Models of Child Health Appraised

(A Study of Primary Healthcare in 30 European countries)

Modelling child health outcomes in MOCHA countries

MEASUREMENT CONUNDRUMS

WP6 Economics and Workforce

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Aims and Conceptual Framework

AIM: To explore the relationship between child health outcomes in the 30 MOCHA countries and models and strength of primary care, controlling for country level confounding factors

CONCEPTUAL FRAMEWORK:

- A 'production function of child health'
- 'Output' / outcomes are affected by several 'inputs', e.g.
  - proximate / family factors (genes, behaviours)
  - socio-economic and demographic characteristics
  - health care system influences, e.g. level of resources, method of organisation (models of care)

METHOD: Quantitative, regression, population/ national level

Bedevilled by data issues and measurement conundrums

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Child health outcome indicators

- Many studies propose holistic national child health indicators (e.g. clinical care, various conditions, hospitalisations, health protection etc)*
- International data sources don't capture these
- Consistently reported outcomes are mortality rates and vaccination rates
- Vaccinations unsuitable outcomes of child primary care:
  - not delivered by primary care in many countries
  - affected by incentives and sanctions in some areas
- Hence mortality rates were used

*(Rigby et al 2003; Gill et al 2014; Mangione-Smith et al 2007; Royal College Paediatricians and Child Health (UK) 2017; European Commission Expert Panel on Health System Performance Assessment).

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Outcome variables – 5 Mortality rates

- **Neonatal mortality per 1000 live births (first 28 days)**
- **Infant mortality per 1000 live births (first year)**
- **Under 5 mortality per 1000 live births**
- **Diabetes mortality ages 0-19 per 100,000 of population**
- **Epilepsy mortality ages 0-19 per 100,000 of population**

Advantages of mortality indicator: variability between countries gives opportunity to investigate contributory factors

Drawbacks of mortality indicator:

- **Poor measures of quality of care / inverse of health**
- **Hospitalisations for diabetes, epilepsy (ambulatory care sensitive conditions) is a recognised measure of quality of primary care; mortality is a poor proxy**

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Explanatory variables (n=10)

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1,2. Health care system features

Bohm (2012, 2013) classification of countries according to
how health care is: - Financed (state vs societal)
- Provided (state vs private)

Rationale: Financing and service provision arrangements create incentives affecting the way actors (organisations and individuals) behave, and this affects patient experiences and outcomes.
E.G. payment of doctors by capitation vs FFS vs P4P
Drawbacks: classification is by predominant method, but most systems have mixed financing and service provision

MOCHA classification of primary care for children (GP led, Paediatrician led, mixed) not used as most systems are mixed and this classification has been shown by others not to affect outcomes)*
* Van Esso et al 2010; Katz et al 2002; Ehrich et al 2016)

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Financing and service delivery classifications, from Bohm 2013

Country	Financing	Service provision
AUSTRIA	Societal	Private
BELGIUM	Societal	Private
BULGARIA	Societal	Private
CROATIA	Societal	Private
CYPRUS	State	State
CZECH REP.	Societal	Private
DENMARK	State	State
ESTONIA	Societal	Private
FINLAND	State	State
FRANCE	Societal	Private
GERMANY	Societal	Private
GREECE	Societal	Private
HUNGARY	Societal	Private
ICELAND	State	State
IRELAND	State	Private
ITALY	State	Private
LATVIA	State	State
LITHUANIA	State	Private
LUXEMBOURG	Societal	Private
MALTA	State	State
NETHERLANDS	Societal	Private
NORWAY	State	State
POLAND	Societal	Private
PORTUGAL	State	State
ROMANIA		
SLOVAKIA	Societal	Private
SLOVENIA	Societal	State
SPAIN	State	State
SWEDEN	State	State
UK	State	State

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3. Strength of Primary Care

- Primary Care Activity Monitor of Europe (PHAMEU), (Kringos et al 2013) scored primary care (strong, medium, weak) on 7 dimensions, each containing a number of indicators:
  - Structure dimensions: governance, economic conditions, workforce
  - Process dimensions: access, continuity, coordination, comprehensiveness
- **Overall strength of primary care score** from PHAMEU used in the analysis

Drawback: scores were based on primary care as a whole and not specifically on care for children

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PHAMEU scoring for strength of countries' primary care (Kringos 2013)

	The structure of primary care			The service-delivery process of primary care				Overall primary care system strength
Country	Primary care governance	Economic conditions of primary care	Primary care workforce development	Access to primary care	Continuity of primary care	Coordination of primary care	Comprehensiveness of primary care	
Austria	Medium	Medium	Weak	Medium	Weak	Weak	Weak	Weak
Belgium	Medium	Strong	Medium	Weak	Strong	Medium	Strong	Strong
Bulgaria	Medium	Weak	Weak	Weak	Medium	Weak	Strong	Weak
Croatia*								
Cyprus	Weak	Weak	Weak	Weak	Medium	Weak	Weak	Weak
Czech Republic	Medium	Weak	Weak	Strong	Strong	Medium	Weak	Medium
Denmark	Strong	Medium	Strong	Strong	Strong	Strong	Medium	Strong
Estonia	Strong	Weak	Medium	Medium	Strong	Medium	Medium	Strong
Finland	Medium	Strong	Strong	Medium	Medium	Medium	Strong	Strong
France	Medium	Medium	Medium	Weak	Medium	Medium	Strong	Medium
Germany	Medium	Strong	Medium	Medium	Strong	Weak	Medium	Medium
Greece	Medium	Weak	Weak	Weak	Weak	Strong	Weak	Weak
Hungary	Weak	Medium	Medium	Strong	Medium	Weak	Weak	Weak
Iceland	Weak	Weak	Weak	Medium	Strong	Weak	Medium	Weak
Ireland	Weak	Weak	Strong	Weak	Strong	Weak	Medium	Weak
Italy	Strong	Strong	Medium	Medium	Weak	Medium	Weak	Medium
Latvia	Medium	Medium	Weak	Weak	Strong	Medium	Medium	Medium
Lithuania	Strong	Medium	Medium	Strong	Weak	Strong	Strong	Strong
Luxembourg	Weak	Weak	Weak	Weak	Weak	Medium	Medium	Weak
Malta	Weak	Weak	Strong	Weak	Weak	Strong	Medium	Weak
Netherlands	Strong	Strong	Strong	Strong	Weak	Strong	Medium	Strong
Norway	Strong	Weak	Medium	Medium	Medium	Weak	Strong	Medium
Poland	Weak	Weak	Weak	Strong	Medium	Strong	Weak	Medium
Portugal	Strong	Medium	Strong	Strong	Medium	Medium	Strong	Strong
Romania	Strong	Strong	Medium	Medium	Medium	Weak	Weak	Medium
Slovak Rep.	Weak	Medium	Weak	Medium	Strong	Weak	Weak	Weak
Slovenia	Strong	Strong	Strong	Strong	Weak	Strong	Weak	Strong
Spain	Strong	Strong	Strong	Strong	Strong	Strong	Strong	Strong
Sweden	Medium	Medium	Medium	Medium	Weak	Strong	Strong	Medium
UK	Strong	Strong	Strong	Strong	Medium	Strong	Strong	Strong

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4,5,6. Country co-variates

- **GDP per capita:** widely used indicator of living standards/ average incomes, and hence an indicator of ability to spend on health care.

  Range in MOCHA: Luxembourg $97,018; Bulgaria, Romania < $20,000; France, UK ~$38,000; Germany $44,072, Ireland $62,828

  Drawback: Doesn't take account of distribution of income

- **Proportion of country's population living in urban areas**
- **Age distribution of population – proportion of population aged 0 – 19 years (proxy for family size)**

  Population range in MOCHA: Malta, Iceland < 500,000; France, UK > 65 million; Germany > 80 million

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7,8,9. Health care workforce

- *Health care expenditure per capita is expected to influence outcomes but it correlates highly with GDP per capita so was omitted from analysis to avoid multicollinearity*
- Health care workforce is a major component in delivery of health care, and contributes significantly to overall health care expenditure. 3 workforce variables included:
  - **number of GPs per 100,000 of population**
  - **number of general paediatricians per 100,000 of population**
  - **number of nurses per 100,000 of population**

Drawbacks:

- **Missing workforce data reduced sample for analysis**
- **Data relate to whole population, not specifically to children**

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10. Access to Health Care

- Point of care charges may limit access to care
- **Out-of-pocket expenditure on health care as % of total health expenditure** used as a proxy

- Out-of-pocket expenditures = direct payments and part of private expenditure (see below)

Drawback: data refer to whole country; charges may not apply to children.

MOCHA Country Agents indicated complex charging systems for children depending on age, condition, medication etc. Only 3 countries with no charges for children (Norway, Sweden, UK)

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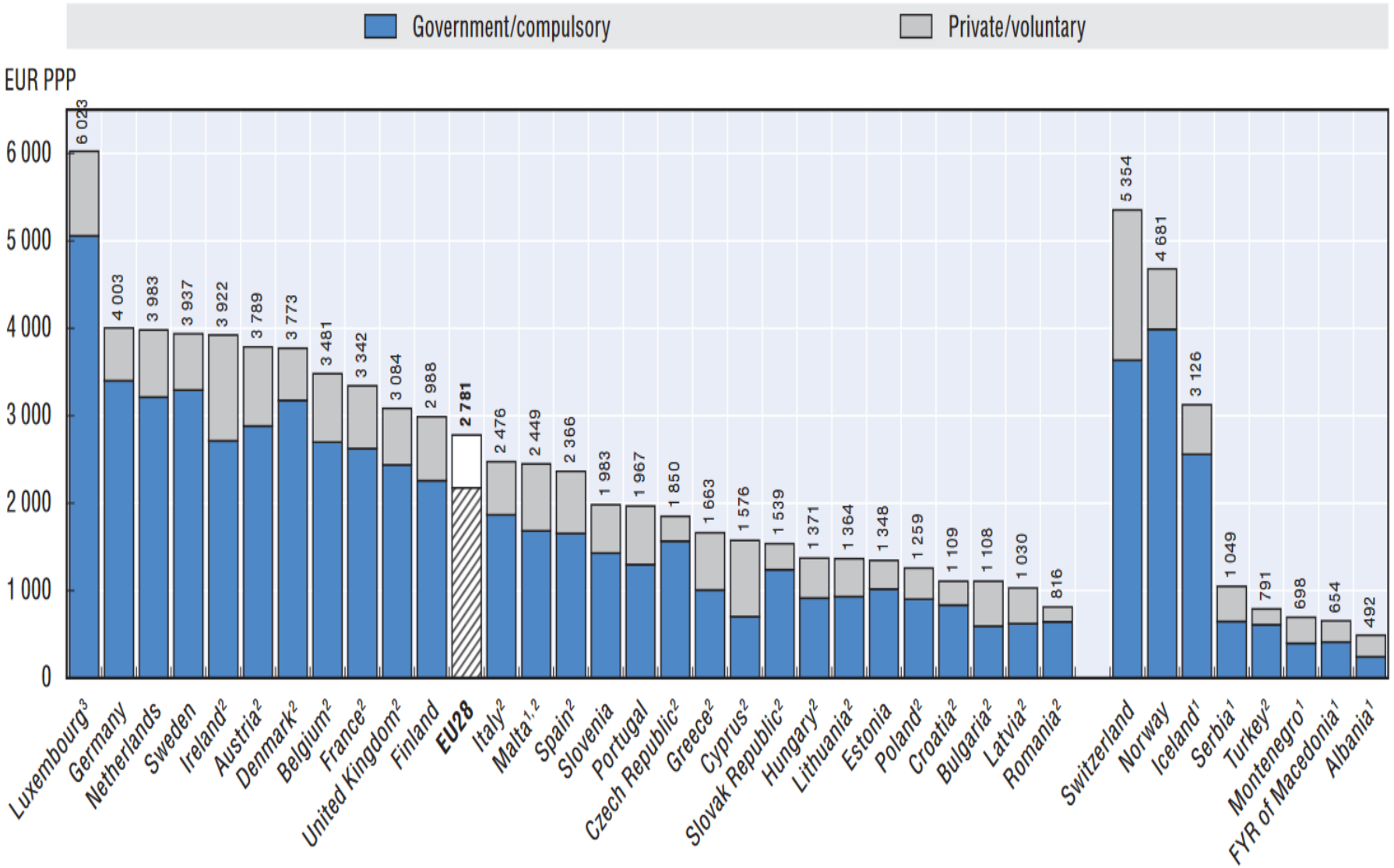
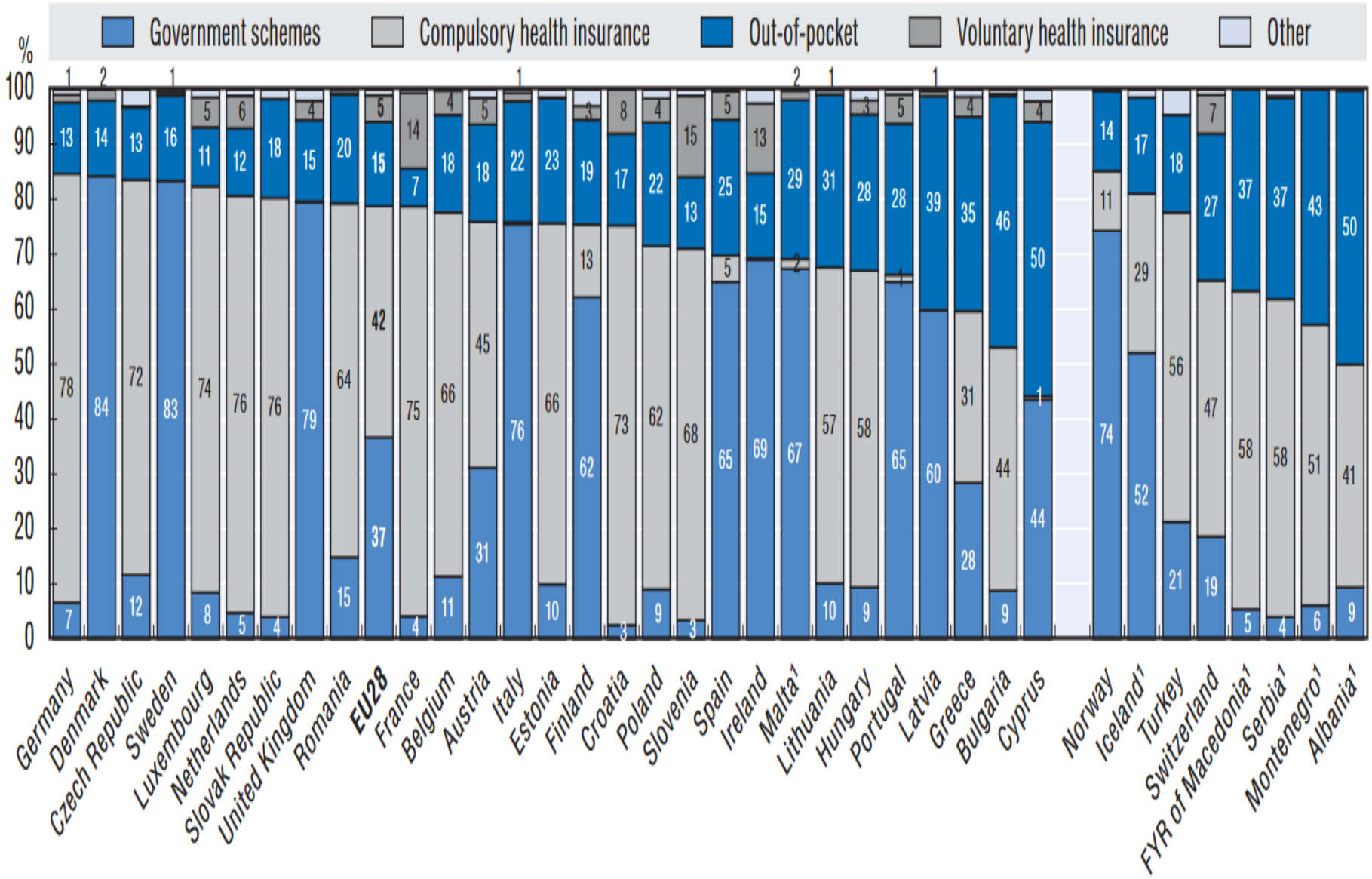
Health expenditure per capita, EU PPP 2015



