How can systems learn from each other?
The role of data and research

Stefan Priebe
Unit for Social and Community Psychiatry
Queen Mary University of London

Disclosure

I have no potential conflict of interest to report.

Questions?

- Are we learning?
- Is mental health care getting better?
- If so, why?
- If we have learnt, from what?
- Role of data and research?

Examples

- Good evidence for the effectiveness of acute day hospitals
- No evidence for the effectiveness of community treatment orders
- Evidence for harm through debriefing
- Questionable evidence for the effectiveness of antidepressants in mild and moderate depression

Further questions?

- What services have ever been established because of research evidence?
- What services have ever been abandoned because of research evidence?
- Which countries do we want to learn from?
- What can we learn from other countries?
- Do we understand the systems we want to learn from?

Some hurdles

- Different health and social care systems
- Language
- English?
  “he came into psychiatry”
- Different cultures and traditions
- Learning from commonalities or from differences?

Assertive Outreach effects

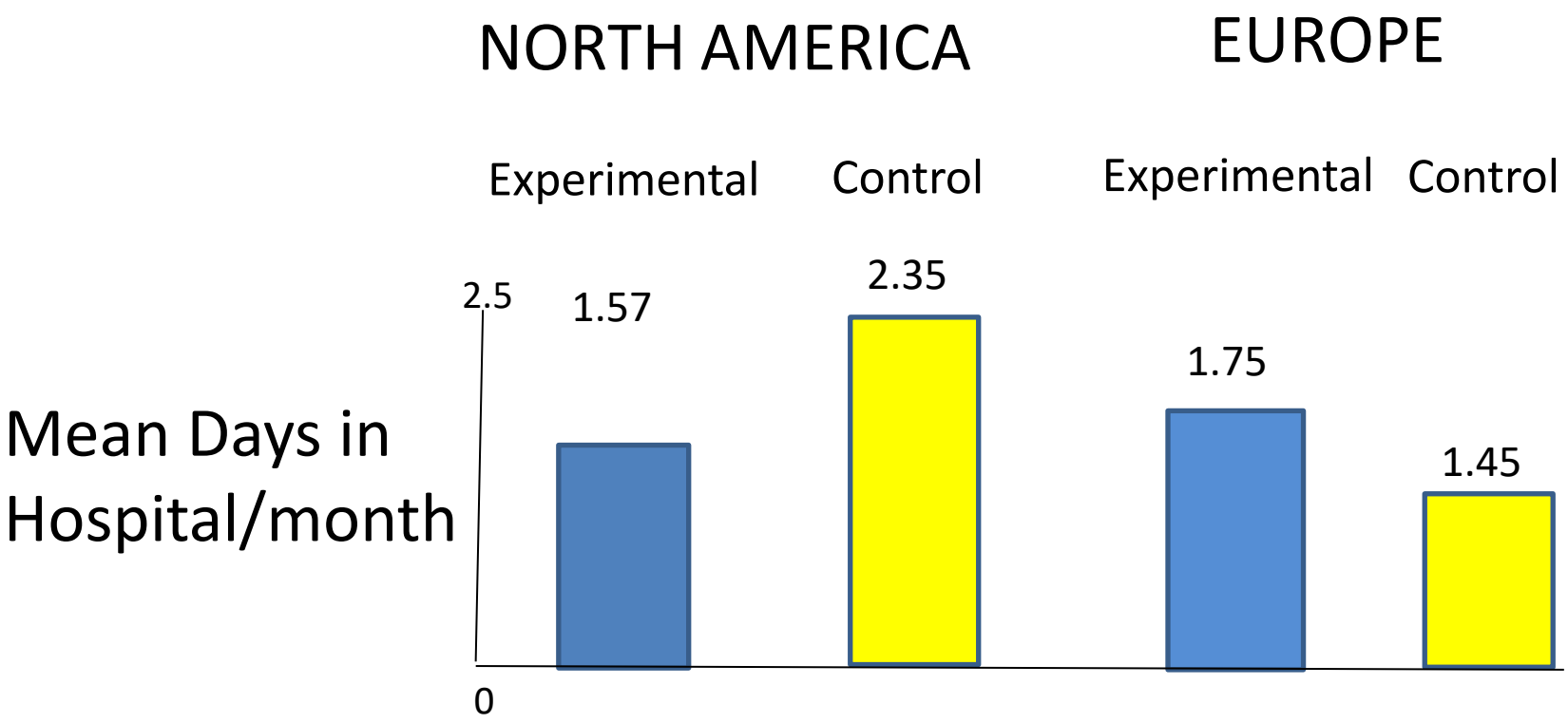
- Studies in North America positive
- Not replicated in Europe
- Debate on the reasons for the difference
- Model adherence?
- Different systems?

