

BACKGROUND

Type 1 diabetes has a major impact on not only the person diagnosed, but also their families/caregivers. Diabetes control is affected by many factors. Our diabetes patient cohort has a very high level of social burden which we feel impacts significantly on the management of their diabetes.

METHODS

Retrospective analysis of all young people supported by the ELCH diabetes team in 2017 looking at age, gender, ethnicity and last HbA1c level; we also reviewed all admissions including those in Diabetes Ketoacidosis (DKA) to A&E and the ward between 2014-2017 excluding newly diagnosed patients. Statistical significance was considered for $p < 0.05$ (SPSS 2010®).

Social burden was defined as those known to Social Services and Youth Offending services; housing issues; financial difficulties; complex medical needs; immigration/language issues; those who have poor engagement with our service.

RESULTS

41 (44%) without social issues | Mean age 11.9 ± 3.8 years

52 (56%) with social issues | Mean age 11.6 ± 4.5 years

93 PATIENTS

✓ Social burden group has higher median HbA1c ($p=0.021$ Mann-Whitney test)

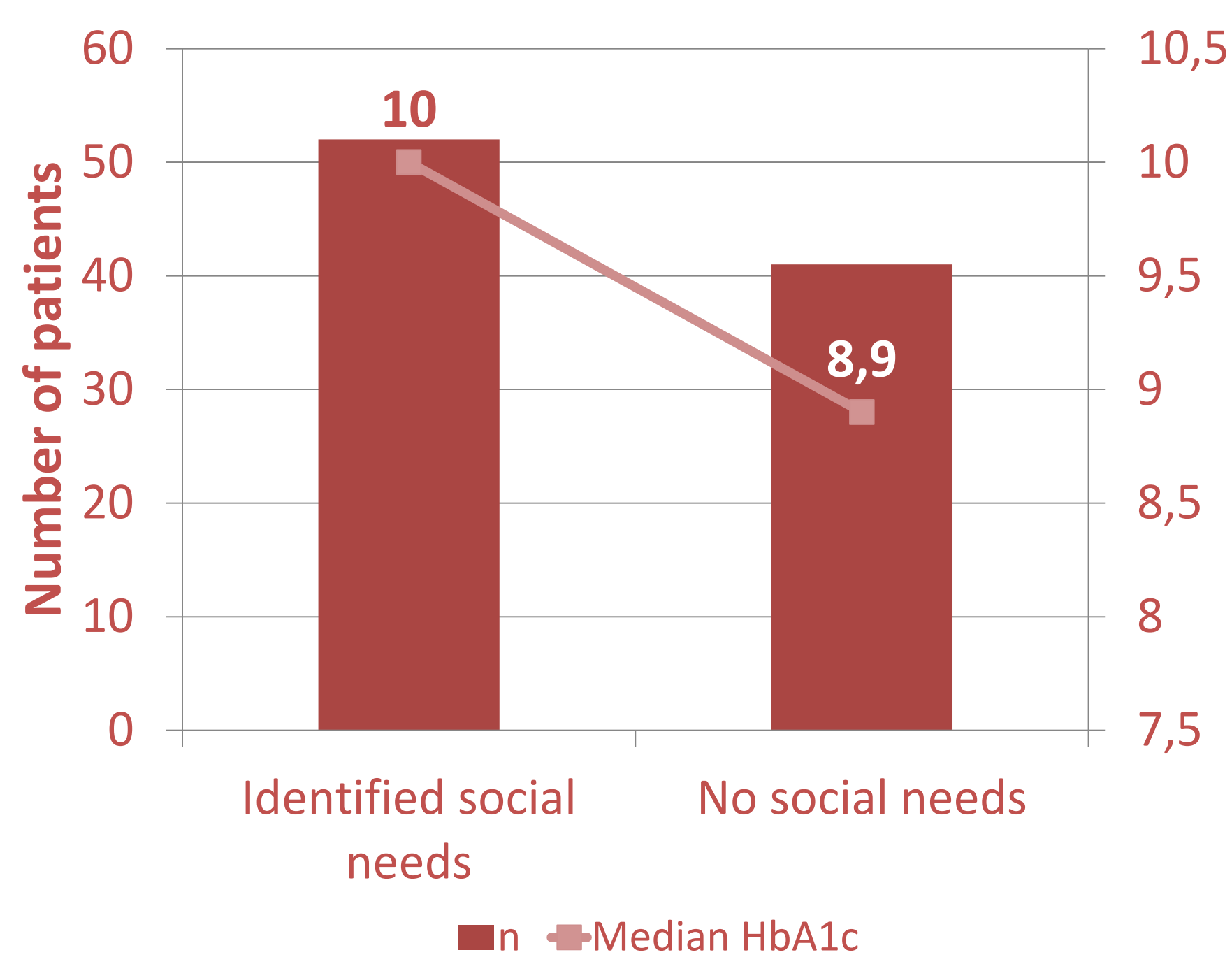
Median HbA1c / Ethnicity

We assessed patients ethnicity in the social burden *versus* the non-social burden group and there were no significant findings found.

