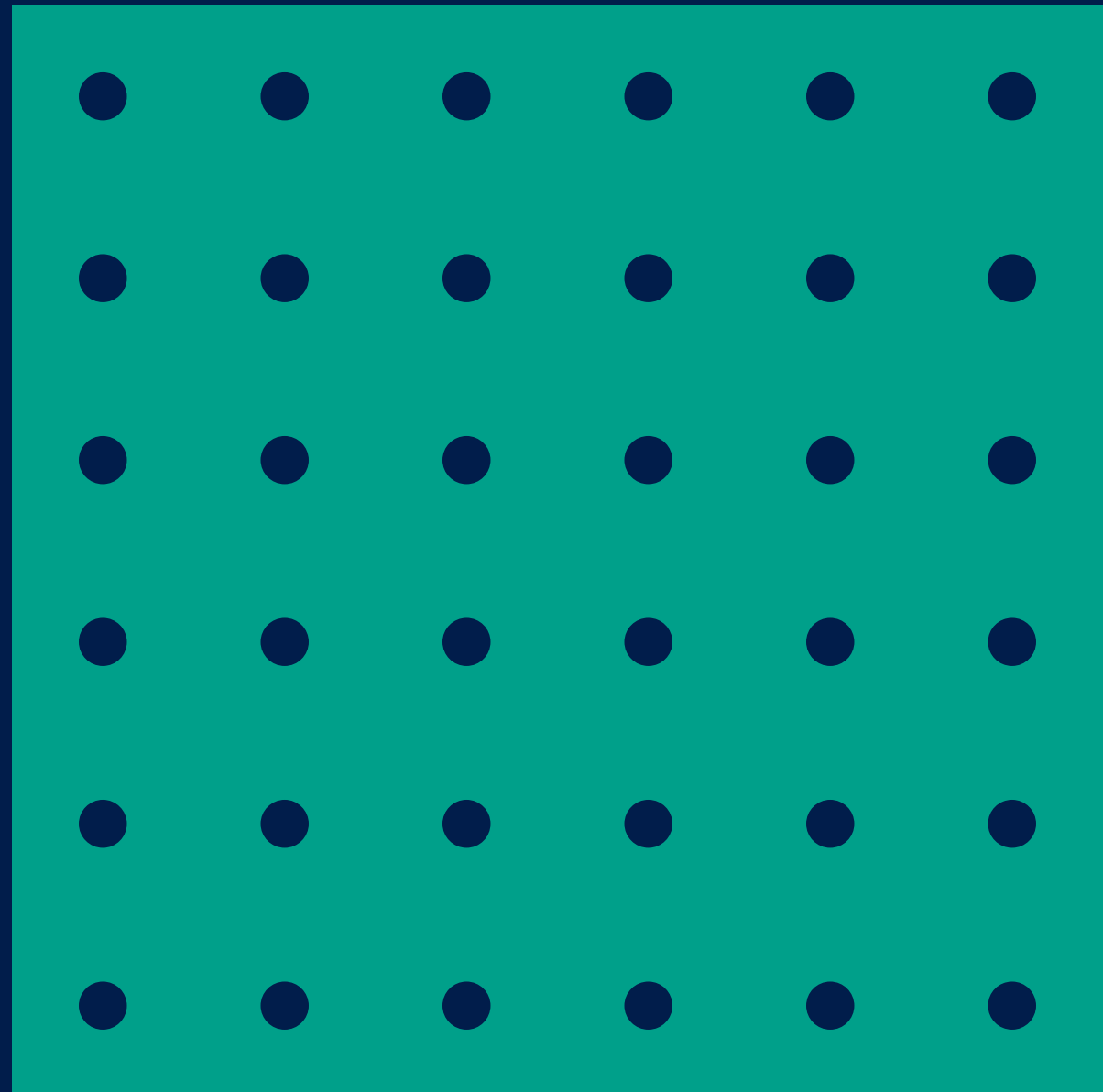

Characteristics of Our Future Health participants

Document version 12



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About this document

This document will provide descriptive statistics for data release 12 (released September 2025) in the Our Future Health Trusted Research Environment (TRE). Table 1 provides information on the data types available in the current data release. Tables 2 and 3 provide summary statistics from demographics and participant geographies. Tables 4 to 8 provide summary statistics from the baseline health questionnaire and clinic measurements data, which consists of body size, socioeconomic, lifestyle and health variables.

