



WHO
Collaborating
Centre

DSPMC - PSY

Venezia, 16 dicembre 2011

Valutazione economica nei servizi di salute mentale

Francesco Amaddeo

Sezione di Psichiatria e Psicologia Clinica

Dipartimento di Sanità Pubblica e Medicina di Comunità

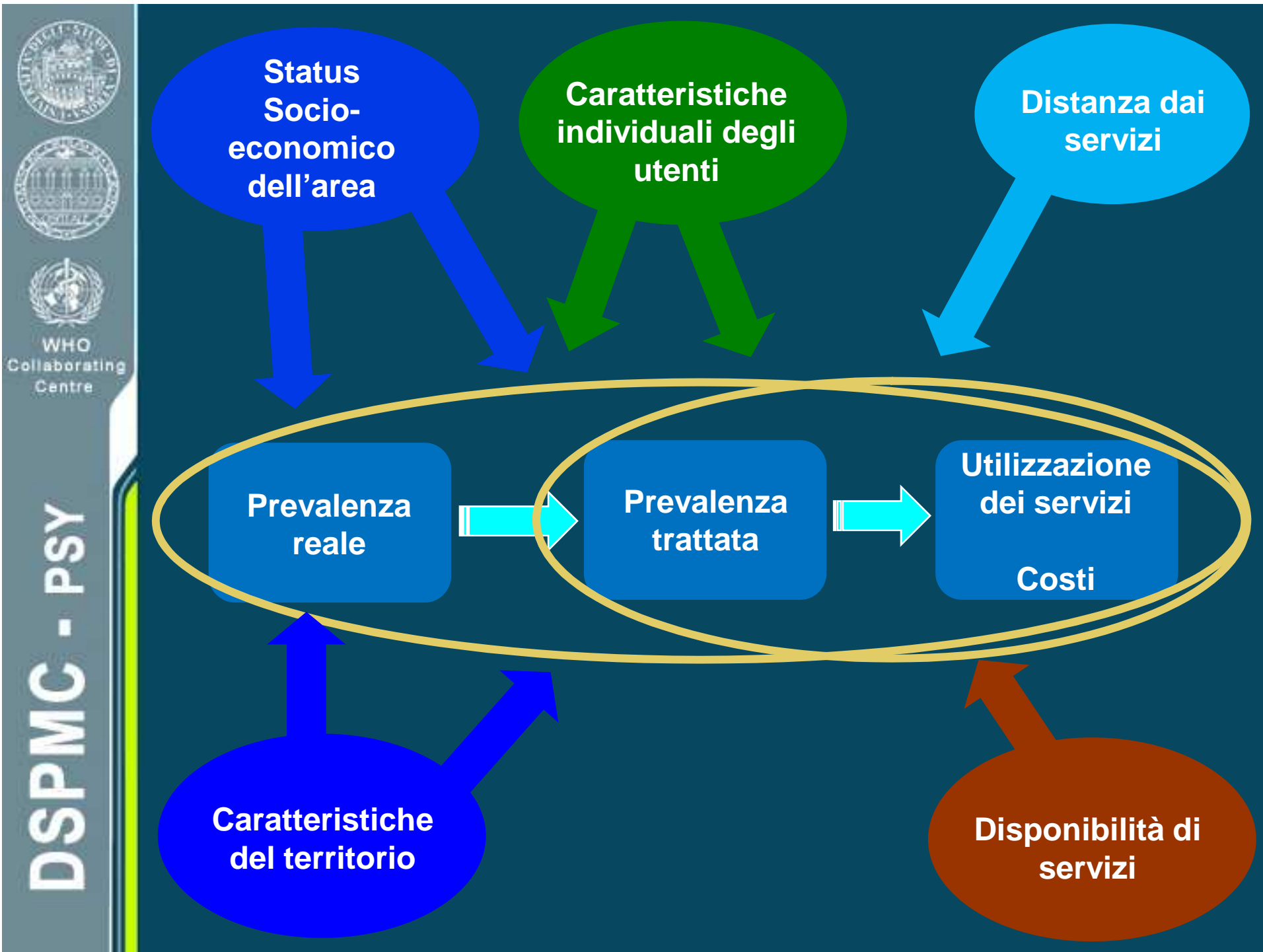
Università di Verona



WHO
Collaborating
Centre

DSPMC - PSY

- **Quale trattamento?**
- **A chi?**
- **Chi paga e come?**
- **Quanto costa?**

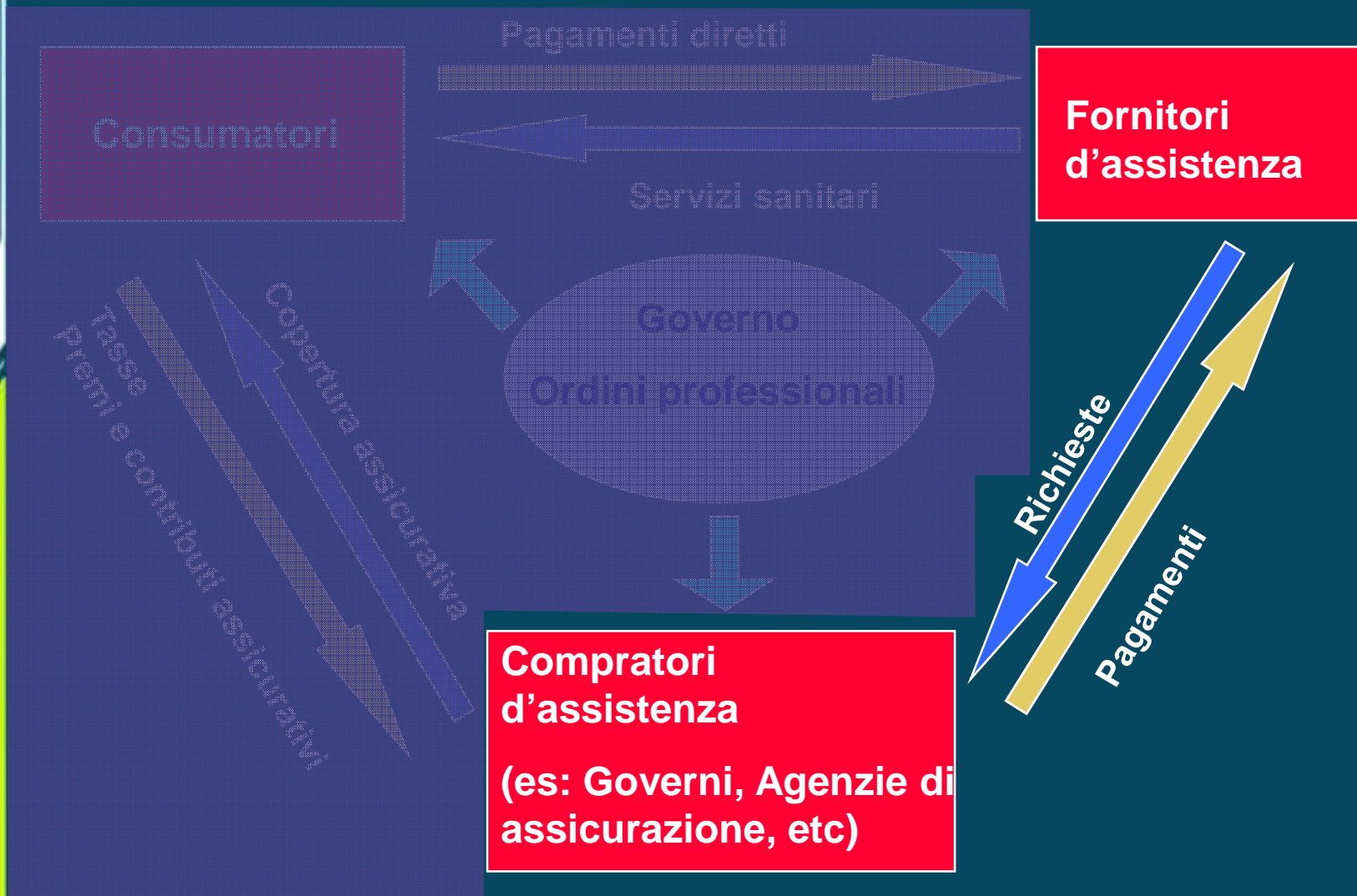




WHO
Collaborating
Centre

DSPMC - PSY

Il sistema di finanziamento dell'assistenza sanitaria (adattata da WHO, 1993)





Le sfide per l'allocazione delle risorse

- (mal)distribuzione
- inappropriatazza
- inflessibilità
- dislocazione
- tempistica

(mal)distribuzione delle risorse



- servizi nei posti sbagliati
- accessibili solo a chi può pagare
- concentrati in gradi strutture (“lontane” geograficamente, socialmente e culturalmente)
- costi elevati dei trasporti
- esclusione budgetaria (per esempio, persone con demenza o ritardo mentale che non vengono sufficientemente protette entro altri budget)

Ma ...
avere risorse
concentrate consente di
difenderle meglio....



WHO
Collaborating
Centre



ELSEVIER

Health & Place ■ (■■■) ■■■-■■■

2006

HEALTH
& PLACE

www.elsevier.com/locate/healthplace

The ecological relationship between deprivation, social isolation and rates of hospital admission for acute psychiatric care: a comparison of London and New York City

Sarah Curtis^{a,*}, Alison Copeland^a, James Fagg^a, Peter Congdon^a,
Michael Almog^b, Justine Fitzpatrick^c

^aDepartment of Geography, Health Research Group, Queen Mary College, University of London, London, UK

(dark shading = more deprived)

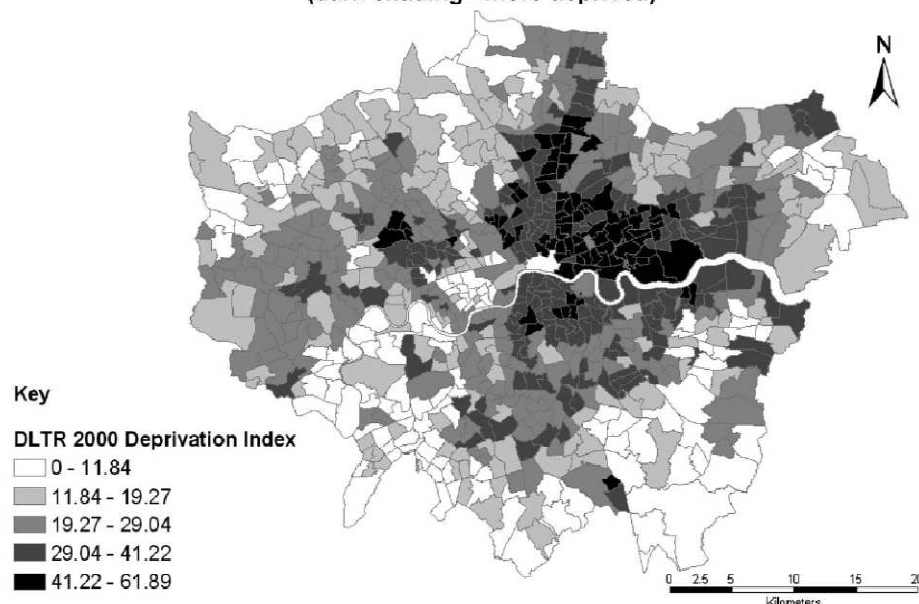


Fig. 1. ODPM index of deprivation 2000; London wards.

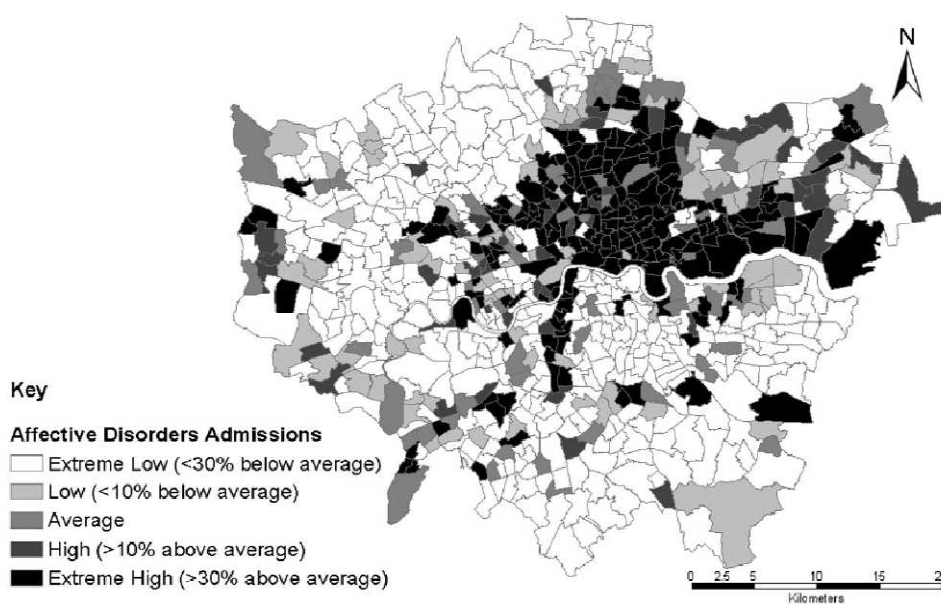


Fig. 3. Standardized admission ratios: acute psychiatric admissions, London wards c. 1998: males 15-64, affective disorders.



