ESM Table 1

Study	Year	Number of patients	Age at study entry *	Duration of follow-up (years)	Other findings	Limitations
Forsander [1]	1998	38	3-15 years	5	Patients with poor HbA1c at five years of diabetes can be identified by the second year	Prevalent cases, small cohort size, paediatric population, short duration of follow up
Jorde [2]	2000	214	30.4 ± 11.9	6	The coefficient of variation for HbA1c was negatively related to age, and accordingly, to years on insulin	Small cohort size, short duration of follow up, different statistical approach
Luyckx [3]	2009	72	13	10	Family climate and self-concept associate with higher HbA1c	Prevalent cases, small cohort size, paediatric population
Edge [4]	2010	362	0–18 years	15	HbA1c levels at 6 months after diagnosis increased with age with a quadratic fit	Prevalent cases, small cohort size, different statistical approach, no information on gender
Helgeson [5]	2010	132	12	5	Low social status, BMI, pubertal status associate with higher subsequent HbA1c	Prevalent cases, small cohort size, paediatric population
Viswanathan [6]	2011	120	7.6 ± 3.9	4	No other baseline variables correlated with subsequent glycaemic control.	Prevalent cases, short duration of follow up, small cohort size, paediatric population
Jackson [7]	2012	155	6.6	14	HbA1c levels at diagnosis and within the first year were significant predictors of long-term control	Prevalent cases, small cohort size, paediatric population
Shalitin [8]	2012	173	3.8 ± 1.6	7	The findings was not dependent on the type of insulin regimens	Prevalent cases, paediatric population, small cohort size
Cabrera [9]	2013	138	6.8 ± 3.3	5	Education and location at time of diagnosis do not appear to play a	Prevalent cases, short duration of follow up,

					significant role in long-term glycaemic control.	paediatric population, no direct exploration of tracking, small cohort size, different primary objective
Gill [10]	2013	181	41 ± 8	5	Small improvements can occur in specific sub-groups – notably males and those with poor baseline control.	Prevalent cases, small cohort size, short duration of follow up
Samuelsson [11]	2013	1,543	5-19 years	12	Girls have higher mean HbA1c than boys.	Prevalent cases, different statistical approach, paediatric population
Clements [12]	2014	2218	0-20	5	Teenage years and black ethnicity associate with higher HbA1c	Short duration of follow up, paediatric population
Hofer [13]	2014	1,146	7.2 (IQR 4.7-9.4)	20	A significant increase in HbA1c is seen during puberty	Different statistical approach
Lawes [14]	2014	155	7.9 (4.5 - 10.9)	5	The relationship between HbA1c at 6 months after diagnosis and future metabolic control was independent of potential patient and observation level confounders.	Prevalent cases, small cohort size, short duration of follow up, paediatric population,
Clements [15]	2016	8,774	8-18 and 16-26 years		Elevated HbA1c in 16 – 18 yr-olds begin a steady improvement into early adulthood. Gender failed to show a clinically significant association with mean age-centered HbA1c	Prevalent cases
Schwandt [16]	2017	6,433	8 years	11	Distinct HbA1c trajectories over the period of follow up can be predicted by BMI, frequency of glucose testing and physical activity levels	Prevalent cases, narrow age range included

ESM Table 1. Previous studies exploring the phenomenon of glycaemic tracking listed in chronological order.
Presented as mean ± standard deviation, median (interquartile range) or minimum-maximum, HbA1c: Glycated Haemoglobin,