Assertive Outreach effects

- Meta-analysis on factors influencing the findings
- Higher baseline bed use (greater reduction)
- Higher model fidelity (greater reduction)

Burns et al., BMJ, 2007

Assertive outreach: RCTs



Burns et al. Br J Psychiatr, 2002

Team characteristics and outcomes

- Pan London Assertive Outreach Study
- 24 teams and 580 patients
- Weekend working significantly associated with more voluntary and involuntary admissions

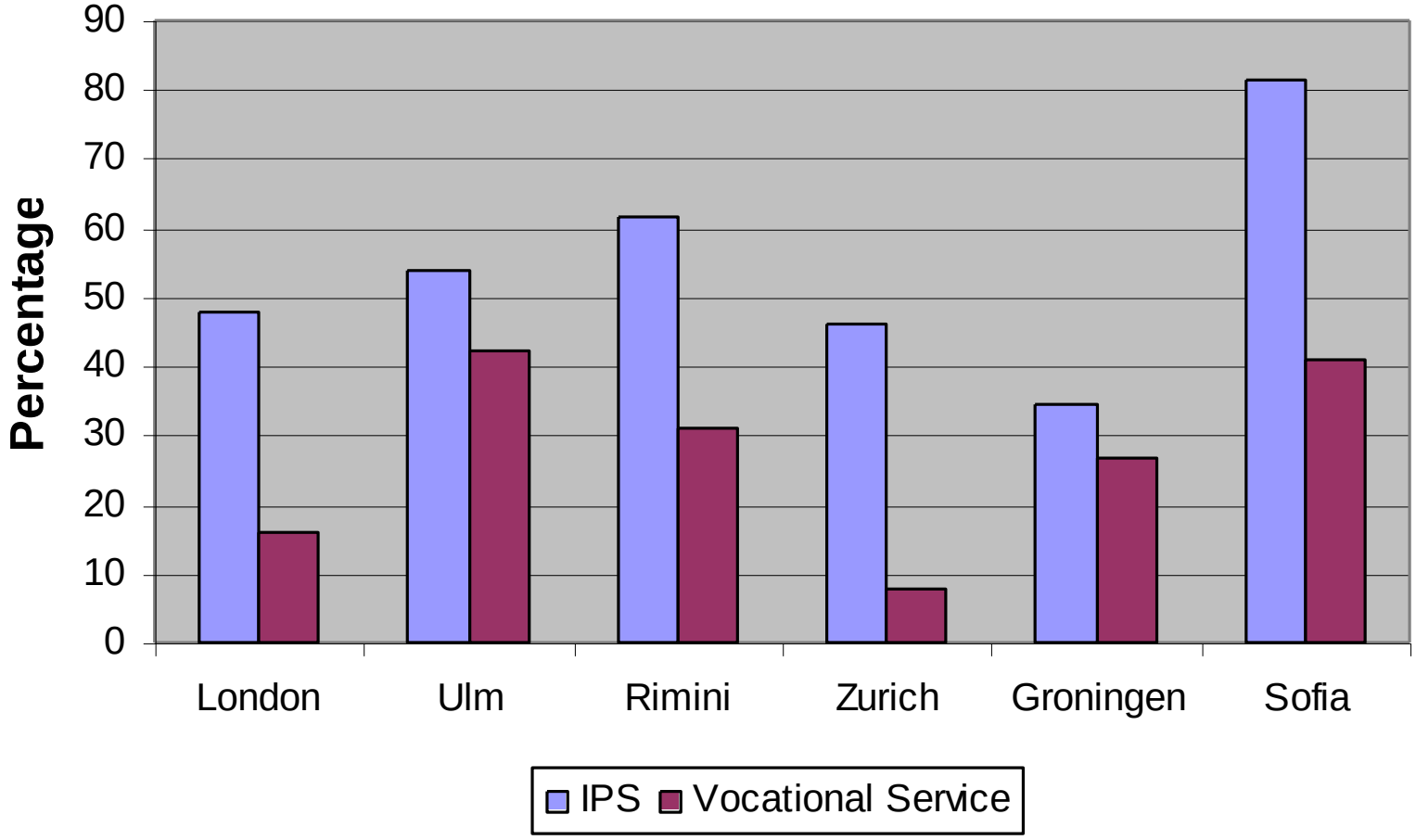
Priebe et al., Br J Psychiatr, 2004

Individual placement and support trial

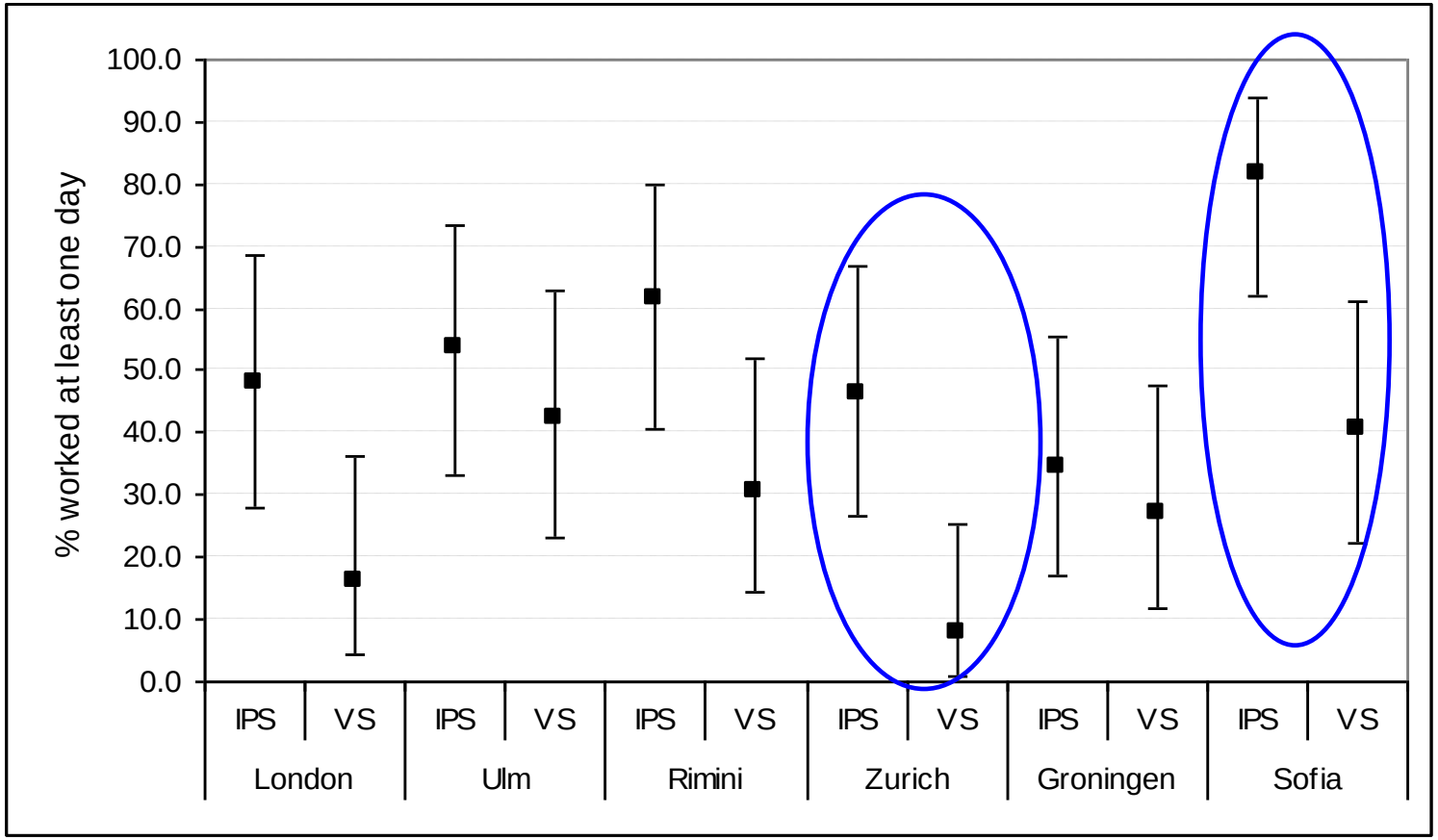
- IPS vs vocational rehabilitation
- Trial in six European countries
- Primary outcome:
  working in regular employment for at least one day
- Overall: 54.5% vs 27.6%
- P <0.001

Burns et al., Lancet, 2002

Worked for a day by centre



IPS effectiveness within centres



DIALOG trial

- Regular use of DIALOG vs treatment as usual
- Over a one year period
- Trial in six European countries
- >500 patients
- Primary outcome:
  subjective quality of life

Priebe et al., Br J Psychiatr, 2007

Overall findings

	Treatment as usual	Intervention group	p
Quality of life (MANSA)	4.74	4.86	0.047
Treatment satisfaction (CSQ)	25.8	26.7	0.007
Needs (CANSAS)	2.46	2.07	0.04

Participating centres

DIALOG trial

- Significant effects in only in Granada and London
- No interaction effect on primary outcome
- Interaction effects on secondary outcomes

Van den Brink et al., SPPE, 2010

Conclusions from these studies?