WHO
Collaborating
Centre

DSPMC - PSY



ELSEVIER

Social Science & Medicine 61 (2005) 2096–2105

2005

SOCIAL
SCIENCE
&
MEDICINE

www.elsevier.com/locate/socscimed

A census-based socio-economic status (SES) index as a tool to examine the relationship between mental health services use and deprivation

Juan Eduardo Tello, Julia Jones, Paola Bonizzato, Mariangela Mazzi, Francesco Amaddeo*, Michele Tansella

Department of Medicine and Public Health, Section of Psychiatry and Clinical Psychology, University of Verona, Policlinico G.B. Rossi, P.le L. Scuro 10, 37134 Verona, Italy

Available online 26 May 2005

Acta Psychiatr Scand 2005; 112: 215–223
All rights reserved
DOI: 10.1111/j.1600-0447.2005.00558.x

2005

Copyright © Blackwell Munksgaard 2005

ACTA PSYCHIATRICA
SCANDINAVICA

Does socioeconomic status affect the use of community-based psychiatric services? A south Verona case register study

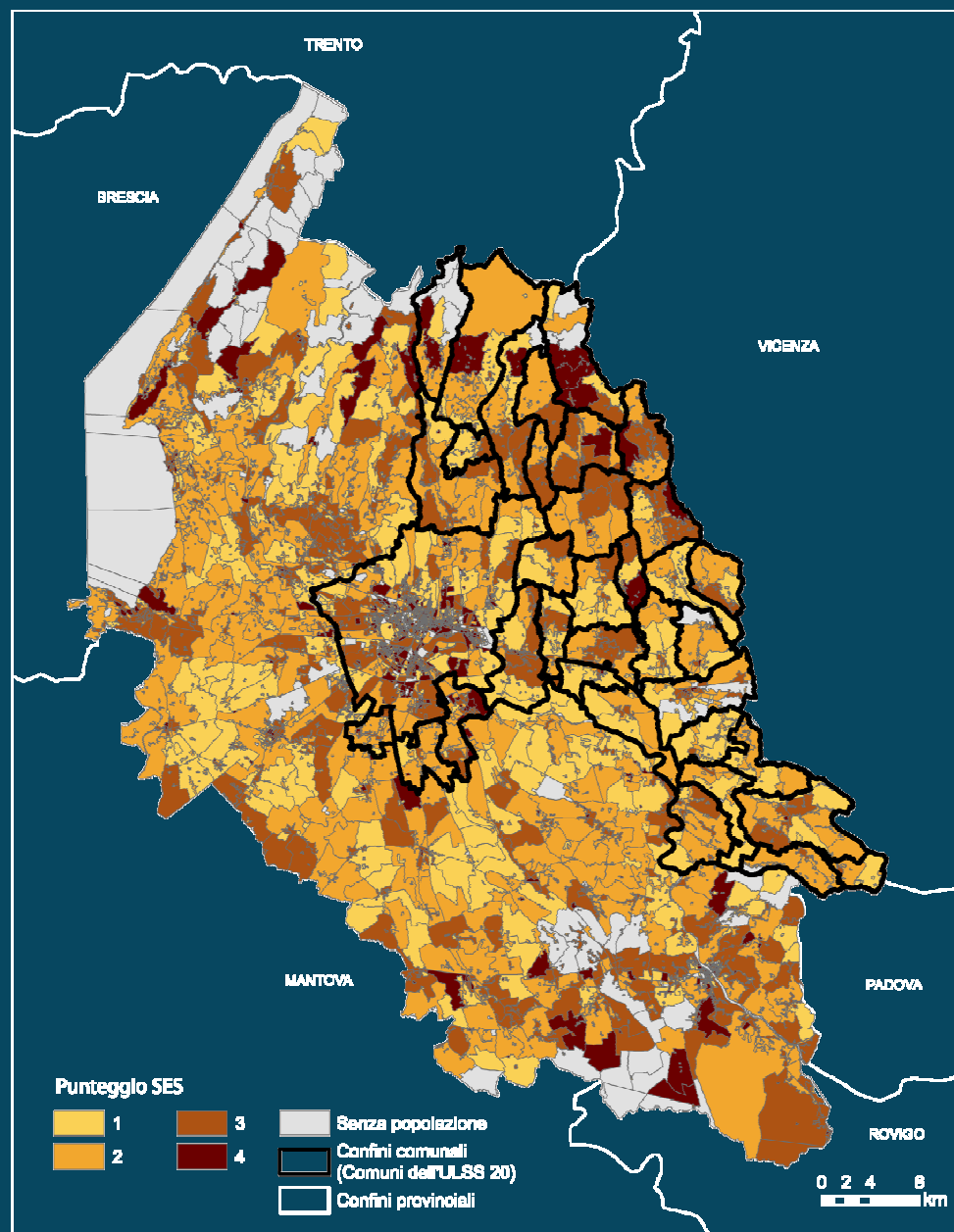
Tello JE, Mazzi M, Tansella M, Bonizzato P, Jones J, Amaddeo F. Does socioeconomic status affect the use of community-based psychiatric services? A south Verona case register study.

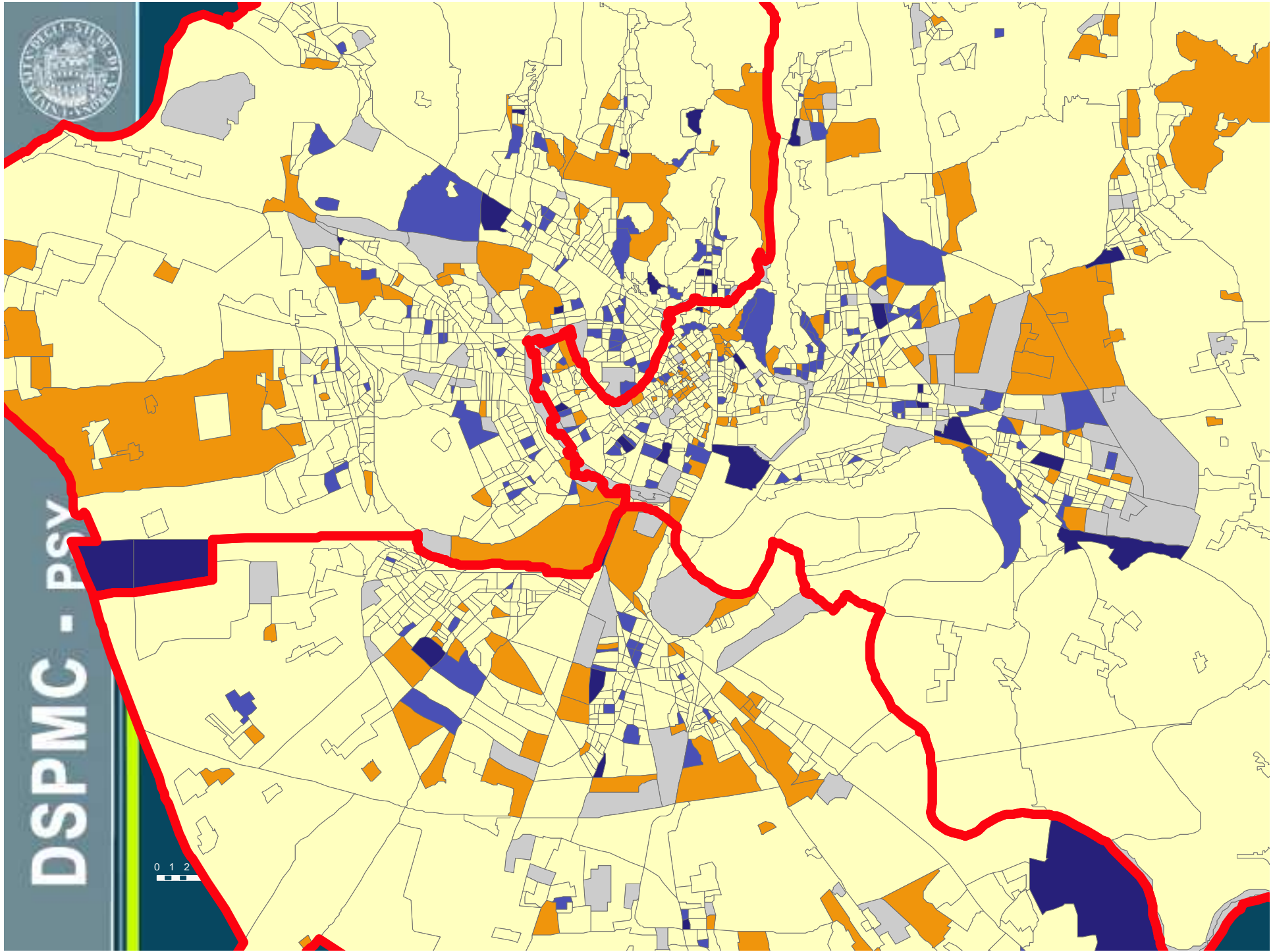
Acta Psychiatr Scand 2005; 112: 215–223. © Blackwell Munksgaard 2005.

J. E. Tello, M. Mazzi, M. Tansella, P. Bonizzato, J. Jones, F. Amaddeo

Department of Medicine and Public Health, Section of Psychiatry and Clinical Psychology, University of Verona, Verona, Italy

