

National Diabetes Audit, Adolescents and Young Adults with Type 1 Diabetes 2017-24

Updated September 2025

NHS

England

Summary

The Adolescent and Young Adult Type 1 Diabetes Audit (AYA; previously referred to as the National Diabetes Transition Audit, NDTA) links datasets from the adult and paediatric national diabetes audits. The AYA has been designed to audit care provision during the period when young people with diabetes move from paediatric to adult based clinical care. The audit covers the period 01 January 2017 to 31 March 2024 and the cohort consists of people with type 1 diabetes aged between 16 and 25 years old during the AYA period.

National Overview – Demographics

Number of people by audit year and age

Audit year	Age at audit start										
	16	17	18	19	20	21	22	23	24	25	All
2017-18	3,115	3,315	3,455	3,620	3,640	3,680	3,880	3,810	3,975	4,105	36,595
2018-19	2,965	3,260	3,450	3,565	3,735	3,815	3,830	4,035	3,920	4,125	36,700
2019-20	2,975	3,125	3,405	3,570	3,750	3,900	3,985	3,985	4,205	4,070	36,965
2020-21	3,100	3,100	3,270	3,510	3,700	3,900	4,050	4,125	4,155	4,315	37,225
2021-22	3,245	3,295	3,225	3,395	3,650	3,830	4,095	4,250	4,290	4,265	37,535
2022-23	3,215	3,400	3,380	3,285	3,465	3,730	3,970	4,145	4,305	4,330	37,220
2023-24	3,475	3,360	3,520	3,450	3,385	3,560	3,805	4,090	4,265	4,435	37,350

Number of people by audit year and sex

Audit year	Sex			
	Female	Male	Unknown/Not specified	All
2017-18	16,530	20,065	-	36,595
2018-19	16,530	20,170	-	36,700
2019-20	16,590	20,375	-	36,965
2020-21	16,680	20,545	-	37,225
2021-22	16,780	20,755	-	37,535
2022-23	16,680	20,540	5	37,220
2023-24	16,670	20,675	5	37,350

National Overview – Ethnicity

Number of people by audit year and ethnicity status

	Ethnicity						
Audit year	Asian or Asian British	Black or Black British	Mixed Ethnicity	White	Any Other Ethnic Group	Unknown /Not stated	All
2017-18	1,660	1,095	665	31,240	590	1,345	36,595
2018-19	1,775	1,130	680	31,200	630	1,285	36,700
2019-20	1,845	1,210	735	31,170	700	1,310	36,965
2020-21	1,965	1,345	815	31,150	705	1,250	37,225
2021-22	2,155	1,465	865	31,100	740	1,215	37,535
2022-23	2,315	1,530	915	30,620	790	1,055	37,220
2023-24	2,445	1,630	930	29,785	795	1,765	37,350

Percentage of people by audit year and ethnicity status

	Ethnicity						
Audit year	Asian or Asian British	Black or Black British	Mixed Ethnicity	White	Any Other Ethnic Group	Unknown /Not stated	All
2017-18	4.5	3.0	1.8	85.4	1.6	3.7	100.0
2018-19	4.8	3.1	1.9	85.0	1.7	3.5	100.0
2019-20	5.0	3.3	2.0	84.3	1.9	3.5	100.0
2020-21	5.3	3.6	2.2	83.7	1.9	3.4	100.0
2021-22	5.7	3.9	2.3	82.9	2.0	3.2	100.0
2022-23	6.2	4.1	2.5	82.3	2.1	2.8	100.0
2023-24	6.5	4.4	2.5	79.7	2.1	4.7	100.0

National Overview – Deprivation Quintile

Number of people by audit year and deprivation quintile

	Deprivation quintile						
Audit year	Most deprived	2nd most deprived	3rd most deprived	2nd least deprived	Least deprived	Unknown	All
2017-18	8,090	7,745	7,250	6,730	6,670	105	36,595
2018-19	8,065	7,600	7,295	6,835	6,835	75	36,700
2019-20	8,190	7,560	7,390	6,920	6,845	55	36,965
2020-21	8,260	7,580	7,425	6,935	6,980	40	37,225
2021-22	8,380	7,710	7,300	6,940	7,160	45	37,535
2022-23	8,285	7,740	7,130	6,860	7,165	40	37,220
2023-24	8,240	7,805	7,190	6,800	7,155	160	37,350

Percentage of people by audit year and deprivation quintile

	Deprivation quintile						
Audit year	Most deprived	2nd most deprived	3rd most deprived	2nd least deprived	Least deprived	Unknown	All
2017-18	22.1	21.2	19.8	18.4	18.2	0.3	100.0
2018-19	22.0	20.7	19.9	18.6	18.6	0.2	100.0
2019-20	22.2	20.5	20.0	18.7	18.5	0.1	100.0
2020-21	22.2	20.4	19.9	18.6	18.8	0.1	100.0
2021-22	22.3	20.5	19.4	18.5	19.1	0.1	100.0
2022-23	22.3	20.8	19.2	18.4	19.3	0.1	100.0
2023-24	22.1	20.9	19.3	18.2	19.2	0.4	100.0

Number of people by audit year and HbA1c status

	HbA1c status								
Audit year	No HbA1c date	No HbA1c value	HbA1c <= 48mmol/mol	HbA1c <= 53mmol/mol	HbA1c <= 58mmol/mol	HbA1c <= 75mmol/mol	HbA1c <= 86mmol/mol	HbA1c > 86mmol/mol	All
2017-18	7,260	7,335	1,980	3,840	6,550	16,700	21,395	7,865	36,595
2018-19	6,950	7,040	2,275	4,330	7,185	17,470	22,020	7,645	36,700
2019-20	8,505	8,575	2,150	4,215	7,100	16,845	21,145	7,245	36,965
2020-21	13,190	13,285	2,545	4,735	7,500	15,630	18,800	5,140	37,225
2021-22	11,305	11,395	3,010	5,415	8,340	17,065	20,470	5,675	37,535
2022-23	9,530	9,645	3,255	5,965	9,225	18,420	21,840	5,735	37,220
2023-24	8,665	8,775	3,830	6,690	10,165	19,445	22,840	5,735	37,350

Percentage of people by audit year and HbA1c status

	HbA1c status								
Audit year	No HbA1c date	No HbA1c value	HbA1c <= 48mmol/mol	HbA1c <= 53mmol/mol	HbA1c <= 58mmol/mol	HbA1c <= 75mmol/mol	HbA1c <= 86mmol/mol	HbA1c > 86mmol/mol	
2017-18	19.8	20.0	5.4	10.5	17.9	45.6	58.5	21.5	
2018-19	18.9	19.2	6.2	11.8	19.6	47.6	60.0	20.8	
2019-20	23.0	23.2	5.8	11.4	19.2	45.6	57.2	19.6	
2020-21	35.4	35.7	6.8	12.7	20.1	42.0	50.5	13.8	
2021-22	30.1	30.4	8.0	14.4	22.2	45.5	54.5	15.1	
2022-23	25.6	25.9	8.7	16.0	24.8	49.5	58.7	15.4	
2023-24	23.2	23.5	10.3	17.9	27.2	52.1	61.2	15.4	

