

B.I.R.O.

Best Information through Regional Outcomes

The role of BIRO in the implementation of the Diabetes EU Policy Recommendations

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DG-SANCO, European Commission
Luxembourg, 13 December 2006*

The problem

- Explosion in prevalence of Type 2 diabetes: EU rate 7.5%, +16% predicted growth by 2025
- Up to 50% of cases currently undiagnosed
- Inequalities in standards of diabetes care
- Dramatic rise in the costs of diabetes
50 billion euros spent yearly
2.5-15% National healthcare expenditure

EU Health Council 2004

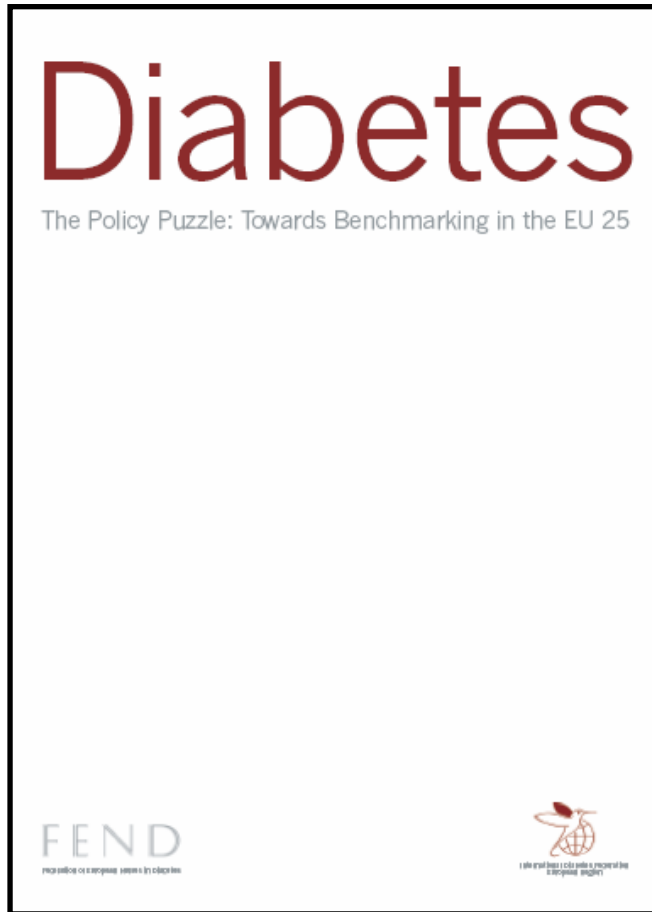
- There is merit in addressing diabetes in a coordinated, strategic & comprehensive way
- A European strategy for diabetes could make important contributions to reducing public health expenditure in member states

Increasing interest in Diabetes

- The EU Health Commissioner's statement in 2004 that he would *"give his full attention to the growing diabetes epidemic"*
- Austrian Presidency decision to make Type 2 diabetes one of its two key public health priorities

IDF/FEND Vienna Declaration

February 2006



The Diabetes Policy Audit



EU Policy Recommendations

Recommendations (1)

- EU:
 1. Encourage Exchange Best Practices
 2. Establish set of common criteria for collection, compilation and reporting of diabetes information
 3. Assess National Diabetes Plans
 4. Encourage development/implementation of national prevention programs
 5. Facilitate EU diabetes research and ensure wide dissemination of results

Recommendations (2)

- **Member States:**
 1. Collect, register, monitor, manage comprehensive diabetes data
 2. Collect, register and manage economic data
 3. Develop/implement National Diabetes Plans
 4. Develop/implement Primary Prevention Programs
 5. Develop/implement Screening Programs
 6. Develop/implement Secondary Prevention Programs (Disease Management)
 7. Establish holistic management (discrimination)
 8. Comprehensive training of healthcare professionals

EU Council Conclusions

June 2006: EU Ministers of Health adopted a set of Health Council Conclusions on the Promotion of Healthy Lifestyles and Prevention of Type 2 diabetes, agreeing that Member States should:

- Develop and implement national diabetes framework plans
- Improve the collection and reporting of diabetes epidemiological and economic data
- Adopt a multi-sectoral, multi-disciplinary approach to managing diabetes
- Develop comprehensive diabetes training for all healthcare professionals.
- The Conclusions also called upon the **European Commission** to prioritise diabetes, to promote best practice through networking & exchange between Member States and to facilitate and support European diabetes research.