Indice SES – Provincia di Verona



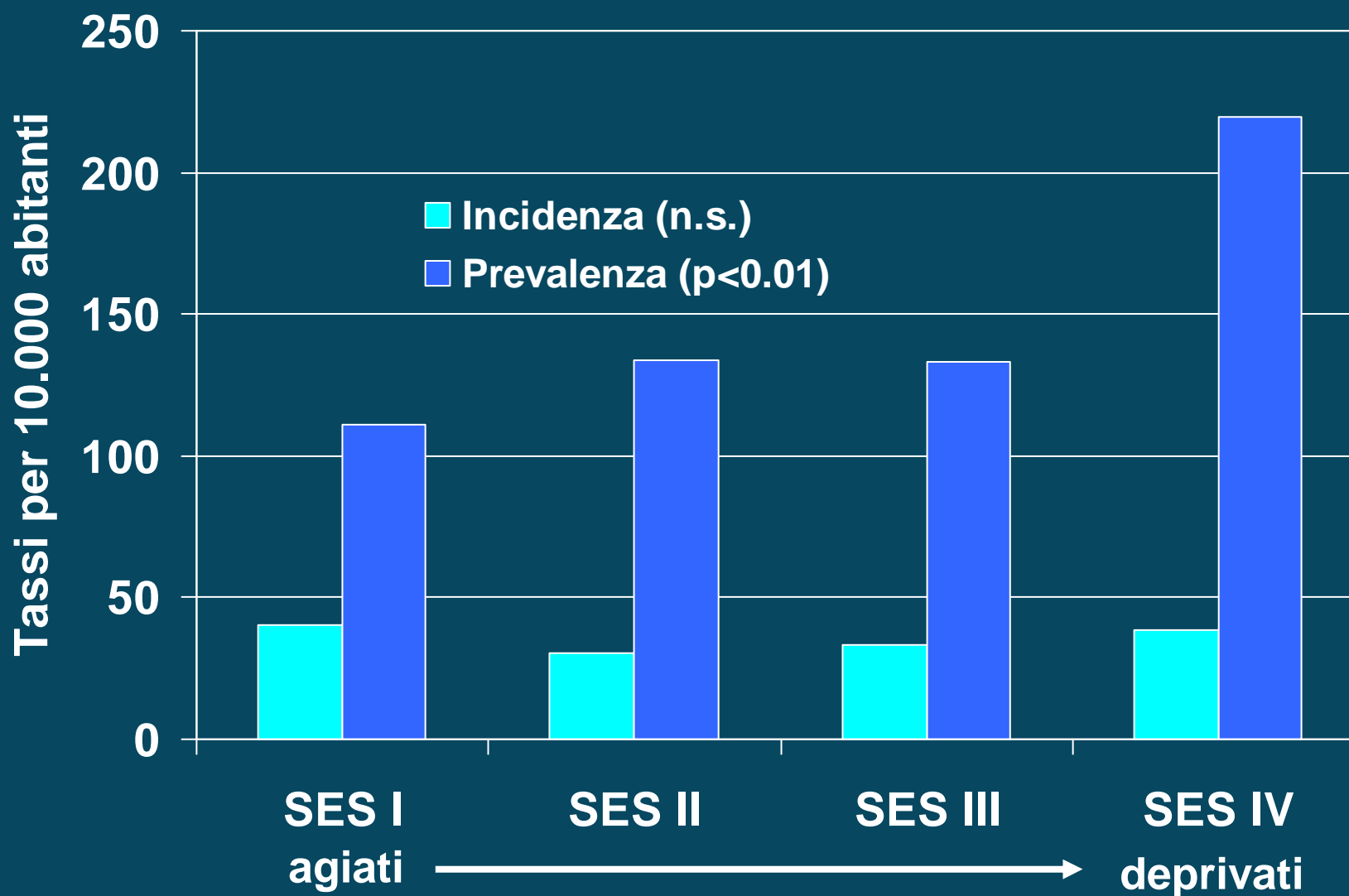




WHO
Collaborating
Centre

DSPMC - PSY

Incidenza e prevalenza per SES

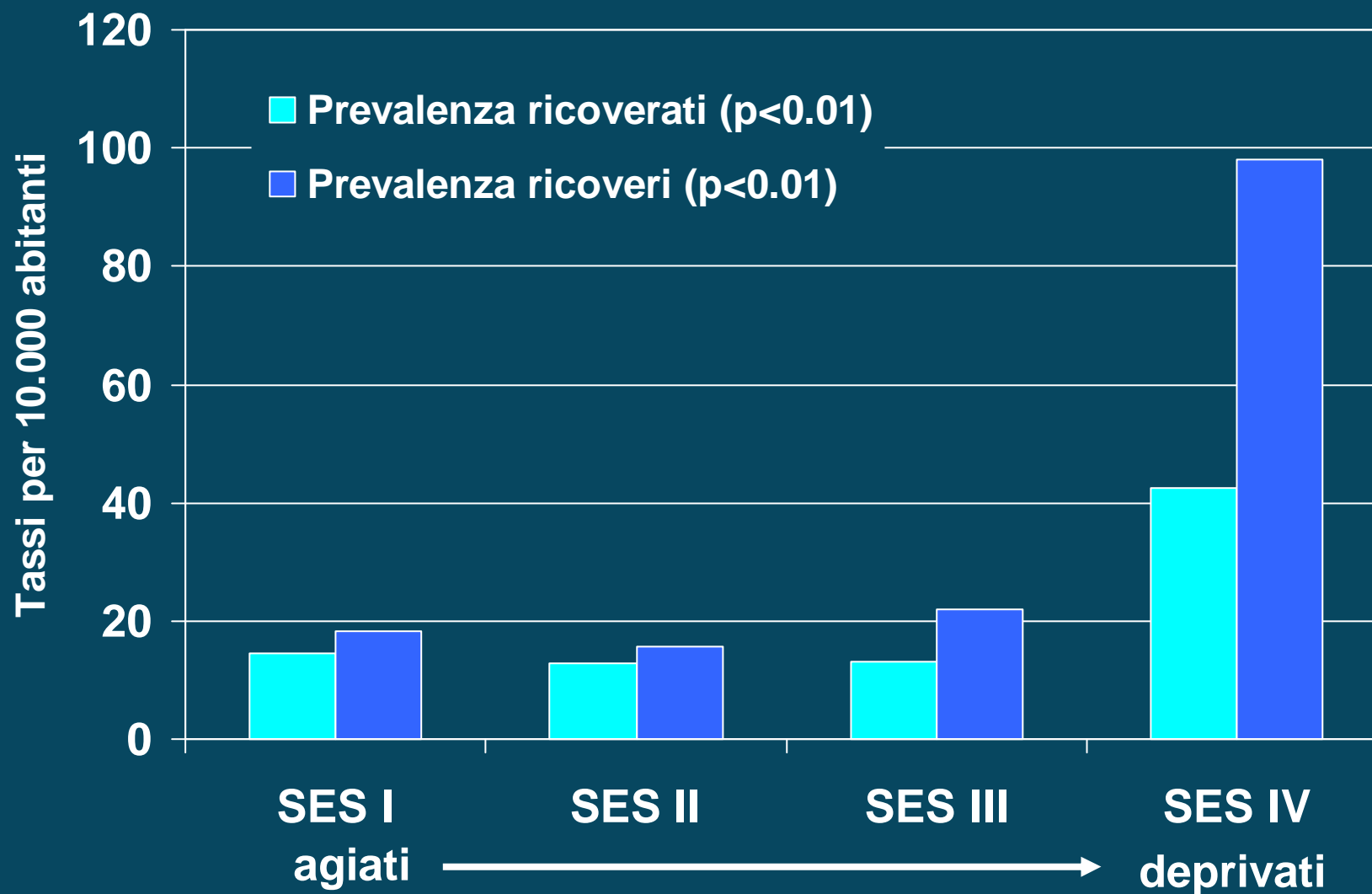




WHO
Collaborating
Centre

DSPMC - PSY

Indici di ospedalizzazione per SES

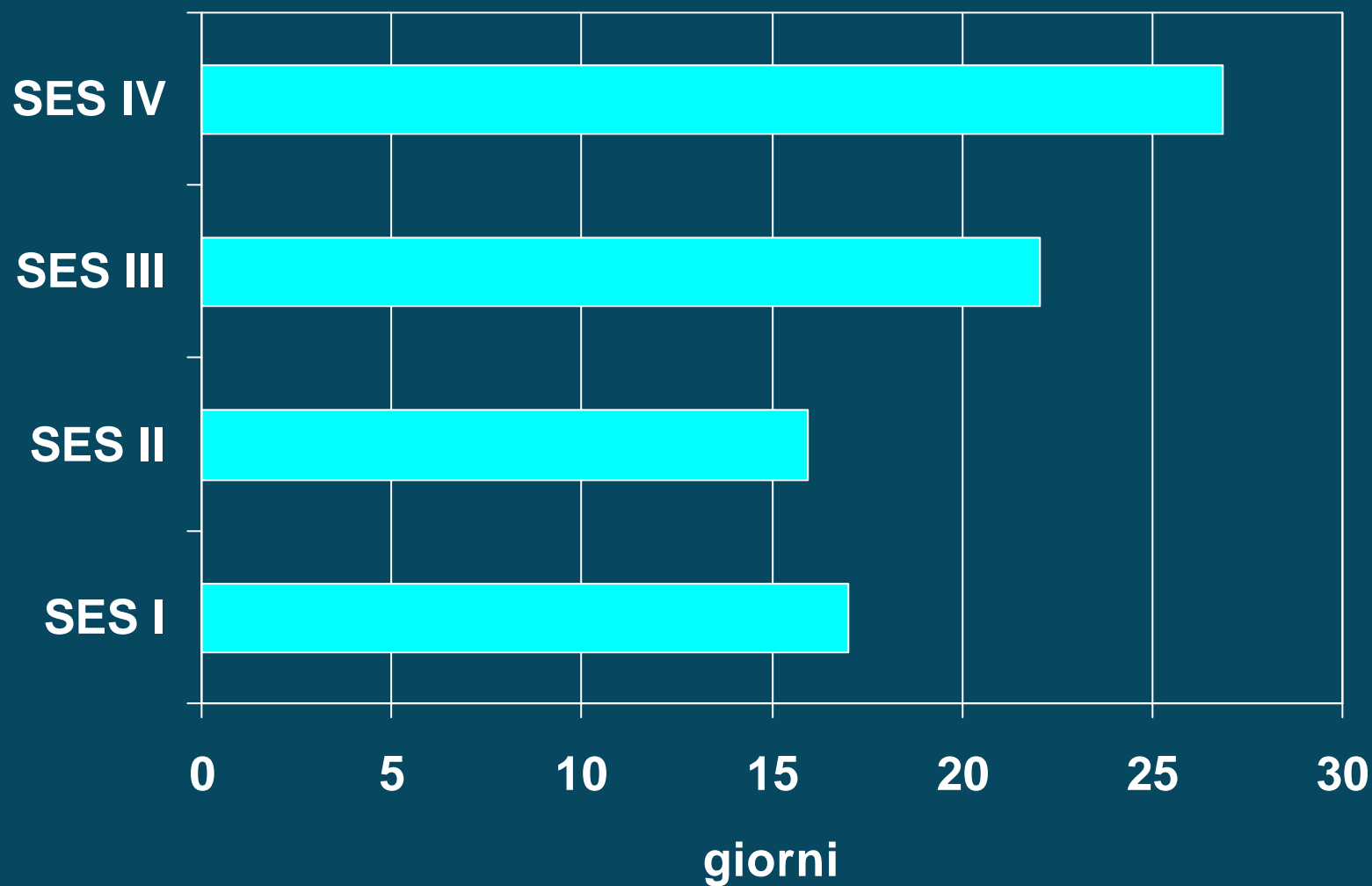




WHO
Collaborating
Centre

DSPMC - PSY

Durata della degenza per SES

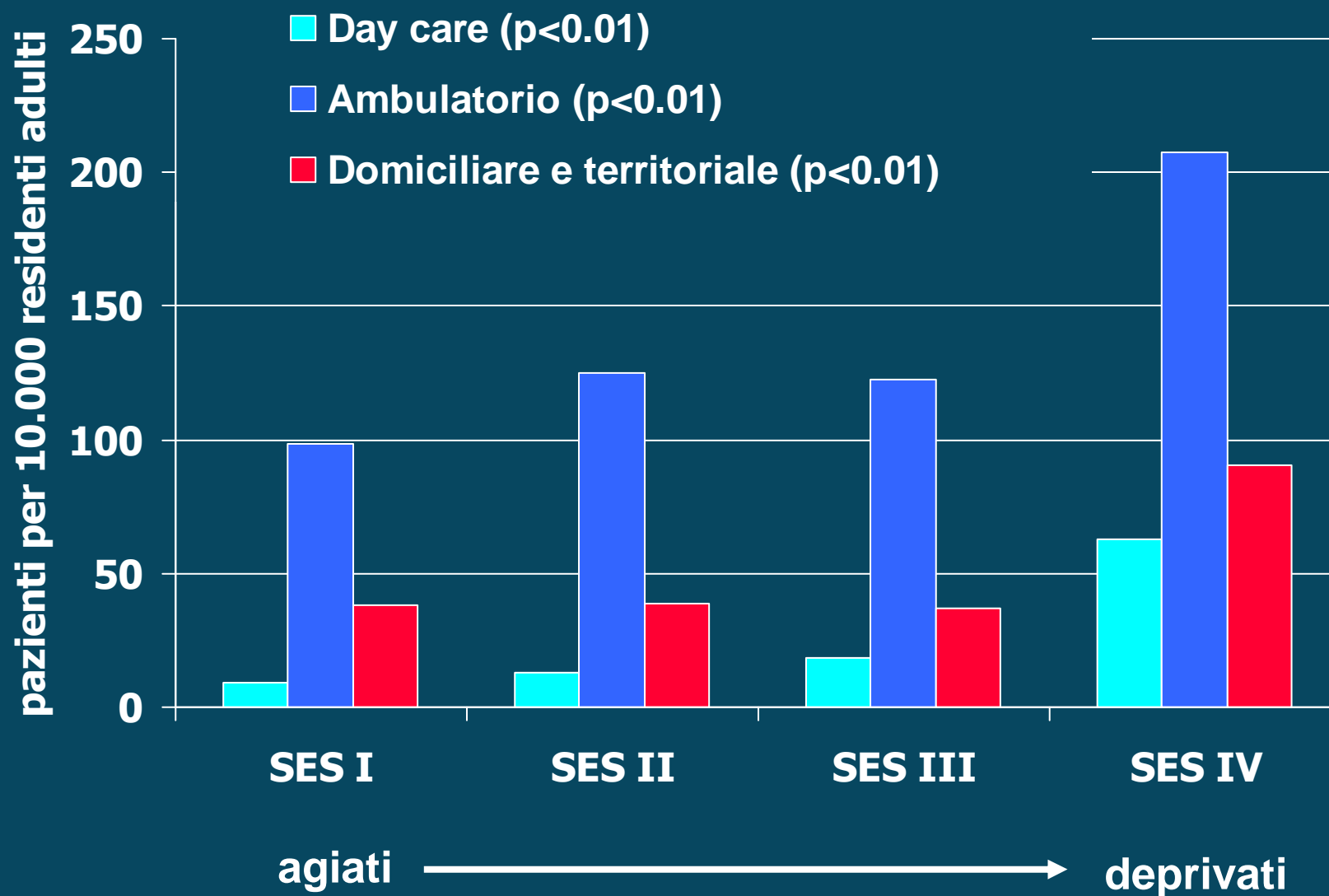




WHO
Collaborating
Centre

DSPMC - PSY

Prevalenza territoriale per SES

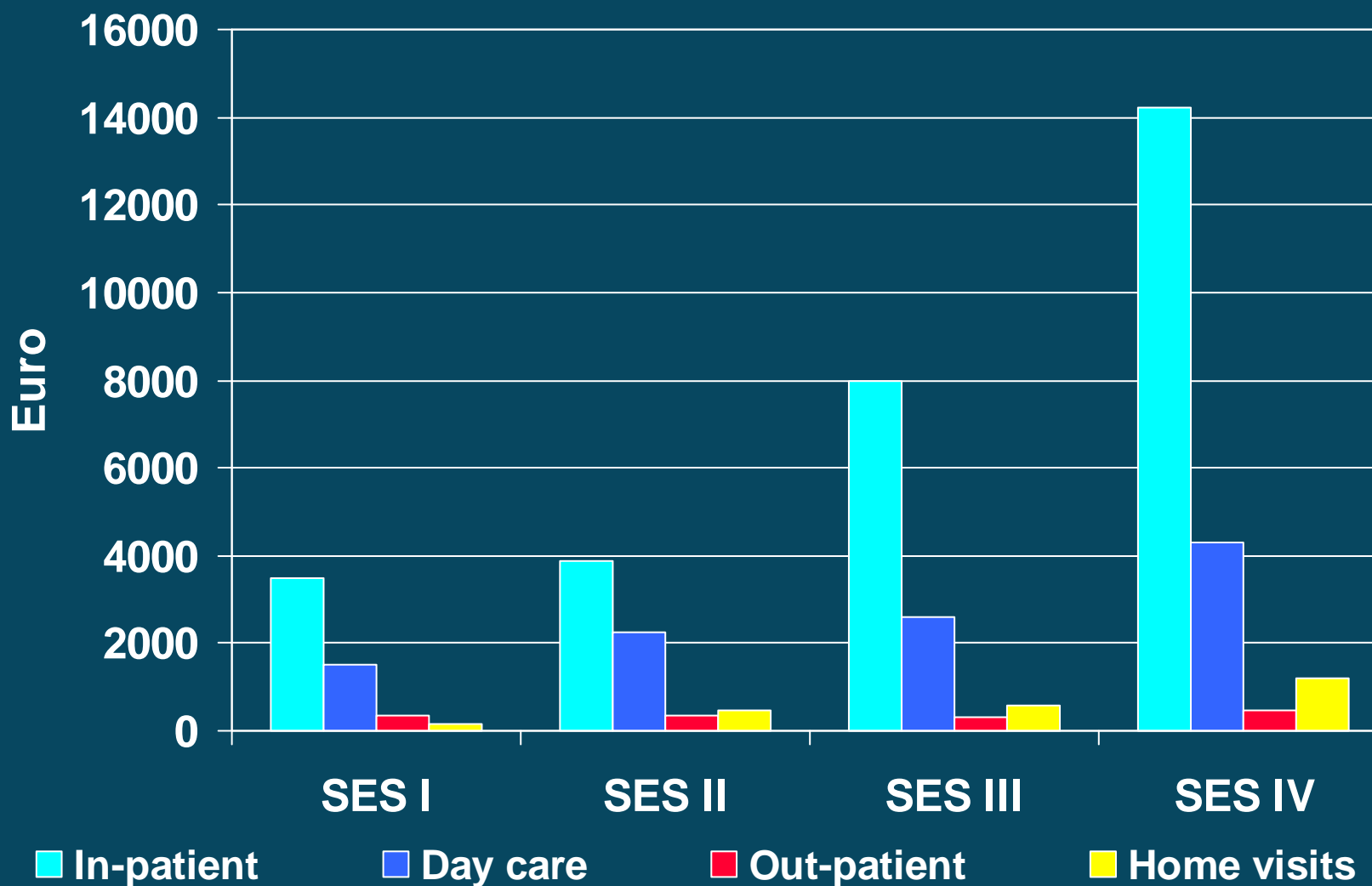




WHO
Collaborating
Centre

DSPMC - PSY

Costi medi per SES e tipo di assistenza (Euro)

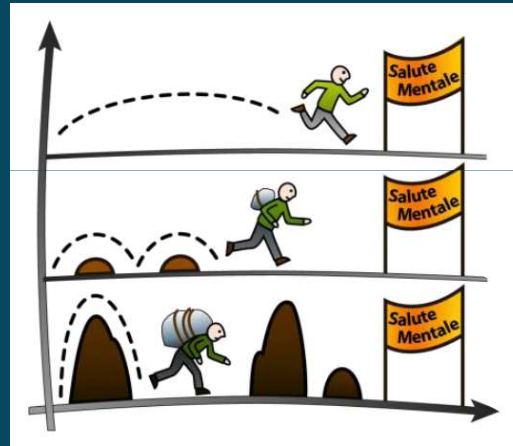




DSPMC - PSY

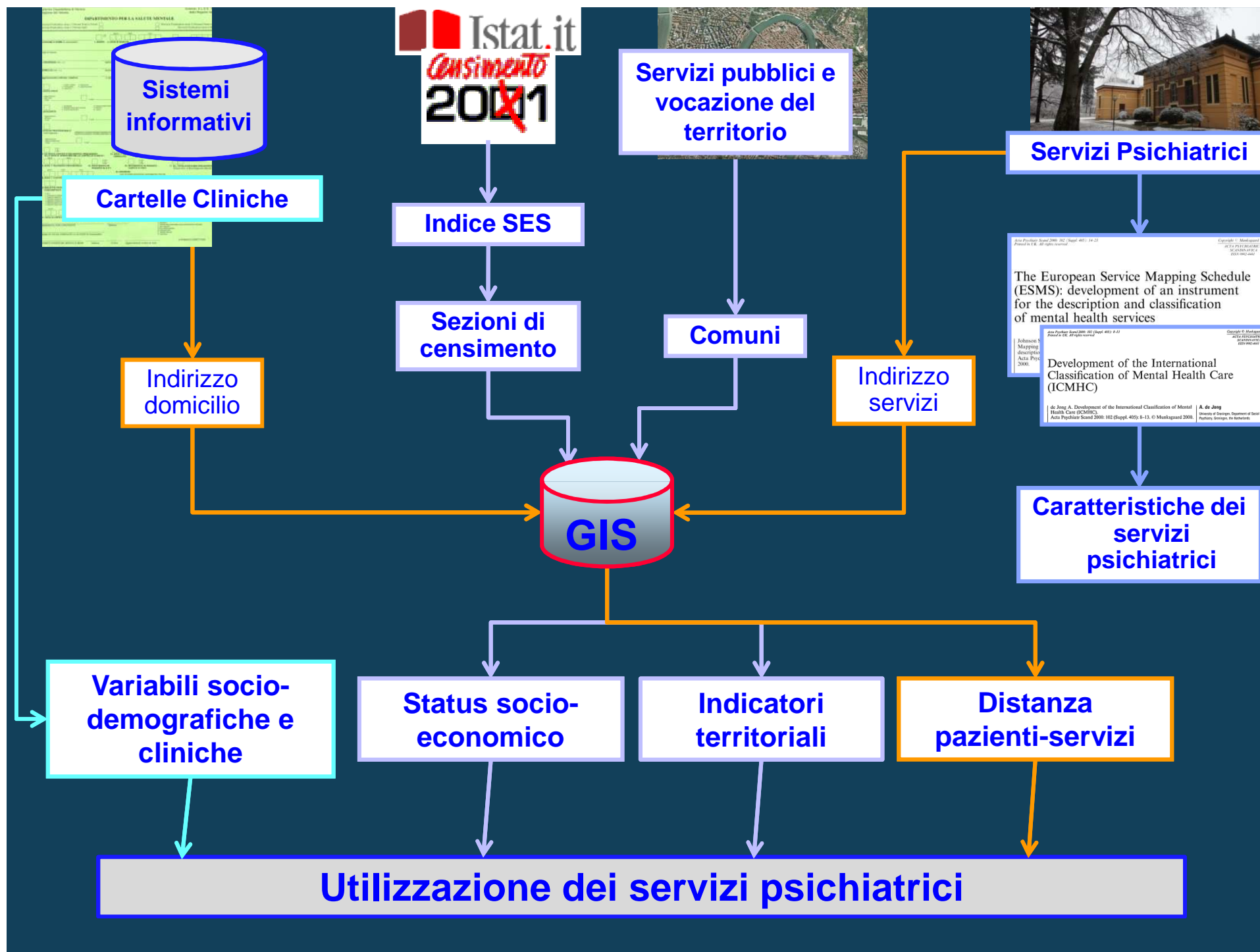
Il progetto

“Status socio-economico, urbanizzazione e salute mentale”