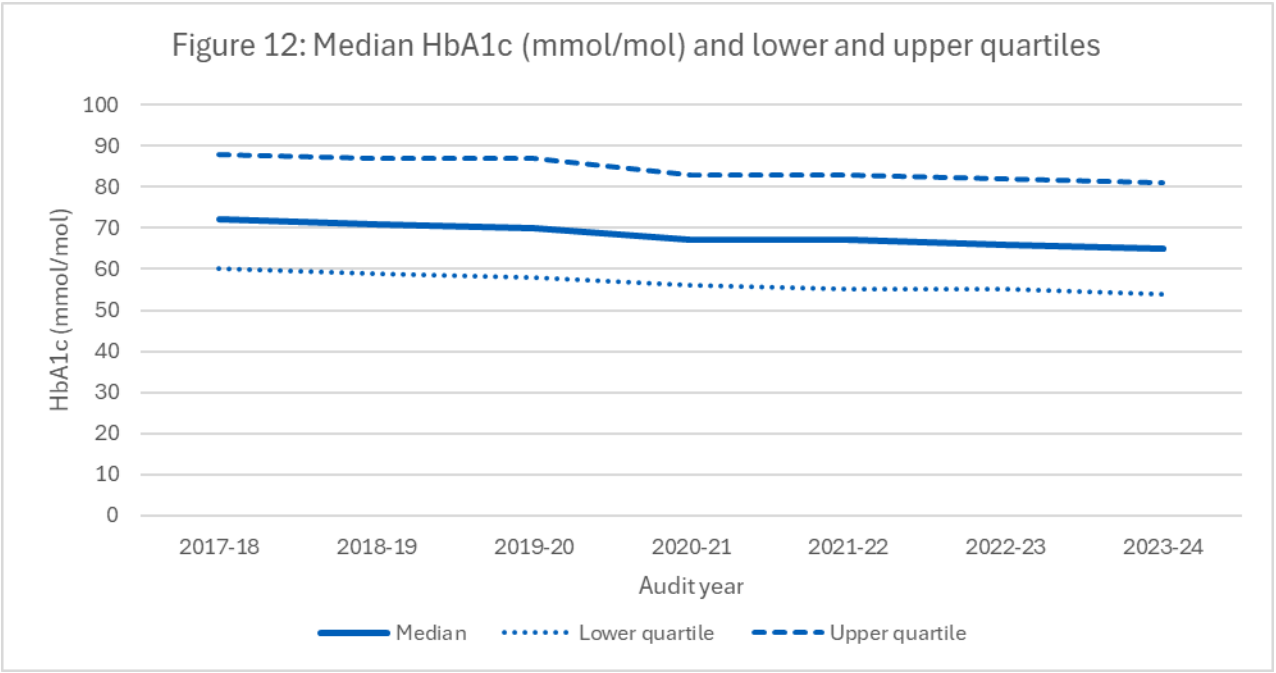
National HbA1c Outcomes

National - HbA1c Outcomes

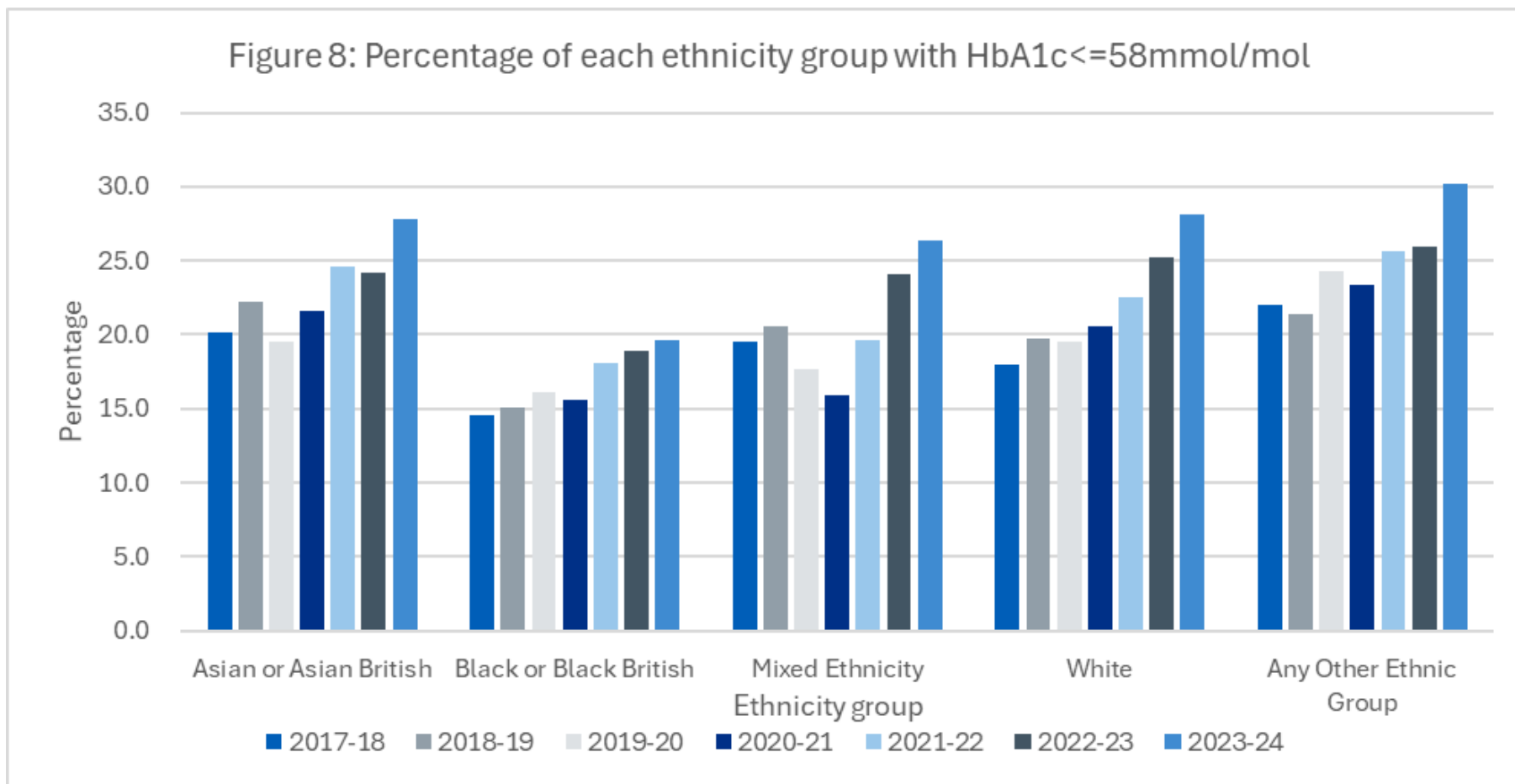
Median

Median HbA1c (mmol/mol), interquartile range and range by audit year

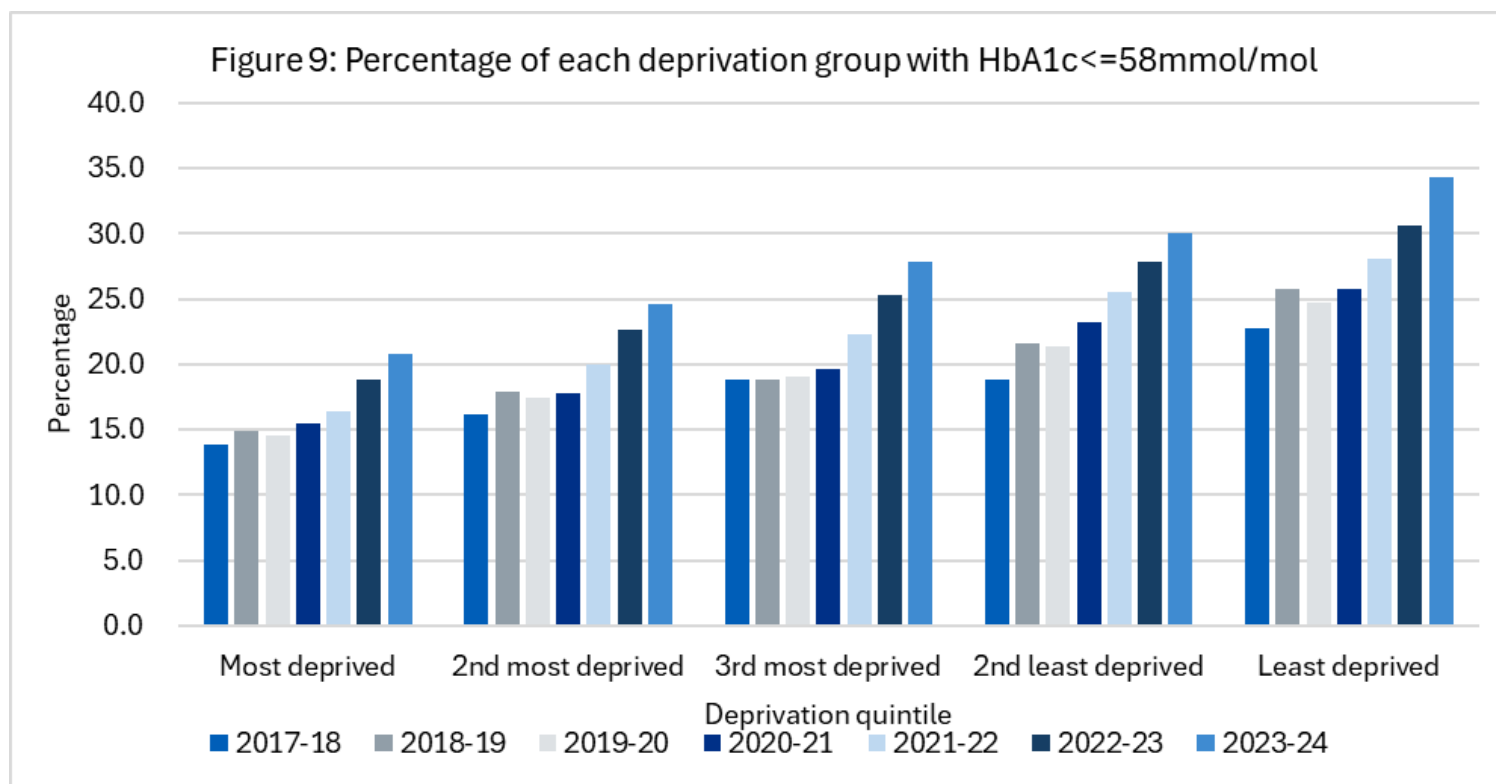
Audit year	People	Median	IQR	Lower quartile	Upper quartile	Range
2017-18	29,260	72	60 - 88	60	88	157.0
2018-19	29,660	71	59 - 87	59	87	170.0
2019-20	28,390	70	58 - 87	58	87	168.8
2020-21	23,940	67	56 - 83	56	83	163.9
2021-22	26,140	67	55 - 83	55	83	169.1
2022-23	27,575	66	55 - 82	55	82	171.0
2023-24	28,575	65	54 - 81	54	81	186.8



National HbA1c Outcomes ≤58mmol/mol by Ethnicity group



National HbA1c Outcomes ≤58mmol/mol by Deprivation group

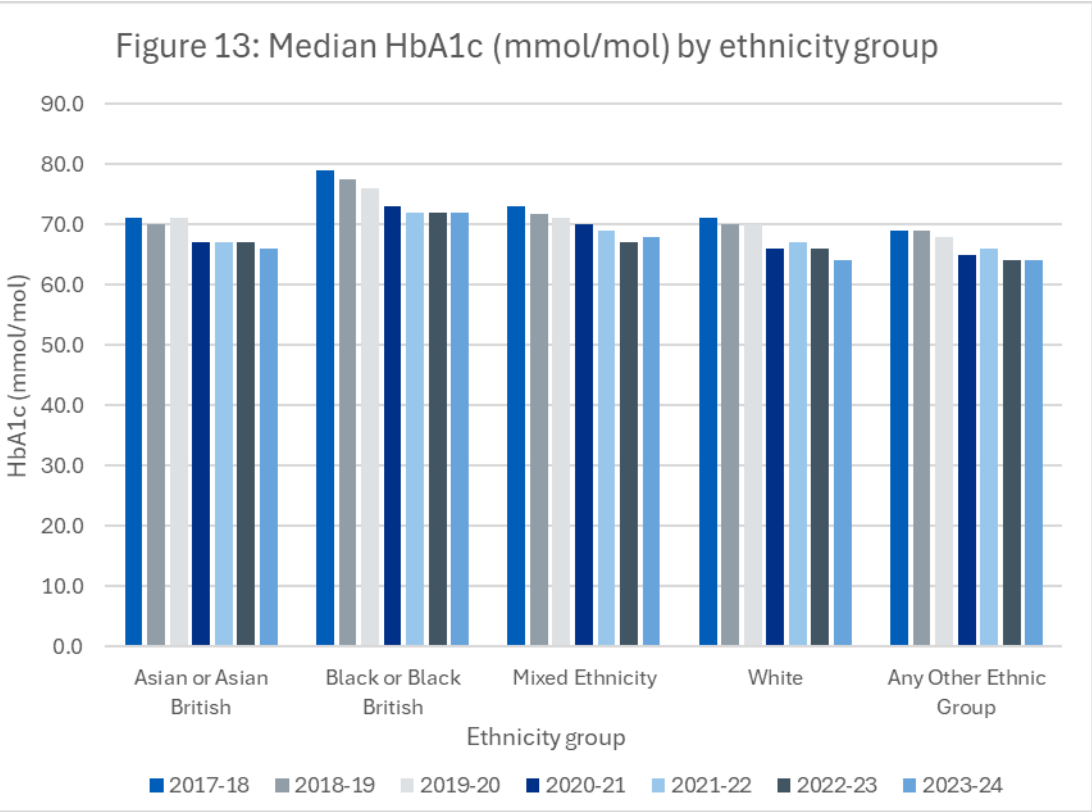


National - HbA1c Outcomes

Median by Ethnicity

Median HbA1c (mmol/mol) by audit year and ethnicity

Audit year	Ethnicity				
	Asian or Asian British	Black or Black British	Mixed Ethnicity	White	Any Other Ethnic Group
2017-18	71.0	79.0	73.0	71.0	69.0
2018-19	70.0	77.5	71.8	70.0	69.0
2019-20	71.0	76.0	71.0	70.0	68.0
2020-21	67.0	73.0	70.0	66.0	65.0
2021-22	67.0	72.0	69.0	67.0	66.0
2022-23	67.0	72.0	67.0	66.0	64.0
2023-24	66.0	72.0	68.0	64.0	64.0

