
Diabeter

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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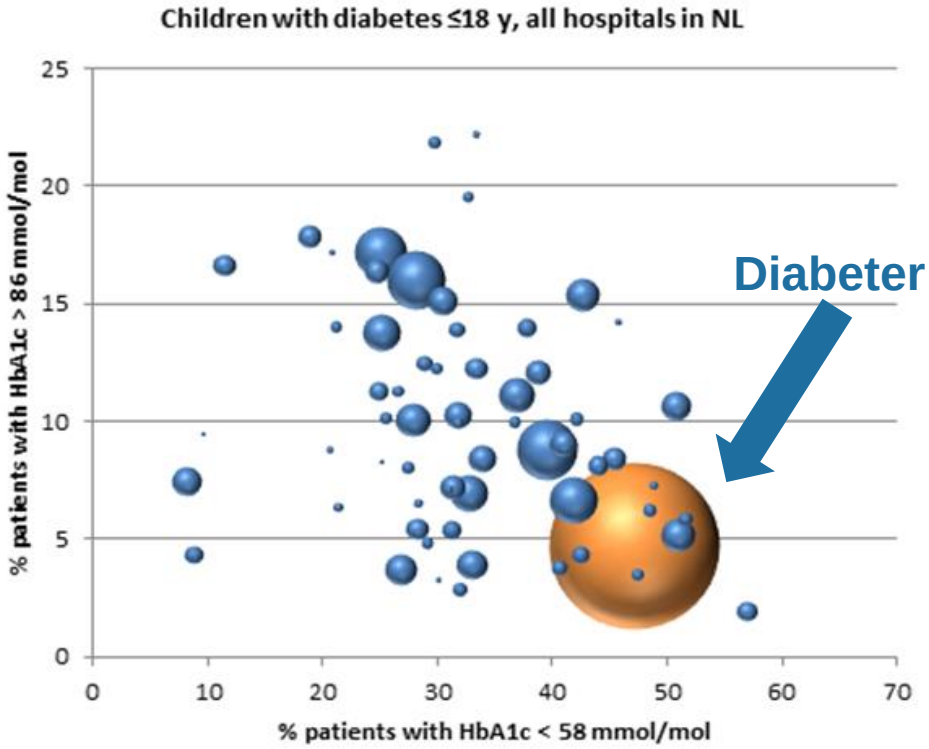
Disclosures

- 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
- In the context of this presentation there are no conflicts of interest