We have computed the statistics based on the data as it appears in the TRE. We applied statistical disclosure controls to minimise risks of re-identification by combining categories where necessary. Tables are presented with combined data for all versions of the questionnaire, except for Table 8 (Health characteristics). Other than the question on current health status, Table 8 includes statistics for version 2 only. Version 1 of the questionnaire, which was completed by approximately 52,000 of 1.9 million participants, had a different and smaller set of options for the health history questions, as described in our [data dictionary and coding file](#).

We welcome feedback on these tables, which we will use to improve documentation for data releases and other reporting of summary statistics in the future.

Send any feedback to support@ourfuturehealth.org.uk

Table 1: Data availability

	N	%
Participant data ^a	1,900,557	100.0
Baseline questionnaire data ^b	1,900,495	100.0
Clinic measurements data ^c	1,433,275	75.4
Genotyping array data ^d	650,870	34.2
Linked health records data ^e	1,648,662	86.7
Admitted Patient Care (HES APC)	1,373,694	72.3
Accident and Emergency (HES A&E; up to April 2020)	1,184,207	62.3
Emergency Care Dataset (ECDS; April 2020 onwards)*	950,974	50.0
Outpatient (HES OP)	1,598,075	84.1
Office of National Statistics (ONS) Death Registration	3,839	0.2
National Disease Registration Service (NDRS) Cancer Pathways	89,397	4.7
NDRS Cancer Registry Patient Tumour	144,966	7.6
NDRS Cancer Registry Treatment	121,613	6.4
Participant geographies data ^{f *}		
Country and region*	102,103	5.4

N: total number of participants with available data of the given type.

?: percentage of total participants with available data of the given type.

*: New data set released with Release 12.

^a The participant data includes information on sex, gender, ethnicity, month and year of birth, consent version, month and year of consent, month and year of registration and blood sample.

^b The questionnaire data includes responses from participants who have completed all five sections: about you, work and education, lifestyle, family health history, and health history. The data captures all responses from both version 1 and version 2 of the questionnaire. Due to slightly different timings of data exports, a small number of participants in the 'Participant data' table may not have a corresponding record in the 'Questionnaire data' table. The questionnaire data for these participants are expected to be available in the next release.

^c The clinic measurements data includes information on baseline physical measurements (height and weight, waist circumference, heart rate and rhythm, and blood pressure) taken by trained staff when participants attend their appointment.

^d The genotyping array data is organised in 3 categories of files: 2 sets of files containing participant genotypes (pVCF and BGEN format), and one file containing sample-level information.

^e The number of participants who have at least one record in one or more of the linked health data tables: Admitted Patient Care (HES APC), Accident and Emergency (HES A&E), Emergency Care Dataset (ECDS), Outpatient (HES OP), Office of National Statistics (ONS) Death Registration, National Disease Registration Service (NDRS) Cancer Pathways, NDRS Cancer Registry Patient Tumour, and NDRS Cancer Registry Treatment. The HES A&E resource was retired in March 2020 and the ECDS resource is a continuation of this dataset from April 2020 to the present.

^f The participant geographies data includes the country and region corresponding to each participant's home address at registration. (First release for a subset of participants).

Cohort characteristics

Table 2: Demographic characteristics of Our Future Health and the 2021/2022 UK Censuses

	Baseline questionnaire data		UK Census 2021/2022
	N	%	%
Total	1,900,495	100	100
Sex ^a			
Female	1,088,628	57.3	51.7
Male	810,707	42.7	48.3
Intersex / Other / Prefer not to answer	1,160	<0.1	NA
Age (years) ^b			
18-29	180,631	9.5	18.7
30-39	282,724	14.9	17.1
40-49	300,678	15.8	15.9
50-59	406,938	21.4	17.3
60-69	436,306	23.0	13.7
70-79	250,951	13.2	11.0
80+	42,267	2.2	6.3
Ethnicity ^c			
Asian Bangladeshi	4,400	0.2	0.8
Asian Indian	47,982	2.5	2.8
Asian Pakistani	13,381	0.7	2.1
Chinese	20,075	1.1	0.8
Other Asian	17,390	0.9	1.4
Black African	17,942	0.9	2.0
Black Caribbean	7,703	0.4	1.0
Other Black	3,567	0.2	0.3
White British	1,551,935	81.7	77.7
Irish	24,793	1.3	7.4
Polish	18,915	1.0	
Other White	112,466	5.9	
Arab	4,635	0.2	0.5
Any other	18,195	1.0	1.4
Mixed	33,123	1.8	1.8
Prefer not to answer	3,992	0.2	NA

N: total number of participants that fall within the given category.