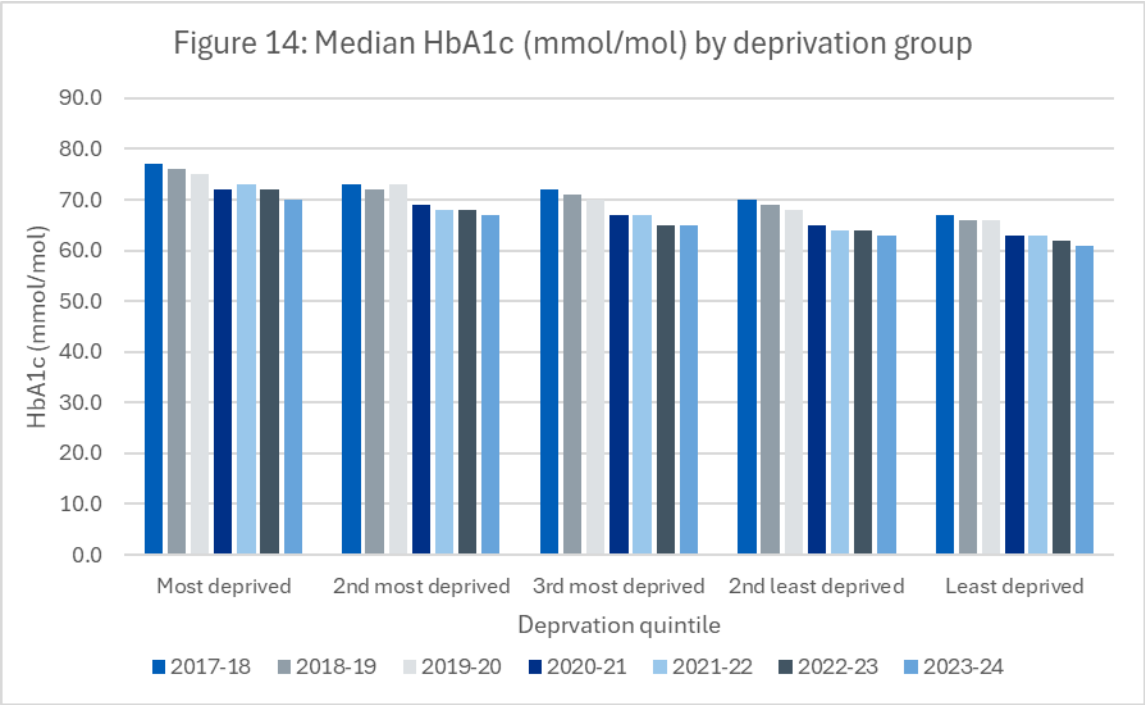


National - HbA1c Outcomes

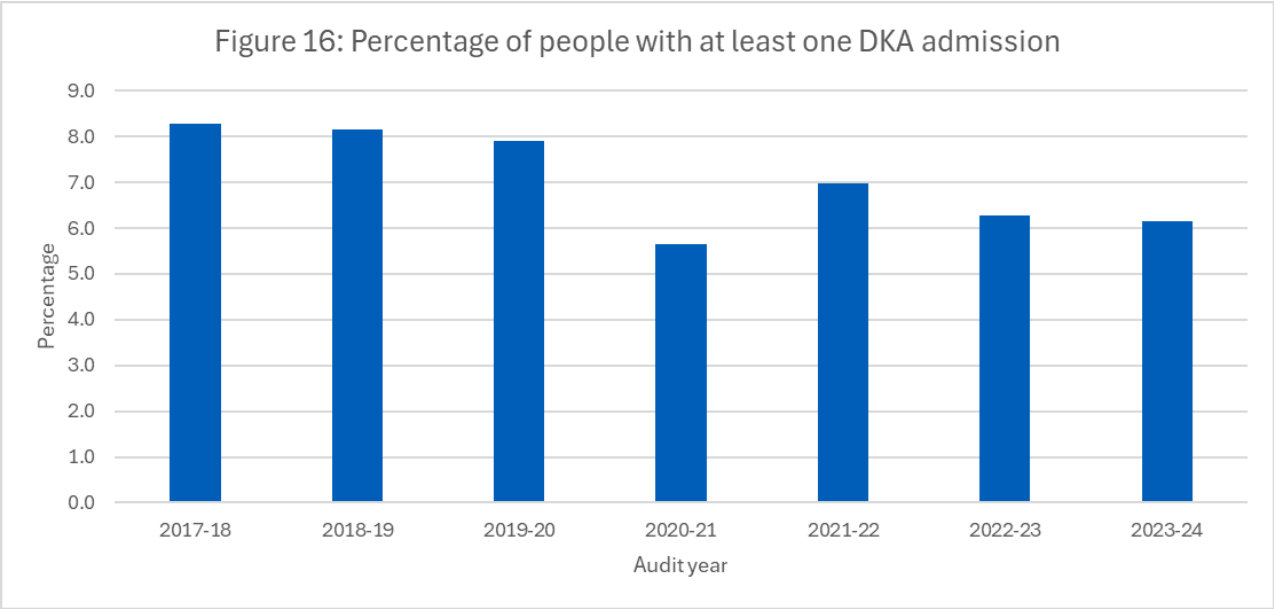
Median by Deprivation

Median HbA1c (mmol/mol) by audit year and deprivation quintile

Audit year	Deprivation quintile				
	Most deprived	2nd most deprived	3rd most deprived	2nd least deprived	Least deprived
2017-18	77.0	73.0	72.0	70.0	67.0
2018-19	76.0	72.0	71.0	69.0	66.0
2019-20	75.0	73.0	70.0	68.0	66.0
2020-21	72.0	69.0	67.0	65.0	63.0
2021-22	73.0	68.0	67.0	64.0	63.0
2022-23	72.0	68.0	65.0	64.0	62.0
2023-24	70.0	67.0	65.0	63.0	61.0



National - DKA Admissions



Percentage of people with at least one DKA admission by audit year and ethnicity

Audit year	Ethnicity				
	Asian or Asian British	Black or Black British	Mixed Ethnicity	White	Any Other Ethnic Group
2023-24	3.9	7.4	7.5	6.3	5.0

Percentage of people with at least 1 DKA admission by audit year and sex

Audit year	Sex	
	Female	Male
2023-24	7.1	5.4

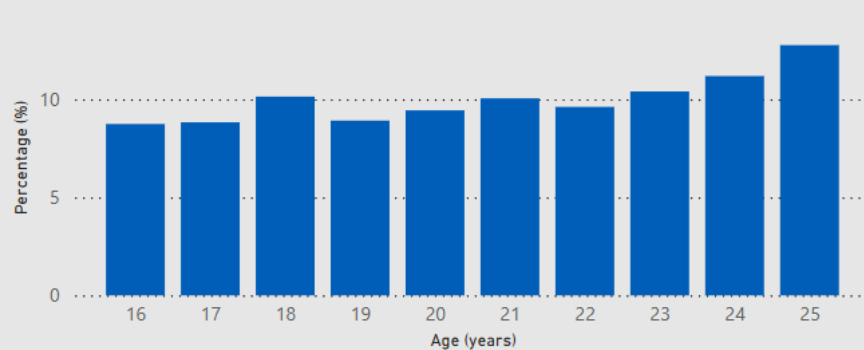
Percentage of people with at least one DKA admission by audit year and deprivation quintile

Audit year	Deprivation quintile				
	Most deprived	2nd most deprived	3rd most deprived	2nd least deprived	Least deprived
2023-24	9.2	7.2	5.5	4.5	3.9

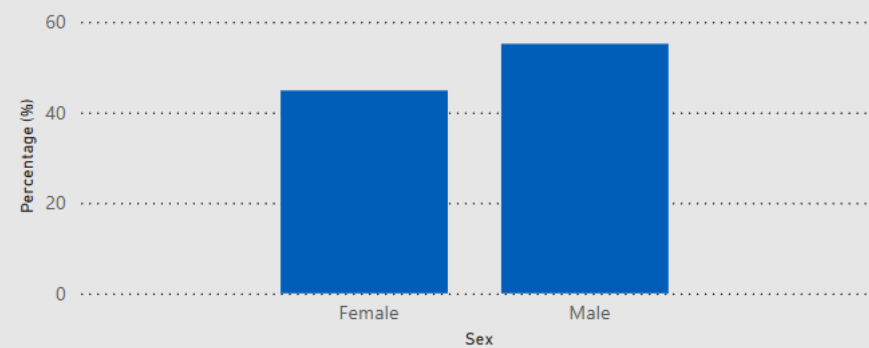
* Excludes DKA admissions in the first year of diagnosis

