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# Capability, health and travel behaviour of older people

## Appendices

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# Appendix A: Descriptive analysis

Appendix table A.1 Health conditions by age group				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	7420	5516	1810	14746
Asthma	6.4%	10.0%	9.1%	8.0%
Arthritis	16.6%	34.1%	42.1%	26.3%
Congestive heart failure	0.5%	1.2%	4.2%	1.2%
Coronary heart disease	2.1%	5.1%	8.6%	4.0%
Angina	2.1%	5.6%	10.3%	4.4%
Heart attack	2.3%	6.3%	9.9%	4.7%
Stroke	1.7%	5.1%	9.5%	3.9%
Emphysema	0.9%	2.3%	2.4%	1.6%
Hyperthyroidism	0.8%	1.4%	1.1%	1.1%
Hypothyroidism	3.4%	6.5%	4.7%	4.7%
Chronic bronchitis	1.4%	3.1%	3.1%	2.3%
Liver condition	2.1%	2.3%	1.6%	2.1%
Cancer or malignancy	3.8%	8.7%	12.1%	6.6%
Diabetes	6.9%	13.1%	16.0%	10.3%
Epilepsy	0.6%	0.7%	0.3%	0.6%
High blood pressure	17.1%	35.9%	45.8%	27.7%
Clinical depression	6.8%	5.0%	3.5%	5.7%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,746*

Appendix table A.2 Health conditions by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	7750	6997	14747
Asthma	9.1%	6.9%	8.0%
Arthritis	31.4%	20.6%	26.3%
Congestive heart failure	1.0%	1.5%	1.2%
Coronary heart disease	2.8%	5.3%	4.0%
Angina	3.8%	5.0%	4.4%
Heart attack	3.0%	6.6%	4.7%
Stroke	3.6%	4.4%	3.9%
Emphysema	1.6%	1.6%	1.6%
Hyperthyroidism	1.7%	0.5%	1.1%
Hypothyroidism	7.5%	1.7%	4.7%
Chronic bronchitis	2.4%	2.1%	2.3%
Liver condition	2.0%	2.3%	2.1%
Cancer or malignancy	6.1%	7.2%	6.6%
Diabetes	8.6%	12.2%	10.3%
Epilepsy	0.6%	0.6%	0.6%
High blood pressure	27.9%	27.4%	27.7%
Clinical depression	6.8%	4.6%	5.7%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,747*

Appendix table A.3 Impairments by age group				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	7420	5516	1810	14746
Mobility	13.4%	20.6%	38.8%	19.2%
Lifting, carrying or moving objects	13.8%	20.2%	33.2%	18.6%
Manual dexterity	6.2%	8.3%	14.7%	8.0%
Continence	3.6%	5.8%	10.3%	5.3%
Hearing	2.6%	5.1%	12.4%	4.7%
Sight	2.3%	4.1%	11.4%	4.1%
Communication	1.1%	1.1%	1.8%	1.2%
Cognitive (memory, learning etc.)	5.2%	4.5%	10.7%	5.6%
Recognising physical danger	0.8%	0.6%	0.6%	0.7%
Physical co-ordination	4.4%	7.3%	15.7%	6.8%
Difficulties with personal care	3.5%	4.7%	9.6%	4.7%
Other	7.1%	7.1%	9.3%	7.4%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,746*

Appendix table A.4 Impairments by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	7750	6997	14747
Mobility	21.1%	17.1%	19.2%
Lifting, carrying or moving objects	21.2%	15.7%	18.6%
Manual dexterity	9.4%	6.5%	8.0%
Continence	5.4%	5.1%	5.3%
Hearing	4.3%	5.2%	4.7%
Sight	4.5%	3.6%	4.1%
Communication	1.0%	1.4%	1.2%
Cognitive (memory, learning etc.)	5.7%	5.6%	5.6%
Recognising physical danger	0.7%	0.7%	0.7%
Physical co-ordination	7.2%	6.5%	6.8%
Difficulties with personal care	5.3%	4.0%	4.7%
Other	7.1%	7.7%	7.4%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,747*

Appendix table A.5 Number of health conditions by age group <sup>1</sup>				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	7417	5511	1810	14737
No conditions	57.1%	27.5%	17.1%	41.1%
Single condition	24.8%	32.2%	30.5%	28.3%
Multiple conditions	18.1%	40.3%	52.4%	30.6%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,737*

Appendix table A.6 Number of health conditions by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	7745	6992	14737
No conditions	43.1%	39.3%	41.1%
Single condition	28.1%	28.4%	28.3%
Multiple conditions	28.7%	32.3%	30.6%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,737*

<sup>1</sup> Sum of population by age group does not equal total due to rounding.

Appendix table A.7 Impairments by number of health conditions <sup>2</sup>				
Number of conditions	No conditions	Single condition	Multiple conditions	Total
<i>Base (weighted)</i>	6049	4157	4497	14703
Mobility	7.4%	16.9%	37.2%	19.2%
Lifting, carrying or moving objects	7.6%	16.1%	35.8%	18.6%
Manual dexterity	2.9%	6.9%	16.0%	8.0%
Continence	2.5%	3.7%	10.4%	5.3%
Hearing	2.0%	3.9%	9.2%	4.7%
Sight	1.9%	3.3%	7.8%	4.1%
Communication	0.6%	1.1%	2.1%	1.2%
Cognitive (memory, learning etc.)	2.7%	4.6%	10.5%	5.6%
Recognising physical danger	0.3%	0.4%	1.4%	0.7%
Physical co-ordination	2.6%	5.2%	14.0%	6.8%
Difficulties with personal care	1.8%	3.5%	9.7%	4.7%
Other	3.4%	6.1%	14.0%	7.4%
<i>At least one of above impairments</i>	16.1%	30.8%	57.1%	32.8%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,703*

Appendix table A.8 Multiple health condition cluster by age group				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	1344	2216	949	4508
Heart disease plus	12.0%	15.7%	19.1%	15.3%
High blood pressure and arthritis	19.0%	25.1%	28.8%	24.1%
Lung and breathing conditions plus	21.1%	17.3%	14.8%	17.9%
Arthritis, cancer and depression	13.1%	11.1%	10.2%	11.5%
High blood pressure, cancer and depression	14.6%	12.7%	14.9%	13.7%
Hyperthyroidism plus	13.3%	12.7%	8.1%	11.9%
High blood pressure and diabetes	6.9%	5.4%	4.0%	5.6%

*Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 4,508*

<sup>2</sup> Sum of population by number of conditions does not equal total due to rounding.

Appendix table A.9 Multiple health condition cluster by sex <sup>3</sup>			
Sex	Female	Male	Total
<i>Base (weighted)</i>	2500	2009	4508
Heart disease plus	33.3%	10.9%	15.3%
High blood pressure and arthritis	31.1%	30.1%	24.1%
Lung and breathing conditions plus	24.6%	21.5%	17.9%
Arthritis, cancer and depression	17.2%	13.0%	11.5%
High blood pressure, cancer and depression	25.8%	12.3%	13.7%
Hyperthyroidism plus	6.7%	20.2%	11.9%
High blood pressure and diabetes	10.8%	4.8%	5.6%

Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 4,508

Appendix table A.10 Impairments by multiple health condition cluster							
Multiple health condition cluster	Heart disease plus	HBP & arthritis	Lung & breathing conditions plus	Arthritis, cancer & depression	HBP, cancer & depression	Hyperthyroidism plus	HBP & diabetes
<i>Base (weighted)</i>	687	1085	803	518	615	538	249
Mobility	45.3%	40.7%	38.3%	39.1%	29.6%	34.7%	16.9%
Lifting, carrying or moving objects	46.8%	38.1%	38.1%	35.5%	26.3%	32.9%	18.1%
Manual dexterity	18.5%	16.8%	16.4%	20.5%	12.4%	14.8%	5.9%
Co-ordination	19.6%	13.4%	12.2%	14.6%	14.4%	13.2%	6.8%
Continence	13.2%	8.7%	11.7%	9.9%	9.1%	12.0%	7.2%
Memory	16.3	8.0%	8.0%	10.5%	13.9%	9.3%	3.2%
Hearing	11.7%	10.2%	10.5%	7.9%	9.0%	7.0%	1.8%

Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 4,494

Appendix table A.11 Number of impairments by age group <sup>4</sup>				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	7406	5502	1802	14710
No impairments	75.0%	64.4%	43.6%	67.2%
Single impairment	9.8%	13.1%	15.3%	11.7%
Multiple impairments	15.2%	22.5%	41.1%	21.1%

Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,710

<sup>3</sup> Sum of population by age group does not equal total due to rounding.

<sup>4</sup> Impairments considered in this analysis were: (1) Mobility, (2) Lifting, carrying or moving objects, (3) Manual dexterity, (4) Continence, (5) Hearing, (6) Sight, (7) Communication, (8) Memory, (9) Recognising physical danger, (10) Physical co-ordination, (11) Difficulty with personal care, and (12) Other.



Appendix table A.12 Number of impairments by sex

Sex	Female	Male	Total
<i>Base (weighted)</i>	7732	6979	14711
No impairments	65.6%	68.9%	67.2%
Single impairment	11.5%	12.0%	11.7%
Multiple impairments	22.9%	19.1%	21.1%

Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,711

Appendix table A.13 Severity of impairment by age group

Age groups	50-64	65-79	80+	Total	
<i>Base (weighted)</i>	7420	5516	1810	14746	
<b>Mobility</b>	No difficulty	86.6%	79.4%	61.2%	80.8%
	Some difficulty	7.6%	12.4%	19.6%	10.9%
	A lot of difficulty	5.6%	8.0%	18.5%	8.1%
	Unable to do this	0.1%	0.2%	0.7%	0.2%
<b>Lifting, carrying or moving objects</b>	No difficulty	86.2%	79.8%	66.9%	81.4%
	Some difficulty	7.4%	10.6%	13.2%	9.3%
	A lot of difficulty	5.7%	7.9%	16.2%	7.8%
	Unable to do this	0.8%	1.7%	3.8%	1.5%
<b>Manual dexterity</b>	No difficulty	93.8%	91.7%	85.3%	92.0%
	Some difficulty	3.9%	5.1%	9.1%	5.0%
	A lot of difficulty	2.3%	3.0%	5.2%	2.9%
	Unable to do this	0.1%	0.1%	0.4%	0.1%
<b>Continence</b>	No difficulty	96.4%	94.2%	89.8%	94.7%
	Some difficulty	2.3%	4.2%	7.1%	3.6%
	A lot of difficulty	1.2%	1.6%	3.2%	1.6%
	Unable to do this	0.1%	0.1%	0.0%	0.1%
<b>Hearing</b>	No difficulty	97.4%	94.9%	87.6%	95.3%
	Some difficulty	1.8%	3.9%	7.9%	3.3%
	A lot of difficulty	0.7%	1.1%	4.4%	1.3%
	Unable to do this	0.0%	0.1%	0.1%	0.1%
<b>Sight</b>	No difficulty	97.7%	96.0%	88.6%	95.9%
	Some difficulty	1.4%	3.0%	6.2%	2.6%
	A lot of difficulty	0.9%	1.1%	5.0%	1.4%
	Unable to do this	0.1%	0.0%	0.2%	0.1%
<b>Memory</b>	No difficulty	94.8%	95.5%	89.4%	94.4%
	Some difficulty	3.5%	3.3%	7.9%	4.0%
	A lot of difficulty	1.7%	1.1%	2.7%	1.6%
	Unable to do this	0.0%	0.0%	0.1%	0.0%

Appendix table A.13 Severity of impairment by age group					
Age groups		50-64	65-79	80+	Total
<i>Base (weighted)</i>		7420	5516	1810	14746
<b>Physical danger</b>	No difficulty	99.2%	99.5%	99.4%	99.4%
	Some difficulty	0.5%	0.4%	0.4%	0.4%
	A lot of difficulty	0.3%	0.1%	0.1%	0.2%
	Unable to do this	0.0%	0.0%	0.1%	0.0%
<b>Coordination</b>	No difficulty	95.7%	92.7%	84.4%	93.2%
	Some difficulty	2.6%	4.8%	10.4%	4.4%
	A lot of difficulty	1.7%	2.4%	4.9%	2.3%
	Unable to do this	0.0%	0.1%	0.4%	0.1%
<b>Personal care</b>	No difficulty	96.5%	95.3%	90.4%	95.3%
	Some difficulty	2.3%	2.8%	5.2%	2.8%
	A lot of difficulty	1.1%	1.5%	3.4%	1.5%
	Unable to do this	0.1%	0.4%	0.9%	0.3%

Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,746

Appendix table A.14 Severity of impairment by sex				
Sex		Female	Male	Total
<i>Base (weighted)</i>		7750	6997	14747
<b>Mobility</b>	No difficulty	78.9%	80.8%	82.9%
	Some difficulty	11.9%	10.9%	9.8%
	A lot of difficulty	9.0%	8.1%	7.0%
	Unable to do this	0.2%	0.2%	0.3%
<b>Lifting, carrying or moving objects</b>	No difficulty	78.8%	81.4%	84.3%
	Some difficulty	10.5%	9.3%	8.0%
	A lot of difficulty	9.1%	7.8%	6.4%
	Unable to do this	1.6%	1.5%	1.3%
<b>Manual dexterity</b>	No difficulty	90.6%	92.0%	93.5%
	Some difficulty	5.8%	5.0%	4.1%
	A lot of difficulty	3.4%	2.9%	2.3%
	Unable to do this	0.1%	0.1%	0.1%
<b>Continence</b>	No difficulty	94.6%	94.7%	95.0%
	Some difficulty	3.6%	3.6%	3.6%
	A lot of difficulty	1.8%	1.6%	1.3%
	Unable to do this	0.1%	0.1%	0.1%
<b>Hearing</b>	No difficulty	95.7%	94.8%	95.3%
	Some difficulty	2.9%	3.8%	3.3%
	A lot of difficulty	1.3%	1.3%	1.3%
	Unable to do this	0.1%	0.1%	0.1%

Appendix table A.14 Severity of impairment by sex				
<b>Sex</b>		<b>Female</b>	<b>Male</b>	<b>Total</b>
<i>Base (weighted)</i>		7750	6997	14747
<b>Sight</b>	No difficulty	95.5%	96.4%	95.9%
	Some difficulty	2.8%	2.3%	2.6%
	A lot of difficulty	1.6%	1.3%	1.4%
	Unable to do this	0.1%	0.0%	0.1%
<b>Communication or speech problems</b>	No difficulty	99.0%	98.6%	98.8%
	Some difficulty	0.8%	1.0%	0.9%
	A lot of difficulty	0.3%	0.4%	0.3%
	Unable to do this	0.0%	0.0%	0.0%
<b>Memory</b>	No difficulty	94.3%	94.5%	94.4%
	Some difficulty	3.8%	4.1%	4.0%
	A lot of difficulty	1.8%	1.4%	1.6%
	Unable to do this	0.0%	0.0%	0.0%
<b>Physical danger</b>	No difficulty	99.4%	99.4%	99.4%
	Some difficulty	0.4%	0.5%	0.4%
	A lot of difficulty	0.2%	0.1%	0.2%
	Unable to do this	0.0%	0.0%	0.0%
<b>Coordination</b>	No difficulty	92.8%	93.5%	93.2%
	Some difficulty	4.8%	4.0%	4.4%
	A lot of difficulty	2.3%	2.3%	2.3%
	Unable to do this	0.1%	0.1%	0.1%