?: percentage of total participants that fall within the given category.

^a Reported sex registered at birth (DEMOG_SEX_1_1 in v1 of the questionnaire, and DEMOG_SEX_2_1 in v2). Response options differed between questionnaire versions in that “Other” in v1 was replaced by “Intersex” in v2.

^b Derived from registration year/month and year/month of birth only (Variable names: REGISTRATION_YEAR, REGISTRATION_MONTH, and BIRTH_YEAR, BIRTH_MONTH).

^c Higher level ethnic groups (Variable name: DEMOG_ETHNICITY_1_1). Missing data for 1 participant due to technical data loss prior to October 2022. For more information, see our [Release 12 Documentation](#).

Other Asian: any other Asian or Asian British background.

Other Black: Any other Black / African / Caribbean background.

White British: White - English / Welsh / Scottish / Northern Irish / British.

Other White: any other White background.

Any other: any other ethnicity.

Mixed: includes Mixed White and Black Caribbean; Mixed White and Black African; Mixed White and Asian; Any other mixed multiple ethnic background.

* Combined census data for adults (≥18 years) in England, Wales and Northern Ireland (2021) and Scotland (2022). If NA, data for the category was not available.

Table 3: Participant country and region at registration (first release)

	Participant geographies data		UK Census 2021/2022
	N	%	%
Total	102,103	100	100
Country ^a / region ^b			
England (E92000001)	99,769	97.7	84.2
North East England (TLC)	838	0.8	4.0
North West England (TLD)	19,667	19.3	11.0
Yorkshire and The Humber (TLE)	26,478	25.9	8.2
East Midlands England (TLF)	2,079	2.0	7.3
West Midlands England (TLG)	20,940	20.5	8.8
East England (TLH)	3,317	3.2	9.4
London (TLI)	17,628	17.3	13.0
South East England (TLJ)	5,270	5.2	13.8
South West England (TLK)	3,552	3.5	8.7
Northern Ireland (N92000002 / TLN)	157	0.2	2.8
Scotland (S92000003 / TLM)	1,331	1.3	8.4
Wales (W92000004 / TLL)	846	0.8	4.7

N: total number of participants that fall within the given category.

%: percentage of total participants that fall within the given category.

^a Variable name: COUNTRY_AT_REG.

^b Variable name: REGION_AT_REG.

^c Combined census data for adults (≥18 years) in England, Wales and Northern Ireland (2021) and Scotland (2022).

Table 4: Self-reported height, weight, and derived body mass index

	Total			Female ^a			Male ^a		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Weight (kg) ^b	1,758,217	77.5	18.0	991,723	71.4	16.9	765,747	85.4	16.2
Height (cm) ^c	1,857,173	169.9	9.9	1,062,041	164.0	6.9	794,310	177.8	7.3
BMI (kg/m2) ^d	1,741,038	26.7	5.6	981,296	26.6	6.1	759,027	27.0	4.9

N: total number of participants that fall within the given category without missing data.

SD: Standard Deviation

^a Based on reported sex registered at birth (DEMOG_SEX_1_1 in v1 of the questionnaire, and DEMOG_SEX_2_1 in v2). Participants who reported “Other” (v1), “Intersex” (v2) or “Prefer not to answer” are not shown.

^b Variable name: DEMOG_WEIGHT_1_1. Extreme values were removed to produce this table (Min 20kg and max 400kg).

^c Variable name: DEMOG_HEIGHT_1_1. Extreme values were removed to produce this table (Min 90cm and max 299cm).

^d BMI calculated as weight (kg) / height (cm)².