Regional NEY Demographics 23/24

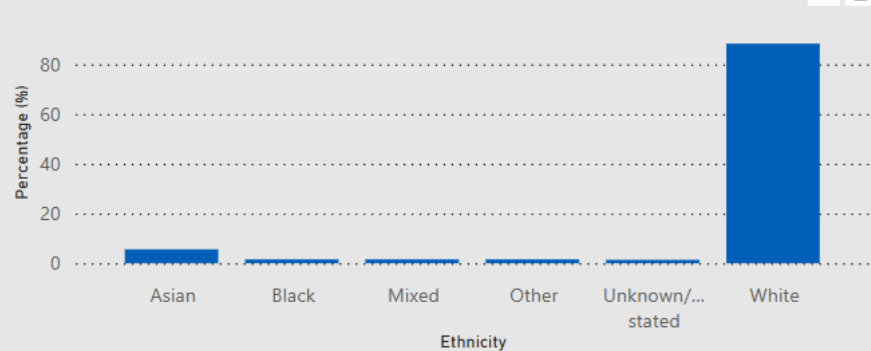
Age at start of audit year



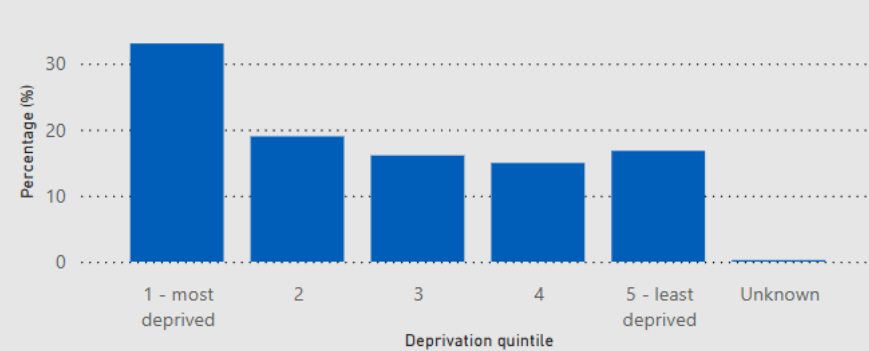
Sex



Ethnicity

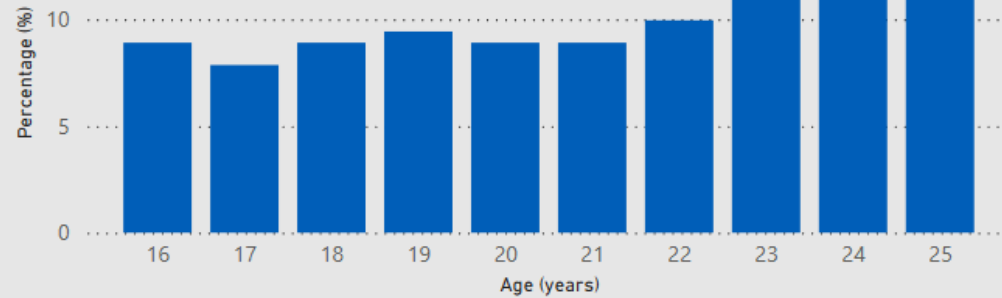


Deprivation

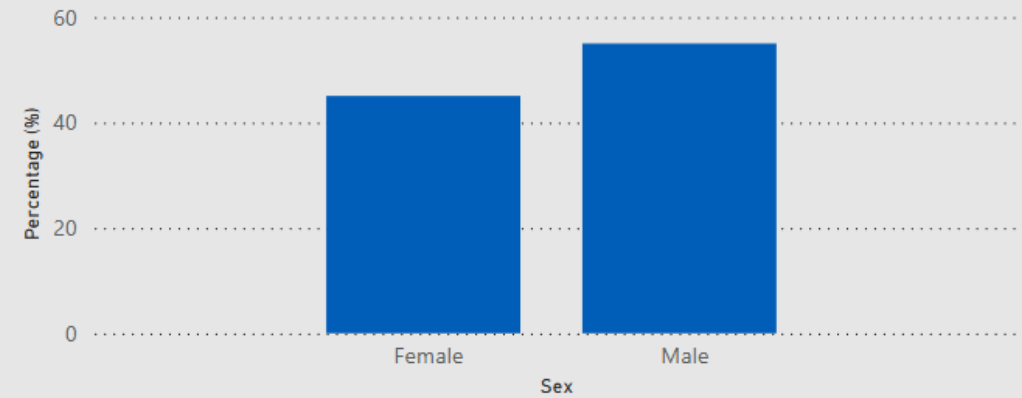


South Yorkshire Demographics 23/24

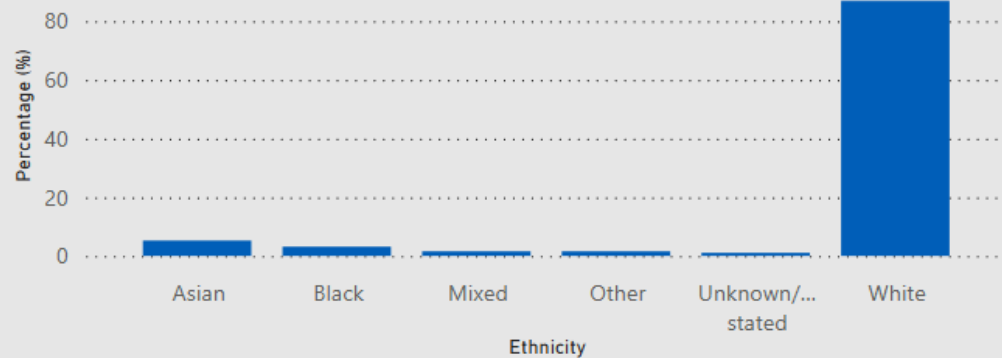
Age at start of audit year



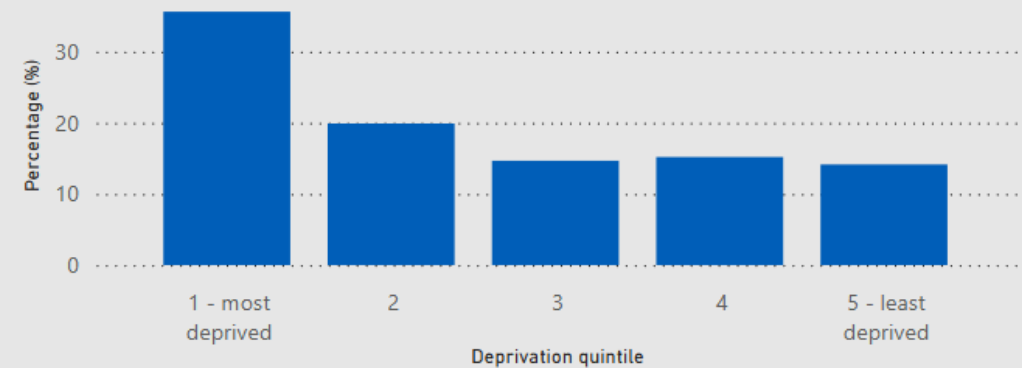
Sex



Ethnicity



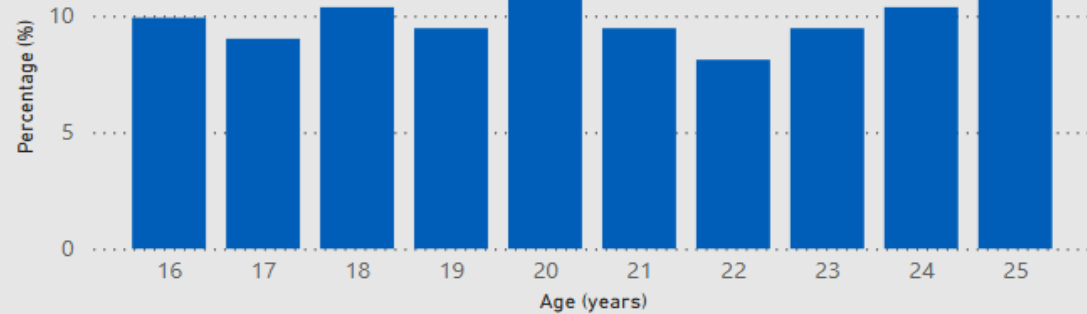
Deprivation



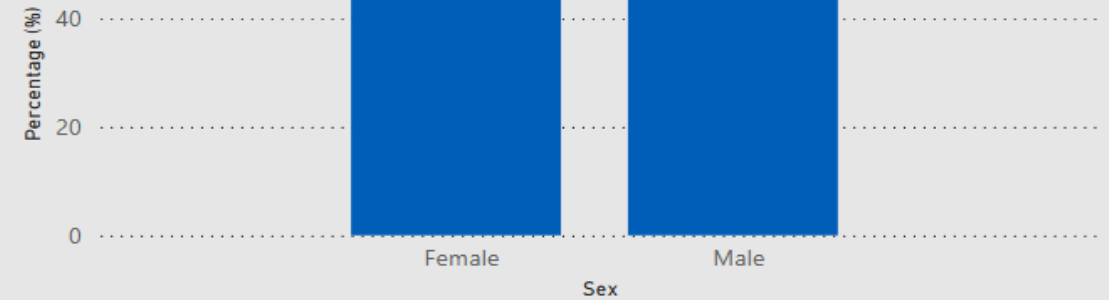
Humber, North Yorkshire Demographics

23/24

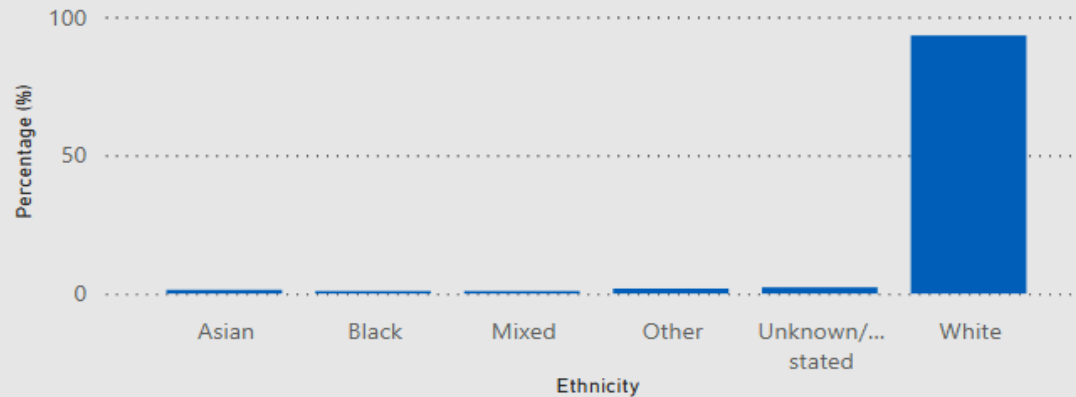
Age at start of audit year



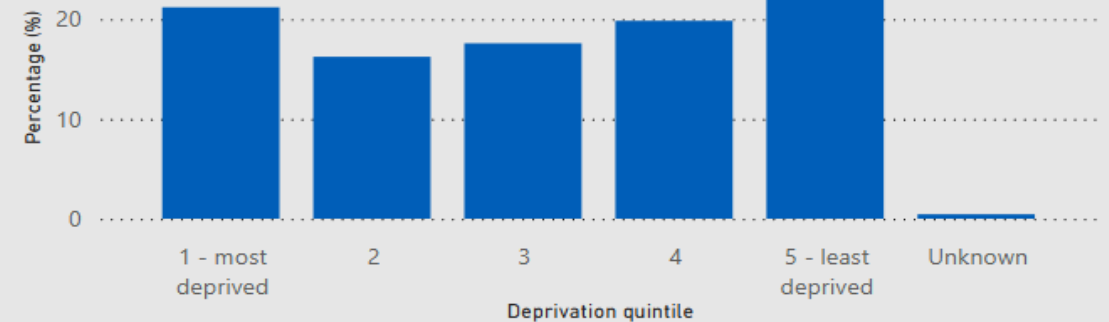
Sex



Ethnicity

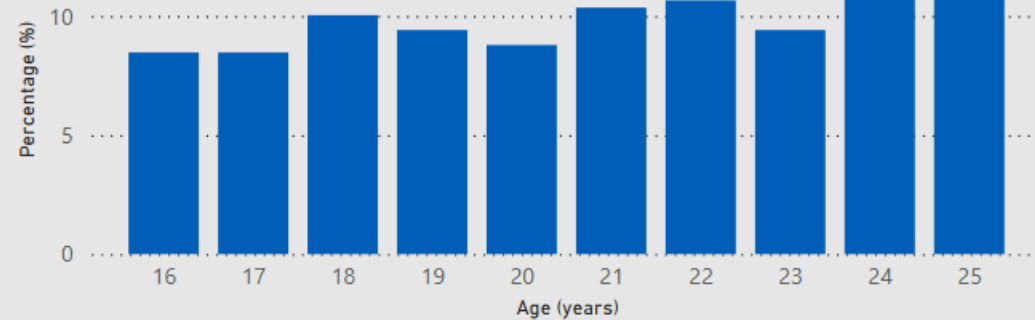


Deprivation

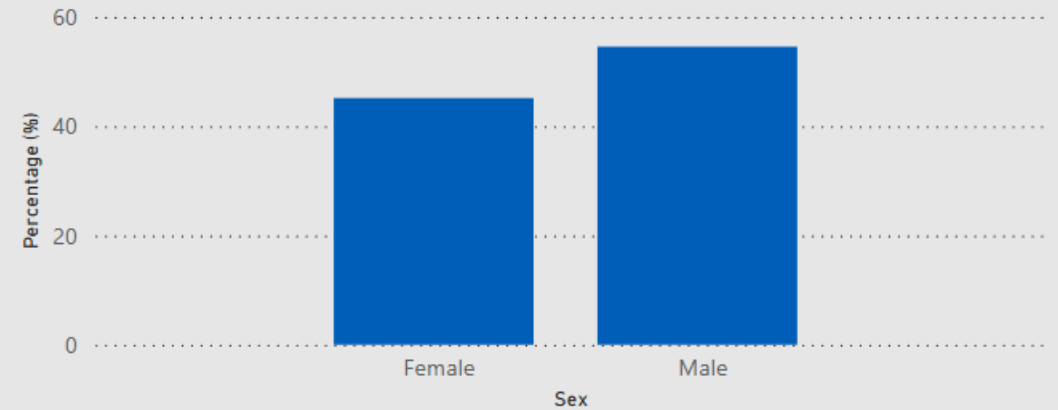


West Yorkshire Demographics 23/24

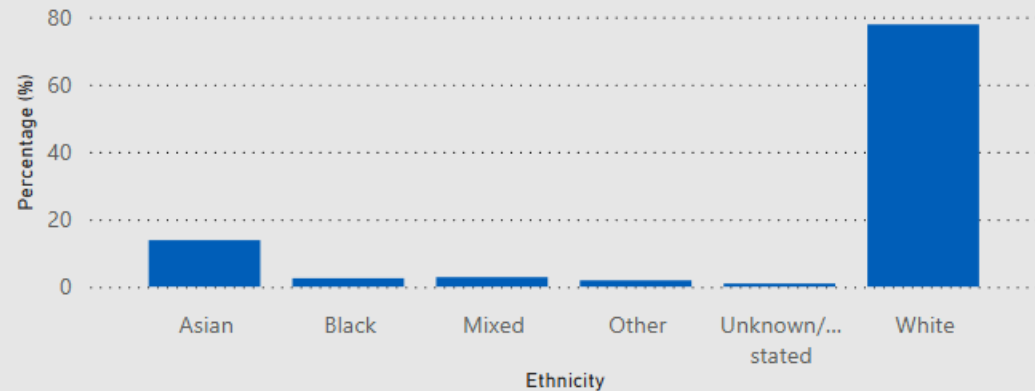
Age at start of audit year



