

SUPPLEMENTARY MATERIAL

Supplement A: Definition of the datasets/stages

Table S1: The different populations compared in the analyses.

Population	NDH population in surveys	NDH population in healthcare records	NDH population offered the DPP	NDH population having an Initial Assessment at the DPP	NDH population who completed Initial Assessment and completed 8 DPP interventions sessions.	NDH population in who completed Initial Assessment and completed 11 DPP interventions sessions.
Data source	UKHLS; HSE	NDA	NDA	MDS	MDS	MDS
NDH definition	Defined as NDH if HbA1c blood levels between 42-47mmol/mol or 6.0-6.4% inclusive	A Read code indicating NDH diagnosis entered in primary care electronic health records. HbA1c within the range 42-47mmol/mol inclusive	A Read code entered in primary care electronic healthcare records indicating the DPP intervention has been offered. HbA1c within the range 42-47mmol/mol inclusive	Participants referred by primary care to the DPP provider based on an HbA1c within the range 42-47mmol/mol inclusive.	Participants referred by primary care to the DPP provider based on an HbA1c within the range 42-47mmol/mol inclusive.	Participants referred by primary care to the DPP provider based on an HbA1c within the range 42-47mmol/mol inclusive.
Time period	UKHLS: 2010-12 HSE: 2015-2018	Jan 2017 to Dec 2019	April 2018 to March 2019	April 2018 to March 2019	April 2018 to March 2019	April 2018 to March 2019
Sample size (N)	UKHLS: 794 HSE: 1,383	1,109,930	157,420	98,024	29,577	19,916

UK Household Longitudinal Study

The UK Household Longitudinal Study (UKHLS) is an annual longitudinal survey of over UK 40,000 households. A stratified clustered random sample of households, consisting of the General Populations Sample (GPS) representative of the UK population and a small subsample of the British Household Panel Survey (BHPS). Sociodemographic characteristics were collected at annual interviews and adult participants in waves 2 and 3 (2010-2012) had an additional nurse visit and gave a blood sample. A biomarker collection for all eligible participants was completed in two waves (2&3). In total, approximately 56,198 men and women over 16 years of age participated in the main interview in waves 2 and 3 of UKHLS, of those 12,162 (22%) had HbA1c measurement. In this study, only participants living in England were included in the analytical sample as the NHS DPP focuses on the English population. Therefore, 10,065 participants residing in England with HbA1c measurement were included in the analytical sample. Less than 1% of the participants had missing values in disability, ethnicity, and employment data. Our analytical sample comprised of 9,987 participants, out of these 8,648 (86%) had normal levels of HbA1c, 794 (8%) had NDH, and 545 (6%) had diabetes. To compensate for the loss of information on blood sample data due to various reasons (i.e., no consent, inability to give blood sample etc), missing data were considered missing at random and thus, non-response blood weights were applied to the analyses. More information on how non-response blood weights were structured can be found in the Understanding Society user guide. [1]

Health Survey for England

The Health Survey for England (HSE) is commissioned by the NHS Information Centre for Health and Social Care for the Department of Health. Since 1994, this annual, cross-sectional survey has been carried out in collaboration with the Health and Social Survey Research group at the Department of Epidemiology at University College London. Data collections occur throughout the year. The first stage of data collections includes information on health and health related behaviours in individuals surveyed using visit from a trained interviewer. The second stage includes a nurse visit with further collection of physical measurements and biological samples. All adults (age 16 or over) in the household are eligible for interview, nurse visit and biological sampling. A random probability sample of households (addresses and postcodes) is surveyed every year. We used data between 2015 and 2018. In total, 32,220 (aged 16+) had a main interview, 25,160 (78.1%) completed a nurse visit and 15,453 (61.4%) gave a blood sample. Of those participants who gave blood sample, 14,873 (96.2%) had a HbA1c

measurement. The analytical sample comprised of 1,387 participants whose HbA1c levels were within the range 6.0-6.4% inclusive indicating NDH. After excluding participants with missing information on sociodemographic characteristics the final analytical sample was 1,383 NDH participants. Similar approach to UKHLS data was followed to compensate for missing data. Blood weights were applied to the statistical analyses.