- Significant effects in only some centres
- No interaction effects on primary outcomes
- Assumption of commonalities
- Learning with each other, but not from other countries

The COFI study

- Assessing in-patients in five European countries:
  Belgium; Germany; Italy; Poland; United Kingdom
- Total sample of 7304 patients
- Outcomes:
  - treatment satisfaction; CAT 0 (low) to 10 (high)
  - length of stay; days

Giacco et al., BMJ Open, 2015

Treatment satisfaction

- Fully adjusted means per country
  - Belgium: 7.8 (0.4)
  - Germany: 7.5 (0.4)
  - Italy: 7.6 (0.4)
  - Poland: 7.9 (0.4)
  - UK: 6.9 (0.5)
- UK significantly less satisfied compared to all other countries

Bird et al., in preparation

Predictors across all countries

+ Age
+ Living with others
+ Having a close friend
+ First admission to hospital

- Higher education
- More severe clinical symptoms
- Comorbid diagnosis of personality disorder
- Involuntary admission

Length of stay

Total sample: 39.4 (sd=49.9)

Fully adjusted means per country

- Belgium: 56.4 (11.0)
- UK: 46.9 (13.9)
- Germany: 37.4 (10.5)
- Poland: 30.9 (11.8)
- Italy: 18.9 (10.4)

Giacco et al., in preparation

Predictors across all countries

Social disadvantage
+ homeless
+ receiving benefits
+ no contacts with friends in the last week

Clinical severity
+ higher score on Clinical Global Impression Scale
+ psychotic disorder
+ substance use disorder
+ history of admissions
+ involuntary legal status

Legal status

	Total sample	Belgium	Germany	Italy	Poland	UK
Involuntary	55.4 (15.9)	64.7 (9.4)	40.7 (9.2)	25.3 (9.5)	36.9 (9.6)	60.2 (12.0)
Voluntary	34.3 (15.1)	54.4 (11.0)	37.2 (9.9)	18.1 (9.9)	30.2 (11.1)	37.2 (11.9)

