

changing diabetes barometer international seminar

Oxford, 8-9 December 2008

Italian Changing Diabetes Barometer

Antonio Nicolucci

Department of Clinical Pharmacology
and Epidemiology
Consorzio Mario Negri Sud
S. Maria Imbaro, Italy



The Italian Health Care System

- Universal coverage
- Availability of ~650 diabetes outpatient clinics
- Diabetes care provided by GPs and diabetes clinics
- Most diabetes clinics use computerized medical record systems

AMD Annals



In recent years, a continuous improvement effort has been implemented by a network of 130 diabetes clinics, all sharing the same system for data extraction from electronic medical records (AMD data file)

A set of quality indicators, identified by the Associazione Medici Diabetologi (AMD), is used to describe patterns of diabetes care

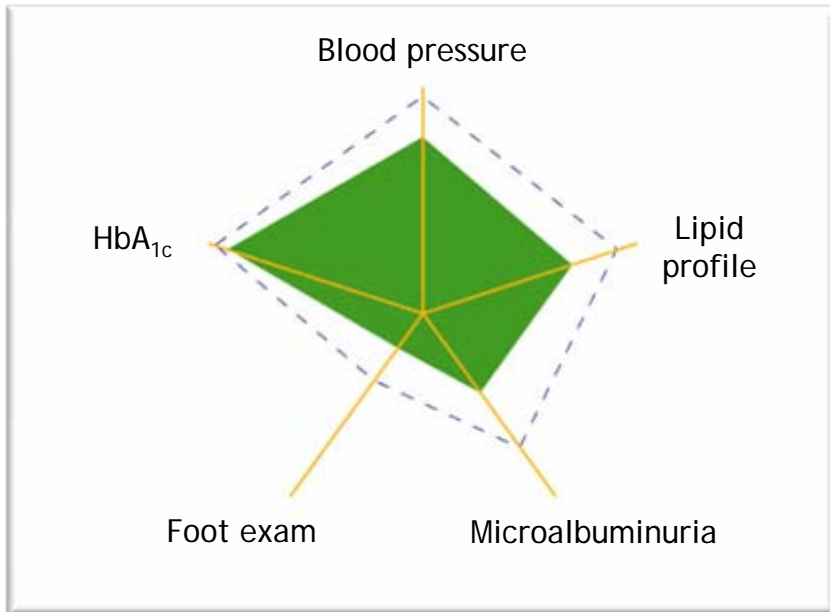
Data from all diabetes outpatient clinics are centrally analyzed anonymously

Results are summarized in an annual publication (AMD Annals), reporting the information on over 200,000 patients

AMD Annals

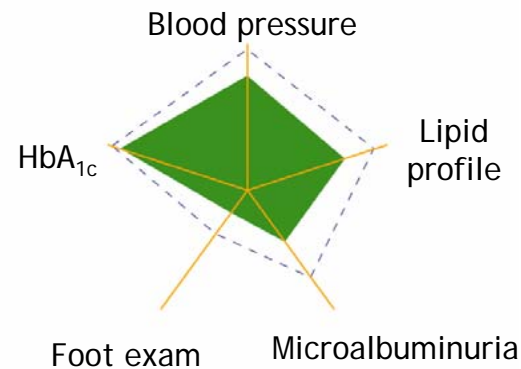


All indicators are compared with reference values, or “gold standard,” established by identifying the best performers. The gold standard for every indicator is represented by the 75th percentile of the ordered distribution of the results obtained in the centres



	GOLD STANDARD	WHOLE SAMPLE
<i>HbA_{1c}</i>	97%	91%
<i>Blood pressure</i>	96%	78%
<i>Lipid profile</i>	91%	70%
<i>Microalbuminuria</i>	74%	44%
<i>Foot exam</i>	37%	19%

AMD Annals



The “best performers” approach is a key feature of the continuous quality improvement initiative

Clinicians are not faced with theoretical standards, often perceived as unrealistic in their structural and organizational setting, but rather with the performance of centres operating under similar conditions

By comparing their own performance with that of centres reaching better overall results, specialists can easily realize the real margin of improvement made possible by simply increasing the level of attention to disease monitoring and treatment

Obstacles/limitations

- Data completeness
- Final outcomes difficult to evaluate
- Suboptimal use of the information at the local level
- Need to facilitate the use of information by policy makers
- Lack of information on GPs performance
- Mainly physician-driven, need to involve other professionals

Five-Year Impact of a Continuous Quality Improvement Effort Implemented by a Network of Diabetes Outpatient Clinics

CLUB DIABETE SICILI@*

Diabetes Care 31:57–62, 2008

- Preliminary data show that benchmarking activities similar to the AMD initiative (best performers approach) can dramatically improve the quality of diabetes care
- AMD Annals now include regional analyses, to facilitate the use of indicators at the local level
- An ad hoc project will be launched in 2009 in three Italian regions to evaluate the impact of the Annals initiative on quality of care and patient centred outcomes

