



Israeli National Diabetes Register

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Outline

- Israeli Health Care System
- Pre-registry data
- National Diabetes Register Framework
- Diabetes Status in Israel



Israel Health System

- National Health Law
- All citizens have medical insurance covering outpatient +inpatient medical services
- Outpatient services organized through 4 health providers
- The 4 HMOs use EMRs (since 1998) and advanced IT systems
- All hospitals have EMR to some extent

Pre - registry status

Three main sources for national diabetes data :

Diabetes type 1 registry

- Voluntary reports of new cases among 0-17 years
- Unidentified - Limited data, no follow up
- Coverage about 70%.

The National Quality indicators for community healthcare Program

- Joint partnership of the 4 HMOs & academic research institutes
- Data is extracted uniformly from EMR
- Each HMO contribute aggregated data
- Results published yearly, publicly available
- Provides snapshot of prevalence, process and outcome indicators
- No follow up
- No data about complications



Health surveys

- Based on self report
- Performed every 2-3 years
- Better for prevalence than for incidence
- Limited clinical data
- Representation issues- no data about small sub-populations

National Diabetes Registry -goals

- Epidemiological data
 - Prevalence, incidence
 - Risk groups
 - Time trends
- Disease course
 - Incidence of complications
 - Mortality rate
- Clinical indicators

Establishment of a national Diabetes Registry

- Formed in 2013
- Full partnership of the 4 HMOs and the Ministry of Health
- Yearly report based on data extracted from EMR
- Coded ID numbers
- Can be cross linked with data sources using same coding mechanism

Diabetes Registry

- Case definition - one or more of the following criteria
 - $HbA1c \geq 6.5$ mg%
 - Blood glucoses ≥ 200 Mg% - on 2 occasions within the previous year, at least one month apart
 - Purchase of anti-glycemic drugs in 3 separate months
- Data collected:
 - demographic variables, weight and height, smoking status
 - lab results (HbA1c, proteinuria, lipids), insulin treatment

Diab. Reg.- Initial data

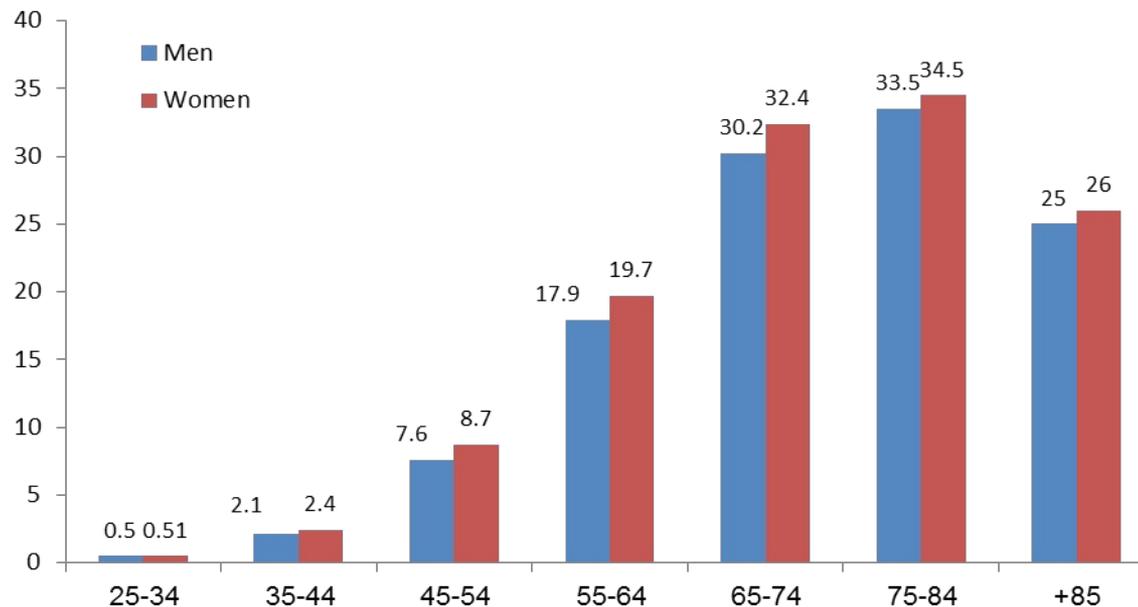
- Reports submitted for 2012, 2013.
- Data analysis is in process
- Positive predictive value -93%
- Estimated sensitivity 80%-85%
- Change of Criteria for next reports is being discussed



.Diab. Reg.- Initial data cont

Diabetes prevalence in adult population is 9.6%

Diabetes prevalence by age and gender population



.Diab. Reg.- Initial data cont

% performance of blood tests in current year

Age	HbA1c test %	LDL test %
18-24	80.2	75.8
25-34	80.5	75.6
35-44	83	74.7
45-54	85.7	79.5
55-64	89	85.7
65-74	92	90.7
75-84	91.5	92.2
+85	86.9	88.7
Total	89.3	87.1



Diabetes Registry - Future directions

- Linkage with other databases (hospitalizations, population register) - in process
- Adding data items - complications, treatments
- Establishing pre-diabetes registry

