



Regione Lombardia  
Sanità

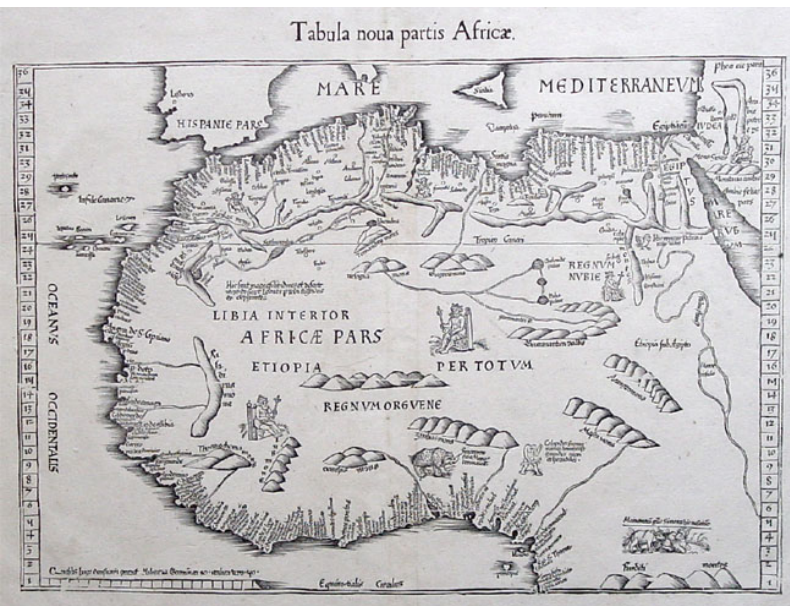
# **THE USE OF INFORMATION SYSTEMS FOR IMPROVING QUALITY OF CARE IN SEVERE MENTAL ILLNESS.**

A. Lora

**NO CONFLICTS OF INTEREST**

# MEASURING QUALITY OF MENTAL HEALTH CARE

- **Very limited knowledge of the quality** of care in mental health services
- The **quality** of routine mental health care is not optimal, it **can vary greatly** from region to region and among providers
- There is an **urgent need** of evaluating quality of care



# ADEQUACY OF CARE IN LOMBARDY (2007)

Adequacy of Treatment for Patients With  
Schizophrenia Spectrum Disorders and  
Affective Disorders in Lombardy, Italy

