, logic checks and interviewer prompts were incorporated into the script to ensure that answers provided were consistent and sensible. In addition to these checks built into the questionnaire, several checks were run (usually multiple times a week) by the ONS National Survey Research Team on datasets received to highlight any potential inconsistencies. These included ensuring that interviewers had selected the correct person at the sampled address to interview, and that the correct questions were being asked based on routing.
- 5.7 Post-fieldwork editing was also conducted by the ONS National Survey Research Team on the data to account for any inconsistencies in response not covered by the checks built into the questionnaire. For example, the question asking respondents to select the ethnic group to which they belong contained several 'Other (specify)' codes, divided according to different ethnic groups (e.g. 'Any other Asian background'). If the verbatim response provided at this question suggested that the respondent belonged to a different 'Other' category, they were re-coded accordingly. Data checks also included looking at notes interviewers added to the questionnaire highlighting and/or clarifying any unusual responses.

### **Derived variables**

- 5.8 A list of required derived variables was provided to ONS by WG. These are variables that are produced from other data, either collected during the interview or obtained from other sources (i.e. geography and census data). Those produced from data collected through the interview either reflect on an original questionnaire variable but where responses are grouped into fewer categories (e.g. age groups) or reflect on a number of questionnaire variables providing an indicator of a respondent having a certain characteristic (e.g. health related derived variables) or

showing certain behaviours (e.g. sport and activity related derived variables). The full list of derived variables can be found in Appendix L.

### **Data outputs**

- 5.9 An unformatted early dataset was provided to WG in April 2021. The file contained the raw data of the first 250 achieved interviews to allow WG to quality assure the questionnaire routing.
- 5.10 WG provided ONS with detailed specifications for required datasets. These specified the required format and labelling for each questionnaire variable and derived variable included in each dataset. Weighting variables were produced by ONS for the individual- and household-level files. Details on the weighting process and weight variables on the datasets can be found in section 6.
- 5.11 Based on the specification, ONS provided to WG the following SPSS data files:
- An 'All people' household file, based on responses to the enumeration grid and basic demographic information on the whole household.
  - A respondent-level file based on responses to the questionnaire and containing interview data for all respondents.
  - An anonymised sample file, with fieldwork outcomes (e.g. interviewed, refused) and geo-demographic data for all addresses.
  - A non-anonymised file, with geographic data for all responding households.
  - A re-contact file, with the address details of all respondents that agreed to be recalled.
- 5.12 The respondent file was delivered to WG iteratively throughout the year to allow for checking in preparation for final annual sign off. Firstly, an interim data file was delivered containing the first three months of the survey data, and then again after ten months (as part of the online trial delivery). Finally, the 12-month full year data was signed off at the end of May 2022, which will be analysed and results published in July 2022. Each iteration of the data was first quality assured by the ONS National Survey Research Team followed by further checking on the content and format of the data sets being carried out by WG before they were signed off.

## Availability of data

- 5.13 To enable a wider research community to access and use the survey data for further analysis, appropriately anonymised participant and household level dataset will be hosted at the UK Data Archive<sup>11</sup> and the SAIL databank<sup>12</sup>.
- 5.14 Due to changes to the survey following the onset of the pandemic, it is important to consider how the changes may have affected results, and in many cases, results should not be compared with previous editions of the National Survey for Wales. Welsh Government produced a report that looks at [how the changes may have affected results for the health-related lifestyles and behaviours of adults](#).

## 6. Weighting, non-response and analysis

- 6.1 The general approach used in the calculation and application of weighting to the 2021-22 data reflects standard protocols in use for weighting social surveys and is in line with current international best practice.
- 6.2 Design weights that reflect the probability of selection (both for households and individuals) were calculated, before being calibrated to the estimated 2020 population of Wales from the 2018-based population projections<sup>13</sup>, and adjusted to represent the resident population<sup>14</sup>.
- 6.3 For 2021-22, there has been a minor adaptative to the weighting methodology to account for instances where respondents have not responded as “Male” or “Female”, but instead spontaneously said “Don’t know” or “Prefer not to say”.
- 6.4 The basic weighting strategy is consistent with the approaches taken to weighting previous National Surveys from 2016-17 to 2020-21, the 2015 large scale field test<sup>15</sup> and the former Welsh Health Survey.

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<sup>11</sup> <https://www.ukdataservice.ac.uk/>

<sup>12</sup> <https://saildatabank.com/>

<sup>13</sup> The weight calibration for 2021-22 will be based on population projections for 2018 (<https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Projections/Local-Authority/2018-based/populationprojections-by-localauthority-year>).

<sup>14</sup> “Resident population” means people living in private households across Wales. It excludes people living in institutional accommodation (e.g. care homes, halls of residence, prisons, hotels and B&Bs, and army bases). People in institutional accommodation are typically not included in social surveys.

<sup>15</sup> Hanson T., Sullivan S., *National Survey for Wales Field Test, Technical Report*, Welsh Government, Social Research Number 19/2016 <https://gov.wales/sites/default/files/statistics-and-research/2019-02/national-survey-wales-2015-field-test-technical-report.pdf>

- 6.5 Each weight will be produced in two steps:
1. Production of design weight (to compensate for differences in sampling probability).
  2. Weight calibration (to compensate for differences between the sample profile and the known population profile).

6.6 As non-response at household and individual level may cause bias in the results, calibrating the weights is also a way to adjust for the probability of not achieving an interview. This is the same approach as used in previous years.

### **Design weights**

6.7 The first step of the weighting process is to calculate a design weight for both the household and individuals within households, which reflects the probability of selection.

6.8 The weight is calculated as follows:

$$\text{Household design weight} = \frac{N_h}{n_h}$$

where  $n_h$  is the sample size (number of addresses) allocated within stratum  $h$  and  $N_h$  is the population size (number of addresses on the Postcode Address File) within stratum  $h$

6.9 In most cases, the product of the number of dwellings at the address and the number of households at the dwelling will both be one. When necessary the numbers were capped to minimise variability in the design weights and therefore in the calibrated weights. The level of such a cap is informed by analysis of the data and evidence from other surveys.

6.10 The individual design weight adjusts for the random selection of one adult within sampled households containing more than one adult aged 16 or older. The weight is calculated as follows:

$$\text{Individual design weight} = \text{Adjusted household design weight}_i \times m_i$$

where  $m_i$  is the number of people aged 16 and over in household  $i$ .

6.11 To avoid disproportionate variation between addresses in the weights, the weight is capped at 5.

## Calibration of weights

- 6.12 Finally, the adjusted design weights at both the household and individual levels will then be calibrated to the relevant population totals. The population totals used in the calibration usually refer to the same period as the survey itself to give totals by LA for both individuals and households. The latest population figures available for the 2021-22 weights will be 2018-based population projections for 2020 for Wales<sup>16</sup> (adjusted for the resident population).<sup>17</sup> There is some delay in population estimates and projections due to data sources being interrupted during the pandemic (i.e. International passenger survey). In deciding on appropriate calibration groups, these needed to be sufficiently large to limit variation in the weights. For the adult weights, the calibration initially considers age, sex and LA.
- 6.13 Appropriate estimates of the number of private households in Wales are used to calibrate the adjusted household design weight to these known population totals. Analysis will be conducted to explore whether using information such as household composition, in terms of the number of adults and children within a household, would be beneficial in defining calibration groups and in the calibration.
- 6.14 Appropriate population totals are used to calibrate the adjusted individual design weight to represent the population of adults in Wales aged 16 and older. Variables considered for calibration groups included age, sex and local authority (LA). The most appropriate calibration groups will be identified by ensuring that the calibration groups are of a suitable size (i.e. more than 30 responses in the sample).
- 6.15 In recent years, the response options to the sex question (What is your sex?) were changed so that respondents could spontaneously say “Don’t know” or “Prefer not to say”, as well as the traditional “Male” and “Female” options. As a result, this affected the traditional weighting procedure where sex is used to define calibration groups.
- 6.16 A project was carried out to assess the possible options to weight the data in the new format. Options considered were 1) Traditional weighting which would exclude those not responding as male/female 2) Give non male/female respondents a

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<sup>16</sup> The population projections are based on the 2011 Census taking into account births and deaths up until 2018: <https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Projections/Local-Authority/2018-based/populationprojections-by-localauthority-year>

<sup>17</sup> Welsh Government, StatsWales Population Projections, <https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Projections/Local-Authority/2018-based>

weight of 1 representing themselves but no more, 3) Impute male or female for the weighting procedure, 4) Calibrate to different population totals which included non-binary population, 5) Give non male/female respondents, a weight that is the average of the males and females in the same region/age calibration group. All options were considered from an ethical and statistical perspective and option 5 was deemed optimal. This option has been approved by the National Statisticians Date Ethics Committee (NSDEC) for use until the question is reviewed when a harmonised question is available.

- 6.17 To carry out the adjusted weighting strategy, the standard weighting procedure is carried out twice: in one instance those respondents who did not respond male or female and **temporarily** recorded as male, and in the second instance they are **temporary** recorded as female. Each respondent then receives an average of the weights they have been assigned from the two weighting procedures. As a result, Males and Females are assigned a weight either exactly the same or extremely close to the weight they would have usually, and respondents who do not respond as Male or Female, are assigned an aggregate of “Male” and “Female” weight within their age and region calibration group. Checks are then made to ensure the sum of all weights still equals the population total. If not, a scaling adjustment could be needed, however for 21-22 this was not necessary, most probably due to the small counts who didn’t respond as male or female.
- 6.18 This aggregate approach is the most ethical solution as it avoids underrepresentation of these respondents and it does not assume any specific sex through imputation for example. Statistically this is a sound methodology to include respondents who do not fall into the traditional calibration groups. It does however imply that the aggregate weight should be dependent on the relative ratio of the over/under sampling of male and female respondents, when there is no reason to suggest this (Kennedy *et al.*, 2020).
- 6.19 The “Don’t know” and “Prefer not to say” response options remain unchanged in the data, the temporary change only occurs during the weighting process and never in the working dataset or published data. As a result, these respondents will be included in all resulting analysis except for anything with a sex breakdown. In terms of how many respondents are affected, in 2021-22, 1 respondent said “Don’t know” and 8 respondents responded “Prefer not to say” (a total of 0.07% of the sample).

6.20 The following variables were used for the calibration of the various weights:

#### 6.20.1 **Adult weight**

- Local authority (22)
- Age
  - 16-19 years
  - 20-24 years
  - 25-29 years
  - 30-34 years
  - 35-39 years
  - 40-44 years
  - 45-49 years
  - 50-54 years
  - 55-59 years
  - 60-64 years
  - 65-69 years
  - 70-74 years
  - 75 years or older
- Sex
  - Male
  - Female

#### 6.20.2 **Child weight**

- Region (4)
  - North West Wales
  - Mid Wales
  - South West Wales
  - South East Wales
- Age (3-17) – 15 separate groups
- Sex
  - Male

- Female

### 6.20.3 Household weight

- Local authority (22)
- Household Composition
  - 1 person household (no child)
  - 2 person household with child
  - 2 person household (no child)
  - 3 person household with 2 children
  - 3 person household with 1 child
  - 3 person household (no children)
  - 4 person household with children
  - 4 person household (no children)
  - 5+ person household

### 6.20.4 Population weight

- Local authority (22)
- Age
  - 0-4 years
  - 5-10 years
  - 11-15 years
  - 16-19 years
  - 20-24 years
  - 25-29 years
  - 30-34 years
  - 35-39 years
  - 40-44 years
  - 45-49 years
  - 50-54 years
  - 55-59 years
  - 60-64 years
  - 65-69 years

- 70-74 years
- 75 years or older
- Sex
  - Male
  - Female

6.21 The weights produced for 2021-22 will be: a household weight, an adult weight, a child weight, and a population weight. A separate adult weight will be provided for each sub-sampled module to allow the accurate estimation of totals from the responses to the questions in each sub-sample. Such weights will account for the difference in the probability of selection between the main survey and for the sub-sample. Un-grossed versions of each of these weights are also available, which give a weighted achieved sample size equal to the un-weighted achieved sample size. Because un-grossed and calibrated weights were initially found to produce slightly different estimates when producing the weights for 2016-17, all four quarters will be scaled up at the same time to the overall sample size in line with previous years. The un-grossed weights are then checked to ensure they sum up to the correct sample totals. The same will be done for 2021-22 weights. Appendix J provides an overview of all weights which will be calculated for the 2021-22 datasets.

