

2nd BRIDGE HEALTH Meeting of the EUBIROD Network
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Slovenia

Iztok Štrotl

Different levels of data sources and analytics

- Pediatric patients
- Tertiary and secondary centers
- Primary level and “model practices”
- Administrative database
- Different telemedicine providers emerging

Different levels of data sources and analytics

- Without common connecting layer
- **Clinical data** about adult patients with diabetes isn't collected nationally in an effective manner,
- Only **administrative national database** is available for analysis at the moment.

National Registry of Childhood Diabetes

- All children and adolescents with newly diagnosed diabetes are referred to only one central institution:

- Department of Pediatric Endocrinology, Diabetes and Metabolism (DPEDM) - University Medical Center - University Children's Hospital, Ljubljana



- Responsible for the Slovenian National Registry of Childhood Diabetes (SNRCD) **since 1970**.
- Active member of the original EUBIROD project with providing data and expertise for pediatric section.

Registry of Childhood Diabetes: methodology

- Long and rich tradition in registry methodology and technology.
- In the last years, they have further improved their database technology based on state of the art technology and industry standards such as:

- OpenEHR
- IHE
- HL7



*open***EHR**

- Pediatric clinic participates in international data collection and benchmarking within the Centre of Reference SWEET project



Registry of Adult Patients with Diabetes

□ Department of Endocrinology, Diabetes and Metabolic Diseases (DEDMD), University Medical Centre Ljubljana, is responsible for Slovenian National Registry of Adult Patients with Diabetes.

□ Data collection for this registry started in **1982**.

□ Only limited number of diabetic patients are included at the time, different local databases in Slovenia.



BIRO in adult population

- DEDMD was associated partner in original EUBIROD project
- didn't participate with data from adult patients in the original EUBIROD project.
- **2013 BIRO report:** DEDMD started to test BIRO on data from adult population with pilot survey of 100 patients.
- **2014 BIRO report:** Extended analysis to almost 2000 patients. Data was collected from local EHR in single tertiary diabetes center.
- **2017 BIRO report:** Pilot analysis with BIRO was extended to one primary and secondary center

Primary care - "model practices"

- Several obstacles to quality diabetes care in family practices in the past:
 - The National Insurance Company did not fully cover regular laboratory testing
 - Education of patients was not available within the primary practice team.
 - The quality of care for patients was not followed.

From 2011, a new concept of work in family medicine

- Chronic care with a detailed description of the professional responsibilities of physicians, practice nurses and nurse practitioners.
- Nurse practitioners created or completed previously existing registers of chronic patients.

National institute of health

- Core public health indicators (incidence, prevalence by different criteria) are regularly compiled.
- Data sources for these indicators are databases defined in National Health Databases Act:
 - Causes of Death Registry,
 - National Hospital Discharge Database,
 - Ambulatory Prescribed Medicines Databases,
 - some other databases.
- The same data sources used for preparation of some quality indicators at national level; reported to international organizations (OECD).

M-health (telemedicine)

- Some pilot studies performed for evaluation of m-health approaches in Slovenia
 - United4Health project
 - Different providers solutions
 - some studies of telehealth Diabetes application

- Debates about national solution/layer

Governance- ongoing process

- Efforts to consolidate governance of Slovenian National Registry of Diabetes.
- *To formalize a national governance body, which would include different stakeholders and would be responsible for:*
 - *efficient and transparent national diabetes registry*
 - *standards for information exchange.*

Conclusions

- Advanced and modern database for pediatric registry with large majority of pediatric patients included
- Still a lot of work for adult population with diabetes
- EUBIROD network very important partner for future

