THE LANCET
Diabetes & Endocrinology

Supplementary appendix

This appendix formed part of the original submission. We post it as supplied by the authors.

Appendix

Participant characteristics: age; sex; ethnicity; and deprivation were identified as confounding factors and recorded. Age was grouped as 18-39 years, 40-64 years, 65-74 years and 75 years and over. Sex was recorded as male or female. Ethnicity was recorded as white, Asian, black, mixed or other. Deprivation was defined by the English Index of Multiple Deprivation (IMD) 2019 associated with the Lower Layer Super Output Area derived from the patient's postcode and grouped into quintiles (from 1 = most deprived to 5 = least deprived) (A1). Sex, ethnicity and deprivation also include an unknown category where either the participant declined to give the relevant information, or a value was not recorded.

Temporal variations in baseline weight were assessed using multivariable linear regression models with baseline weight as the dependent variable and time period (2017-20 and 2020-21) and participant characteristics (age, sex, ethnicity and deprivation) as independent variables. Adjusted mean weight change was determined using the coefficient for time period; for example, a coefficient of +0.5 for 2020-21 relative to 2017-20 was interpreted as a 0.5kg increase in baseline weight between the two time periods. We fitted a number of models. The first model used age, sex, ethnicity, deprivation and time period as independent variables and was used to estimate the overall adjusted mean weight difference. We then added interaction terms between patient characteristics and time period to test for associations between temporal differences and characteristics. These interaction models were used to estimate the adjusted mean weight difference for each characteristic in 2020-21 compared to 2017-20.

Statistical significance was defined as $p<0\cdot05$ and confidence intervals were set at 95%. All data were analysed with Stata, version 16.

Appendix Reference

A1.   English indices of deprivation 2019 [Internet]. 2019 [cited 2021 Mar 24]. Available from: https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019
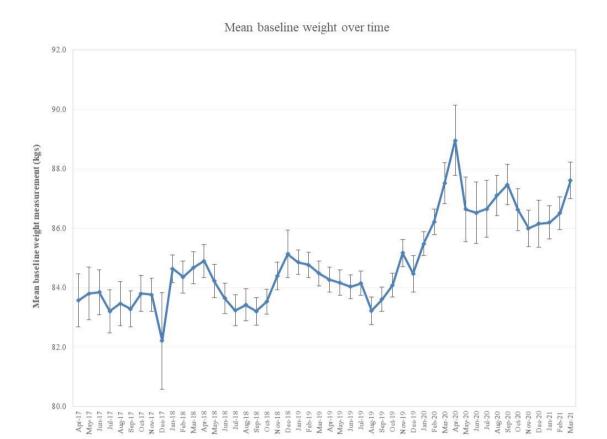
Supplementary Material

S1: Number of participants with valid weight data at entry to the NHS Diabetes Prevention Programme, 2017-20 and 2020-21

	Number of participants		Number of participants with valid data		Percentage with valid data	
	2017-20	2020-21	2017-20	2020-21	2017-20	2020-21
Total	217,181	72,611	208,054	46,069	96%	63%
< 40	7,512	5,084	7,169	3,258	95%	64%
40 – 64	88,308	37,855	84,641	24,180	96%	64%
65 – 74	76,870	19,367	73,703	12,402	96%	64%
75+	44,491	10,305	42,541	6,229	96%	60%
Male	97,505	31,492	93,464	20,253	96%	64%
Female	119,207	41,068	114,142	25,776	96%	63%
Indeterminate/unknown	469	51	448	40	96%	78%
Asian	24,015	9,602	23,228	5,752	97%	60%
Black	12,590	6,193	12,073	3,163	96%	51%
Mixed	3,544	1,495	3,422	883	97%	59%
Other	3,196	1,016	3,071	576	96%	57%
White	159,435	51,489	152,775	34,232	96%	66%
Unknown	14,401	2,816	13,485	1,463	94%	52%
IMD 1 (most deprived)	36,407	11,802	34,899	7,615	96%	65%
IMD 2	40,007	14,033	38,295	8,494	96%	61%
IMD 3	43,574	15,177	41,715	9,494	96%	63%
IMD 4	46,218	15,515	44,176	9,997	96%	64%
IMD 5 (least deprived)	50,658	16,029	48,670	10,428	96%	65%
Unknown	317	55	299	41	94%	75%

S2: Mean weight (kg) at entry to the NHS Diabetes Prevention Programme between April 2017 and March 2021

	Number of participants	Mean baseline weight measurement (kgs)	95% CI lower	95% CI upper
2017-18	38,372	84.0	83.8	84.2
2018-19	71,573	84.1	84.0	84.3
2019-20	98,109	84.7	84.6	84.8
2020-21	46,069	86.8	86.6	87.0

S3. Mean monthly baseline weights (with 95% confidence intervals) at entry to the NHS Diabetes Prevention Programme between April 2017 and March 2021.

Mean baseline weight over time