



HEALTH CARE QUALITY AND OUTCOMES

Presentation by Ian Brownwood, Health Division, OECD



Update on ongoing program of work

- 1. Patient reported quality measures**
- 2. Patient safety**
3. Hospital performance
4. Low value care
5. Dementia
6. Health data infrastructure



1. PATIENT REPORTED QUALITY MEASURES

PaRIS

Patient – Reported Indicators Survey

The next generation of OECD health statistics

“We, the OECD Health Ministers, welcome the advice from the OECD High-level Reflection Group on Health Statistics to invest in better cross-country comparative measures of patients’ own experience of medical care and health care outcomes, and **we ask the OECD to further engage in the analysis and development of such comparative measures.**”



PaRIS (Patient-Reported Indicators Surveys)

1. Specific conditions: supporting national health systems to collect patient-reported indicators in a comparable way

Accelerate and standardise
work already underway

Cancer, hip & knee, AMI, CVA,
mental health

2. Complex needs: addressing critical gaps in the measurement of patient-reported indicators

Develop new surveys, direct
to patients and carers

Chronic illness and multiple
morbidity

PROMS, PREMS, PRIMs

Collaboration with
international partners

Supervised by HCQI
Expert Grp and Hlth Cttee

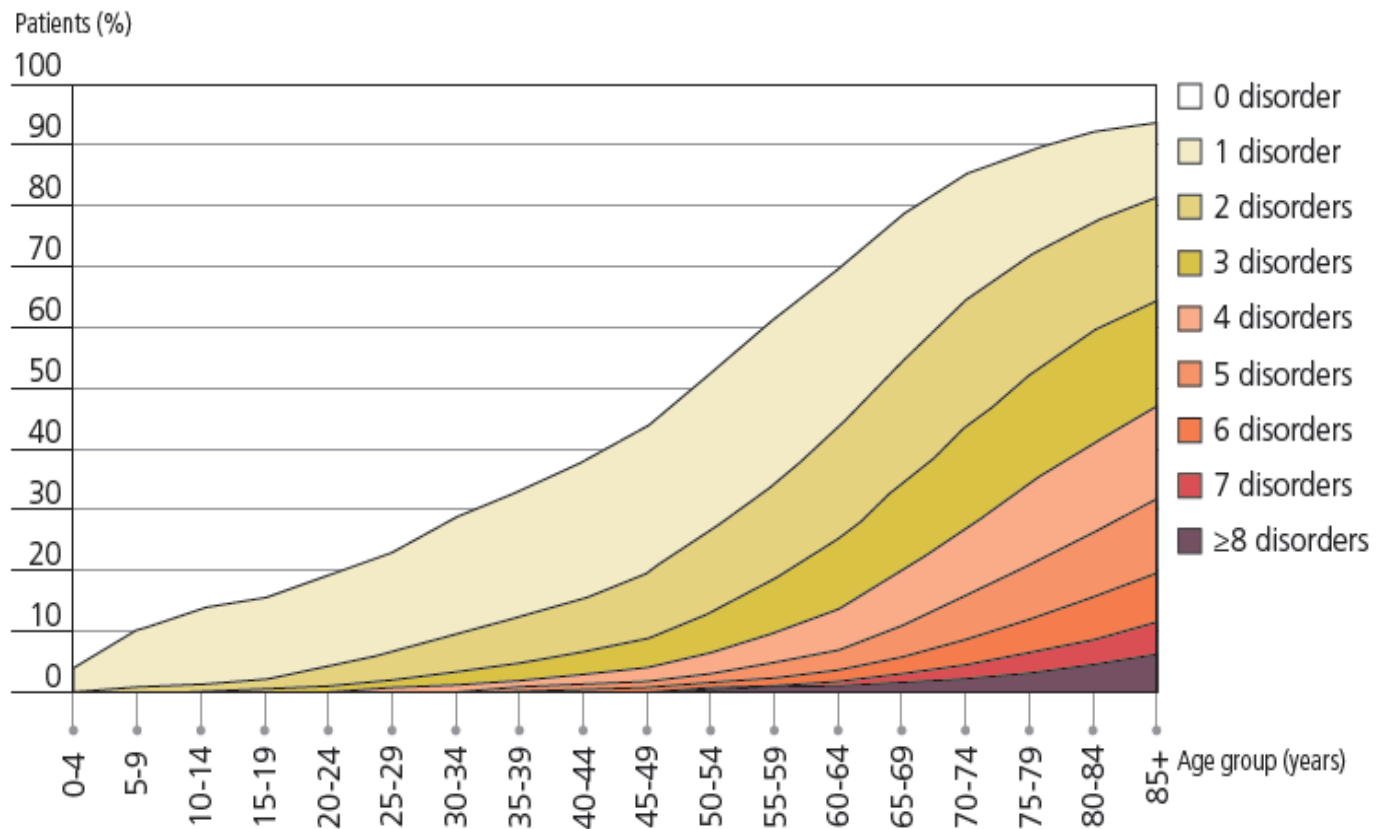


COMPLEX NEEDS



Many patients do not fit into one disease category

Figure 1.1 **The prevalence of multimorbidity is increasing with age**



Source: Adapted from Barnett, K. et al. (2012), "Epidemiology of Multimorbidity and Implications for Health Care, Research, and Medical Education: A Cross-sectional Study", *The Lancet*, Vol. 380, No. 9836, pp. 37-43.



New international PROMS survey: complex conditions

Objective: develop international, person-centred benchmarks of health system performance for patients with complex needs, through:

- A survey of PROMs in people with chronic conditions, mainly cared for in primary care
- Link surveys of primary care provider characteristics.

A specially convened **Taskforce** will develop

- Survey content: key themes and key questions for each theme
- Survey design: population sampling and data collection strategies