Background

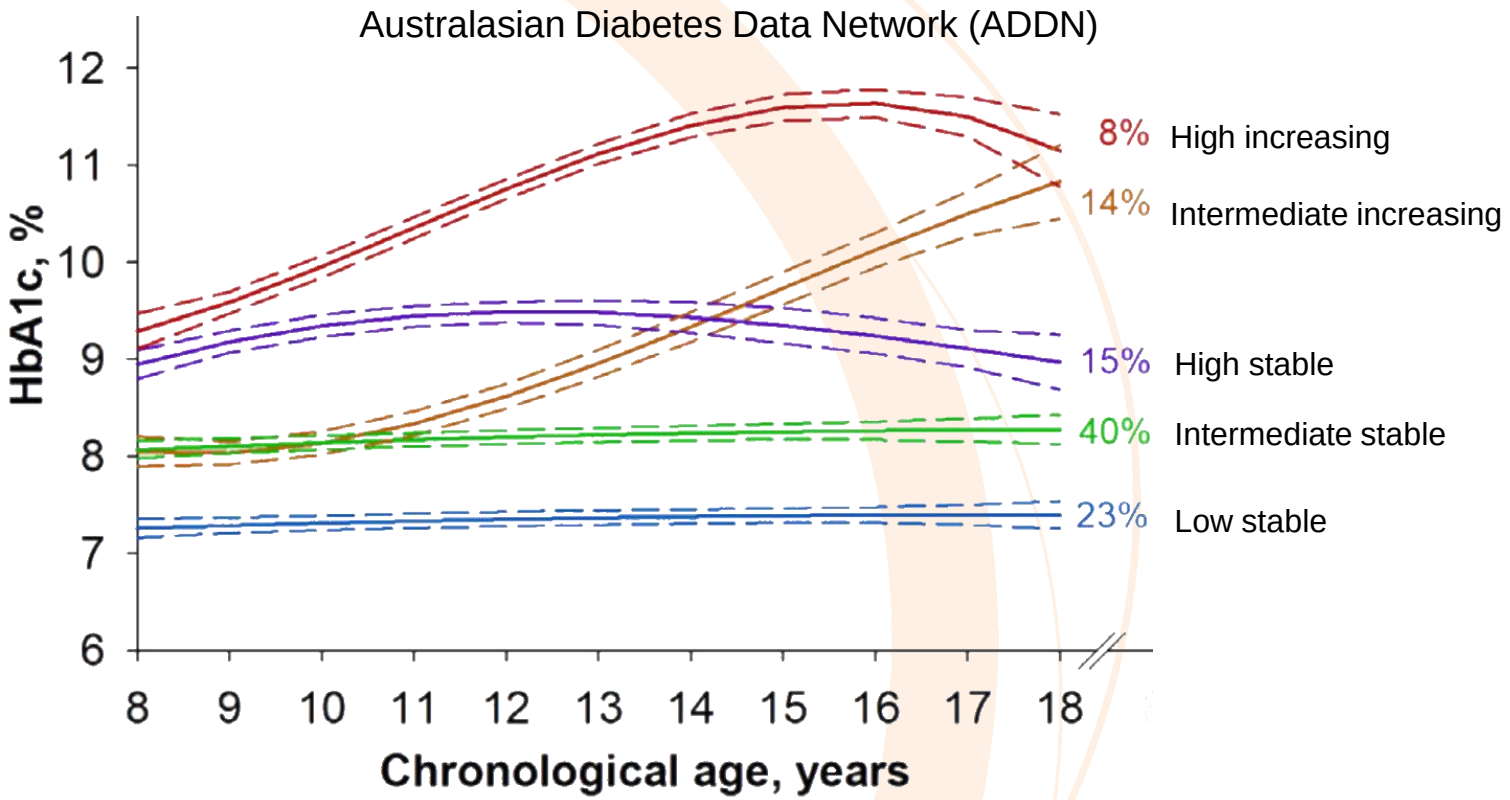
- Diabeter delivers value-based T1D care:
  - Integrated practice unit (IPU)
  - More patients per HCP -> more knowledge
  - Frequent contact
  - Improve outcomes -> reduce complications
- This results in better glycaemic control (vs NL average)
- Diabeter has 31% primary patients and 69% secondary patients



HCP, healthcare professional

Background (2)

- Recent studies show ‘tracking’ of HbA1c values[1]
- Within different populations, similar tracks can be identified[2]



- Similar for DPV and T1DX populations[2]

[1]Paes etal.,
[2]Clements et al., Pediatr Diabetes. 2019 Nov;20(7):920-931
ADDN, Australasian Diabetes Data Network (Australia); DPV, DiabetesPatienten-Verlaufsdokumentation initiative (Germany/Austria/Luxembourg); T1DX, T1D Exchange Clinic Network (USA)