The Changing Diabetes Barometer pilot project: aims

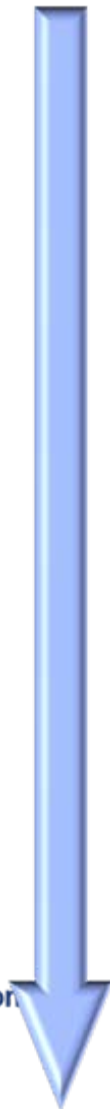
- To evaluate whether an educational approach based on feedback of regional performance measures (regional AMD Annals), coupled with the best performer approach, is effective in improving the quality of diabetes care (process and intermediate outcome measures)
- To evaluate the impact of these benchmarking activities on patient centred outcomes (quality of life, patient satisfaction)

The Changing Diabetes Barometer pilot project: methods



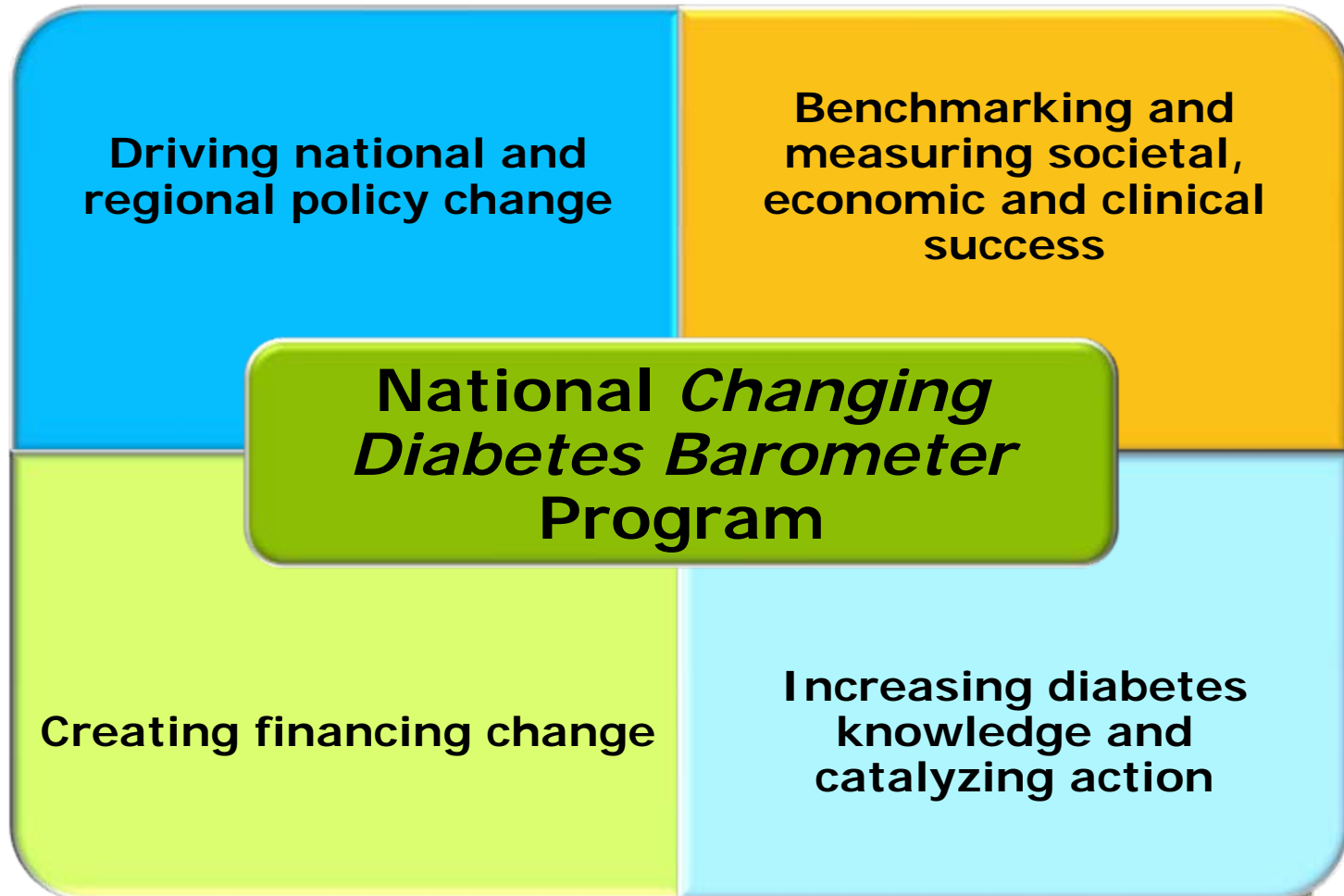
- Three Italian regions
- Clinics participating in the AMD Annals (~ 30)
- Data on all the patients seen in the diabetes clinics during the year will be obtained using the AMD Annals approach
- A sample of 150 patients in each clinic will be asked to fill in study questionnaires on two separate occasions (baseline and after 18 months)
- Results will be discussed during local meetings involving health professionals