Understanding Society Wave 7 (2015-2017). Individuals aged 50+, n = 14,747

Appendix table A.15 Difficulty with ADL/IADL tasks by age group				
<b>Age groups</b>	<b>50-64</b>	<b>65-79</b>	<b>80+</b>	<b>Total</b>
<i>Base (weighted)</i>	1837	2903	874	5614
No difficulties	85.9%	81.4%	62.8%	80.0%
Difficulty with a single task	7.8%	10.7%	15.4%	10.5%
Difficulty with several tasks	3.6%	4.1%	10.5%	4.9%
Difficulty with all tasks	2.6%	3.9%	11.2%	4.6%

English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 5,614

Appendix table A.16 Difficulty with ADL/IADL tasks by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	3013	2601	5614
No difficulties	77.5%	82.8%	80.0%
Difficulty with a single task	11.2%	9.7%	10.5%
Difficulty with several tasks	5.6%	4.1%	4.9%
Difficulty with all tasks	5.7%	3.3%	4.6%

English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 5,614

Appendix table A.17 Difficulty with individual ADL/IADL tasks by age group					
	Age groups	50-64	65-79	80+	Total
	<i>Base (weighted)</i>	4197	2953	1002	8152
ADL	Dressing, inc. shoes & socks	7.5%	12.7%	24.4%	11.4%
	Walking across a room	1.8%	3.8%	11.6%	3.7%
	Using the toilet (inc. up/down)	2.4%	3.6%	8.1%	3.5%
	Eating, such as cutting up food	1.4%	1.8%	5.9%	2.1%
IADL	Using a map in a strange place	2.2%	4.2%	13.0%	4.3%
	Recognising physical danger	1.0%	0.9%	4.3%	1.4%
	Shopping for groceries	5.4%	8.1%	27.1%	9.1%
	Taking medications	1.5%	2.0%	7.4%	2.4%
	Managing money	1.8%	2.6%	11.9%	3.3%

English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152

Appendix table A.18 Difficulty with individual ADL/IADL tasks by sex				
	Sex	Female	Male	Total
	<i>Base (weighted)</i>	4275	3877	8152
ADL	Dressing, inc. shoes & socks	11.6%	11.3%	11.4%
	Walking across a room	4.5%	2.8%	3.7%
	Using the toilet (inc. up or down)	4.4%	2.6%	3.5%
	Eating, such as cutting up food	2.7%	1.5%	2.1%
IADL	Using a map in a strange place	6.2%	2.2%	4.3%
	Recognising physical danger	1.6%	1.2%	1.4%
	Shopping for groceries	12.0%	5.8%	9.1%
	Taking medications	2.4%	2.3%	2.4%
	Managing money	3.8%	2.8%	3.3%

English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152

Appendix table A.19 Other difficulties by age group				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	1836	2903	875	5614
No other difficulties	89.1%	81.9%	46.6%	78.8%
One other difficulty	7.8%	12.9%	30.9%	14.1%
Several other difficulties	0.5%	2.1%	7.8%	2.5%
All other difficulties	2.5%	3.1%	14.7%	4.7%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 5,614*

Appendix table A.20 Other difficulties by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	3012	2602	5614
No other difficulties	76.2%	81.8%	78.8%
One other difficulty	14.9%	13.1%	14.1%
Several other difficulties	3.1%	1.8%	2.5%
All other difficulties	5.9%	3.3%	4.7%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 5,614*

Appendix table A.21 Other difficulties (individual) by age group				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	4197	2953	1002	8152
Walking 100 yards	7.5%	13.6%	35.0%	13.1%
Sitting for about 2 hours	12.3%	13.4%	15.5%	13.1%
Getting up from a chair	18.3%	25.7%	41.7%	23.8%
Climbing > 1 flights of stairs (no rest)	17.9%	34.7%	61.7%	29.4%
Climbing 1 flight of stairs (no rest)	7.8%	15.3%	39.6%	14.4%
Stooping, kneeling or crouching	26.4%	40.1%	63.3%	35.9%
Reaching or extending arms	8.6%	10.7%	20.6%	10.8%
Pulling or pushing large objects	11.3%	17.1%	37.9%	16.7%
Lifting or carrying objects (>10lbs)	14.1%	22.8%	46.1%	21.2%
Picking up a 5p coin from a table	3.1%	6.3%	13.2%	5.5%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

Appendix table A.22 Other difficulties (individual) by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	4275	3877	8152
Walking 100 yards	15.0%	11.0%	13.1%
Sitting for about 2 hours	14.5%	11.6%	13.1%
Getting up from a chair	27.2%	20.1%	23.8%
Climbing > 1 flights of stairs (no rest)	35.7%	22.4%	29.3%
Climbing 1 flight of stairs (no rest)	18.4%	10.0%	14.4%
Stooping, kneeling or crouching	40.7%	30.6%	35.9%
Reaching or extending arms	13.3%	8.2%	10.8%
Pulling or pushing large objects	22.3%	10.5%	16.7%
Lifting or carrying objects (>10lbs)	29.2%	12.2%	21.2%
Picking up a 5p coin from a table	6.4%	4.5%	5.5%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

Appendix table A.23 Frequency of public transport use by difficulties with ADL/IADL tasks					
Difficulty with ADL/IADL tasks	None	Single	Several	All	Total
<i>Base (weighted)</i>	4489	589	277	259	5614
Every day or nearly every day	7.7%	7.5%	4.1%	6.2%	7.4%
Two or three times a week	14.8%	14.4%	10.3%	9.9%	14.3%
Once a week	8.0%	8.6%	4.3%	10.4%	8.0%
Two or three times a month	10.5%	6.3%	4.8%	6.7%	9.6%
Once a month or less	33.5%	25.1%	13.6%	19.0%	30.9%
Never	25.7%	38.1%	62.8%	47.8%	29.8%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 5,614*

Appendix table A.24 Use of mobility aids by age group				
Age groups	50-64	65-79	80+	Total
<i>Base (weighted)</i>	4197	2953	1002	8152
Cane / walking stick	6.2%	16.3%	46.3%	14.8%
Zimmer frame / walker	0.7%	3.2%	19.7%	3.9%
Manual wheelchair	0.9%	2.6%	9.1%	2.5%
Electric wheelchair	0.2%	0.5%	1.1%	0.4%
Buggy or scooter	0.8%	2.7%	6.1%	2.1%
Personal alarm	0.3%	2.0%	12.0%	2.3%
Elbow crutches	0.9%	1.7%	1.4%	1.2%
Hearing aids	3.2%	14.0%	35.5%	11.0%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

**Appendix table A.25 Use of mobility aids by sex**

<b>Sex</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
<i>Base (weighted)</i>	4275	3877	8152
Cane / walking stick	16.6%	12.8%	14.8%
Zimmer frame / walker	5.4%	2.3%	3.9%
Manual wheelchair	3.2%	1.7%	2.5%
Electric wheelchair	0.5%	0.4%	0.4%
Buggy or scooter	2.3%	1.9%	2.1%
Personal alarm	3.3%	1.3%	2.3%
Elbow crutches	1.3%	1.1%	1.2%
Hearing aids	9.8%	12.3%	11.0%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

**Appendix table A.26 Number of mobility aids used (0-7) by age group**

<b>Age groups</b>	<b>50-64</b>	<b>65-79</b>	<b>80+</b>	<b>Total</b>
<i>Base (weighted)</i>	4197	2953	1002	8152
None	92.8%	80.6%	42.8%	82.3%
Single aid	5.3%	13.4%	30.2%	11.3%
Two aids	1.3%	3.4%	16.5%	3.9%
Three (or more) aids	0.5%	2.5%	10.5%	2.5%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

**Appendix table A.27 Number of mobility aids used (0-7) by sex**

<b>Sex</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>
<i>Base (weighted)</i>	4275	3877	8152
None	79.7%	85.2%	82.3%
Single aid	12.2%	10.3%	11.3%
Two aids	5.1%	2.7%	3.9%
Three (or more) aids	3.1%	1.8%	2.5%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

**Appendix table A.28 Self-reported general health by age group**

<b>Age groups</b>	<b>50-64</b>	<b>65-79</b>	<b>80+</b>	<b>Total</b>
<i>Base (weighted)</i>	4197	2953	1002	8152
Excellent health	17.6%	8.9%	4.0%	12.3%
Very good health	30.7%	28.7%	20.7%	27.7%
Good health	30.6%	33.8%	32.7%	30.8%
Fair health	14.0%	20.8%	30.1%	17.7%
Poor health	7.1%	7.9%	12.5%	7.8%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*

Appendix table A.29 Self-reported general health by sex			
Sex	Female	Male	Total
<i>Base (weighted)</i>	4275	3877	8152
Excellent health	12.7%	12.9%	12.3%
Very good health	27.0%	30.8%	27.7%
Good health	32.1%	31.9%	30.8%
Fair health	19.6%	17.0%	17.7%
Poor health	8.6%	7.4%	7.8%

*English Longitudinal Study of Ageing Wave 7 (2014-2015). Individuals aged 50+, n = 8,152*



## Appendix B: Multivariate analysis

Appendix table B.1 Characteristics associated with having one or more health conditions		
		One or more conditions
Age (Ref = 50-59)	60-64	3.027*** (0.191)
	65-69	3.069*** (0.235)
	70-79	4.377*** (0.348)
	80+	6.129*** (0.609)
Sex (Ref = Male)	Female	1.089** (0.044)
Region (Ref = East Midlands)	East of England	1.007 (0.093)
	London	0.788** (0.080)
	North East	1.060 (0.121)
	North West	1.134 (0.103)

Appendix table B.1 Characteristics associated with having one or more health conditions

		<b>One or more conditions</b>
Region (Ref = East Midlands)	<i>Northern Ireland</i>	0.638*** (0.063)
	<i>Scotland</i>	0.750*** (0.069)
	<i>South East</i>	0.908 (0.077)
	<i>South West</i>	0.948 (0.086)
	<i>Wales</i>	0.763*** (0.073)
	<i>West Midlands</i>	1.060 (0.103)
	<i>Yorkshire and Humber</i>	0.967 (0.092)
Urban/rural (Ref = Rural)	<i>Urban</i>	1.149*** (0.050)
Employment status (Ref = Employed)	Retired	1.552*** (0.096)
	Unemployed	2.278*** (0.320)
	Sick	5.038*** (0.582)

Appendix table B.1 Characteristics associated with having one or more health conditions

		<b>One or more conditions</b>
Employment status (Ref = Employed)	Other	1.189 (0.148)
Household composition (Ref = Single adult)	Couple	0.741*** (0.039)
	Two adults	0.815** (0.085)
	Three adults	0.707*** (0.047)
Children in household (Ref = None)	Mentioned	0.721*** (0.045)
<b>Observations</b>		14,734
<b>R<sup>2</sup></b>		0.142

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Logistic regression (complex surveys), with coefficients expressed as odds ratios. Understanding Society, Wave 7 (2015-2017). Standard errors (log base) in parentheses.

Appendix table B.2 Relationship between impairments and health conditions

		Mobility	Lifting	Manual dexterity	Contenance	Hearing	Memory	Coordination
<b>Health conditions</b>								
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	1.083 (0.322)	1.301 (0.357)	1.253 (0.488)	0.549 (0.219)	0.846 (0.392)	0.789 (0.321)	0.434** (0.174)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	1.710*** (0.287)	1.427** (0.221)	2.061*** (0.453)	0.704 (0.175)	1.394 (0.348)	0.402*** (0.096)	1.240 (0.284)
Angina (Ref = Not mentioned)	<i>Mentioned</i>	0.925 (0.224)	1.564* (0.366)	0.819 (0.246)	0.885 (0.304)	1.002 (0.312)	0.944 (0.293)	0.938 (0.271)
Heart attack (Ref = Not mentioned)	<i>Mentioned</i>	1.243 (0.295)	1.608** (0.384)	0.762 (0.231)	0.459** (0.154)	1.002 (0.339)	0.874 (0.295)	0.640 (0.200)
Hypothyroidism (Ref = Not mentioned)	<i>Mentioned</i>	0.523 (0.301)	0.480 (0.254)	0.313 (0.226)	0.422 (0.349)	0.511 (0.375)	1.108 (0.864)	0.526 (0.370)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	0.799 (0.139)	1.123 (0.173)	1.068 (0.220)	1.134 (0.251)	0.637** (0.145)	0.784 (0.174)	0.582*** (0.118)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.470*** (0.081)	0.947 (0.153)	0.883 (0.178)	1.726** (0.405)	1.373 (0.370)	0.992 (0.230)	0.621** (0.131)
High blood pressure (Ref = Not mentioned)	<i>Mentioned</i>	0.702** (0.126)	0.760* (0.125)	0.803 (0.184)	0.667 (0.165)	0.888 (0.220)	0.585** (0.141)	0.599** (0.133)
Clinical depression (Ref = Not mentioned)	<i>Mentioned</i>	0.593** (0.139)	0.777 (0.168)	0.559** (0.154)	0.478** (0.140)	0.425*** (0.140)	0.930 (0.266)	0.676 (0.190)
Number of conditions		1.333*** (0.131)	1.175* (0.106)	1.318** (0.142)	1.383*** (0.173)	1.292** (0.167)	1.369*** (0.159)	1.660*** (0.186)

Appendix table B.2 Relationship between impairments and health conditions

		<b>Mobility</b>	<b>Lifting</b>	<b>Manual dexterity</b>	<b>Continenence</b>	<b>Hearing</b>	<b>Memory</b>	<b>Coordination</b>
Health condition cluster (Ref = Single health condition)	<i>No conditions</i>	0.623*** (0.084)	0.475*** (0.061)	0.726 (0.154)	0.579*** (0.119)	0.676* (0.136)	0.372*** (0.076)	0.814 (0.162)
	<i>Heart disease plus</i>	1.371 (0.297)	1.643** (0.332)	1.088 (0.296)	1.480 (0.465)	0.790 (0.224)	1.709* (0.502)	1.564* (0.424)
	<i>HBP and arthritis</i>	1.498** (0.262)	1.594*** (0.261)	1.134 (0.248)	1.173 (0.282)	1.040 (0.267)	1.351 (0.351)	1.092 (0.245)
	<i>Lung &amp; breathing conditions plus</i>	0.875 (0.211)	1.209 (0.261)	0.957 (0.305)	1.531 (0.486)	1.336 (0.461)	1.155 (0.408)	1.680 (0.561)
	<i>Arthritis, cancer &amp; depression</i>	1.224 (0.206)	1.176 (0.191)	1.222 (0.232)	0.912 (0.210)	0.683 (0.174)	1.379 (0.327)	1.084 (0.230)
	<i>HBP, cancer &amp; depression</i>	1.525** (0.275)	1.342* (0.219)	1.139 (0.271)	1.461 (0.347)	0.933 (0.239)	1.059 (0.231)	1.157 (0.258)
	<i>Hyperthyroidism plus</i>	1.876 (0.951)	3.262** (1.589)	2.612 (1.733)	2.226 (1.725)	1.961 (1.347)	0.676 (0.482)	1.287 (0.827)
	<i>HBP &amp; diabetes</i>	2.360*** (0.605)	1.413 (0.351)	0.770 (0.305)	0.459** (0.173)	0.797 (0.319)	1.183 (0.486)	1.356 (0.449)