Table 5: Body size and heart measurements from the clinic appointment

		Total			Female ^a			Male ^a		
Anthropometry		N	Mean	SD	N	Mean	SD	N	Mean	SD
Weight (kg) ^b		1,431,275	78.2	17.5	798,584	72.0	16.2	631,875	86.1	15.7
Height (cm) ^c		1,431,079	169.0	9.6	798,676	163.2	6.8	631,585	176.4	7.4
BMI (kg/m2) ^d		1,430,200	27.3	5.6	797,963	27.0	6.0	631,422	27.7	5.0
Waist circumference (cm) ^e		1,428,487	90.2	14.9	796,953	85.4	14.4	630,720	96.3	13.3
Heart measurements ^f		N	Mean	SD	N	Mean	SD	N	Mean	SD
Systolic BP, (mmHg) ^g	1 st reading	1,430,763	131.5	18.8	798,300	127.4	18.9	631,646	136.6	17.5
	2 nd reading	1,428,639	126.6	17.5	796,912	122.5	17.5	630,912	131.9	16.1
	3 rd reading	122,367	135.2	22.9	51,553	131.5	25.2	70,748	137.8	20.7
Diastolic BP, (mmHg) ^h	1 st reading	1,430,763	81.4	10.7	798,300	79.9	10.5	631,646	83.2	10.6
	2 nd reading	1,428,639	80.1	10.4	796,912	78.5	10.1	630,912	82.0	10.4
	3 rd reading	122,367	83.1	13.1	51,553	81.8	13.2	70,748	84.1	12.9
Heart rate, (bpm) ⁱ	1 st reading	1,430,763	73.6	13.0	798,300	75.0	12.4	631,646	71.8	13.5
	2 nd reading	1,428,639	73.0	12.5	796,912	74.4	12.0	630,912	71.1	13.0
	3 rd reading	122,367	66.5	18.5	51,553	70.2	19.5	70,748	63.9	17.2

N: total number of participants that fall within the given category without missing data.

SD: Standard Deviation

^a Based on reported sex registered at birth (DEMOG_SEX_1_1 in v1 of the questionnaire, and DEMOG_SEX_2_1 in v2). Participants who reported “Other” (v1), “Intersex” (v2) or “Prefer not to answer” are not shown.

^b Variable name: WEIGHT.

^c Variable name: HEIGHT.

^d BMI calculated as weight (kg) / height (cm)².

^e Variable name: WAIST.

^f Third readings for heart measures are obtained only in v2 of the clinic measurements process and if at least one of the following criteria is met: SBP readings 1 and 2 are either both greater than or equal to 160 mmHg or both less than 90 mmHg; or Heart rate readings 1 and 2 are either both greater than or equal to 100 bpm or both less than 60 bpm, or Heart rhythm readings 1 and 2 are both “irregular”.

^g Variable names: HEART_FIRST_BP_SYSTOLIC, HEART_SECOND_BP_SYSTOLIC, and HEART_THIRD_BP_SYSTOLIC.

^h Variable names: HEART_FIRST_BP_DIASTOLIC, HEART_SECOND_BP_DIASTOLIC, and HEART_THIRD_BP_DIASTOLIC.

ⁱ Variable names: HEART_FIRST_RATE, HEART_SECOND_RATE, and HEART_THIRD_RATE.

Table 6: Socioeconomic characteristics

	Total (N=1,900,495)		Female ^a (N=1,088,628)		Male ^a (N=810,707)	
	N	%	N	%	N	%
Annual household income ^b						
<£18000	180,653	9.5	117,475	10.8	63,059	7.8
£18000 to £30999	288,336	15.2	170,913	15.7	117,296	14.5
£31000 to £51999	389,355	20.5	217,821	20.0	171,404	21.1
£52000 to £100000	493,125	25.9	267,757	24.6	225,254	27.8
>£100 000	239,289	12.6	120,421	11.1	118,815	14.7
Do not know/Prefer not to answer	309,737	16.3	194,241	17.8	114,879	14.2
Qualifications (highest level) ^c						
College or University degree	981,868	51.7	570,777	52.4	410,662	50.7
A levels/AS levels/BTEC or equivalent	312,572	16.4	177,953	16.3	134,479	16.6
O levels, GCSEs or equivalent	294,391	15.5	175,307	16.1	118,996	14.7
CSEs or equivalent	80,070	4.2	43,577	4.0	36,474	4.5
NVQ, HND or HNC or equivalent	67,805	3.6	31,626	2.9	36,148	4.5
Other professional qualifications e.g. nursing, teaching	43,251	2.3	26,285	2.4	16,949	2.1
None of the above	91,614	4.8	47,633	4.4	43,914	5.4
Prefer not to answer / Missing	28,924	1.5	15,470	1.4	13,085	1.6
Employment status (first answer) ^d						
Full or part-time student	59,246	3.1	41,514	3.8	17,674	2.2
In paid employment or self-employed	1,165,432	61.3	674,817	62.0	490,166	60.5
Looking after home and/or family	66,426	3.5	57,623	5.3	8,778	1.1
On paid leave	10,504	0.6	9,394	0.9	1,104	0.1
Retired	571,456	30.1	294,671	27.1	276,562	34.1
Unable to work because of sickness or disability	54,787	2.9	35,724	3.3	18,981	2.3
Unemployed	35,115	1.8	20,011	1.8	15,058	1.9
Unpaid or voluntary work / unpaid carer	73,376	3.9	50,306	4.6	23,032	2.8
None of the above / Prefer not to answer	16,992	0.9	9,605	0.9	7,058	0.9