The BIRO project

- **“Best Information through Regional Outcomes” (B.I.R.O.):**
 - Three years project in the field of diabetes funded by the Health Information Strand, Public Health Program, DG-SANCO
 - Start: 1st December 2005
 - Total cost: 1.2Mn€
 - Total contribution by the European Union: 715,000€
- ***Aim: “to provide European health systems with an ad hoc, evidence and population-based diabetes information system”***
- Seven partners from academia and governmental institutions, sharing an extensive experience in diabetes research/chronic care management
- Novel strategy for the routine collection of base parameters and the regular production of European summary indicators. The proposal targets better collection and integration of national and international data targeting regional networks, optimizing precision at the lowest cost through the active involvement of local users

BIRO Consortium



**Department of Internal Medicine
University of Perugia, Italy**



**Division of Medicine and Therapeutics
University of Dundee, Scotland, UK**



**Joanneum Research,
Graz, Austria**



**Department of Medicine,
University of Bergen, Norway**



**Institute of Diabetes "Paulescu",
Bucharest, Romania**



**Department of Medicine,
University of Malta, Malta**



**Department of Health Promotion,
Ministry of Health, Republic of Cyprus**



Regione Umbria



NOKLUS

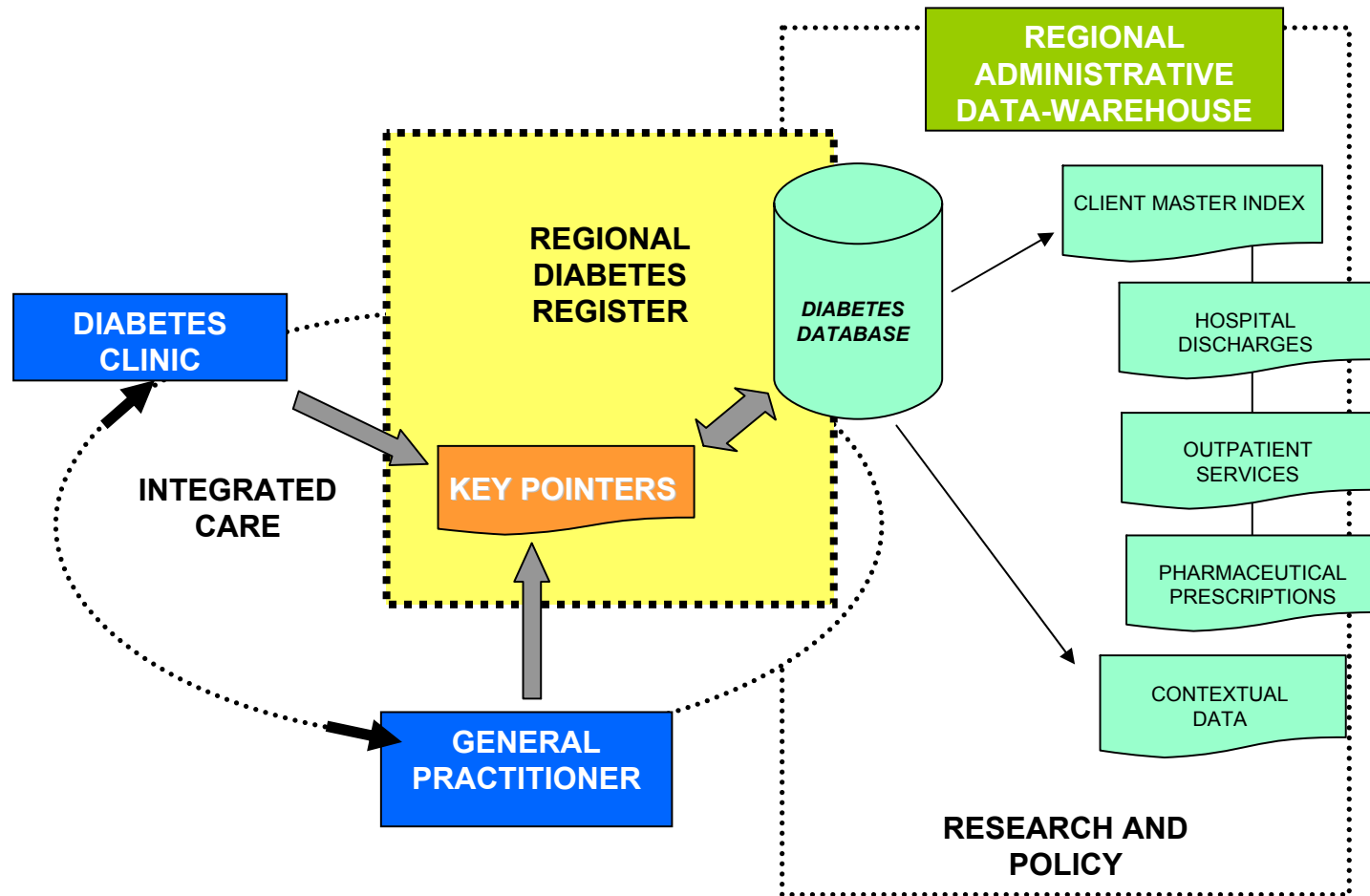


Public Health

BIRO approach

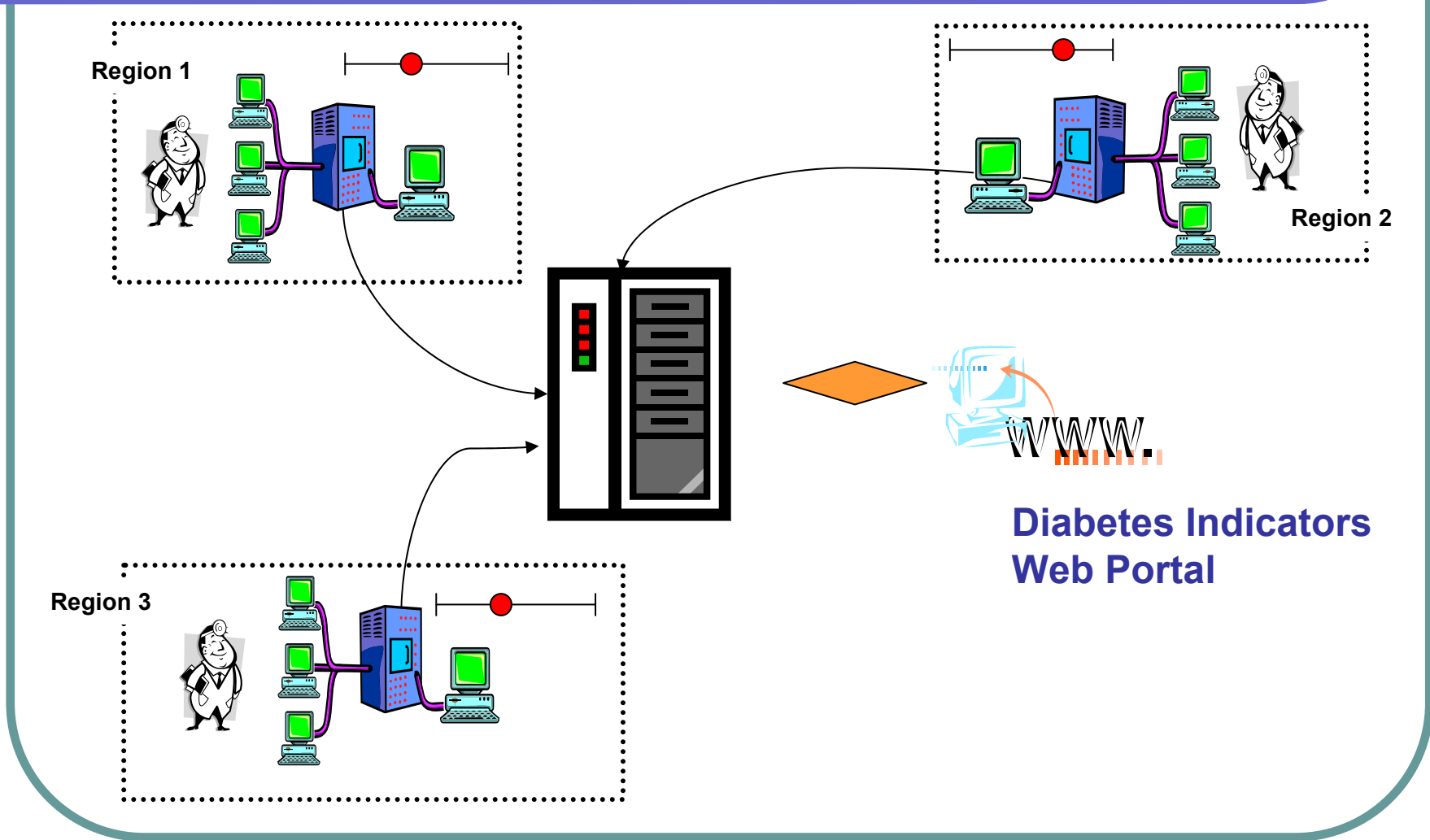
- Continuous, automated, standardized collection of longitudinal data from regional registers as a way to produce sustainable and reliable population-based indicators at the European level