Francesco Amaddeo, Valeria Donisi, Riccardo Pertile, Federico Tedeschi, Damiano Salazzari, Laura Grigoletti, Andrea Fiorillo, Corrado De Rosa, Mauro Percudani, Linda Confalonieri, Michele Tansella

Dip. Sanità Pubblica e Medicina di Comunità, Sezione di Psichiatria e Psicologia Clinica, Università di Verona
Dip. di Salute Mentale, A.O. "G. Salvini", Garbagnate Milanese
Dip. di Psichiatria, Università di Napoli, SUN





WHO
Collaborating
Centre

DSPMC - PSY

Studio Multicentrico Italiano

Donisi et al., 2011

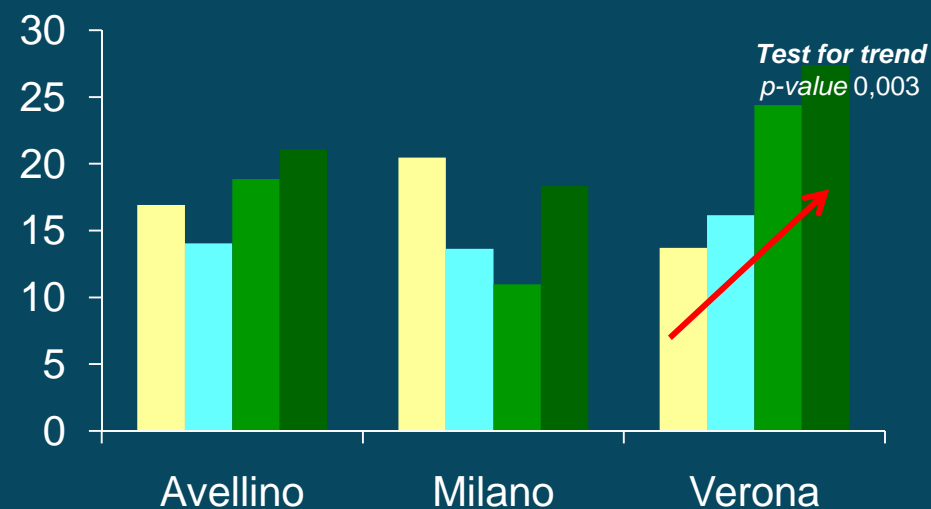
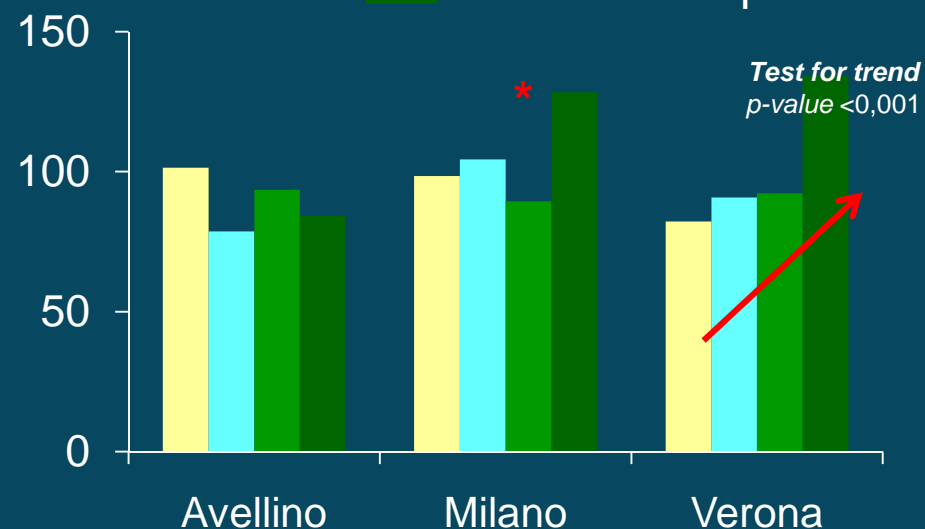
Prevalenza

	Tasso per 10.000	(95% IC)
AV	86,96	(79,46-94,45)
MI	104,15	(97,89-110,41)
VR	100,24	(94,06-106,42)

Incidenza

	Tasso per 10.000	(95% IC)
AV	16,13	(12,89-19,84)
MI	14,47	(12,12-16,81)
VR	22,13	(19,22-25,05)

