Supplemental Table 1 – GAMM results (linear elements)

Outcome	Covariate	Estimate	Std. Error	t value	p value
A1C (%)	Male	-0.362	0.478	-0.758	0.449
	Age (years)	*-0.0456*	*0.0146*	*-3.12*	*0.00199*
	diabetes diagnosis	*0.0731*	*0.0315*	*2.32*	*0.0209*
Glucose (natural-log ml/dl)	Male	-0.132	0.0829	-1.59	0.112
	Age (years)	*-0.00756*	*0.00251*	*-3.01*	*0.00271*
	diabetes diagnosis	*0.0181*	*0.00544*	*3.33*	*0.000919*
	Fasting	*-0.416*	*0.0261*	*-16*	*1.03E-50*
Systolic BP (mmHg)	Male	-1.7	3.9	-0.437	0.663
	Age (years)	*0.569*	*0.116*	*4.9*	*1.12E-06*
	Years since diabetes diagnosis	0.2	0.257	0.777	0.437
Diastolic BP (mmHg)	Male	0.996	1.8	0.553	0.58
	Age (years)	0.00393	0.0537	0.0733	0.942
	Years since diabetes diagnosis	0.0038	0.119	0.0318	0.975
Weight (lbs)	Male	8.63	6.3	1.37	0.171
	Age (years)	-0.264	0.183	-1.44	0.15
	Years since diabetes diagnosis	0.11	0.418	0.262	0.793
Waist-circumference (cm)	Male	-0.423	2.14	-0.197	0.844
	Age (years)	0.105	0.0633	1.66	0.0973
	Years since diabetes diagnosis	-0.114	0.142	-0.805	0.421
BMI (kg/m^2)	Male	-2.14	1.28	-1.67	0.0957
	Age (years)	0.0161	0.0373	0.432	0.666
	Years since diabetes diagnosis	-0.0299	0.085	-0.353	0.725

Outcome	Covariate	OR estimate	OR 95% LCL	OR 95% UCL	p value
A1C control (A1C <= 8%)	Male	1.68	0.63	4.46	0.301
	Age (years)	*1.05*	*1.01*	*1.08*	*0.00454*
	diabetes diagnosis	*0.896*	*0.829*	*0.968*	*0.00526*
A1C goal (A1C <= subject's goal)	Male	3.11	0.94	10.3	0.063
	Age (years)	*1.08*	*1.03*	*1.12*	*0.000475*
	diabetes diagnosis	*0.889*	*0.802*	*0.986*	*0.0253*

Supplemental Table 2 – GAMM results (non-linear elements)

Outcome	EDF	F	p-value
A1C (%)	*4.09*	*8.1*	*2.80E-06*
Glucose (natural-log ml/dl)	*4.58*	*4.23*	*0.00206*
Systolic BP (mmHg)	1	2.83	0.0926
Diastolic BP (mmHg)	2.02	1.08	0.349
Weight (lbs)	*4.39*	*6.47*	*2.54E-05*
Waist-circumference (cm)	2.07	1.77	0.151
BMI (kg/m^2)	*3.63*	*5.8*	*0.000224*
Outcome	**EDF**	**Chi-square**	**p-value**
A1C control (A1C <= 8%)	2.63	10.1	0.0676
A1C goal (A1C <= subject's goal)	2.28	6.07	0.118

EDF: effective degrees of freedom of the estimated non-linear function