Design (1) - The Regional Diabetes Register



Design (2) – Information Exchange

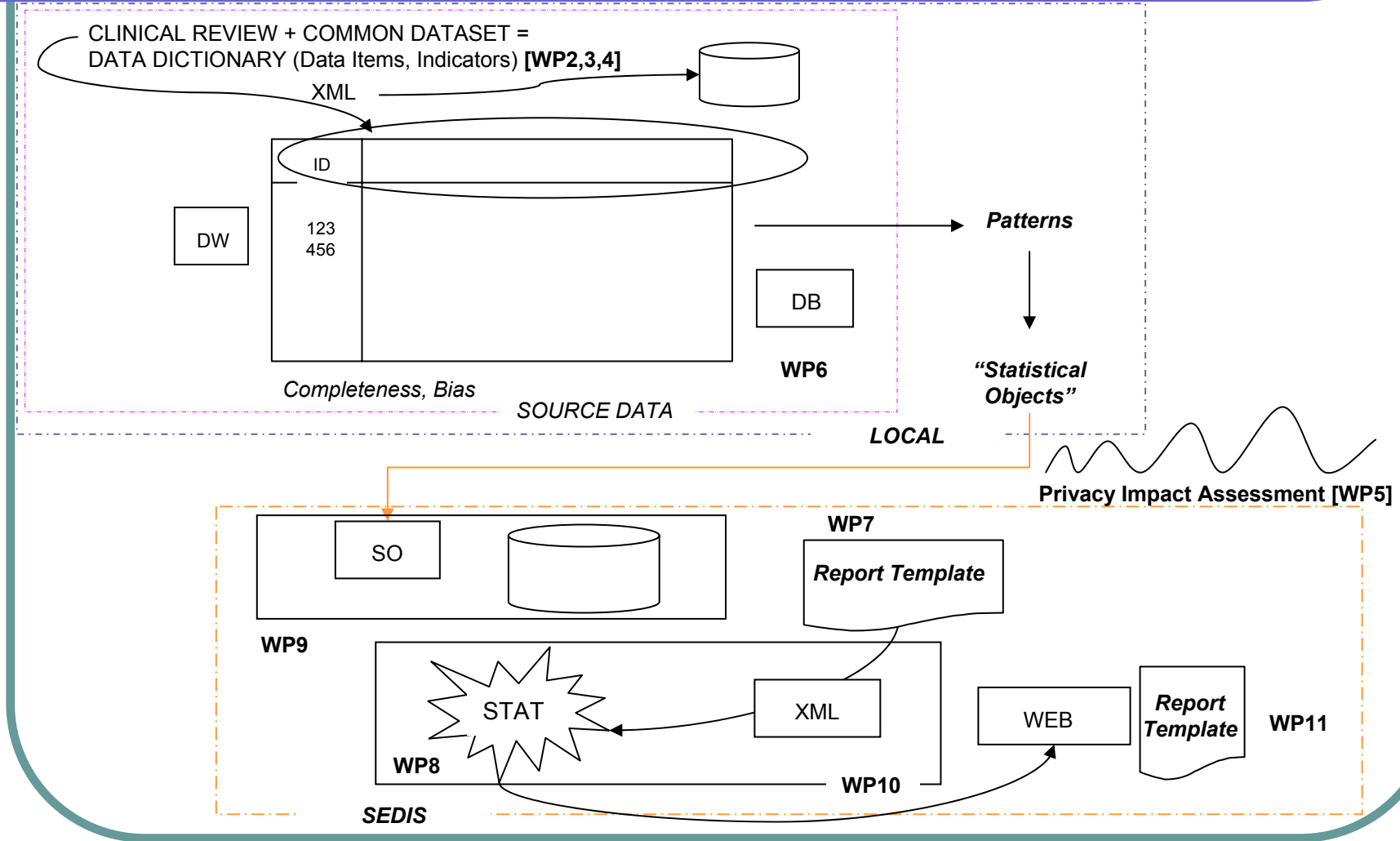
Shared Evidence-Based Diabetes Information System (SEDIS)



Design (3) BIRO logic

- Minimise burden for data collection
 - Data collection unaltered locally
 - Data translated to a BIRO common format
- Standardise definitions
 - Common dataset and data dictionary
- Standardise statistical methods and reporting tools
- Adopt modern software standards