SES I
SES II
SES III
SES IV - deprivato



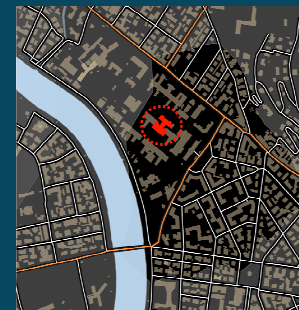
NOVITA'

Status
Socio-
economico
dell'area

E' stato costruito un **indice di status socio-economico (SES)**:

- Base Nazionale
- 336.788 sezioni di censimento (SC)
- 9 variabili del censimento

Caratteristiche
del territorio



Distanza dai
servizi

Distanza calcolata lungo la rete di
viabilità stradale



E' stata messa a punto una
metodologia per misurare la
disponibilità/accessibilità di servizi
pubblici di base, servizi
sanitari, economici, culturali, ricreativi
ed educativi



PERGAMON

Social Science & Medicine 49 (1999) 425–433

SOCIAL
SCIENCE
&
MEDICINE

Effects of distances to hospital and GP surgery on hospital inpatient episodes, controlling for needs and provision

Robin Haynes^{a,*}, Gra

^a*School of Environmen*

^b*School of Health Policy*

WHO
Collaborating
Centre

DSPMC - PSY

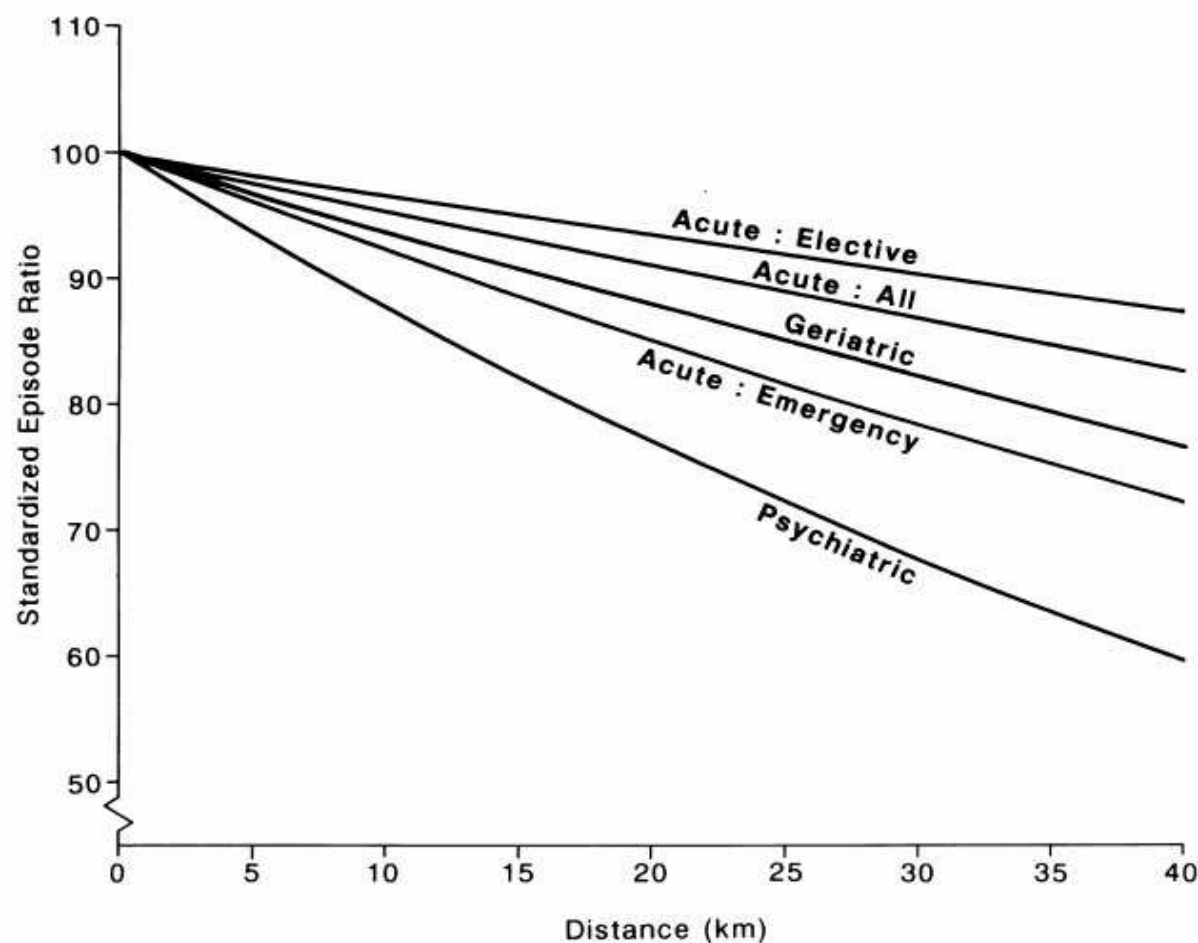


Fig. 1. Effects of distance to hospital on inpatient episodes, controlling for needs and provision



WHO
Collaborating
Centre

DSPMC - PSY

Soc Psychiatry Psychiatr Epidemiol (2011) 46:881–891
DOI 10.1007/s00127-010-0257-4

ORIGINAL PAPER

How are caseload and service utilisation of psychiatric services influenced by distance? A geographical approach to the study of community-based mental health services

Grazia Zulian · Valeria Donisi · Giacomo Secco ·
Riccardo Pertile · Michele Tansella ·
Francesco Amaddeo

Received: 22 January 2009 / Accepted: 11 June 2010 / Published online: 26 June 2010
© Springer-Verlag 2010

Abstract

Introduction The aim of this study was to assess how the caseload and the utilisation of community-based mental health services is influenced by distance and to socioeco-

Results The facilities were not equally located in the catchment areas. Of particular significance, rural areas appear to be poorly served by mental health services. The distance decay effect exists, with different trends for the three types of



DSPMC - PSY

Distanza e Network Area Function



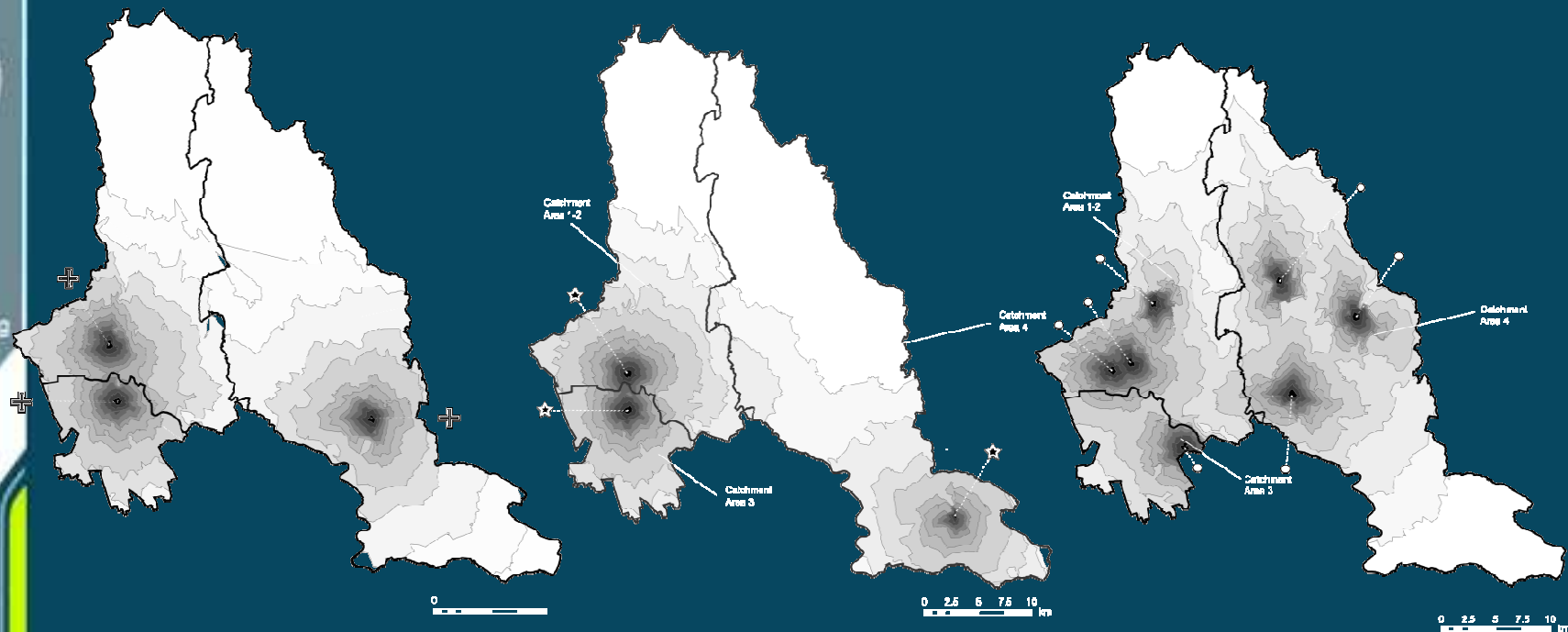
Zulian et al., submitted



WHO
Collaborating
Centre

DSPMC - PSY

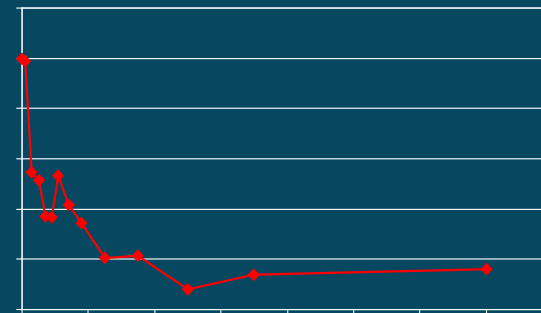
Aree di impedenza e utilizzazione dei servizi



SPDC



Centri di Salute Mentale



Servizi ambulatoriali

inappropriatezza delle risorse

i servizi disponibili non corrispondono ai bisogni ed alle preferenze dei pazienti

Perché?

non si usano indicatori di qualità delle cure che riflettono bisogni e preferenze dei pazienti

- le persone con problemi di salute mentale possono non essere capaci o essere riluttanti ad esprimere giudizi
- il servizio ha maggiore potere

Ma ...

vogliamo davvero

a. il libero mercato nell'assistenza alla salute mentale?

b. e lasciare le decisioni ai professionisti?



W
Colla

PSY



WHO
Collaborating
Centre

DSPMC - PSY

Which factors affect the costs of psychiatric residential care? Findings from the Italian PROGRES study

Amaddeo F, Grigoletti L, de Girolamo G, Picardi A, Santone G and the PROGRES Study Group. Which factors affect the costs of psychiatric residential care? Findings from the Italian PROGRES study.

**F. Amaddeo¹, L. Grigoletti¹,
G. de Girolamo², A. Picardi³,
G. Santone⁴ and the PROGRES
Study Group***

Objective: In the latest years, mental hospitals have gradually been replaced by a community-based network of facilities, including non-hospital residential facilities (RFs). Little information is still available about their costs. Our aims were to estimate the costs of Italian RFs and to evaluate which factors affect the cost of RFs and their patients. **Method:** A representative sample of 265 Italian RFs, hosting 2962 patients, was selected for the study. RFs costs and costs of psychiatric, medical and informal care were estimated.