Appendix table B.2 Relationship between impairments and health conditions

		Mobility	Lifting	Manual dexterity	Contenance	Hearing	Memory	Coordination
<b>Control variables</b>								
Age group (Ref = 50-64)	65-79	0.845** (0.073)	0.810*** (0.063)	0.731*** (0.078)	0.949 (0.119)	0.945 (0.125)	1.001 (0.132)	0.797* (0.095)
	80+	1.194 (0.174)	0.955 (0.130)	0.853 (0.156)	0.921 (0.189)	1.068 (0.219)	1.597** (0.343)	0.978 (0.185)
Sex (Omitted – no change)		- -	- -	- -	- -	- -	- -	- -
Region (Ref = East Midlands)	East of England	0.799 (0.453)	0.741 (0.421)	2.225 (1.447)	0.145* (0.159)	0.335 (0.360)	2.105 (1.874)	0.902 (0.680)
	London	5.914** (5.351)	1.645 (1.275)	1.089 (1.280)	- -	- -	18.34* (29.12)	1.629 (1.848)
	North East	0.109* (0.134)	1.285 (1.185)	6.538 (8.677)	0 (0.001)	6.161 (8.691)	6.965 (12.05)	2.064 (2.271)
	North West	1.349 (1.190)	0.578 (0.439)	0.512 (0.448)	0.0500** (0.072)	7.396 (9.528)	0 (0.001)	0.533 (0.455)
	Northern Ireland	757,804 (0)	54,773 (0)	0 (0.040)	- -	- -	- -	- -
	Scotland	3.988 (4.578)	0.124** (0.115)	0.129 (0.186)	- -	0 (0.002)	7.791 (11.94)	0.644 (1.050)

Appendix table B.2 Relationship between impairments and health conditions

		<b>Mobility</b>	<b>Lifting</b>	<b>Manual dexterity</b>	<b>Contenance</b>	<b>Hearing</b>	<b>Memory</b>	<b>Coordination</b>
Region (Ref = East Midlands)	South East	1.290 (0.937)	0.535 (0.340)	0.931 (0.725)	0.215 (0.203)	11.32 (19.29)	83.25** (148.6)	3.211 (3.399)
	South West	2.508 (2.008)	1.381 (0.862)	0.491 (0.411)	0.273 (0.376)	8.555 (11.58)	3.598 (4.497)	3.526 (3.609)
	Wales	1.176 (1.049)	0.314 (0.243)	2.686 (2.838)	0.223 (0.314)	5.556 (11.63)	3.501 (4.959)	0.657 (0.618)
	West Midlands	3.011 (2.513)	1.622 (1.175)	0.480 (0.453)	0.315 (0.432)	(0) (0.002)	5.850 (7.083)	0.421 (0.393)
	Yorkshire and Humber	0.327 (0.226)	0.377 (0.277)	1.558 (1.783)	0.163 (0.220)	8.521 (11.69)	5.910 (8.926)	1.501 (1.831)
Urban/rural (Ref = Rural)	Urban	0.883 (0.190)	0.798 (0.159)	1.091 (0.271)	1.155 (0.359)	0.939 (0.341)	1.076 (0.342)	1.294 (0.331)
Work status (Ref = Employed)	Retired	1.065 (0.096)	1.135 (0.096)	1.237* (0.158)	1.378** (0.204)	0.830 (0.128)	1.396** (0.211)	1.249 (0.181)
	Unemployed	1.190 (0.184)	1.299* (0.184)	1.176 (0.250)	1.918** (0.491)	0.669 (0.182)	1.472* (0.317)	1.221 (0.281)
	Sick	2.967*** (0.402)	3.298*** (0.426)	2.263*** (0.349)	2.244*** (0.414)	1.335 (0.289)	2.585*** (0.448)	2.457*** (0.416)
	Other	1.181 (0.179)	1.216 (0.170)	1.248 (0.251)	1.305 (0.325)	0.840 (0.233)	2.043*** (0.484)	1.399 (0.316)

Appendix table B.2 Relationship between impairments and health conditions

		<b>Mobility</b>	<b>Lifting</b>	<b>Manual dexterity</b>	<b>Contenance</b>	<b>Hearing</b>	<b>Memory</b>	<b>Coordination</b>
Household composition (Ref = Single adult)	Couple	0.751** (0.098)	1.053 (0.127)	0.972 (0.154)	0.817 (0.148)	1.165 (0.218)	0.887 (0.161)	0.710** (0.118)
	Two adults	1.129 (0.181)	1.169 (0.170)	1.025 (0.196)	0.970 (0.234)	0.864 (0.220)	1.189 (0.264)	1.057 (0.220)
	Three adults	0.661*** (0.098)	0.885 (0.123)	0.890 (0.166)	0.672* (0.149)	0.829 (0.193)	0.792 (0.169)	0.706* (0.141)
Children in household (Ref = None)	Mentioned	0.842 (0.090)	0.966 (0.095)	0.893 (0.117)	0.803 (0.137)	0.970 (0.169)	0.934 (0.140)	1.015 (0.150)
<b>Observations</b>		19,030	21,427	12,202	8,826	8,866	8,972	10,847
<b>R<sup>2</sup></b>		0.032	0.026	0.018	0.021	0.017	0.027	0.026

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects logistic regression (longitudinal data), with coefficients expressed as odds ratios. Understanding Society, Waves 1-7 (2009-2017). Standard errors (log base) in parentheses.



Appendix table B.3 Longitudinal fixed effects model: relationship between travel frequency and health

		Frequency of car travel	Frequency of bus travel	Frequency of train travel	Frequency of bicycle travel	Distance driven
<b>Health conditions</b>						
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	0.253 (0.391)	-0.664* (0.400)	0.273 (0.353)	-0.317 (0.210)	0.358 (0.243)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	-0.151 (0.211)	0.096 (0.214)	0.368* (0.190)	-0.081 (0.113)	0.012 (0.139)
Angina (Ref = Not mentioned)	<i>Mentioned</i>	-0.290 (0.346)	-0.116 (0.351)	-0.036 (0.312)	0.080 (0.185)	0.369 (0.228)
Heart attack (Ref = Not mentioned)	<i>Mentioned</i>	-0.432 (0.327)	0.440 (0.331)	-0.029 (0.295)	0.031 (0.175)	0.261 (0.227)
Hypothyroidism (Ref = Not mentioned)	<i>Mentioned</i>	-0.175 (0.562)	-0.060 (0.571)	0.530 (0.508)	-0.190 (0.302)	-0.105 (0.303)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	-0.049 (0.202)	-0.055 (0.205)	0.170 (0.182)	-0.036 (0.108)	0.321** (0.154)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.064 (0.234)	0.369 (0.238)	-0.079 (0.212)	-0.255** (0.126)	0.073 (0.160)
High blood pressure (Ref = Not mentioned)	<i>Mentioned</i>	-0.085 (0.220)	0.328 (0.224)	-0.058 (0.199)	0.061 (0.118)	0.110 (0.137)
Clinical depression (Ref = Not mentioned)	<i>Mentioned</i>	-0.429 (0.327)	-0.116 (0.332)	0.447 (0.295)	0.056 (0.175)	0.394** (0.182)
Number of conditions		0.148 (0.134)	-0.078 (0.135)	-0.172 (0.120)	0.018 (0.072)	-0.296*** 0.095
<b>Health condition cluster</b>						
Health condition cluster (Ref = Single health condition)	<i>No conditions</i>	0.232 (0.148)	-0.178 (0.151)	0.004 (0.134)	0.095 (0.080)	-0.161* (0.092)

Appendix table B.3 Longitudinal fixed effects model: relationship between travel frequency and health

		Frequency of car travel	Frequency of bus travel	Frequency of train travel	Frequency of bicycle travel	Distance driven
Health condition cluster (Ref = Single health condition)	Heart disease plus	0.332 (0.263)	-0.298 (0.267)	0.068 (0.237)	0.058 (0.141)	0.093 (0.211)
	HBP and arthritis	0.304 (0.230)	-0.221 (0.233)	0.030 (0.207)	-0.106 (0.123)	0.196 (0.145)
	Lung & breathing conditions plus	-0.207 (0.288)	0.485* (0.293)	-0.169 (0.260)	0.239 (0.155)	0.161 (0.196)
	Arthritis, cancer & depression	0.014 (0.230)	-0.057 (0.234)	-0.060 (0.208)	-0.089 (0.123)	0.308** (0.154)
	HBP, cancer & depression	0.191 (0.209)	-0.091 (0.213)	0.197 (0.189)	0.004 (0.112)	0.161 (0.150)
	Hyperthyroidism plus	0.504 (0.575)	0.105 (0.584)	-0.833 (0.519)	0.071 (0.308)	0.500* (0.267)
	HBP & diabetes	0.798*** (0.307)	-0.375 (0.312)	0.346 (0.277)	0.233 (0.165)	0.303 (0.215)
<b>Control variables</b>						
Age group (Ref = 50-64)	65-79	0.080 (0.086)	-0.019 (0.088)	0.082 (0.080)	0.038 (0.046)	0.080 (0.056)
	80+	-0.064 (0.163)	0.216 (0.166)	0.174 (0.147)	0.104 (0.088)	0.056 (0.124)
Sex (Ref = Male)	Female	1.697 (1.220)	1.661 (1.240)	0.120 (1.102)	0.357 (0.654)	-2.081*** (0.779)

Appendix table B.3 Longitudinal fixed effects model: relationship between travel frequency and health

		Frequency of car travel	Frequency of bus travel	Frequency of train travel	Frequency of bicycle travel	Distance driven
Region (Ref = East Midlands)	<i>East of England</i>	0.020 (0.570)	0.499 (0.579)	0.728 (0.515)	-0.085 (0.306)	-0.530 (0.393)
	<i>London</i>	-1.719** (0.767)	-0.235 (0.780)	0.231 (0.693)	-0.207 (0.412)	-1.293** (0.522)
	<i>North East</i>	0.046 (0.711)	1.118 (0.722)	0.891 (0.642)	0.020 (0.381)	- -
	<i>North West</i>	1.197* (0.722)	-0.359 (0.734)	1.616** (0.653)	-0.989** (0.387)	-0.749 (0.514)
	<i>Northern Ireland</i>	- -	- -	- -	- -	- -
	<i>Scotland</i>	-0.005 (0.826)	1.216 (0.839)	1.466** (0.746)	-1.617*** (0.443)	0.792 (0.556)
	<i>South East</i>	0.231 (0.799)	-0.603 (0.812)	0.625 (0.722)	-0.240 (0.429)	-0.953** (0.417)
	<i>South West</i>	0.230 (0.671)	-0.376 (0.682)	0.114 (0.606)	-0.342 (0.360)	-0.608 (0.484)
	<i>Wales</i>	1.349 (1.047)	0.774 (1.064)	-0.944 (0.946)	-0.914 (0.561)	-1.577** (0.711)
	<i>West Midlands</i>	-0.208 (0.797)	-0.246 (0.810)	0.814 (0.720)	-0.324 (0.427)	-1.218** (0.485)
	<i>Yorks. &amp; Humber</i>	-0.013 (0.667)	-0.569 (0.678)	1.118* (0.603)	-0.008 (0.358)	-0.230 (0.829)
Urban/rural (Ref = Rural)	<i>Urban</i>	-0.012 (0.209)	0.418** (0.212)	0.073 (0.189)	0.110 (0.112)	-0.064 (0.134)
Work status (Ref = Employed)	<i>Retired</i>	-0.334*** (0.085)	0.083 (0.086)	0.022 (0.077)	0.088* (0.046)	-0.128** (0.057)

Appendix table B.3 Longitudinal fixed effects model: relationship between travel frequency and health

		Frequency of car travel	Frequency of bus travel	Frequency of train travel	Frequency of bicycle travel	Distance driven	
Work status (Ref = Employed)	<i>Unemployed</i>	-0.425*** (0.154)	-0.241 (0.156)	0.194 (0.139)	0.049 (0.083)	-0.257** (0.111)	
	<i>Sick</i>	-0.450*** (0.165)	-0.159 (0.167)	0.258* (0.148)	0.131 (0.088)	-0.373*** (0.129)	
	<i>Other</i>	-0.194 (0.148)	-0.145 (0.151)	0.103 (0.134)	0.219*** (0.080)	-0.136 (0.111)	
Household composition (Ref = Single)	<i>Couple</i>	0.170 (0.142)	-0.101 (0.145)	0.087 (0.129)	0.067 (0.076)	-0.121 (0.100)	
	<i>Two adults</i>	0.053 (0.167)	0.001 (0.170)	0.206 (0.151)	0.025 (0.0895)	0.084 (0.117)	
	<i>Three adults</i>	0.216 (0.158)	-0.210 (0.161)	0.210 (0.143)	0.033 (0.085)	-0.191* (0.111)	
Kids in household (Ref = Not mentioned)	<i>Mentioned</i>	0.067 (0.109)	-0.017 (0.111)	-0.023 (0.099)	-0.049 (0.059)	-0.056 (0.070)	
<b>Model specific variables</b>							
Wave (Ref = Wave 4)	<i>Wave 6</i>	0.019 (0.027)	-0.058** (0.027)	-0.042* (0.024)	0.004 (0.014)	-0.108*** (0.024)	
Constant		-3.839*** (0.845)	-6.108*** (0.858)	-6.329*** (0.763)	-5.034*** (0.453)	6.019*** (0.501)	
		<b>Observations</b>	16,499	16,497	16,502	16,502	13,210
		<b>R<sup>2</sup></b>	0.008	0.006	0.006	0.007	0.018

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects OLS regression (longitudinal data). Understanding Society, Waves 4, 6 (2012-2016). Standard errors in parentheses.

Appendix table B.4 Longitudinal regression analysis: relationship between travel frequency and severity of impairment <sup>5</sup>

		Frequency of car use	Frequency of bus use	Frequency of train use	Frequency of bicycle use
		<i>OLS regression</i>	<i>OLS regression</i>	<i>OLS regression</i>	<i>OLS regression</i>
Mobility (Ref = No impairment)	<i>Some difficulty</i>	-0.086 (0.054)	-0.282*** (0.075)	-0.180*** (0.044)	-0.174*** (0.045)
	<i>A lot of difficulty</i>	-0.200*** (0.060)	-1.154*** (0.083)	-0.365*** (0.049)	-0.242*** (0.050)
	<i>Unable to do this</i>	-1.863*** (0.308)	-2.323*** (0.425)	-0.398 (0.249)	-0.317 (0.258)
Lifting/carrying objects (Ref = No impairment)	<i>Some difficulty</i>	-0.020 (0.059)	-0.171** (0.081)	-0.191*** (0.047)	-0.260*** (0.049)
	<i>A lot of difficulty</i>	-0.061 (0.063)	-0.863*** (0.087)	-0.339*** (0.050)	-0.278*** (0.052)
	<i>Unable to do this</i>	-0.456*** (0.123)	-1.278*** (0.170)	-0.420*** (0.099)	-0.282*** (0.103)
Manual dexterity (Ref = No impairment)	<i>Some difficulty</i>	0.003 (0.085)	-0.122 (0.121)	-0.063 (0.070)	-0.184** (0.073)
	<i>A lot of difficulty</i>	0.101 (0.104)	-0.884*** (0.145)	-0.298*** (0.085)	-0.188** (0.088)

<sup>5</sup> This table corresponds to Figure 4.26 in the report. It is based on 48 separate regressions (one for each mode of transport (4) and each impairment type (12)) and simplifies the model output. In each model, the variables controlled for were: health conditions, age group, gender, region, urban/rural and employment status. The model with the smallest number of observations (5,977) was for recognising physical danger and car travel.