Design (4) - BIRO Technology



Design (5) Multilevel outputs

Clinical

Criteria

Guidelines
Scientific evidence
Epidemiological models
Classification system

Data

Relational Database
Linked structures

Management



Analysis



Planning



Administration

System for analysis

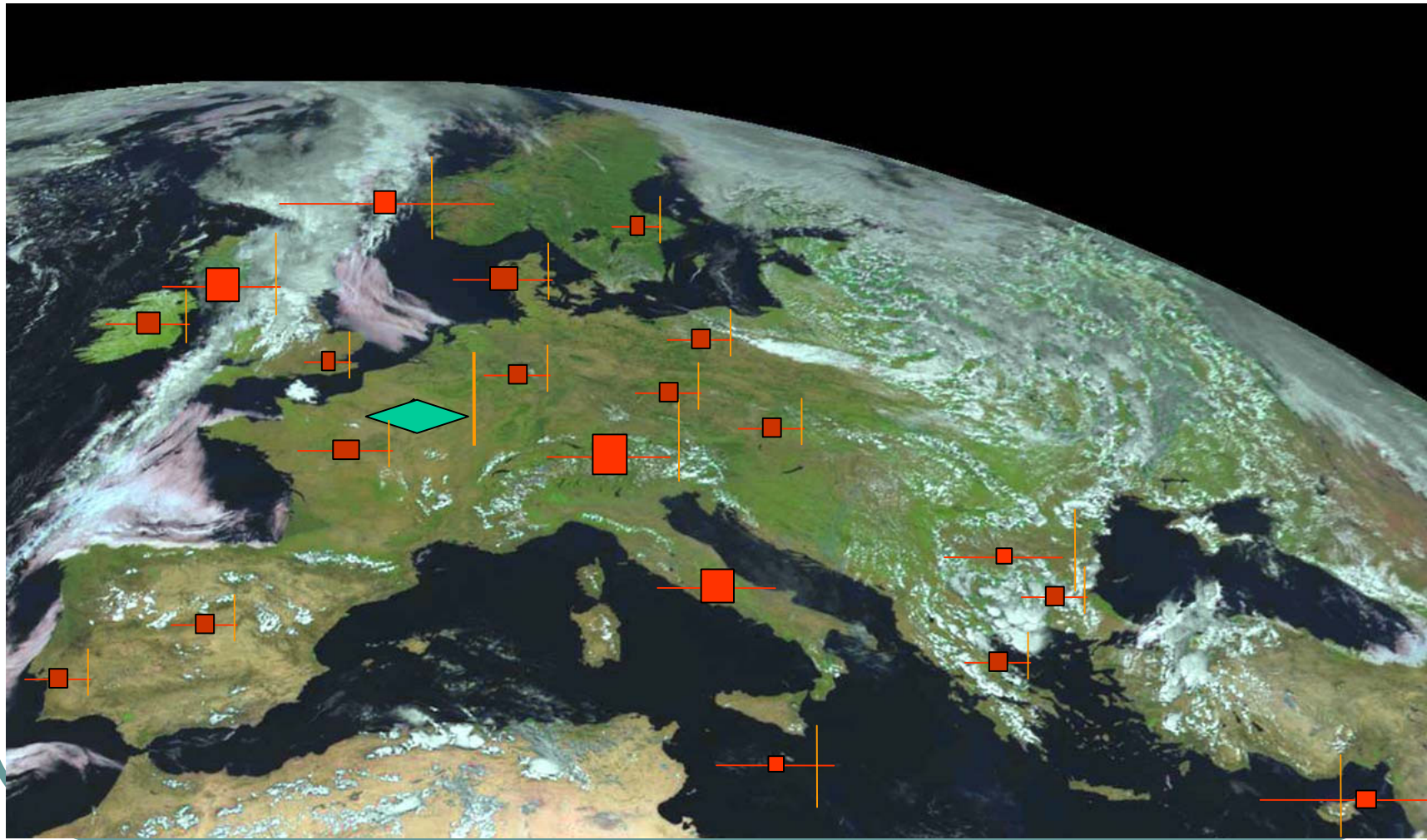
Reports
Statistical models

Citizens

Shared Care

Risk factors
Diagnosis
Procedures
Treatments
Outcomes

Design (6) - Overall Results



BIRO and the Diabetes EU Policy (1)