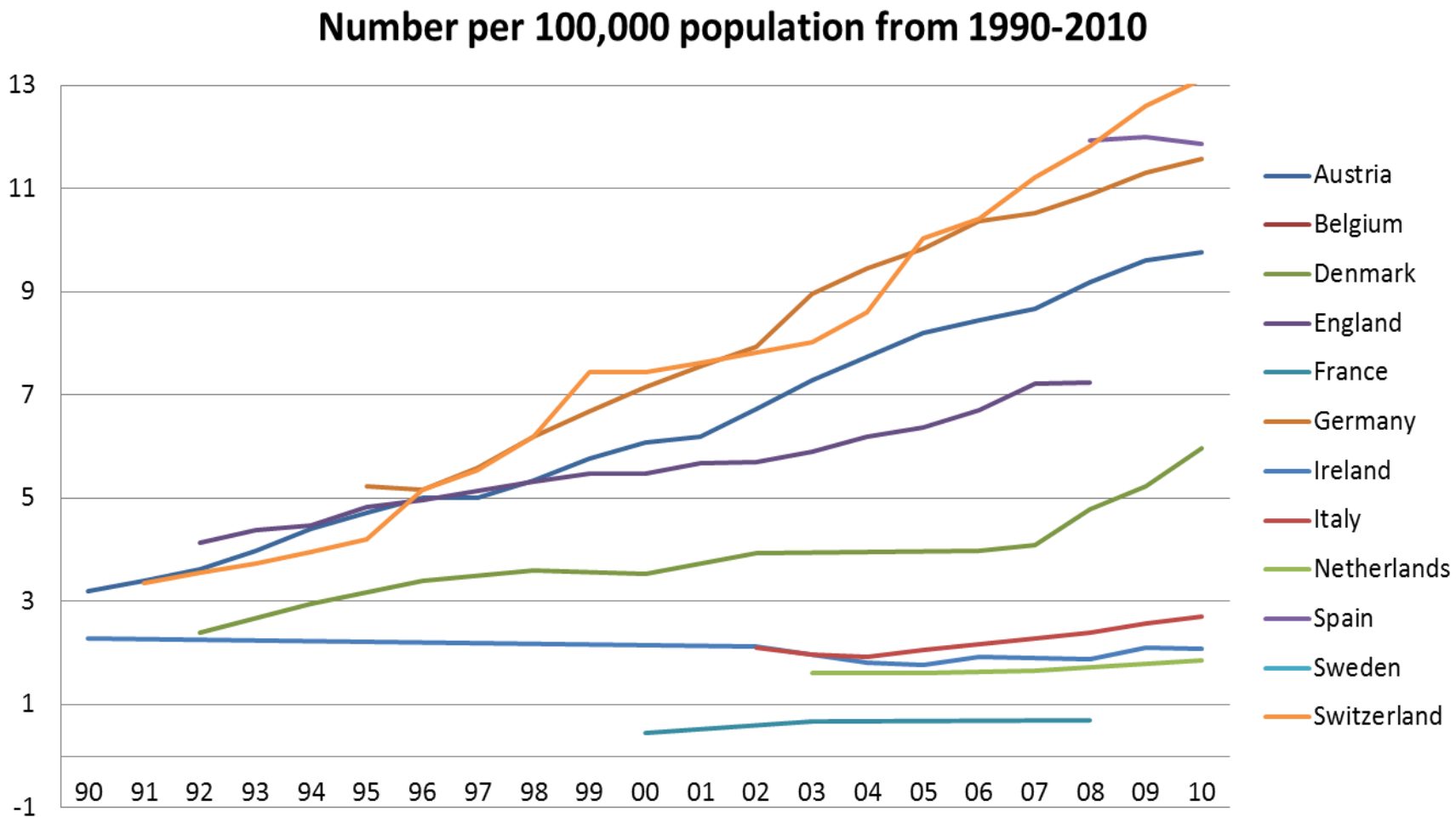
Homelessness

	Total sample	Belgium	Germany	Italy	Poland	UK
Homeless	54.2 (22.6)	92.7 (9.1)	31.8 (10.1)	23.6 (14.4)	30.8 (9.9)	54.9 (15.0)
Not homeless	38.1 (16.4)	54.4 (10.5)	37.5 (10.1)	18.9 (10.3)	30.8 (11.7)	46.2 (13.6)