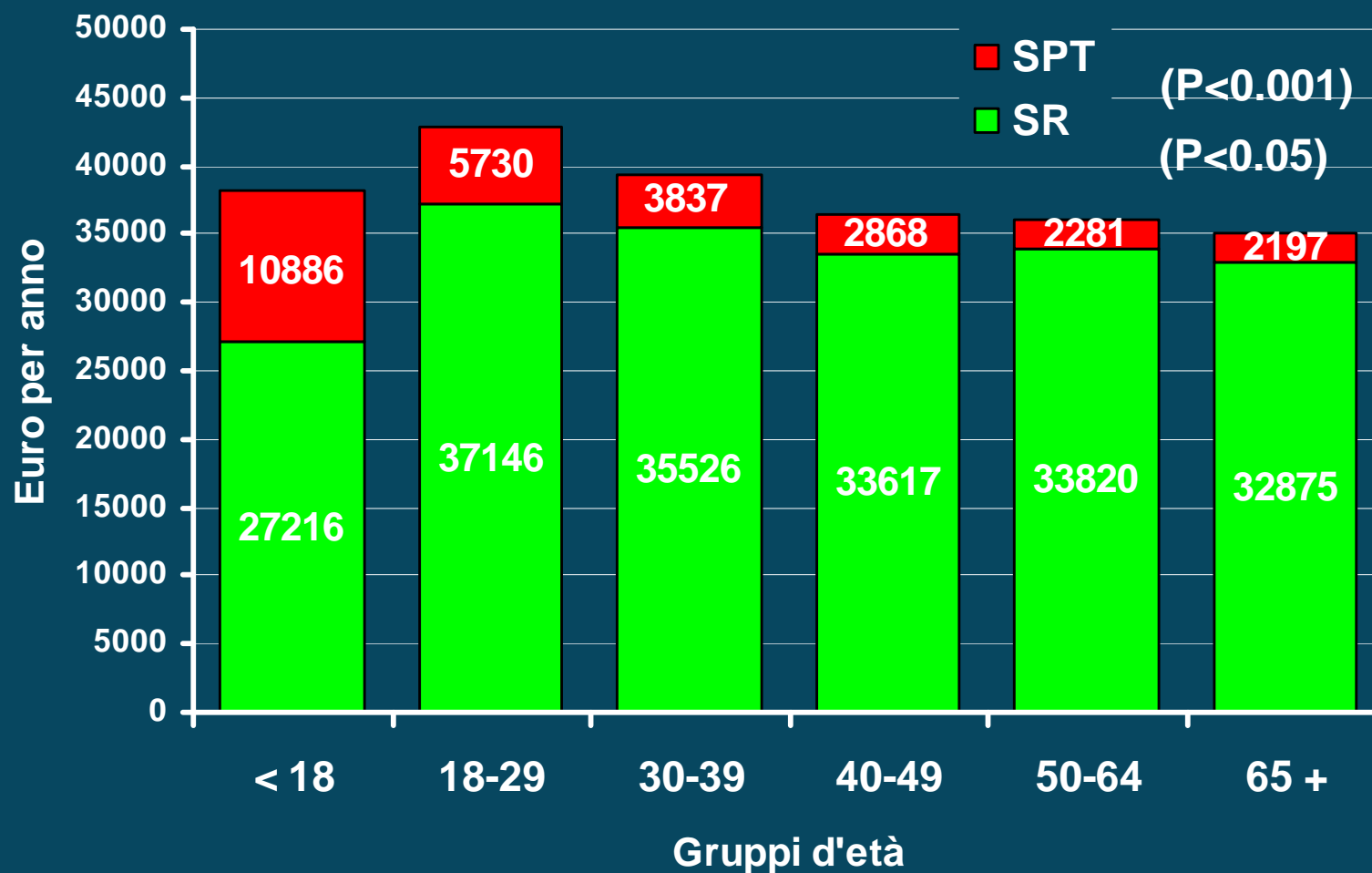
¹Department of Medicine and Public Health, Section of Psychiatry and Clinical Psychology, University of Verona, Verona, ²Department of Mental Health, ASL of Bologna, Bologna, ³Centre of Epidemiology and Health Surveillance and Promotion, Italian National Institute of Health, Rome and ⁴Psychiatric Clinic, United Hospitals of Ancona and Polytechnic University of Marche, Ancona, Italy



WHO
Collaborating
Centre

DSPMC - PSY

Costi medi per paziente SR ed SPT per gruppi d'età



Amaddeo et al. 2007 – Acta Psychiatrica Scandinavica



WHO
Collaborating
Centre

DSPMC - PSY

Acta Psychiatr Scand 2006; 1-6
All rights reserved
DOI: 10.1111/j.1600-0447.2006.00894.x

Copyright © 2006 The Authors
Journal Compilation © 2006 Blackwell Munksgaard
ACTA PSYCHIATRICA
SCANDINAVICA

Avoidable mortality of psychiatric patients in an area with a community-based system of mental health care

Amaddeo F, Barbui C, Perini G, Biggeri A, Tansella M. Avoidable mortality of psychiatric patients in an area with a community-based system of mental health care.

Objective: To ascertain the existence of an excess of avoidable mortality among psychiatric patients in an area with a *community-based* system of care, to identify predictors of higher risk of avoidable mortality and to provide some possible indication to reduce avoidable

F. Amaddeo¹, C. Barbui¹,
G. Perini¹, A. Biggeri²,
M. Tansella¹

¹Department of Medicine and Public Health, Section of Psychiatry and Clinical Psychology, University of Verona, Verona, Italy, and ²Department of Statistics, University of Florence, Florence, Italy

Malignant neoplasm of
trachea, bronchus and
lung (5-64)

3,43

Chronic liver disease
and cirrhosis (15-74)

25,65

Indicators of health
policies quality

8,91

Indicators of health
care quality

1,72

Mortalità della popolazione
generale

SMR

inflexibilità delle risorse

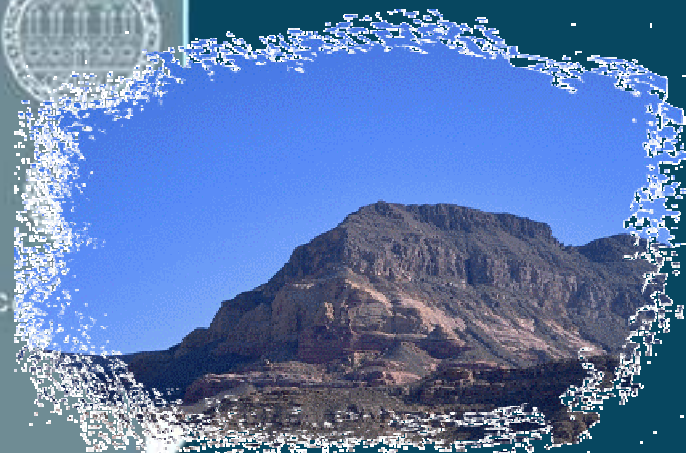
i servizi sono organizzati in maniera troppo rigida per trattare nel modo migliore possibile

Perché?

- le decisioni prese centralmente sono “imposte” ai servizi locali
- la “trappola” dei benefici - le regole sui benefici economici impediscono alle persone di rientrare nel mercato del lavoro
- le regole sulla sicurezza sociale incoraggiano l'uso dell'assistenza hospital-based
- difficile immaginare un uso diverso delle strutture

Ma ...

- a. il budget centralizzato consente economie di scala
- b. le decisioni centralizzate assicurano l'uniformità dell'assistenza regionale



The difficult task of predicting the costs of community-based mental health care. A comprehensive case register study

V. Donisi^{1*}, J. Jones², R. Pertile¹, D. Salazzari¹, L. Grigoletti¹, M. Tansella¹ and F. Amaddeo¹

¹ Section of Psychiatry and Clinical Psychology, Department of Public Health and Community Medicine, University of Verona, Verona, Italy

² Department of Mental Health and Learning Disability, City University, London, UK

Background. Previous studies have attempted to forecast the costs of mental health care, using clinical and individual factors of psychiatric service utilis-

Table 3. R^2 increase in adding new variables in the Hierarchical Regression models

Model	R^2	R^2 increase
Model 1: gender, age, living situation, occupational status, diagnosis	0.0501	–
Model 2: Model 1 + previous psychiatric history	0.4191	+0.3690
Model 3: Model 2 + SES index	0.4205	+0.0014

atric diagnosis, who had at least Northern Italy, were included in

dislocazione delle risorse

agenzie diverse forniscono assistenza per la salute mentale – le decisioni potrebbero non essere uniformi, globali e coerenti

Perché?

- ognuno “protegge” le proprie risorse – la riallocazione è resa difficile da burocrazia e gelosia
- la valutazione delle performance può incoraggiare atteggiamenti “egoisti”
- incentivi e/o disincentivi economici

Ma ...

- a. un sistema economico misto aumenta le possibilità di scelta e offre maggiori *chance* di innovazione
- b. la burocrazia offre protezione





tempistica delle risorse



i cambiamenti evidence-based o spinti dalla domanda avvengono molto lentamente

Perché?

- “Se funziona, perché cambiarlo?”
- la formazione del personale richiede tempo e risorse
- le strutture hanno costi fissi
- nelle strutture con una certa capacità (posti-letto o prestazioni) il recupero dei costi è lento
- bisogna spendere di più adesso per risparmiare dopo (gobba nei costi e doppi costi)

Ma ...

- a. le evidenze sono abbastanza robuste?
- b. il cambiamento è necessariamente buono?
- c. c'è la volontà di spendere di più?



WHO
Collaborating
Centre

DSPMC - PSY

Hollinghurst et al., 2005 British Medical Journal

Opportunity cost of antidepressant prescribing in England: analysis of routine data

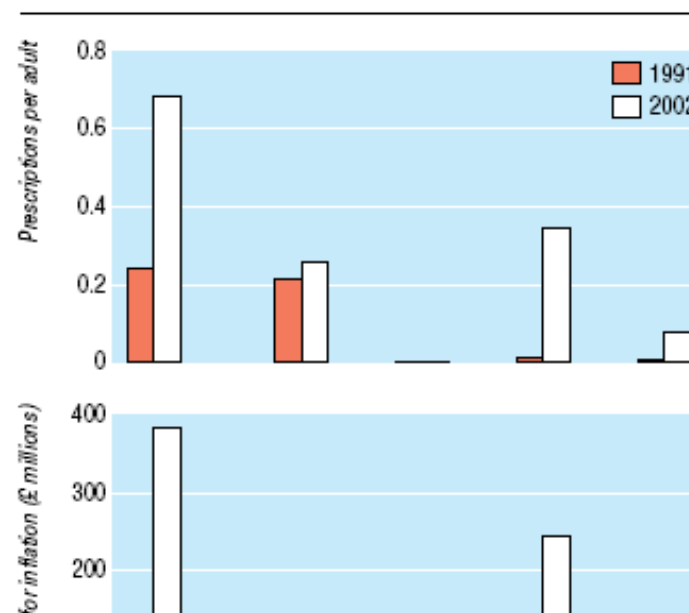
Sandra Hollinghurst, David Kessler, Tim J Peters, David Gunnell

Recently, prescribing of antidepressant drugs has increased exceptionally.¹ At the same time, concerns have been raised about the medicalisation of human distress and, more recently, about the safety of antidepressants.¹

Many general practitioners would like to refer patients for psychological treatment, for which there is good evidence of effectiveness,² but are constrained by the lack of NHS therapists. We estimated the opportunity cost of the recent rise in antidepressant prescribing by valuing it in terms of an effective alternative treatment—cognitive behaviour therapy.

Methods and results

We used Department of Health data on the number and cost of antidepressant drugs dispensed in the



Academic Unit of Primary Health Care, Department of Community Based Medicine, University of Bristol, Bristol BS6 6JL