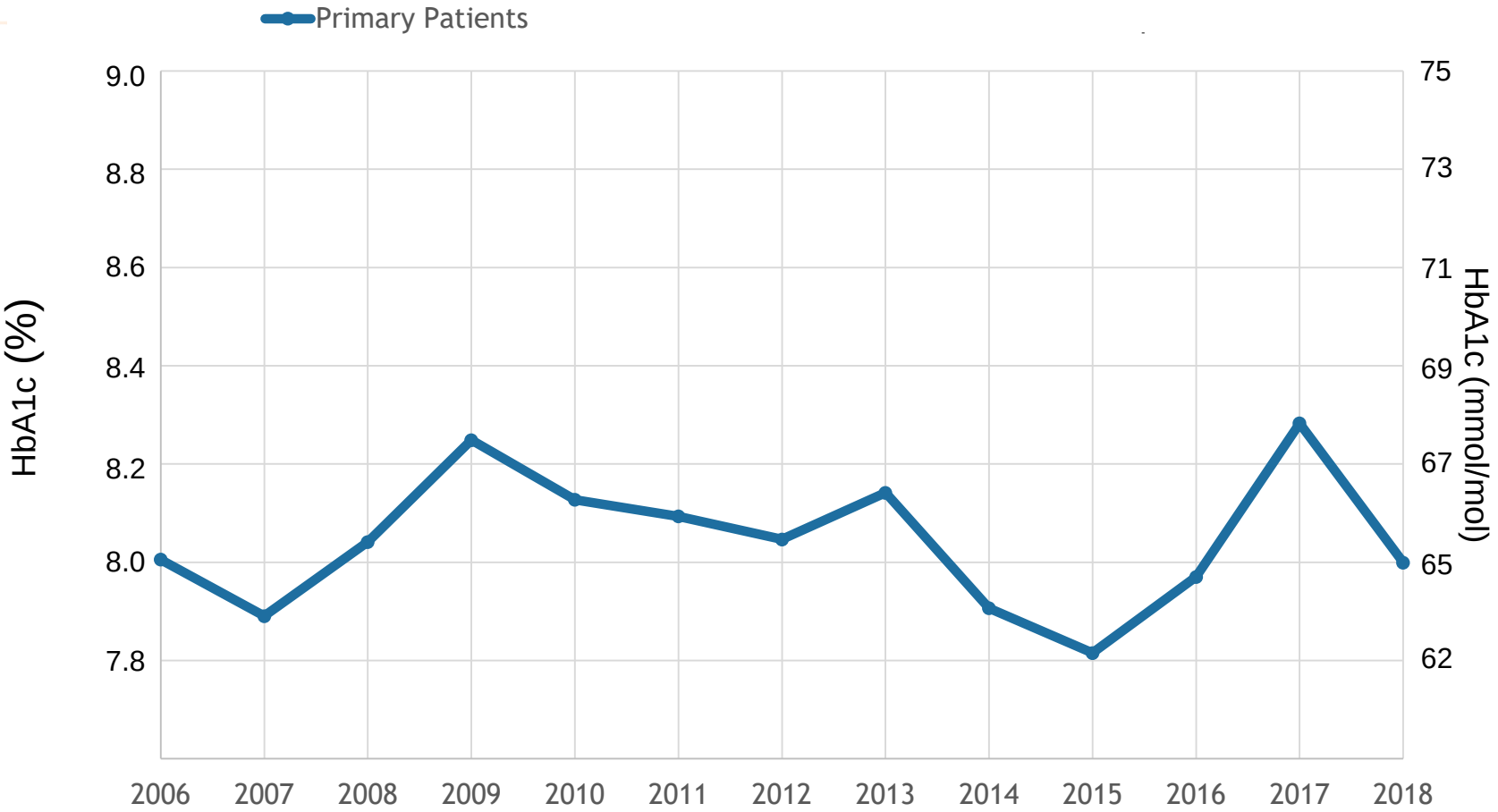
Research question

- **Does switching to a more comprehensive care model result in improved glycaemic control, i.e. in ‘switching tracks’?**

Study design

- HbA1c values were extracted from our custom built disease management system Vcare
- Patients treated ≥1 year at Diabeter (n= 2014) were included:
  - Secondary patients were only included if they had received ≥1 year of previous care in another clinic
- HbA1c was determined cross-sectionally per year from 2006-2018
- Changes were analysed descriptively for primary and secondary patients
- Three hospitals (H1-3) discontinued their T1D care and transferred all T1D patients to Diabeter:
  - this allowed study of both ‘en bloc’ and individual patient transfers from >40 other referring centers