Countries will:

- Review Taskforce proposals at the June 2018 Health Committee
- Approve survey implementation in interested pilot health systems.



Next steps

- Consideration of proposed way forward by OECD Health Committee - June 2017
- Establish PaRIS Taskforce and convene initial meetings – by December 2017
- Taskforce report on development pathway - June 2018
- Preliminary pilot data collection - 2019



SPECIFIC CONDITIONS



Role of the OECD HCQI Expert Group

To examine recommended PROMs for specific patient groups, with particular reference to:

- the **methods used** to identify appropriate outcomes to measure;
- **patients' involvement** in this work;
- **current use** of these outcome sets in international health systems;
- experiences in **different linguistic and cultural settings**.

... and, if appropriate, endorse them for international collection and reporting through *PaRIS*, giving particular consideration to:

- **validity**
- **feasibility** and,
- **actionability**.





Initial Focus Areas

- May 2017
 - Hip and Knee
 - Cancer
- November 2017
 - Mental Health
 - AMI and Stroke



HIP AND KNEE

ICHOM Standard Set for Hip and Knee Osteoarthritis: Outcomes



Treatment approaches covered

- **Non-Surgical:** Lifestyle intervention | Patient education | Physiotherapy | Walking aid or orthosis | Oral medication | Intraarticular injection
- **Surgical:** Osteotomy | Joint replacement | Other forms of surgical treatment

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Country led development pathway

CIHI's PROMs Program - Objectives

- **Provide leadership in standards development for PROMs in routine care**
 - Convene stakeholders and facilitate alignment and collaboration within Canada and internationally (OECD, ICHOM)
 - Develop standardized approaches for PROMs collection and reporting
- **Facilitate consensus on priority populations (conditions, sectors)**
 - Focus on data gaps to support increased availability of PROMs in priority areas
- **Provide comparable PROMs data, reports and ability to link with other national sources**
 - Local, regional, national, international
 - Use by patients, clinicians, administrators, policy-makers, researchers