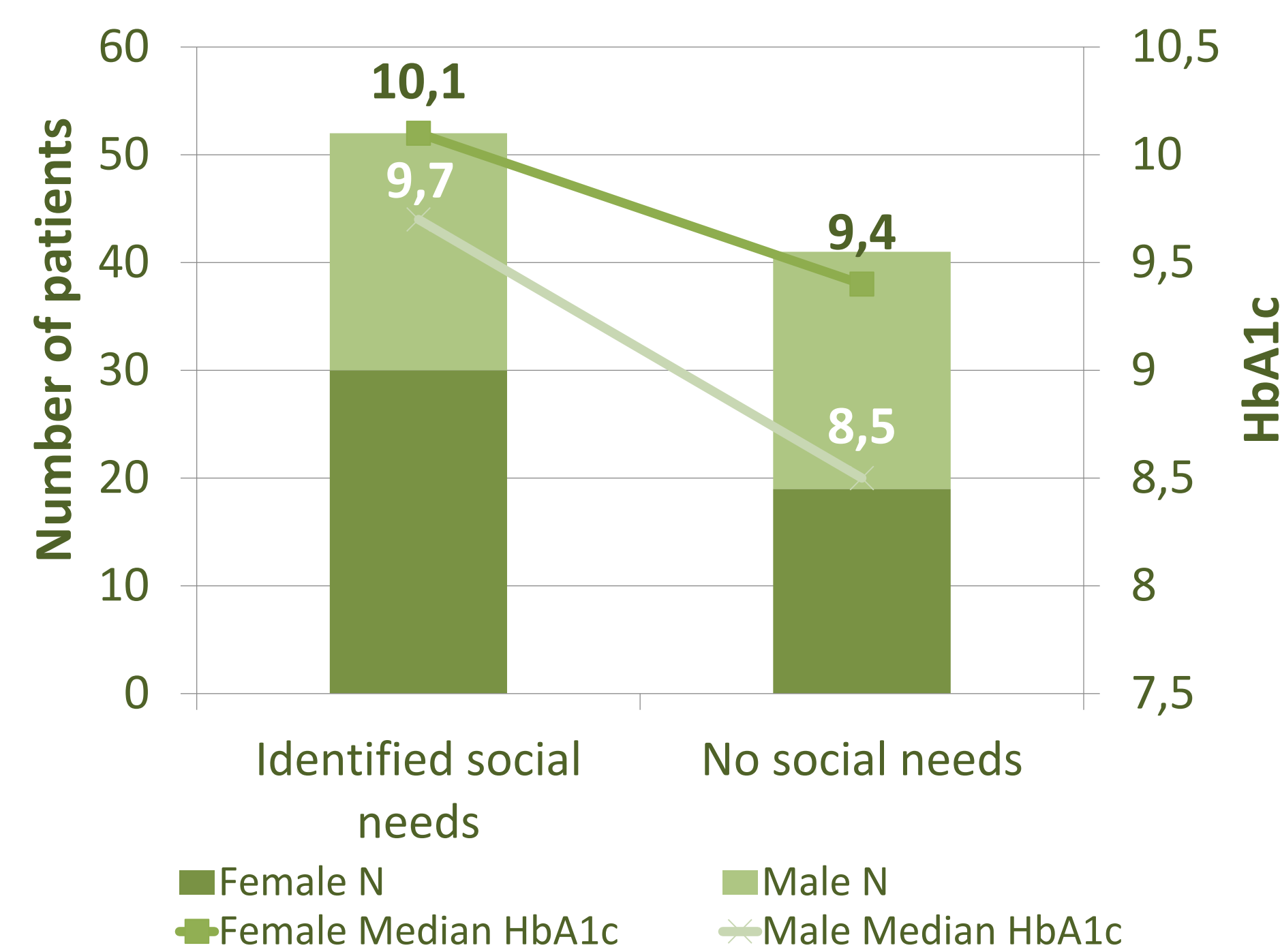
SOCIAL ISSUES	No. of patients*
Youth offending Services	2
Immigration issues	4
Open to Common Assessment Framework	6
Housing issues and/or financial difficulties	14
Education issues	15
Complex needs and/or challenging behaviour	16
Language issues	19
Currently/ Previously open to SS	20
Recurrent DNA > 2 (or cancelled)	22