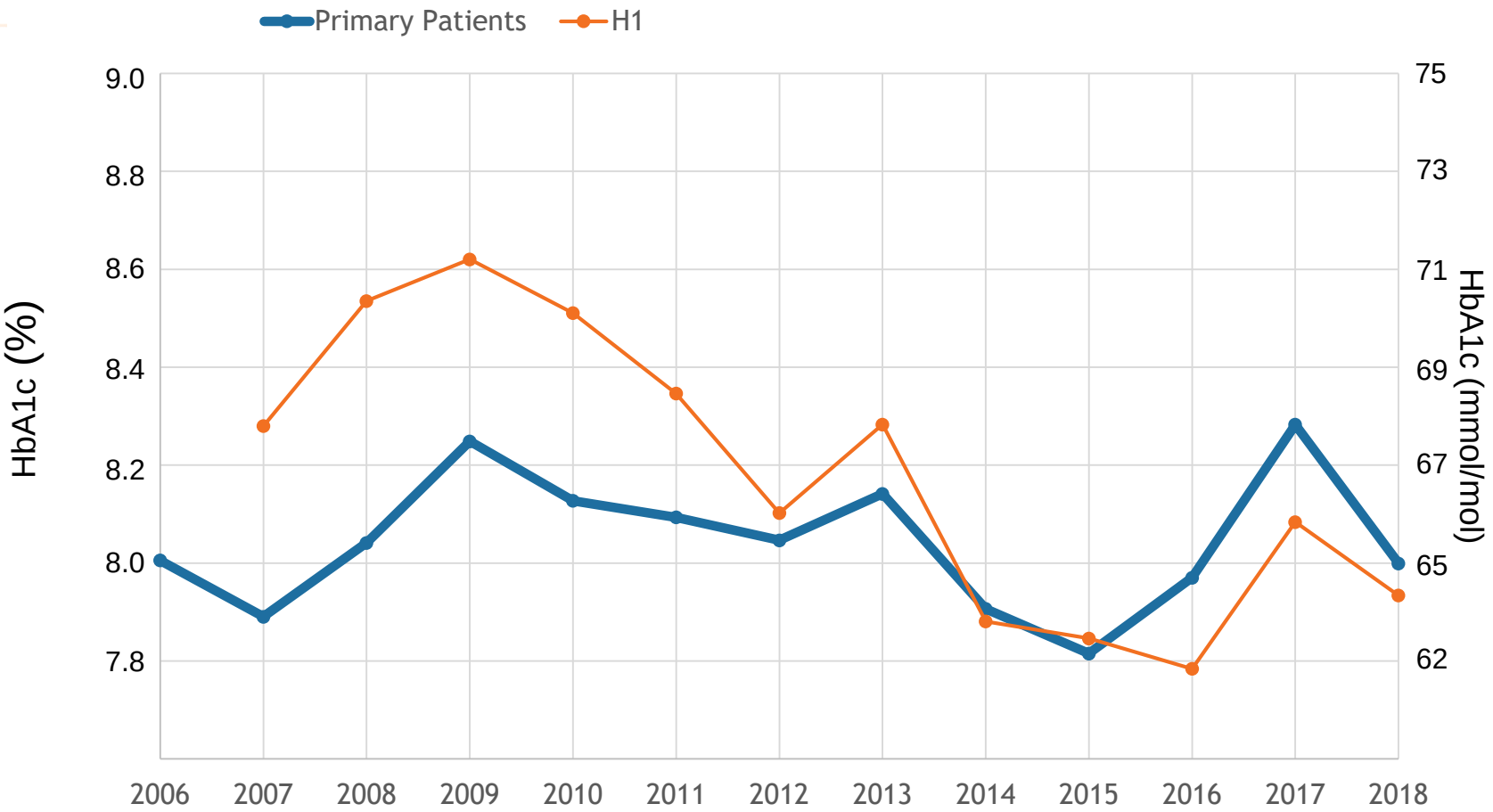
Results: HbA1c – Primary patients



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Primary patients (n)	89	114	140	174	212	270	331	373	440	480	523	581	571