Health expenditure, type of financing, World Bank 2014



Data and Methods

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Data and Methods

- Data for 7 quantitative variables and 5 mortality outcomes from WHO, World Bank, Eurostat
- 30 MOCHA countries, 13 years (2004-2016)
- Data for categorical variables from Bohm, Kringos. **Drawback is that one value for whole period**
- Random effects regression model
- Missing data not regarded as missing at random and not imputed, **may introduce bias**
- Two models for each outcome – no lag; 2 year lag for GDP, workforce, urbanisation, out-of-pocket expenditure, as changes take time to affect outcomes
- Log of GDP used (i.e. a rate of growth of GDP)
- Analysis using STATA

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Summary descriptive statistics of quantitative variables for 30 MOCHA countries, 2004 – 2016. (N=390, is complete data all countries, all years)

VARIABLES	N	Mean	Standard deviation	Min	Max
Mortality rate/1000 live births, neonatal	360	3.204	1.804	0.900	12.30
Mortality rate/1000 live births, infant	360	4.629	2.730	1.500	19.50
Mortality rate/1000 live births, under 5 years	360	5.519	3.098	1.900	22.40
Mortality rate<=19years/100,000 population, diabetes	390	0.0708	0.0474	0.0184	0.260
Mortality rate<=19years/100,000 population, epilepsy	390	0.381	0.155	0.149	0.920
GDP per capita, $ PPP	390	35,096	15,243	11,736	97,864
% of population in urban areas	390	73.41	12.51	49.63	97.90
Population aged 0-19 years as % of total population	390	22.23	2.538	18.05	29.64
Out-of-pocket expenditure as % total health expenditure	330	20.44	9.769	5.221	49.70
General paediatricians / 100,000 of population	265	14.28	6.236	3.900	30.09
General practitioners / 100,000 of population	227	70.94	28.55	13.28	170.00
Nurses / 100,000 of population	232	977.6	497.4	29	2,675

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Findings

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Findings - summary

- Factors associated with a reduction in mortality:
  - GDP per capita growth *(Infant, Neonatal, Under 5)*
  - Higher workforce - paediatricians and GPs *(Infant, Neonatal, Under 5)*
  - Less out-of-pocket expenditure (*Neonatal, Diabetes 0-19)*
  - Lower proportions of children in the population (*all 7 outcomes)*
  - State-based service provision compared to private-based service provision *(Epilepsy 0-19)*
  - Weak, rather than strong, primary care systems (*Diabetes 0-19, Epilepsy 0-19)*

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Coefficients – unlagged models

Dependent Variables: Mortality	Neonatal per 1000 live births	Infant per 1000 live births	Under 5 per 1000 live births	Diabetes /100000 Popul'n	Epilepsy /100000 Popul'n
GDP per capita (log)	**-1.255*** [0.363]	**-2.012*** [0.555]	**-2.388*** [0.665]	0.018 [0.019]	0.091 [0.067]
Out of pocket (% THE)	**0.027** [0.014]	0.014 [0.021]	0.023 [0.025]	**0.002** [0.001]	0.004 [0.003]
Paediatricians/100,000 pop.	**-0.017** [0.007]	**-0.032*** [0.010]	**-0.037*** [0.012]	-0.000 [0.000]	-0.000 [0.001]
GPs/100,000 pop.	**-0.008** [0.004]	**-0.019*** [0.006]	**-0.021*** [0.008]	**-0.000** [0.000]	**-0.002*** [0.001]
% Population <=19yrs	**0.421*** [0.031]	**0.651*** [0.047]	**0.763*** [0.056]	**0.013*** [0.002]	**0.033*** [0.006]
Service provision (State =1, Private =0)	-1.072 [0.723]	-2.075* [1.128]	-2.254* [1.259]	-0.022 [0.023]	**-0.215** [0.099]
Primary care overall score (Strong =1, Weak =0)	0.229 [0.693]	0.413 [1.080]	0.556 [1.208]	**0.049** [0.023]	**0.216** [0.096]
Observations/ no. countries	166 /23	166 /23	166 /23	166/ 23	166 /23
Standard errors in brackets	*** p<0.01	** p<0.05	* p<0.01		

Interpretation: Example 1

Increase in paediatricians (non specialist) by 1 per 100,000 of population is associated with a decrease in neonatal deaths of 0.017 per live births

- Average number of paediatricians per 100,000 population in MOCHA countries is about 14 (slide 18)
- An increase of 1 paediatrician per 100,000 of population in a country with (say~) 750,000 live births annually will be associated with a reduction of neonatal deaths per 1000 live births of:

  750,000/1000* -0.017 = 12.75 fewer deaths per annum

[~ France, chose bas GDP per cap close to MOCHA average]

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Interpretation: Example 2

Association between GDP per capita and infant mortality per 1000 live births

- Coefficient of log of GDP per capita of -2.02 is the change in infant mortality per 1000 live births for a 100% growth rate
- A 1% GDP per capita growth rate in a country with (say) 750,000 live births per annum would be associated with:

  750,000/1000 * -0.02 = 15 fewer infant deaths

- In MOCHA countries, the average GDP per capita is $35,000, and average infant mortality per 1000 live births is 4.6 (slide 18). In a country with 750,000 live births pa there would be 750,000 * 0.0046 = 3460 infant deaths pa. With GDP growth of 1%, the number of infant deaths falls by 15 from 3460 to 3445

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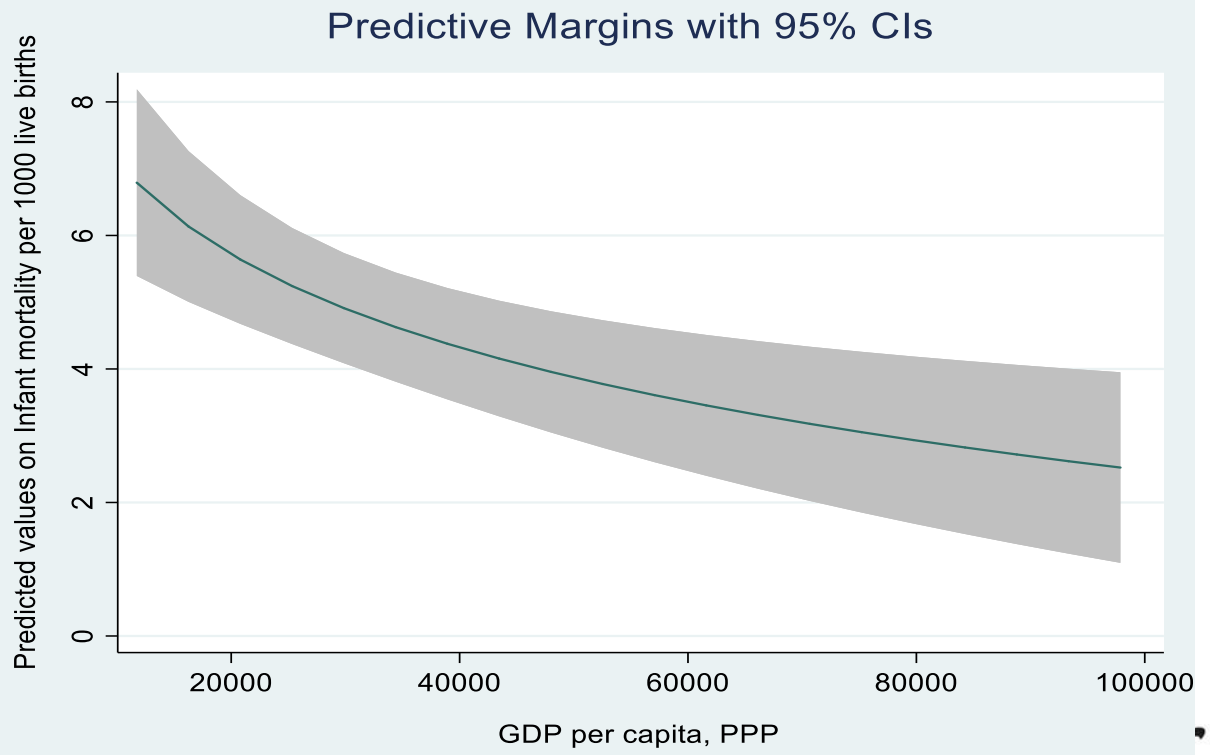
Relationship between GDP per capita and infant mortality per 1000 live births

[MOCHA average $35,000 GDP per capita and 4.6 infant mortality /1000 live births]



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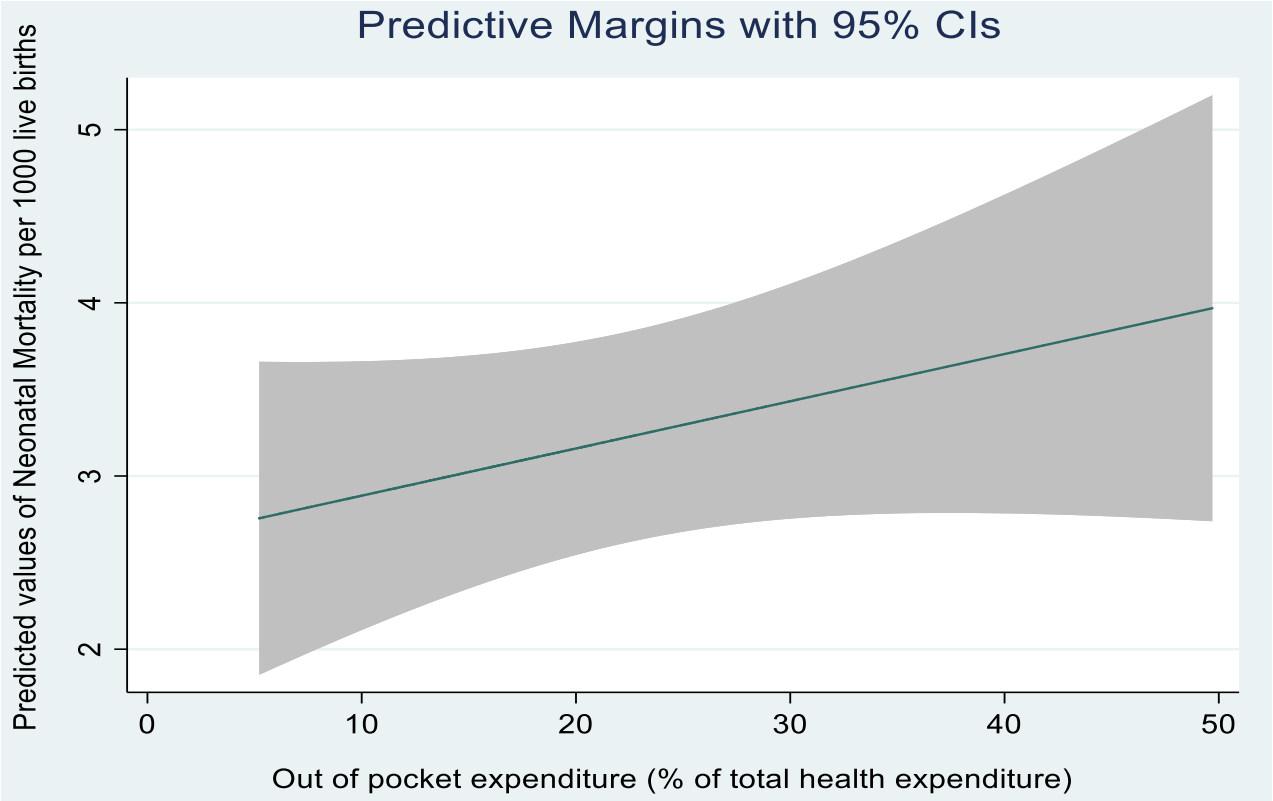
Relationship between out-of-pocket expenditures as % of total health expenditure and neonatal mortality per 1000 live births

