

BACKGROUND

"SWEET"

- "Better control in Pediatric and Adolescent diabetes : Working to CrEate CEnTers of Reference"
- based on a partnership of diabetes organizations led by the ISPAD with contributions of IDF Europe, FEND, and PCDE
- network of peer audited Centers of Reference (CORs) with a continuous electronic documentation of at least 150 pediatric patients with diabetes treated by a multidisciplinary team based on the ISPAD clinical practice recommendations

OBJECTIVE AND METHODS

Network of CoRs with data collection on **SWEETBASE** (Fig. 1) for benchmarking and longitudinal health analysis

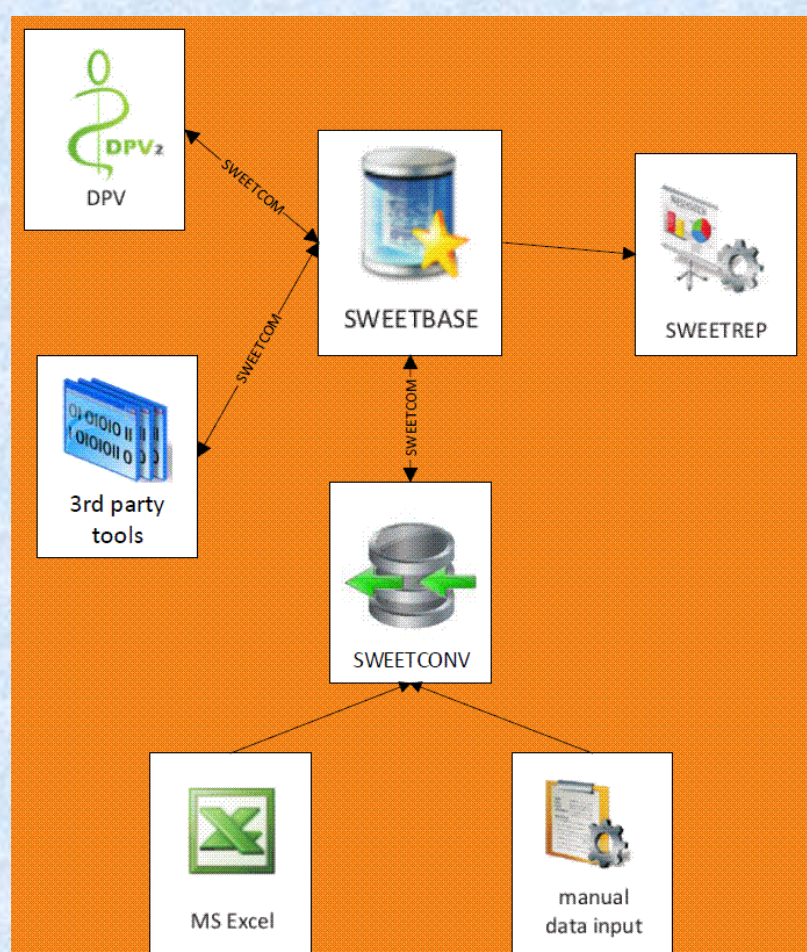


Fig. 1: SWEET Data management system

Aggregate data is de-identified and exported to SWEETBASE according to local ethical and data safety regulations

- minimum collected data: age, diabetes duration, gender, diabetes type, HbA1c
- optional: height, weight, blood pressure; screening for nephropathy, hyperlipidaemia, celiac disease, thyroid disease and retinopathy

RESULTS

Data collection

2006 -2013 with 14 centres in 13 countries in Europe (Fig. 2)
Overall number of visits = 105373
Age = 14.1 years (median)
Diabetes duration = 5.1 years (median)