National Diabetes Audit

The National Diabetes Audit (NDA) is part of the National Clinical Audit Programme commissioned by the Healthcare Quality Improvement Partnership and funded by NHS England. The NDA is delivered by NHS Digital partnership with Diabetes UK and is supported by Public Health England. The NDA was established in 2004 to monitor disease management and outcome. Since 2017 all GPs are required to submit patients' data to the NDA. Once an NDH diagnosis had been confirmed, primary care staff would add a Read code to a patient's healthcare record indicating NDH diagnosis. If the DPP intervention is offered, a second Read code indicating the DPP programme had been offered would be added into the healthcare record. Since, January 2017, an NDH module containing healthcare records from patients with an NDH diagnosis code, form part of the National Diabetes Audit (NDA) extraction. We used NDA data from the period between January 2017 until December 2019 and we restricted the analysis only for DPP offered participants. In total, 2,043,010 had at least an HbA1c measurement and 1,529,665 participants had at least an HbA1c measurement. We kept the NDH measurement from the earliest calendar date. After including only those who were DPP offered between April 2018 – March 2019 and excluding 541 (0.04%) participants with missing information in the Index of Multiple Deprivation, our analytical sample comprised of 1,267,350 NDH participants. Out of these, 157,420 were offered to take part in the DPP between April 2018 – March 2019. Therefore, we have created two groups for the NDA data 1) for those who were NDH diagnosed from primary records (NDA) between January 2017 until December 2019 and 2) for those who received a DPP offer between April 2018 until March 2019.

Minimum Data Set

The NHS DPP providers are commissioned to deliver dietary and physical activity behavioural interventions. Four service providers were selected to implement the first service specification of the NHS DPP intervention: Reed Momenta (London, UK), ICS Health and Well-being (Leeds, UK), Ingeus UK (London, UK), and Living Well Taking Control (Birmingham, UK).

Each service provider structures the intervention according to the service specification provided by NHS England. Programme across providers follow a similar structure, including an initial assessment and a minimum of 13 core and maintenance sessions. Individuals identified as having NDH are offered the intervention by their GP, if the offer is accepted, they are referred to participate in the interventions. All service providers were required to collect a minimum data set from the initial assessment and sessions which included demographics and clinical information. To date, NHS England is commissioning delivery of its third service specification, which includes different modes of digital delivery in addition to a group, face to face mode.

Supplement B: Tables and graph from the analyses

Table S2: Summary statistics (UKHLS & HSE & NDA & MDS)

	UK Household Longitudinal Study		Health Survey for England		National Diabetes Audit		National Diabetes Audit		Minimum Data Set					
	General Population				Diabetes Prevention Programme identified		Diabetes Prevention Programme offered		Diabetes Prevention Programme attended		Diabetes Prevention Programme completed			
	Non-Diabetic Hyperglycaemia Sample (794)		Non-Diabetic Hyperglycaemia Sample (1,383)		Non-Diabetic Hyperglycaemia Sample (1,109,930)		Non-Diabetic Hyperglycaemia Sample (157,420)		Non-Diabetic Hyperglycaemia sample (98,024)		Non-Diabetic Hyperglycaemia sample (29,577)		Non-Diabetic Hyperglycaemia sample (19,916)	
									Initial Assessment		8 sessions		11 sessions	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Age categories														
<40	27	6.1	68	7.5	52,770	4.8	10,820	6.9	4,408	4.5	589	2.0	304	1.5
40-49	58	9.3	128	12.0	112,515	10.1	20,920	13.3	9,476	9.7	1,673	5.7	987	5.1
50-59	162	21.4	248	19.2	222,780	20.1	35,710	22.7	19,312	19.7	4,763	16.1	3,035	15.2
60-69	242	26.3	405	25.6	277,300	25.0	39,490	25.1	27,836	28.4	9,663	32.7	6,652	33.4
70-79	202	22.0	354	22.7	278,395	25.1	35,060	22.3	27,739	28.3	10,311	34.8	7,197	36.1
80+	103	14.9	180	13.0	166,175	15.0	15,430	9.8	9,253	9.4	2,578	8.7	1,741	8.7
Sex														
Male	377	44.9	636	47.8	532,300	48.0	74,725	47.5	44,237	45.1	13,476	45.6	9,063	45.5
Female	417	55.1	747	52.2	577,630	52.0	82,700	52.5	53,787	54.9	16,101	54.4	10,853	54.5
Limiting illness or Disability														
No	263	35.0	545	39.4	1,104,070	99.5	156,715	99.6	82,067	83.7	25,430	86.0	17,424	87.5
Yes	531	65.0	838	60.6	5,860	0.5	710	0.4	15,957	16.3	4,147	14.0	2,492	12.5
Ethnicity														
White-British	744	89.8	1,225	85.7	747,470	67.3	96,965	61.4	76,420	78.0	24,637	83.3	16,889	84.9
Ethnic minorities	50	10.2	158	14.3	362,465	32.7	60,460	38.4	21,604	22.0	4,940	16.7	3,017	15.1
Index of Multiple Deprivation														
Least deprived	144	15.8	281	19.3	198,440	17.9	25,920	16.5	22,467	22.9	7,444	25.1	4,905	24.6