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PSYCHIATRIC SERVICES

## MINIMALLY ADEQUATE TREATMENT

*(Wang et al. 2007)*

.. At least two months of  
specific psychotropic  
drugs

+

4 psychiatric visits

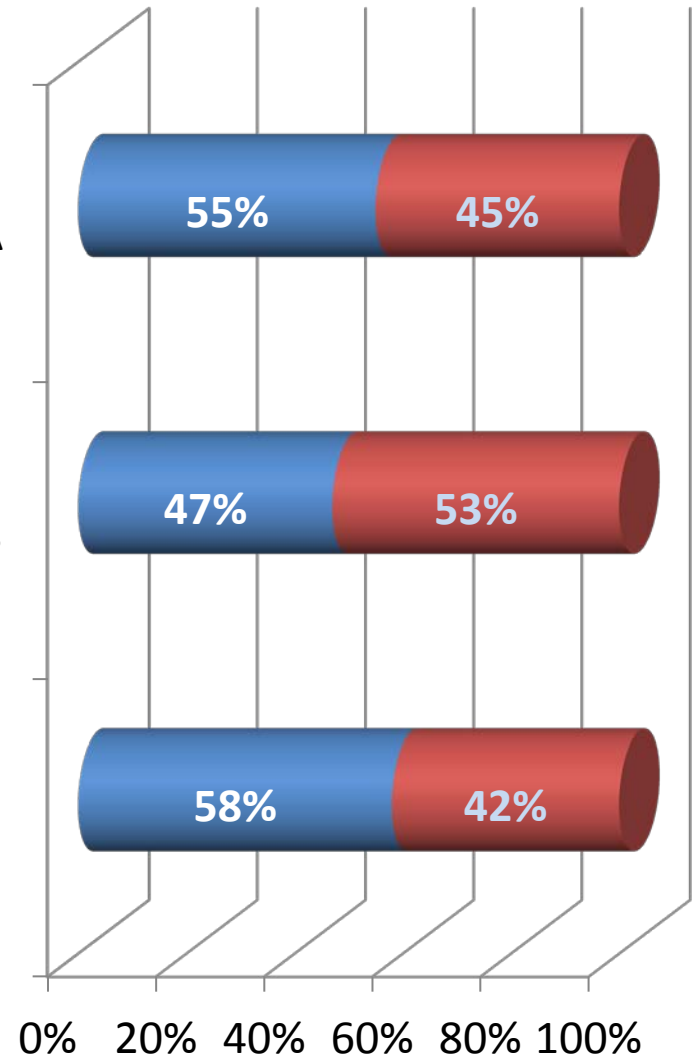
OR *(for depression)*

8 psychoterapeutic  
sessions

SCHIZOPHRENIA

BIPOLAR DIS.

DEPRESSION



■ INADEQUATE ■ ADEQUATE

# CLINICAL INDICATORS, THE TOOLS FOR EVALUATING QUALITY



- describing the performance that should occur for a particular type of patient or for related outcomes
- focused on quality of care (not on cost or health care utilization),
- measuring the technical quality provided (not interpersonal or consumer perspectives),
- related to the evidences (Guidelines)
- be constructed from administrative data (rather than requiring dedicated data collection or non-standardized data elements).

# GOALS OF THE CLINICAL INDICATORS



- to document the quality of care,
- to make comparisons (benchmarking) over time between mental health services,
- To support accountability, regulation, and accreditation,
- as well as quality improvement



# PROJECT STEPS

# SYSTEMATIC REVIEW

- Literature review from online databases (PubMed, PsycInfo, Embase, etc) grey literature and reports from governments and professional organizations (1990 -2010).
- 281 clinical indicators







## DELPHI ROUNDS

- for reducing the number of indicators, enhancing validity
- 25 SIEP experts
- 3 Delphi rounds



**SCHIZOPHRENIC  
DISORDERS**  
41 indicators

**BIPOLAR DISORDERS**  
33 indicators

**DEPRESSIVE DISORDERS**  
14 indicators

# THE FINAL SET OF CLINICAL INDICATORS

## QUALITY DIMENSIONS

- Accessibility
- Continuity
- Appropriateness of psychosocial treatments
- Appropriateness of pharmacological treatments
- Safety
- Sentinel events

## TREATMENT PHASES

- Onset episode
- Acute episode
- Maintenance
- Common elements

# 4

## MERGING HEALTH INFORMATION SYSTEMS

MENTAL HEALTH  
ACTIVITIES

GENERAL HOSPITAL  
ADMISSIONS

CLINICAL INDICATORS AT PATIENT LEVEL  
(*UNIQUE PATIENT IDENTIFIER*)

HEALTH  
INTERVENTIONS  
AT AMBULATORY  
LEVEL

PHARMACEUTICAL  
PRESCRIPTIONS





# **QUALITY OF CARE FOR SCHIZOPHRENIC PATIENTS IN LOMBARDY**

# THE SAMPLE



- **28,227 patients with schizophrenic disorder** (ICD10 F2) treated in 2009 in mental health services of Lombardy (23% of the total one-year treated prevalence)
- **1 year of data extraction for all the patients:** for each patient a period of 365 days after his/her first contact in 2009 with DMHs has been chosen for extracting his/her records from health databases of Lombardy Region.

# FIRST EPISODE

**First episode patients** are defined those who aged less than 35 years old and have had the first contact with the Department of Mental Health (DMH) during 2009

Patient's age at first contact with mental health services	27.8 years
Patients with a waiting time >7 days for the first CMHC outpatient visit	18%
Patients with continuity of care in the first year of treatment <i>[at least one contact, both outpatient contact and/or admission in hospital and residential wards, every 90 days in the 365 days after their first contact in the year]</i>	60%
Mean number of patient's contacts with CMHCs per month	2.6
Mean number of carers' contacts with CMHCs per month	1.3
Patients treated with psychotherapy <i>(at least 3 sessions)</i>	23%
Patients treated with psycho-education <i>(at least 4 sessions)</i>	9.4%
Patients with multi-professional activities in CMHC	77%
Patients adherent to antipsychotic treatment after 180 days after the first episode	11%
Patients, who are prescribed for the first time SGAs, with appropriate monitoring for hyperglycaemia and hyperlipidemia <i>(at least 2 checks during the first 12 weeks after the beginning of the therapy)</i>	14%