Conclusions

- Patient responses are relatively similar
- System responses vary highly

Forensic Beds



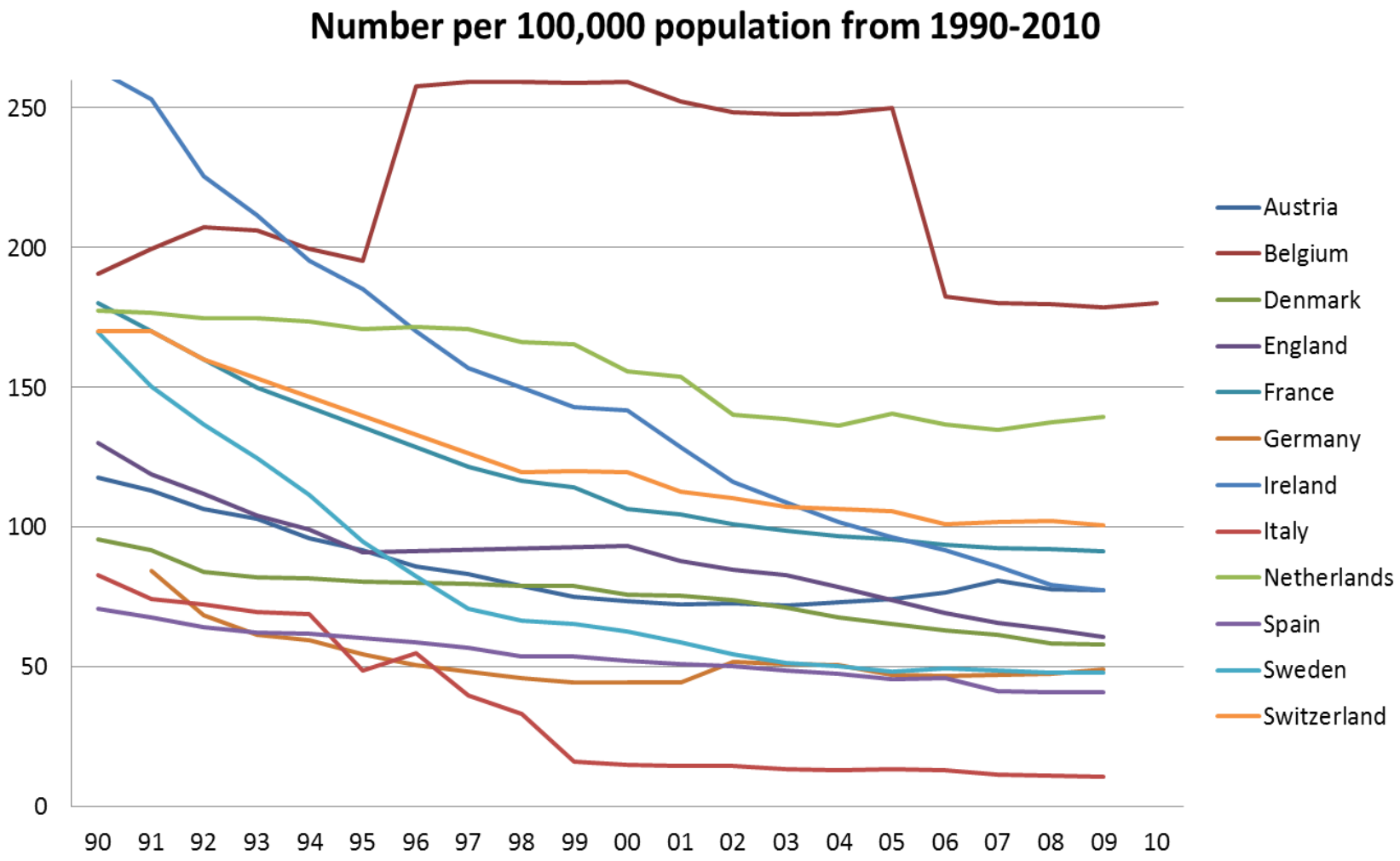
Chow & Priebe, BMJ Open, 2016

Need for data from different countries

- Penrose hypothesis
- Are changes in bed numbers and prison population associated?
- Co-integration analyses in one country
- Analyses of changes in different countries

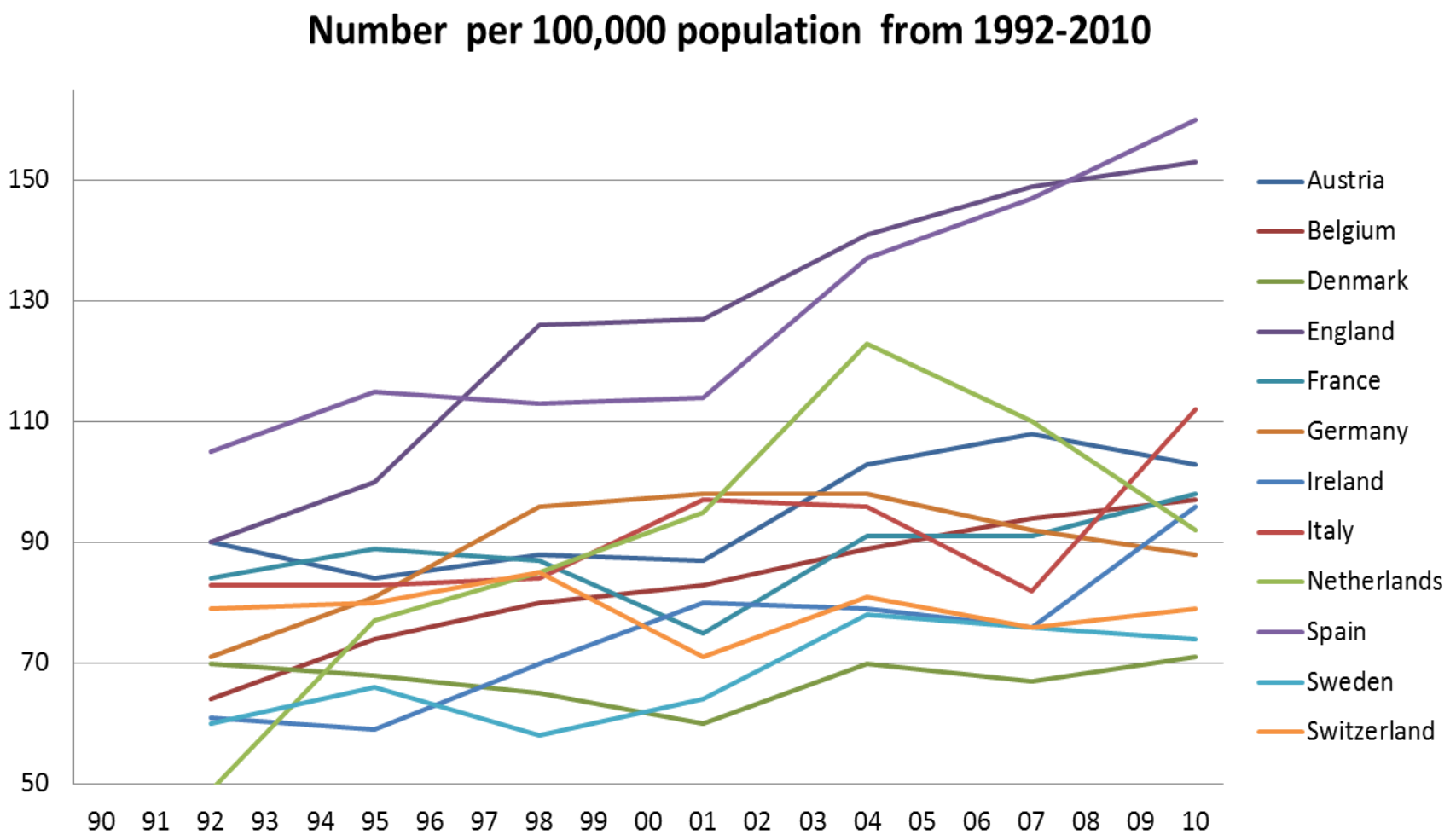
Ceccherini-Nelli & Priebe, International Journal of Social Economics, 2007