NA: not applicable

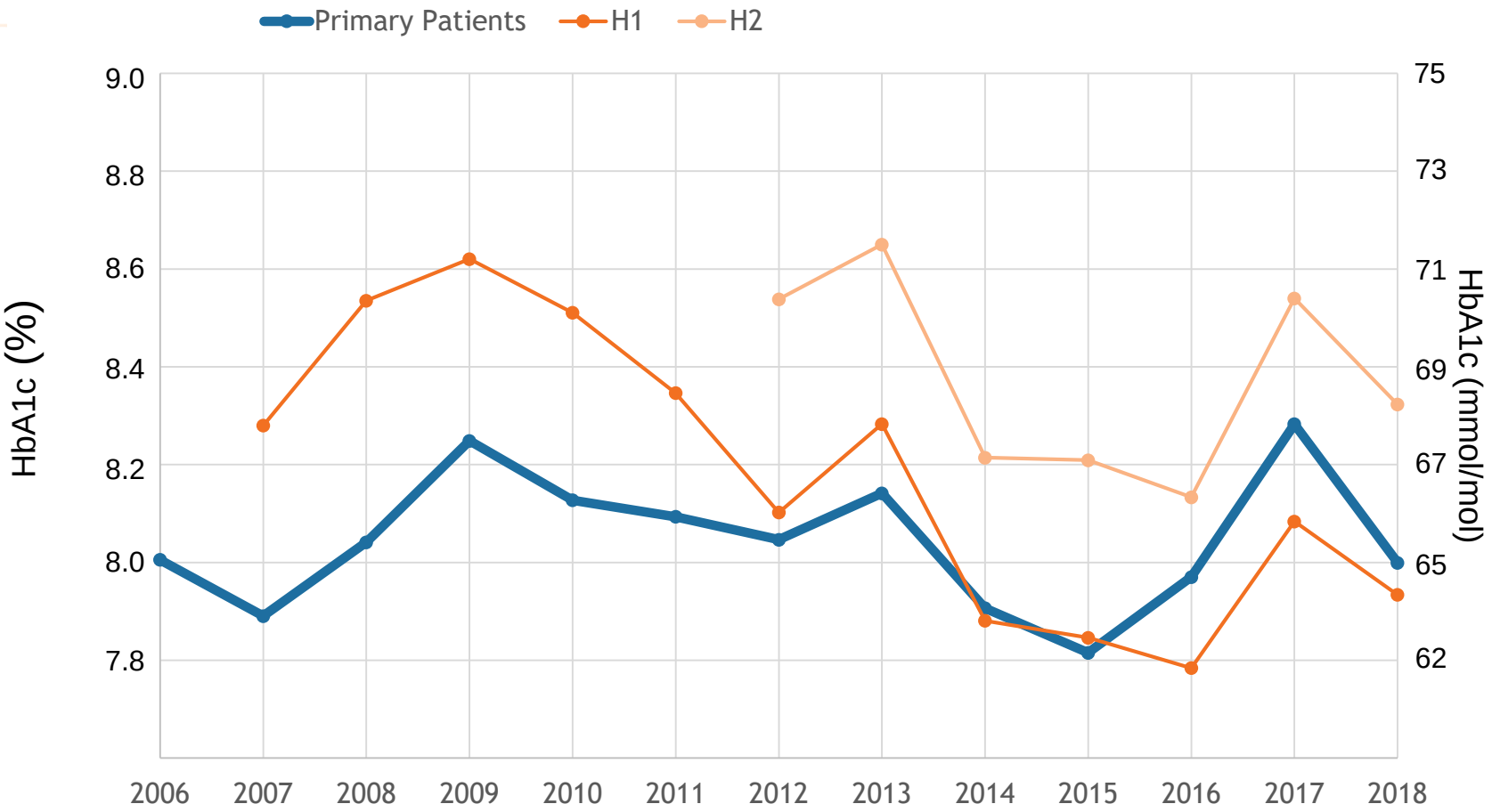
Results: HbA1c - Hospital 1



Primary patients (n)	89	114	140	174	212	270	331	373	440	480	523	581	571
En bloc transfer from H1 (n)	NA	105	105	98	95	95	92	88	83	76	76	75	71