- EU:
 - 1. Exchange of best practice
 - Web Portal
 - 2. Establish set of common criteria for collection, compilation and reporting of diabetes information
 - Clinical Review
 - Common dataset
 - Data Dictionary
 - Privacy Impact Assessment
 - Database/Statistical Engine
 - Reports Template
 - 3. Facilitate EU diabetes research and ensure wide dissemination of results
 - Database/Statistical Engine

BIRO and the Diabetes EU Policy (2)

- **Member States:**
 - 1. Collect, register, monitor, manage comprehensive diabetes data
 - All WPs
 - 2. Collect, register and manage economic data
 - Clinical Review, Common dataset, Data Dictionary
 - Privacy Impact Assessment
 - Database/Statistical Engine
 - Reports Template
 - 3.2 Create an evaluation system to track health outcomes and cost-effectiveness
 - Database/Statistical Engine
 - 6.3 Monitor and measure health outcomes in secondary prevention
 - All WPs
 - 8.2 Establish quality of care measurement as part of normal practice for healthcare professionals
 - All WPs

WP Leaders



**Department of Internal Medicine
University of Perugia, Italy**

**COORDINATION, MANAGEMENT, DISSEMINATION
PRIVACY IMPACT ASSESSMENT
DATABASE/STATISTICAL ENGINES**



**Division of Medicine and Therapeutics
University of Dundee, Scotland, UK**

**COMMON DATASET
DATA DICTIONARY**



**Joanneum Research,
Graz, Austria**

**CLINICALREVIEW
COMMUNICATION SOFTWARE**



**Department of Medicine,
University of Bergen, Norway**

**REPORTS TEMPLATE
WEB PORTAL**



**Institute of Diabetes "Paulescu",
Bucharest, Romania**

TECHNOLOGY TRANSFER



**Department of Medicine,
University of Malta, Malta**

EVALUATION



**Department of Health Promotion,
Ministry of Health, Republic of Cyprus**



Regione Umbria



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Public Health

Results

- After 1 yr:
 - n. 4 meetings
 - 1st Year Investigator Meeting Malta June 2006
 - Deliverables:
 - Clinical Review
 - Common Dataset
 - Preliminary Privacy Impact Assessment
 - 1st Year Evaluation Report
 - Poster IDF Cape Town December 2006
 - Website + Forum

Activity 2007

- Dundee Technical Meeting (April)
- Deliverables: Data Dictionary, Privacy Impact Assessment, Database Engine, Communication Software, Report Template
- Statistical Analysis of Test Datasets
- 2nd Investigator Meeting, Cyprus (end May)
- BIRO Paper(s)
- Evaluation Report

Test Datasets

- June 2007 (Region, number of subjects)
 - Umbria (IT): 30,000
 - Tayside (UK): 15,000
 - Styria+Carinthia (AT): 40,000
 - Cyprus (CY): 5,000
 - Malta (MT): 25,000

www.biro-project.eu



B.I.R.

- About
- Partners
- Objectives
- Activities
- Documents
- Restricted Area
- Links
- Forum
- Results

Best Information through Regional Outcomes
Building a Shared European Diabetes Information System

A Public Health Project funded by the European Commission
Health Information Strand, DG-SANCO 2005

[Latest Updates](#)

- December, 11th 2006 - Added [B.I.R.O. Poster at last IDF Congress](#) documents downloadable from the Results area
- November, 27th 2006 - Added [EU Policy Recommendations](#) documents downloadable from the Documents area
- November, 14th 2006 - Added [Graz Meeting Minutes](#) downloadable from the Restricted area
- October, 18th 2006 - Added the first Result ([Clinical Review](#)) downloadable from the new Results area
- October, 4th 2006 - Added the official downloadable B.I.R.O. Brochure

Website

Forum



B.I.R.O. Forum - The European Diabetes Project's Forum - Mozilla Firefox

http://biro-project.eu:8080/forum/forums/list.page

B.I.R.O. Forum - The European Diabetes Project's Forum

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Forums			
	Topics	Messages	Last Message
B.I.R.O.			
Restricted Forum B.I.R.O. Consortium restricted forum	21	62	13/12/2006 00:05:00 fabrizio
The B.I.R.O. Blog In this forum you can write all you think about B.I.R.O. and all related things Moderators: B.I.R.O. Consortium	3	8	08/06/2006 10:57:59 Pietro
Bugs and Problems If you find any bugs or problems write a message in this forum	1	3	14/07/2006 12:30:59 sheek

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Feedback

- Value of the BIRO approach for the implementation of EU diabetes policy
- Expansion of its geographical coverage
- Interoperability between BIRO and the EU web portal

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