N: total number of participants that fall within the given category.

%: percentage of total participants that fall within the given category.

^a Based on reported sex registered at birth (DEMOG_SEX_1_1 in v1 of the questionnaire, and DEMOG_SEX_2_1 in v2). Participants who reported “Other” (v1), “Intersex” (v2) or “Prefer not to answer” are not shown.

^b Variable name: HOUSING_INCOME_1_1

^c UK-specific qualifications (or equivalent): A levels and AS levels are generally obtained when leaving secondary school around 18 years of age; GCSEs and now-obsolete O levels and CSEs are generally obtained during secondary school around 16 years of age; NVQs, HNDs and HNCs are work-based, vocational qualifications. Variable name: EDU_QUAL_1_M.

^d Variable names: WORK_STATUS_1_M and WORK_STATUS_2_M. Counts do not sum to their corresponding totals because participants can select multiple answers.

Table 7: Lifestyle characteristics

	Total (N=1,900,495)		Female ^a (N=1,088,628)		Male ^a (N=810,707)	
	N	%	N	%	N	%
Physical activity ^b						
≥4 times a week walk for at least 10 minutes	1,520,885	80.0	872,454	80.1	647,801	79.9
≥4 times a week moderate physical activity	928,317	48.8	516,328	47.4	411,603	50.8
≥4 times a week vigorous physical activity	419,226	22.1	211,624	19.4	207,411	25.6
Cigarette smoking status ^c						
Current smoker	131,387	6.9	71,443	6.6	59,845	7.4
Former smoker	553,487	29.1	300,131	27.6	253,130	31.2
Never-smoker	1,182,695	62.2	699,876	64.3	482,257	59.5
Prefer not to answer / Missing / Unknown	32,926	1.7	17,178	1.6	15,475	1.9
E-cigarette status (vaping) ^d						
Ever used	306,746	16.1	175,750	16.1	130,837	16.1
Never used	1,579,382	83.1	905,527	83.2	673,108	83.0
Prefer not to answer	14,367	0.8	7,351	0.7	6,762	0.8
Alcohol consumption ^e						
Daily or almost daily	177,290	9.3	75,907	7.0	101,309	12.5
3 to 4 days per week	362,610	19.1	177,298	16.3	185,188	22.8
1 to 2 days per week	497,623	26.2	271,989	25.0	225,444	27.8
1 to 2 days per month	300,386	15.8	188,637	17.3	111,627	13.8
Special occasions	349,864	18.4	243,133	22.3	106,546	13.1
Never	205,007	10.8	128,102	11.8	76,699	9.5
Prefer not to answer	7,715	0.4	3,562	0.3	3,894	0.5

N: total number of participants that fall within the given category.

%: percentage of total participants that fall within the given category.

^a Based on reported sex registered at birth (DEMOG_SEX_1_1 in v1 of the questionnaire, and DEMOG_SEX_2_1 in v2). Participants who reported “Other” (v1), “Intersex” (v2) or “Prefer not to answer” are not shown.

^b Variable names: For version 1: ACTIVITY_WALK_DAYS_1_1, ACTIVITY_MOD_DAYS_1_1, and ACTIVITY_VIG_DAYS_1_1; and for version 2: ACTIVITY_WALK_DAYS_2_1, ACTIVITY_MOD_DAYS_2_1, and ACTIVITY_VIG_DAYS_2_1.