4th quintile	164	18.5	302	20.9	214,120	19.3	28,360	18.0	20,039	20.4	6,577	22.2	4,686	23.5
3rd quintile	165	20.2	290	20.8	225,945	20.3	32,010	20.3	19,147	19.6	6,173	21.0	4,300	21.6
2nd quintile	151	20.8	274	20.9	222,280	20.0	35,330	22.4	18,356	18.7	5,260	17.8	3,523	17.7
Most deprived	170	24.7	236	18.2	249,145	22.4	35,805	22.7	18,015	18.4	4,123	13.9	2,502	12.6
Total	794	100.0	1,383	100.0	1,109,930	100.0	157,420	100.0	98,024	100.0	29,577	100.0	19,916	100.0

Notes: N(unweighted) but % (survey non-response weighted). Summary statistics for NDA data have been rounded to 5.

Difference in total the NDA data occur due to rounding of the data in adherence with data sharing agreement requirements from the data provided.

Table S3: Multivariable analysis of the general population (UKHLS and HSE) and DPP stages and age groups

	Age categories (ref <40)				
	40-49	50-59	60-69	70-79	80+
Datasets	OR (95% CIs)				
UKHLS	1(ref)	1(ref)	1(ref)	1(ref)	1(ref)
HSE	1.01(0.53-1.95)	0.69(0.39-1.24)	0.74(0.42-1.31)	0.77(0.43-1.38)	0.66(0.36-1.20)
DPP identified	1.11(0.63-1.96)	1.10(0.67-1.83)	1.12(0.68-1.83)	1.52(0.92-2.51)	1.60(0.95-2.69)
DPP offered	1.03(0.58-1.83)	0.91(0.55-1.52)	0.84(0.51-1.38)	1.02(0.62-1.68)	0.78(0.47-1.32)
DPP attended	1.19(0.67-2.10)	1.11(0.67-1.84)	1.25(0.76-2.04)	1.56(0.95-2.57)	0.87(0.52-1.46)
DPP completed_8 sessions	1.51(0.85-2.69)	1.89(1.14-3.15)	2.89(1.75-4.77)	3.83(2.32-6.34)	1.61(0.96-2.72)
DPP completed_11 sessions	1.68(0.94-3.01)	2.23(1.33-3.73)	3.63(2.19-6.03)	4.87(2.92-8.12)	2.00(1.17-3.39)
Sex					
Male	1(ref)	1(ref)	1(ref)	1(ref)	1(ref)
Female	0.75(0.73-0.76)	0.84(0.83-0.86)	0.84(0.83-0.86)	0.96(0.94-0.97)	1.20(1.18-1.22)
Limiting illness or Disability					
No	1(ref)	1(ref)	1(ref)	1(ref)	1(ref)
Yes	0.59(0.54-0.63)	0.57(0.53-0.61)	0.49(0.46-0.52)	0.56(0.53-0.60)	0.75(0.70-0.80)
Ethnicity					
White-British	1(ref)	1(ref)	1(ref)	1(ref)	1(ref)
Ethnic minorities	0.64(0.63-0.65)	0.34(0.33-0.34)	0.22(0.22-0.23)	0.17(0.17-0.18)	0.20(0.19-0.20)
Index of Multiple Deprivation					
Least deprived	1(ref)	1(ref)	1(ref)	1(ref)	1(ref)
4th quintile	0.84(0.80-0.87)	0.78(0.75-0.81)	0.73(0.71-0.76)	0.68(0.65-0.70)	0.64(0.61-0.66)
3rd quintile	0.74(0.71-0.77)	0.62(0.60-0.64)	0.53(0.52-0.55)	0.45(0.44-0.47)	0.42(0.40-0.43)
2nd quintile	0.67(0.65-0.70)	0.47(0.45-0.48)	0.34(0.33-0.36)	0.25(0.24-0.26)	0.23(0.22-0.23)
Most deprived	0.60(0.58-0.62)	0.37(0.35-0.38)	0.23(0.22-0.24)	0.15(0.14-0.15)	0.13(0.12-0.13)
Constant	4.16(2.35-7.38)	13.89(8.37-23.03)	24.21(14.74-39.77)	21.60(13.10-35.63)	11.32(6.74-19.01)