Sandra Hollinghurst
lecturer in health economics

David Kessler
general practitioner research fellow

Tim J Peters
professor of primary care health services research

Department of Social Medicine, University of



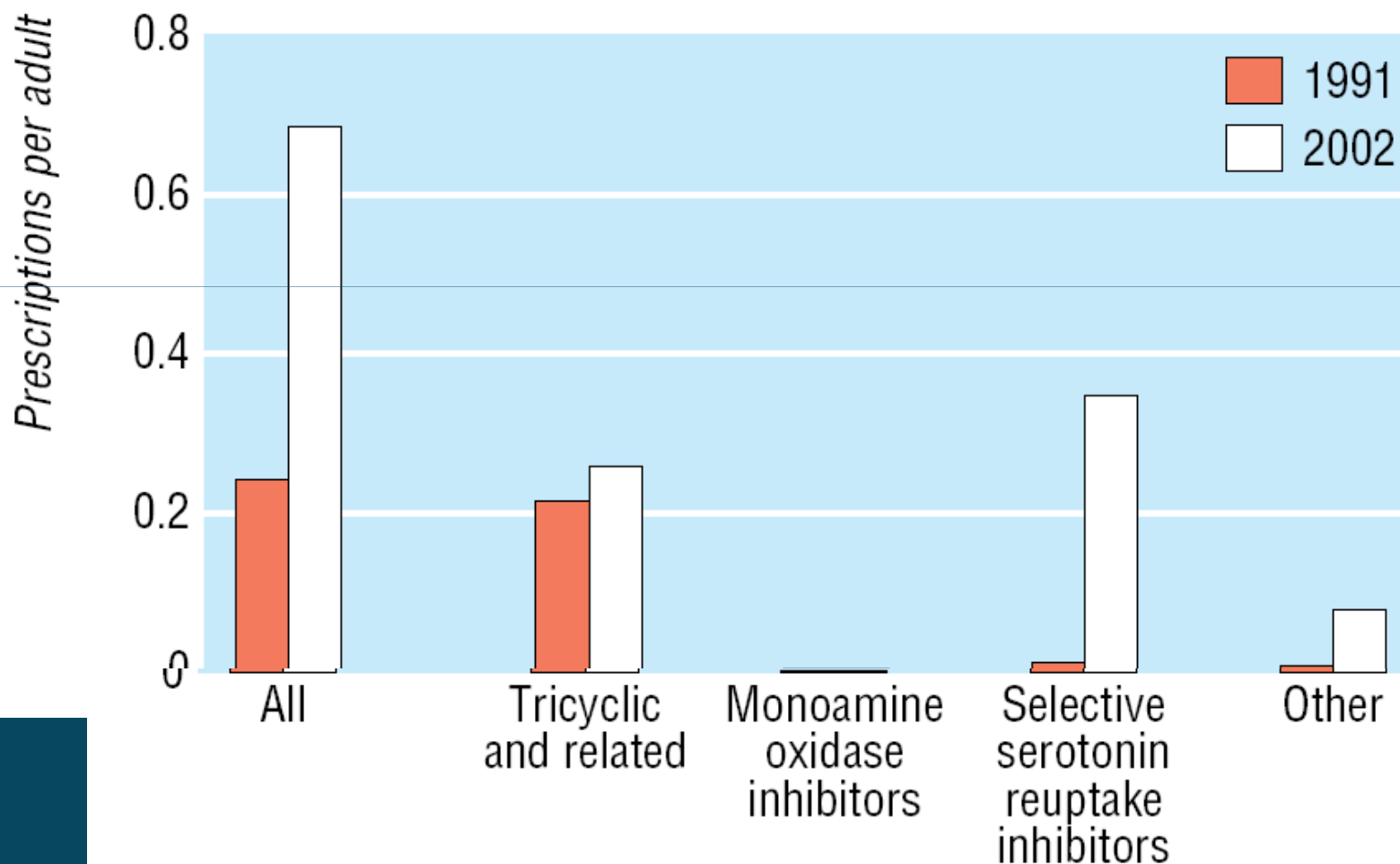
WHO
Collaborating
Centre

DSPMC - PSY

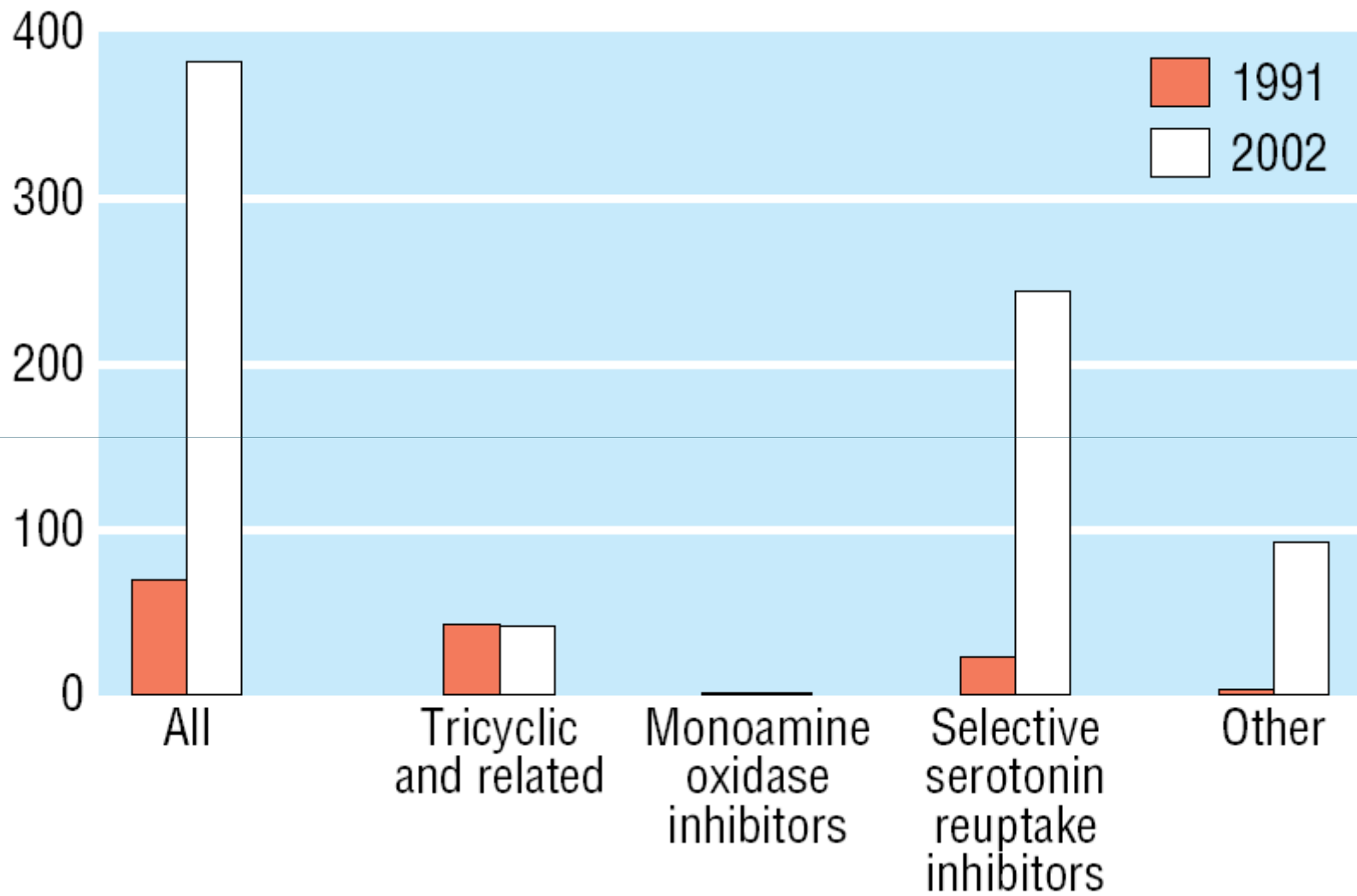
dal 1991 al 2002:

- 17.300.000 pezzi in più

- 1.300.000 persone trattate in più



Total adjusted for inflation (£ millions)





WHO
Collaborating
Centre

DSPMC - PSY

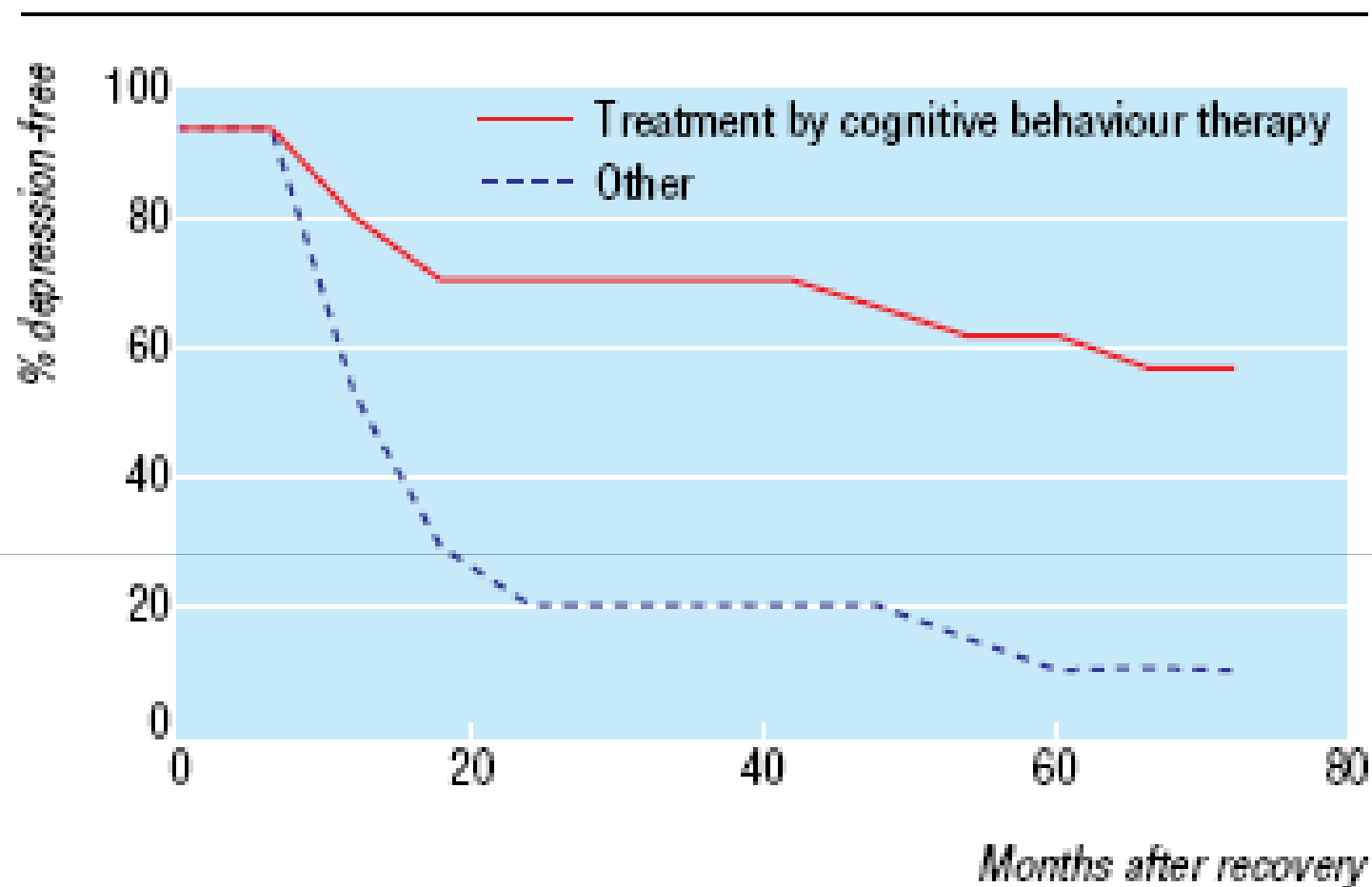
Incremento di 450.000.000 di Euro dal 1991 al 2002

- **Secondo le linee-guida NICE nella Depressione moderata o severa sono indicate 18 sessioni di CBT**
- **1 psicologo clinico esperto in CBT: 57.000 Euro per anno**
- **si potrebbero assumere circa 7.700 psicologi clinici**
- **1 psicologo clinico può visitare 6 persone al giorno per 40 settimane**
- **si potrebbero trattare 1.540.000 pazienti per anno**



WHO
Collaborating
Centre

DSPMC - PSY



Risk of relapse after recovery from depression¹²

A predictive model to allocate frequent service users of community-based Mental Health Services to different packages of care

LAURA GRIGOLETTI,¹ FRANCESCO AMADDEO,¹ ALDRIGO GRASSI,² MASSIMO BOLDRINI,²
MARCO CHIAPPELLI,² MAURO PERCUDANI,³ FRANCESCO CATAPANO,⁴ ANDREA FIORILLO,⁴
FRANCESCO PERRIS,⁴ MAURIZIO BACIGALUPI,⁵ PAOLO ALBANESE,⁵ SIMONA SIMONETTI,⁵
PAOLA DE AGOSTINI,⁶ MICHELE TANSELLA,¹ THE I-PSYCOST GROUP*

¹Department of Medicine and Public Health, Section of Psychiatry and Clinical Psychology, University of Verona, Verona (Italy)

²"Scalo" Mental Health Centre, Bologna (Italy)

³Mental Health Department, Hospital of Legnano (Milan); present address: Mental Health Department, "G. Salvini" Hospital, Garbagnate Milanese (Italy)

⁴Psychiatry Department, Second University of Naples, Naples (Italy)

⁵Mental Health Department ASL Rome B, Rome (Italy)

⁶Economic Sciences Department, University of Verona, Verona (Italy)

*I-PSYCOST GROUP: List of participants. **Coordinator:** M. Tansella (Verona); **I-Psycost Group:** Francesco Amaddeo (Verona); Maurizio Bacigalupi (Rome), Francesco Catapano (Naples), Aldrigo Grassi (Bologna), Mauro Percudani (Legnano), Antonio Acerra (Avellino), Paolo Albanese (Rome), Luca Bartoli (Naples), Giancarlo Belloni (Legnano), Paolo Boccara (Rome), Massimo Boldrini (Bologna), Pierluigi Castiglioni (Legnano), Giorgio Cerati (Legnano), Marco Chiappelli (Bologna), Danilo Cognetti (Rome), Sara Comerio (Legnano), Agostino Contini (Legnano), Andrea Fiorillo (Naples), Laura Grigoletti (Verona), Lucia Grosso (Verona); Mariangela Masella (Naples), Flavia Rossano (Naples), Simonetta Schlosser (Rome), Simona Simonetti (Rome), Chiara Zucchi (Bologna); **Economical Consultant:** Federico Perali (Verona), Paola De Agostini (Verona).