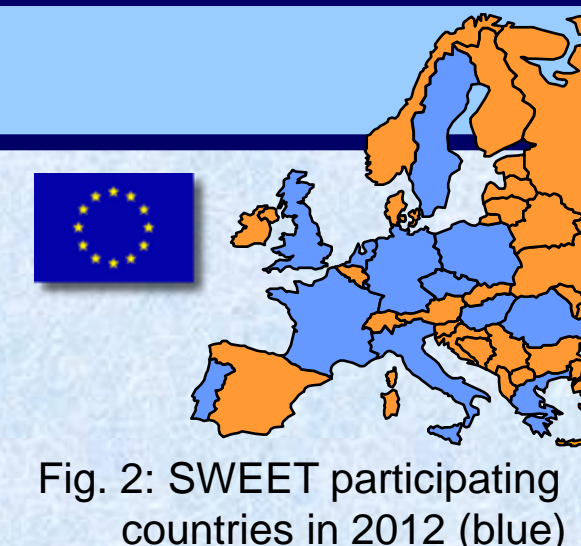


Fig. 2: SWEET participating countries in 2012 (blue)

Data analysis for 2012

- Patients distribution in diabetes (Fig. 3):
 - type 1: n = 5859
 - type 2: n = 62
 - other types: n = 115
- Average visits per diabetes type are more frequent type 1 (Fig. 4):
 - type 1: n = 3,5
 - type 2: n = 2,4
 - other types: n = 2,8
- ISPAD target HbA1c >7,5% was reached in % patients (Fig. 5):
 - type 1: 35 %
 - type 2: 56 %
 - other types: 67 %

Type 2 has better average control

Changes from 2006 - 2012

- Patient visits increases
 - n = 3710 (2006) → 24181 (2012)
- Documented monitoring (Fig. 6):
 - weight: 77 → 91%
 - height: 75 → 89 %
 - HbA1c: 83 → 98 %
- Monitoring of co-morbidities (Fig. 7):
 - Blood pressure: 50 → 65 %
 - Nephropathy: 12 → 19 %
 - Hyperlipidaemia: 30 → 41 %
 - Retinopathy: 28 → 14 %
- valid HbA1c among CoRs (Fig. 8) = 8.1 → 7.9 % (mean)