6.22 The following tables provide 2018-based population projection totals for 2020:

**Table 6.1: Projected 2020 resident population by age and sex**

Age by sex		N	%
Male	0-4	84,817	2.7%
Male	5-10	112,673	3.6%
Male	11-15	92,840	3.0%
Male	16-19	66,690	2.2%
Male	20-24	99,749	3.2%
Male	25-29	102,100	3.3%
Male	30-34	96,456	3.1%
Male	35-39	90,597	2.9%
Male	40-44	84,607	2.7%
Male	45-49	93,396	3.0%
Male	50-54	104,710	3.4%

<b>Age by sex</b>		<b>N</b>	<b>%</b>
Male	55-59	107,202	3.5%
Male	60-64	95,232	3.1%
Male	65-69	86,675	2.8%
Male	70-74	86,796	2.8%
Male	75-79	60,147	1.9%
Male	80+	67,275	2.2%
Female	0-4	81,207	2.6%
Female	5-10	107,216	3.5%
Female	11-15	88,287	2.8%
Female	16-19	60,781	2.0%
Female	20-24	89,910	2.9%
Female	25-29	97,972	3.2%
Female	30-34	96,861	3.1%
Female	35-39	93,543	3.0%
Female	40-44	87,431	2.8%
Female	45-49	98,247	3.2%
Female	50-54	111,032	3.6%
Female	55-59	113,548	3.7%
Female	60-64	101,018	3.3%
Female	65-69	91,917	3.0%
Female	70-74	92,749	3.0%
Female	75-79	67,827	2.2%
Female	80+	90,323	2.9%
<b>All</b>		<b>3,101,831</b>	<b>100.0</b>

**Table 6.2: Projected 2020 resident population by age with Local authority**

<b>Local authority</b>	<b>0-24</b>	<b>25-64</b>	<b>65-74</b>	<b>75+</b>
Isle of Anglesey	17,649	33,684	9,861	7,847
Gwynedd	34,854	58,519	14,773	12,683
Conwy	2,8080	55,559	16,632	14,551
Denbighshire	25,344	46,214	12,787	10,075

Flintshire	42,915	79,957	18,406	14,215
Wrexham	38,469	69,222	14,971	11,457
Powys	19,139	31,251	9,909	8,148
Ceredigion	31,853	59,730	17,532	14,409
Pembrokeshire	49,706	92,771	24,395	19,069
Carmarthenshire	74,439	121,661	25,659	21,430
Swansea	39,165	74,119	16,594	12,531
Neath Port Talbot	39,400	75,368	16,285	12,921
Bridgend	36,111	6,7894	15,529	12,218
Vale of Glamorgan	121,316	18,3102	28,319	22,341
Cardiff	70,184	12,3704	25,733	19,304
Rhondda Cynon Taf	51,570	93,985	19,926	14,935
Merthyr Tydfil	18,824	3,6605	7660	5,925
Caerphilly	26,316	47,756	10,436	8,286
Blaenau Gwent	22,793	46,706	12,736	10,777
Torfaen	46,872	81,317	14,257	11,752
Monmouthshire	31,557	63,425	19,434	15,948
Newport	17,614	31,403	6,303	4,750
<b>All</b>	<b>884,170</b>	<b>157,3952</b>	<b>358,137</b>	<b>285,572</b>

**Table 6.3: Projected 2020 household composition estimates**

<b>Group description</b>	<b>Group size</b>
1 person household (no children)	445,268
2 person household with child	55,587
2 person household without children	430,238
3 person household with 2 children	25,368
3 person household 1 child	85,855
3 person household (no children)	92,310
4 person household with children	129,705
4 person household (no children)	33,958
5 person household	79,935

<b>Total</b>	1,378,226
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### Weighting the online trial

6.23 For the weighting of the online trial the calibrated household weights from the telephone sample were used as design weights for the online sample. These were then adjusted for non-response to the online questionnaire. The adjusted weights were then used to create adult/child weights based on household compositions. All were calibrated to population totals using the usual methodology.

### Design effects and factors

6.24 Design effects and factors have been calculated for several variables allowing effective sample sizes to be produced at a national and local level. Table 6.4 provides an overview of the average design effect at local authority level based on a number of selected questions that were asked of the whole sample of respondents.

**Table 6.4: Design effects and effective sample sizes<sup>18</sup>**

<b>Local authority</b>	<b>Design effect</b>	<b>Effective sample size</b>
Isle of Anglesey	1.09	342
Gwynedd	1.26	374
Conwy	1.10	377
Denbighshire	1.26	285
Flintshire	1.30	418
Wrexham	1.32	350
Ceredigion	1.24	281
Pembrokeshire	1.21	442
Carmarthenshire	1.27	583
Swansea	1.37	664
Neath Port Talbot	1.30	439
Bridgend	1.19	430
Vale of Glamorgan	1.30	353

<sup>18</sup> The variables used to calculate average design effects were all asked of the full sample. These were DvEcoStat3, DvFGHealth1, Dvsmokec, Dvmvpa150, DvFGLonely, DvLDAny, DvFinBilCred, GenHealth, GpOverSat, Tenure, WeiSpk, IntPersUse, WbSatLife, CvFPFoodB, Alc12m, HspHadApp, DvFGHealth4, DvPrtAny, DvFGComm, LaBelong

<b>Local authority</b>	<b>Design effect</b>	<b>Effective sample size</b>
Cardiff	1.00	1,166
Rhondda Cynon Taf	1.27	609
Caerphilly	1.31	479
Blaenau Gwent	1.34	277
Torfaen	1.31	266
Monmouthshire	1.46	298
Newport	1.49	375
Powys	1.25	995
Merthyr Tydfil	1.19	298
<b>Average</b>	<b>1.27</b>	<b>459</b>
<b>Full sample</b>	<b>1.48</b>	<b>8,500</b>

6.18 Table 6.5 shows the design effects, design factors and confidence intervals for a range of questions in the 2021-22 survey

**Table 6.5: Design effects, design factors and confidence intervals for a range of 2021-22 survey estimates<sup>19</sup>**

Variable name	Variable label	Value label	Design effect	Design factor	95 % Confidence Interval	
					Lower	Upper
DvEcoStat3	Economic status (3 classifications)	In employment	0.94	0.97	55.8%	57.5%
		Unemployed	2.47	1.57	1.9%	2.7%
		Economically inactive	0.90	0.95	40.2%	41.9%
		Don't know/refused	0.53	0.73	0.0%	0.1%
		Total	0.89	0.95		
DvFinBilCred	Household/Pensioner deprivation - Ability to keep up with bills and credit commitments at present	Keeping up with all bills and commitments without any difficulties	1.66	1.29	74.9%	76.8%
		Keeping up with all bills and commitments but it is a struggle from time to time	1.68	1.30	17.1%	18.8%
		Keeping up with all bills and commitments but it is a constant struggle	1.41	1.19	3.3%	4.1%
		Falling behind with some bills and credit commitments	1.57	1.25	1.0%	1.5%
		Having real financial problems and have fallen behind with many bills and credit commitments	1.33	1.15	0.3%	0.6%
		Have no bills	6.47	2.54	0.2%	0.6%
		Don't know/refused	3.86	1.96	0.2%	0.6%
		Total	1.61	1.27		
GenHealth	Health in general	Very good	1.60	1.26	34.8%	36.9%
		Good	1.54	1.24	35.4%	37.4%

<sup>19</sup> The variables used to calculate average design effects were all asked of the full sample. These IntPersUse, WelSpk, Dvsmokec, Dvalcushibi, Dvmvpa150, DvFGHealth1

Variable name	Variable label	Value label	Design effect	Design factor	95 % Confidence Interval	
					Lower	Upper
WbSatLife	Well-being – Overall satisfaction with life (0-10 scale)	Fair	1.25	1.12	18.5%	20.1%
		Bad	1.03	1.02	6.0%	6.9%
		Very bad	1.02	1.01	1.6%	2.2%
		Don't know/refused	1.36	1.17	0.0%	0.2%
		Total	1.50	1.22		
		0	1.16	1.08	0.6%	0.9%
		1	1.02	1.01	0.2%	0.4%
		2	1.05	1.03	0.5%	0.8%
		3	1.48	1.22	1.2%	1.7%
		4	1.38	1.18	1.8%	2.4%
		5	1.37	1.17	6.2%	7.2%
		6	1.72	1.31	6.4%	7.6%
		7	1.73	1.31	17.5%	19.2%
		8	1.54	1.24	29.7%	31.7%
		9	1.49	1.22	13.9%	15.5%
		10	1.41	1.19	16.3%	17.9%
GpOverSat	GP - Overall satisfaction with care received	Don't know	1.45	1.2	0.2%	0.5%
		Total	1.41	1.19		
		Very satisfied	1.57	1.25	56.4%	60.4%
		Fairly satisfied	1.63	1.28	26.0%	29.6%
		Neither satisfied nor dissatisfied	1.60	1.27	3.6%	5.3%
		Fairly dissatisfied	1.74	1.32	4.6%	6.4%
		Very dissatisfied	1.38	1.18	3.0%	4.4%
Don't know/refused	0.96	0.98	0.0%	0.3%		

Variable name	Variable label	Value label	Design effect	Design factor	95 % Confidence Interval	
					Lower	Upper
DvFGLonely	People feeling lonely (FG)	Total	1.44	1.20		
		Not lonely	1.51	1.23	28.0%	30.0%
		Sometimes lonely	1.52	1.23	57.1%	59.3%
		Lonely	1.49	1.22	12.0%	13.4%
		Don't know	1.57	1.25	0.0%	0.1%
Alc12m_1	Alcohol - usual weekly alcohol consumption: higher risk - binary	Total	1.50	1.23		
		Yes	1.52	1.23	77.8%	80.3%
		No	1.53	1.24	19.6%	22.0%
		Don't know/refused	1.03	1.02	0.0%	0.2%
DvFGHealth1	Health - People with fewer than 2 healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active).	Total	1.02	1.01		
		Yes	1.45	1.20	87.2%	89.1%
		No	1.29	1.14	6.0%	7.4%
		Don't know/refused	1.65	1.29	4.5%	5.9%
DvFGHealth4	Health - People with 4 or 5 healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active).	Total	1.30	1.14		
		Yes	1.6	1.27	64.0%	66.9%
		No	1.62	1.27	27.9%	30.8%
		Don't know/refused	1.65	1.29	4.5%	5.9%
HspHadApp	Hospital - Had an appointment at an NHS hospital in last 12 months	Total	1.26	1.12		
		Yes	1.43	1.2	34.6%	36.9%
		No	1.44	1.2	63.0%	65.2%
		Don't know/refused	1.16	1.08	0.0%	0.2%

Variable name	Variable label	Value label	Design effect	Design factor	95 % Confidence Interval	
					Lower	Upper
DvSmokec	Derived variable – Currently smoke either daily or occasionally	Total	1.47	1.21		
		Yes	1.64	1.28	85.9%	87.9%
		No	1.64	1.28	12.0%	14.0%
		Don't know/refused	1.01	1.01	0.0%	0.2%
Dvmvpa150	Derived variable – MVPA meets guidelines 150 minutes weekly	Total	1.64	1.28		
		Yes	1.47	1.21	41.1%	44.0%
		No	1.47	1.21	56.0%	58.9%
		Don't know/refused	0.72	0.85	0.0%	0.1%
IntPersUse	Internet - Personal use of internet at home, work or elsewhere	Total	1.39	1.18		
		Yes	0.57	0.76	91.3%	92.1%
		No	0.57	0.76	7.9%	8.7%
		Don't know/refused	0.33	0.57	0.0%	0.0%
WelSpk	Welsh language - Speak Welsh	Total	0.56	0.75		
		Yes	1.47	1.21	17.7%	19.3%
		No	1.44	1.2	63.3%	65.2%
		No, but have some Welsh speaking ability	1.62	1.27	16.4%	18.0%
LaBelong	Community cohesion – Belonging to local area	Don't know	0.55	0.74	0.0%	0.0%
		Total	1.51	1.23		
		Strongly agree	1.48	1.22	43.9%	46.0%
		Tend to agree	1.57	1.25	33.1%	35.1%
		Neither agree nor disagree	1.63	1.28	11.1%	12.5%
		Tend to disagree	1.8	1.34	5.9%	7.0%
Strongly disagree	1.67	1.29	2.0%	2.6%		

Variable name	Variable label	Value label	Design effect	Design factor	95 % Confidence Interval	
					Lower	Upper
DvFGComm	Derived variable – Have sense of community (belonging; different backgrounds get on, treat with respect)	Don't know	1.28	1.13	0.3%	0.6%
		Total	1.48	1.22		
		Yes	1.56	1.25	61.6%	63.7%
		No	1.58	1.26	33.4%	35.5%
		Don't know/refused	1.44	1.2	2.6%	3.3%
		Total	1.19	1.09		
DvPrtAny	Derived variable – Participating in any activity	Yes	1.24	1.11	54.6%	56.5%
		No	1.23	1.11	42.7%	44.6%
		Don't know/refused	1.56	1.25	0.6%	1.0%
		Total	1.92	1.38		
DvLDAny	Derived variable – Latent demand for any activity	Yes	1.63	1.28	29.5%	31.6%
		No	1.63	1.28	68.1%	70.1%
		Don't know/refused	2.23	1.49	0.2%	0.5%
		Total	1.64	1.28		
Tenure	Accommodation - Tenure	I/we own it or live with the person who owns it	1.64	1.28	73.0%	74.9%
		It is rented from the local council	1.30	1.14	4.1%	4.9%
		It is rented from a housing association or housing trust	1.47	1.21	7.3%	8.5%
		It is rented from a private landlord	2.03	1.42	11.8%	13.3%
		Other (e.g. live rent free or home comes with job)	1.23	1.11	0.7%	1.0%
		Don't know/refused	6.60	2.57	0.1%	0.4%
		Total	2.16	1.47		
CvFPFoodB	Food Poverty – Has household received food from a food	Yes, I/we have	1.61	1.27	1.9%	2.5%
		No, but I/we wanted to	1.27	1.13	1.2%	1.7%