NA: not applicable

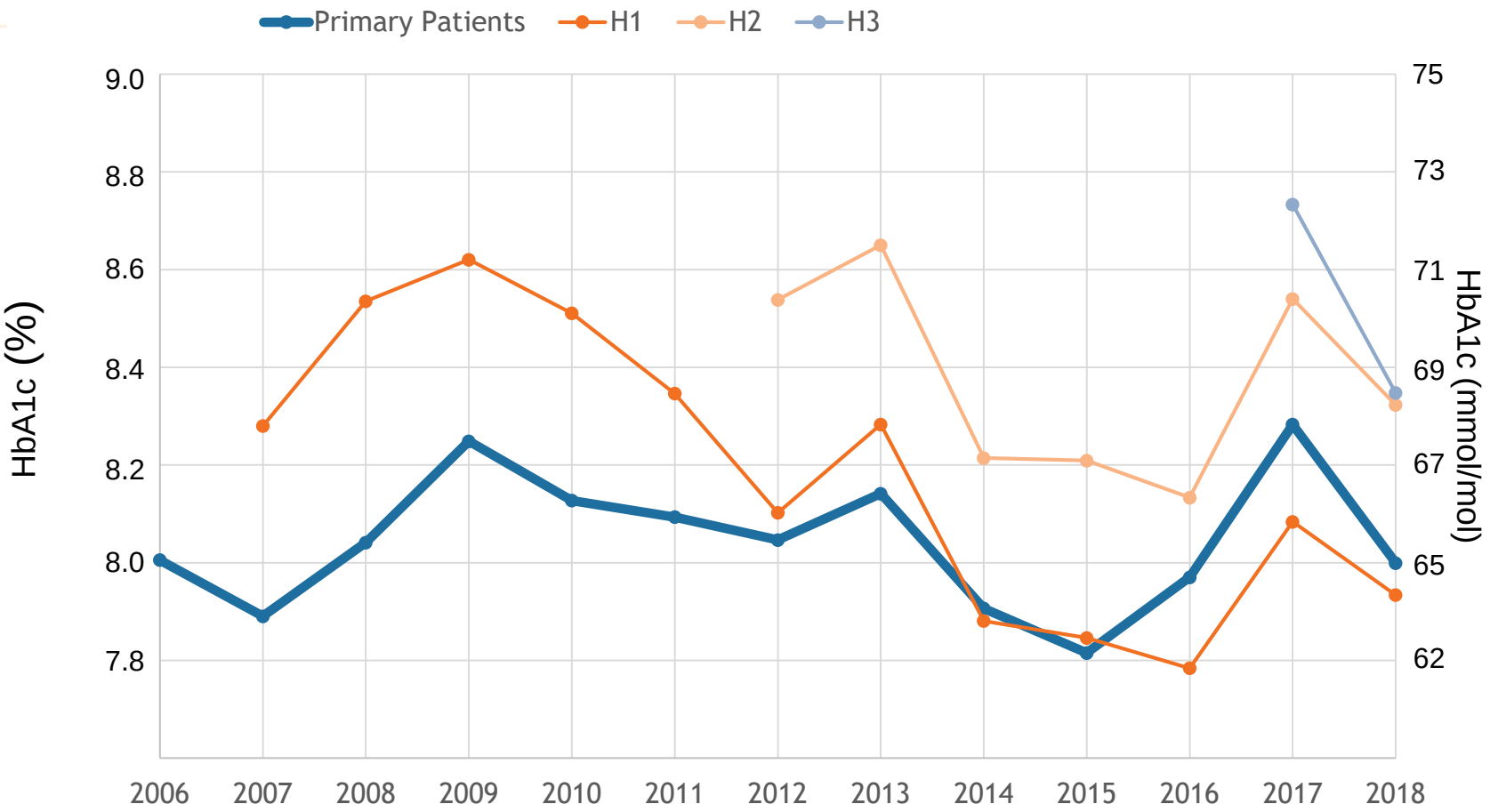
Results: HbA1c - Hospital 2



Primary patients (n)	89	114	140	174	212	270	331	373	440	480	523	581	571
En bloc transfer from H1 (n)	NA	105	105	98	95	95	92	88	83	76	76	75	71
En bloc transfer from H2 (n)	NA	NA	NA	NA	NA	NA	42	44	42	44	42	40	39