Proposed Roadmap for International Alignment of PROMs

	Jul 2017	Jan 2018	Jul 2018	Jan 2019	Jul 2019
	- Dec 2017	- Jun 2018	- Dec 2018	- Jun 2019	- Dec 2019
International PROMs Working Group					
Convene international PROMs hip and knee arthroplasty working group (OECD)	✓				
Conduct working group meetings (quarterly)	✓	✓	✓	✓	✓
Data Collection					
Agree on collection standards, including tools, time points, data set and administration approach (international PROMs hip and knee arthroplasty working group)	✓	✓	✓		
Publish recommended collection standards, including adoption and use of ePROMs (OECD)			✓		
Confirm participation in standardized PROMs collection (member countries of international PROMs hip and knee arthroplasty working group)	✓	✓			
For countries with established PROMs program, align existing standards with international standards		✓	✓	✓	
For countries not collecting PROMs, prepare for PROMs collection according to international standards		✓	✓	✓	
Collect PROMs data according to international standards by January 2019 (actual start date may vary in some countries)				✓	✓
Reporting and Benchmarking					
Develop PROMs measures, methodology and reports (international PROMs hip and knee arthroplasty working group)	✓	✓	✓		
Confirm PROMs measures and methodology by January 2019 (international PROMs hip and knee arthroplasty working group)				✓	
Submit preliminary PROMs indicators using existing data to OECD by March 2019 for inclusion in <i>Health At a Glance 2019</i> (member countries with existing PROMs programs)				✓	
Publish preliminary results in <i>Health At a Glance 2019</i> in November 2019 (OECD)					✓
Continue to update PROMs measures and prepare for inclusion in <i>Health at a Glance 2021</i>					✓








Next steps

- Establish hip and knee working group and convene initial meetings – by December 2017
- Develop and publish measures and data collection standards – by December 2018
- Pilot data collection – 2019
- Publish in *OECD Health at a Glance 2019*



CANCER

ICHOM has developed 5 cancer Standard Sets, collectively addressing 44% of the global cancer burden and 6.7% of the overall global disease burden

Standard Set	Population Covered	Treatment Approaches Covered
 Localised Prostate Cancer	Men with clinical American Joint Committee of Cancer (AJCC) stages T ₁ -T ₄ localised <u>PCa</u> treated with curative intent or followed with active surveillance	Active surveillance, watchful waiting, radical prostatectomy, external-beam radiation therapy, brachytherapy, ADT, focal therapy
 Advanced Prostate Cancer	Men with M ₁ disease as defined by American Joint Committee on Cancer staging, and men with biochemical recurrent ineligible for further curative therapy	ADT, hormonal therapy other than ADT, chemotherapy, immunotherapy, radiopharmaceuticals, radiation, bisphosphonates or <u>denosumab</u> , interventions for LP complications
 Lung Cancer	All patients with newly diagnosed lung cancer, including non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC), treated with curative or palliative intent (including best supportive care)	Surgery, radiotherapy, chemotherapy, targeted therapy, immunotherapy
 Colorectal Cancer	All patients with invasive, American Joint Committee of Cancer (AJCC) stage I-IV colon and/or rectal cancer, regardless of type or intent of treatment received, including those who did not receive therapy	Surgery, radiotherapy, chemotherapy, targeted therapy, no treatment
 Breast Cancer	All pathologically confirmed American Joint Committee of Cancer (AJCC) patients with stages 0 to IV BC, including ductal carcinoma in situ (DCIS), in both men and women	(Reconstructive)surgery, (neo)adjuvant radiotherapy, (neo)adjuvant chemotherapy, targeted therapy, (neo)adjuvant hormonal therapy, no therapy

Global Burden of Disease Cancer Collaboration, Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life-years for 32 Cancer Groups, 1990 to 2015: A Systematic Analysis for the Global Burden of Disease Study. *JAMA Oncol*, 2016.

ICHOM Standard Set for Breast Cancer: Outcomes

Scope

- All patients (men and women) with newly pathologically diagnosed invasive breast cancer (stage I-IV) and ductal carcinoma in situ (DCIS).