^c Individuals who currently smoke cigarettes at any frequency (all/most days/occasionally) are considered current smokers. Individuals who do not currently smoke and have never smoked or smoked on fewer than 100 occasions in their lifetime are considered never smokers (including if they have smoked anything other than cigarettes). Individuals who currently do not smoke cigarettes but smoked on all or most days in the past or smoked on more than 100 occasions in their lifetime are considered former smokers. For version 1 questionnaires, based on variables: SMOKE_STATUS_1_1, SMOKE_TOBACCO_PREV_1_1, and SMOKE_100_TIMES_1_1. For version 2 questionnaires, based on variables: SMOKE_TOBACCO_TYPE_1_M, SMOKE_REG_1_M, SMOKE_STATUS_2_1, and SMOKE_100_TIMES_2_1.

^d Variable names: For version 1 questionnaires SMOKE_VAPE_1_2 and for version 2 questionnaires SMOKE_TOBACCO_TYPE_1_M.

^e Variable name: ALCOHOL_CURR_1_1.

Table 8: Health characteristics

Version 1 and 2 of questionnaire	Total (N=1,900,495)		Female ^a (N=1,088,628)		Male ^a (N=810,707)	
	N	%	N	%	N	%
Current health status ^b						
Poor	106,531	5.6	64,270	5.9	42,151	5.2
Fair	460,051	24.2	259,290	23.8	200,484	24.7
Good	1,048,586	55.2	603,161	55.4	444,986	54.9
Excellent	275,141	14.5	156,209	14.3	118,836	14.7
Do not know / Prefer not to answer	10,185	0.5	5,697	0.5	4,250	0.5
Version 2 of questionnaire	Total (N=1,847,750)		Female ^a (N=1,058,896)		Male ^a (N=787,724)	
	N	%	N	%	N	%
Any long-standing physical or mental health conditions or illnesses ^c						
Yes	789,094	42.7	472,456	44.6	316,200	40.1
No	986,719	53.4	543,075	51.3	443,268	56.3
Do not know / Prefer not to answer	71,937	3.9	43,365	4.1	28,256	3.6
Medical conditions ^d						
Autoimmune disorder	71,937	3.9	43,365	4.1	28,256	3.6
Blood Disorders (Anaemia)	125,796	7.3	105,729	10.7	20,014	2.7
Cancer	133,276	7.7	75,119	7.6	58,118	7.9
Complications or difficulties in pregnancy or childbirth	110,263	6.4	109,824	11.1	425	0.1
Digestive system or liver problems	209,401	12.1	129,822	13.1	79,495	10.8
Endocrine, nutritional and metabolic disorders (e.g., diabetes, thyroid disorder, vitamin deficiencies)	184,745	10.7	136,059	13.7	48,600	6.6
Eye or visual problems	312,364	18.1	171,788	17.3	140,426	19.0
Fractures, breaks, or joint problems	397,007	23.0	225,617	22.8	171,237	23.2
Heart or circulatory disease (e.g., high blood pressure or stroke)	279,144	16.1	129,981	13.1	149,051	20.2
Kidney or urinary system disorders	107,732	6.2	57,073	5.8	50,609	6.9
Lung or respiratory problems	190,248	11.0	111,088	11.2	79,074	10.7
Mental health conditions (e.g., depression, bipolar disorder)	343,095	19.8	239,536	24.2	103,348	14.0
Neurodevelopmental conditions (e.g., Autism spectrum disorder, ADHD)	37,746	2.2	23,891	2.4	13,775	1.9
Neurological disorders (e.g., Epilepsy)	43,141	2.5	27,456	2.8	15,654	2.1
Reproductive system problems	104,394	6.0	91,198	9.2	13,167	1.8
Other	116,346	6.7	66,269	6.7	50,013	6.8
None of the above	448,740	25.9	235,290	23.8	213,247	28.9
Do not know	14,698	0.8	7,456	0.8	7,201	1.0
Prefer not to answer	6,604	0.4	3,286	0.3	3,093	0.4

N: total number of participants that fall within the given category.

%: percentage of total participants that fall within the given category.