NA: not applicable

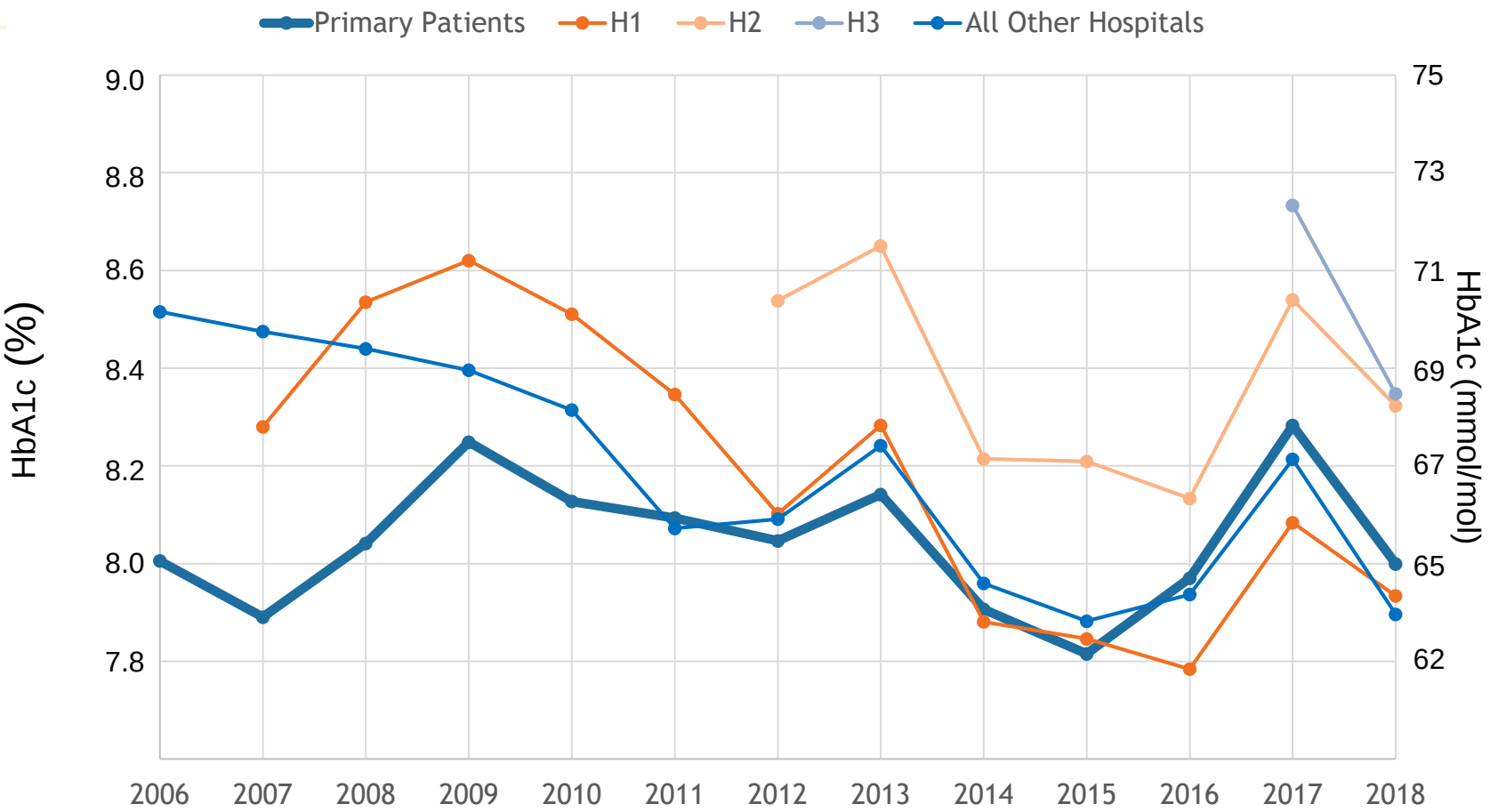
Results: HbA1c - Hospital 3



Primary patients (n)	89	114	140	174	212	270	331	373	440	480	523	581	571
En bloc transfer from H1 (n)	NA	105	105	98	95	95	92	88	83	76	76	75	71
En bloc transfer from H2 (n)	NA	NA	NA	NA	NA	NA	42	44	42	44	42	40	39
En bloc transfer from H3 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159	156