Variable name	Variable label	Value label	Design effect	Design factor	95 % Confidence Interval	
					Lower	Upper
	bank in the last 12 months?	No, I/we didn't need to	1.46	1.21	95.9%	96.7%
		Don't know/refused	1.56	1.25	0.00%	0.00%
		Total		1.56	1.25	

## **7. Appendices**

Appendix A – Kish Grid

Appendix B – Sub-sampling specification

Appendix C – Survey Timings

Appendix D - WG Advance Letter

Appendix E - Purpose leaflet

Appendix F - A5 Interviewer introduction postcard

Appendix G - KtN/Called today card

Appendix H - Appointment card

Appendix I - Chaser letter

Appendix J - Conversion letter

Appendix K - Helpline leaflet

Appendix L - Data linkage flowchart

Appendix M – Derived Variables for Final dataset

Appendix N – Weights produced for 21-22 final data

Appendix O – Outcome code descriptions

## Appendix A: Kish Grid

		Number of adults aged 16 or over in household												
		2	3	4	5	6	7	8	9	10	11	12	13	14
Address Number on Address List	1	1	1	2	1	2	5	7	3	2	6	9	7	1
	2	2	3	1	2	4	3	6	8	4	4	1	9	13
	3	2	2	3	5	3	7	5	1	10	7	12	4	9
	4	1	2	4	4	5	2	8	6	3	11	8	5	3
	5	2	1	2	3	1	4	1	2	1	3	6	12	8
	6	1	3	1	1	6	1	3	7	9	5	2	11	4
	7	1	2	3	3	4	6	4	9	6	2	5	8	6
	8	2	1	4	4	1	7	2	4	8	8	11	2	12
	9	1	3	4	5	3	1	4	5	5	10	7	6	11
	10	2	3	1	2	5	6	7	8	7	9	10	13	2
	11	2	2	3	4	2	3	5	4	6	1	4	10	14
	12	1	1	2	2	6	5	2	1	5	5	3	1	5
	13	2	1	4	1	4	4	1	7	2	8	11	3	7
	14	1	2	2	3	1	2	3	2	10	4	10	5	10
	15	2	3	3	5	5	2	8	3	7	6	5	10	14
	16	1	2	1	3	3	1	6	5	3	10	1	1	5
	17	1	1	3	5	6	4	8	9	4	7	9	9	6
	18	2	3	4	4	2	7	2	6	9	3	4	2	13
	19	2	3	1	1	2	3	7	8	8	1	2	3	4
	20	1	2	2	2	5	5	3	2	1	2	8	12	10
	21	2	1	2	4	3	6	1	1	10	11	7	8	7
	22	1	2	4	5	4	2	5	6	8	9	6	4	8
	23	2	3	3	2	1	7	4	7	9	4	12	13	9
	24	1	1	1	3	6	3	6	5	6	2	3	11	3
	25	2	3	1	1	4	4	8	3	1	9	5	6	1
	26	1	1	3	1	5	6	2	9	5	10	12	7	2
	27	1	2	4	2	1	5	5	4	3	5	6	4	11
	28	2	3	2	5	2	1	3	8	7	8	7	5	12
	29	2	1	1	3	6	5	7	9	4	6	10	1	12
	30	1	2	4	4	3	1	4	4	2	7	9	11	11
	31	1	1	3	1	2	3	6	3	2	11	1	7	1
	32	2	3	2	2	4	7	1	1	4	1	8	9	13
	33	2	2	1	5	3	2	7	6	10	3	2	12	9
	34	1	2	3	4	5	4	6	2	3	4	11	8	3
	35	2	1	4	3	1	6	5	7	1	7	4	2	8
	36	1	3	2	1	6	7	8	5	9	11	3	6	4
	37	1	2	1	3	4	1	1	8	6	3	9	13	6
	38	2	1	3	4	1	6	3	4	8	5	1	10	2
	39	1	3	4	5	3	3	4	1	5	2	12	3	5
	40	2	3	2	2	5	5	2	7	7	8	8	5	7

## Appendix B: Sub-sampling specification

Topic	Subsample	Notes
Hospitals	10,000	Proportionate sample by Local health board
Dental appointments	8,000	Proportionate sample by Local health board. selected from hospital subsample
GP services, BMI, Diet, Alcohol, Smoking, and e-cigarette use, and Physical activity (GPFG)	6,000	Split equally by health board, same subsample for each topic, within dentist subsample
Hearing impairment and eye care	4,500	Proportionate sample by Local health board. selected from GPFG subsample
Active Travel	10,000	Initially sample not chosen alongside GPFG sample, but subsampling removed in June
Climate Emergency Views	4,000	Sample not chosen alongside GPFG sample
Internet Skills	6,000	Sample not chosen alongside GPFG sample
Satisfaction with health services	4,000	Proportionate sample
Companion animals	6,000	Random Sample
Children's rights	2,000	Asked of all parents plus 2k of non-parents
Satisfaction with education system	2,000	Asked of all parents plus 2k of non-parents
Satisfaction with Welsh Government	4,000	Proportionate sample to Welsh regions
ACW Arts module	8,000	Proportionate sample

## Appendix C: Survey timings

Table C.1: 2021-22 National Survey mean and median times by questionnaire section. Mean median figures are based on cases routed to the relevant section (Sample size) not including respondents that were not sampled for sub-sampled modules. All times are given in seconds. Mean and median figures have been rounded to the nearest tenth. These figures are excluding outliers

Section name	Sample size	Mean	Median
Core – National identity	12,577	28.9	23
Core – Ethnicity	12,570	15.7	12
Core – Welsh language	12,273	29.8	22
Core – Tenure	12,347	24.3	21
Local authorities	12,560	50.5	45
Access to services and facilities	12,329	46.5	41
Democracy and understanding of local councils	12,365	48.5	45
Community cohesion	12,331	63.6	57
Community safety	12,322	48.9	44
Hazards – noise	11,377	19.6	14
Local environment quality	12,357	62.5	52
Climate emergency – views*	3,953	118.8	113
Companion animals*	7,069	33.4	16
Core – Economic status and qualifications	12,151	55.4	50
Employability and support	6,045	24.2	9
Post-compulsory education and training	12,235	43.5	25
Internet use	12,301	20.5	17
Internet skills*	5,394	78.0	79
Volunteering	12,263	12.9	12
Universal credit	8,684	14.5	11
Core – Household material deprivation – non - pensioner	7,890	87.2	78
Core – Household material deprivation - pensioner	4,564	115.2	88
Food poverty	12,229	29.7	27
Primary schools	1,402	123.3	114.5
Secondary schools	1,269	83.3	84
Educational aspirations	1,022	43.1	37
Child physical activity	2,125	60.1	56
Children’s rights*	4,385	20.4	19
Core – Health demographic questions	12,394	17.7	15
Pregnant	1,537	6.8	5
BMI (FG)*	6,264	25.2	23
Core – Long – term illnesses	12,497	60.7	40
Diet (FG)*	6,331	89.9	80
Alcohol (FG)*	6,374	68.3	56.5
Smoking and e-cigarette use (FG)*	6,218	28.3	21
Physical activity (FG)	6,397	106.5	101
Active travel*	10,517	30.9	29
Sport Wales (FG)	12,130	78.4	59

Core - ONS4 - Well-being	12,498	70.3	61
Loneliness (FG)	12,463	55.7	52
GP services*	6,197	95.7	86
Hospital appointments*	10,360	28.9	14
Dental appointments*	8,310	55.7	48
Hearing impairment*	4,837	22.0	15
Eye care*	4,893	30.9	26
Satisfaction with health services*	4,136	36.1	30
Satisfaction with education system*	4,444	29.2	25
Satisfaction with Welsh Government*	3,977	27.9	24
ACW – Attendance*	8,384	83.7	64
ACW – Participation*	8,088	25.6	15
ACW – Welsh language arts events*	2,974	7.5	6
ACW – Barriers*	8,431	27.4	22
ACW – Attitudes to arts and culture*	8,326	150.3	144
Core - Recontact	12,434	60.2	51
End of interview	2,185	309.2	200
Core – Interviewer check information	10,352	154.5	112
<b>Overall</b>	<b>12,551</b>	<b>2,040</b>	<b>1,938</b>

\*Subsampled sections

## Appendix D: WG Advance Letter

### Help improve local services and receive a £15 thank you

<NAME>  
<ADDRESS LINE 1>  
<ADDRESS LINE 2>  
<ADDRESS LINE 3>  
<TOWN>  
<COUNTY>



Dear Resident,

Your address has been selected for the **National Survey for Wales**. To say thank you for taking part in the survey, we will send a **£15 gift voucher**.

The survey takes place over the telephone, so we need your phone number.

#### Please provide your phone number:

1 Go to our secure web page: [www.gov.wales/surveywales](http://www.gov.wales/surveywales)

2 Enter this access code:

3 Then enter your phone number

Use a calculator if you need it. Phone numbers in Wales start with 01 or 02.

Case studies will be published on the website. If we do hear from you, we may use a short, social media-style version of your comments to help improve services.

The survey is easy to complete, and you do not need any special knowledge to do it. You can take part in English or Welsh. Answers are kept confidential and are only used for research purposes.

This is your chance to give your views on things like health, the NHS, schools, council services, and your local area. Welsh Government, local councils, and NHS Wales will use the results to take action on the coronavirus situation and other issues.

The survey is carried out by the Office for National Statistics (ONS), on behalf of Welsh Government. It is separate from the 2021 census, which is also carried out by ONS.

This is an important study. Thank you for helping us at this difficult time.

**Dr Steven Marshall**

Chief Social Research Officer, Welsh Government

NSW\_ADVLET1E 02/21



Happy to communicate in  
Welsh or English.



Welsh Government, Cathays Park, Cardiff, CF10 3NQ

## Helpu gwella gwasanaethau lleol a chael £15 fel diolch

<NAME>  
<ADDRESS LINE 1>  
<ADDRESS LINE 2>  
<ADDRESS LINE 3>  
<TOWN>  
<COUNTY>



Annwyl Breswlydd,

Mae eich cyfeiriad wedi'i ddewis ar gyfer **Arolwg Cenedlaethol Cymru**. I ddiolch ichi am gymryd rhan, byddwch yn cael **taieb rhodd sy'n werth £15**.

Mae'r arolwg yn cael ei gynnal dros y ffôn, felly bydd angen inni gael eich rhif ffôn.

### Rhowch eich rhif ffôn os gwelwch yn dda:

- 1 Ewch i'r gwefan ddiogel: [www.llyw.cymru/arolwgymru](http://www.llyw.cymru/arolwgymru)
- 2 Nodwch y cod mynediad hwn:
- 3 Yna nodwch eich rhif ffôn.

Neu ffoniwch ni ar Rhadffon **0800 496 2119**.

**SAMPLE**  
Owch eich rhif ffôn os fel... Os ydych chi'n gwybod gennych, efallai...  
yn y... chi, sydd... eich rhif ffôn.

Mae'r arolwg yn hawdd i'w wrnedd a does dim angen unrhyw wybodaeth arbennig arnoch. Gallwch gymryd rhan yn Gymraeg neu yn Saesneg. Mae'r atebion yn gyfrinachol ac yn cael eu defnyddio ar gyfer ymchwil yn unig.

Dyma'ch cyfle i roi eich barn ar bethau fel iechyd, y GIG, ysgolion, gwasanaethau cyngor, a'ch ardal leol. Bydd y canlyniadau'n cael eu defnyddio gan sefydliadau fel Llywodraeth Cymru, cynghorau lleol a GIG Cymru i weithredu ar sefyllfa'r coronafeirws a materion eraill.

Mae'r arolwg yn cael ei gynnal gan y Swyddfa Ystadegau Gwladol (ONS), ar ran Llywodraeth Cymru. Mae'n wahanol i gyfrifiad 2021, sydd hefyd yn cael ei gynnal gan yr ONS.

Mae hon yn astudiaeth bwysig. Diolch am ein helpu ar yr adeg anodd hon.

**Dr Steven Marshall**

Prif Swyddog Ymchwil Gymdeithasol, Llywodraeth Cymru



Hapus i gyfathrebu yn y  
Gymraeg neu yn Saesneg.



Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ

NSW\_AdvLeNW 02/21

## Appendix E: Purpose leaflet

### The National Survey for Wales is taking place right across Wales.

This is your chance to tell us about your experiences and opinions on a range of issues including health care, leisure, sports, council services, and your local area. Your answers will help us to take action on things that are important to you.

This study is being conducted by the Office for National Statistics (ONS) on behalf of the Welsh Government and other public organisations. ONS is the independent government department responsible for producing statistics.

### We value your contribution.

We need to talk to people of different ages, from different walks of life, and living in all parts of Wales. Your contribution is voluntary but is very important to us because we can't find a place to do any other work. We need your opinions no matter what your background or experience.