Appendix table B.4 Longitudinal regression analysis: relationship between travel frequency and severity of impairment <sup>5</sup>

		Frequency of car use	Frequency of bus use	Frequency of train use	Frequency of bicycle use
Manual dexterity (Ref = No impairment)	<i>Unable to do this</i>	-1.266*** (0.476)	-2.180*** (0.667)	0.025 (0.391)	-0.184 (0.405)
Continence (Ref = No impairment)	<i>Some difficulty</i>	-0.191* (0.099)	-0.095 (0.139)	-0.031 (0.081)	-0.044 (0.083)
	<i>A lot of difficulty</i>	-0.210 (0.132)	-0.064 (0.185)	-0.116 (0.107)	-0.121 (0.110)
	<i>Unable to do this</i>	-0.485 (0.754)	-0.107 (1.056)	-0.238 (0.611)	0.141 (0.629)
Hearing (Ref = No impairment)	<i>Some difficulty</i>	-0.203** (0.103)	-0.002 (0.146)	-0.074 (0.083)	-0.085 (0.086)
	<i>A lot of difficulty</i>	-0.196 (0.142)	-0.272 (0.199)	-0.076 (0.116)	-0.054 (0.119)
	<i>Unable to do this</i>	-1.165** (0.530)	2.138*** (0.742)	0.483 (0.431)	-0.380 (0.444)
Sight (Ref = No impairment)	<i>Some difficulty</i>	-0.621*** (0.106)	0.253 (0.160)	-0.279** (0.116)	-0.072 (0.139)
	<i>A lot of difficulty</i>	-1.045*** (0.125)	0.058 (0.187)	-0.443*** (0.137)	-0.217 (0.163)
	<i>Unable to do this</i>	-1.062** (0.463)	-0.373 (0.691)	-0.315 (0.508)	-0.187 (0.605)

Appendix table B.4 Longitudinal regression analysis: relationship between travel frequency and severity of impairment <sup>5</sup>

		Frequency of car use	Frequency of bus use	Frequency of train use	Frequency of bicycle use
Communication (Ref = No impairment)	<i>Some difficulty</i>	-0.173 (0.221)	-0.567* (0.330)	-0.356 (0.248)	-0.080 (0.300)
	<i>A lot of difficulty</i>	-0.020 (0.416)	-1.789*** (0.622)	-0.328 (0.468)	-0.436 (0.566)
	<i>Unable to do this</i>	0.317 (1.692)	0.902 (2.533)	0.447 (1.903)	-1.014 (2.305)
Memory (Ref = No impairment)	<i>Some difficulty</i>	-0.559*** (0.095)	-0.323** (0.142)	-0.309*** (0.102)	-0.268** (0.124)
	<i>A lot of difficulty</i>	-0.807*** (0.130)	-1.009*** (0.192)	-0.462*** (0.140)	-0.022 (0.169)
	<i>Unable to do this</i>	-3.951*** (0.996)	-0.178 (1.472)	-0.776 (1.074)	-1.019 (1.302)
Recognising physical danger (Ref = No impairment)	<i>Some difficulty</i>	-0.823** (0.412)	-0.744 (0.620)	-0.295 (0.467)	-0.058 (0.564)
	<i>A lot of difficulty</i>	-1.348** (0.542)	-0.100 (0.816)	-0.283 (0.615)	-0.634 (0.742)
	<i>Unable to do this</i>	0.308 (0.919)	-0.675 (1.383)	-0.332 (1.042)	-1.109 (1.258)
Physical co-ordination (Ref = No impairment)	<i>Some difficulty</i>	-0.503*** (0.092)	-0.403*** (0.136)	-0.157 (0.099)	-0.195* (0.117)

Appendix table B.4 Longitudinal regression analysis: relationship between travel frequency and severity of impairment <sup>5</sup>

		Frequency of car use	Frequency of bus use	Frequency of train use	Frequency of bicycle use
Physical co-ordination (Ref = No impairment)	<i>A lot of difficulty</i>	-0.516*** (0.110)	-0.999*** (0.165)	-0.471*** (0.120)	-0.371*** (0.142)
	<i>Unable to do this</i>	-1.440*** (0.372)	-1.591*** (0.542)	-0.505 (0.395)	-0.471 (0.467)
Personal care (Ref = No impairment)	<i>Some difficulty</i>	-0.885*** (0.122)	-1.238*** (0.179)	-0.494*** (0.132)	-0.209 (0.158)
	<i>A lot of difficulty</i>	-1.166*** (0.141)	-1.667*** (0.207)	-0.620*** (0.153)	-0.368** (0.183)
	<i>Unable to do this</i>	-1.797*** (0.288)	-2.876*** (0.423)	-0.737** (0.312)	-0.147 (0.374)
Other (Ref = No impairment)	<i>Some difficulty</i>	-0.105 (0.090)	0.164 (0.137)	0.021 (0.101)	-0.248** (0.121)
	<i>A lot of difficulty</i>	-0.579** (0.236)	-0.583 (0.357)	-0.301 (0.277)	0.073 (0.317)
	<i>Unable to do this</i>	0.126 (0.314)	-0.390 (0.474)	-0.176 (0.352)	0.552 (0.421)

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects OLS regression (longitudinal data). Understanding Society, Waves 4, 6 (2012-2016). Standard errors in parentheses. Minimum observations = 5,977



Appendix table B.5 Difficulties with ADL/IADL and other difficulties by health <sup>6</sup>

		ADL/IADL Difficulty	Other difficulties
Age (Ref = 50-64)	65-79	-0.035** (0.017)	0.013 (0.014)
	80+	0.018 (0.032)	0.238*** (0.025)
Sex (Ref = Male)	Female	- -	- -
Region (Ref = North East)	North West	0.171 (0.381)	-0.118 (0.352)
	Yorkshire and Humber	0.386 (0.353)	-0.039 (0.287)
	East Midlands	1.002*** (0.360)	-0.033 (0.302)
	West Midlands	0.161 (0.348)	-0.066 (0.297)
	East of England	-0.064 (0.310)	-0.226 (0.295)
	London	-0.273 (0.324)	-0.229 (0.286)

<sup>6</sup> See Table 5.1 in the main report for classification of activities

Appendix table B.5 Difficulties with ADL/IADL and other difficulties by health <sup>6</sup>

		<b>ADL/IADL Difficulty</b>	<b>Other difficulties</b>
Region (Ref = North East)	<i>South East</i>	-0.013 (0.313)	0.008 (0.270)
	<i>South West</i>	0.091 (0.323)	-0.049 (0.282)
Employment status (Ref = retired)	<i>Employed</i>	-0.038 (0.036)	0.003 (0.031)
	<i>Self-employed</i>	-0.035 (0.051)	0.027 (0.045)
	<i>Unemployed</i>	0.001 (0.087)	-0.019 (0.069)
	<i>Sick</i>	0.276*** (0.042)	0.056* (0.029)
	<i>Looking after home/family</i>	-0.026 (0.027)	-0.019 (0.021)
	<i>Semi-retired</i>	-0.110 (0.076)	-0.069 (0.064)
Paid work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.014 (0.032)	-0.047* (0.027)

Appendix table B.5 Difficulties with ADL/IADL and other difficulties by health <sup>6</sup>

		<b>ADL/IADL Difficulty</b>	<b>Other difficulties</b>
Self-employment (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.050 (0.044)	-0.035 (0.040)
Voluntary work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.005 (0.019)	-0.020 (0.016)
Cared for someone (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.001 (0.019)	-0.018 (0.015)
Looked after home/family (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.057*** (0.013)	-0.045*** (0.010)
Attended educational/training course (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.034 (0.036)	-0.007 (0.030)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	0.022 (0.022)	0.014 (0.018)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.078* (0.044)	0.114*** (0.033)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	0.070** (0.030)	0.077*** (0.022)
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	0.024 (0.046)	0.139*** (0.034)

Appendix table B.5 Difficulties with ADL/IADL and other difficulties by health <sup>6</sup>

		<b>ADL/IADL Difficulty</b>	<b>Other difficulties</b>
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	0.596*** (0.057)	0.336*** (0.042)
Psychiatric problem (Ref = Not mentioned)	<i>Mentioned</i>	0.080 (0.066)	0.009 (0.054)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	0.145*** (0.031)	0.166*** (0.026)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	0 (0.048)	0.044 (0.037)
High Cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	0.032* (0.020)	-0.002 (0.016)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.034** (0.016)	0.051*** (0.012)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.537*** (0.128)	0.287*** (0.107)
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	0.597*** (0.077)	0.635*** (0.055)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	0.234 (0.356)	-0.049 (0.262)

Appendix table B.5 Difficulties with ADL/IADL and other difficulties by health <sup>6</sup>

		<b>ADL/IADL Difficulty</b>	<b>Other difficulties</b>
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.457** (0.220)	0.246 (0.153)
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	0.540 (0.351)	0.216 (0.260)
<b>Observations</b>		17897	14566
<b>R<sup>2</sup></b>		0.032	0.058

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects OLS regression (longitudinal data). English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses.

Appendix table B.6 Travel mode use by ADL/IADL Difficulties

		Frequency of travel by public transport	Frequency of lifts from family / friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
		<i>OLS Regression</i>	<i>OLS Regression</i>	<i>Logistic Regression</i>	<i>Logistic Regression</i>	<i>Logistic Regression</i>	<i>Logistic Regression</i>
Getting dressed (Ref = No difficulty)	<i>Has difficulty</i>	-0.002 (0.030)	-0.004 (0.054)	1.049 (0.094)	1.019 (0.089)	2.441*** (0.328)	1.530* (0.242)
Walking across a room (Ref = No difficulty)	<i>Has difficulty</i>	-0.146** (0.059)	0.129 (0.093)	1.211 (0.166)	0.963 (0.162)	0.650 (0.477)	1.259 (0.316)
Using the toilet (inc. getting up/down) (Ref = No difficulty)	<i>Has difficulty</i>	0.047 (0.052)	0.002 (0.084)	0.984 (0.133)	1.126 (0.150)	0.774 (0.473)	0.856 (0.368)
Eating (inc. cutting food) (Ref = No difficulty)	<i>Has difficulty</i>	0.096 (0.072)	-0.037 (0.120)	1.099 (0.170)	0.700* (0.210)	1.492 (0.597)	0.761 (0.445)
Using a map to get around a strange place (Ref = No difficulty)	<i>Has difficulty</i>	0.081* (0.046)	0.030 (0.077)	1.012 (0.119)	1.076 (0.137)	1.087 (0.513)	1.506 (0.327)
Recognising you are in physical danger (Ref = No difficulty)	<i>Has difficulty</i>	-0.005 (0.093)	0.082 (0.152)	0.922 (0.215)	0.939 (0.272)	1.526 (0.513)	0.879 (0.419)
Shopping for groceries (Ref = No difficulty)	<i>Has difficulty</i>	-0.222*** (0.038)	0.052 (0.060)	1.069 (0.098)	1.000 (0.096)	0.939 (0.338)	0.910 (0.233)
Taking medications (Ref = No difficulty)	<i>Has difficulty</i>	-0.038 (0.079)	-0.105 (0.133)	1.037 (0.176)	0.981 (0.247)	1.810 (0.519)	0.982 (0.467)
Managing money (Ref = No difficulty)	<i>Has difficulty</i>	-0.228*** (0.065)	-0.152 (0.103)	0.884 (0.161)	0.899 (0.199)	0.400 (0.650)	0.697 (0.450)
Age (Ref = 50-64)	65-79	0.036 (0.025)	-0.088 (0.100)	1.060 (0.095)	0.893 (0.174)	0.476 (0.705)	0.705 (0.544)

Appendix table B.6 Travel mode use by ADL/IADL Difficulties

		Frequency of travel by public transport	Frequency of lifts from family / friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Age (Ref = 50-64)	80+	-0.086* (0.046)	-0.070 (0.121)	1.171 (0.156)	0.904 (0.210)	0.588 (0.861)	1.121 (0.680)
Sex (Ref = Male)	Female	- -	- -	- -	- -	- -	- -
Region (Ref = North East)	North West	0.489 (0.540)	- -	- -	0 (3639.236)	- -	- -
	Yorkshire and Humber	0.007 (0.499)	- -	- -	0 (3639.236)	- -	- -
	East Midlands	-0.337 (0.510)	-0.753 (2.011)	- -	0 (3639.236)	- -	- -
	West Midlands	0.002 (0.492)	-1.130 (1.329)	1.134 (1.455)	0 (3639.235)	† †	0 (7452.511)
	East of England	-0.106 (0.438)	-0.917 (1.758)	3.622 (1.724)	0 (3639.236)	- -	- -
	London	1.206*** (0.458)	0.757 (1.322)	0.325 (1.827)	0 (3639.235)	- -	- -
	South East	-0.173 (0.443)	0.811 (1.258)	0.900 (1.248)	0 (3639.236)	0.773 (1.597)	† †
	South West	0.106 (0.457)	1.450 (1.455)	2.045 (1.493)	0 (3639.236)	- -	- -

Appendix table B.6 Travel mode use by ADL/IADL Difficulties

		Frequency of travel by public transport	Frequency of lifts from family / friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Employment status (Ref = Retired)	<i>Employed</i>	-0.114** (0.052)	-0.022 (0.169)	1.022 (0.248)	0.948 (0.214)	1.843 (2.307)	0 (8341.303)
	<i>Self-employed</i>	-0.096 (0.073)	-0.650* (0.342)	0.800 (0.535)	1.080 (0.291)	1.982 (2.297)	† †
	<i>Unemployed</i>	-0.119 (0.123)	2.084 (1.498)	1.210 (1.409)	1.328 (1.226)	- -	- -
	<i>Permanently sick/disabled</i>	-0.013 (0.060)	-0.010 (0.120)	1.036 (0.173)	1.184 (0.201)	0.755 (0.575)	1.702 (0.409)
	<i>Looking after home/family</i>	-0.013 (0.039)	0.059 (0.076)	1.033 (0.105)	1.039 (0.142)	0.926 (0.464)	0.506 (0.452)
	<i>Semi-retired</i>	0.101 (0.108)	-0.099 (0.378)	1.150 (0.476)	1.033 (0.412)	0 (8850.447)	- -
Paid work (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.072 (0.046)	-0.126 (0.144)	0.906 (0.221)	1.050 (0.190)	0.261 (1.877)	- -
Self-employment (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.001 (0.063)	0.029 (0.267)	0.822 (0.465)	0.855 (0.240)	0.769 (1.996)	- -
Voluntary work (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.007 (0.027)	-0.136** (0.062)	0.932 (0.114)	1.016 (0.092)	0.764 (0.452)	1.094 (0.439)
Cared for someone (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.031 (0.026)	-0.063 (0.057)	0.953 (0.097)	1.083 (0.090)	0.909 (0.400)	0.910 (0.322)



Appendix table B.6 Travel mode use by ADL/IADL Difficulties

		Frequency of travel by public transport	Frequency of lifts from family / friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Looked after home or family (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.063*** (0.018)	0.052 (0.039)	0.951 (0.068)	1.126** (0.060)	0.659 (0.255)	1.050 (0.230)
Attended a formal educational or training course (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.007 (0.051)	0.063 (0.133)	0.947 (0.293)	0.829 (0.171)	0.756 (0.760)	0.284 (1.505)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	-0.062** (0.032)	-0.026 (0.067)	1.018 (0.110)	1.030 (0.107)	0.518 (0.538)	1.410 (0.373)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.067 (0.062)	-0.016 (0.118)	1.011 (0.189)	1.091 (0.238)	0.891 (0.860)	0.823 (0.626)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	-0.079* (0.042)	0.105 (0.085)	0.939 (0.137)	0.927 (0.126)	1.044 (0.614)	2.175* (0.412)
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	-0.103 (0.066)	-0.168 (0.137)	1.118 (0.254)	1.101 (0.208)	4.267 (1.734)	1.594 (0.647)
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	-0.379*** (0.081)	0.027 (0.145)	1.418 (0.233)	0.879 (0.263)	0.441 (0.791)	2.265 (0.687)
Psychiatric problem (Ref = Not mentioned)	<i>Mentioned</i>	-0.127 (0.094)	0.433** (0.180)	1.321 (0.401)	0.937 (0.338)	0 (3956.069)	3.285 (0.991)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	-0.020 (0.044)	0.047 (0.098)	1.077 (0.168)	0.981 (0.159)	1.268 (0.673)	0.964 (0.511)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	-0.078 (0.069)	-0.188 (0.130)	0.952 (0.263)	0.988 (0.197)	1.947 (1.262)	0.166** (0.731)

Appendix table B.6 Travel mode use by ADL/IADL Difficulties

		Frequency of travel by public transport	Frequency of lifts from family / friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
High Cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	-0.006 (0.028)	0.092 (0.060)	1.061 (0.099)	1.034 (0.094)	0.879 (0.432)	1.183 (0.366)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.018 (0.023)	-0.043 (0.043)	1.050 (0.073)	0.983 (0.066)	1.090 (0.253)	1.070 (0.201)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.062 (0.182)	-0.444 (0.390)	1.774 (0.600)	1.497 (0.953)	- -	- -
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	-0.228** (0.110)	0.139 (0.204)	1.062 (0.294)	1.034 (0.380)	† †	0.685 (0.718)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	0.894* (0.504)	0.301 (0.817)	4.795 (1.207)	† †	0 (6265.574)	5.342 (8475.214)
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	-1.223*** (0.314)	-0.994* (0.538)	0.702 (0.564)	0 (786.708)	0.414 (1.053)	† †
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	-0.692 (0.497)	-0.346 (0.800)	0.326 (1.193)	0 (786.71)	- -	0.408 (8475.215)
	<b>Observations</b>	17896	5817	15496	10666	10666	10666
	<b>R<sup>2</sup></b>	0.016	0.014	0.002	0.003	0.003	0.004

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses.