Treatment Approaches

- (Reconstructive) Surgery | Radiotherapy | Chemotherapy | Hormonal Therapy | Targeted Therapy |

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People caring for people



Initial Focus on Breast Cancer

- Incremental approach
- Well developed PROMS in this area
- Aligns with existing OECD indicators (i.e. Concord Study)
- Establish a cancer working group and initial meetings – by December 2017



Emerging issues for consideration

- Selecting PROMS for actionability at clinical and national levels
- Mapping of different PROMS currently in use by countries
- Generic versus condition specific PROMS
- Integrating PROMS, PREMS and PRIMs
- Establishing capacity for PROMS data in national clinical registries
- Linking PROMS to other data sources to strengthen risk adjustment



By December 2017

- PaRIS Taskforce and Cancer and Hip Knee Working Groups established and initial meetings held
- OECD Expert workshop on generic PROMS - 8 November 2017
- Progress report on Cancer and Hip and Knee PROMS and initial consideration of mental health and AMI and Stroke PROMS by HCQI experts – November 2017
- Strategy paper for overall PaRIS initiative considered Health Committee – December 2017



2. PATIENT SAFETY



Economics of patient safety

- Aspect of clinical waste in the *Tackling Wasteful Spending on Health* report (January 2017).
- Global Ministerial Summit on Patient Safety in Germany (March 2017)
 - Following on from initial summit in London during 2016
 - OECD paper on Economy and Efficiency of Patient Safety
 - System costs of failure
 - Strategies for reducing harm





Ongoing R&D

Program in 2017 is being financially supported by a grant from the **EU Health Programme 2014-2020 of the European Commission.**

Objectives

1. **Actionability:** To understand current uptake and use of indicators by EU and OECD member states for quality improvement and performance assessment.
2. **Extend:** To build support for the adoption of additional indicators to broaden scope and/or perspectives on patient safety.
3. **Ongoing R&D** To further develop the methodology of existing indicators improve international comparability.