Europe: Psychiatric Beds



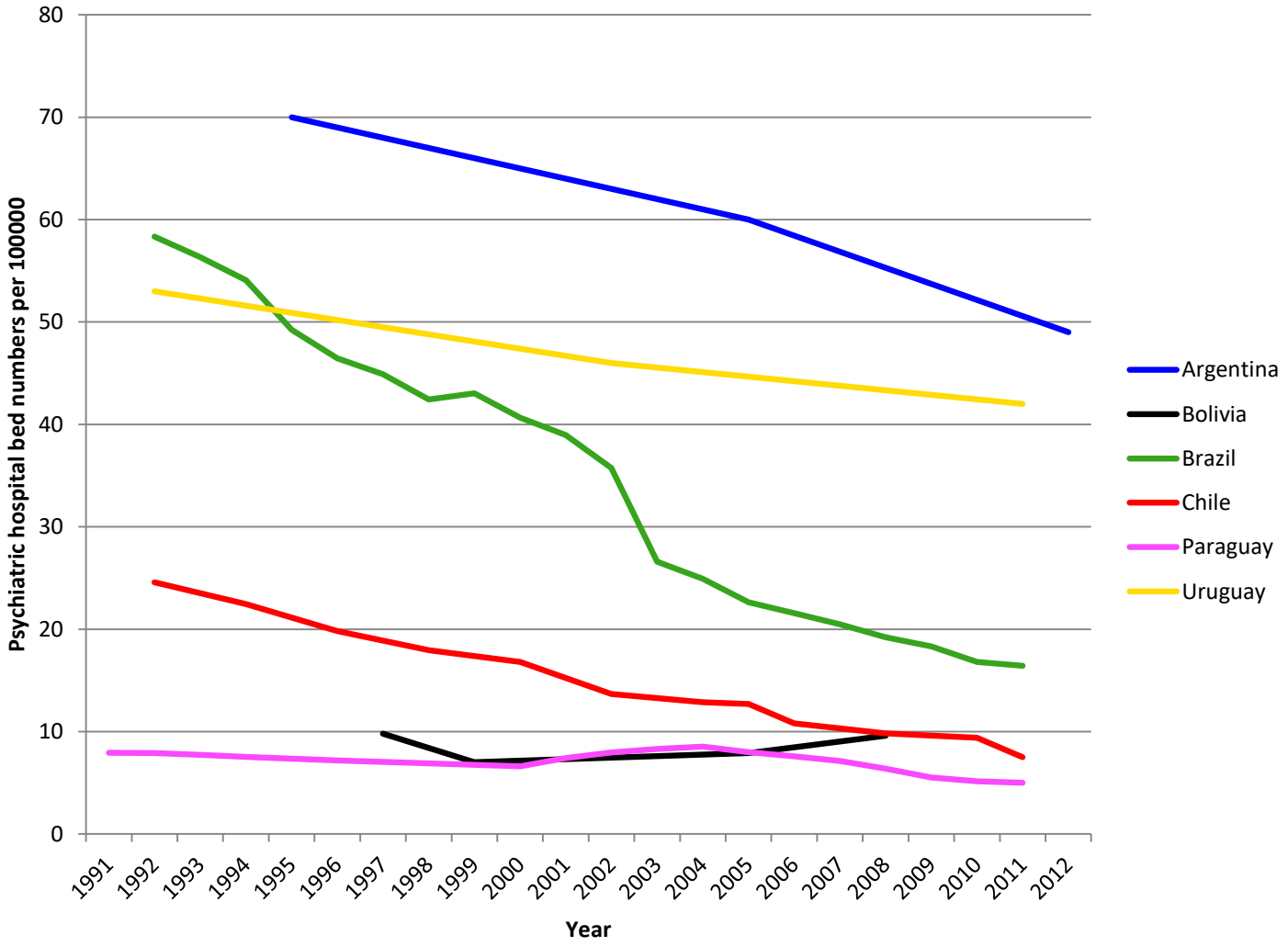
Chow & Priebe, BMJ Open, 2016

Europe: Prison Population



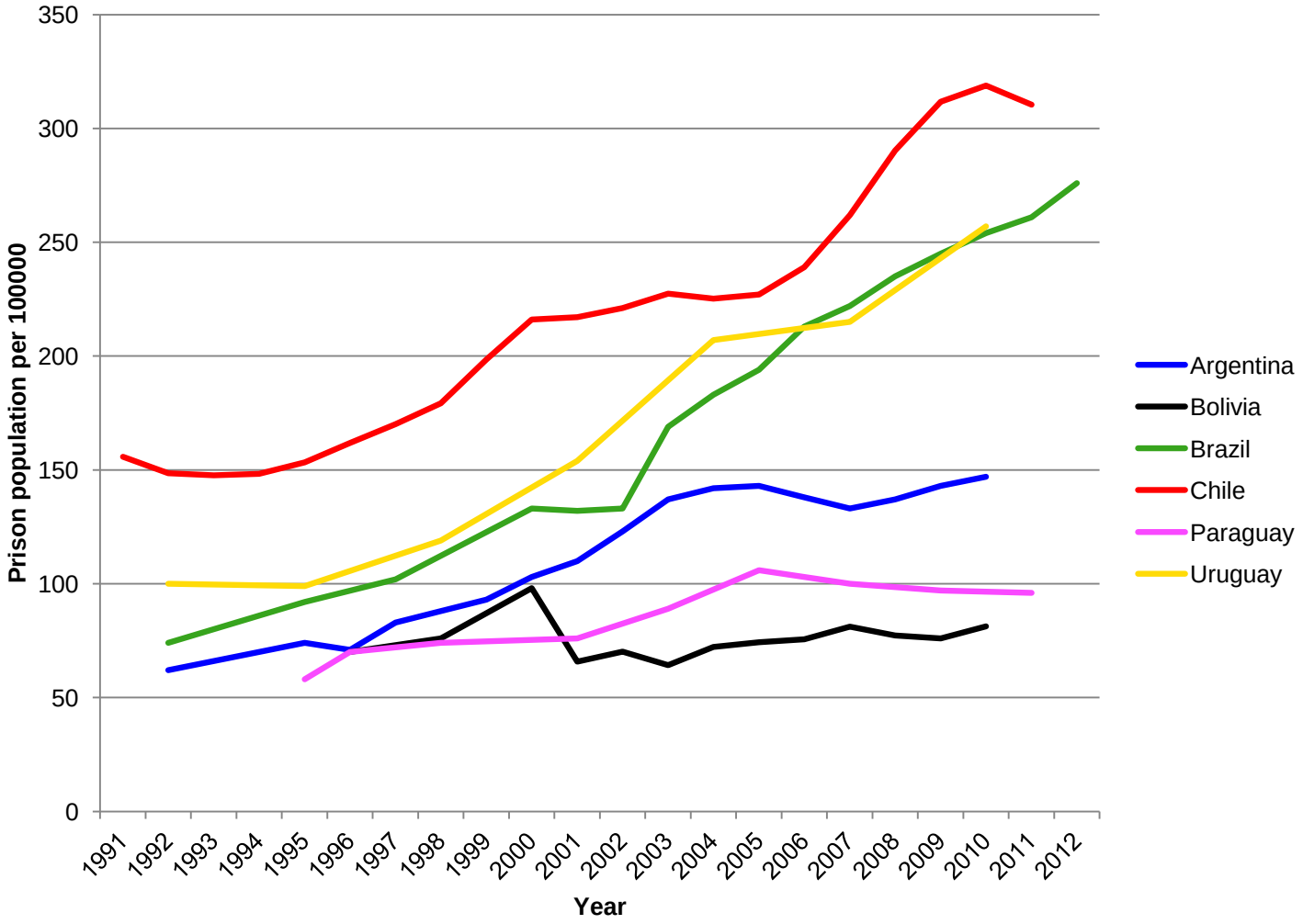
Chow & Priebe, BMJ Open, 2016

South America: Psychiatric Beds



Mundt et al., JAMA Psychiatry, 2015

South America: Prison Population



Mundt et al., JAMA Psychiatry, 2015

Findings

- Significant associations between reduction of bed numbers and increase of prison populations in Europe and South America
- When adjusting for macro-economic factors:
  - association in Europe is not significant anymore
  - association in South America remains significant

Mundt et al., JAMA Psychiatry, 2015; Chow & Priebe, BMJ Open, 2016

How can we learn from each other?

- Understanding other systems
- Working in other countries
- Avoiding simple appraisals
- Widening options

Role of data and research

- Limited
- Better concepts, better methodologies and better data required
- Quasi-experimental studies
- Quantitative and qualitative comparisons
- Global mental health
- Increasing importance