# THE ACUTE EPISODE AND THE EARLY POST ACUTE PERIOD

Unplanned readmissions within 4 weeks	21%
Admissions in General Hospital Psychiatric Ward (GHPW) with a length of stay greater than 30 days	12%
Compulsory admissions	12%
Patients physically restrained at least once yearly during hospitalization in GHPW	13%
Patients who receive a mental health outpatient visit within 14 days from discharge from GHPW	52%
Patients with continuity of clinical monitoring after hospitalisation ( <i>at least one psychiatric visit per month in CMHC during the six months after discharge</i> )	27%
Patients with home care following GHPW discharge ( <i>at least one home visit in the two weeks following the discharge</i> )	7%
Patients with appropriate dosage of antipsychotic drug at discharge ( <i>i.e. between 300-1000 mg CPZ equivalent</i> )	59%

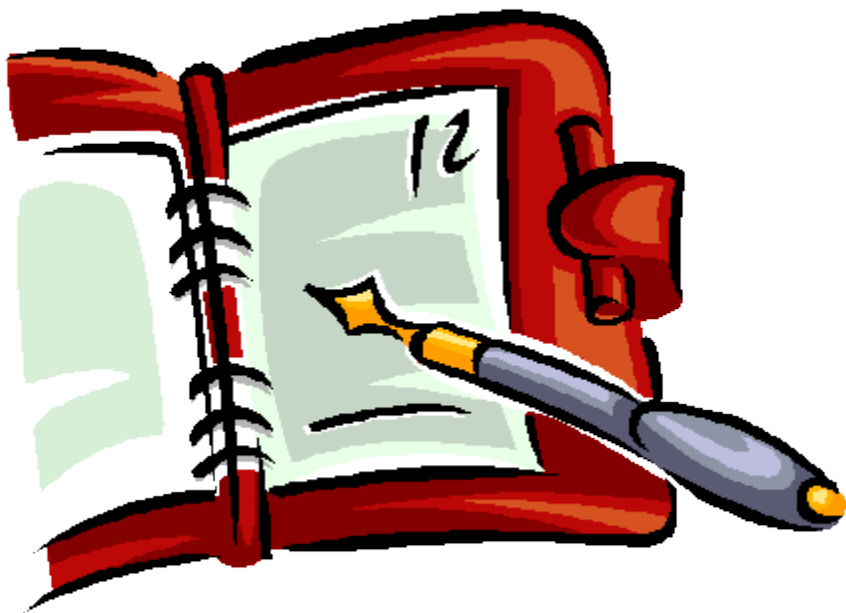
# MAINTENANCE AND PROMOTION OF THE RECOVERY

Treatment gap ( <i>the absolute difference between the true prevalence of a disorder in the community and the proportion of affected individuals who are treated in MHS for the disorder</i> ).	40%
Patients with continuity of care ( <i>at least one contact, both outpatient contact and/or admission in hospital and residential wards, every 90 days in the 365 days after their first contact in the year</i> )	67%
Patients with at least 6 CMHC contacts per year	67%
Carers with at least 3 CMHC contacts specifically addressed to family members per year	11%
Patients treated with psychotherapy ( <i>at least 3 sessions</i> )	12%
Patients treated with psycho-education ( <i>at least 4 sessions</i> )	1%
Patients involved in social, expressive, practical-manual, and physical activities	16%
Patients who received support to employment	5%
Patients who received support to independent living	1%