Appendix table B.7 Travel mode use by other difficulties

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
		<i>OLS Regression</i>	<i>OLS Regression</i>	<i>Logistic Regression</i>	<i>Logistic Regression</i>	<i>Logistic Regression</i>	<i>Logistic Regression</i>
Walking 100 yards (Ref = No difficulty)	<i>Has difficulty</i>	-0.177*** (0.034)	-0.074 (0.059)	1.058 (0.100)	1.126 (0.093)	0.732 (0.292)	1.094 (0.243)
Sitting for approx. 2 hours (Ref = No difficulty)	<i>Has difficulty</i>	-0.004 (0.028)	0.029 (0.053)	1.051 (0.088)	0.958 (0.088)	0.638 (0.315)	0.957 (0.249)
Rising from chair after sitting for long period (Ref = No difficulty)	<i>Has difficulty</i>	0.006 (0.023)	0.055 (0.044)	1.056 (0.074)	0.966 (0.072)	0.644 (0.286)	0.898 (0.222)
Climbing 2+ flights of stairs (no rest) (Ref = No difficulty)	<i>Has difficulty</i>	0.018 (0.024)	-0.071 (0.048)	1.003 (0.077)	1.051 (0.075)	1.616 (0.329)	1.075 (0.258)
Climbing 1 flight of stairs (no rest) (Ref = No difficulty)	<i>Has difficulty</i>	-0.205*** (0.029)	-0.073 (0.052)	1.047 (0.086)	1.007 (0.085)	1.165 (0.271)	0.717 (0.235)
Stooping, kneeling, or crouching (Ref = No difficulty)	<i>Has difficulty</i>	-0.036 (0.022)	-0.010 (0.047)	1.021 (0.076)	1.029 (0.070)	1.082 (0.296)	1.167 (0.243)
Reaching / extending arms (Ref = No difficulty)	<i>Has difficulty</i>	-0.040 (0.030)	-0.018 (0.056)	0.985 (0.096)	1.112 (0.094)	1.274 (0.368)	1.035 (0.277)
Pulling / pushing large objects (Ref = No difficulty)	<i>Has difficulty</i>	-0.009 (0.029)	0.025 (0.052)	1.030 (0.086)	0.848* (0.088)	1.538 (0.285)	1.332 (0.239)
Lifting or carrying weights >10lbs (Ref = No difficulty)	<i>Has difficulty</i>	-0.033 (0.027)	-0.081 (0.051)	1.047 (0.080)	1.085 (0.080)	0.715 (0.256)	0.887 (0.252)

Appendix table B.7 Travel mode use by other difficulties

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Picking up a 5p coin from a table (Ref = No difficulty)	<i>Has difficulty</i>	0.005 (0.040)	-0.114 (0.069)	1.053 (0.109)	0.926 (0.117)	1.194 (0.365)	1.041 (0.278)
Age (Ref = 50-64)	<i>65-79</i>	0.037 (0.025)	-0.081 (0.100)	1.054 (0.096)	0.885 (0.174)	0.441 (0.755)	0.857 (0.53)
	<i>80+</i>	-0.070 (0.046)	-0.049 (0.120)	1.145 (0.156)	0.881 (0.211)	0.515 (0.930)	1.255 (0.657)
Sex (Ref = Male)	<i>Female</i>	-	-	-	-	-	-
		-	-	-	-	-	-
Region (Ref = North East)	<i>North West</i>	0.470 (0.539)	- -	- -	0 (3639.326)	- -	- -
	<i>Yorkshire and Humber</i>	0.011 (0.498)	- -	- -	0 (3639.327)	- -	- -
	<i>East Midlands</i>	-0.379 (0.509)	-1.128 (2.009)	- -	0 (3639.326)	- -	- -
	<i>West Midlands</i>	-0.023 (0.491)	-1.006 (1.327)	1.161 (1.451)	0 (3639.326)	† †	0 (7281.438)
	<i>East of England</i>	-0.111 (0.438)	-1.244 (1.757)	3.345 (1.723)	0 (3639.326)	- -	- -
	<i>London</i>	1.203*** (0.457)	0.696 (1.320)	0.307 (1.830)	0 (3639.326)	- -	- -

Appendix table B.7 Travel mode use by other difficulties

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Region (Ref = North East)	<i>South East</i>	-0.175 (0.442)	0.800 (1.256)	0.926 (1.248)	0 (3639.326)	0.495 (1.598)	† †
	<i>South West</i>	0.075 (0.456)	1.387 (1.453)	2.067 (1.491)	0 (3639.326)	- -	- -
Employment status (Ref = Retired)	<i>Employed</i>	-0.111** (0.052)	-0.017 (0.169)	1.027 (0.247)	0.947 (0.214)	1.803 (2.267)	0 (8213.299)
	<i>Self-employed</i>	-0.091 (0.073)	-0.612* (0.342)	0.799 (0.534)	1.090 (0.291)	1.538 (2.386)	† †
	<i>Unemployed</i>	-0.143 (0.123)	2.086 (1.496)	1.341 (1.383)	1.357 (1.226)	- -	- -
	<i>Permanently sick/disabled</i>	-0.003 (0.060)	-0.013 (0.120)	1.010 (0.170)	1.189 (0.200)	0.599 (0.587)	1.359 (0.404)
	<i>Looking after home/family</i>	-0.022 (0.039)	0.048 (0.076)	1.038 (0.105)	1.040 (0.142)	1.172 (0.458)	0.452* (0.467)
	<i>Semi-retired</i>	0.112 (0.107)	-0.093 (0.378)	1.076 (0.468)	1.047 (0.412)	0 (8640.415)	- -
Paid work (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.076* (0.046)	-0.134 (0.143)	0.915 (0.221)	1.040 (0.190)	0.415 (1.97)	- -
Self-employment (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.006 (0.062)	0.016 (0.266)	0.815 (0.465)	0.854 (0.240)	1.120 (2.017)	- -

Appendix table B.7 Travel mode use by other difficulties

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Voluntary work (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.009 (0.027)	-0.137** (0.062)	0.936 (0.114)	1.009 (0.092)	0.627 (0.451)	1.159 (0.439)
Cared for someone (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.033 (0.026)	-0.063 (0.057)	0.959 (0.097)	1.089 (0.090)	0.938 (0.382)	0.748 (0.320)
Looked after home or family (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.063*** (0.018)	0.042 (0.039)	0.955 (0.068)	1.131** (0.060)	0.763 (0.254)	1.062 (0.231)
Attended a formal educational or training course (in last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.007 (0.051)	0.060 (0.133)	0.940 (0.295)	0.839 (0.171)	1.077 (0.758)	0.321 (1.507)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	-0.058* (0.032)	-0.027 (0.067)	1.023 (0.111)	1.031 (0.106)	0.586 (0.487)	1.244 (0.372)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.088 (0.062)	-0.011 (0.119)	1.010 (0.189)	1.107 (0.238)	0.921 (0.904)	0.837 (0.655)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	-0.067 (0.042)	0.121 (0.085)	0.929 (0.135)	0.930 (0.126)	1.173 (0.629)	2.348** (0.409)
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	-0.073 (0.066)	-0.145 (0.137)	1.114 (0.254)	1.077 (0.209)	3.389 (1.738)	1.399 (0.624)
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	-0.358*** (0.081)	0.079 (0.145)	1.377 (0.231)	0.895 (0.264)	0.395 (0.810)	2.103 (0.700)
Psychiatric problem (Ref = Not mentioned)	<i>Mentioned</i>	-0.106 (0.093)	0.417** (0.179)	1.312 (0.403)	0.955 (0.336)	0 (4015.992)	4.527 (1.029)

Appendix table B.7 Travel mode use by other difficulties

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	0.002 (0.044)	0.091 (0.098)	1.068 (0.168)	0.996 (0.160)	0.874 (0.702)	0.945 (0.524)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	-0.087 (0.069)	-0.183 (0.130)	0.926 (0.265)	0.977 (0.196)	2.653 (1.331)	0.178** (0.716)
High Cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	-0.003 (0.028)	0.092 (0.060)	1.062 (0.099)	1.029 (0.094)	0.82 (0.419)	1.176 (0.372)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.017 (0.023)	-0.032 (0.042)	1.058 (0.072)	0.988 (0.067)	1.004 (0.253)	1.074 (0.201)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.077 (0.182)	-0.450 (0.390)	1.747 (0.604)	1.424 (0.949)	- -	- -
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	-0.218** (0.110)	0.169 (0.204)	1.051 (0.296)	1.101 (0.380)	† †	0.689 (0.715)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	0.876* (0.503)	0.132 (0.814)	4.813 (1.200)	† †	0 (5991.853)	2.35 (8442.703)
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	-1.260*** (0.312)	-0.932* (0.536)	0.698 (0.555)	0 (794.103)	0.676 (0.978)	† †
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	-0.743 (0.496)	-0.234 (0.799)	0.319 (1.192)	0 (794.105)	- -	0.774 (8442.703)

Appendix table B.7 Travel mode use by other difficulties

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
	<b>Observations</b>	17897	5818	15497	10667	10667	10667
	<b>R<sup>2</sup></b>	0.019	0.014	0.002	0.003	0.003	0.004

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses.



Appendix table B.8 Use of mobility aids by health

		<b>Cane/ Walking stick</b>	<b>Zimmer/ Walker</b>	<b>Manual wheelchair</b>	<b>Electric wheelchair</b>	<b>Buggy/ scooter</b>	<b>Personal alarm</b>	<b>Elbow crutches</b>
Age	<i>(in years)</i>	1.023*** (0.008)	1.042*** (0.015)	1.083** (0.032)	1.204** (0.084)	1.121*** (0.032)	1.046** (0.019)	1.085* (0.045)
Impairment <i>(Ref = No impairment)</i>	<i>Mentioned</i>	1.211*** (0.061)	1.807*** (0.152)	2.897*** (0.262)	0.443 (0.643)	1.484** (0.192)	1.608** (0.199)	1.283 (0.272)
Gender <i>(Ref = Male)</i>	<i>Female</i>	- -	- -	- -	- -	- -	- -	- -
Region <i>(Ref = North East)</i>	<i>North West</i>	0 (899.650)	- -	- -	- -	- -	- -	- -
	<i>Yorkshire &amp; Humber</i>	0 (899.650)	- -	- -	- -	- -	- -	† †
	<i>East Midlands</i>	0 (899.650)	† (6951.740)	† (7168.421)	- -	- -	- -	- -
	<i>West Midlands</i>	0 (899.650)	- -	- -	- -	† (5463.104)	1.149 (1.688)	- -
	<i>East of England</i>	0 (899.650)	0 (7603.735)	- -	- -	- -	0.852 †	- -
	<i>London</i>	0 (899.650)	- -	- -	0 †	- -	- -	- -
	<i>South East</i>	0 (899.650)	- -	- -	- -	- -	† (6848.263)	- -
	<i>South West</i>	0 (899.650)	- -	1 (5981.929)	- -	- -	- -	- -

Appendix table B.8 Use of mobility aids by health

		<b>Cane/ Walking stick</b>	<b>Zimmer/ Walker</b>	<b>Manual wheelchair</b>	<b>Electric wheelchair</b>	<b>Buggy/ scooter</b>	<b>Personal alarm</b>	<b>Elbow crutches</b>
Employment status (Ref = Retired)	<i>Employed</i>	1.006 (0.264)	1.211 (1.440)	1.497 (1.084)	† †	0.192 (1.297)	0.439 †	0.280 (1.349)
	<i>Self employed</i>	1.248 (0.418)	2.553 †	3.985 †	† †	2.266 (2.205)	- -	† †
	<i>Unemployed</i>	0.492 (0.617)	- -	- -	- -	- -	- -	- -
	<i>Sick</i>	0.961 (0.105)	1.019 (0.238)	1.182 (0.238)	0.997 (0.499)	1.473* (0.221)	1.257 (0.310)	1.564 (0.301)
	<i>Looking after home/family</i>	0.999 (0.115)	0.993 (0.272)	0.767 (0.478)	2.855 (0.936)	1.380 (0.407)	0.535 (0.469)	1.051 (0.731)
	<i>Semi-retired</i>	1.351 (0.550)	0 (3893.246)	0 (3452.929)	- -	0.873 (0.811)	- -	0 (4779.565)
Paid work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.601** (0.234)	0.256 (1.519)	1.562 (0.956)	1.755 †	1.565 (0.635)	0 (9105.282)	0.547 (1.265)
Self-employment (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.868 (0.345)	0 (8492.695)	0 (9293.740)	† †	0.625 (1.251)	- -	† (5496.327)
Voluntary work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.970 (0.098)	0.655 (0.312)	1.733 (0.494)	0.350 (1.242)	0.830 (0.405)	1.116 (0.368)	0.481 (0.552)
Cared for someone (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.980 (0.087)	0.551* (0.321)	1.530 (0.433)	0.640 (0.831)	1.052 (0.306)	0.746 (0.335)	1.016 (0.463)