### Why has my household been chosen?

Households are chosen at random to take part in the survey. The survey is chosen from the Royal Mail's public register. A list of all addresses in Wales is used.

### What happens next?

Please provide your phone number so we can call to arrange a time to do the survey. Instructions on how to do this are in the accompanying leaflet or just give us a call on Freephone 0800 496 2119.

The interviewer will randomly select one person in your household, aged 16 or over,

to take part in the survey. If the interviewer phones at a time when you are busy, they will be happy to make an appointment for another time.

The survey lasts around 30 minutes. To say thank you for taking part in the survey, we'll send a **£15 gift voucher**.

### Confidentiality

The information you give us will be treated as confidential and only used for research purposes. More details on the survey, including how we store and process information, can be found on our website: [www.gov.wales/surveywales](http://www.gov.wales/surveywales)

### Can I be interviewed in Welsh?

Yes. Please tell the interviewer or contact us on freephone **0800 496 2119**.

### What if I have any other questions?

- Please ask the interviewer, or
  - Call **0800 496 2119** (freephone), or
  - Email [nationalsurveyforwales@ons.gov.uk](mailto:nationalsurveyforwales@ons.gov.uk)
- If you would like to contact Welsh Government directly please email [surveys@gov.wales](mailto:surveys@gov.wales) or call **0300 060 4400**.

WG\_NSW\_PL 03/21

### Did you know?

**89%** satisfied with GP care



**26%** volunteer for an organisation



National Survey for Wales, 2019-20

National Survey for Wales



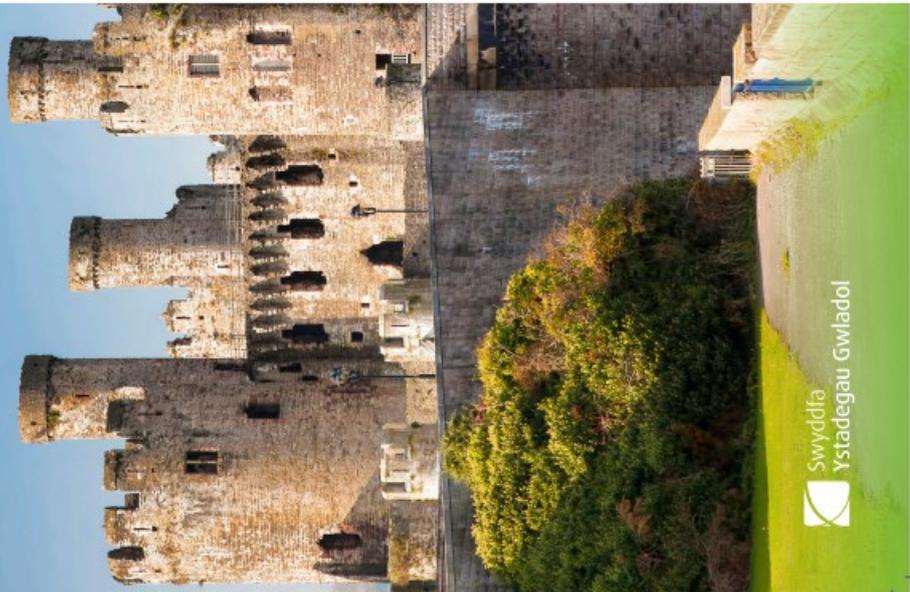
Llywodraeth Cymru  
Welsh Government

Office for National Statistics

# Arolwg Cenedlaethol Cymru



Llywodraeth Cymru  
Welsh Government



Swyddfa  
Ystadegau Gwladol

## Mae Arolwg Cenedlaethol Cymru yn astudiaeth o bobl ledled Cymru gyfan.

Dyma eich cyfle i sôn am eich profiadau a'ch barn ar amrywiaeth o faterion megis iechyd, y GIG, chwaraeon, gwasanaethau'r cyngor a'ch ardal leol. Bydd eich atebion yn ein helpu i weithredu ar bethau sy'n bwysig yn eich barn chi.

Cynhelir yr ymchwil hon gan y Swyddfa Ystadegau Gwladol (SYG) ar ran Llywodraeth Cymru a sefydliadau cyhoeddus eraill. Adran annibynnol o llywodraeth, sy'n gyfrifol am gynhyrchu ystadegau swyddogol, yw'r SYG.

### Rydym yn gwerthfawrogi eich cyfraniad

Mae angen i ni siarad â phobl o oeddrannau gwahanol, o gefndiroedd gwahanol ac sy'n byw ym mhob rhan o Gymru. Mae eich cyfraniad yn wirfoddol, ond mae'n bwysig iawn i ni oherwydd ni allwn roi eich lle i unrhyw un arall. Mae angen eich barn arnom beth bynnag yw eich cefndir neu'ch profiad.

### Pam bod fy nghartref wedi cael ei ddewis?

Caiff cartrefi eu dewis ar hap i gymryd rhan yn yr arolwg. Cânt eu dewis o restr cyfeiriadau'r Post Brenhinol o'r holl gyfeiriadau yng Nghymru, sydd ar gael i'r cyhoedd.

### Beth sy'n digwydd nesaf?

Rhowch eich rhif ffôn fel y gallwn drefnu amser cyfleus i gynnal yr arolwg. Mae cyfarwyddiadau ar sut i wneud hyn yn y llythyr, neu ffoniwch ni ar rhadffôn  
**0800 496 2119.**

Bydd y cyfweilydd yn dewis un person yn eich cartref, sy'n 16 oed neu hŷn, ar hap i

gymryd rhan yn yr arolwg. Os bydd y cyfweilydd yn eich ffonio ar adeg pan fyddwch chi'n gyswrtio, bydd yn hapus i drefnu gyda chi gyfer amser arall.

Byddwch yn para tua 30 munud. I gael eiddo i'ch am gymryd rhan yn yr arolwg, byddwch yn cael **taleb rhodd** gwerth **£15.**

### Ed

Caiff eiddoedd y byddwch yn ei rhoi i'ch defnyddio a'i defnyddio at adibenion ymchwil yn unig. Ceir rhagor o eiddoedd aros gan gynnwys sut i'w defnyddio a phrosesu'r wybodaeth a'w defnyddio.

Yn eiddoedd aros gan gynnwys sut i'w defnyddio a'w defnyddio.

### Arolwg Cymru/arolwgCymru

Ynghyfweld yn Gymraeg?  
Gallwch ymweld wrth y cyfweilydd neu ffonio'n rhadffôn.

### 9.

### Beth bydd gennyf unrhyw gwestiynau

- eraill!
- Golyhwych i'r cyfweilydd, neu ffonio **0800 496 2119**, neu

**arolwgCenedlaetholCymru@ons.gov.uk**

hofferch gysylltu â Llywodraeth Cymru, e-bostiwch **arolygon@llyw.cymru** neu ffonio **0300 060 4400.**

### Oeddech chi'n gwybod?



**26%** yn gwirfoddoli i sefydliad

**89%** yn fodlon gyda'u gofal meddyg teulu



Arolwg Cenedlaethol Cymru, 2019-20

## Appendix F: A5 Interviewer introduction postcard



Office for  
National Statistics  
Swyddfa  
Ystadegau Gwladol



Dear Resident

We recently wrote to you about the **National Survey for Wales**.

This study is being carried out for the Welsh Government by the Office for National Statistics (ONS).

I will be your interviewer for the study. The study takes place over the telephone, so I would be grateful if you could let me have your phone number. **Please call or text me** to provide your phone number and arrange a convenient time to do the survey.

To say thank you for taking part, we will send a **£15 gift voucher**.

I look forward to speaking to you soon.

Annwyl Breswyllydd

Ysgrifennom atoch yn ddiweddar ynglŷn ag **Arolwg Cenedlaethol Cymru**.

Mae'r astudiaeth hon yn cael ei chynnal gan y Swyddfa Ystadegau Gwladol (SYG) ar ran Llywodraeth Cymru.

Fi fydd eich cyfwelydd ar gyfer yr astudiaeth. Cynhelir yr astudiaeth dros y ffôn, felly byddwn yn ddiolchgar pe gallech roi eich rhif ffôn i mi. **Ffoniwch neu anfonwch neges destun ataf** i roi eich rhif a threfnu amser cyfleus i gynnal yr arolwg.

Byddwch yn derbyn **taleb gwerth £15** i ddiolch i chi am gymryd rhan.

Edrychaf ymlaen at siarad gyda chi cyn hir.

My phone number / Rhif ffôn: \_\_\_\_\_

My name / Fy enw: \_\_\_\_\_

NSW\_ONS\_Int\_intro\_card 03/21



# Appendix G: KtN/Called today card

Office for National Statistics  
Swyddfa Ystadegau Gwladol

Llywodraeth Cymru  
Welsh Government

Date: ...../...../.....

**Please get in touch...**

Hello,

You were recently invited to take part in the National Survey for Wales. I visited today to explain the study. In these challenging times, we need more than ever to get out about the issues facing people across Wales. The survey takes place over the telephone, so **I need your phone number**. To say thank you for taking part, we will send a **£15 nift voucher**.

**Please provide your phone number by either:**

- Visiting [www.gov.wales/surveywales](http://www.gov.wales/surveywales)  
You will need your household access code which is: .....
- Calling me directly on: .....
- Calling the office for free on **0800 496 2119**
- Emailing [nationalsurveyforwales@ons.gov.uk](mailto:nationalsurveyforwales@ons.gov.uk)

Kind regards,

Field interviewer, Office for National Statistics

[www.gov.wales/surveywales](http://www.gov.wales/surveywales)

NSW\_KtN\_CT 03/21

**SAMPLE**

---

Office for National Statistics  
Swyddfa Ystadegau Gwladol

Llywodraeth Cymru  
Welsh Government

Dyddiad: ...../...../.....

**Cysylltwch â ni...**

Helo,

Yn ddiweddar cawsoch eich gwahodd i gymryd rhan yn Arolwg Cenedlaethol Cymru. Ymwelais â chi heddiw i es astudiaeth. Yn ystod y cyfnod heriol hwn mae'n bwysicach nag erioed inni ddarganfod beth yw'r materion sy'n wynebu pobl Cymru. Cynhelir yr astudiaeth dros y ffôn, felly **rwyf angen eich ffôn**. Byddwch yn derbyn **taleb gwerth £15** i ddiolch i chi i gymryd rhan.

**Cysylltwch â ni drwy naill ai:**

- Defnyddiwch eich cod mynediad: .....
- i ychwanegu eich rhif ffôn at y dudalen we ddiogel: [www.llyw.cymru/arolwgcymru](http://www.llyw.cymru/arolwgcymru)
- Ffonio fi yn uniongyrchol ar: .....
- Ffonio'r swyddfa am ddim ar **0800 496 2119**
- Anfon neges e-bost at: [arolwgenedlaetholcymru@ons.gov.uk](mailto:arolwgenedlaetholcymru@ons.gov.uk)

Cofion gorau,

Cyfweydd Maes, Swyddfa Ystadegau Gwladol

[www.llyw.cymru/arolwgcymru](http://www.llyw.cymru/arolwgcymru)

NSW\_KtN\_CT 03/21

**SAMPL**

## Appendix H: Appointment card

Office for  
National Statistics  
Swyddfa  
Ystadegau Gwladol



Date: ...../...../.....

Your appointment with an interviewer from the Office for National Statistics has been arranged for:

Interview time: .....	Dyddiad cyfweiliad: .....	Amser: .....
Interviewer: .....	Cyfeirdd: .....	
Interviewer: .....	Rhif: .....	

If you have any queries please call our interviewer on the number below and they will be pleased to discuss with you.

Telephone number: .....

Thank you for your help.

NSW\_On\_ApptCard 05/21



[www.gov.wales/nationalsurveyinfo](http://www.gov.wales/nationalsurveyinfo)



Happy to communicate in Welsh or English.

Office for  
National Statistics  
Swyddfa  
Ystadegau Gwladol



Dyddiad: ...../...../.....

Trefnwyd eich apwyntiad gyda chyfwelydd o'r Swyddfa Ystadegau Gwladol ar gyfer:

Interview time: .....	Dyddiad cyfweiliad: .....	Amser: .....
Interviewer: .....	Cyfeirdd: .....	
Interviewer: .....	Rhif: .....	

Os oes gennych unrhyw gwestiynau ffoniwch ein cyfwelydd ar y rhif isod a byddant yn fwy na pharod i drafod â chi.

Rhif ffôn: .....

Diolch am eich help.

NSW\_On\_ApptCard 05/21



[www.llyw.cymru/arolwgcenedlaetholgywb](http://www.llyw.cymru/arolwgcenedlaetholgywb)



Hapus i gyfathrebu yn y Gymraeg neu yn Saesneg

## Appendix I: Chaser letter



To request a letter in large print, or braille please phone 0800 496 2119 or email [accessibility@ons.gov.uk](mailto:accessibility@ons.gov.uk)

Dear Resident

We wrote to you recently to say you have been chosen to take part in the **National Survey for Wales**. I have been trying to get in touch but have so far not managed to speak with you.

### How to take part:

To complete the study at a time that suits you, or if you have any questions, please contact me on:

**SAMPLE**

We'd be grateful if you could get in touch as soon as possible. We look forward to hearing from you.

