



# Challenges in Diabetic Care – Implementing a New Patient Education Programme

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## Introduction

Poor HbA1c in the first year following diagnosis of type 1 diabetes is a predictor of poor metabolic control and early development of complications. Achieving good glycaemic control requires compliant, well-educated patients.

In October 2013, we introduced a revised and extended 'Newly Diagnosed Patient Education Programme' in which a total of 20 sessions are delivered by the multidisciplinary team.

## BCH Programme

20 sessions (each 45-60 mins) providing patients with a total of 15-20 hours of structured education covering all aspects of diabetic care.

The programme starts immediately after diagnosis.

Sessions are delivered over a period of 6 weeks and by members of the MDT:

- Diabetologist (6)
- PDSN (7)
- Dietician (5)
- Social worker (3)
- Psychologist (1)

The majority of sessions are delivered within the first 2 weeks following diagnosis.

Whilst most sessions are hospital based, 5 are based around home visits, allowing the team to further gain insight into family dynamics and social background

**Aim:** To assess the effect of the new policy for newly diagnosed Type 1 diabetics on their HbA1c in the 1<sup>st</sup> year.

## Method

Type 1 diabetics diagnosed October 2013-October 2014, who completed the new education programme were analysed and compared to a pre-intervention group diagnosed January-December 2010.

Data obtained included HbA1c during the first year post diagnosis, patient demographics and psychosocial factors.

## Results

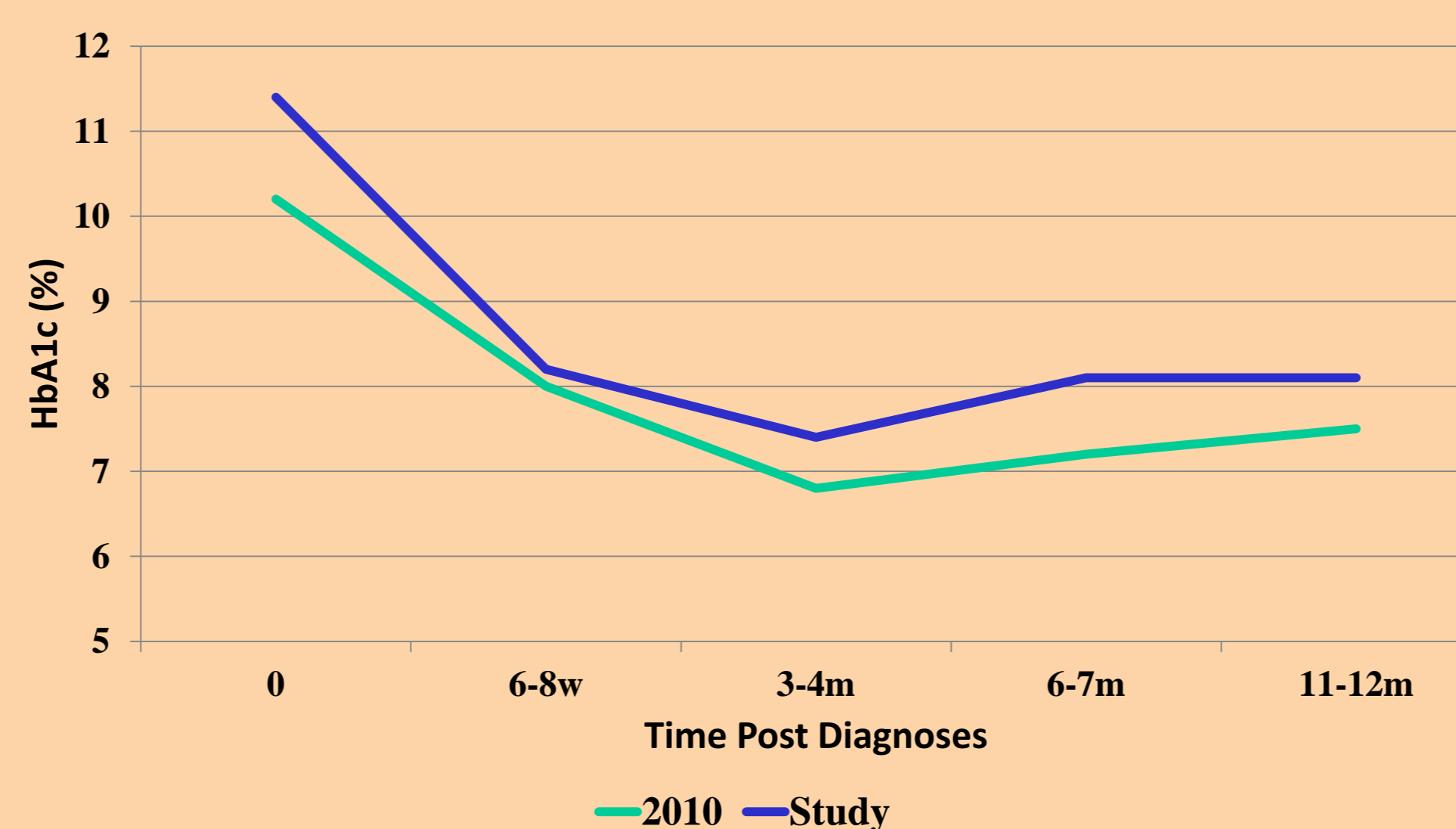
24 patients (8 males, 16 females) were included in the study group compared to 17 (6 males, 11 females) in the pre-intervention group.

