

Glycaemic control in T1D patients treated from clinical onset in a value-based care center vs. patients transferred from other centers: the DIABETER experience

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Background

- Diabeter delivers value-based T1D care:
 - Integrated practice unit (IPU)
 - More patients per healthcare professional -> more knowledge
 - Frequent contacts
 - Improved outcome -> reduced complications

THE DIABETER EXPERIENCE

- This results in better glycaemic control (vs Dutch average)
- Diabeter has:
 - 31% primary patients: treated at Diabeter from diagnosis onwards
 - 69% secondary patients: started treatment from diagnosis in other clinic and transferred to Diabeter
- Recent studies show 'tracking' of HbA1c values¹
- Within different registries, similar tracks can be identified²

Research question

- Does switching from standard care to a value-based care model result in improved glycaemic control, i.e. in 'switching tracks'?

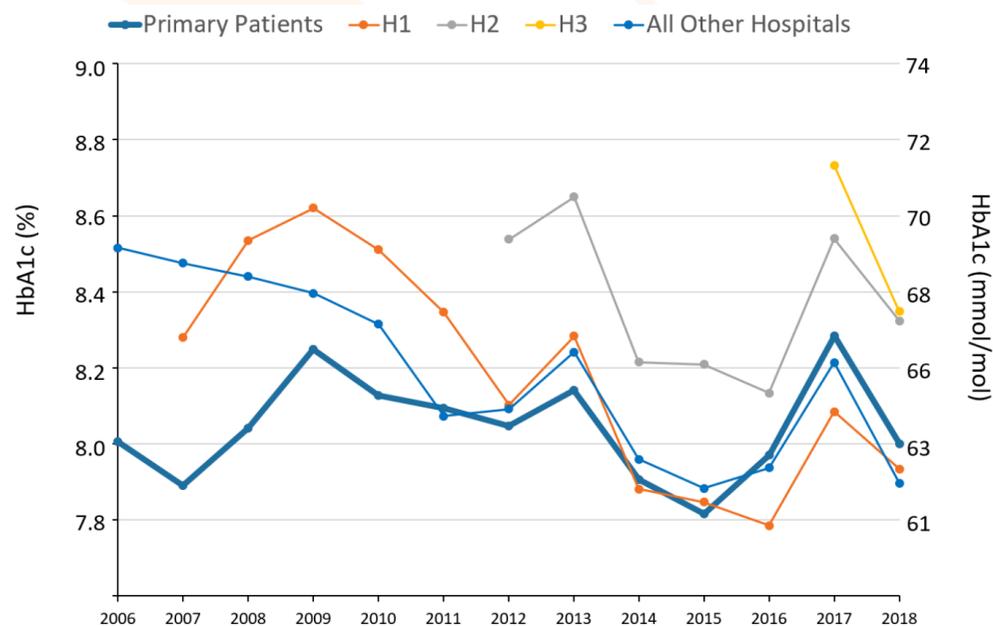


Study design

- Patients treated ≥ 1 year at Diabeter (n= 2014) were included:
 - Secondary patients were only included if they had a history of ≥ 1 year of care in their previous clinic
 - Three hospitals (H1-3) discontinued their T1D care and transferred all T1D patients to Diabeter
 - Individual patient transfers from >40 other referring centers were also analysed
- HbA1c values were extracted from medical record files and analysed cross-sectionally per year from 2006-2018

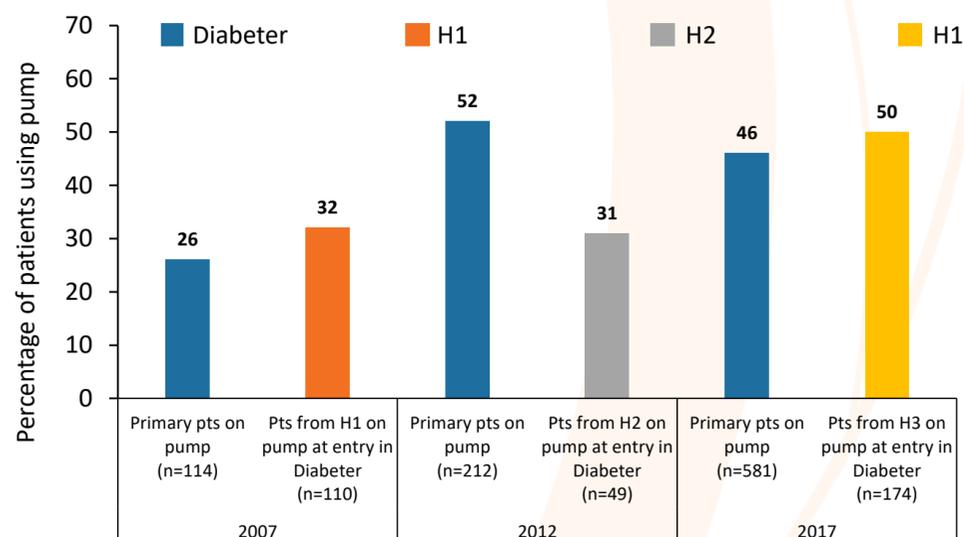
Results

- HbA1c



Primary patients (n)	89	114	140	174	212	270	331	373	440	480	523	581	571
Group transfer from H1 (n)		105	105	98	95	95	92	88	83	76	76	75	71
Group transfer from H2 (n)							42	44	42	44	42	40	39
Group transfer from H3 (n)												159	156
Individual transfers from other hospitals, excl. H1-H3 (n)	96	156	231	340	452	536	584	617	652	717	775	837	789

- Pump use



Conclusions & Discussion

- HbA1c levels of primary patients fluctuate around 8.0% over the years
- Secondary patients had higher HbA1c at the time they transferred to Diabeter
- Secondary patients gradually improve HbA1c levels to levels comparable with those of primary patients
- Differences in pump use between groups of patients do not completely explain this improvement

Transition from standard care to a value-based care model may overcome 'tracking' of glucose control

Disclosures

- Healthcare contracts with all Dutch insurance organizations
- Diabeter was acquired by Medtronic in April 2015: Diabeter is compliant with legal and healthcare policies and laws on independency for prescription, patient data, research and employee data. This includes supervisory board, client board, complaint board and transparency requirements.

References

- Paes et al., *Pediatr Diabetes*. 2019 Aug;20(5):494-509.
- Clements et al., *Pediatr Diabetes*. 2019 Nov;20(7):920-931