References

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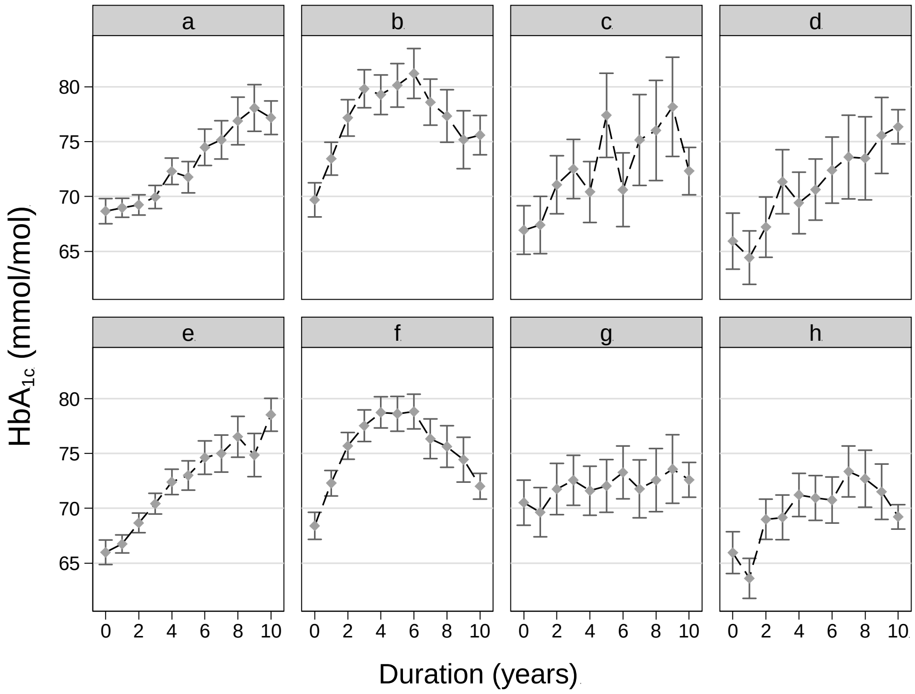
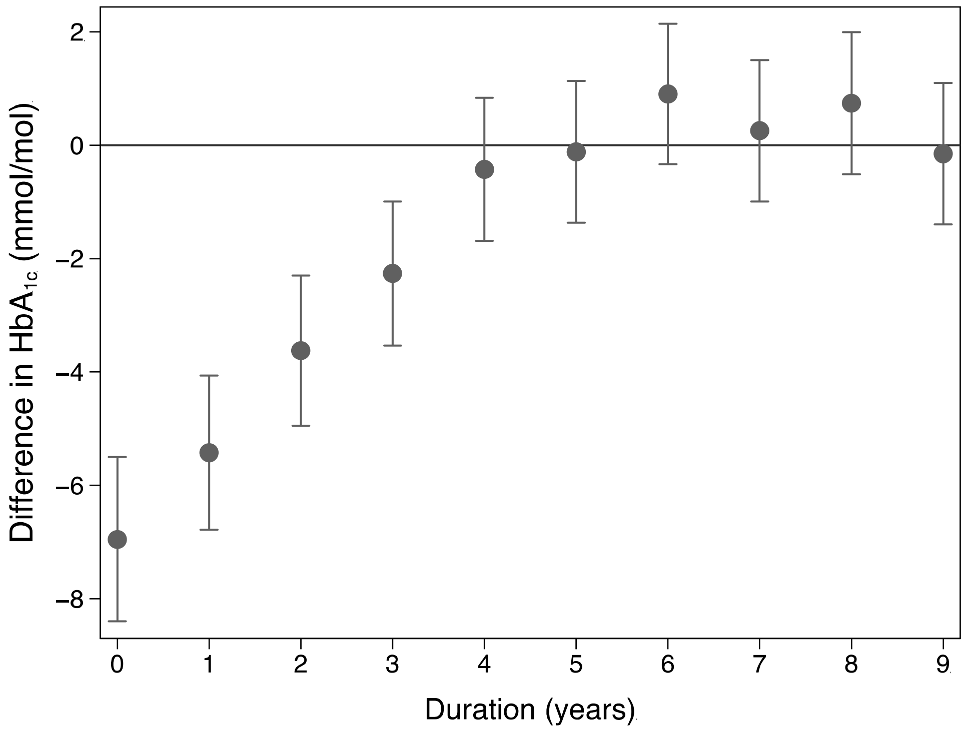
ESM Figure 1



ESM Fig 1: HbA_{1c} change with time from diagnosis in individuals with type 1 diabetes displayed according to their sex and age range at which they were diagnosed. Males are panels (a-d). Females are panels (e-h). Age group 0-10 years are panels (a,e), age group 10-20 are panels (b,f), age group 20-30 are panels (c,g), age groups 30-40 are panels (d,h). Duration time 0 represents the HbA1c values captured from date of diagnosis to year 1; time 1 represents the HbA_{1c} measurements from year 1 to 2, etc.

ESM Figure 2



ESM Fig 2: HbA_{1c} change with time from diagnosis in individuals with type 1 diabetes. Random intercept and slopes model-Adjusted for sex, age and Townsend index. (restricted to individuals with 10 years or more of follow-up). Duration time 0 represents the HbA1c values captured from date of diagnosis to year 1; time 1 represents the HbA_{1c} measurements from year 1 to 2, etc.