1. ACTIONABILITY



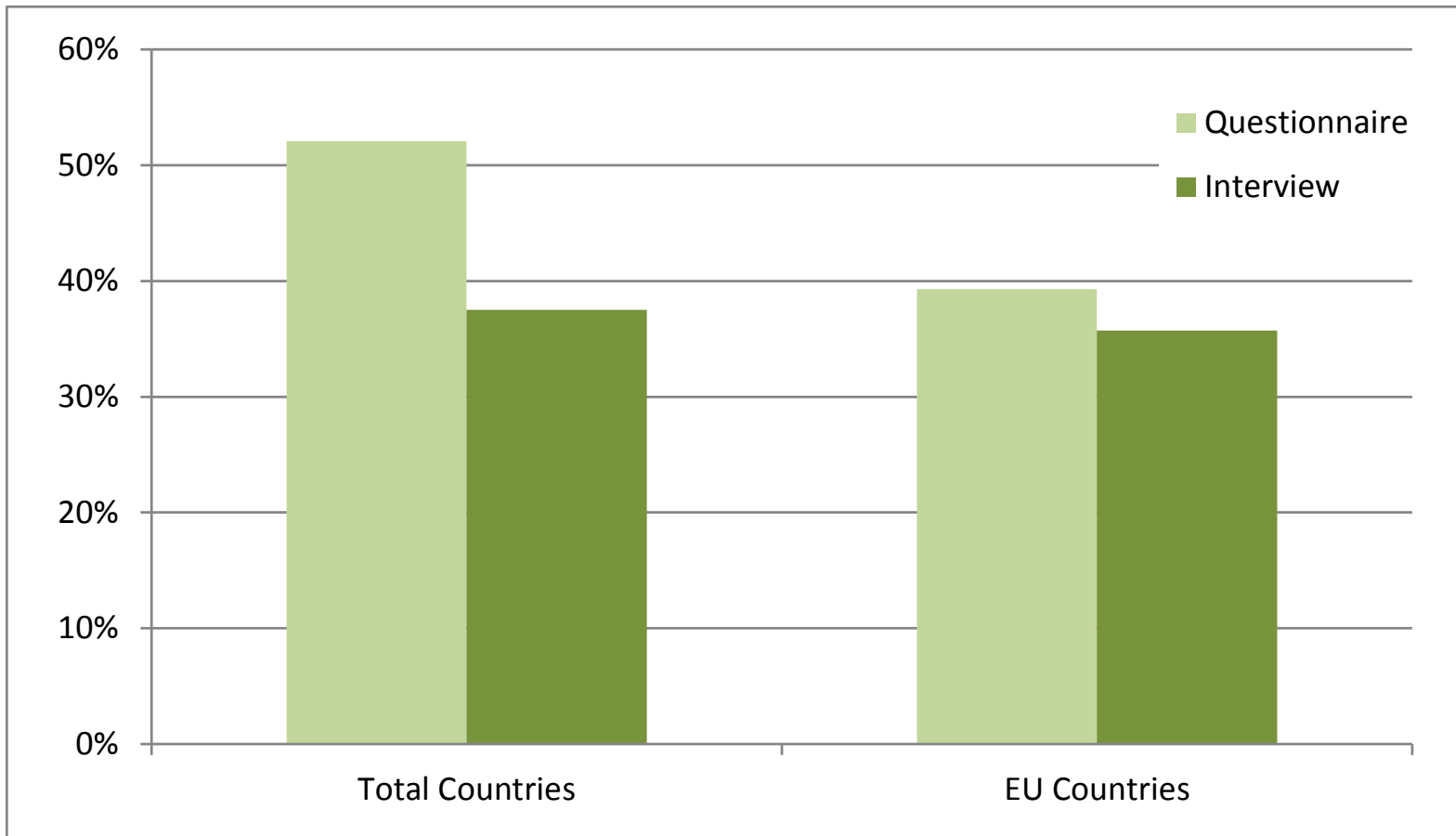
Key objectives and methods

- Focus on the availability and use of OECD and other patient safety indicators
- Survey
 - Baseline understanding of patient safety indicator availability and use
 - 26 countries
- Interview
 - Explore barriers and enablers of indicator use and identify emerging indicator developments
 - 20 countries



Participation

Participation by Total Invited Countries (48) and EU Countries (28)