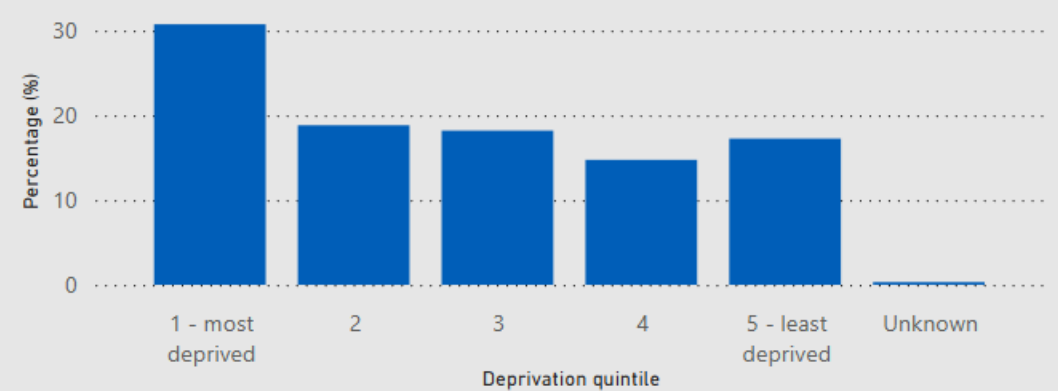
Sex



Ethnicity

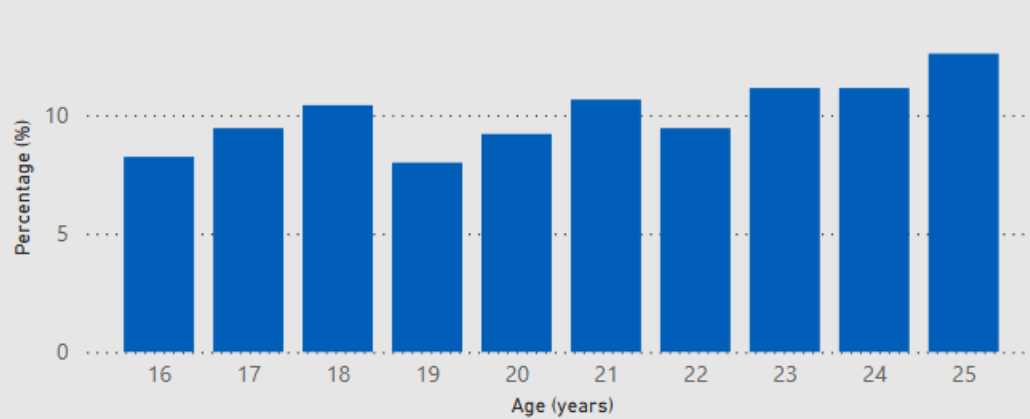


Deprivation

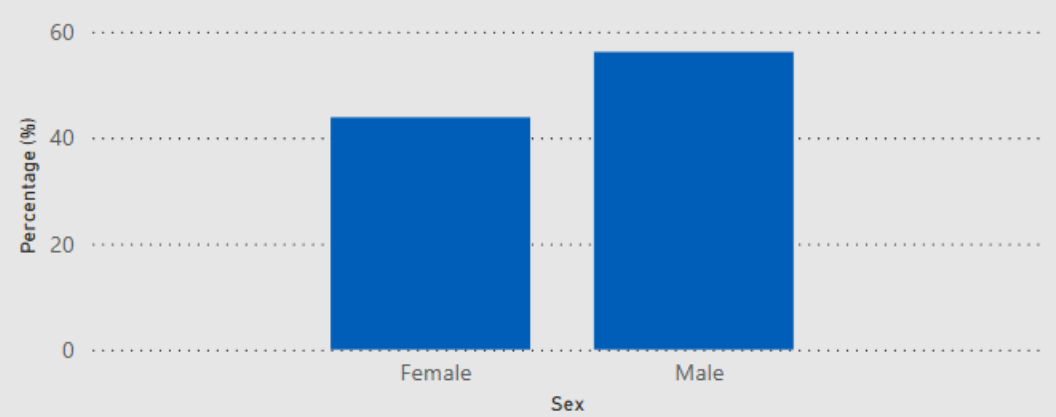


NENC Demographics 23/24

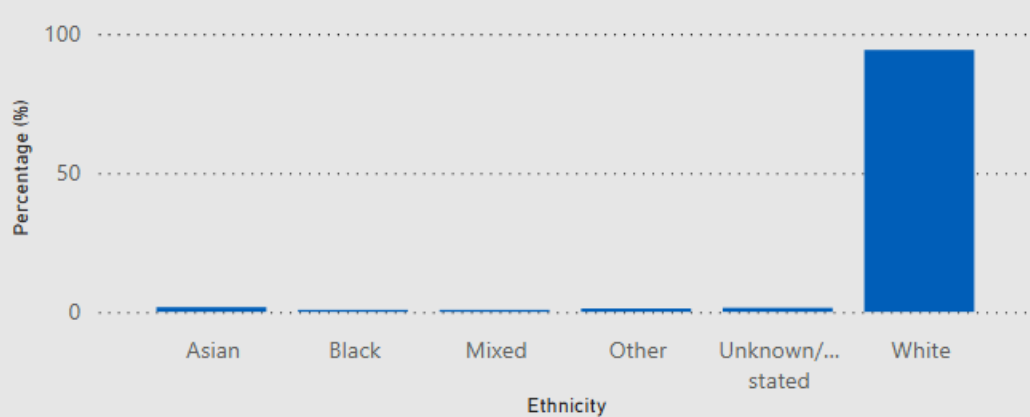
Age at start of audit year



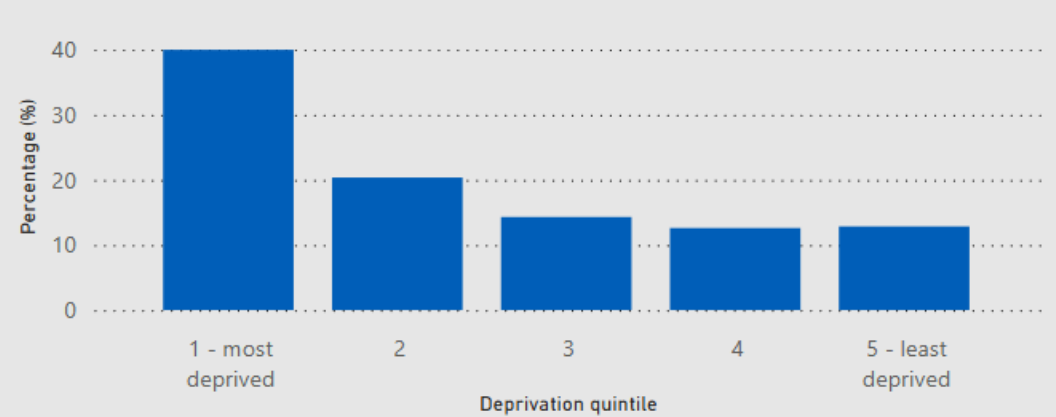
Sex



Ethnicity



Deprivation



Regional data for North East and Yorkshire

ICB/LHB name	People	Attenders	Attenders Percentage	HbA1c<=58 mmol/mol count	HbA1c<=58 mmol/mol percentage	Median HbA1c	IQR - LQ	IQR - UQ	Range	DKA	DKA percentage
All	5,720	4,620	80.8	1,570	27.4	66.0	55.0	83.0	173.8	395	6.9
NHS Humber and North Yorkshire ICB	1,110	880	79.3	300	27.0	66.0	55.0	81.0	141.0	95	8.6
NHS North East and North Cumbria ICB	2,065	1,640	79.4	535	25.9	67.0	55.0	84.0	154.6	155	7.5
NHS South Yorkshire ICB	955	835	87.4	335	35.1	62.0	52.0	77.8	156.8	60	6.3
NHS West Yorkshire ICB	1,595	1,265	79.3	400	25.1	67.0	56.0	84.8	170.5	90	5.6