[MOCHA average OOP = 20% of THE and 3.2 neonatal mortality /1000 live births]



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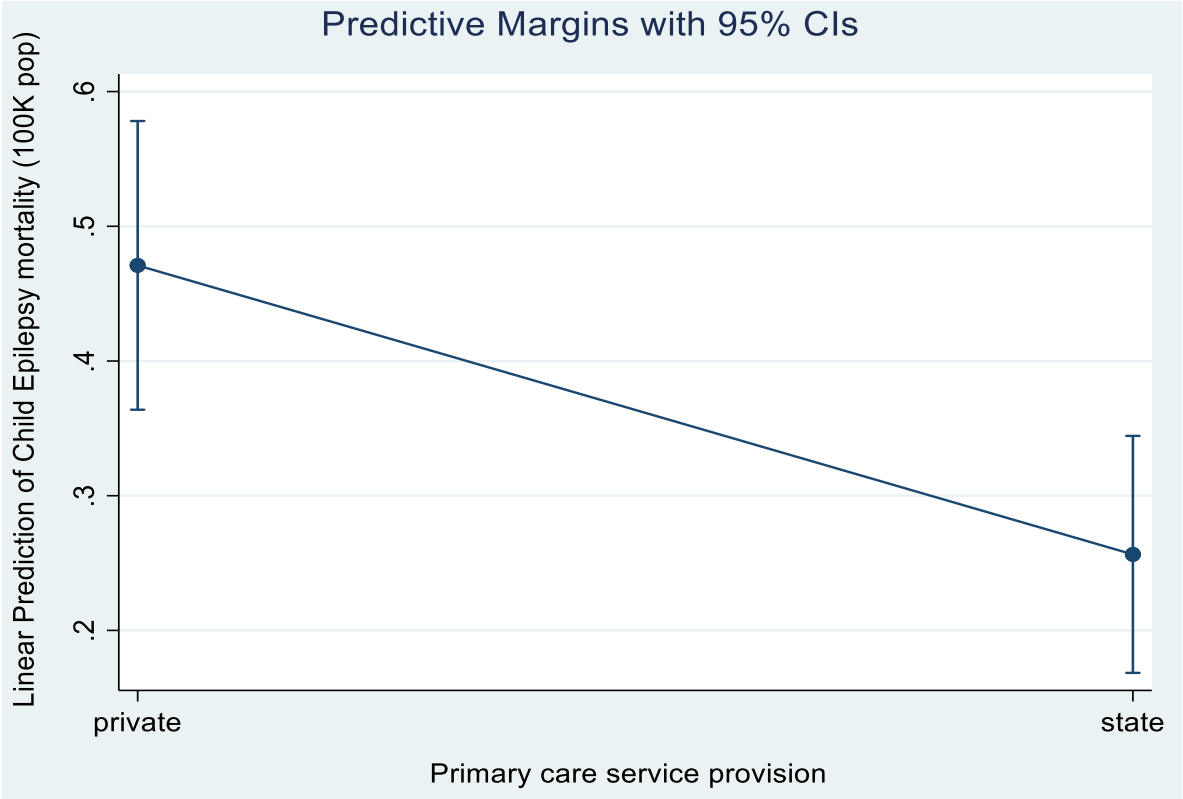
Epilepsy mortality 0 – 19 years predicted to be 0.215 per 100,000 of the population lower with predominantly state service provision (rather than private)



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CONCLUSION

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Summary and Conundrums

Summary: Child mortality found to fall with

- higher GDP per capita (early years mortality);
- larger paediatrician workforce (early years mortality);
- Larger GP workforce (early years, diabetes & epilepsy 0-19 mortality)
- lower out-of-pocket expenditures (diabetes & epilepsy 0-19 mortality);
- lower proportions of ages 0 -19 in population (early years, diabetes & epilepsy 0-19 mortality)

Interpret findings with caution as measurement conundrums

- Data deficiencies constrained choice of outcome measures and explanatory variables.
- Incomplete data (missing values), especially workforce reduced the number of countries included in the analysis
- Most country data (GDP, workforce, OOP) are not child or primary care specific
- Counter intuitive finding on strength of primary care may be because the indicator was not child specific

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Thank you

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WP 4
The Measurement Conundrums:
Calculating Conclusions

The Hague, 16th November 2018

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Ilaria Rocco[1], Barbara Corso[1], Daniela Luzi[2], Fabrizio Pecoraro[2], Oscar Tamburis[3]

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1. Analysis of the measures used

- Sources: International databases & CAs
- Comparison

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1. Analysis of the measures used

- Sources: International databases & CAs
- Comparison

2. Analysis of the relationships across measures

- Example of a Structural equation modeling approach

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1. Analysis of the measures used

Questions:

1. How is child health **monitored** in Europe?

2. How do European countries **evaluate** child health care **quality**?

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1. Analysis of the measures used

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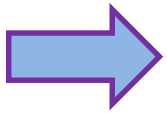

207 measures **child health-related**

2. How do European countries **evaluate** child health care **quality**?

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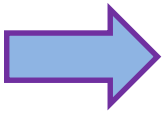

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1. Analysis of the measures used

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→ **207** measures **child health-related**

2. How do European countries **evaluate** child health care **quality**?

Sources: **Country Agents** ad-hoc questionnaire

→ **352** measures **to evaluate the quality of child health care**

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Distribution of the collected measures according to the age range, by source

International databases n=207
Country agents n=352

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Distribution of the collected measures according to the age range, by source

International databases n=207
Country agents n=352

Age-specific

International databases n=157 (**76%**)
Country agents n=122 (**35%**)

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Distribution of the collected measures according to the age range, by source

	< 1	[1-4]	[5-9]	[10-17]	> 17
International databases n=207	40 (25%)	3 (2%)	1 (1%)	42 (27%)	0
Country agents n=352	29 (24%)	2 (2%)	0	2 (2%)	1 (1%)
Age-specific					
International databases n=157 (**76%**)	18 (11%)				
Country agents n=122 (**35%**)	4 (3%)				
International databases n=157 (**76%**)		0			
Country agents n=122 (**35%**)		6 (5%)			
International databases n=157 (**76%**)			12 (8%)		
Country agents n=122 (**35%**)			51 (42%)		
International databases n=157 (**76%**)				19 (12%)	
Country agents n=122 (**35%**)				7 (6%)	
International databases n=157 (**76%**)			0		
Country agents n=122 (**35%**)			7 (6%)		
International databases n=157 (**76%**)				0	
Country agents n=122 (**35%**)				8 (6%)	
International databases n=157 (**76%**)				7 (4%)	
Country agents n=122 (**35%**)				1 (1%)	
International databases n=157 (**76%**)					14 (9%)
Country agents n=122 (**35%**)					4 (3%)

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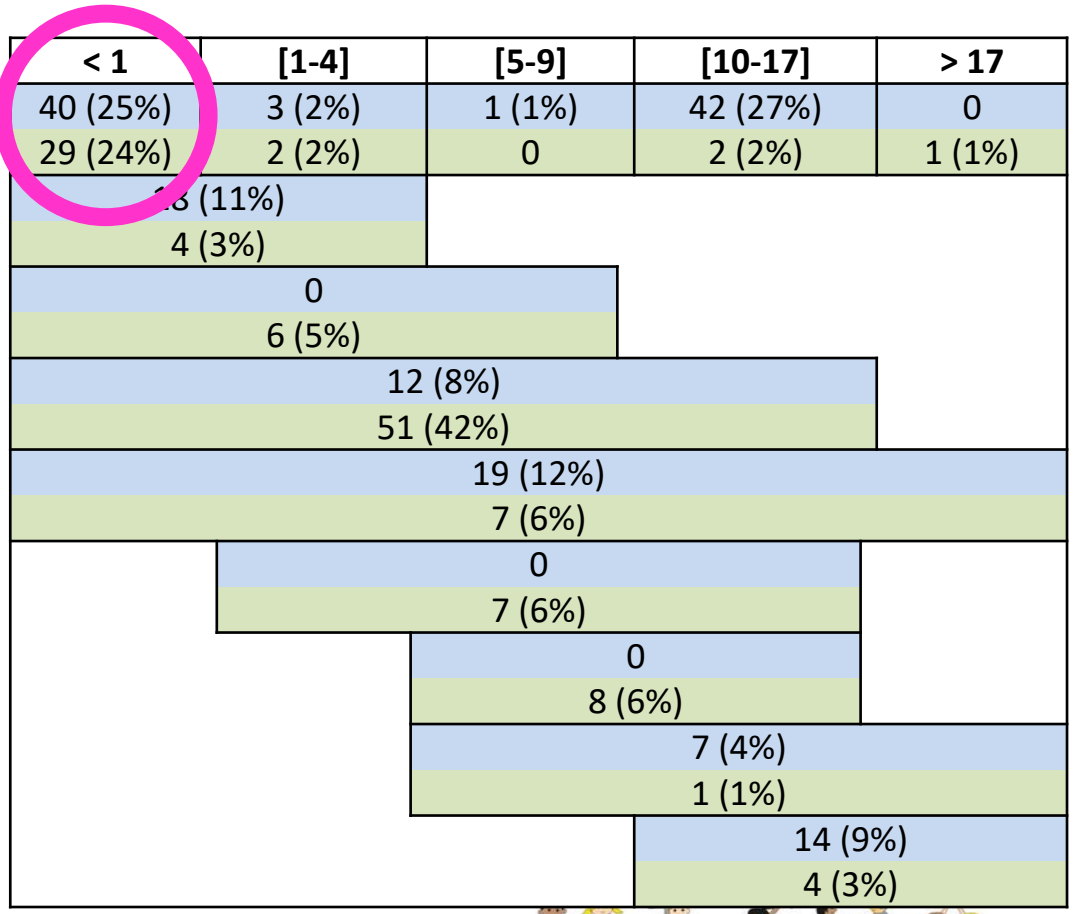
Distribution of the collected measures according to the age range, by source

	International databases n=207	Country agents n=352
Age-specific	International databases n=157 (**76%**)	Country agents n=122 (**35%**)



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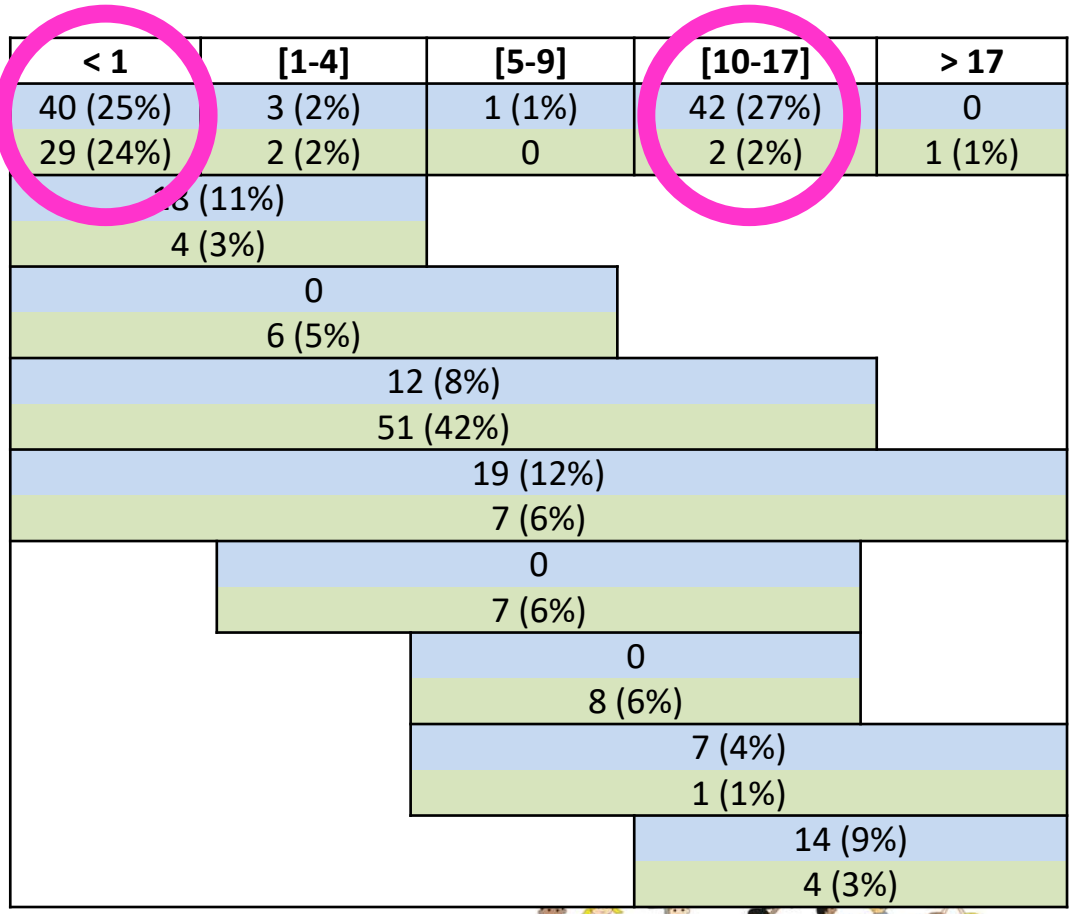