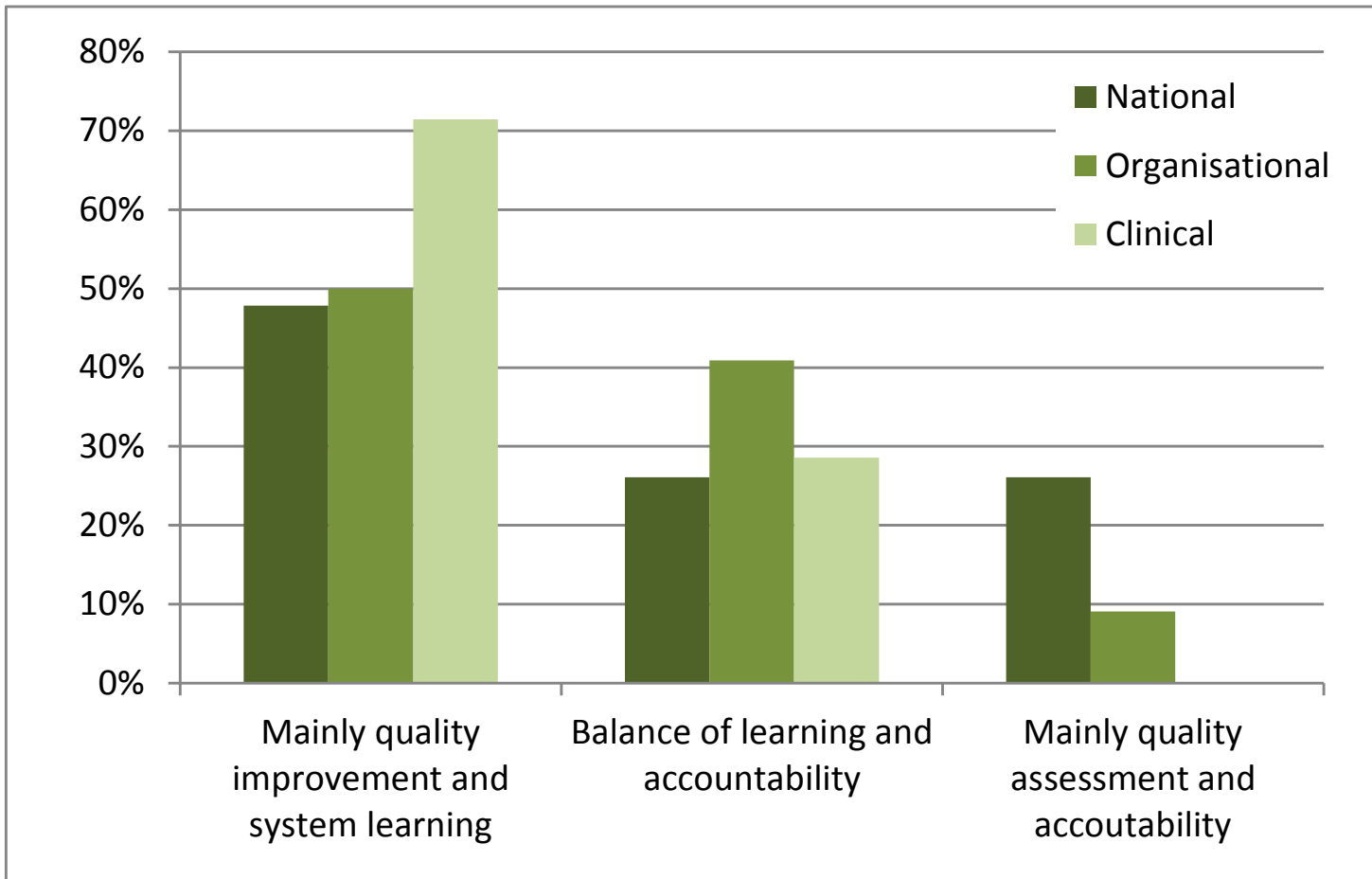
National measurement programs

- About 90% of countries have national and hospital level programs HOWEVER only a third of countries indicated there was good alignment.
- Countries with national coverage:
 - 100% hospital
 - 50% primary care and long term care
- Purpose of indicators
 - Mainly improvement and learning (formative function) 50% national - 70% clinical level
 - Accountability (summative function) 25% national – 0% clinical level.



Main purpose of indicators?

Main Purpose of Patient Safety Indicators (% of respondents)