Appendix table B.8 Use of mobility aids by health

		<b>Cane/ Walking stick</b>	<b>Zimmer/ Walker</b>	<b>Manual wheelchair</b>	<b>Electric wheelchair</b>	<b>Buggy/ scooter</b>	<b>Personal alarm</b>	<b>Elbow crutches</b>
Looked after home/family (last month) <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	0.943 (0.058)	0.733* (0.165)	0.830 (0.247)	0.346 (0.792)	1.007 (0.184)	0.787 (0.206)	1.046 (0.280)
Attended educational / training course (last month) <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	0.794 (0.239)	1.103 (1.082)	0.823 (1.283)	0.853 †	1.094 (0.750)	0.610 (0.920)	0.802 (0.945)
Hypertension <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.030 (0.089)	1.359 (0.244)	0.821 (0.242)	0.689 (0.642)	1.288 (0.242)	1.211 (0.289)	0.547* (0.356)
Diabetes <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.223 (0.169)	3.829** (0.549)	1.047 (0.544)	0.385 (1.410)	1.378 (0.643)	3.387 (1.207)	0.896 (0.776)
Cancer <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.054 (0.119)	1.235 (0.351)	1.110 (0.357)	0.474 (0.742)	0.673 (0.362)	1.701 (0.454)	1.764 (0.476)
Chronic lung disease <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.002 (0.162)	1.126 (0.432)	1.107 (0.498)	2.822 (1.116)	0.587 (0.374)	2.873* (0.589)	0.956 (0.667)
Stroke <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.298 (0.187)	2.264 (0.515)	6.105** (0.808)	0.014* (2.248)	1.674 (0.809)	1.601 (0.598)	0.723 (1.441)
Psychiatric problem <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.154 (0.269)	1.469 (0.577)	0.440 (0.724)	- -	0.316 (1.141)	0.843 (1.724)	† (7118.353)
Arthritis <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.726*** (0.163)	1.238 (0.369)	1.731 (0.560)	2.744 (1.607)	1.261 (0.504)	2.360* (0.478)	1.345 (0.915)
Asthma <i>(Ref = Not mentioned)</i>	<i>Mentioned</i>	1.023 (0.161)	1.163 (0.399)	0.990 (0.433)	† †	0.848 (0.532)	0.907 (0.438)	† (6212.340)

Appendix table B.8 Use of mobility aids by health

		<b>Cane/ Walking stick</b>	<b>Zimmer/ Walker</b>	<b>Manual wheelchair</b>	<b>Electric wheelchair</b>	<b>Buggy/ scooter</b>	<b>Personal alarm</b>	<b>Elbow crutches</b>
High Cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	1.001 (0.087)	1.346 (0.238)	0.689 (0.282)	1.817 (0.730)	0.999 (0.247)	1.001 (0.332)	1.014 (0.336)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	1.025 (0.061)	1.139 (0.152)	1.080 (0.200)	0.952 (0.415)	1.332 (0.194)	0.973 (0.192)	1.020 (0.264)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	1.567 (0.664)	0.146* (1.043)	1.208 (1.224)	† †	† †	† (6384.517)	† (6610.943)
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	2.210*** (0.253)	3.072** (0.514)	1.987 (0.887)	0 †	1.250 (0.748)	2.184 (0.681)	1.461 (0.667)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	1.416 (1.029)	1.640 (0.731)	1.336 (0.705)	0.239 (1.279)	1.330 (0.760)	† (3768.997)	0.209 (1.338)
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	1.140 (0.501)	† (4440.055)	0.405 (0.903)	- -	1.189 (0.873)	- -	- -
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	0.591 (1.026)	- -	- -	- -	- -	- -	- -
	<b>Observations</b>	14566	14566	14566	14566	14566	14566	14566
	<b>R<sup>2</sup></b>	0.006	0.007	0.005	0.002	0.003	0.004	0.003

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects OLS regression (longitudinal data). English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses. † denotes standard errors and non-significant coefficients with values of 10,000 or greater.

Appendix table B.9 Number of mobility aids used by health

		Number of mobility aids used (0-7)
Age	<i>(in years)</i>	0.022*** (0.002)
Impairment <i>(Ref = No impairment)</i>	<i>Mentioned</i>	0.260*** (0.016)
Gender <i>(Ref = Male)</i>	<i>Female</i>	-0.139 (0.346)
Region <i>(Ref = North East)</i>	<i>North West</i>	-0.043 (0.282)
	<i>Yorkshire and the Humber</i>	-0.060 (0.296)
	<i>East Midlands</i>	-0.024 (0.292)
	<i>West Midlands</i>	-0.209 (0.289)
	<i>East of England</i>	-0.202 (0.281)
	<i>London</i>	-0.024 (0.265)
	<i>South East</i>	-0.056 (0.277)
	<i>South West</i>	0.025 (0.030)

Appendix table B.9 Number of mobility aids used by health

		Number of mobility aids used (0-7)
Employment status (Ref = Retired)	<i>Employed</i>	0.042 (0.045)
	<i>Self-employed</i>	0.018 (0.068)
	<i>Unemployed</i>	0.053* (0.029)
	<i>Permanently sick or disabled</i>	-0.013 (0.021)
	<i>Looking after home/family</i>	-0.047 (0.063)
	<i>Semi-retired</i>	-0.016 (0.027)
Paid work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.013 (0.039)
Self-employment (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.016 (0.015)
Voluntary work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.017 (0.014)
Cared for someone (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.034*** (0.010)
Looked after home/family (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.006 (0.029)

Appendix table B.9 Number of mobility aids used by health

		<b>Number of mobility aids used (0-7)</b>
Attended educational/training course (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.003 (0.017)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	0.058* (0.033)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.038* (0.022)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	0.085** (0.033)
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	0.288*** (0.042)
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	-0.033 (0.053)
Psychiatric problems (Ref = Not mentioned)	<i>Mentioned</i>	0.114*** (0.025)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	0.033 (0.036)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	-0.019 (0.015)
High cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	0.026** (0.012)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.215** (0.105)

Appendix table B.9 Number of mobility aids used by health

		<b>Number of mobility aids used (0-7)</b>
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.581*** (0.054)
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	0.005 (0.257)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	0.161 (0.151)
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.137 (0.255)
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	0.043 (0.254)
<b>Observations</b>		14566
<b>R<sup>2</sup></b>		0.089

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects OLS regression (longitudinal data). English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses.



Appendix table B.10 Regression analysis: use of transport modes by use of mobility aids and health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
		<i>OLS Regression</i>	<i>OLS Regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>
Cane / Walking stick (Ref = Does not use)	Uses	-0.137*** (0.034)	-0.092 (0.063)	1.100 (0.110)	1.165 (0.101)	1.508 (0.322)	0.802 (0.252)
Zimmer frame / Walker (Ref = Does not use)	Uses	-0.560*** (0.064)	0.010 (0.092)	1.088 (0.172)	0.939 (0.161)	0.955 (0.335)	1.111 (0.320)
Manual wheelchair (Ref = Does not use)	Uses	-0.403*** (0.077)	0.094 (0.116)	1.033 (0.182)	0.865 (0.207)	1.848 (0.517)	0.975 (0.337)
Electric wheelchair (Ref = Does not use)	Uses	-0.336** (0.156)	0.204 (0.238)	0.790 (0.349)	0.634 (0.422)	1.527 (0.983)	1.126 (0.962)
Buggy / scooter (Ref = Does not use)	Uses	-0.229*** (0.082)	-0.025 (0.135)	1.377 (0.235)	0.938 (0.237)	2.155 (0.801)	2.775 (0.719)
Personal alarm (Ref = Does not use)	Uses	-0.287*** (0.070)	0.025 (0.097)	1.096 (0.180)	1.113 (0.158)	0.673 (0.356)	0.868 (0.328)
Elbow crutches (Ref = Does not use)	Uses	-0.094 (0.093)	0.134 (0.170)	1.083 (0.259)	0.944 (0.299)	0.205 (1.378)	1.271 (0.542)
Age (Ref = 50-64)	65-79	0.026 (0.030)	-0.050 (0.112)	1.070 (0.108)	0.872 (0.192)	0.329 (0.720)	0.715 (0.539)
	80+	-0.099* (0.053)	-0.027 (0.135)	1.162 (0.172)	0.889 (0.231)	0.400 (0.895)	1.234 (0.703)

Appendix table B.10 Regression analysis: use of transport modes by use of mobility aids and health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Gender (Ref = Male)	<i>Female</i>	- -	- -	- -	- -	- -	- -
Region (Ref = North East)	<i>North West</i>	0.643 (0.735)	- -	- -	0.000 (6000.403)	- -	- -
	<i>Yorkshire and the Humber</i>	-0.536 (0.600)	- -	- -	5.973 (6758.075)	- -	- -
	<i>East Midlands</i>	-1.349** (0.630)	-1.638 (2.064)	- -	0.000 (6000.403)	- -	- -
	<i>West Midlands</i>	-0.273 (0.620)	-1.161 (1.353)	1.202 (1.462)	0.000 (6000.403)	- -	0.000 †
	<i>East of England</i>	-0.700 (0.616)	-1.741 (1.814)	3.205 (1.720)	0.000 (6000.403)	- -	- -
	<i>London</i>	0.730 (0.597)	0.597 (1.361)	0.378 (1.812)	0.000 (6000.403)	- -	- -
	<i>South East</i>	-0.322 (0.565)	0.787 (1.277)	0.914 (1.249)	0.000 (6000.403)	0.627 (1.602)	† (7214.865)
	<i>South West</i>	-0.405 (0.589)	1.250 (1.501)	2.104 (1.502)	0.000 (6000.403)	- -	- -
Employment status (Ref = Retired)	<i>Employed</i>	-0.099 (0.064)	-0.064 (0.215)	1.032 (0.277)	0.986 (0.241)	0.898 (1.987)	0.000 †

Appendix table B.10 Regression analysis: use of transport modes by use of mobility aids and health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Employment status (Ref = Retired)	<i>Self-employed</i>	-0.183* (0.095)	-0.645 (0.456)	0.821 (0.720)	1.214 (0.354)	0.000 (9954.584)	† †
	<i>Unemployed</i>	-0.230 (0.144)	2.070 (1.513)	0.771 (1.373)	0.884 (1.720)	- -	- -
	<i>Permanently sick or disabled</i>	-0.027 (0.061)	-0.037 (0.122)	1.000 (0.173)	1.243 (0.204)	0.638 (0.576)	1.435 (0.399)
	<i>Looking after home/family</i>	-0.011 (0.044)	0.087 (0.084)	1.025 (0.116)	1.091 (0.151)	1.026 (0.499)	0.539 (0.463)
	<i>Semi-retired</i>	0.102 (0.135)	-0.096 (0.493)	1.088 (0.474)	1.169 (0.475)	0.000 †	- -
Paid work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.025 (0.057)	-0.046 (0.180)	0.909 (0.249)	1.112 (0.224)	1.293 (1.599)	- -
Self-employment (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.126 (0.084)	-0.023 (0.337)	0.743 (0.566)	0.726 (0.297)	† †	- -
Voluntary work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.009 (0.032)	-0.102 (0.071)	0.949 (0.125)	1.018 (0.100)	0.623 (0.455)	1.402 (0.468)
Cared for someone (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.008 (0.031)	0.019 (0.065)	0.963 (0.106)	1.080 (0.097)	0.775 (0.406)	0.744 (0.329)

Appendix table B.10 Regression analysis: use of transport modes by use of mobility aids and health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Looked after home/family (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.078*** (0.021)	0.033 (0.044)	0.946 (0.075)	1.112 (0.065)	0.724 (0.274)	0.915 (0.241)
Attended educational/training course (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.004 (0.062)	0.068 (0.153)	0.967 (0.318)	0.833 (0.186)	1.111 (0.737)	0.000 (5097.594)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	-0.079** (0.037)	0.000 (0.074)	1.009 (0.120)	0.982 (0.116)	0.607 (0.498)	1.266 (0.384)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.096 (0.069)	-0.120 (0.131)	1.015 (0.205)	0.975 (0.265)	0.674 (0.864)	0.940 (0.633)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	-0.074 (0.047)	0.094 (0.093)	0.931 (0.146)	0.964 (0.134)	2.040 (0.658)	2.761** (0.421)
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	-0.088 (0.071)	-0.168 (0.145)	1.105 (0.267)	1.072 (0.215)	† (3827.231)	1.524 (0.645)
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	-0.320*** (0.089)	0.035 (0.158)	1.355 (0.239)	0.806 (0.287)	0.647 (0.814)	2.173 (0.690)
Psychiatric problems (Ref = Not mentioned)	<i>Mentioned</i>	-0.276** (0.113)	0.353* (0.202)	1.224 (0.477)	1.036 (0.426)	0.000 (7157.584)	4.706 (1.054)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	-0.001 (0.054)	0.065 (0.113)	1.084 (0.187)	0.984 (0.176)	1.170 (0.813)	0.866 (0.537)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	-0.075 (0.077)	-0.200 (0.134)	0.939 (0.278)	0.954 (0.202)	1.927 (1.211)	0.172** (0.739)

Appendix table B.10 Regression analysis: use of transport modes by use of mobility aids and health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
High cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	-0.007 (0.033)	0.128* (0.067)	1.047 (0.110)	1.029 (0.103)	1.359 (0.419)	1.110 (0.373)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.018 (0.026)	-0.040 (0.046)	1.028 (0.077)	0.964 (0.071)	0.858 (0.253)	1.029 (0.200)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.130 (0.223)	-1.047** (0.467)	1.906 (0.672)	1.081 (1.014)	0.000 (0.000)	0.000 (0.000)
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	-0.030 (0.116)	0.174 (0.210)	0.984 (0.302)	0.977 (0.386)	† †	0.669 (0.727)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	1.197** (0.547)	-0.018 (0.877)	2.389 (1.256)	† (1301.141)	0.000 (9982.477)	3.219 †
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	-1.167*** (0.322)	-0.833 (0.550)	0.776 (0.564)	0.000 (1301.140)	1.108 (0.961)	† †
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	-1.084** (0.544)	-0.116 (0.861)	0.502 (1.251)	0.000 (1301.141)	0.000 (0.000)	0.463 †
	<b>Observations</b>	14565	5087	12437	9570	9570	9570
	<b>R<sup>2</sup></b>	0.030	0.013	0.001	0.003	0.003	0.004

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects regressions (longitudinal data). English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses. Coefficients and standard errors for the logistic regression models are expressed as odds ratios and in log base respectively.

† denotes standard errors and non-significant coefficients with values of 10,000 or greater.