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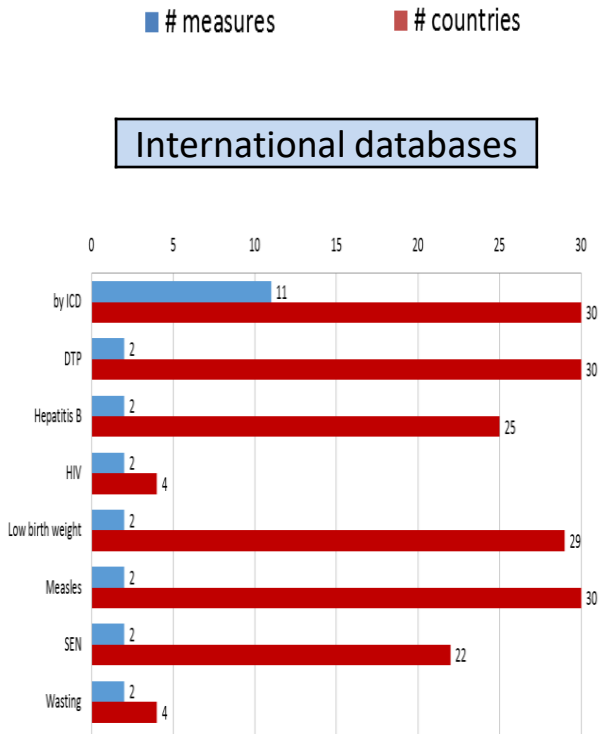
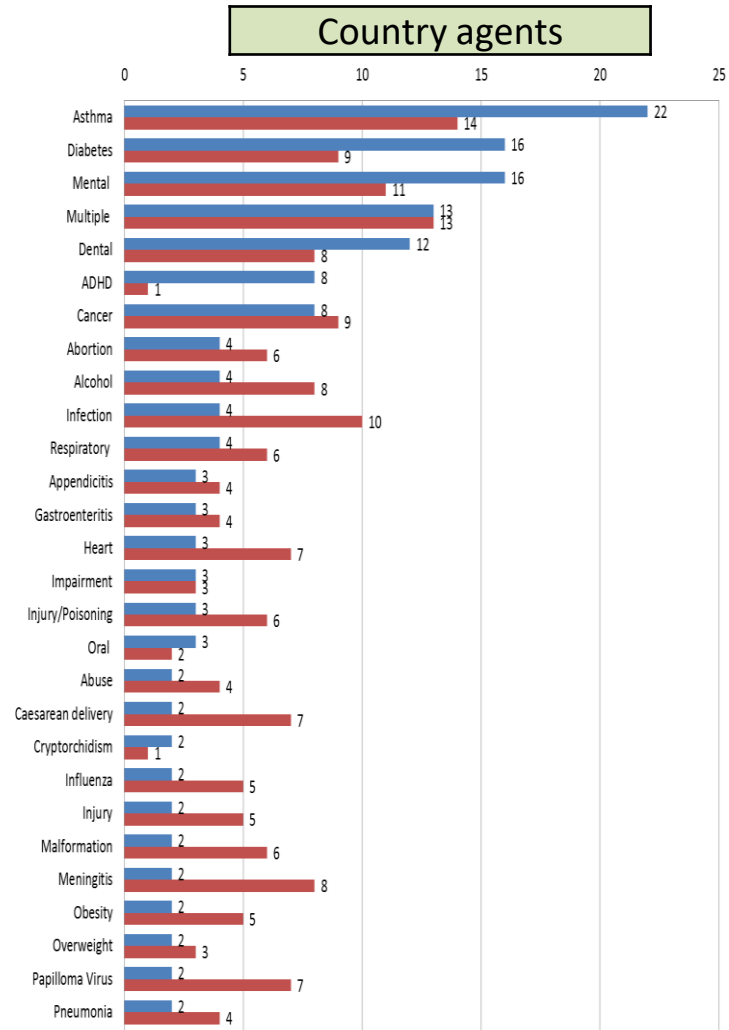
Distribution of the collected measures according to the disease, by source





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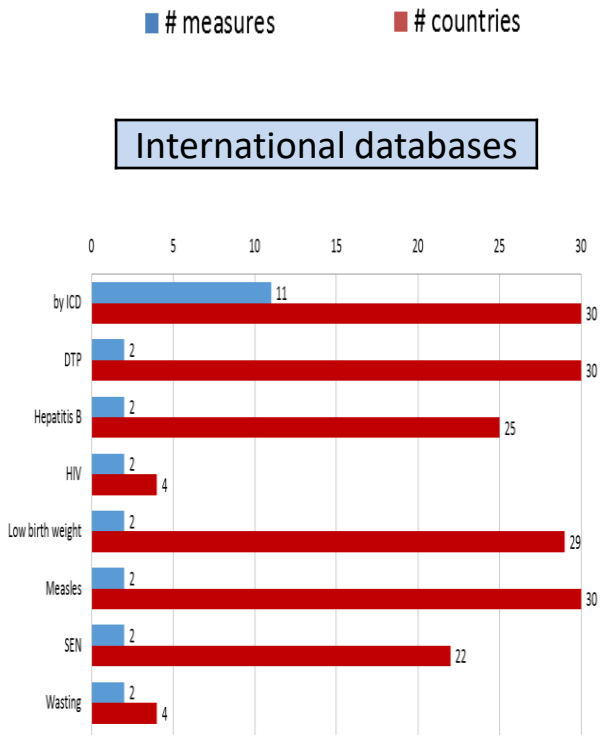

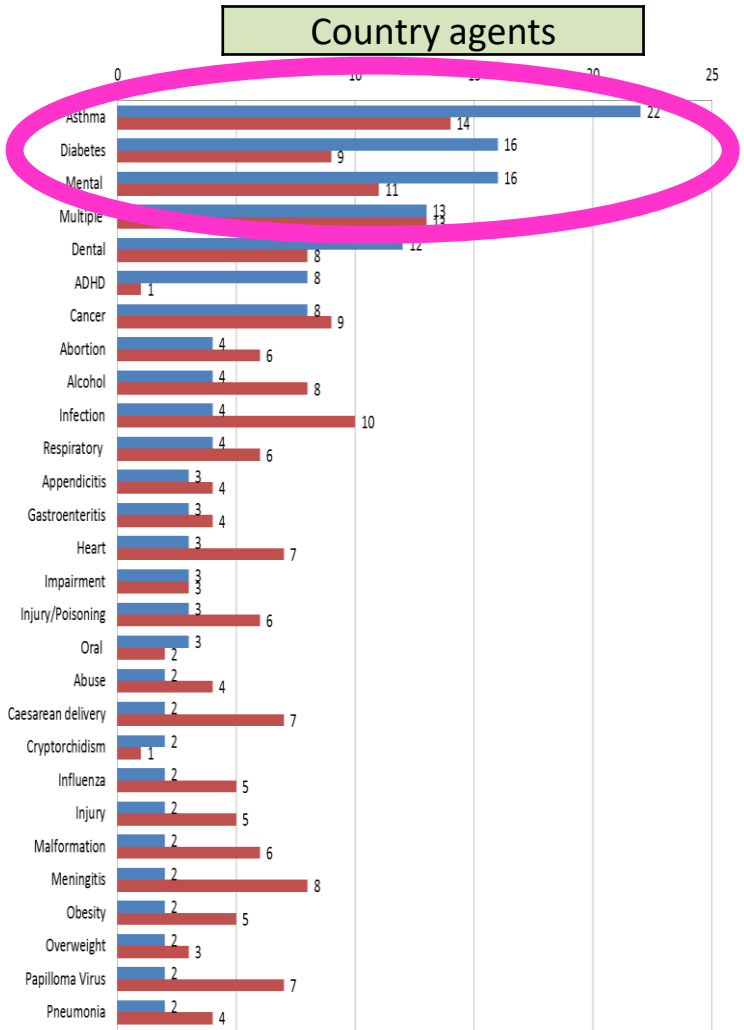

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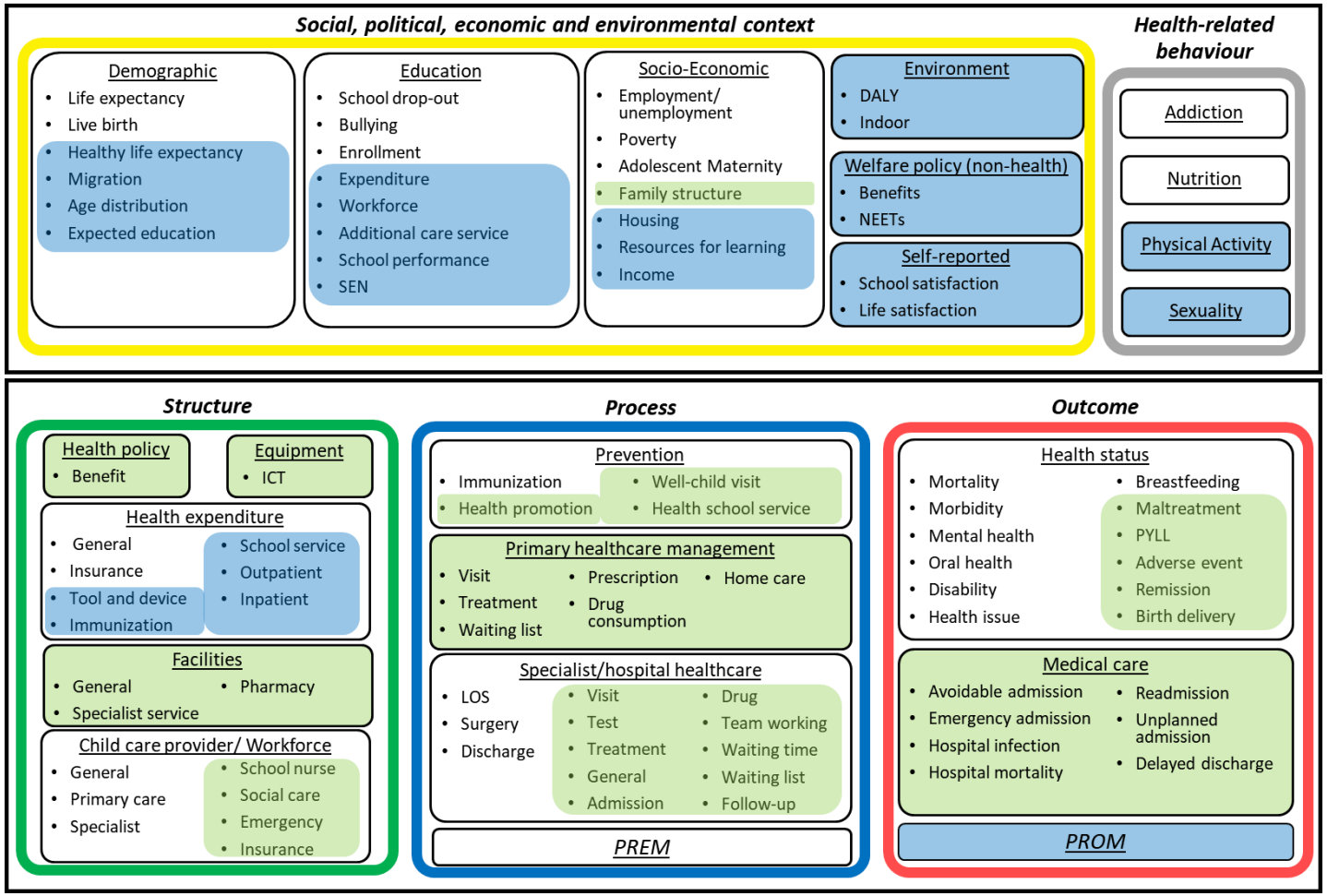
Topic covered, by source