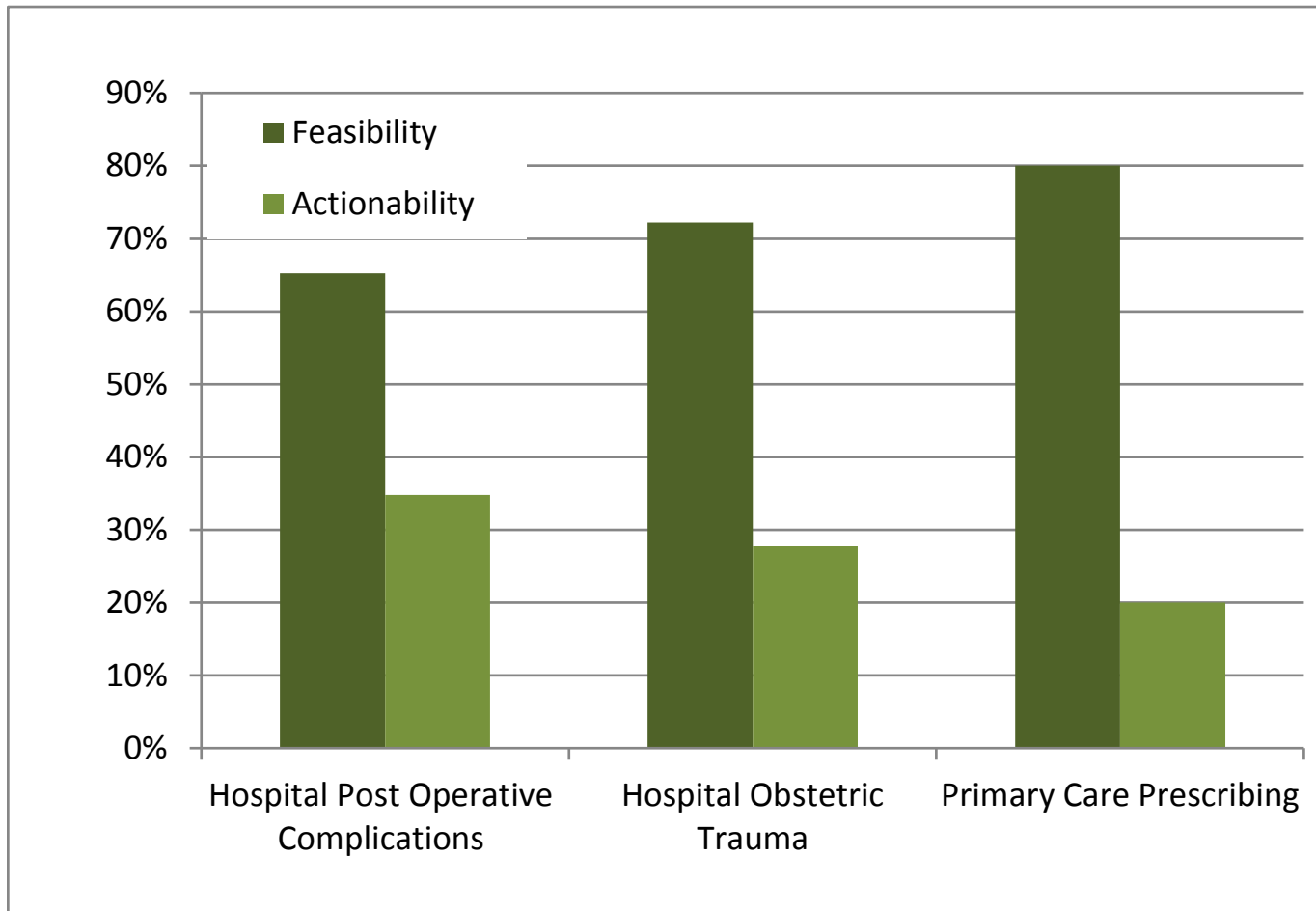
Availability of OECD PSIs

- Just over two thirds of the respondents indicated at least one **acute care** PSI is calculated nationally, compared with just over half of the respondents calculating the **primary care** PSIs.
- Reasons countries don't calculate PSIs:
 - Feasibility (data availability, data quality, technical expertise)
 - Actionability (indicator relevance, validity, clinical acceptance)



Reasons for not calculating OECD PSIs

Main Reason Why OECD PSIs Not Calculated at National Level





ISSUES



Current actionability of OECD PSIs

Concerns about actionability remain for countries calculating and using the indicators

In **Korea**...“At this time, the only OECD acute care patient safety indicator reported at the national level is postoperative sepsis rates. This indicator is not reported down to the regional and hospital level and therefore has limited actionability...while all the OECD indicators could be generated there were significant concerns regarding validity and data quality.”

In **Slovenia**...“Use of the data by the hospital and clinicians is not strong given concerns regarding the relevance and reliability of the data. The data is considered too old to be helpful (given aggregation for 3 years, delays in compiling the national data and delays in publishing the data).”



Current actionability of OECD PSIs

Concerns about actionability remain for countries calculating and using the indicators

In **Spain...** "The indicators work well at the national and regional level but not so well at the hospital level. This not so much due to methodological issues or technical issues regarding coding quality or data reliability but more to do with clinical acceptance and use."