Notes: Odds-ratios and 95% CIs from a multinomial logistic regression model. Age regressed on dataset identifier adjusted for socio demographic characteristics. Survey observations are weighted using UKHLS and HSE survey blood weights accounting for selection probabilities, attrition, and non-response.

Table S4: Predicted probabilities and 95% CIs of the general population (UKHLS and HSE) and various DPP stages for age groups (illustrated in Figure 1).

	<40		40-49		50-59				
	Predicted Pr	95% CIs		Predicted Pr	95% CIs		Predicted Pr	95% CIs	
UKHLS	4%	2.4%	6.5%	10%	7.3%	13.2%	23%	20.0%	26.9%
HSE	6%	3.5%	7.4%	14%	11.2%	16.0%	21%	18.7%	23.7%
DPP identified	4%	3.5%	3.6%	9%	9.0%	9.1%	21%	20.6%	20.8%
DPP offered	5%	4.8%	5.0%	12%	11.4%	11.7%	23%	23.2%	23.7%
DPP attended	4%	3.5%	3.8%	10%	9.8%	10.2%	21%	21.1%	21.7%
DPP completed_8 sessions	2%	1.8%	2.2%	6%	6.0%	6.6%	18%	17.4%	18.4%
DPP completed_11 sessions	1%	0.8%	1.2%	6%	5.3%	6.0%	17%	16.6%	17.7%
	60-69		70-79		80+				
	Predicted Pr	95% CIs		Predicted Pr	95% CIs		Predicted Pr	95% CIs	
UKHLS	29%	25.7%	32.6%	21%	18.0%	23.8%	12%	9.5%	14.2%
HSE	28%	25.6%	30.7%	21%	18.9%	23.2%	10%	8.6%	11.7%
DPP identified	26%	26.0%	26.2%	25%	25.4%	25.5%	15%	14.9%	15.1%
DPP offered	27%	26.5%	26.9%	23%	23.0%	23.4%	10%	10.0%	10.3%
DPP attended	30%	29.5%	30.1%	27%	26.4%	27.0%	8%	8.3%	8.6%
DPP completed_8 sessions	34%	33.5%	34.6%	32%	31.8%	32.8%	8%	7.8%	8.2%
DPP completed_11 sessions	35%	34.0%	35.4%	33%	32.7%	34.0%	8%	7.4%	8.1%

Table S5: Multivariable analysis of general population (UKHLS and HSE) and DPP stages and sex.

	Sex (ref male) OR (95% CIs)
Datasets	
UKHLS	1(ref)
HSE	0.90(0.74-1.10)
DPP identified	0.87(0.75-1.02)
DPP offered	0.91(0.77-1.07)
DPP attended	1.01(0.86-1.18)
DPP completed_8 sessions	0.99(0.84-1.16)
DPP completed_11 sessions	0.99(0.84-1.16)
Age categories	
<40	1(ref)
40-49	0.75(0.74-0.76)
50-59	0.85(0.83-0.86)
60-69	0.85(0.83-0.86)
70-79	0.96(0.95-0.98)
80+	1.20(1.18-1.23)
Limiting illness or Disability	
No	1(ref)
Yes	0.98(0.95-1.00)
Ethnicity	
White-British	1(ref)
Ethnic minorities	1.00(0.99-1.01)
Index of Multiple Deprivation	
Least deprived	1(ref)
4th quintile	1.02(1.01-1.03)
3rd quintile	1.05(1.04-1.07)
2nd quintile	1.11(1.09-1.12)
Most deprived	1.16(1.15-1.17)
Constant	1.26(1.08-1.48)

Notes: Odds-ratios and 95% CIs from a logistic regression model. Sex regressed on dataset identifier adjusted for socio demographic characteristics. Survey observations are weighted using UKHLS and HSE survey blood weights accounting for selection probabilities, attrition, and non-response.