NA: not applicable

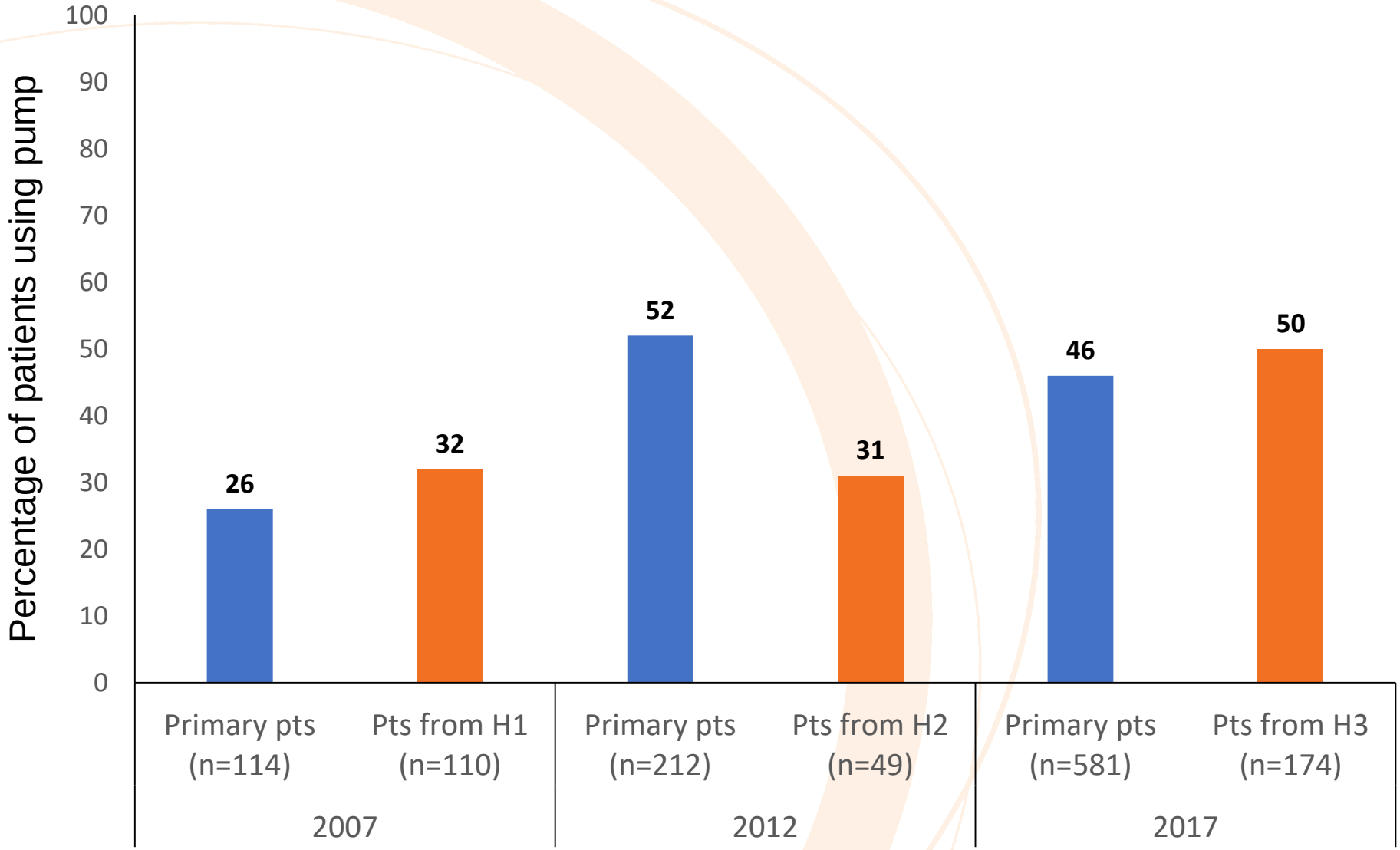
Results: HbA1c - all other 2º patients



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

NA: not applicable

Results: Pump use



Conclusions

- HbA1c levels of primary patients (all age groups) fluctuate around 8.0 % over the years
- Secondary patients had higher HbA1c at the time they transferred to Diabeter
- Secondary patients show gradual improvement of 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 to another, more comprehensive care model may overcome 'tracking' of glucose control

Limitations & Future studies

Limitations:

- Data were only analyzed descriptively: differences were not statistically tested
- Data were analyzed cross-sectionally per year, not continuously per patient

Future studies should:

- Look at differences in:
  - insulin types
  - method of insulin administration
  - patient-related factors
- Include formal statistical analyses

Thank you!

Diabeter measures outcomes & cost per patient

Ther@py Email

In addition, patient empowerment and remote coaching drive outcome improvement