# MAINTENANCE AND PROMOTION OF THE RECOVERY

Patients adherent to antipsychotic treatment after 180 days in the maintenance phase	49%
Patients who are prescribed a single type of antipsychotic drug	74%
Patients, not responding adequately to antipsychotic treatment, treated with clozapine	14%
Patient with appropriate frequency and dosage of depot/long-acting injectable antipsychotics	98%
Patients with appropriate clinical monitoring of depot/long-acting injectable antipsychotics ( <i>at least one psychiatric visit every 90 days</i> )	89%
Patients, who are prescribed SGAs, monitored for hyperglycaemia and hyperlipidemia ( <i>at least 1 check, if the patients was treated at least 180 days</i> )	47%
Patients with at least one psychiatric visit within 90 days of interrupting or stopping treatment with an antipsychotic	49%
Mortality ( <i>SMR</i> )	2.01



**LOOKING FORWARD**

# ADVANTGES

GOOD  
NEWS,  
BAD  
NEWS

- Clinical indicators showed **strengthens and weaknesses** of the mental health system in Lombardy
- monitoring routinely quality of care from health information system data is **feasible**
- placing **no burden** on mental health professionals
- a **regional dashboard** of clinical indicators is needed, benchmarking DMHs

GOOD  
NEWS,  
BAD  
NEWS

## LIMITS

- the inclusion **solely** of **indicators** that could be drawn **from current information system data**
- the lack of information on the **clinical and psychosocial problems of the patients** for severity adjustment and eligibility
- The lack of the **user's point of view** on quality
- At service level **feed back to the clinicians** and **quality improvement projects** are needed

# WHERE ARE WE GOING? - 1



# MOVING TOWARDS A CLINICALLY ORIENTED INFORMATION SYSTEM

*(McGlynn et al., 1998)*

# WHERE ARE WE GOING? - 2

**MONITORING**

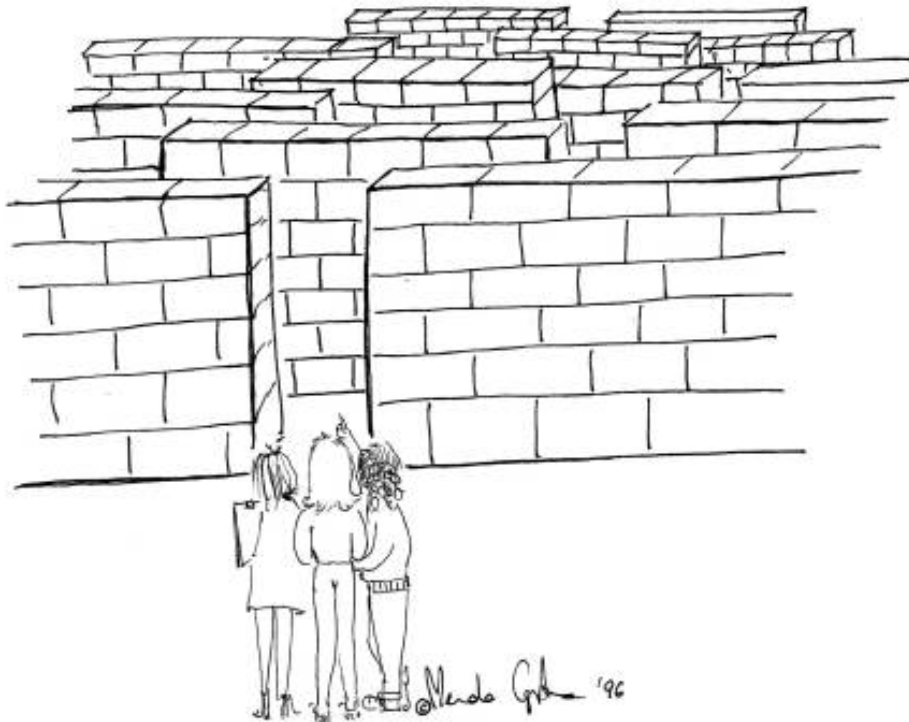
**EVALUATION**



**FROM ADMINISTRATIVE DATA BASES**

# HELPING PEOPLE IN THE LABYRINTH OF THE MENTAL HEALTH SYSTEM

THE MENTAL HEALTH SYSTEM



In Italy Ministry of Health developed:

- **Clinical pathways** for severe mental illness
- **Clinical indicators** for monitoring these clinical pathways