International databases
Country agents
Both



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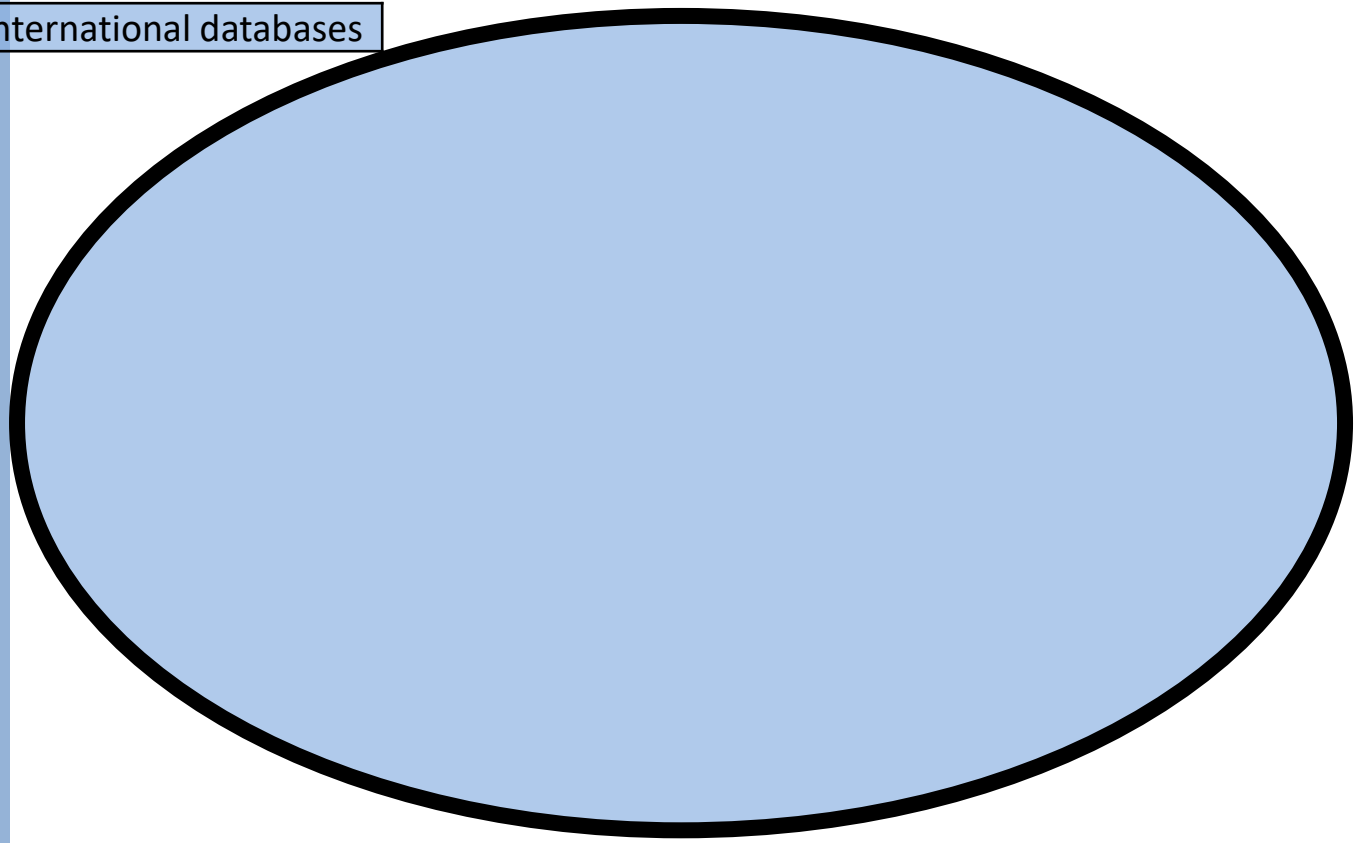
Measures “in common”



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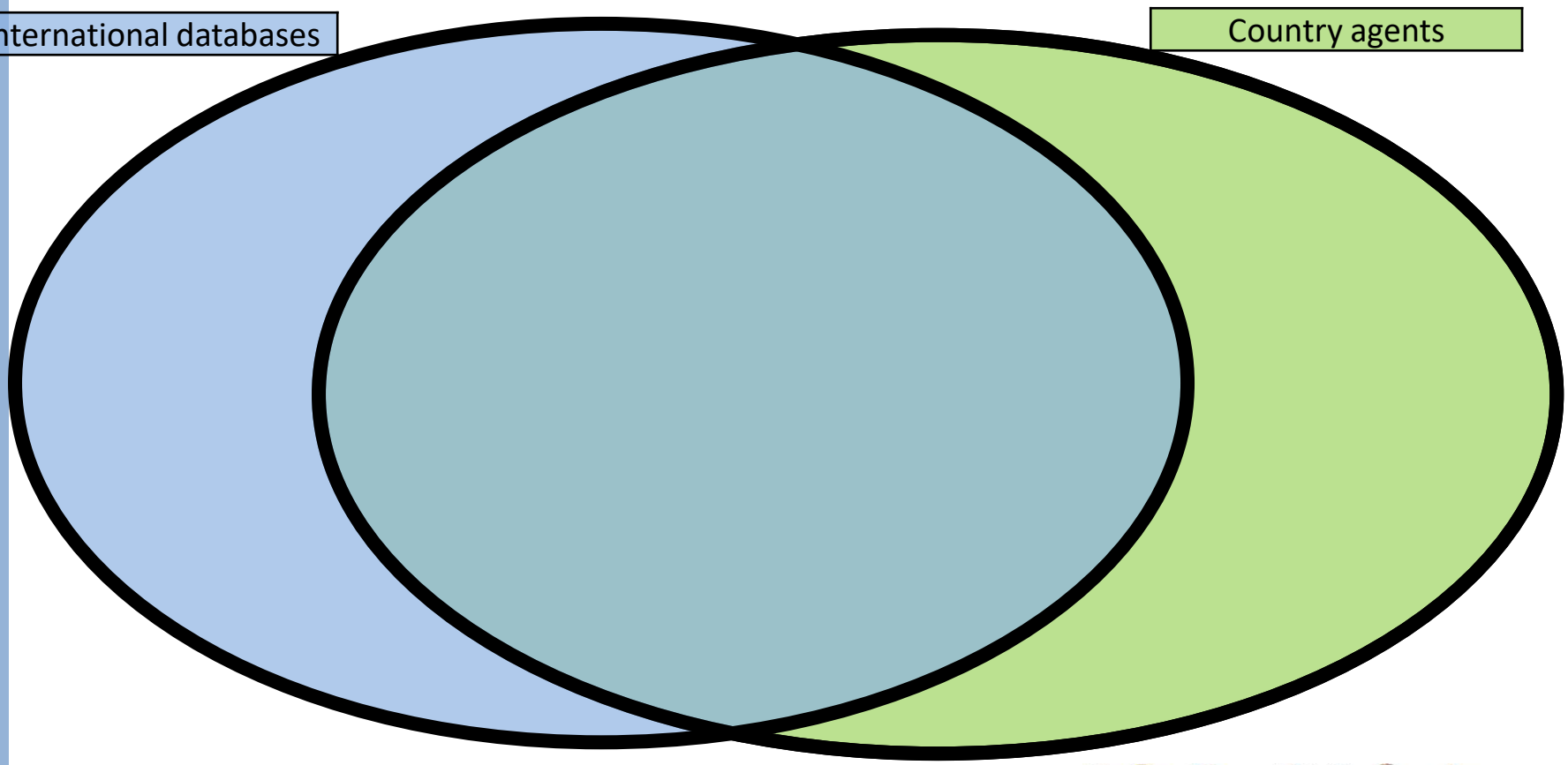
Measures “in common”



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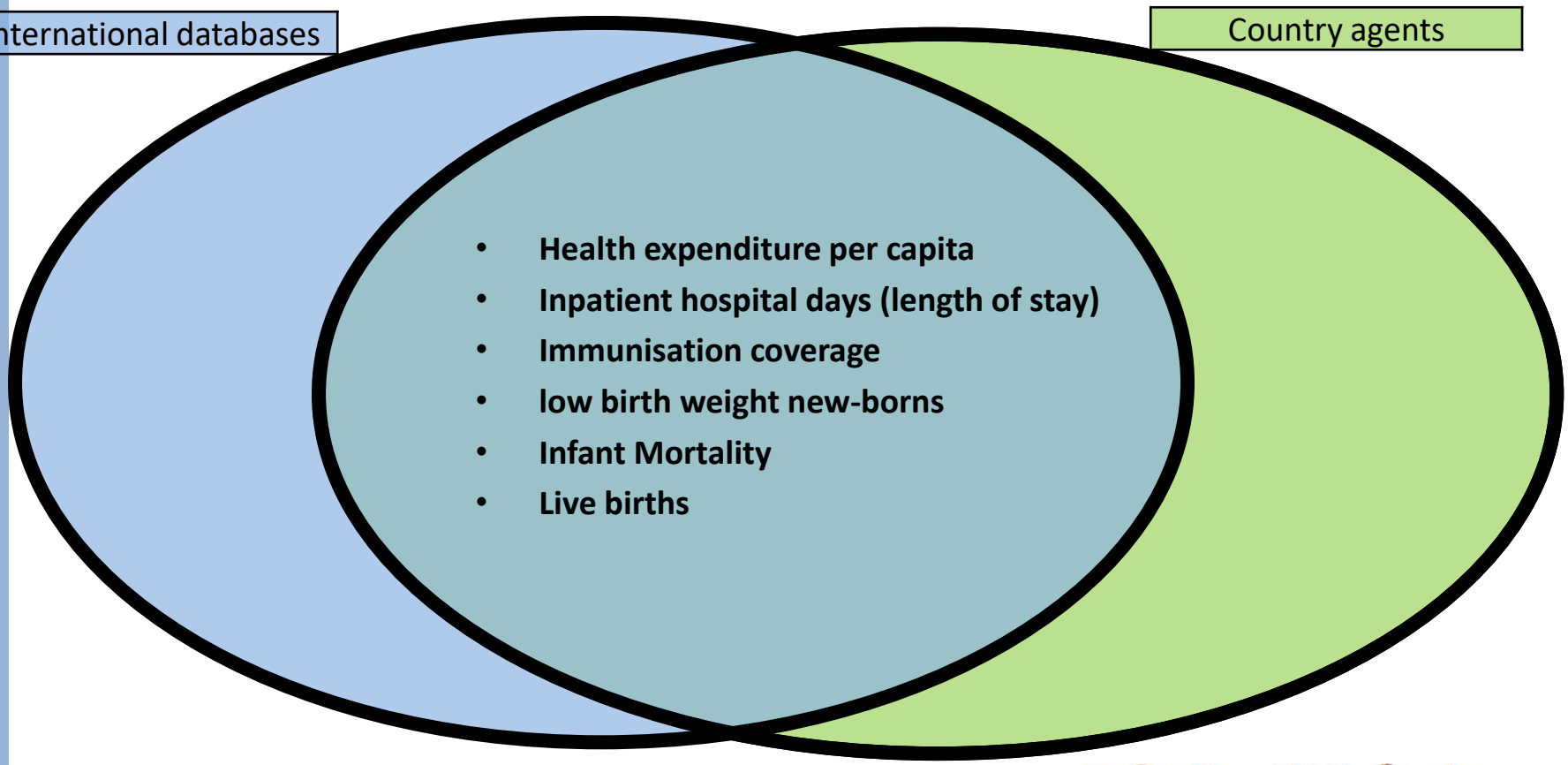
Measures “in common”



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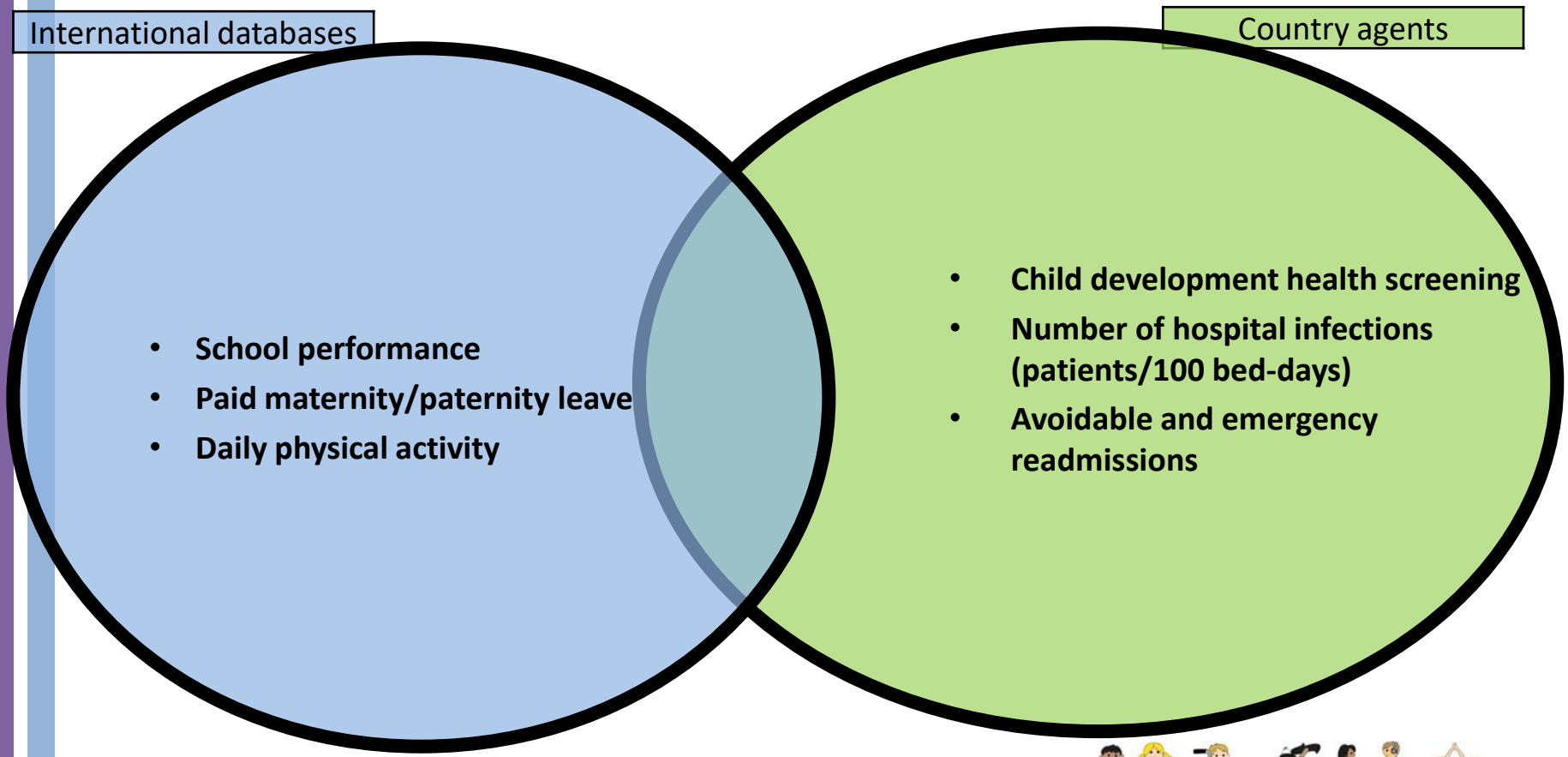
Measures not “in common”



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Challenging issues

- Do these common measures provide an overall picture that allows to detect the multidimensionality of the child health care?
- We need a deeper insight of the properties of the measures in common (Reliability, Validity…)
- Are these measures collected with a homogeneous methodology across countries?