IQR - LQ

The lower quartile HbA1c value in mmol/mol among the population of people aged 16-25 with type 1 diabetes

IQR - UQ

The upper quartile HbA1c value in mmol/mol among the population of people aged 16-25 with type 1 diabetes

Range

The range of the HbA1c values in mmol/mol among the population of people aged 16-25 with type 1 diabetes

DKA - The number of people aged 16-25 with type 1 diabetes with at least one DKA admission in the audit period - ** excludes DKA admissions in the first year of diagnosis

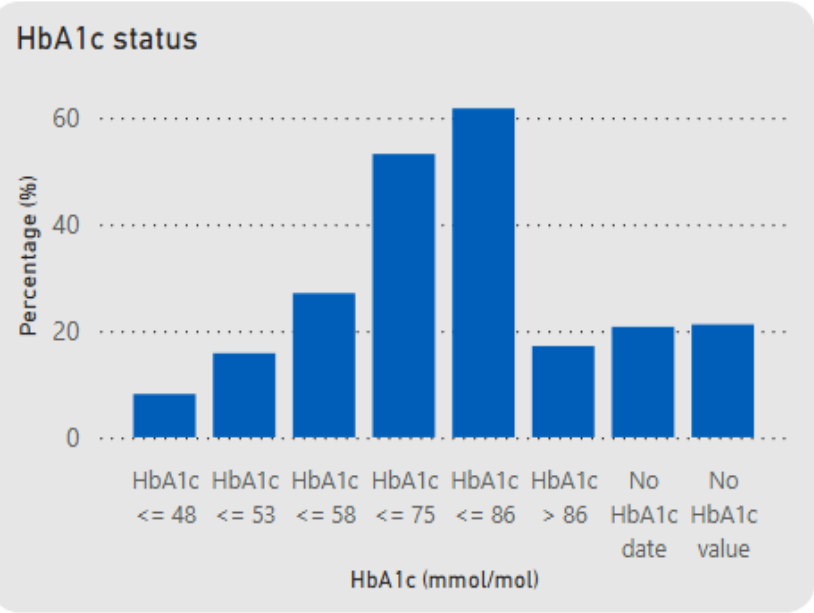
ICB Comparisons

Key	
	The ICB percentage is better than expected (by at least two standard deviations) - see footnote
	The ICB percentage is worse than expected (by at least two standard deviations) - see footnote
	The ICB has one of the 10 highest percentages of people in the most deprived quintile (31.8 - 59.5%)
	The ICB has one of the 10 lowest percentages of people in the most deprived quintile (0.9-9.1%)

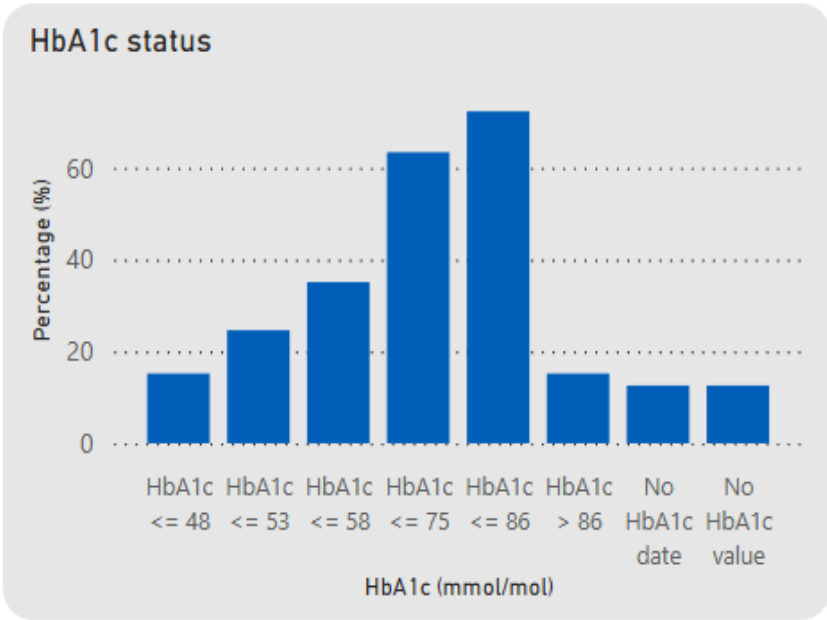
Region	ICB/LHB name	Young people with type 1 diabetes	Percentage attendance at clinic	Percentage with HbA1c<=58mmol/mol	Percentage with at least one DKA admission	Percentage in the most deprived quintile
North East and Yorkshire	All	5,720	80.8	27.4	6.9	33.0
North East and Yorkshire	NHS Humber and North Yorkshire ICB	1,110	79.3	27.0	8.6	21.2
North East and Yorkshire	NHS North East and North Cumbria ICB	2,065	79.4	25.9	7.5	40.0
North East and Yorkshire	NHS South Yorkshire ICB	955	87.4	35.1	6.3	35.6
North East and Yorkshire	NHS West Yorkshire ICB	1,595	79.3	25.1	5.6	30.7

Notes:
The ICB and LHB percentages which are outside of 2 standard deviations (SD) from the national average have been identified using the funnel plot methodology described on the "Funnel plot" tab.
For percentage attendance and percentage with HbA1c<=58 mmol/mol, the orange background indicates ICBs/LHBs with a percentage that is at least 2SD below the national average, and the blue background indicates a percentage that is above the national average.
For percentage DKA admissions it is the other way round - the orange background indicates ICBs/LHBs with a percentage that is at least 2SD above the national average, and the blue background indicates a percentage that is below the national average.