The Changing Diabetes Barometer pilot project: timing



T0	Annals data collection, Pts questionnaires
T1 (+3 M)	1° meeting (Quality indicators)
T2 (+6 M)	2° meeting (QoL, satisfaction)
T3 (+12 M)	Annals data collection
T4 (+15 M)	3° meeting (Quality indicators)
T5 (+18 M)	Pts questionnaires
T6 (+24 M)	Annals data collection
T7 (+27 M)	Final assessment

National *Changing Diabetes Barometer* Programme



Implementing at the national level the Changing Diabetes Barometer Project

D.A.W.N.
Diabetes Attitudes
Wishes & Needs

ANNALS
Quality Indicators
in Diabetes Care

COSTS OF
DIABETES
KPI on Diabetes
Costs

Barometer on
Diabetes
and lifestyle

Ensure measurability and transparency

To give a picture of the complexity and seriousness of diabetes

To create objectives and indicators to a national level to promote change

Thank you

**changing diabetes barometer
international seminar**
Oxford, 8-9 December 2008



Further information

**changing diabetes barometer
international seminar**
Oxford, 8-9 December 2008



AMD Indicators



Process measures:

- HbA1c
- Blood pressure
- Lipid profile
- Microalbuminuria
- Foot examination
- Eye examination
- Use of selected drug classes

Intermediate outcome measures:

- HbA1c ≤ 7.0
- HbA1c > 8.0
- BP $< 130/85$ mmHg
- BP $> 140/90$ mmHg
- LDL-C < 100 mg/dl
- LDL-C > 130 mg/dl

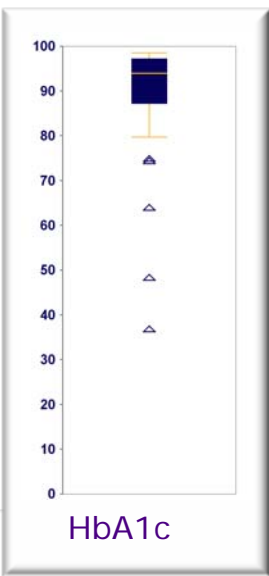
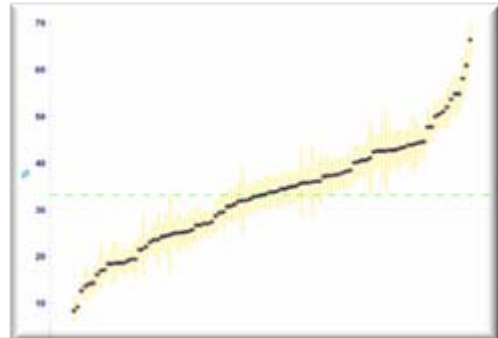
Final outcome measures:

- CV events
- Blindness
- Amputations
- ESRD

AMD Annals



Statins



HbA1c

Baseline Quality-of-Care Data From a Quality-Improvement Program Implemented by a Network of Diabetes Outpatient Clinics

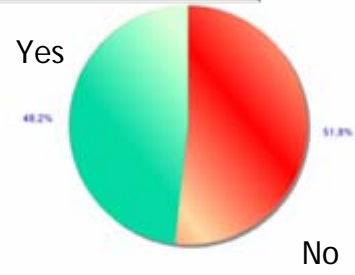
MARIA C.E. ROSSI, MSc¹
 ANTONIO NICOLUCCI, MD¹
 ADOLFO ARCANGELI, MD²
 ANTONINO CIMINO, MD³
 GUALTIERO DE BIGONTINA, MD⁴
 CARLO GIORDA, MD⁵
 ILLIDIO MELONCELLI, MD⁶

FABIO PELLEGRINI, MSc¹
 UMBERTO VALENTINI, MD³
 GIACOMO VESPASIANI, MD⁶
 ON BEHALF OF THE ASSOCIAZIONE MEDICI
 DIABETOLOGI (AMD) ANNALS STUDY
 GROUP*

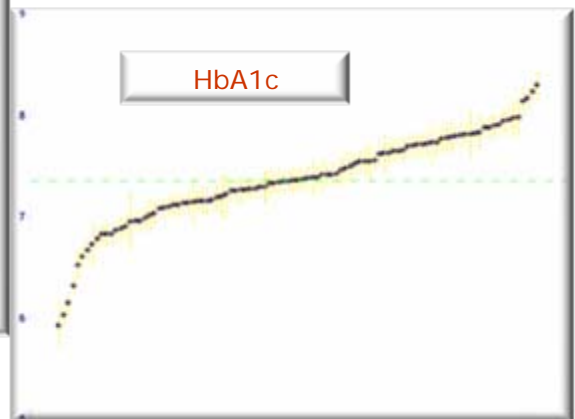
Diabetes Care 31:2166–2168, 2008



DM2



HbA1c ≤ 7.0



HbA1c