Appendix table B.11 Regression analysis: use of transport modes by self-reported general health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
		<i>Linear Regression</i>	<i>Linear Regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>
Self-reported general health (Ref = 0 Excellent)	<i>Unit decline health</i> (Max = 4)	0.024** (0.012)	-0.001 (0.025)	0.970 (0.040)	1.042 (0.038)	0.904 (0.156)	0.972 (0.122)
Age (Ref = 50-64)	65-79	0.035 (0.025)	-0.079 (0.100)	1.055 (0.095)	0.874 (0.174)	0.507 (0.707)	0.824 (0.513)
Age (Ref = 50-64)	80+	-0.106** (0.046)	-0.054 (0.120)	1.164 (0.155)	0.874 (0.211)	0.619 (0.865)	1.134 (0.660)
Sex (Ref = Male)	<i>Female</i>	- -	- -	- -	- -	- -	- -
Region (Ref = North East)	<i>North West</i>	0.488 (0.540)	- -	- -	0 (3639.195)	- -	- -
	<i>Yorkshire and the Humber</i>	-0.008 (0.506)	- -	- -	0 (3639.200)	- -	- -
	<i>East Midlands</i>	-0.255 (0.530)	-0.867 (2.004)	- -	0 (3639.195)	- -	- -
	<i>West Midlands</i>	0.007 (0.493)	-1.073 (1.325)	1.156 (1.449)	0 (3639.195)	† (7341.458)	0 (7420.949)
	<i>East of England</i>	-0.087 (0.439)	-1.044 (1.751)	3.362 (1.723)	0 (3639.195)	- -	- -

Appendix table B.11 Regression analysis: use of transport modes by self-reported general health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Region (Ref = North East)	<i>London</i>	1.238*** (0.461)	0.696 (1.317)	0.317 (1.833)	0 (3639.195)	- -	- -
	<i>South East</i>	-0.223 (0.444)	0.751 (1.254)	0.906 (1.247)	0 (3639.195)	0.584 (1.580)	† (4408.974)
	<i>South West</i>	0.088 (0.457)	1.383 (1.450)	2.119 (1.490)	0 (3639.195)	- -	- -
Employment status (Ref = Retired)	<i>Employed</i>	-0.110** (0.052)	-0.023 (0.169)	1.020 (0.247)	0.950 (0.214)	2.514 (2.300)	0 (9538.637)
	<i>Self-employed</i>	-0.115 (0.073)	-0.663* (0.348)	0.793 (0.534)	1.074 (0.291)	2.484 (2.341)	† (8829.783)
	<i>Unemployed</i>	-0.149 (0.124)	2.095 (1.493)	1.231 (1.393)	1.307 (1.228)	- -	- -
	<i>Permanently sick or disabled</i>	-0.049 (0.061)	-0.042 (0.125)	1.023 (0.169)	1.068 (0.207)	0.789 (0.546)	1.567 (0.462)
	<i>Looking after home/family</i>	-0.008 (0.039)	0.038 (0.076)	1.033 (0.105)	1.060 (0.143)	1.079 (0.449)	0.488 (0.456)
	<i>Semi-retired</i>	0.107 (0.109)	-0.108 (0.377)	1.097 (0.467)	1.006 (0.412)	0 (8677.266)	- -
Paid work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.068 (0.046)	-0.128 (0.143)	0.909 (0.221)	1.046 (0.190)	0.331 (1.901)	- -

Appendix table B.11 Regression analysis: use of transport modes by self-reported general health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Self-employment (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.008 (0.063)	0.029 (0.267)	0.828 (0.464)	0.860 (0.240)	0.891 (2.008)	- -
Voluntary work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.012 (0.027)	-0.136** (0.062)	0.932 (0.114)	1.007 (0.093)	0.608 (0.457)	1.011 (0.432)
Cared for someone (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.027 (0.026)	-0.082 (0.057)	0.957 (0.097)	1.090 (0.091)	0.993 (0.366)	0.850 (0.355)
Looked after home/family (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.069*** (0.018)	0.042 (0.039)	0.953 (0.068)	1.125** (0.060)	0.695 (0.245)	1.020 (0.232)
Attended educational/training course (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.008 (0.051)	0.066 (0.132)	0.955 (0.293)	0.834 (0.171)	0.959 (0.714)	0.338 (1.505)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	-0.065** (0.032)	-0.021 (0.067)	1.029 (0.110)	1.051 (0.107)	0.558 (0.474)	1.272 (0.384)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.085 (0.063)	-0.040 (0.122)	1.016 (0.188)	1.127 (0.240)	1.097 (0.843)	0.998 (0.605)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	-0.085** (0.043)	0.103 (0.085)	0.945 (0.134)	0.945 (0.127)	1.007 (0.630)	2.394** (0.420)
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	-0.094 (0.066)	-0.202 (0.138)	1.098 (0.253)	1.149 (0.211)	5.71 (1.685)	1.977 (0.786)



Appendix table B.11 Regression analysis: use of transport modes by self-reported general health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	-0.388*** (0.083)	0.064 (0.146)	1.409 (0.229)	0.866 (0.264)	0.590 (0.854)	2.495 (0.743)
Psychiatric problems (Ref = Not mentioned)	<i>Mentioned</i>	-0.130 (0.096)	0.410** (0.187)	1.309 (0.401)	1.032 (0.348)	0 (5578.716)	8.966 (1.495)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	-0.007 (0.045)	0.068 (0.098)	1.086 (0.167)	1.001 (0.160)	1.199 (0.665)	1.009 (0.514)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	-0.062 (0.070)	-0.151 (0.131)	0.939 (0.263)	0.999 (0.196)	1.722 (1.200)	0.171** (0.738)
High cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	-0.008 (0.028)	0.090 (0.060)	1.059 (0.099)	1.034 (0.094)	1.026 (0.396)	1.240 (0.369)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.023 (0.023)	-0.038 (0.042)	1.057 (0.072)	0.992 (0.067)	0.963 (0.242)	1.066 (0.204)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.049 (0.181)	-0.415 (0.389)	1.825 (0.599)	1.494 (0.952)	- -	- -
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	-0.296*** (0.112)	0.051 (0.215)	1.057 (0.293)	1.005 (0.386)	† (9081.249)	0.590 (0.747)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	1.071** (0.529)	0.222 (0.819)	4.396 (1.194)	† (860.915)	0 (6027.723)	2.463 (1.201)
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	-1.453*** (0.339)	-0.943* (0.545)	0.745 (0.549)	0 (860.913)	1.037 (0.900)	† (5459.206)
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	-0.682 (0.523)	-0.302 (0.797)	0.340 (1.186)	0 (860.915)	- -	- -

Appendix table B.11 Regression analysis: use of transport modes by self-reported general health

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
	<b>Observations</b>	17650	5754	15492	10507	10507	10507
	<b>R<sup>2</sup></b>	0.012	0.012	0.001	0.002	0.002	0.003

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects regressions (longitudinal data). English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses. Coefficients and standard errors for the logistic regression models are expressed as odds ratios and in log base respectively.

† denotes standard errors and non-significant coefficients with values of 10,000 or greater.

Appendix table B.12 Regression analysis: transport mode use by self-reported general health and number of health conditions

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
		<i>OLS Regression</i>	<i>OLS Regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>	<i>Logistic regression</i>
Self-reported general health ( <i>Min = 0 Excellent</i> )	<i>Unit decline in health (Max = 4)</i>	-0.023 (0.018)	-0.051 (0.042)	0.948 (0.069)	1.075 (0.066)	0.952 (0.271)	0.711 (0.257)
Health conditions	<i>Num. reported</i>	-0.658 (0.523)	-0.238 (0.798)	0.349 (1.186)	0.000 (864.389)	1.111 (0.941)	1.297 (0.616)
Self-reported health x Number of conditions ( <i>Interaction</i> )		0.023*** (0.007)	0.020 (0.014)	1.009 (0.022)	0.988 (0.022)	0.980 (0.083)	1.098 (0.067)
Age group ( <i>Ref = 50-64</i> )	<i>65-79</i>	0.033 (0.025)	-0.077 (0.100)	1.054 (0.095)	0.874 (0.174)	0.512 (0.707)	0.792 (0.515)
	<i>80+</i>	-0.108** (0.046)	-0.053 (0.120)	1.163 (0.155)	0.874 (0.211)	0.625 (0.866)	1.095 (0.662)
Sex ( <i>Ref = Male</i> )	<i>Female</i>	- -	- -	- -	- -	- -	- -
	<i>North West</i>	0.474 (0.540)	- -	- -	0.000 (3639.391)	- -	- -
Region ( <i>Ref = North East</i> )	<i>Yorkshire and the Humber</i>	0.016 (0.506)	- -	- -	0.000 (3639.392)	- -	- -
	<i>East Midlands</i>	-0.279 (0.530)	-0.919 (2.003)	- -	0.000 (3639.392)	- -	- -

Appendix table B.12 Regression analysis: transport mode use by self-reported general health and number of health conditions

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Region (Ref = North East)	<i>West Midlands</i>	-0.001 (0.493)	-1.098 (1.324)	1.155 (1.447)	0.000 (3639.391)	† (7348.959)	0.000 (7266.408)
	<i>East of England</i>	-0.095 (0.438)	-1.093 (1.751)	3.302 (1.724)	0.000 (3639.392)	- -	- -
	<i>London</i>	1.235*** (0.461)	0.675 (1.317)	0.314 (1.834)	0.000 (3639.391)	- -	- -
	<i>South East</i>	-0.231 (0.443)	0.731 (1.254)	0.903 (1.247)	0.000 (3639.391)	0.588 (1.581)	† (4403.404)
	<i>South West</i>	0.083 (0.456)	1.381 (1.449)	2.136 (1.489)	0.000 (3639.391)	- -	- -
Employment status (Ref = Retired)	<i>Employed</i>	-0.111** (0.052)	-0.027 (0.169)	1.020 (0.247)	0.954 (0.214)	2.481 (2.308)	0.000 (9128.142)
	<i>Self-employed</i>	-0.114 (0.073)	-0.677* (0.348)	0.793 (0.534)	1.078 (0.291)	2.414 (2.354)	† (8830.409)
	<i>Unemployed</i>	-0.151 (0.124)	2.145 (1.493)	1.250 (1.394)	1.290 (1.231)	- -	- -
	<i>Permanently sick / disabled</i>	-0.046 (0.061)	-0.038 (0.125)	1.025 (0.169)	1.071 (0.207)	0.799 (0.549)	1.498 (0.467)
	<i>Looking after home/family</i>	-0.008 (0.039)	0.039 (0.076)	1.033 (0.105)	1.061 (0.143)	1.079 (0.449)	0.495 (0.455)
	<i>Semi-retired</i>	0.109 (0.109)	-0.115 (0.377)	1.097 (0.467)	1.008 (0.412)	0.000 (8669.787)	- -

Appendix table B.12 Regression analysis: transport mode use by self-reported general health and number of health conditions

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Paid work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.062 (0.046)	-0.116 (0.143)	0.912 (0.221)	1.041 (0.190)	0.325 (1.909)	- -
Self-employment (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.006 (0.063)	0.033 (0.267)	0.829 (0.464)	0.857 (0.240)	0.885 (2.011)	- -
Voluntary work (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.012 (0.027)	-0.135** (0.062)	0.933 (0.114)	1.007 (0.093)	0.607 (0.457)	1.051 (0.433)
Cared for someone (last month) (Ref = Not mentioned)	<i>Mentioned</i>	-0.027 (0.026)	-0.082 (0.057)	0.957 (0.097)	1.090 (0.091)	0.995 (0.366)	0.821 (0.356)
Looked after home/family (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.068*** (0.018)	0.042 (0.039)	0.952 (0.068)	1.127** (0.060)	0.694 (0.245)	1.051 (0.234)
Attended educational/training course (last month) (Ref = Not mentioned)	<i>Mentioned</i>	0.010 (0.051)	0.071 (0.132)	0.960 (0.293)	0.832 (0.171)	0.954 (0.713)	0.342 (1.503)
Hypertension (Ref = Not mentioned)	<i>Mentioned</i>	0.526 (0.524)	0.161 (0.801)	2.874 (1.196)	† (864.389)	0.535 (1.059)	0.798 (0.700)
Diabetes (Ref = Not mentioned)	<i>Mentioned</i>	0.690 (0.526)	0.154 (0.809)	2.846 (1.200)	† (864.389)	1.024 (1.233)	0.686 (0.848)
Cancer (Ref = Not mentioned)	<i>Mentioned</i>	0.512 (0.525)	0.285 (0.806)	2.652 (1.198)	† (864.389)	0.952 (1.108)	1.558 (0.734)

Appendix table B.12 Regression analysis: transport mode use by self-reported general health and number of health conditions

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Chronic lung disease (Ref = Not mentioned)	<i>Mentioned</i>	0.519 (0.527)	-0.005 (0.811)	3.085 (1.217)	† (864.389)	5.563 (1.897)	1.258 (1.018)
Stroke (Ref = Not mentioned)	<i>Mentioned</i>	0.222 (0.530)	0.255 (0.813)	3.976 (1.211)	† (864.389)	0.553 (1.232)	1.510 (0.960)
Psychiatric problems (Ref = Not mentioned)	<i>Mentioned</i>	0.467 (0.532)	0.612 (0.822)	3.673 (1.257)	† (864.389)	0.000 (5578.932)	4.703 (1.583)
Arthritis (Ref = Not mentioned)	<i>Mentioned</i>	0.579 (0.525)	0.239 (0.808)	3.027 (1.211)	† (864.389)	1.163 (1.093)	0.566 (0.775)
Asthma (Ref = Not mentioned)	<i>Mentioned</i>	0.535 (0.528)	0.042 (0.814)	2.651 (1.217)	† (864.389)	1.600 (1.517)	0.119** (0.945)
High cholesterol (Ref = Not mentioned)	<i>Mentioned</i>	0.579 (0.524)	0.265 (0.805)	2.961 (1.194)	† (864.389)	0.952 (0.937)	0.744 (0.718)
Cataracts (Ref = Not mentioned)	<i>Mentioned</i>	0.613 (0.524)	0.143 (0.804)	2.954 (1.193)	† (864.389)	0.905 (0.910)	0.668 (0.618)
Parkinson's disease (Ref = Not mentioned)	<i>Mentioned</i>	0.643 (0.554)	-0.232 (0.891)	5.092 (1.334)	† (864.389)	- -	- -
Hip fracture (Ref = Not mentioned)	<i>Mentioned</i>	0.309 (0.535)	0.230 (0.829)	2.968 (1.223)	† (864.389)	† (9085.050)	0.342 (0.947)
Memory problems (Ref = Not mentioned)	<i>Mentioned</i>	1.598 (1.039)	0.332 (1.596)	11.949 (2.349)	† (1728.777)	0.000 (6011.461)	- -
Alzheimer's disease (Ref = Not mentioned)	<i>Mentioned</i>	-0.824* (0.440)	-0.696 (0.680)	2.100 (1.141)	1.325 (1.688)	- -	† (5541.003)

Appendix table B.12 Regression analysis: transport mode use by self-reported general health and number of health conditions

		Frequency of travel by public transport	Frequency of lifts from family or friends	Drive a car	Use of Taxi	Use of Door-to-door community transport	Use of transport provided by hospital / day centre / lunch club
Dementia (Ref = Not mentioned)	<i>Mentioned</i>	-	-	-	-	-	-
		-	-	-	-	-	-
<b>Observations</b>		17650	5754	15492	10507	10507	10507
<b>R<sup>2</sup></b>		0.013	0.012	0.001	0.002	0.001	0.003

Notes: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Fixed effects regressions (longitudinal data). English Longitudinal Study of Ageing, Waves 4-7 (2008-2015). Standard errors in parentheses. Coefficients and standard errors for the logistic regression models are expressed as odds ratios and in log base respectively.

† denotes standard errors and non-significant coefficients with values of 10,000 or greater.