### Why you should take part:

By taking part in the National Survey, you will help organisations like local councils, Welsh Government and NHS Wales make decisions. In turn this will help improve life for people in your community and right across Wales.

Everyone's views are important to include in the study. You do not need any special knowledge to take part, and you can arrange an interview time that is convenient for you.

To say thank you for taking part, we will send a **£15 gift voucher**.

Yours faithfully

Field interviewer - Interviewer Number: .....



[www.gov.wales/nationalsurveyinfo](http://www.gov.wales/nationalsurveyinfo)

Welsh Government, Cathays Park, Cardiff, CF10 3NQ

Happy to communicate in Welsh or English.

NSW\_CH\_Ltr 03/21

Mae llythyr mewn print bras, neu Braille, ar gael ar gais drwy ffonio 0800 496 2119 neu drwy anfon e-bost i [accessibility@ons.gov.uk](mailto:accessibility@ons.gov.uk)

Annwyl Breswylydd

Gwnaethom ysgrifennu atoch yn ddiweddar i roi gwybod ichi eich bod wedi cael eich dewis i gymryd rhan yn **Arolwg Cenedlaethol Cymru**. Rwyf wedi bod yn ceisio dod i gysylltiad â chi ond nid wyf wedi llwyddo i siarad â chi hyd yma.

### Sut i gymryd rhan:

I drefnu i gynnal yr astudiaeth ar amser sy'n gyfleus i chi, neu os oes gennych sbectol neu gwestiynau cysylltush â mi os

**SAMPL**

llwocrefydw eich bod yn mynd i'r afael i drefnu amser i ymuno â'r astudiaeth hon ar **0800 496 2119** neu i gysylltu â mi trwy e-bost i [accessibility@ons.gov.uk](mailto:accessibility@ons.gov.uk)

Byddem yn ddiolchgar pe gallech gysylltu cyn gynted â phosibl. Edrychwn ymlaen at glywed gennych.

### Pam ddylwn i gymryd rhan:

Drwy gymryd rhan yn yr Arolwg Cenedlaethol, byddwch yn helpu sefydliadau fel cynghorau lleol, Llywodraeth Cymru a Gwasanaeth Iechyd Gwladol Cymru i wneud penderfyniadau. Bydd gwneud hyn yn helpu i wella bywydau pobl yn eich cymuned ac ym mhob cwr o Gymru.

Mae'n bwysig bod barn pob un yn cael ei chynnwys yn yr astudiaeth. Does dim angen unrhyw wybodaeth arbennig arnoch i gymryd rhan a gallwch drefnu amser cyfweiliad sy'n gyfleus i chi.

Byddwn yn anfon **taleb rhodd o £15** atoch i ddiolch ichi am gymryd rhan.

Yn gywir

Cyfweilydd Maes – Rhif Cyfweilydd: .....



Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ

Hapus i gyfathrebu yn y Gymraeg neu yn Saesneg

## Appendix J: Conversion letter



To request a letter in large print, or braille please phone 0800 496 2119 or email [accessibility@ons.gov.uk](mailto:accessibility@ons.gov.uk)

Dear Resident

An interviewer from the Office for National Statistics called recently to discuss taking part in the **National Survey for Wales**. We would like to tell you a bit more about the study.

### Why this study matters

Information from the National Survey for Wales is used to help make sure public money is spent where it is needed the most across Wales. Your responses can help lead to changes within your area, but for this to happen we need you to take part.

### What this study is about

This is your chance to tell us how you use services and what you think about them. This includes NHS services, local council services, and any other services you use. If you have any questions, you can just ask them. To say that you have any special knowledge to help us, you can also claim a £15 gift voucher.

**How to take part:**

An interviewer will call again soon to answer any further questions you may have and for you to take part. Or you can call your interviewer on:

You can also call free on **0800 496 2119** to arrange a time convenient to you.

Thank you for helping us with this important study.

**Dr Steven Marshall**  
Chief Social Research Officer, Welsh Government



[www.gov.wales/nationalsurveyinfo](http://www.gov.wales/nationalsurveyinfo)

Welsh Government, Cathays Park, Cardiff, CF10 3NQ

Happy to communicate in Welsh or English.

NSW\_Cnv\_Ltr 03/21

Mae llythyr mewn print bras, neu Braille, ar gael ar gais drwy ffonio 0800 496 2119 neu drwy anfon e-bost i [accessibility@ons.gov.uk](mailto:accessibility@ons.gov.uk)

Annwyl Breswlydd

Galwodd cyfwelydd o'r Swyddfa Ystadegau Gwladol yn ddiweddar i drafod cymryd rhan yn **Arolwg Cenedlaethol Cymru**. Hoffem egluro ychydig mwy am yr astudiaeth.

### Pam mae'r astudiaeth hon yn bwysig

Caiff gwybodaeth o Arolwg Cenedlaethol Cymru ei defnyddio i sicrhau bod arian cyhoeddus yn cael ei wario lle mae ei angen fwyaf ledled Cymru. Gall eich ymateb helpu i arwain at newidiadau yn eich ardal ond, er mwyn i hyn ddigwydd, mae angen i chi gymryd rhan.

### Natur yr astudiaeth hon

Syma'n cyfle i'w rhoi i'w gwybodaeth. Lywodraeth Cymru a'ed profiadau a'ch barn i'w rhoi i'w gwybodaeth. Mae'r Gwladol yn gwybodaeth i'w rhoi i'w gwybodaeth, eich ardal leol, a'ed profiadau a'ch barn i'w rhoi i'w gwybodaeth. Mae'r Gwladol yn gwybodaeth i'w rhoi i'w gwybodaeth, eich ardal leol, a'ed profiadau a'ch barn i'w rhoi i'w gwybodaeth. Nid oes arnau i'w gwybodaeth arbenigol arnoch i'w haterb. Byddwn yn anfon **taleb rhodd o £15** atoch i ddiolch ichi am gymryd rhan.

**SAMPLE**

NSW\_CMY\_LIT 03/21

### Sut i gymryd rhan:

Bydd cyfwelydd yn galw eto'n fuan i ateb unrhyw gwestiynau pellach a allai fod gennych. Fel arall, gallwch ffonio'r cyfwelydd ar:

 Neu ffonio rhadffôn **0800 496 2119** i drefnu amser sy'n gyfleus i chi.

Diolch i chi am ein helpu gyda'r astudiaeth bwysig hon.



**Dr Steven Marshall**

Prif Swyddog Ymchwil, Gymdeithasol Llywodraeth Cymru



Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ  
Hapus i gyfathrebu yn y Gymraeg neu yn Saesneg

## Appendix K: Helpline leaflet

### Thank you for taking part in the National Survey for Wales

We appreciate you giving your time to take part in this important study. The information you have provided will be treated in confidence and only used for statistical and research purposes.

The results of the study will be used by organisations such as Welsh Government, local councils, and NHS Wales to inform their decision on the coronavirus situation and other issues affecting people across Wales.

For more information on the study or to see previous results, visit our website:

 [www.gov.wales/surveywales](http://www.gov.wales/surveywales)

If you have any questions:

 Please call the survey enquiry line on **0800 496 2119**

 Or email [surveyfeedback@ons.gov.uk](mailto:surveyfeedback@ons.gov.uk)

### Information and support

The organisations on this leaflet provide information, advice and support on topics covered in the survey.

Advice from the Welsh Government on coronavirus (Covid-19) is available at:

 [www.gov.wales/coronavirus](http://www.gov.wales/coronavirus)

NSW\_help\_ENG 05/21



**SAMPLE**  
Helplines  
and support



### Health and mental health

#### NHS Direct Wales

Health advice and information,  
24 hours a day.  
0845 4647  
[www.111.wales.nhs.uk](http://www.111.wales.nhs.uk)

#### Community Advice & Listening Line

Mental Health Helpline for Wales.  
0800 132 737 or text 'help' to 81066  
[www.callhelpline.org.uk](http://www.callhelpline.org.uk)

#### Wales Drug and Alcohol Helpline

Help with alcohol and drug problems,  
24 hours a day.  
0808 808 2234 or text 'DAA' to 81066.  
[www.dan247.org.uk](http://www.dan247.org.uk)

#### Help me quit

Help to quit smoking.  
0808 250 2157  
[www.helpmequit.wales](http://www.helpmequit.wales)

### Work and finances

#### Universal Credit helpline

0800 328 1744 (Welsh)  
0800 328 5644 (English)

#### Money Advice Service

Free, independent advice on  
money issues.  
0800 138 7777  
[www.moneyadviceservice.org.uk](http://www.moneyadviceservice.org.uk)

#### Working Wales

Information, advice and guidance about  
support if you are made redundant.  
0800 028 4844  
[www.workingwales.gov.wales](http://www.workingwales.gov.wales)

### Other support

#### Age Cymru

Support and advice for older people.  
03003 034 498  
[www.ageuk.org.uk/cymru](http://www.ageuk.org.uk/cymru)

#### Live Fear Free

Support for victims of domestic abuse.  
0808 801 0800  
[www.gov.wales/live-fear-free](http://www.gov.wales/live-fear-free)

#### Citizens Advice

Advice on a wide range of issues.  
0800 702 2020  
[www.citizensadvice.org.uk/wales](http://www.citizensadvice.org.uk/wales)

#### Volunteering Wales

Register as a volunteer.  
[www.volunteering-wales.net](http://www.volunteering-wales.net)

### Food availability and poverty

If you are in need please contact your GP,  
local authority social services or Jobcentre  
Plus who can refer you to a local food  
bank.

You can also call Citizens Advice on  
**0800 702 2020**.

#### National Gambling Helpline

Support and advice on gambling  
problems.  
0808 802 0133  
[www.gamcare.org.uk](http://www.gamcare.org.uk)

## Diolch ichi am gymryd rhan yn Arolwg Cenedlaethol Cymru

Rydym yn gwerthfawrogi eich bod yn rhoi eich amser i gymryd rhan yn yr astudiaeth bwysig hon. Bydd yr wybodaeth yr ydych wedi'i darparu yn cael ei thrin yn gyfrinachol ac yn cael ei defnyddio at ddibenion ystadegol ac ymchwil yn unig.

Bydd canlyniadau'r astudiaeth yn cael eu defnyddio gan sefydliadau fel Llywodraeth Cymru, cynghorau lleol, a GIG i weithredu ar ymhliffa corona feirws a mwy eraill. Bydd wyneb i'w gweld ar y wefan [www.llyw.cymru](http://www.llyw.cymru). I gael mwy o wybodaeth, i'w gweld canlyniadau blaenorol, ewch i'n gwefan:

[www.llyw.cymru/arolwg-cenedlaethol-cymru](http://www.llyw.cymru/arolwg-cenedlaethol-cymru)

Os oes gennych unrhyw gwestiynau:

Cysylltwch â llinell ymholiadau'r arolwg drwy ffonio **0800 496 2119**

Neu e-bostio [surveyfeedback@ons.gov.uk](mailto:surveyfeedback@ons.gov.uk)

### Gwybodaeth a chymorth

Mae'r sefydliadau ar y daflen yma yn darparu gwybodaeth, cyngor a chymorth ar bynciau sydd yn yr arolwg.

Mae cyngor gan Lywodraeth Cymru y coronafeirws (COVID-19) ar gael yn:

[www.llyw.cymru/coronafeirws](http://www.llyw.cymru/coronafeirws)

NSW\_help\_WAL 05/21



# SAMPLE

## Gwybodaeth a chymorth



[www.llyw.cymru/arolwg.cymru](http://www.llyw.cymru/arolwg.cymru)

### Iechyd ac iechyd meddwl

#### Galw Iechyd Cymru

Cyngor a gwybodaeth iechyd, 24 awr y dydd.  
0845 4647

[www.111.wales.nhs.uk](http://www.111.wales.nhs.uk)

#### Llinell Wrando a Chymorth Cymunedol

Llinell Gymorth Iechyd Meddwl ar gyfer Cymru.

0800 132 737 / Anfonwch 'help' i 81066

[www.callhelpline.org.uk](http://www.callhelpline.org.uk)

#### Llinell Gymorth Cyffuriau ac Alcohol Cymru

Cymorth gyda hroblemau alcohol a chyffuriau. 24 awr y dydd.

0808 808 222 / Neu ffonio 111

DAN i 81066

[www.dan247.org.uk](http://www.dan247.org.uk)

#### Helpa fi i stopio

Cymorth i roi gorau i smygu.

0808 250 2157

[www.helpafiistopio.cymru](http://www.helpafiistopio.cymru)

#### Gwaith a chyllid

#### Llinell gymorth Credyd Cynhwysol

0800 328 1744 (Cymraeg)

0800 328 5644 (Saesneg)

#### Y Gwasanaeth Cyngori Ariannol

Cyngor annibynnol am ddim ar faterion ariannol.

0800 138 7777

[www.moneyadviceservice.org.uk/cy](http://www.moneyadviceservice.org.uk/cy)

#### Cymru'n Gweithio

Gwybodaeth, cyngor ac arweiniad ynglŷn â chymorth os ydych wedi colli'ch swydd.