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2. Analysis of the relationships across measures

Questions: What contribution an harmonised freely available European dataset may give to the understanding of the child health care?

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Structural Equation Modeling

SEM is a very general statistical modelling technique, widely used in the behavioural sciences, which combines the strengths of **factor analysis** and **multiple regression** in a single model that can be tested statistically.

SEM provides three advantages:

- It includes in the model both **manifest/observed** variables and **latent** factors
- It analyses the **interrelatedness** of the factors considered
- It estimates both the **direct** effect that a certain factor has on the outcome of interest, and the effect mediated by other factors (**indirect** effect).

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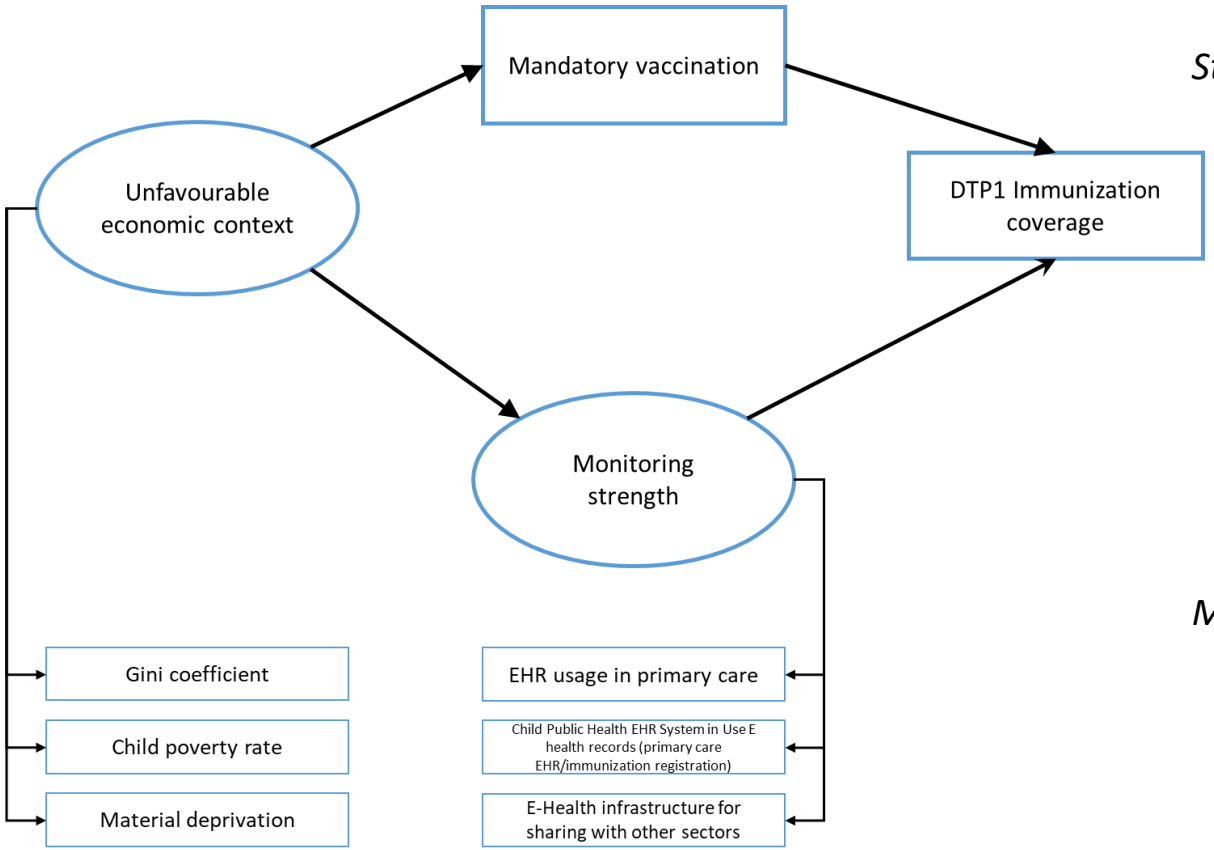
Path diagram of the hypothesised SEM model



Structural model

Measurement model

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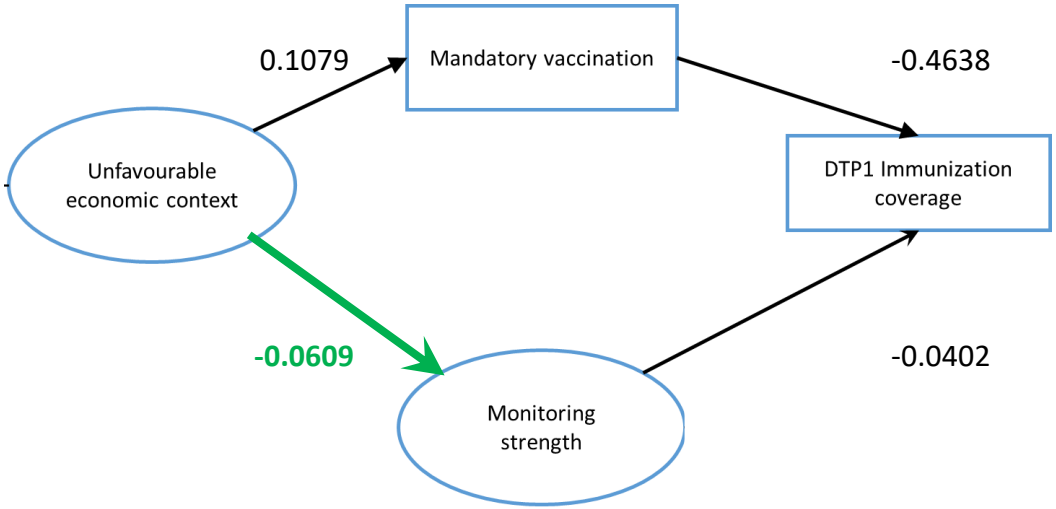
Path diagram of the hypothesised SEM model



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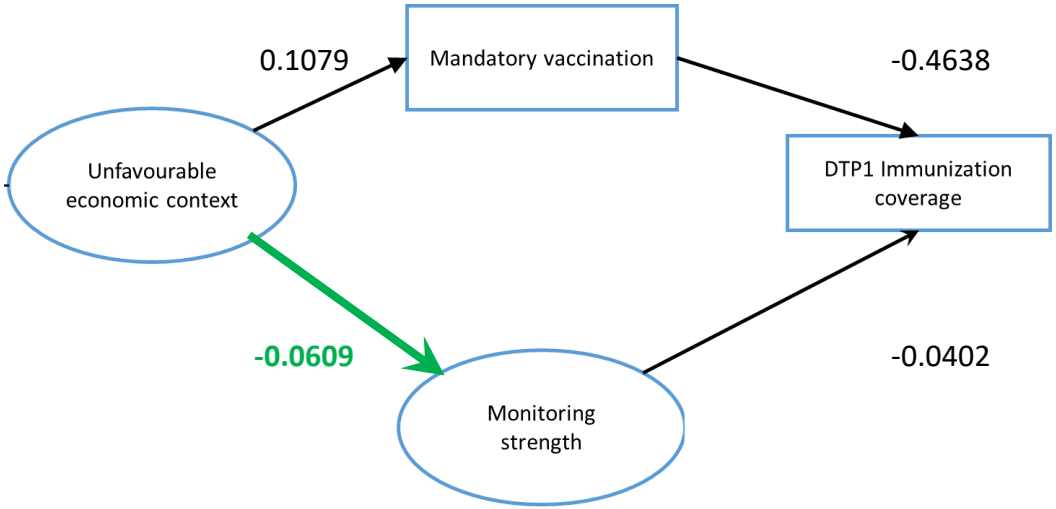
Path diagram of the hypothesised SEM model



*The **indirect effect** of the economic context on the immunization coverage (-0.0476) is not significant*

If a country has a favourable economic context, a mandatory vaccination and a strong monitoring system its immunization coverage is not higher than that reported in a country where these three conditions are not fulfilled.

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Conclusions

This exemplifying SEM model clearly shows the **potentiality** of this statistical technique to simultaneously estimate complex relationships among factors, allowing the decomposition of the effects.

However, this analysis implies the following:

- facilitating the **exchange of data** across European data (privacy issue);
- availability of freely-available **harmonised** data;
- good **quality** of data.

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Thanks

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Children with Complex Care Needs - Patients and Primary Care Interfaces

Dr Maria Brenner
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Trinity College Dublin

Research Team: Manna Alma, Anne Clancy, Philip Larkin, Sapfo Lignou, Daniela Luzi, Rebecca McHugh, Elena Montañana Olaso, Miriam O'Shea, Fabrizio Pecoraro, Rose-Marie Satherley, Oscar Tamburis, Austin Warters, Ingrid Wolfe, Jay Berry, Carol Hilliard, Eleanor Hollywood

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Aim

To examine the interface between primary and secondary care, and the social care interface, for children with complex care needs.

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Children with complex care needs

…*multidimensional health and social care needs in the presence of a recognized medical condition or where there is no unifying diagnosis. They are individual and contextualized, are continuing and dynamic,* and are *present across a range of settings, impacted by healthcare structure.* (Brenner et al. 2018)