Fig. 3: Distribution in Europe: mainly type 1 diabetes

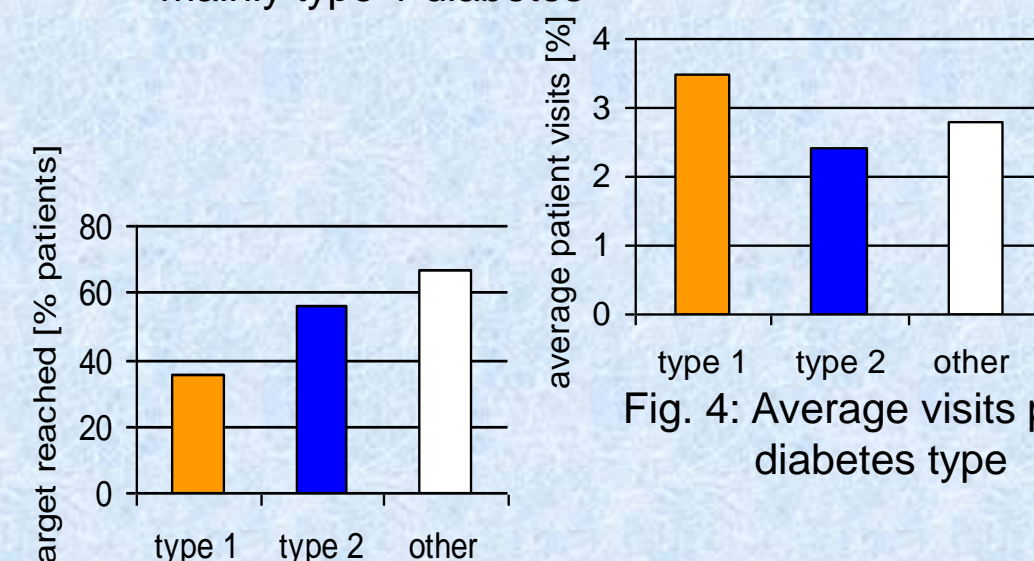


Fig. 4: Average visits per diabetes type

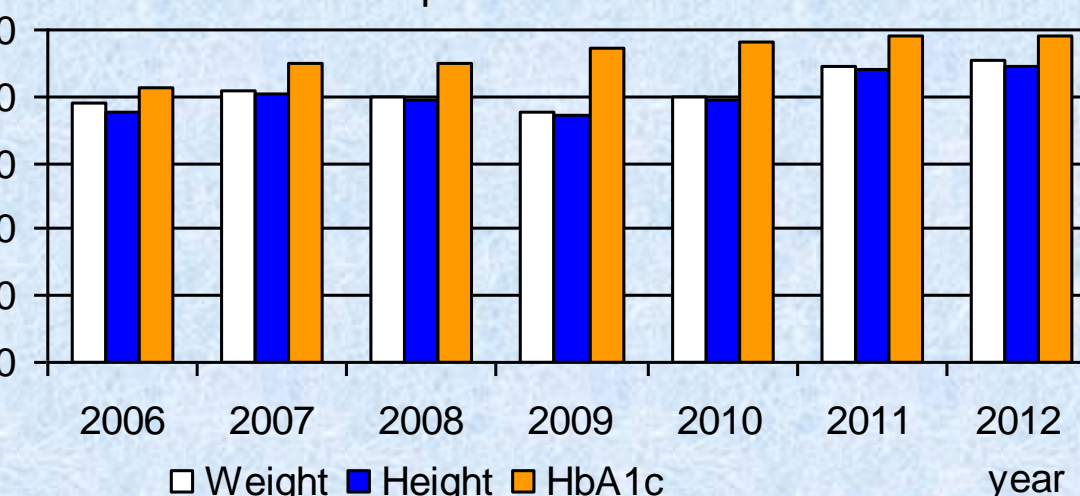


Fig. 5: ISPAD target HbA1c >7,5% reached in % patients

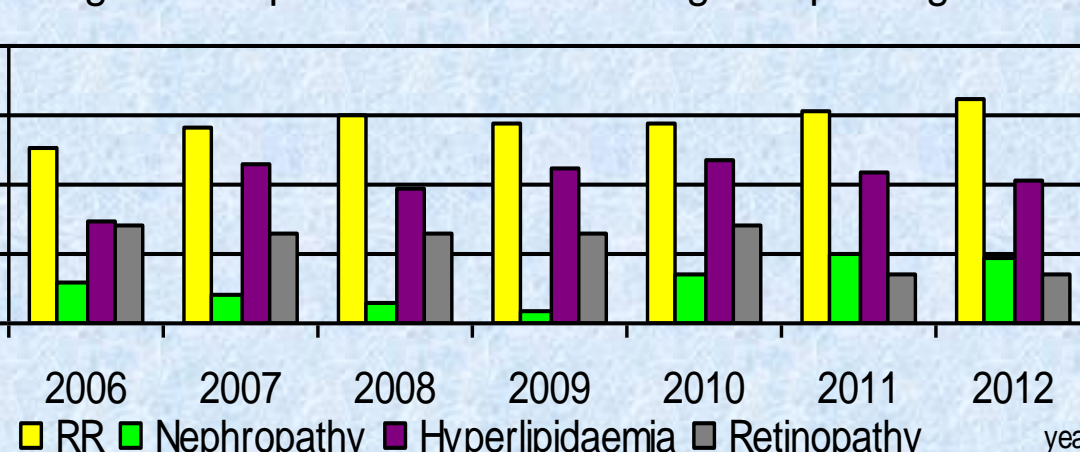


Fig. 6: Completeness of Monitoring is improving

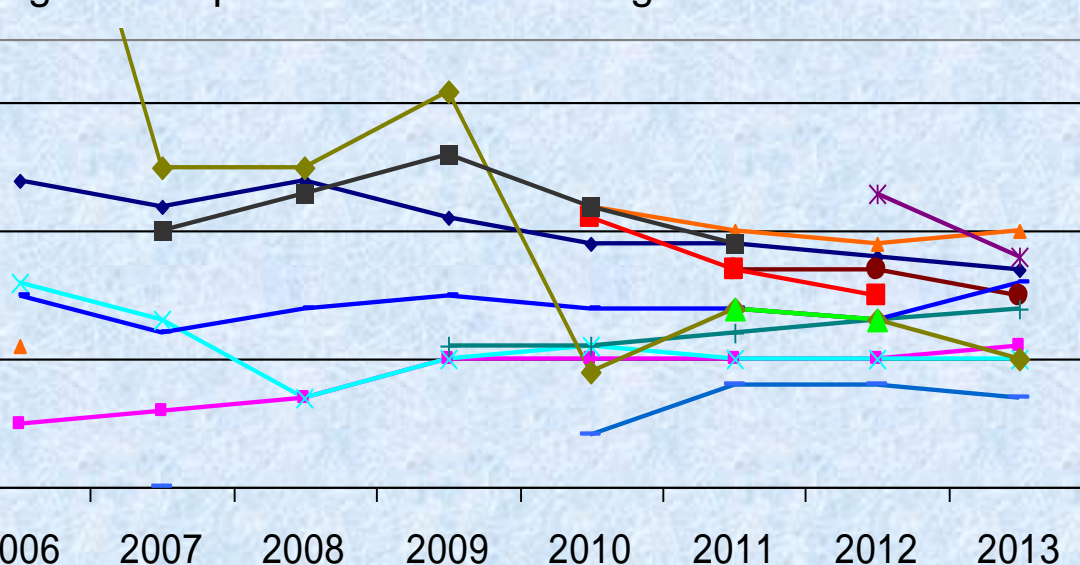


Fig. 7: Completeness of Monitoring of co-morbidities



Fig. 8: Benchmarking as a basis for quality circles: Real improvement of centre HbA1c or data quality issues

CONCLUSION

SWEET enables ...

- continuous evaluation of diabetes treatment and outcome variables
 - benchmarking data to exchange best practices and to reduce inequalities
- the SWEET network of CoR's wish ...**
- to obtain political power on a national and international level
 - to facilitate dissemination of new approaches and techniques
- the SWEET group hopes ...**
- to extend from the initial group of centers within countries throughout Europe and beyond

You are very welcome to join us!

The SWEET group...

Leading investigators are:
M. Witsch¹, T. Danne², J. Allgrove³, B. Aschemeier², C. de Beaufort¹, G. Forsander⁴, K. Klee², O. Kordonouri², K. Lange⁵, L. Madacsy⁶, C. Maffei⁷, E. Pańkowska⁸, J.F. Raposo⁹, J.-J. Robert¹⁰, V. Serban¹¹, Z. Šumník¹², A. Szybowska¹³, A. Vazeou¹⁴, H. Veeze¹⁵, S. Waldron¹⁶