	Study group (Oct 2013 – Oct 2014)	Pre-intervention group (2010)
Number	24	17
M:F	8:16	6:11
Mean age	10 (3.5 -15y)	8.9 (1y10m - 14y9m)
DKA at diagnosis	4 (16%)	5 (29%)
Discharged straight from ED	15 (62%)	8 (47%)
Non DKA admitted	5 (21%)	4 (23%)
Social Issues	2 CAF, 9 split families, 3 domestic violence	3 split families, 2 chaotic
Psychology F/U	8 (2 clinical depression)	2

HbA1c at diagnosis was 11.4 % for the study group compared to 10.2% in the pre-intervention group.

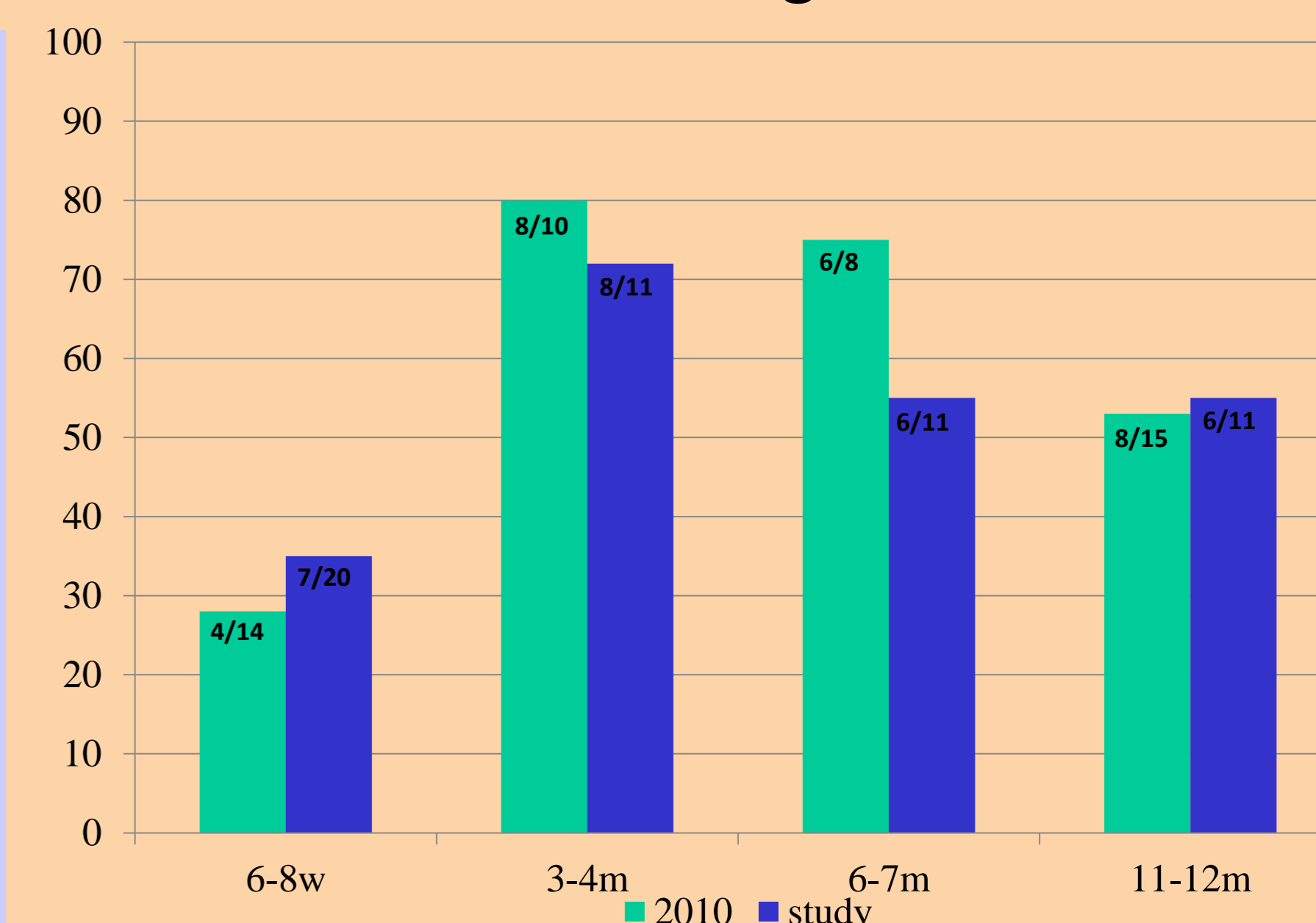
Whilst at 6-8 weeks similar HbA1c levels were achieved (8.1% vs. 8.0%), HbA1c at 12 months measured 8.1% vs. 7.6%, but a similar percentage of patients in both groups achieved an Hba1c < 7.5% (55% vs. 53%).

Mean HbA1c Trend



3 patients within the study group (age 11y, 13y,15y) had significantly worse HbA1cs at 1 year than the remainder of their cohort (14%, 11.9% and 10.9% respectively). All have significant psychosocial issues. Excluding these 3 patients, the mean HbA1c at 1 year in the study group would drop from 8.1% to 7.3%, highlighting a high impact area where additional input could be targeted.

Percent Achieving HbA1c <7.5



## Discussion

Psychosocial factors varied greatly between groups, with the study group having higher numbers of social risk factors (CAF 2 vs. 0, split families 9 vs. 3, domestic violence 3 vs. 0, ongoing psychology support 8 vs. 2, clinical depression 2 vs. 0), impacting on diabetes management. It is encouraging that despite this, the percentage of patients achieving HbA1c levels < 7.5% one year after diagnosis is similar between groups.

The BCH diabetic team provides care to a high proportion of patients from socially deprived backgrounds. This finding highlights barriers to successful diabetes management and has prompted us to further evaluate the social support we can provide to these high risk individuals.

**Conclusion:** Current data highlights that the service is providing care to a socially challenging population and will need further consideration and tailoring. Long term outcomes are awaited.

## References

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