Table S6: Predicted probabilities and 95% CIs of the general population (UKHLS and HSE) and various DPP stages for sex (illustrated in Figure S1).

	Male			Female		
	Predicted Pr	95% CIs		Predicted Pr	95% CIs	
UKHLS	45%	40.8%	48.7%	55%	51.3%	59.2%
HSE	47%	44.4%	50.1%	53%	49.9%	55.6%
DPP identified	48%	48.0%	48.2%	52%	51.8%	52.0%
DPP offered	47%	46.8%	47.3%	53%	52.7%	53.2%
DPP attended	45%	44.3%	44.9%	55%	55.1%	55.7%
DPP completed_8 sessions	45%	44.5%	45.6%	55%	54.4%	55.5%
DPP completed_11 sessions	45%	44.3%	45.7%	55%	54.3%	55.7%

Table S7: Multivariable analysis of general population (UKHLS and HSE) and DPP stages and limiting illness or disability.

	Limiting illness or Disability (ref no) OR (95% CIs)
Datasets	
UKHLS	1(ref)
HSE	0.89(0.72-1.10)
DPP identified	0.003(0.003-0.004)
DPP offered	0.003(0.002-0.003)
DPP attended	0.12(0.10-0.14)
DPP completed_8 sessions	0.10(0.08-0.12)
DPP completed_11 sessions	0.09(0.07-0.11)
Age categories	
<40	1(ref)
40-49	0.58(0.54-0.63)
50-59	0.54(0.50-0.57)
60-69	0.44(0.41-0.47)
70-79	0.49(0.46-0.53)
80+	0.65(0.60-0.70)
Sex	
Male	1(ref)
Female	0.99(0.97-1.02)
Ethnicity	
White-British	1(ref)
Ethnic minorities	0.40(0.38-0.42)
Index of Multiple Deprivation	
Least deprived	1(ref)
4th quintile	1.18(1.13-1.23)
3rd quintile	1.32(1.26-1.37)
2nd quintile	1.67(1.60-1.74)
Most deprived	2.19(2.11-2.28)
Constant	2.64(2.18-3.20)

Notes: Odds-ratios and 95% CIs from a logistic regression model. Limiting illness or disability regressed on dataset identifier adjusted for socio demographic characteristics. Survey observations are weighted using UKHLS and HSE survey blood weights accounting for selection probabilities, attrition, and non-response. Comparable disability measures are not available in the NDA and DPP offered datasets so these estimates should be interpreted with caution.

Table S8: Predicted probabilities and 95% CIs of the general population (UKHLS and HSE) and various DPP stages for limiting illness or disability (illustrated in Figure 2)

	No limiting illness or disability			Limiting illness or disability		
	Predicted Pr	95% CIs		Predicted Pr	95% CIs	
UKHLS	40%	35.8%	44.2%	60%	53.8%	64.2%
HSE	43%	39.8%	45.8%	57%	54.2%	60.2%
DPP identified*						
DPP offered*						
DPP attended	85%	84.7%	85.2%	15%	14.8%	15.2%
DPP completed_8 sessions	87%	86.4%	87.2%	13%	12.6%	13.4%
DPP completed_11 sessions	88%	87.8%	88.7%	12%	11.6%	12.4%

*Comparable disability measures were not available in the DPP identified and offered stages.

Table S9: Multivariable analysis of general population (UKHLS and HSE) and DPP stages and ethnicity

	Ethnicity (ref White-British) OR (95% CIs)
Datasets	
UKHLS	1(ref)
HSE	1.40(0.96-2.04)
DPP identified	3.17(2.29-4.41)
DPP offered	3.74(2.69-5.19)
DPP attended	2.02(1.45-2.80)
DPP completed_8 sessions	1.61(1.16-2.23)
DPP completed_11 sessions	1.46(1.05-2.03)
Age categories	
<40	1(ref)
40-49	0.64(0.63-0.65)
50-59	0.34(0.33-0.34)
60-69	0.22(0.22-0.23)
70-79	0.17(0.17-0.18)
80+	0.20(0.19-0.20)
Sex	
Male	1(ref)
Female	1.00(0.99-1.01)
Limiting illness or Disability	
No	1(ref)
Yes	0.46(0.44-0.47)
Index of Multiple Deprivation	
Least deprived	1(ref)
4th quintile	0.96(0.95-0.97)
3rd quintile	1.11(1.10-1.12)
2nd quintile	1.33(1.32-1.35)
Most deprived	1.24(1.22-1.25)
Constant	0.49(0.36-0.69)

Notes: Odds-ratios and 95% CIs from a logistic regression model. Ethnicity regressed on dataset identifier adjusted for socio demographic characteristics. Survey observations are weighted using UKHLS and HSE survey blood weights accounting for selection probabilities, attrition, and non-response.