^a Based on reported sex registered at birth (DEMOG_SEX_1_1 in v1 of the questionnaire, and DEMOG_SEX_2_1 in v2). Participants who reported “Other” (v1), “Intersex” (v2) or “Prefer not to answer” are not shown.

^b Variable name: HEALTH_STATUS_CURR_1_1. Missing data for 1 participant due to technical data loss prior to October 2022. For more information, see our [Release 12 Documentation](#).

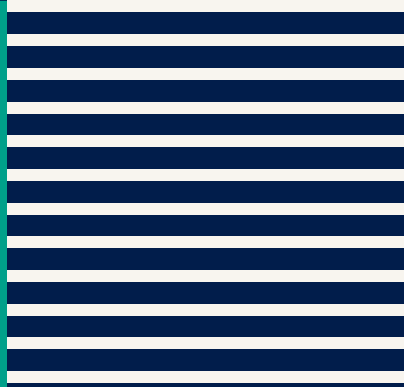
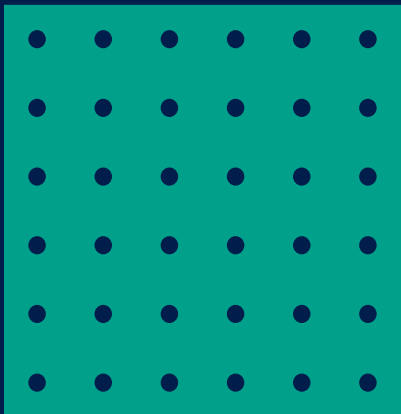
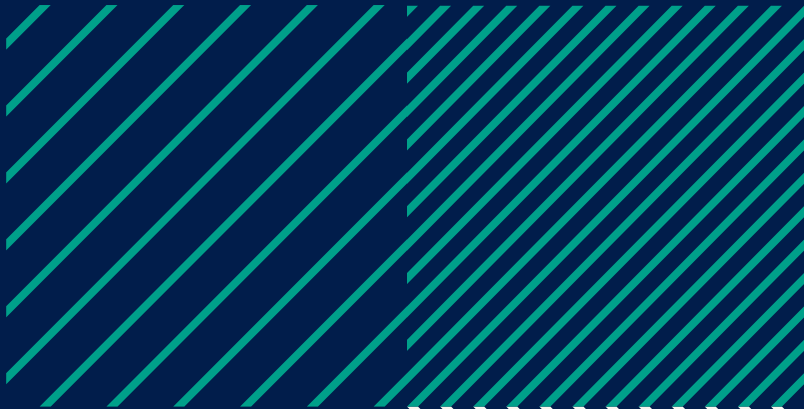
^c Variable name: HEALTH_STATUS_CHRONIC_1_1. Version 2 of questionnaire only.

^d Responses to the question (Version 2 of questionnaire only), “Have you ever been diagnosed with any of the following by a doctor or other health professional?” (DIAG_2_M). Multiple responses are allowed, so condition-specific percentages may not sum to 100%. ‘Other, not listed’ was offered as a possible response. Only top-level categories of medical conditions are shown: depending on responses to these questions, additional questions are presented so that participants can give further details on their specific conditions.

Note on representativeness and statistical weights

Participant self-selection can lead to selection biases for some analyses in all non-probability, volunteer-based recruitment programmes, including Our Future Health. We aim to recruit a cohort that is reflective of the diversity of the UK population in terms of age, ethnicity, socioeconomic status and geography. This will ensure that the resource is amenable to investigation of a large range of hypotheses and potential discoveries to improve the health of all parts of the UK population. Recruiting a diverse population will also help both to minimise selection biases and to maximise the participation of groups in the UK who have been historically under-represented in health research. Current diversity of the Our Future Health cohort can be compared to the combined UK Censuses 2021-2022 using Table 2 of this document.

We recognise, however, that our participant sample is unlikely to be fully representative of the UK population in demographics and other factors. Research using data from Our Future Health may therefore be affected, to varying degrees, by selection biases. To address this challenge, we plan to conduct non-response analyses using data from our recruitment partners and from UK Census programmes. In due course, we will make the sampling weights and statistical code from this work available to our research users, enabling weighting of results back to the UK, England, Scotland, Wales, and Northern Ireland populations. This will help researchers to improve the accuracy of statistical inferences to these UK national populations in analyses of data from Our Future Health.



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Our
Future
Health