0800 028 4844

[www.cymrungweithio.llyw.cymru](http://www.cymrungweithio.llyw.cymru)

### Cymorth arall

#### Age Cymru

Cymorth a chyngor i bobl hŷn.

03003 034 498

[www.ageuk.org.uk/cymru](http://www.ageuk.org.uk/cymru)

#### Byw Heb Ofn

Cymorth i ddioddefwyr cam-drin domestig.

0808 801 0800

[www.llyw.cymru/byw-heb-ofn](http://www.llyw.cymru/byw-heb-ofn)

#### Cyngor ar Bopeth

Cyngor ar bob math o faterion.

0800 702 2020

[www.censadvice.org.uk/cymraeg](http://www.censadvice.org.uk/cymraeg)

#### Gwirfoddoli Cymru

Cofrestru i gwirfoddolwr.

[www.volunteering-wales.net](http://www.volunteering-wales.net)

### Argaeledd bwyd a thlodi bwyd

Os ydych mewn angen, cysylltwch â'ch meddygfa, gwasanaethau cymdeithasol eich awdurdod lleol neu'r Ganolfan Byd Gwaith a all eich cyfeirio at fanc bwyd lleol.

Gallwch hefyd ffonio Cyngor ar Bopeth ar **0800 702 2020**.

#### Llinell Gymorth Gamblo Cenedlaethol

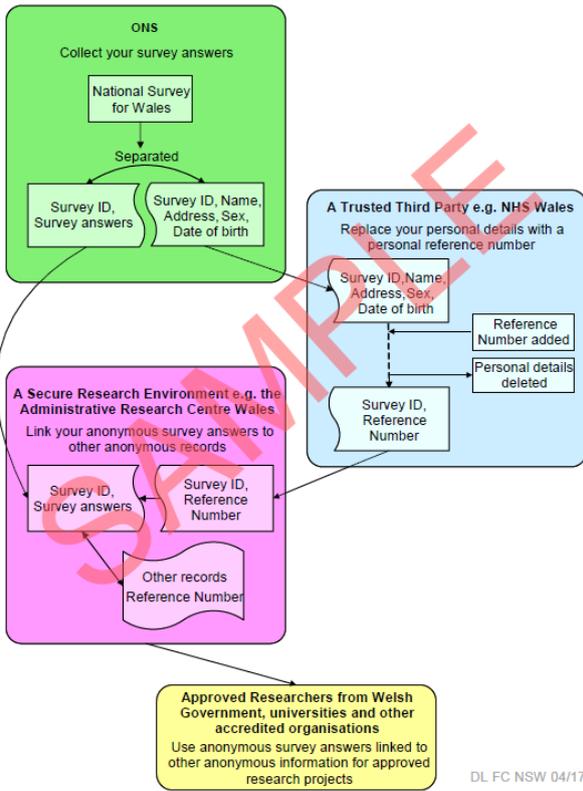
Gwybodaeth, cymorth a chyngor am ddim ar broblemau gamblo.

0808 8020 133

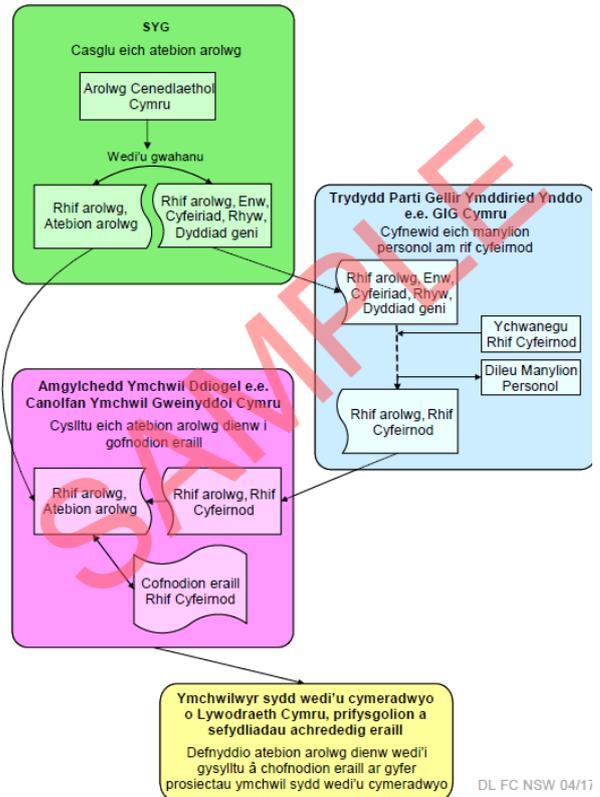
[www.gamcare.org.uk](http://www.gamcare.org.uk)

# Appendix L: Data linkage flowchart

How do we link your survey answers to other information?



Sut ydym yn cysylltu eich atebion arolwg i gofnodion eraill?



## Appendix M: Derived Variables for Final dataset

Variable Name	Variable Label
DvAgeGrp3	Derived variable - Age (3 groups)
DvAgeGrp5	Derived variable - Age (5 groups)
DvWkinAge	Derived variable - Working age
DvPenFlag	Derived variable - Pensionable age at time of interview
DvCvWkingHh	Derived variable - Household members of working age in paid work, either full-time or part-time
DvCvFurlHh	Derived variable - Household members who are furloughed, either full-time or part-time
DvTenurGrp2	Derived variable - Tenure (grouped)
DvHhUnd16	Derived variable - Household contains children aged under 16
DvHhUnd19	Derived variable - Household contains children aged under 19
DvHh60OrOvr	Derived variable - Household contains adult aged 60 or over
DvHhType2	Derived variable - Household type (new groups)
DvNeet	Derived variable - Not in education, employment or training (NEET) status (aged 16-18)
DvNeet2	Derived variable - Not in education, employment or training (NEET) status (aged 16-25)
DvEthnicity	Derived variable - Ethnicity (in three groups)
DvReligion	Derived variable - Religion (grouped)
DvWeLang1	Derived variable - Welsh language ability - Can speak, read and write Welsh
DvWeLang2	Derived variable - Welsh language ability - Can speak and read Welsh, but not write Welsh
DvWeLang3	Derived variable - Welsh language ability - Can speak Welsh, but can't read or write Welsh
DvWeLang4	Derived variable - Welsh language ability - Can understand spoken Welsh only
DvFGWelsh	Derived variable - People using Welsh Language in everyday life (FG indicator 36)
DvWelSpkHh	Derived variable - Household members speaking Welsh (aged 3 and over)
DvIntPersUse	Derived variable - Internet - Personal use of internet at home, work or elsewhere
DvAtPsModeTravCL	Derived variable - usual mode of travel to primary school - Car or lift
DvAtPsModeTravBus	Derived variable - usual mode of travel to primary school - Bus
DvAtPsModeTravWik	Derived variable - usual mode of travel to primary school - Walking
DvAtSsModeTravCL	Derived variable - usual mode of travel to secondary school - Car or lift
DvAtSsModeTravBus	Derived variable - usual mode of travel to secondary school - Bus
DvAtSsModeTravWik	Derived variable - usual mode of travel to secondary school - Walking
DvAtWikBke10	Derived variable - Walks (10mins+) or cycles at least once a week as means of transport
DvEcoStat3	Derived variable - Economic status (3 classifications)
DvHiQual2	Derived variable - Highest educational qualification

DvLLTI	Derived variable - Has a limiting long-standing illness, disability or infirmity
DvFGLonely	Derived variable - People feeling lonely (FG indicator)
DvFGComm	Derived variable - Have a sense of community (belonging; different backgrounds get on, treat with respect)
DvWbSatlifeGrp4	Derived variable - Overall satisfaction with life (grouped)
DvWbLifeWrthGrp4	Derived variable - Overall extent of feeling that the things done in life are worthwhile (grouped)
DvWbHapYestGrp4	Derived variable - Overall happiness yesterday (grouped)
DvWbAnxYestGrp4	Derived variable - Overall anxiety yesterday (grouped)
Dvgenhealth3	Derived variable - General health (3 groups)
Dvgoodhealth	Derived variable - Good general health
Dvfairbadhealth	Derived variable - Fair or bad health
Dvhtcm	Derived variable - Height : in cm - computed from Feet/inches if necessary
Dvwtkg	Derived variable - Weight : in kg - computed from Stones/pounds if necessary
Dvbmi	Derived variable - Body Mass Index
Dvbmi2	Derived variable - Body Mass Index (excl pregnant women)
Dvbmilev2	Derived variable - Body Mass Index classification (excl pregnant women)
Dvbmimorb2	Derived variable - Body Mass Index classification (excl pregnant women) (incl. 40+)
Dvbmihealthy2	Derived variable - Body Mass Index classification (excl pregnant women) (healthy BMI) [SamplePopHlthWeight]
Dvbmiowob2	Derived variable - BMI Overweight or obese (excl pregnant women)
Dvbmiobese2	Derived variable - BMI Obese (excl pregnant women)
Dvsmokec	Derived variable - Currently smoke either daily or occasionally
Dvsmokstat	Derived variable - Smoking status
DvCvnondrink	Derived variable - Non drinker in the last 12 months (not even occasional)
DvCvDnFreq0	Derived variable - Drinking frequency (incl. non-drinkers)
DvCvalcusgrp	Derived variable - Usual weekly consumption groups
DvCvalcusgrp2	Derived variable - Average weekly alcohol consumption extra groups incl non-drinkers
DvCvalcusgrp3	Derived variable - Average weekly alcohol consumption extra groups excl non-drinkers
DvCvalcushazbi	Derived variable - Average weekly alcohol consumption hazardous not harmful (>14 up to 50(m) / 35(f) units)
DvCvalcusharmbi	Derived variable - Average weekly alcohol consumption harmful (>50(m) / 35(f) units)
DvCvalcushazbidr	Derived variable - Average weekly alcohol consumption hazardous not harmful excl non-drinkers (>14 up to 50(m) / 35(f) units)
DvCvalcusharmbidr	Derived variable - Average weekly alcohol consumption harmful excl non-drinkers (>50(m) / 35(f) units)
DvCvalcushibi	Derived variable - Average weekly alcohol consumption above guidelines
DvCvunitswk0	Derived variable - Usual number of weekly units

DvCvunitswk0dr	Derived variable - Usual number of weekly units - drinkers only
DvCvunitsyr0dr	Derived variable - Usual number of annual units - drinkers only
Dvlimany	Derived variable - Limited at all by longstanding illness
Dvlimlot	Derived variable - Limited a lot by longstanding illness
Dvlimnum	Derived variable - Number of limiting illnesses
Dvlimnumgrp	Derived variable - Number of limiting illnesses (grouped)
Dvlsill	Derived variable - Any longstanding illness
Dvlsillnum	Derived variable - Number of longstanding illnesses
Dvlsillnumgrp	Derived variable - Number of longstanding illnesses (grouped)
Dvillness0	Derived variable - Individual has No longstanding illness
	Derived variable - Individual has Cancer (neoplasm) including lumps, masses, tumours and growths and benign (non-malignant) lumps and cysts
Dvillness1	
Dvillness2	Derived variable - Individual has Diabetes incl. Hyperglycaemia
Dvillness3	Derived variable - Individual has Other endocrine - metabolic
	Derived variable - Individual has Mental illness - anxiety - depression - nerves (nes)
Dvillness4	
Dvillness5	Derived variable - Individual has learning disability
Dvillness6	Derived variable - Individual has Epilepsy - fits - convulsions
Dvillness7	Derived variable - Individual has Migraine - headaches
	Derived variable - Individual has Other problems of nervous system
Dvillness8	
	Derived variable - Individual has Cataract - poor eye sight - blindness
Dvillness9	
Dvillness10	Derived variable - Individual has Other eye complaints
Dvillness11	Derived variable - Individual has Poor hearing - deafness
Dvillness12	Derived variable - Individual has Tinnitus - noises in the ear
	Derived variable - Individual has Meniere's disease - ear complaints causing balance problems
Dvillness13	
Dvillness14	Derived variable - Individual has Other ear complaints
	Derived variable - Individual has Stroke - cerebral haemorrhage - cerebral thrombosis
Dvillness15	
Dvillness16	Derived variable - Individual has Heart attack - angina
	Derived variable - Individual has Hypertension - high blood pressure - blood pressure (nes)
Dvillness17	
Dvillness18	Derived variable - Individual has Other heart problems
	Derived variable - Individual has Piles - haemorrhoids incl. Varicose Veins in anus
Dvillness19	
	Derived variable - Individual has Varicose veins - phlebitis in lower extremities
Dvillness20	
Dvillness21	Derived variable - Individual has Other blood vessels - embolic
Dvillness22	Derived variable - Individual has Bronchitis - emphysema
Dvillness23	Derived variable - Individual has Asthma
Dvillness24	Derived variable - Individual has Hayfever
Dvillness25	Derived variable - Individual has Other respiratory complaints
	Derived variable - Individual has Stomach ulcer - ulcer (nes) - abdominal hernia - rupture
Dvillness26	