Table S10: Predicted probabilities and 95% CIs of the general population (UKHLS and HSE) and various DPP stages for ethnicity (illustrated in Figure 3)

	White-British			Ethnic minorities		
	Predicted Pr	95% CIs		Predicted Pr	95% CIs	
UKHLS	87%	83.6%	90.9%	13%	9.1%	16.7%
HSE	83%	80.5%	85.6%	17%	14.4%	19.5%
DPP identified	68%	68.2%	68.4%	32%	31.6%	31.8%
DPP offered	65%	64.4%	64.9%	35%	35.1%	35.6%
DPP attended	77%	77.0%	77.5%	23%	22.5%	23.0%
DPP completed_8 sessions	81%	80.5%	81.5%	19%	18.5%	19.5%
DPP completed_11 sessions	82%	81.9%	83.0%	18%	17.0%	18.1%

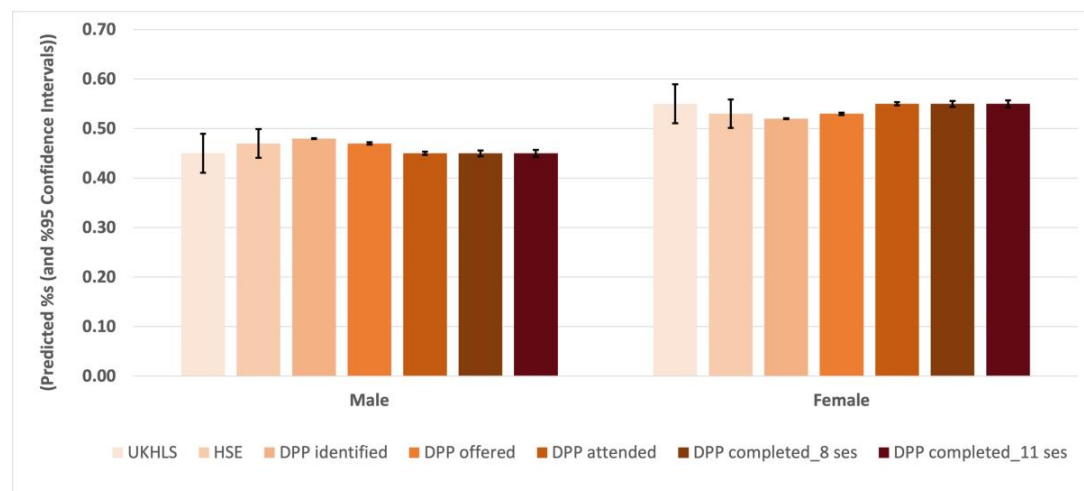
Table S11: Multivariable analysis of general population (UKHLS and HSE) and DPP stages and IMD