¹DCCP- Clinique pédiatrique de Luxembourg, Luxembourg, ²Kinder- und Jugendkrankenhaus Auf der Bult, Diabetes Centre for Children and Adolescents, Hannover, Germany, ³Royal London Hospital, Whitechapel, Barts Health NHS Trust, London, United Kingdom, ⁴Sahlgrenska University Hospital, Gothenburg, Sweden, ⁵Hannover Medical School Medical School, Department of Medical Psychology, Hannover, Germany, ⁶Semmelweis University, Budapest, Hungary, ⁷University of Verona, Pediatric Diabetes Unit, Verona, Italy, ⁸Instytut Matki i Dziecka, Warsaw, Poland, ⁹Associação Protectora dos Diabéticos de Portugal, Lisboa, Portugal, ¹⁰Hopital des Enfants-Malades, Department Diabete de l'enfant, Paris, France, ¹¹Clinical Medical Center "Cristian Serban" For The Evaluation And Rehabilitation Of Children And Adolescents Buzias, Buzias, Romania, ¹²University Hospital Motol, Department of Paediatrics, Prague, Czech Republic, ¹³The Medical University of Warsaw, Department of Pediatric Diabetology, Neonatology and Birth Defects, Warsaw, Poland, ¹⁴Panagioti and Aglalia Kyriakou Children's Hospital, Department of Pediatrics and Diabetes Center, Athens, Greece, ¹⁵Stichting Diabeter, Rotterdam, Netherlands, ¹⁶Diabetes UK, London, United Kingdom



REFERENCES

- e-mail: sweet-project@hka.de
- website: www.sweet-project.eu
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