Dvillness27	Derived variable - Individual has Other digestive complaints (stomach, liver, pancreas, bile ducts, small intestine - duodenum, jejunum and ileum)
Dvillness28	Derived variable - Individual has Complaints of bowel - colon (large intestine, caecum, bowel, colon, rectum)
Dvillness29	Derived variable - Individual has Complaints of teeth - mouth - tongue
Dvillness30	Derived variable - Individual has Kidney complaints
Dvillness31	Derived variable - Individual has Urinary tract infection
Dvillness32	Derived variable - Individual has Other bladder problems - incontinence
Dvillness33	Derived variable - Individual has Reproductive system disorders
Dvillness34	Derived variable - Individual has Arthritis - rheumatism - fibrositis
Dvillness35	Derived variable - Individual has Back problems - slipped disc - spine - neck
Dvillness36	Derived variable - Individual has Other problems of bones - joints - muscles
Dvillness37	Derived variable - Individual has Infectious and parasitic disease
Dvillness38	Derived variable - Individual has Disorders of blood and blood forming organs
Dvillness39	Derived variable - Individual has Skin complaints
Dvillness40	Derived variable - Individual has Other complaints
Dvillness41	Derived variable - Individual has Unclassifiable
Dvillchap1	Derived variable - Individual has Neoplasms and benign growths
Dvillchap2	Derived variable - Individual has Endocrine and metabolic diseases
Dvillchap3	Derived variable - Individual has Mental disorders
Dvillchap4	Derived variable - Individual has Nervous system illness
Dvillchap5	Derived variable - Individual has Eye complaints
Dvillchap6	Derived variable - Individual has Ear complaints
Dvillchap7	Derived variable - Individual has Heart and circulatory illness
Dvillchap8	Derived variable - Individual has Respiratory system illness
Dvillchap9	Derived variable - Individual has Digestive system illness
Dvillchap10	Derived variable - Individual has Genito-urinary system illness
Dvillchap11	Derived variable - Individual has Musculoskeletal illness
Dvillchap12	Derived variable - Individual has Infectious diseases
Dvillchap13	Derived variable - Individual has Blood and related organs illness
Dvillchap14	Derived variable - Individual has Skin complaints
Dvillchap15	Derived variable - Individual has Other illness
Dvillchap16	Derived variable - Individual has Unclassifiable
Dvlimill1	Derived variable - Cancer (neoplasm) including benign (non-malignant) lumps and cysts limits individual
Dvlimill2	Derived variable - Diabetes incl. hyperglycaemia limits individual
Dvlimill3	Derived variable - Other endocrine/metabolic complaint limits individual
Dvlimill4	Derived variable - Mental illness/anxiety/depression/nerves limits individual
Dvlimill5	Derived variable - Learning disability limits individual

Dvlimill6	Derived variable - Epilepsy/fits/convulsions limits individual
Dvlimill7	Derived variable - Migraine/headaches limits individual
Dvlimill8	Derived variable - Other problems of nervous system limit individual
Dvlimill9	Derived variable - Cataract/poor eye sight/blindness limits individual
Dvlimill10	Derived variable - Other eye complaints limit individual
Dvlimill11	Derived variable - Poor hearing/deafness limits individual
Dvlimill12	Derived variable - Tinnitus/noises in the ear limits individual
Dvlimill13	Derived variable - Meniere's disease/ear complaints causing balance problems limits individual
Dvlimill14	Derived variable - Other ear complaints limits individual
Dvlimill15	Derived variable - Stroke/cerebral haemorrhage/cerebral thrombosis limits individual
Dvlimill16	Derived variable - Heart attack/angina limits individual
Dvlimill17	Derived variable - Hypertension/high blood pressure/blood pressure limits individual
Dvlimill18	Derived variable - Other heart problems limits individual
Dvlimill19	Derived variable - Piles/haemorrhoids limits individual
Dvlimill20	Derived variable - Varicose veins/phlebitis in lower extremities limits individual
Dvlimill21	Derived variable - Other blood vessels/embolic limits individual
Dvlimill22	Derived variable - Bronchitis/emphysema limits individual
Dvlimill23	Derived variable - Asthma limits individual
Dvlimill24	Derived variable - Hayfever limits individual
Dvlimill25	Derived variable - Other respiratory complaints limits individual
Dvlimill26	Derived variable - Stomach ulcer/ulcer/abdominal hernia/rupture limits individual
Dvlimill27	Derived variable - Other digestive complaints (stomach, liver, pancreas etc.) limits individual
Dvlimill28	Derived variable - Complaints of bowel/colon/rectum limits individual
Dvlimill29	Derived variable - Complaints of teeth/mouth/tongue limits individual
Dvlimill30	Derived variable - Kidney complaints limits individual
Dvlimill31	Derived variable - Urinary tract infection limits individual
Dvlimill32	Derived variable - Other bladder problems/incontinence limits individual
Dvlimill33	Derived variable - Reproductive system disorders limits individual
Dvlimill34	Derived variable - Arthritis/rheumatism/fibrositis limits individual
Dvlimill35	Derived variable - Back problems/slipped disc/spine/neck limits individual
Dvlimill36	Derived variable - Other problems of bones/joints/muscles limits individual
Dvlimill37	Derived variable - Infectious and parasitic disease limits individual
Dvlimill38	Derived variable - Disorders of blood and blood forming organs limits individual
Dvlimill39	Derived variable - Skin complaints limits individual

Dvlimill40	Derived variable - Other complaint limits individual
Dvlimill41	Derived variable - Unclassifiable complaint limits individual
Dvlimillchap1	Derived variable - Neoplasms and benign growths (1) limit individual
Dvlimillchap2	Derived variable - Endocrine and metabolic diseases (2-3) limit individual
Dvlimillchap3	Derived variable - Mental disorders (4-5) limit individual
Dvlimillchap4	Derived variable - Nervous system complaints (6-8) limit individual
Dvlimillchap5	Derived variable - Eye complaints (9-10) limit individual
Dvlimillchap6	Derived variable - Ear complaints (11-14) limit individual
Dvlimillchap7	Derived variable - Heart and circulatory complaints (15-21) limit individual
Dvlimillchap8	Derived variable - Respiratory system complaints (22-25) limit individual
Dvlimillchap9	Derived variable - Digestive system complaints (26-29) limit individual
Dvlimillchap10	Derived variable - Genito-urinary system complaints (30-33) limit individual
Dvlimillchap11	Derived variable - Musculoskeletal complaints (34-36) limit individual
Dvlimillchap12	Derived variable - Infectious diseases (37) limit individual
Dvlimillchap13	Derived variable - Blood and related organs complaints (38) limit individual
Dvlimillchap14	Derived variable - Skin complaints (39) limit individual
Dvlimillchap15	Derived variable - Other complaint limits individual
Dvlimillchap16	Derived variable - Unclassifiable complaint limits individual
DvCvfrtpor2	Derived variable - Total portion of fruit
DvCvvegpor2	Derived variable - Total portion of vegetables (incl.salad)
DvCvporfv2	Derived variable - Total portion of fruit and veg
DvCvfv5aday2	Derived variable - No of portions of fruit and vegetables eaten yesterday
DvCvfv52	Derived variable - Eaten 5+ fruit or veg the previous day - binary
Dvecigevbi	Derived variable - E-cigarette ever used - binary
Dvecignbi	Derived variable - E-cigarette used now - binary
Dvtrygupbi	Derived variable - Tried to give up smoking (in last 3 months) - binary
Dvstpsmk1m	Derived variable - Gave up smoking at least one month ago - binary
Dvstpsmk1y	Derived variable - Gave up smoking at least one year ago - binary
Dvdualfirst	Derived variable - Dual users tobacco and e-cigarettes - which used first
Dvwalkweek	Derived variable - Any walking in the last 7 days - binary
Dvwalkmv	Derived variable - Walking qualifying as moderate activity
Dvwalkmw	Derived variable - Total minutes walking per week
Dvwlkmvmw	Derived variable - Minutes walking per week qualifying as moderate activity
Dvwlkmvday	Derived variable - Walking as moderate activity in last 7 days, number of days

Dvwalkday	Derived variable - Walk in last 7 days - number of days (scale)
Dvmodexweek	Derived variable - Any moderate activity in last 7 days - binary
Dvmodexday	Derived variable - Moderate activity in last 7 days - number of days
Dvmodexmw	Derived variable - Total minutes moderate activity per week
Dvvigexweek	Derived variable - Any vigorous activity in last 7 days - binary
	Derived variable - Total minutes vigorous activity per week *2 to give moderate intensity minutes
Dvvigmmvw	Derived variable - Vigorous activity in the last 7 days - number of days
Dvvigexday	Derived variable - Total minutes vigorous activity per week
Dvvigexmw	Derived variable - Total minutes vigorous activity per week
Dvmvpagrp2	Derived variable - MVPA minutes per week - 3 groups
Dvmvpamw	Derived variable - MVPA minutes per week
Dvmvpa150	Derived variable - MVPA meets guidelines 150 minutes weekly
Dvmvinact	Derived variable - MVPA inactive <30 minutes weekly
	Derived variable - Number of at least moderately active days per week
Dvmvdays	Derived variable - Moderate or vigorous activity on Monday
Dvmonx	Derived variable - Moderate or vigorous activity on Monday
Dvtuex	Derived variable - Moderate or vigorous activity on Tuesday
Dvwedx	Derived variable - Moderate or vigorous activity on Wednesday
Dvthux	Derived variable - Moderate or vigorous activity on Thursday
Dvfrix	Derived variable - Moderate or vigorous activity on Friday
Dvsatx	Derived variable - Moderate or vigorous activity on Saturday
Dvsunx	Derived variable - Moderate or vigorous activity on Sunday
	Derived variable - People with 4 or 5 healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active). (FG indicator)
DvFGHealth4	Derived variable - Number of healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active)
	Derived variable - People with fewer than 2 healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active)
DvFGHealthyB	Derived variable - People with fewer than 2 healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active)
	Derived variable - People with 2 or more healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active).
DvFGHealth1	Derived variable - People with 2 or more healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active).
	Derived variable - People with 2 or more healthy lifestyle behaviours (not smoking, healthy weight, eat 5 fruit or veg, not drinking above guidelines, active). (FG indicator)
DvFGHealth2	Derived variable - Participation in sporting activities three or more times a week (FG indicator)
DvFGSport	Derived variable - Participation in sporting activities three or more times a week (FG indicator)
	Derived variable - Frequency of participation in sport (average per week)
DvFrqPrtSport4	Derived variable - Frequency of participation in sport (average per week)
	Derived variable - Frequency of participation in any fitness activity (average per week)
DvFrqPrtFitness4	Derived variable - Frequency of participation in any fitness activity (average per week)
	Derived variable - Frequency of participation in any sport or game (average per week)
DvFrqPrtSportGam4	Derived variable - Frequency of participation in any sport or game (average per week)
	Derived variable - Frequency of participation in any outdoor pursuit (average per week)
DvFrqPrtOutPur4	Derived variable - Frequency of participation in any outdoor pursuit (average per week)
DvPrtAny	Derived variable - Participating in any activity
DvPrtExclWik	Derived variable - Participating in any activity excluding walking
DvPrtAnyFitness	Derived variable - Participating in any fitness activity

DvPrtAnySportGam	Derived variable - Participating in any sport or game
DvPrtAnyOutPur	Derived variable - Participating in any outdoor pursuit
DvLDAAny	Derived variable - Latent demand for any activity
DvLDExclWik	Derived variable - Latent demand for any activity excluding walking
DvLDAAnyFitness	Derived variable - Latent demand for any fitness activity
DvLDAAnySportGam	Derived variable - Latent demand for any sport or game
DvLDAAnyOutPur	Derived variable - Latent demand for any outdoor pursuit
DvLDFitnessFit	Derived variable - Latent demand - Fitness - Fitness classes
DvLDFitnessGym	Derived variable - Latent demand - Fitness - Gym activities
DvLDFitnessDan	Derived variable - Latent demand - Fitness - Dance classes
DvLDFitnessCyc	Derived variable - Latent demand - Fitness - Cycling
DvLDFitnessSwim	Derived variable - Latent demand - Fitness - Swimming or diving
DvLDFitnessWalk	Derived variable - Latent demand - Fitness - Walking over 2 miles
DvLDFitnessJogRun	Derived variable - Latent demand - Fitness - Jogging or running
DvLDSportGamTeam	Derived variable - Latent demand - Sports and games - Team sports
DvLDSportGamRacket	Derived variable - Latent demand - Sports and games - Racket sports
DvLDSportGamIndoor	Derived variable - Latent demand - Sports and games - Indoor games
DvLDSportGamBowl	Derived variable - Latent demand - Sports and games - Bowling or bowls
DvLDSportGamMartial	Derived variable - Latent demand - Sports and games - Combat sports or martial arts
DvLDSportGamGolf	Derived variable - Latent demand - Sports and games - Golf
DvLDSportGamShtArch	Derived variable - Latent demand - Sports and games - Shooting or archery
DvLDSportGamAthl	Derived variable - Latent demand - Sports and games - Athletics
DvLDSportGamMult	Derived variable - Latent demand - Sports and games - Multisport
DvLDOOutPurMount	Derived variable - Latent demand - Outdoor pursuits - Mountain sports
DvLDOOutPurMotor	Derived variable - Latent demand - Outdoor pursuits - Motorsport
DvLDOOutPurFishAng	Derived variable - Latent demand - Outdoor pursuits - Fishing or angling
DvLDOOutPurHorse	Derived variable - Latent demand - Outdoor pursuits - Horse riding
DvLDOOutPurWater	Derived variable - Latent demand - Outdoor pursuits - Watersport
DvPrtGymTramp	Derived variable - Participation - Gymnastics and/or trampolining
DvPrtBowls	Derived variable - Participation - Indoor and/or outdoor bowls
DvPrtSkiSnowbd	Derived variable - Participation - Skiing and/or snowboarding
DvPrtCanKayak	Derived variable - Participation - Canoeing and/or kayaking
DvPrtAthRunJog	Derived variable - Participation - Athletics and/or running/jogging
DvLDGymTramp	Derived variable - Latent demand - Gymnastics and/or trampolining
DvLDBowls	Derived variable - Latent demand - Indoor and/or outdoor bowls
DvLDSkiSnowbd	Derived variable - Latent demand - Skiing and/or snowboarding
DvLDCanKayak	Derived variable - Latent demand - Canoeing and/or kayaking
DvLDAthRunJog	Derived variable - Latent demand - Athletics and/or running/jogging