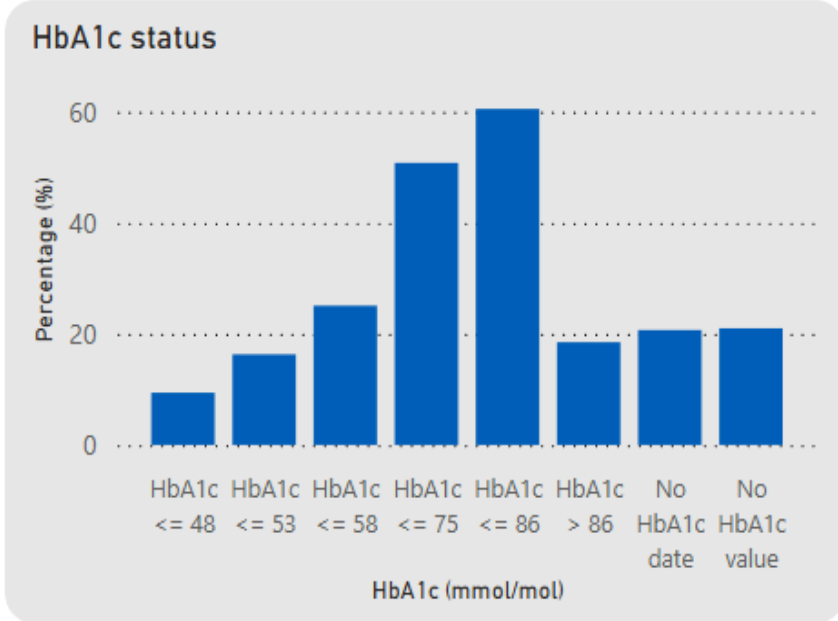
Regional HbA1c Outcomes by ICB



HNY

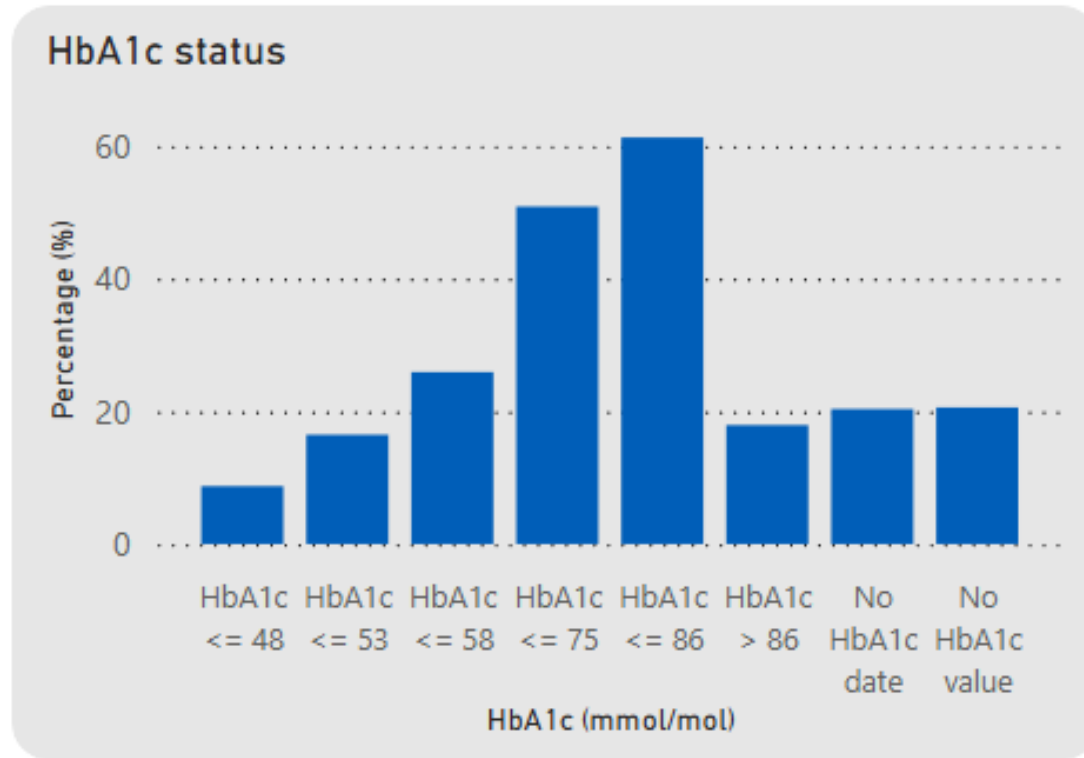


SY



WY

Regional HbA1c Outcomes by ICB



NENC

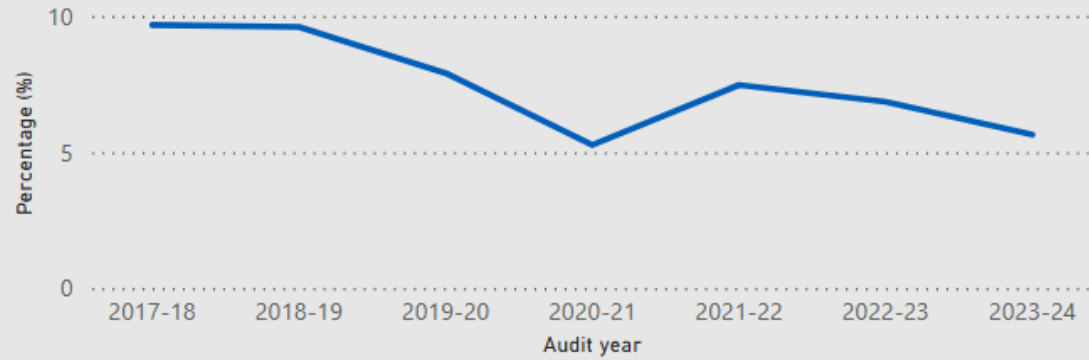
DKA rates – West Yorkshire

Time series

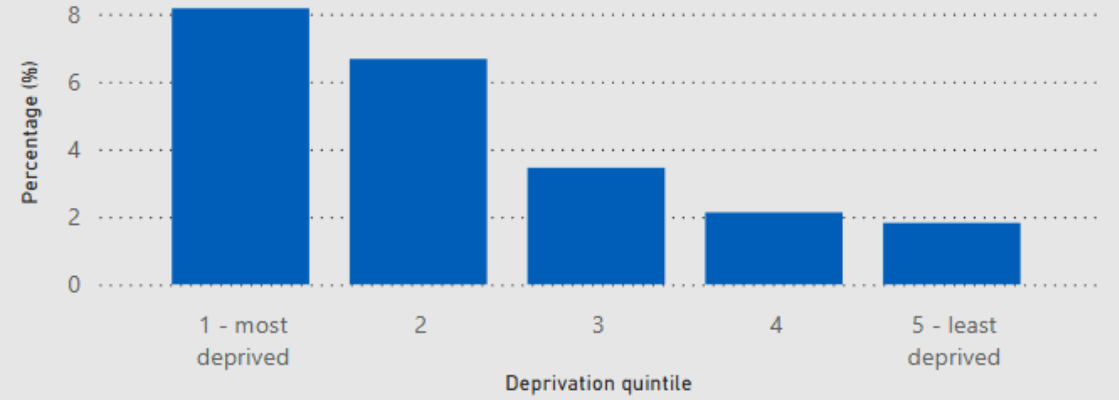
● Rate per 100 people

Measure

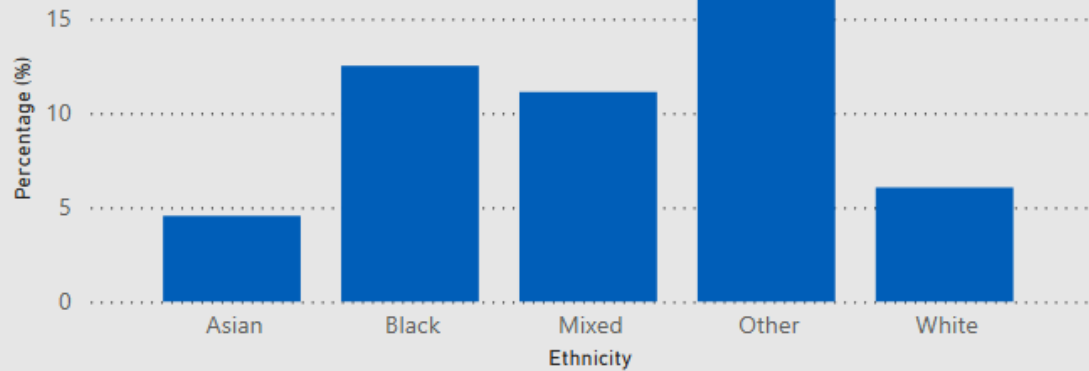
DKA: Rate



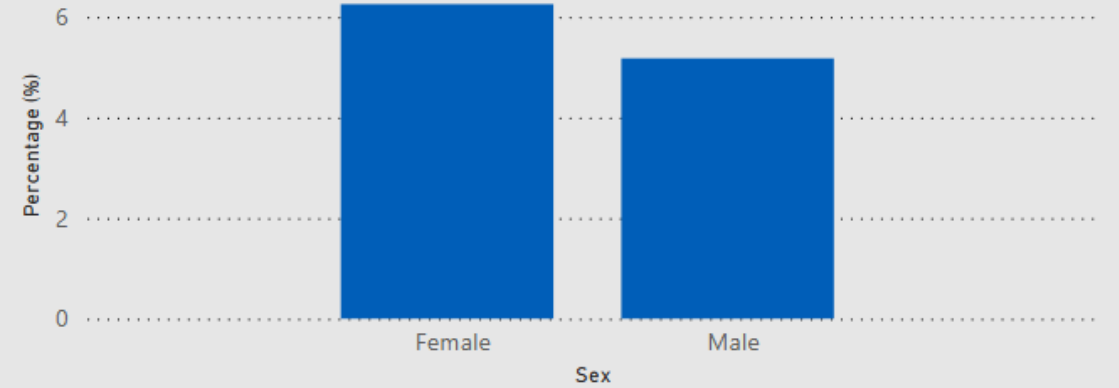
Deprivation



Ethnicity



Sex



DKA rates – South Yorkshire

Time series

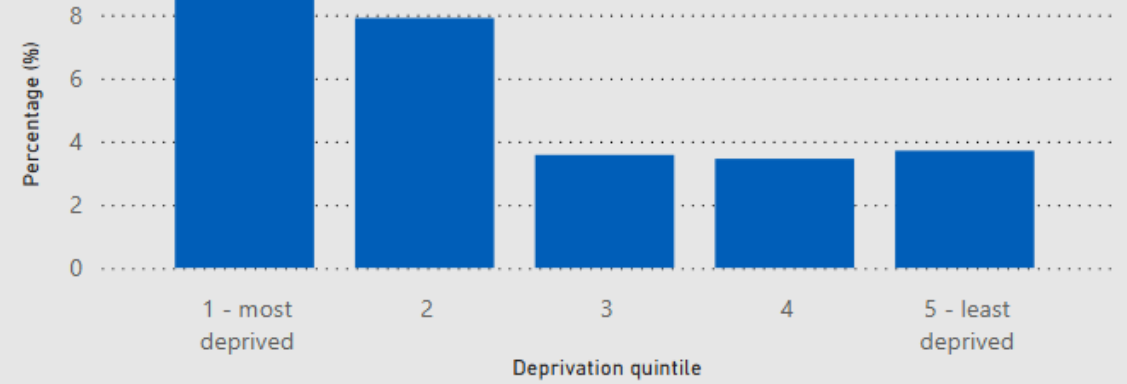
● Rate per 100 people

Measure

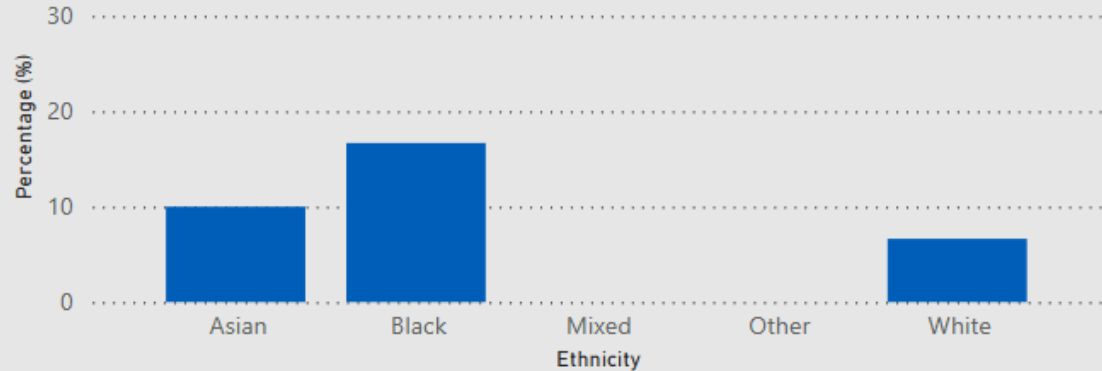
DKA: Rate



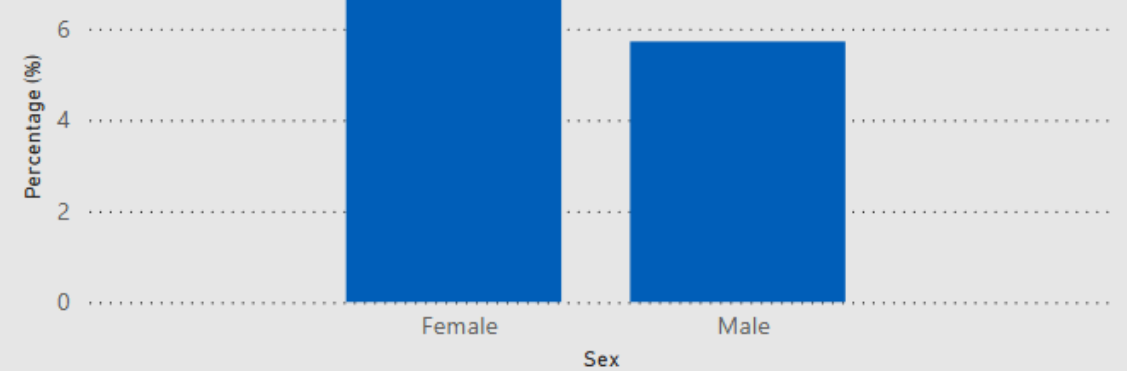
Deprivation