*Many patients fell into multiple categories

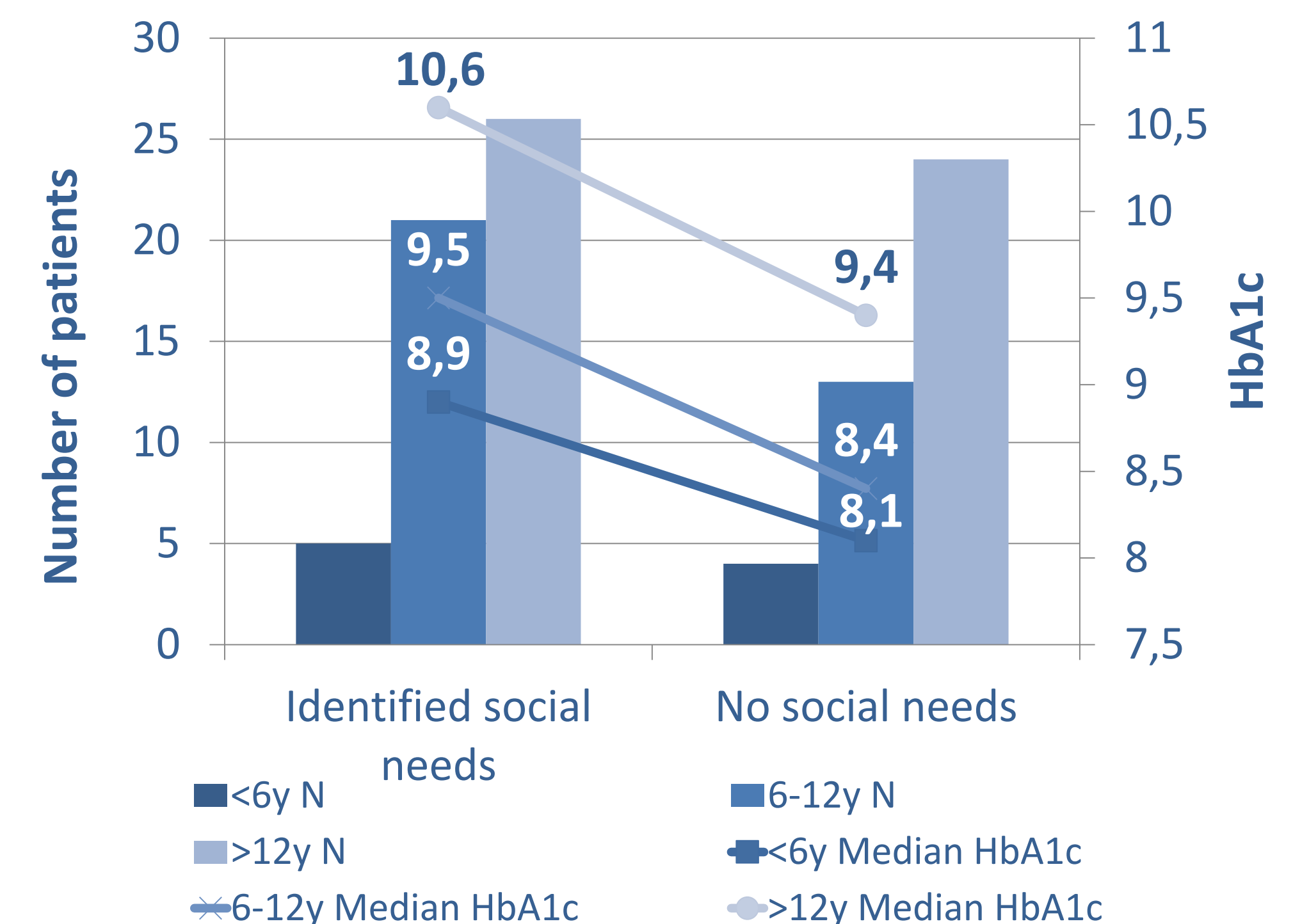
Median HbA1c



Median HbA1c / Gender



Median HbA1c / Age



Admissions 2014-2017

✓ Social burden group has more A&E admissions and recurrent episodes of DKA ($p=0.003$) and more ward admissions ($p=0.011$) (Mann-Whitney test).

Group	A&E admissions	Patients (with one or more A&E admission)	Ward admissions	Average length of stay
Identified social needs	74 (29 with DKA)	35 (maximum no. of admissions per patient - 11)	56	7 days
No social needs	20 (6 with DKA)	16 (maximum no. of admissions per patient - 2)	11	4.1 days

DISCUSSION

From our type 1 diabetes patient cohort the group with higher social burden was found to have: higher median HbA1c, more A&E and ward admissions along with longer admission stays and recurrent DKA episodes. This has a significant impact on their glycaemic control and ultimately their health and long term well-being. We believe that patients with diabetes who have higher levels of social burden often face other more urgent social issues, which means that the child's diabetes is not always the main priority for the family and young person. Future research may wish to consider what forms of psychosocial support could help address this.