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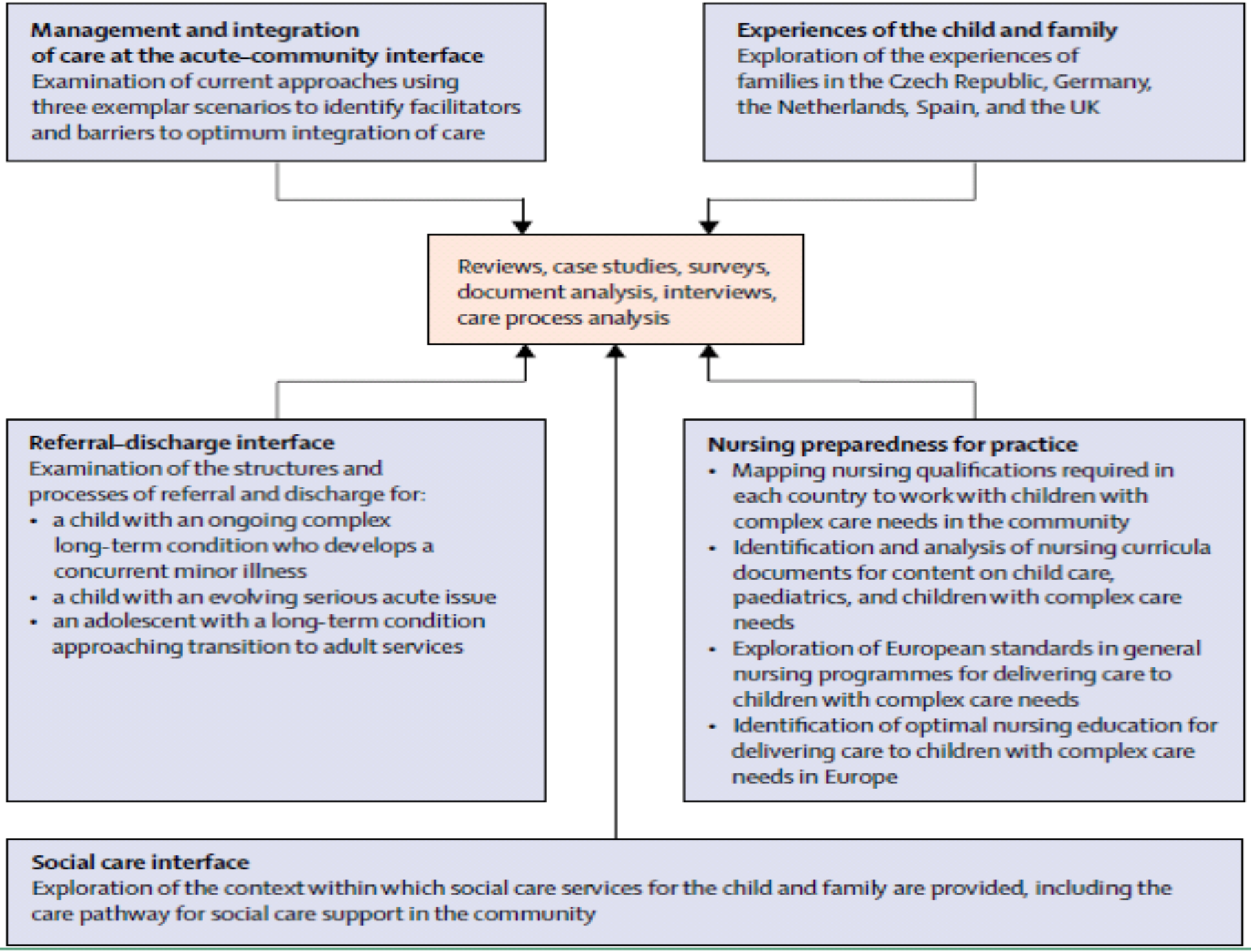
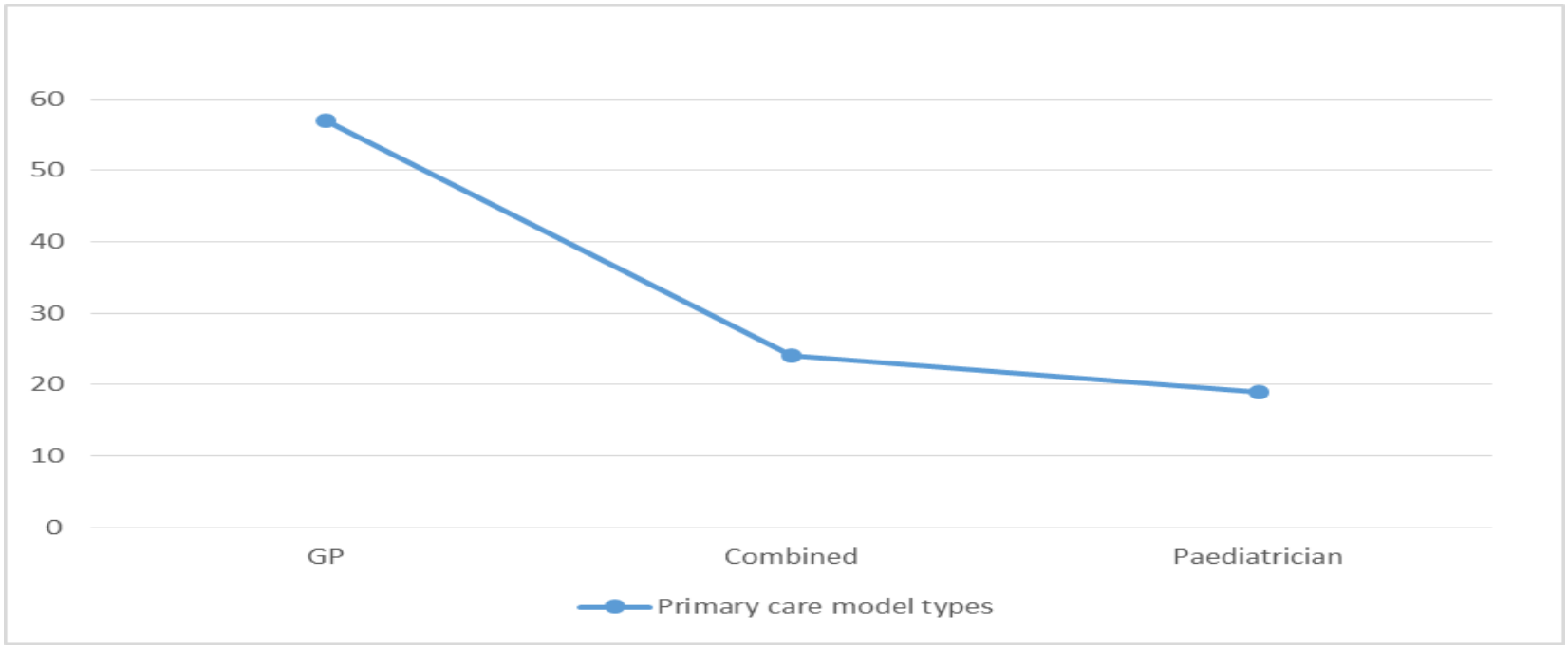

Management and integration of care at the acute–community interface
Examination of current approaches using three exemplar scenarios to identify facilitators and barriers to optimum integration of care
Experiences of the child and family
Exploration of the experiences of families in the Czech Republic, Germany, the Netherlands, Spain, and the UK
Reviews, case studies, surveys, document analysis, interviews, care process analysis
Referral–discharge interface
Examination of the structures and processes of referral and discharge for:
• a child with an ongoing complex long-term condition who develops a concurrent minor illness
• a child with an evolving serious acute issue
• an adolescent with a long-term condition approaching transition to adult services
Nursing preparedness for practice
• Mapping nursing qualifications required in each country to work with children with complex care needs in the community
• Identification and analysis of nursing curricula documents for content on child care, paediatrics, and children with complex care needs
• Exploration of European standards in general nursing programmes for delivering care to children with complex care needs
• Identification of optimal nursing education for delivering care to children with complex care needs in Europe
Social care interface
Exploration of the context within which social care services for the child and family are provided, including the care pathway for social care support in the community

Primary care models



After referral to secondary care, the primary care team would be involved in the child's on-going care in only seven countries (36.8%).

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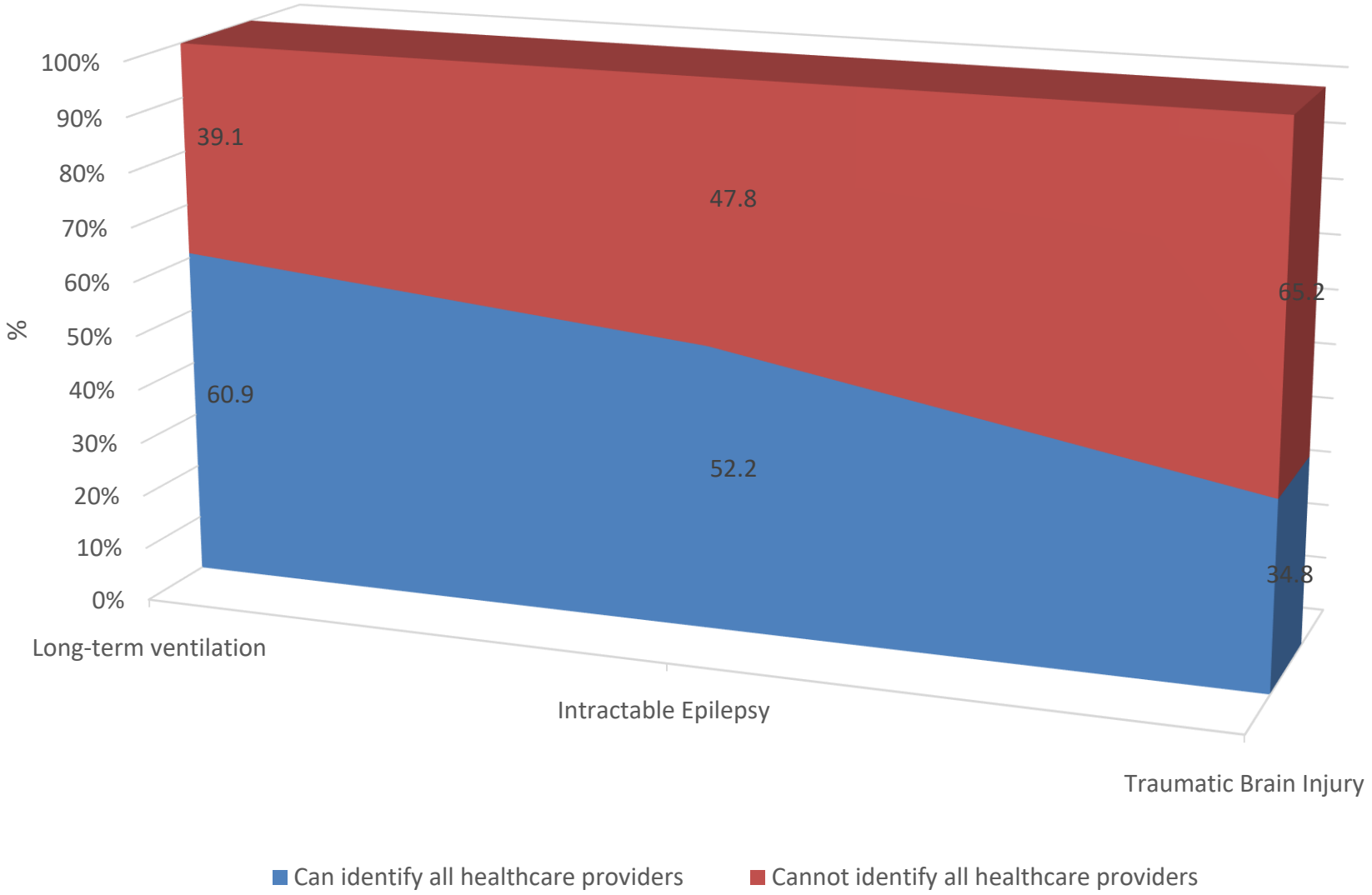
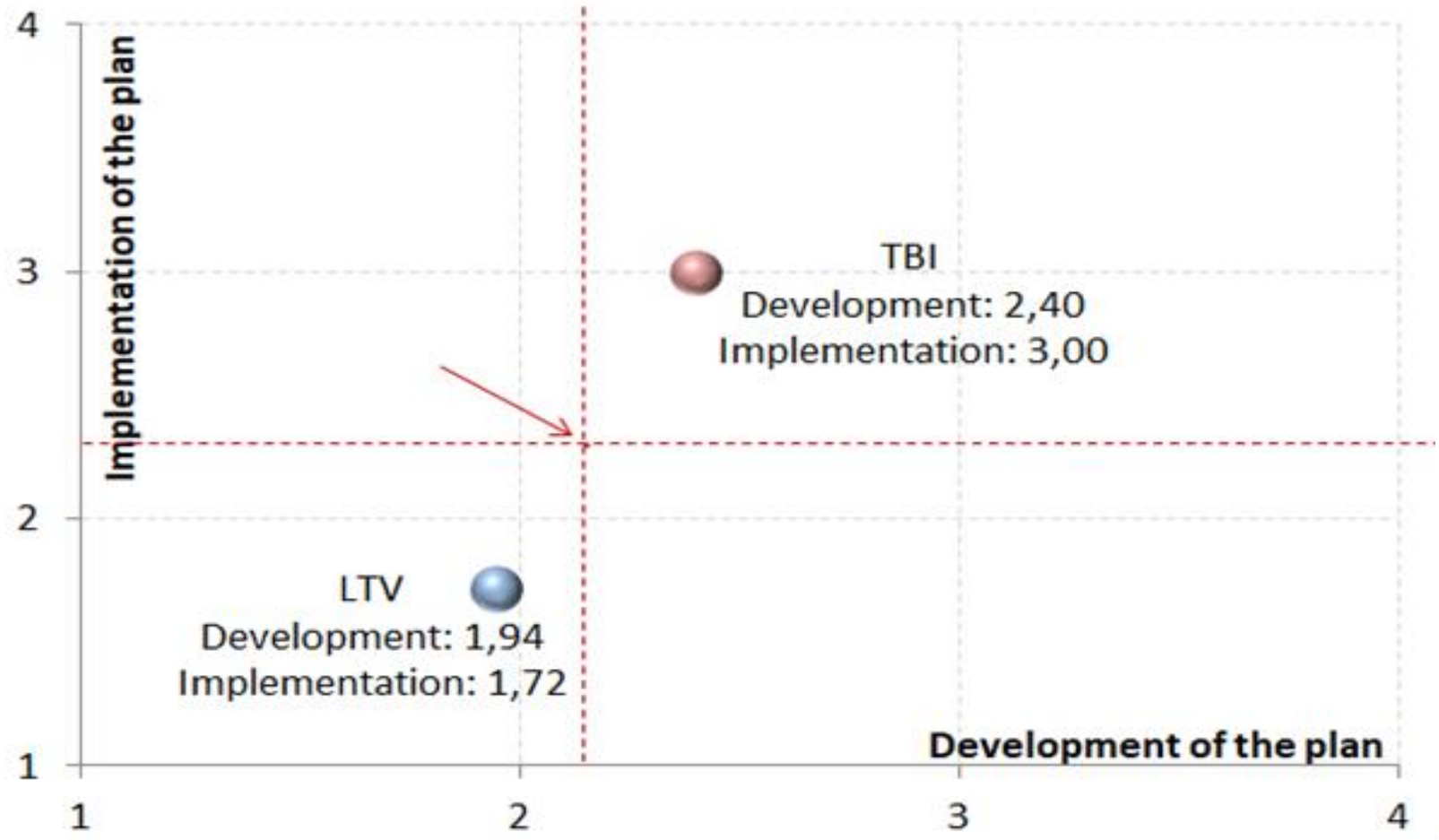
Identification of all healthcare providers