Grigoletti L. et al, 2010 – Epidemiologia e Psichiatria Sociale



DSPMC - PSY

Un nuovo sistema di finanziamento per i Servizi di Salute Mentale

Pazienti con bisogni ridotti:
pagamento a prestazione

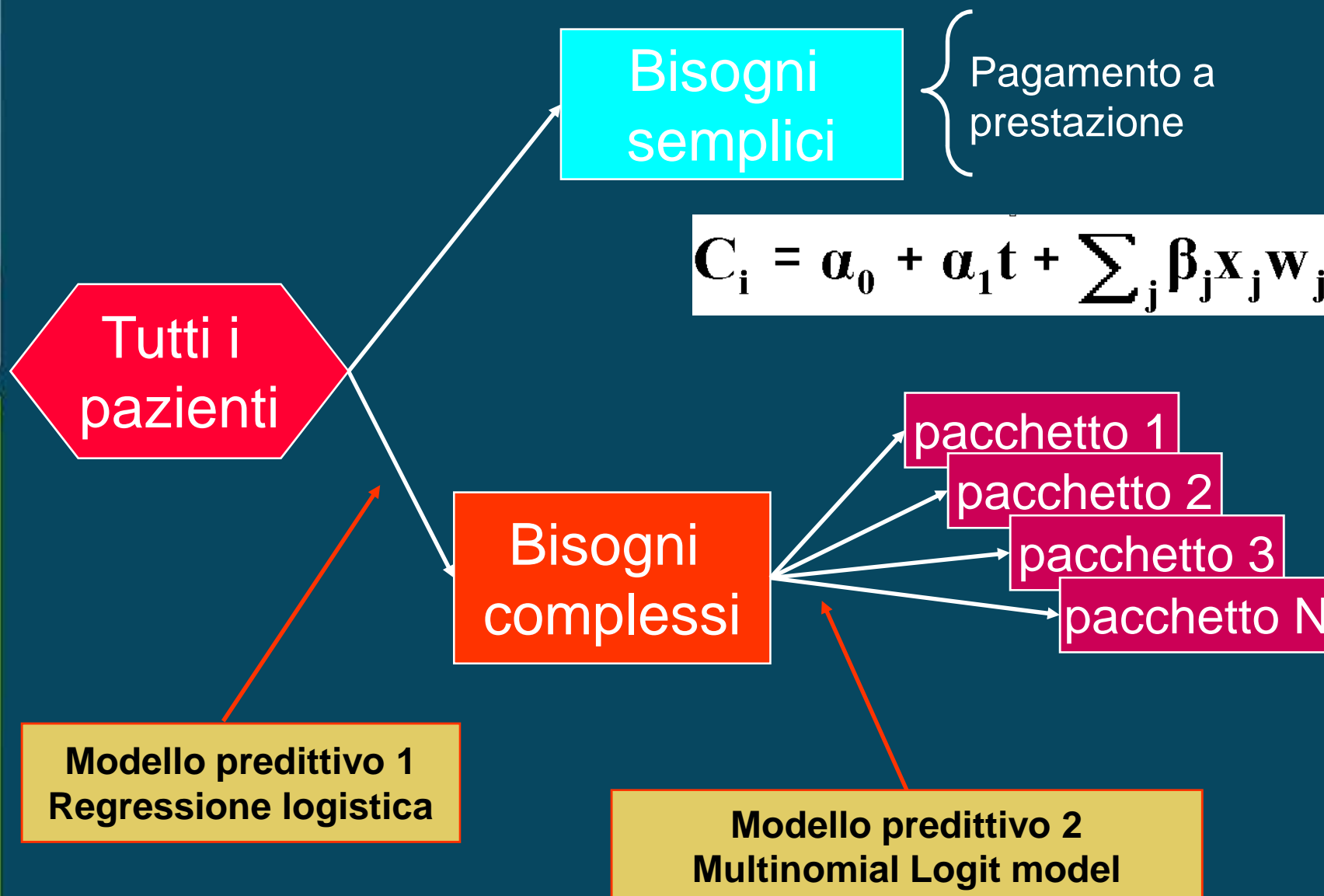


Tutti i pazienti

Pazienti con bisogni elevati :
pacchetti di cura



Sistema di finanziamento e analisi statistiche





WHO
Collaborating
Centre

DSPMC - PSY

Peso medio per tipo di intervento

Intervento	Peso Medio	Dev stnd	Numero progetti	% correttamente classificati
Domiciliare	0.81	0.22	100 (31%)	87
Semiresidenziale	0.82	0.21	9 (3%)	89
CTRP	0.86	0.16	51 (16%)	94
Residenziale lungo-assistito	0.69	0.22	164 (50%)	79
Totale	0.76	0.22	324 (100%)	78

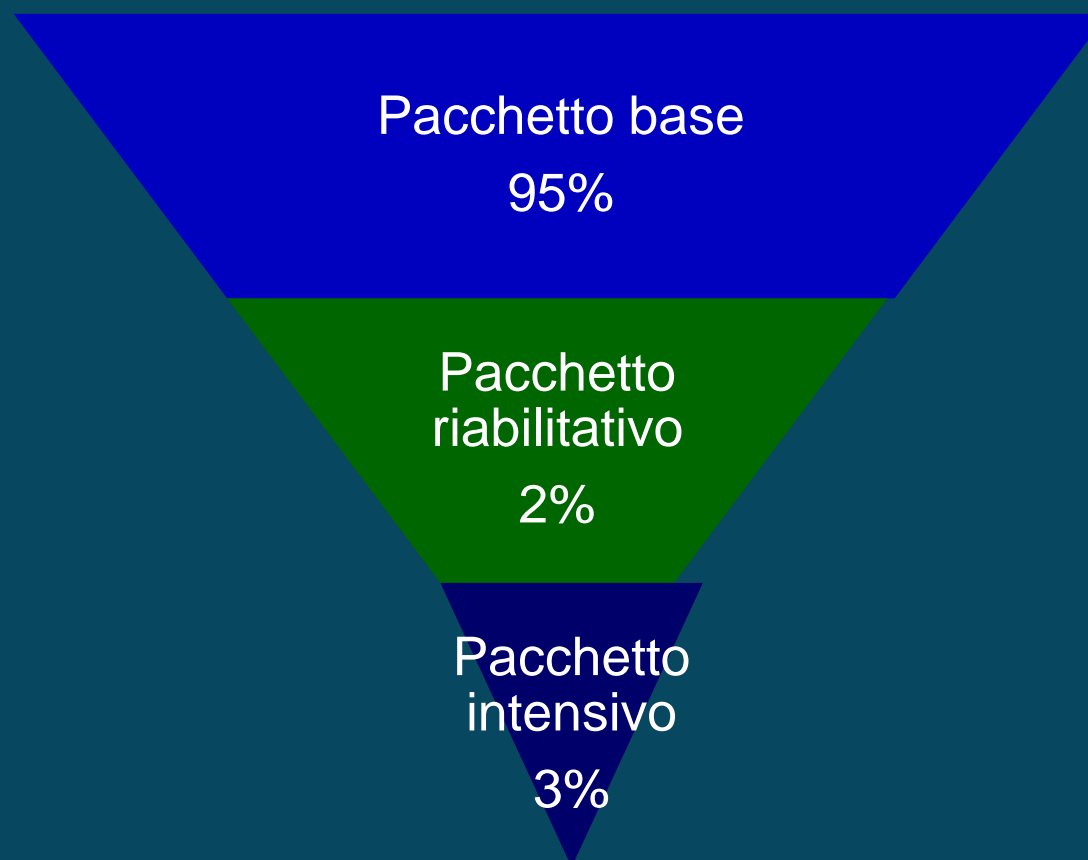
Grigoletti L. et al, 2010 – Epidemiologia e Psichiatria Sociale



WHO
Collaborating
Centre

DSPMC - PSY

Capacità del modello di prevedere l'assegnazione ai 3 pacchetti di cura



Grigoletti L. et al, 2010 – Epidemiologia e Psichiatria Sociale

REFINEMENT

RE-search on FIN-ancing systems' E- ffect on the Quality of MENT-al health care

Specific Programme "Cooperation" – Theme
"Health"

Call identifier: FP7-HEALTH-2010-single-stage

Duration: 36 months

COORDINATORE:

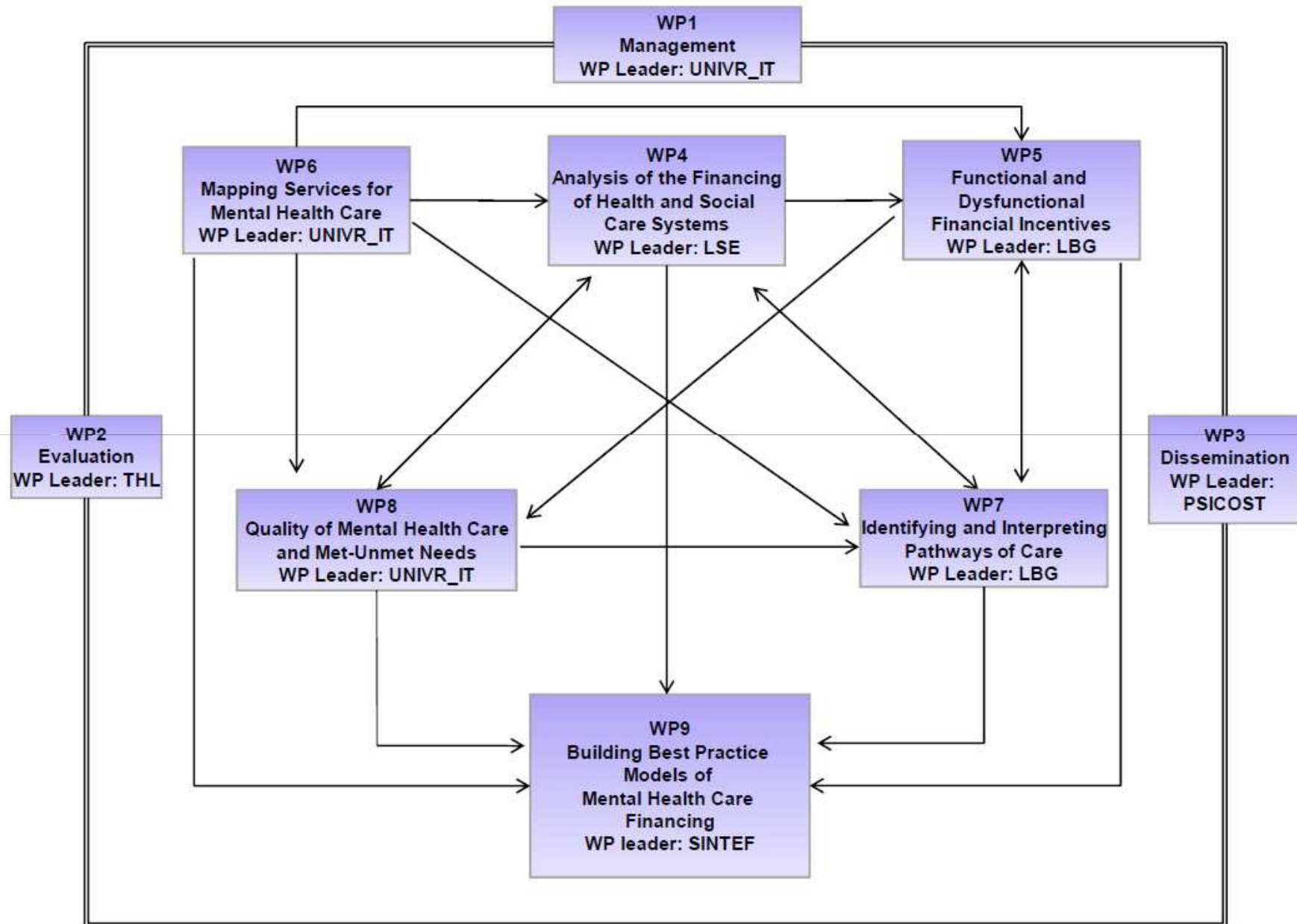
Professor Francesco Amaddeo

Dipartimento di Sanità Pubblica e Medicina di Comunità

Sezione di Psichiatria e Psicologia Clinica

Unità di Ricerca: Registro Psichiatrico dei Casi, Epidemiologia, Geografia ed
Economia della Salute Mentale

Pert Diagram showing the interdependencies of the REFINEMENT Work Packages





WHO
Collaborating
Centre

DSPMC - PSY

Partners

Beneficiary Number	Beneficiary name	Country
1(coordinator)	UNIVERSITA' DEGLI STUDI DI VERONA	ITALY
2	LUDWIG BOLTZMANN GESELLSCHAFT	AUSTRIA
3	LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE	UK
4	TERVEYDEN JA HYVINVOINNIN LAITOS	FINLAND
5	ASOCIACION CIENTIFICA PSICOST	SPAIN
6	STIFTELSEN SINTEF	NORWAY
7	UNIVERSITY OF TARTU	ESTONIA
8	UNIVERSITE PARIS XII - VAL DE MARNE	FRANCE
9	INSTITUTUL DE PROGNOZA ECONOMICA	ROMANIA



WHO
Collaborating
Centre

DSPMC - PSY

Il corridoio del
manicomio
Van Gogh, 1889