Ethnicity



Sex



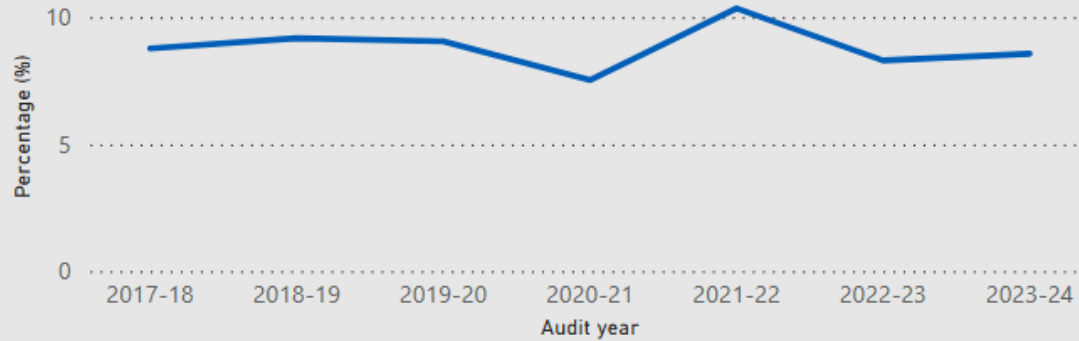
DKA rates – Humber, North Yorkshire

Time series

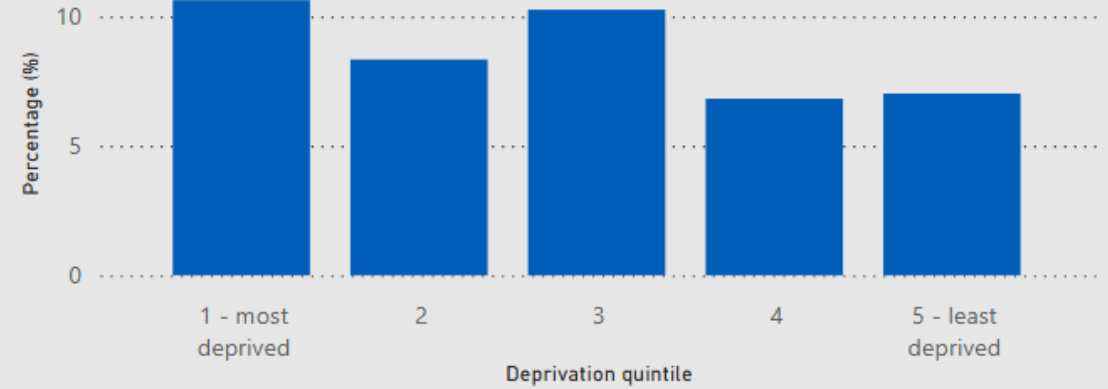
● Rate per 100 people

Measure

DKA: Rate



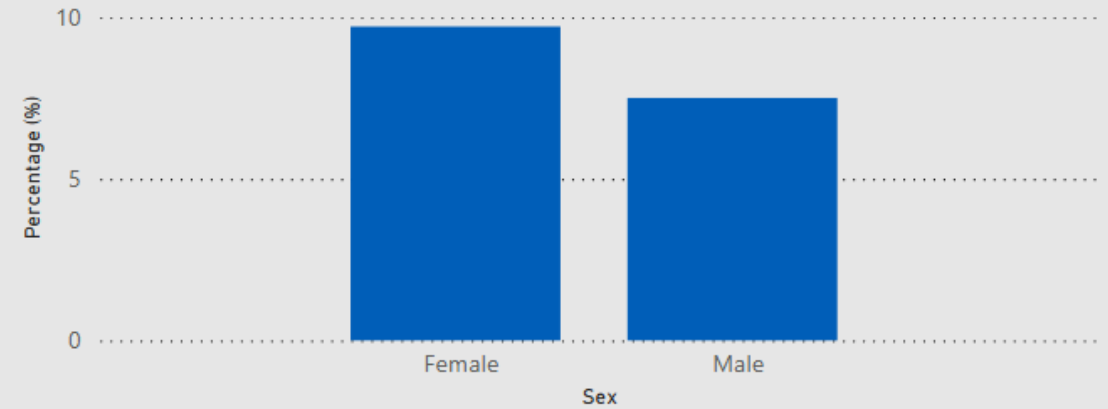
Deprivation



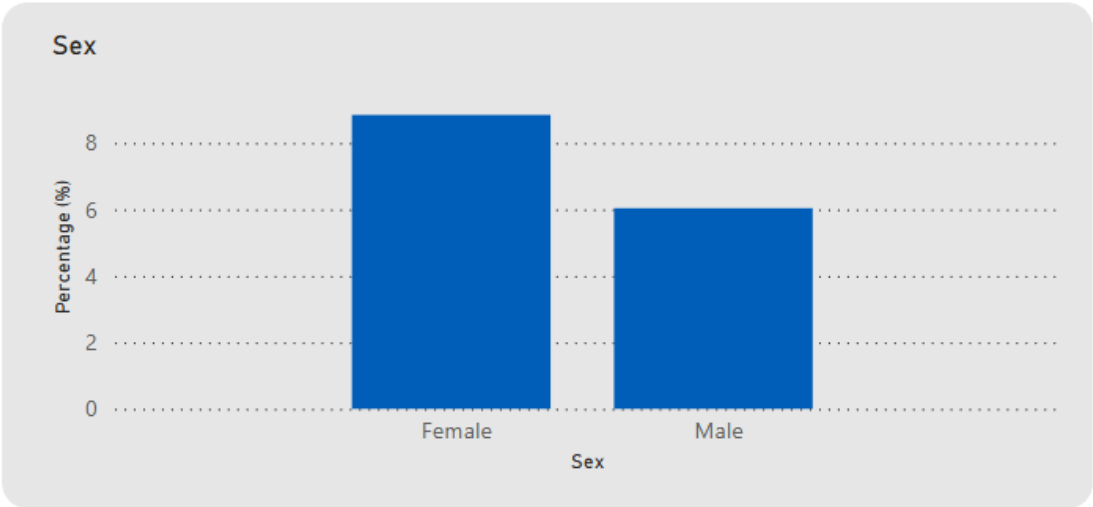
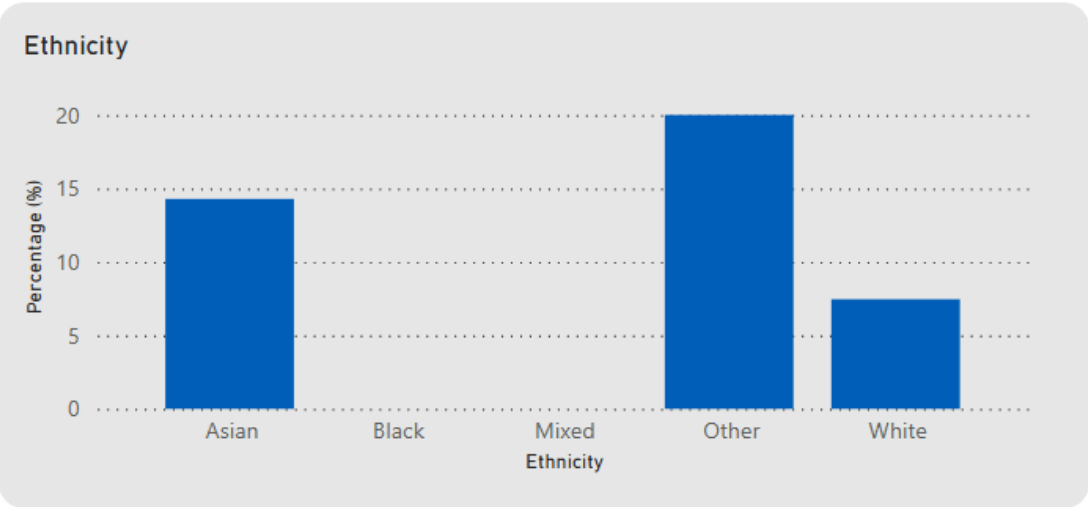
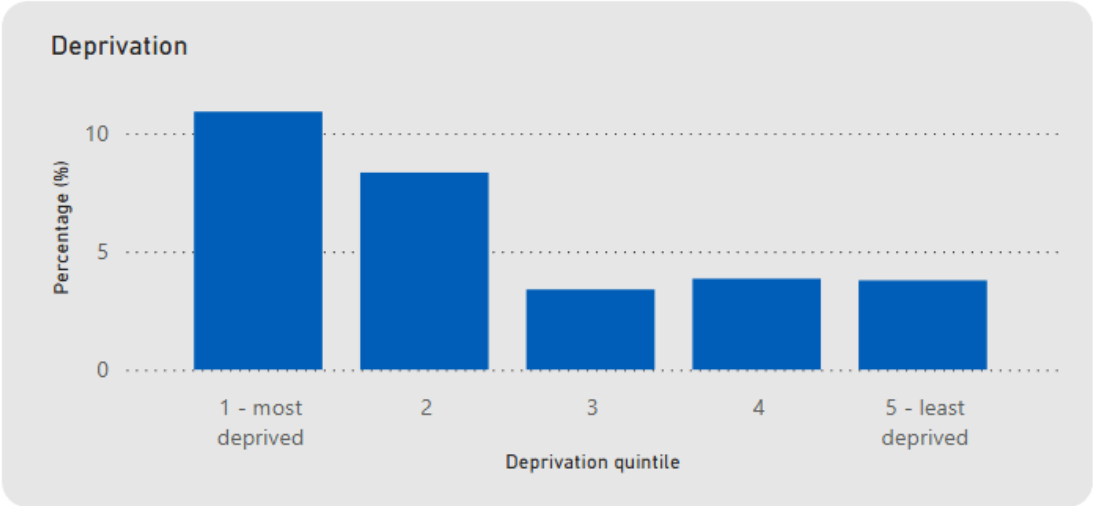
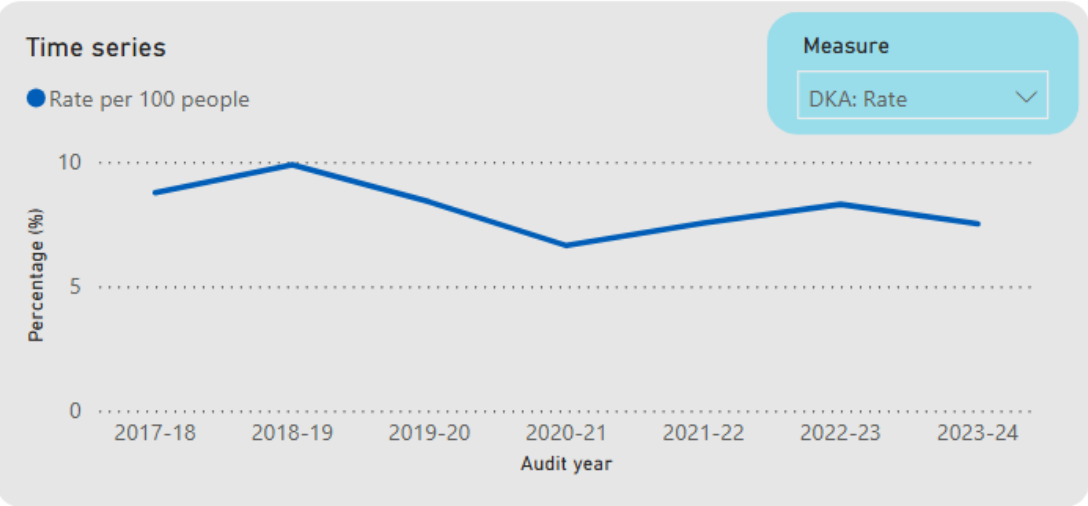
Ethnicity



Sex



DKA rates – NENC



Links

AYA Dashboard for interactive charts please use- [Microsoft Power BI](#)

AYA info page with raw excel data files - [National Diabetes Audit, Adolescents and Young Adults with Type 1 Diabetes 2017-24 - NHS England Digital](#)