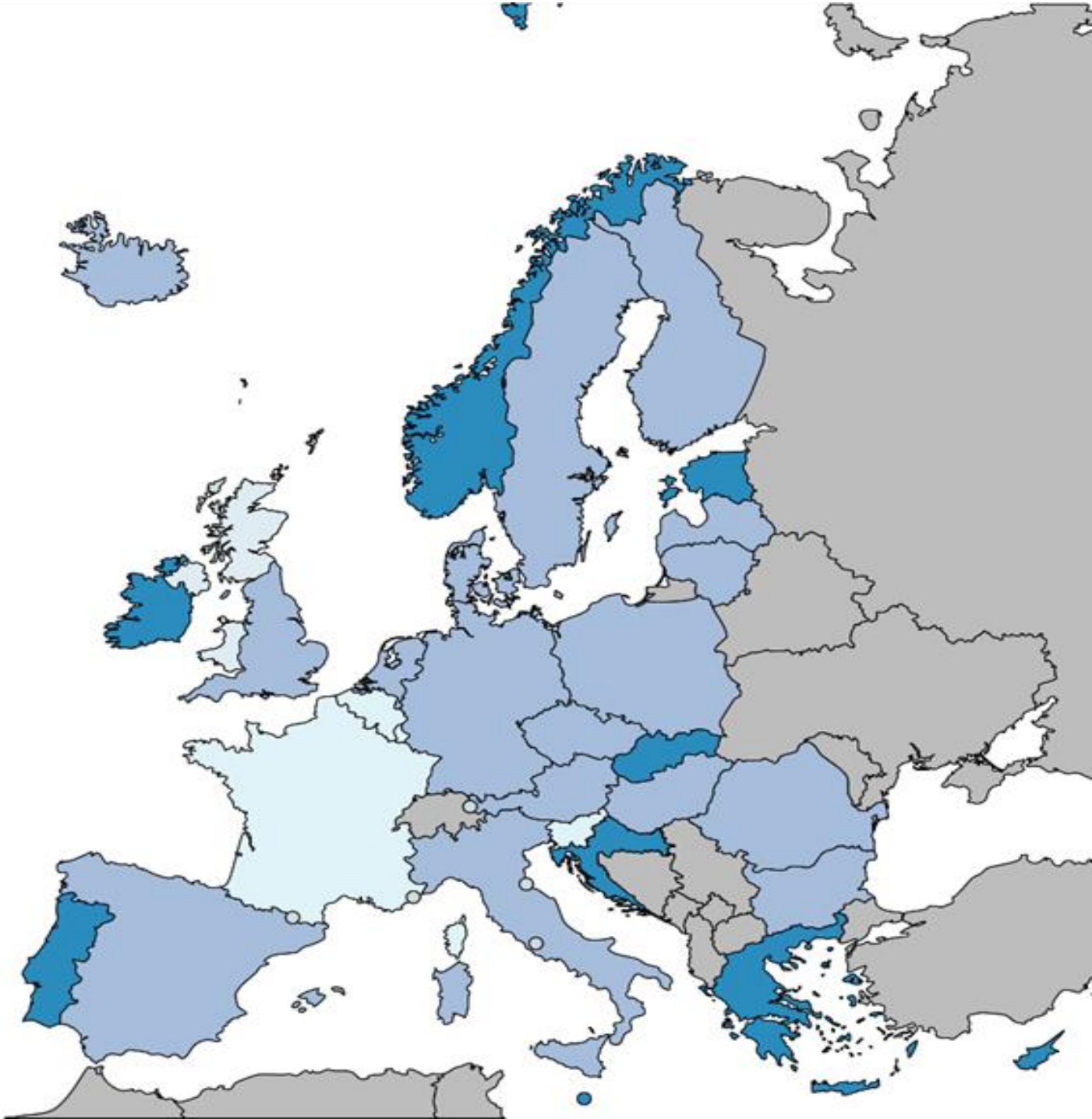


Average level of collaboration in care planning

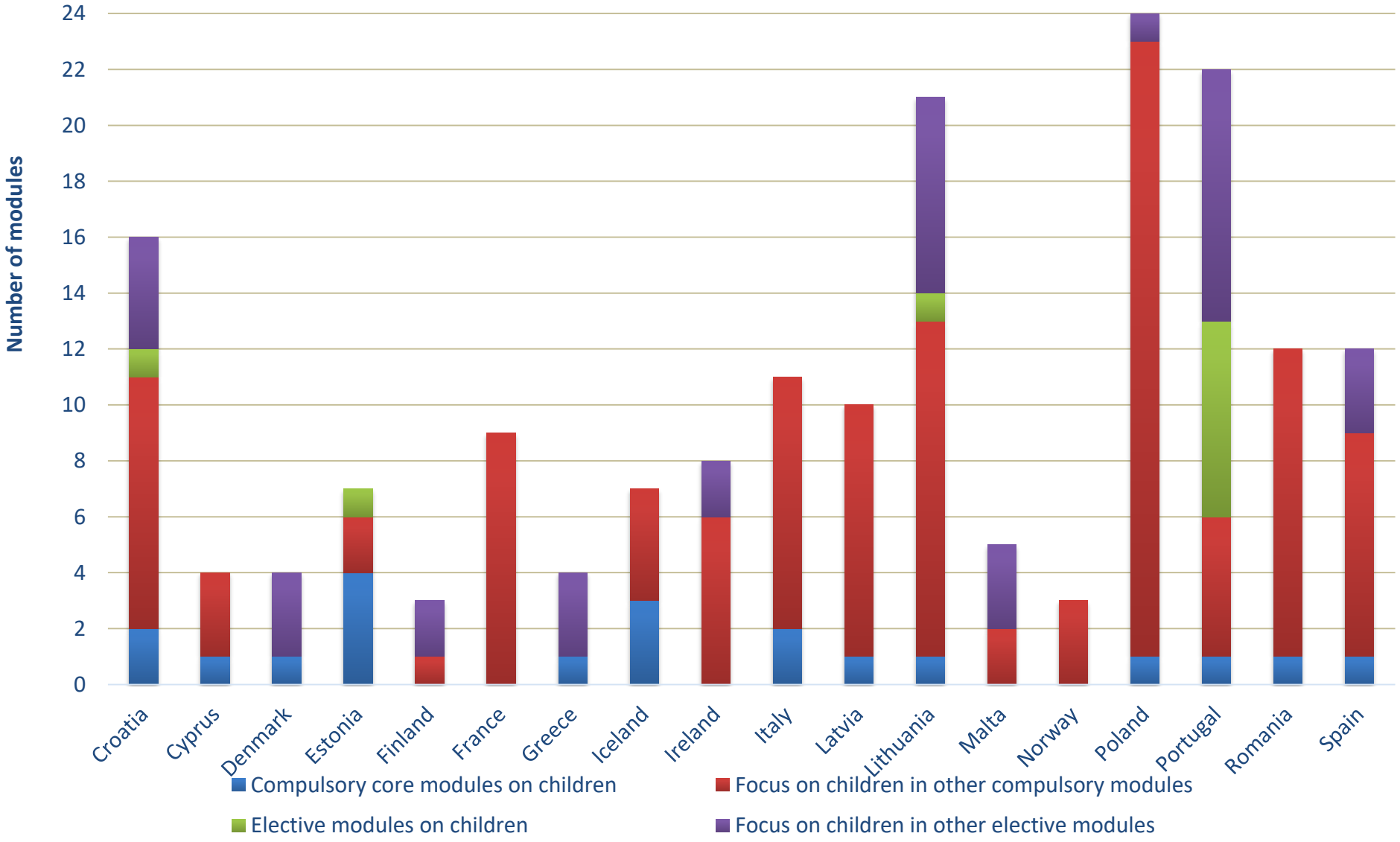


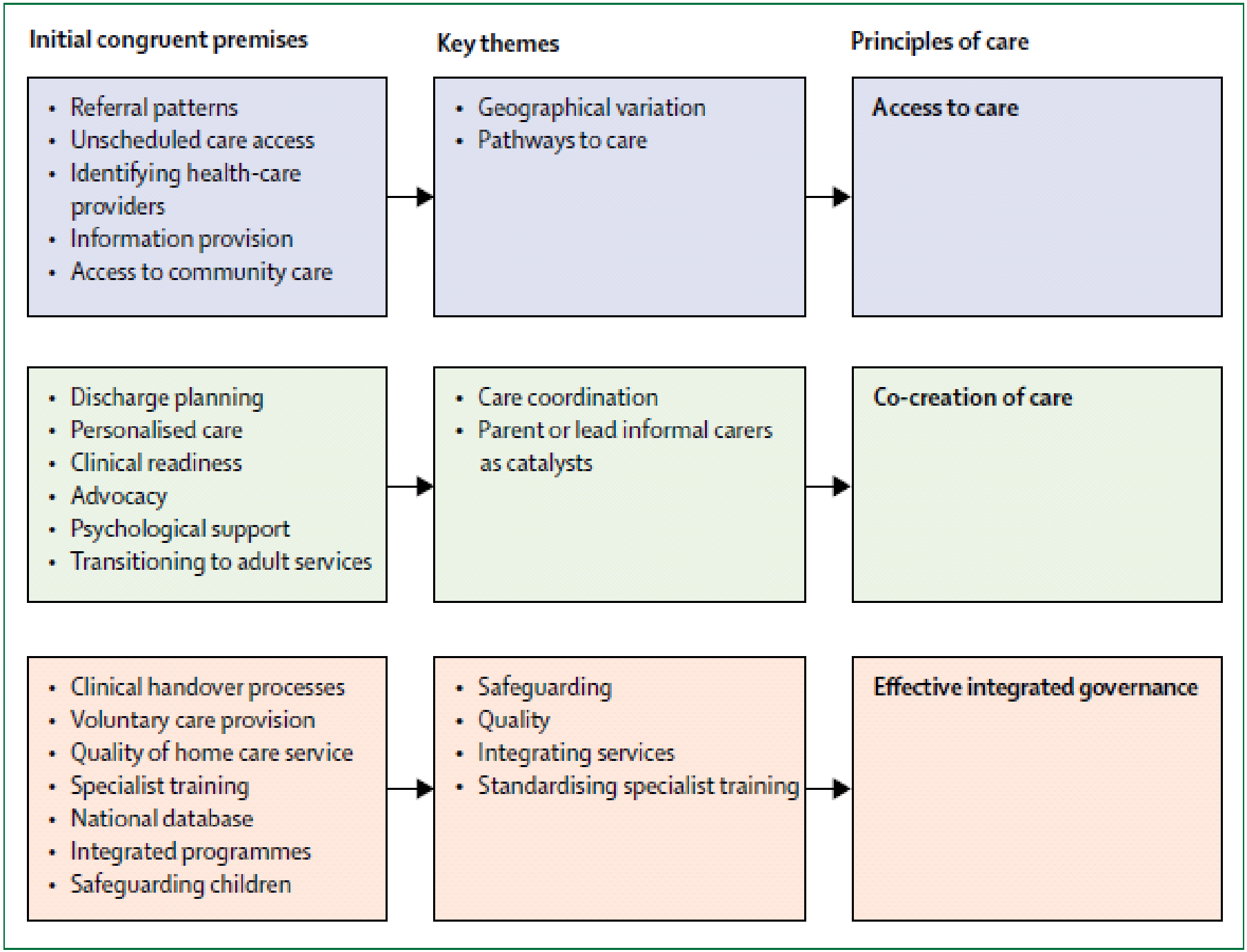
Presence of central national authority to coordinate provision of social care services

- Central national authority to coordinate provision of social care services
- Social care provision decentralised to local, municipality or regional level
- Incomplete data/no data
- Non MOCHA country



Distribution of child-related content across the modules in nursing curricula




Initial congruent premises
Key themes
Principles of care
Referral patterns
Unscheduled care access
Identifying health-care providers
Information provision
Access to community care
Geographical variation
Pathways to care
Access to care
Discharge planning
Personalised care
Clinical readiness
Advocacy
Psychological support
Transitioning to adult services
Care coordination
Parent or lead informal carers as catalysts
Co-creation of care
Clinical handover processes
Voluntary care provision
Quality of home care service
Specialist training
National database
Integrated programmes
Safeguarding children
Safeguarding
Quality
Integrating services
Standardising specialist training
Effective integrated governance

Principle 1: Access to care

Equitable access to consistently high quality, prompt and accessible services across the country to meet the needs and improve health of all groups within the population.

- A pathway for 24-h access, 7 days a week, to non-urgent specialist care in the community is in place
- Community complex care centres are established where there is a substantial population of children with complex care needs, and where the specialist expertise exists to support the child and their family
- Electronic health records are used to support communication and continuity of care across the acute–community interface
- Children and families have access to community pharmacists

Principle 2: Co-creation of care

Equipping the child and family in partnership with the professional to design, create and deliver health and social services.

- A discharge planning coordinator is available to the child and family when transitioning from the acute to the community setting
- Parents are supported to be clinically ready to care for their child at home, in an incremental manner
- The child, their parents or guardians, and siblings have access to psychological support
- A plan of care is prepared with adult health and social care services before an adolescent is transferred from paediatric services

Principle 3: Effective integrated governance

…effective communication, access to suitably skilled healthcare professionals, transparent decision-making processes, and the inclusion of children and their families in the design and evaluation of services.

- All health and social care providers who care for a child living with complex care needs are systematically identified
- Specialist training is provided for primary care providers caring for children living with complex care needs and their families
- National integrated care programmes are in place to support care delivery
- Safeguarding training for children with communication difficulties is provided for all health and social care staff

Key issues

- **Non-linearity -** we do not prescribe care for specific ages, acknowledging that **transitions and readiness for care are individual and contextualised** for each child and family.

- **Timeliness** - a timely transition to home, timely assessment of needs, the timely identification of deterioration, and the timely management of transitions to end-of-life care.

- **Multidisciplinary approach -** no single profession has the prerequisite knowledge to effect progress in this area.

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MOCHA principles and standards of care

Offer a means:

To benchmark existing services for children living with complex care needs

To influence policy in relation to service delivery for these children

To provide a suite of indicators with which to assess future service developments in this area.

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Thank you

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Enjoy your lunch!

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