Datasets	Index of Multiple Deprivation (ref least deprived) OR (95% CIs)			
	Fourth quintile	Third quintile	Second quintile	Most deprived
UKHLS	1(ref)	1(ref)	1(ref)	1(ref)
HSE	0.92(0.68-1.25)	0.83(0.61-1.13)	0.79(0.57-1.08)	0.58(0.42-0.79)
DPP identified	1.03(0.81-1.32)	1.03(0.80-1.33)	1.09(0.84-1.41)	1.22(0.94-1.58)
DPP offered	1.03(0.80-1.32)	1.07(0.83-1.38)	1.21(0.93-1.57)	1.19(0.92-1.53)
DPP attended	0.82(0.64-1.06)	0.74(0.58-0.96)	0.74(0.57-0.96)	0.69(0.54-0.89)
DPP completed_8 sessions	0.83(0.64-1.06)	0.75(0.58-0.97)	0.71(0.54-0.92)	0.55(0.42-0.71)
DPP completed_11 sessions	0.90(0.70-1.16)	0.81(0.62-1.04)	0.74(0.57-0.96)	0.52(0.40-0.68)
Age categories				
<40	1(ref)	1(ref)	1(ref)	1(ref)
40-49	0.84(0.80-0.87)	0.74(0.71-0.77)	0.67(0.65-0.69)	0.60(0.58-0.62)
50-59	0.77(0.74-0.80)	0.61(0.59-0.64)	0.46(0.45-0.48)	0.37(0.35-0.38)
60-69	0.73(0.70-0.76)	0.53(0.51-0.55)	0.34(0.33-0.35)	0.23(0.22-0.24)
70-79	0.67(0.65-0.70)	0.45(0.47-0.47)	0.25(0.24-0.26)	0.15(0.14-0.15)
80+	0.64(0.61-0.66)	0.42(0.40-0.43)	0.23(0.22-0.23)	0.13(0.12-0.13)
Sex				
Male	1(ref)	1(ref)	1(ref)	1(ref)
Female	1.02(1.01-1.03)	1.05(1.04-1.06)	1.10(1.09-1.12)	1.16(1.15-1.17)
Limiting illness or Disability				
No	1(ref)	1(ref)	1(ref)	1(ref)
Yes	1.18(1.14-1.23)	1.30(1.25-1.35)	1.59(1.53-1.66)	1.98(1.91-2.06)
Ethnicity				
White-British	1(ref)	1(ref)	1(ref)	1(ref)
Ethnic minorities	0.96(0.95-0.97)	1.11(1.09-1.12)	1.33(1.31-1.34)	1.24(1.22-1.25)
Constant	1.47(1.14-1.89)	2.00(1.55-2.59)	2.58(1.99-3.35)	3.63(2.80-4.70)

Notes: Odds-ratios and 95% CIs from a multinomial logistic regression model. Index of Multiple Deprivation regressed on dataset identifier adjusted for socio demographic characteristics. Survey observations are weighted using UKHLS and HSE survey blood weights accounting for selection probabilities, attrition, and non-response.

Table S12: Predicted probabilities and 95% CIs of the general population (UKHLS and HSE) and various DPP stages for Index of Multiple Deprivation (illustrated in Figure 4)

	Least deprived			Fourth quintile			Third quintile		
	Predicted Pr	95% CIs		Predicted Pr	95% CIs		Predicted Pr	95% CIs	
UKHLS	19%	15.6%	21.8%	20%	17.0%	23.1%	22%	18.3%	24.9%
HSE	23%	20.2%	25.3%	22%	20.1%	24.9%	22%	19.4%	24.2%
DPP identified	17%	17.3%	17.5%	19%	19.2%	19.3%	21%	20.7%	20.9%
DPP offered	17%	16.8%	17.2%	19%	18.6%	19.0%	21%	20.9%	21.3%
DPP attended	23%	23.1%	23.7%	21%	20.4%	21.0%	20%	19.9%	20.4%
DPP completed_8 sessions	24%	23.9%	24.9%	22%	21.2%	22.2%	21%	20.8%	21.8%
DPP completed_11 sessions	24%	23.0%	24.2%	23%	22.2%	23.3%	22%	21.4%	22.6%
	Second quintile			Most deprived					
	Predicted Pr	95% CIs		Predicted Pr	95% CIs				
UKHLS	20%	16.9%	23.4%	20%	16.4%	23.6%			
HSE	19%	17.1%	21.6%	14%	11.8%	15.5%			
DPP identified	20%	20.3%	20.5%	22%	21.9%	22.1%			
DPP offered	22%	21.9%	22.3%	21%	20.9%	21.1%			
DPP attended	19%	18.5%	19.0%	17%	16.7%	17.2%			
DPP completed_8 sessions	19%	18.2%	19.1%	14%	13.7%	14.4%			
DPP completed_11 sessions	19%	18.2%	19.3%	13%	12.4%	13.4%			

**Figure S1: Predicted probabilities of the general population (UKHLS and HSE) and various DPP stages for sex. More information about the regression model in Table S4 and predicted probabilities in Table S5. Note: predicted %s (probabilities) and predicted 95% CIs were drawn from regression models by sex for general population and administrative data.**

REFERENCES

- [1] Benzeval M, Davillas A, Kumari M, Lynn P. Understanding society: the UK household longitudinal study biomarker user guide and glossary. 2014. <https://www.understandingsociety.ac.uk/sites/default/files/downloads/documentation/health/user-guides/7251-UnderstandingSociety-Biomarker-UserGuide-2014.pdf>