DvLDSkateSkatebd	Derived variable - Participation - Skating and/or skateboarding
DvFGSafe	Derived variable - People feeling safe (at home, walking in the local area, and travelling)
DvFGLocServ	Derived variable - Satisfied with ability to get to services and facilities (FG indicator)
DvCvEcoStat3	Derived variable - Economic status (3 classifications) - last 7 days
AdDepFlag	Included in the Adult deprivation sub-sample
DvAdBdLnMD	Derived variable - Respondent routed to additional adult (non-pensioner) material deprivation questions
DvAdMatDep	Derived variable - Non-pensioner adults in material deprivation
PenDepFlag	Included in the Pensioner deprivation sub-sample
DvPnBdLnMD	Derived variable - Respondent routed to additional pensioner material deprivation questions
DvPnMatDep	Derived variable - Pensioner in material deprivation
DvMatDep	Derived variable - Material deprivation (adults and pensioners combined)
DvFinBilCred	Derived variable - Keeping up with bills
DvIntNumActsR	Derived variable - Internet skills - Number of internet activities carried out in the past 3 months
DvIntHandling	Derived variable - Internet skills - Handling information and content
DvIntComms	Derived variable - Internet skills - Communicating
DvIntTransact	Derived variable - Internet skills - Transacting
DvIntSolving	Derived variable - Internet skills - Problem solving
DvIntSafety	Derived variable - Internet skills - Being safe and legal online
DvIntNumSkills1920	Derived variable - Internet skills - Number of digital skills accomplished in past 3 months
DvIntSkills5	Derived variable - Internet skills - Accomplished 5 digital skills in past 3 months
DvHPNumberAll	Derived variable - Companion Animals - How many companion animals does your household own
DvHPTimeCat1y	Derived variable - Companion Animals - Got cat within the last 12 months
DvHPTimeDog1y	Derived variable - Companion Animals - Got dog within the last 12 months
DvHPTimeAny1y	Derived variable - Companion Animals - Got any animal within the last 12 months
DvHPOnlineAd	Derived variable - Companion Animals - Animal advertised online
DvHPPuppyKitten	Derived variable - Companion Animals - Aquired a puppy or kitten
DvHPInsCatDog	Derived variable - Companion Animals - Cat or dog is insured
DvHPMCCatDog	Derived variable - Companion Animals - Cat or dog is microchipped
DvUrbRur	Derived variable - Urban/rural classification
DvUrbRurCom	Derived variable - Urban/rural classification – combined
DvBUA	Derived variable - Built-up areas
DvLACd	Derived variable - Local Authority - geography code
DvLA	Derived variable - Local Authority
DvPolReg	Derived variable - Police region
DvFireReg	Derived variable - Fire & Rescue Service region

DvEconDevReg	Derived variable - Economic Development regions
DvRegions	Derived variable - Welsh regions (ACW and Sport Wales)
DvRegions2	Derived variable - Regions of Wales (for Welsh language use analysis)
DvAsEcArea	Derived variable - Assembly Economic Fora Area
DvPSFoot	Derived variable - Public services footprint
DvLSOA2001	Derived variable - Lower super output area (based on 2001 Census)
DvLSOA2011	Derived variable - Lower super output area (based on 2011 Census)
DvMSOA2011	Derived variable - Middle super output area (based on 2011 Census)
DvUSOA2011	Derived variable - Upper super output area (based on 2011 Census)
DvLHB	Derived variable - Local health board (before April 2019)
DvLHBCd	Derived variable - Local health board - geography code
DvLHB2019	Derived variable - Local health board (2019 definition)
DvLHBCd2019	Derived variable - Local health board (2019 definition) - geography code
DvWIMDOvr5	Derived variable – Welsh Index of Multiple Deprivation – overall score (in quintiles)
DvWIMDInc5	Derived variable – Welsh Index of Multiple Deprivation – income score (in quintiles)
DvWIMDEmp5	Derived variable – Welsh Index of Multiple Deprivation – employment score (in quintiles)
DvWIMDHlth5	Derived variable – Welsh Index of Multiple Deprivation – health score (in quintiles)
DvWIMDEdu5	Derived variable – Welsh Index of Multiple Deprivation – education score (in quintiles)
DvWIMDHse5	Derived variable – Welsh Index of Multiple Deprivation – housing score (in quintiles)
DvWIMDEnv5	Derived variable – Welsh Index of Multiple Deprivation – physical environment score (in quintiles)
DvWIMDServ5	Derived variable – Welsh Index of Multiple Deprivation – access to services score (in quintiles)
DvWIMDSafe5	Derived variable – Welsh Index of Multiple Deprivation – community safety score (in quintiles)

## Appendix N: Weights produced for 21-22 final data

Variable Name	Variable Label
popwtesp	Weight adapted from 2013 European Standard Population
SamplePopulationWeight	Weight to make telephone sample reflect the characteristics of whole population in Wales
WalesPopulationWeight	Weight to represent whole population in Wales (for modules asked of all sample in telephone questionnaire)
SampleAdultWeight	Weight to make telephone sample reflect the characteristics of all adults (16+) in Wales
WalesAdultWeight	Weight to represent all adults (16+) in Wales (for modules asked of all sample in telephone questionnaire)
SampleHhWeight	Weight to make telephone sample reflect the characteristics of all households in Wales
WalesHhWeight	Weight to represent all households in Wales (for modules asked of all sample in telephone questionnaire)
OnlineSampleAdultWeight	Weight to make online sample reflect the characteristics of all adults (16+) in Wales
OnlineWalesAdultWeight	Weight to represent whole population in Wales (for modules asked of all sample in online questionnaire)
OnlineSampleHhWeight	Weight to make online sample reflect the characteristics of all households in Wales
OnlineWalesHhWeight	Weight to represent all households in Wales (for modules asked of all sample in online questionnaire)
SampleHospitalWeight	Weight to make the Hospital sub-sample reflect the characteristics of all adults (16+) in Wales
SampleDentalWeight	Weight to make the Dental sub-sample reflect the characteristics of all adults (16+) in Wales
SampleGPWeight	Weight to make the GP sub-sample reflect the characteristics of all adults (16+) in Wales
SamplePopHlthWeight	Weight to make the population health lifestyle sub-sample reflect the characteristics of all adults (16+) in Wales
SampleIntSkillsWeight	Weight to make the internet skills sub-sample reflect the characteristics of all adults in Wales
SampleClimateWeight	Weight to make the climate change sub-sample reflect the characteristics of all adults in Wales
SampleTravelWeight	Weight to make the Active Travel sub-sample reflect the characteristics of all adults in Wales
SampleSatWGWeight	Weight to make the satisfaction with Welsh Government sub-sample reflect the characteristics of all adults in Wales
SampleSatEduWeight	Weight to make the satisfaction with education sub-sample reflect the characteristics of all adults in Wales
SampleSatHlthWeight	Weight to make the satisfaction with health sub-sample reflect the characteristics of all adults in Wales
SampleEyeEarWeight	Weight to make the eyesight sub-sample reflect the characteristics of all adults in Wales
SampleAnimalWeight	Weight to make the companion animals sub-sample reflect the characteristics of all adults in Wales
SampleACWWeight	Weight to make the Arts Council Wales sub-sample reflect the characteristics of all adults in Wales
SampleUNCRCWeight	Weight to make the children's rights sub-sample reflect the characteristics of all adults in Wales

WalesHospitalWeight	Weight to make the Hospital sub-sample represent all adults (16+) in Wales
WalesDentalWeight	Weight to make the Dental sub-sample represent all adults (16+) in Wales
WalesGPWeight	Weight to make the GP sub-sample represent all adults (16+) in Wales
WalesPopHlthWeight	Weight to make the population health lifestyle sub-sample represent all adults (16+) in Wales
WalesIntSkillsWeight	Weight to make the internet skills sub-sample represent all adults (16+) in Wales
WalesClimateWeight	Weight to make the climate change sub-sample represent all adults (16+) in Wales
WalesTravelWeight	Weight to make the Active Travel sub-sample represent all adults (16+) in Wales
WalesSatWGWeight	Weight to make the satisfaction with Welsh Government sub-sample represent all adults (16+) in Wales
WalesSatEduWeight	Weight to make the satisfaction with education sub-sample represent all adults (16+) in Wales
WalesSatHlthWeight	Weight to make the satisfaction with health sub-sample represent all adults (16+) in Wales
WalesEyeEarWeight	Weight to make the eyesight sub-sample represent all adults (16+) in Wales
WalesAnimalWeight	Weight to make the companion animals sub-sample represent all adults (16+) in Wales
WalesACWWeight	Weight to make the Arts Council Wales sub-sample represent all adults (16+) in Wales
WalesUNCRCWeight	Weight to make the children's rights sub-sample represent all adults (16+) in Wales
SampleChildWeight	Weight to make the sample of children reflect the characteristics of all children 3-17 in Wales
WalesChildWeight	Weight to represent all children 3-17 in Wales
WalesMatDepWeight	Weight to make the Household deprivation sub-sample reflect the characteristics of all adults (16+) in Wales
SampleMatDepWeight	Weight to make the Household deprivation sub-sample represent all adults (16+) in Wales
WalesPenDepWeight	Weight to make the Pension deprivation sub-sample reflect the characteristics of all adults (16+) in Wales
SamplePenDepWeight	Weight to make the Pension deprivation sub-sample represent all adults (16+) in Wales

## Appendix O: Outcome code descriptions

Table O.1: Eligible codes

Outcome category	Outcome code	Description
Complete interview	110	Complete interview by required respondent / selected person
Partial interview	220	Partial interview by required respondent / selected person
Non-contact	310	No contact with anyone at the address
Non-contact	320	Contact made at the address, but not with any member of the sampled dwelling/household
Non-contact	330	Contact made at sampled dwelling/household, but not with any responsible resident
Non-contact	340	Contact made with responsible member of sampled dwelling/household, but not with sampled person
Refusal	410	Office (HQ) refusal
Refusal	421	Sampling Unit information refused - information was refused about the number of dwellings/households at address
Refusal	422	Information refused that would allow identification of required respondent(s) within dwelling or household. Information refused about persons within household
Refusal	431	Refusal by required respondent / selected person
Refusal	432	Refusal by proxy
Refusal	433	Sampling Unit information refused - refused access to the site
Refusal	440	Refusal during interview
Refusal	450	Broken appointment, no re-contact
Other non-response	511	Ill at home during survey period: notified to head office
Other non-response	512	Ill at home during survey period: notified to interviewer
Other non-response	521	Away/ill in hospital throughout the field period: notified to head office
Other non-response	522	Away/ill in hospital throughout the field period: notified to interviewer
Other non-response	531	Physically or mentally unable/incompetent: notified to head office
Other non-response	532	Physically or mentally unable/incompetent: notified to interviewer
Other non-response	543	Language difficulties: notified to interviewer

Other non-response	544	Interview discontinued due to comprehension difficulties
Other non-response	545	Interview discontinued due to other difficulties
Other non-response	550	Lost interview
Other non-response	561	Full interview achieved but respondent requested data be deleted

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**Table O.2: Unknown eligibility codes**

<b>Outcome category</b>	<b>Outcome code</b>	<b>Description</b>
	560	Other non-response
	612	Issued but not attempted
	641	Information refused about whether address is residential Unknown whether address is residential due to non-
	642	contact
	651	Information refused about whether there are eligible resident(s)
	652	Unknown whether there are eligible resident(s) due to non-contact

**Table O.3: Ineligible codes**

<b>Outcome category</b>	<b>Outcome code</b>	<b>Description</b>
	620	Inaccessible
	630	Unable to locate address
	710	Not yet built / under construction
	720	Demolished / derelict
	730	Vacant / empty
	740	Non-residential address
	750	Address occupied, but no resident household/resident(s)
	760	Communal establishment / Institution
	781	Directed not to sample at address