# Appendix C: Survey Questions

## Understanding Society

Reference	Question	Response options	Waves
<b>Impairments</b>			
<b>Health.</b>	Do you have any long-standing physical or mental impairment, illness or disability? By 'long-standing' I mean anything that has troubled you over a period of at least 12 months or that is likely to trouble you over a period of at least 12 months	1 Yes 2 No	1-7
<b>Disdif.</b>	Even though you don't have any long-standing health problems, do {if HEALTH = 2} / Do {if HEALTH <> 2} you have any health problems or disabilities that mean you have substantial difficulties with any of the following areas of your life?	1 Mobility (moving around at home and walking) 2 Lifting, carrying or moving objects 3 Manual dexterity 4 Contenance (bladder and bowel control) 5 Hearing (apart from using standard hearing aid) 6 Sight (apart from wearing standard glasses) 7 Communication or speech problems 8 Memory or ability to concentrate, learn or understand 9 Recognising when you are in physical danger 10 Your physical co-ordination (e.g. balance) 11 Difficulties with own personal care (e.g. getting dressed, taking a bath or shower) 12 Other health problem or disability 96 None of these	1-7
<b>Dissev.</b>	How much difficulty do you have with [DisDif]? Would you say...	1 Some difficulty 2 A lot of difficulty 3 Unable to do this?	1-7



Reference	Question	Response options	Waves
<b>Health conditions</b>			
<b>Hcond.</b> (Note: part of question family used to compute longitudinal variable)	Has a doctor or other health professional ever told you that you have any of these conditions? Please just tell me the numbers that apply.	1 Asthma 2 Arthritis 3 Congestive heart failure 4 Coronary heart disease 5 Angina 6 Heart attack or myocardial infarction 7 Stroke 8 Emphysema 9 Hyperthyroidism or an over-active thyroid 10 Hypothyroidism or an under-active thyroid 11 Chronic bronchitis 12 Any kind of liver condition 13 Cancer or malignancy 14 Diabetes 15 Epilepsy 16 High blood pressure 17 Clinical depression 18 Other longstanding/chronic condition, please specify 96 None of these	1-7
<b>Mobility/transport use</b>			
<b>Trcarfq.</b> (Note: scale inverted for regression analysis)	How frequently do you travel by private car or van - whether as a driver or passenger? Please count a single trip as one journey and each return trip as two	1 At least once a day 2 Less than once a day but at least 3 times a week 3 Once or twice a week 4 Less than that but more than twice a month 5 Once or twice a month 6 Less than that but more than twice a year 7 Once or twice a year 8 Less than that or never	4, 6

Reference	Question	Response options	Waves
<b>Trbusfq.</b> (Note: scale inverted for regression analysis)	How frequently do you use an ordinary bus? Please count a single trip as one journey and each return trip as two.	1 At least once a day 2 Less than once a day but at least 3 times a week 3 Once or twice a week 4 Less than that but more than twice a month 5 Once or twice a month 6 Less than that but more than twice a year 7 Once or twice a year 8 Less than that or never	4, 6
<b>Trtrnfq.</b> (Note: scale inverted for regression analysis)	How frequently do you use a train, not including underground, tram or light rail? Please count a single trip as one journey and each return trip as two	1 At least once a day 2 Less than once a day but at least 3 times a week 3 Once or twice a week 4 Less than that but more than twice a month 5 Once or twice a month 6 Less than that but more than twice a year 7 Once or twice a year 8 Less than that or never	4, 6
<b>Trbikefq.</b> (Note: scale inverted for regression analysis)	How frequently do you use a bicycle? Please count a single trip as one journey and each return trip as two	1 At least once a day 2 Less than once a day but at least 3 times a week 3 Once or twice a week 4 Less than that but more than twice a month 5 Once or twice a month 6 Less than that but more than twice a year 7 Once or twice a year 8 Less than that or never	4, 6
<b>Carmiles.</b>	About how many miles would you say you personally have driven in the last twelve months? If you drive more than one car owned by or available to your household, please give the mileage for the car you drive most often.	<Positive integer>	1, 4
<b>Demographics</b>			
<b>Ageif.</b>	What was [your] age at [your] last birthday? If you don't know please give your best estimate.	<Positive integer>	1-7
<b>Sex.</b>	Are you male or female?	1 Male 2 Female	1-7

Reference	Question	Response options	Waves
<b>GOR</b>	Region (derived variable, based on respondent's postcode)	1 North East 2 North West 3 Yorkshire and Humber 4 East Midlands 5 West Midlands 6 East of England 7 London 8 South East 9 South West 10 Wales 11 Scotland 12 Northern Ireland	1-7
<b>Urban/ rural</b>	Urban/rural (derived variable, based on respondent's postcode)	1 Urban 2 Rural	1-7
<b>Jbstat.</b>	Which of these best describes your current employment situation?	1 Self-employed 2 In paid employment (full or part time) 3 Unemployed 4 Retired 5 On maternity leave 6 Looking after family or home 7 Full-time student 8 Long term sick or disabled 9 On a government training scheme 10 Unpaid worker in family business 11 Working in an apprenticeship 97 Doing something else	1-7

# English Longitudinal Study of Ageing

Reference	Question	Response options	Waves
<b>Activities of Daily Living (ADL)</b>			
HEADLA	<p>Because of a health problem, [^do you /does he /does she] have difficulty doing any of the activities on this card? Exclude any difficulties that you expect to last less than three months</p> <p>INTERVIEWER: PROBE - 'What others?'....Code all that apply.</p> <p><b>(Response options in bold used in the analysis<sup>7</sup>)</b></p>	<p><b>1 Walking 100 yards</b></p> <p><b>2 Sitting for about two hours</b></p> <p><b>3 Getting up from a chair after sitting for long periods</b></p> <p><b>4 Climbing several flights of stairs without resting</b></p> <p><b>5 Climbing one flight of stairs without resting</b></p> <p>6 Stooping, kneeling, or crouching</p> <p><b>7 Reaching or extending [^your / his / her] arms above shoulder level (either arm)</b></p> <p><b>8 Pulling or pushing large objects like a living room chair</b></p> <p><b>9 Lifting or carrying weights over 10 pounds, like a heavy bag of groceries</b></p> <p><b>10 Picking up a 5p coin from a table</b></p> <p>96 None of these</p>	1-7
<b>Instrumental Activities of Daily Living (IADL)</b>			
HEADLB	<p>Here are a few more everyday activities. Please tell me if [^you have / [^name] has] any difficulty with these because of a physical, mental, emotional or memory problem. Again, exclude any difficulties you expect to last less than three months.</p> <p>Because of a health or memory problem, [^do you /does he /does she] have difficulty doing any of the activities on this card?</p> <p>INTERVIEWER: PROBE - 'What others?'....Code all that apply.</p> <p><b>(Response options in bold used in the analysis<sup>8</sup>)</b></p>	<p><b>1 Dressing, including putting on shoes and socks</b></p> <p><b>2 Walking across a room</b></p> <p>3 Bathing or showering</p> <p><b>4 Eating, such as cutting up [^your / his / her] food</b></p> <p>5 Getting in or out of bed</p> <p><b>6 Using the toilet, including getting up or down</b></p> <p><b>7 Using a map to figure out how to get around in a strange place</b></p> <p><b>8 Recognising when you are in physical danger</b></p> <p>9 Preparing a hot meal</p> <p><b>10 Shopping for groceries</b></p> <p>11 Making telephone calls</p> <p>12 Communication (speech, hearing or eyesight)</p> <p><b>13 Taking medications</b></p>	1-7

<sup>7</sup> Only the answer options that are relevant for mobility were included in the analysis.

<sup>8</sup> Only the answer options that are relevant for mobility were included in the analysis.

Reference	Question	Response options	Waves
		14 Doing work around the house or garden <b>15 Managing money, such as paying bills and keeping track of expenses</b> 96 None of these	
<b>Impairments</b>			
<b>HEFUNC</b>	By [^yourself / himself / herself] and without using any special equipment, how much difficulty [^do you / does [^name]] have walking for a quarter of a mile? [^Do you / Does he / Does she] have... INTERVIEWER: Read out...	1 No difficulty 2 Some difficulty 3 Much difficulty 4 Unable to do this?	1-7
<b>Self-reported health</b>			
<b>HEHELF</b>	Would you say your health is...	1 Excellent 2 Very good 3 Good 4 Fair 5 Poor <sup>9</sup>	1-7
<b>Raw variables measuring health conditions (used as basis for the derived variables included in the analysis)<sup>10</sup></b>			
<b>HEDIAA</b> (Note: part of question family used to compute longitudinal variable)	[^Has / Apart from what you have already told us, and thinking about what has happened since we last saw [^you / [^name]] on [^date of last interview] has] a doctor [^BLANK / ever] told [^you / [^name]] that [^you have / he	<b>1 High blood pressure or hypertension</b> 2 Angina 3 A heart attack (including myocardial infarction or coronary thrombosis) 4 Congestive heart failure	1-7

<sup>9</sup> In Wave 3 of ELSA, the possible responses were different compared to other waves: 1. Very good, 2. Good, 3. Fair, 4. Bad, 5. Very bad.

<sup>10</sup> Health conditions were measured by a set of derived variables extracted from the Harmonised ELSA data set that were further derived using variables from the raw ELSA dataset. This was done to compute a variable that indicates whether the respondent was suffering from each given illness in the given wave. The harmonised data included a derived variable indicating for each wave whether a particular health condition was ever experienced. The raw ELSA data contains variables that measure if any new conditions are experienced since the previous waves but also whether the conditions mentioned in the previous waves are still experienced. We used the harmonised data and this second variable to measure if a condition is experienced in the given wave. As such, the inclusion of various health conditions was limited by the availability of the relevant variables in both datasets. Only the health conditions that are consistently and repeatedly measured in subsequent ELSA waves are included in the Harmonised dataset. The health conditions included are: hypertension, diabetes, cancer or malignant tumour, chronic lung disease, stroke, psychiatric problems, arthritis (including osteoarthritis, rheumatism), asthma, high cholesterol, cataracts, Parkinson's disease, hip fracture, memory problems, Alzheimer's disease, dementia.

Reference	Question	Response options	Waves
	has / she has] (or have had) any of the [^BLANK / other] conditions on this card? INTERVIEWER: PROBE - 'What others?' Code all that apply. <b>(Response options in bold used in the analysis)</b>	5 A heart murmur [...] 6 An abnormal heart rhythm <b>7 Diabetes or high blood sugar</b> <b>8 A stroke (cerebral vascular disease)</b> <b>9 High cholesterol</b> 95 Any other heart trouble (SPECIFY) 96 None of these	
<b>HEDIAB</b> (Note: part of question family used to compute longitudinal variable)	^Has / Apart from what you have already told us, and thinking about what has happened since we last saw [^you / [^name]] on [^date of last interview] has / Thinking about what has happened since we last saw [^you / [^name]] on [^date of last interview] has] a doctor [^BLANK / ever] told [^you / [^name]] that [^you have / he has / she has] (or had) any of the [^BLANK / other] conditions on this card? <b>(Response options in bold used in the analysis)</b>	<b>1 Chronic lung disease such as chronic bronchitis or emphysema</b> <b>2 Asthma</b> <b>3 Arthritis (including osteoarthritis, or rheumatism)</b> 4 Osteoporosis, sometimes called thin or brittle bones <b>5 Cancer or a malignant tumour (excluding minor skin cancers)</b> <b>6 Parkinson's disease</b> <b>7 Any emotional, nervous or psychiatric problems</b> <b>8 Alzheimer's disease</b> <b>9 Dementia, senility or another serious memory impairment</b> 10 Malignant blood disorder, e.g. leukaemia 11 Multiple Sclerosis or Motor Neurone Disease 96 None of these	1-7
<b>HEPSY</b> (Note: part of question family used to compute longitudinal variable)	What type of emotional, nervous or psychiatric problems [^do (did) you /does (did) [^name]]   have?	1 Hallucinations 2 Anxiety 3 Depression 4 Emotional problems 5 Schizophrenia 6 Psychosis 7 Mood swings 8 Manic depression 95 Something else	1-7
<b>HEFRAC</b>	Have you [^BLANK / ever] fractured your hip since we last talked to you on [^]?	1 Yes 2 No	1-7
<b>HEOPT</b>	[^Has / Apart from what you have already told us and thinking about what has happened since we last saw [^you / [^name]] on [^date of last interview] has] a doctor or optician [^BLANK /ever] told [^you/ [^name]] that [^you have/ he has/ she has] (or [^you/ he/ she] had) [^BLANK /any of these other	1 Glaucoma or suspected glaucoma 2 Diabetic eye disease 3 Macular degeneration <b>4 Cataracts</b> 96 None of these	1-7

Reference	Question	Response options	Waves
	conditions]... INTERVIEWER: Read out each in turn and code all that apply. Include Diabetic Retinopathy in code 2. Include age related Maculopathy in code 3. <b>(Response options in bold used in the analysis)</b>		
<b>Mobility aids</b>			
<b>HEADID</b>	^Do you / Does [^name]] use any of these? Only include personal alarms used to call for assistance after falls etc. <b>(Response options in bold used in the analysis<sup>11</sup>)</b>	<b>1 A cane or walking stick</b> <b>2 A Zimmer frame or walker</b> <b>3 A manual wheelchair</b> <b>4 An electric wheelchair</b> <b>5 A buggy or scooter</b> 6 Special eating utensils <b>7 A personal alarm</b> <b>8 Elbow crutches</b> <b>96 None of these</b>	1-7
<b>HEHAID</b>	Nowadays, do you ever wear a hearing aid? INTERVIEWER: If Yes ask: Do you wear your hearing aid(s) some of the time or most of the time?	1 Yes, most of the time 2 Yes, some of the time 3 No	7
<b>Mobility/transport use</b>			
<b>SPTRAA</b>	How often [^do you/does [^name]] use public transport?	1 Every day or nearly every day 2 Two or three times a week 3 Once a week 4 Two or three times a month 5 Once a month or less 6 Never	1-7
<b>SPCARA</b>	IF has use of car or van = Yes [SPCar = 1] [Do you/ Does [^name] ever drive this car or van [^yourself/himself/herself]?	1 Yes 2 No, passenger only	2-7
<b>SPTRO</b>	[Do you/Does [^name]] ever use any of the following means of transport? <b>(Response options in bold used in the analysis)</b>	<b>1 Lifts from family or friends not lived with</b> <b>2 Taxi</b> <b>3 Door-to-door community transport, e.g. dial-a-ride</b> <b>4 Transport provided by hospital / day centre / lunch club</b>	3-7

<sup>11</sup> Only the answer options that are relevant for mobility were included in the analysis.

Reference	Question	Response options	Waves
		5 [(Care home respondents only) Transport provided by care home] 96 None of these	
<b>SPLIFT</b>	How often [do you/does ^[name]] get lifts from family or friends who do not live with     ^[you/him/her]?	1 Every day or nearly every day 2 Two or three times a week 3 Once a week 4 Two or three times a month 5 Once a month or less 6 SPONTANEOUS - do not currently use	3-7
<b>SPTAXI</b>	How often [do you/does name] use a taxi?	1 Every day or nearly every day 2 Two or three times a week 3 Once a week 4 Two or three times a month 5 Once a month or less 6 SPONTANEOUS - do not currently use	3-7
<b>Demographics</b>			
<b>INDAGER</b>	Age variable	<Positive integer>	1-7
<b>INDSEX2</b>	Recoded gender variable	0 Female 1 Male	0 - 1
<b>WPDES</b>	Which one of these, would you say best describes ^[your/name's] current situation?	1 Retired 2 Employed 3 Self-employed 4 Unemployed 5 Permanently sick or disabled 6 Looking after home or family 95 Other (specify) 96 Spontaneous: semi-retired	1-7
<b>WPACT</b>	Did ^[you/name] do any of these activities during the last month, that is since ^[date one month ago]? CODE ALL THAT APPLY	1 Paid work 2 Self-employment 3 Voluntary work 4 Cared for someone 5 Looked after home or family 6 Attended a formal educational or training course 96 None of these	1-7
<b>GOR_N</b>	Government officer region (region) variable	1 North East 2 North West 3 Yorkshire and The Humber 4 East Midlands 5 West Midlands 6 East 7 London 8 South East 9 South West	1-7