In **Belgium...** "Few hospitals showed interest in the data and it was concluded that use of the data to improve learning and improve outcomes was negligible. Feedback was sought from the chief medical officers and clinical coding coordinators. Of the few that reported back, the overwhelming response was that they did not use the data."



Actionability - clinical engagement

There is a general mistrust or scepticism amongst clinical staff of patient safety indicators based on administrative data.

In the **US**...“The surgical community has a long tradition in quality improvement, with significant activities over the years focussed on the evaluation of morbidity and mortality in their population.

The preferred approach to quality improvement is through self-regulation with the development and use of clinical registries owned and operated by the clinical community”.

In the **US**...“The use of administrative data is now accepted as an alternative but has marked a change in the culture of data generation and use, particularly around ownership of the data. There is still healthy debate with the clinical community expressing concerns over the lack of specificity of coding, lack of auditing and accuracy of coding and the incidence of errors in administrative data”



Actionability - clinical engagement

Improved actionability can be achieved through sustained efforts to engage the clinical community

“In the **US** there is a real focus on strengthening the links between the coding community and the clinical community with two-way education and processes to help forge greater understanding. For example most hospitals are hiring Clinical Document Improvement specialists educated to help bridge the gap between the two communities”.

In **Canada**...“Actionability is a key consideration for this work. To go along with the hospital harm indicator the Canadian Patient Safety Institute developed an improvement resource library of best practices for the 31 clinical groups to address key issues and improve preventability.”



OPTIONS



1. Improve availability and quality of data

Access to mature data systems is holding back the availability of indicators in some countries

“**Estonia** has an administrative data system (Health Information System) that most hospitals contribute to but coverage is not complete and the data quality is variable, it has only been in full operation for two years and extending coverage and completeness of the data is the principal priority at this time.

“A national system of data does not currently exist in **Poland**. The Centre for Medical Information has been implementing a national project but it has not been successful. It has not been able to create and collect national data, largely because of the need to access data from variety organisations, each of which have quite different data holdings.



1. Improve availability and quality of data

National data availability remains the predominant issue primary care safety indicators

“The **US** does not have a nationally representative prescribed drug reporting platform. This prohibits the US from reporting and using the OECD primary care prescribing indicators at the national level.”

“Calculation of the OECD prescribing indicators can be achieved through a 10% sample of prescribing data that is available in **Spain** at the national level”

“**Poland** does not currently have access to a national prescription drug database and therefore can't calculate and use the OECD primary care indicators.”

“At this time, **Chile** does not collect and have access to prescribed drugs data at the national level, nor does it have plans to develop this capacity in the future.”



2. Establish stable indicator specifications

Further refinement and clarification of existing indicators will improve actionability.

“**Finland** would encourage the development of publicly available specifications of the indicators by the OECD that identify PSIs that are stable in specification. The Ministry and districts require clear guidance and assurance of stability and a more formal official release with clear specification of the PSIs by the OECD would help.

The issues they [OECD PSIs] pertain to are important but **Sweden** has developed more specific (and with specific denominators) and (in their view) better defined indicators that align with the priority conditions and quality registries that exist in Sweden”



3. Facilitate calculation of the indicators

- OECD PSIs are complex to calculate and data demanding (e.g. SDx coding depth)
- Main change required to bring about improved availability of indicators:
 - Need to strengthen expertise and resources
- Some countries are just embarking on calculations:
 - Cyprus, Italy, Latvia, Lithuania, Mexico, Peru
- Broader application of approach used in hospital performance project is proposed (i.e. application of standardised SAS code).



4. Bundle process & outcome indicators

Actionability can be strengthened by linking outcome indicators to process indicators

In **Belgium**...“A greater focus is now on the use of process indicators. Rather than measuring DVT/PE rates, anticoagulant therapy and bed stocking utilisation measures are now being considered given they are sensitive to changes in clinical practice and more actionable.”

“**Chile** considers these indicators [OECD PSIs] will be useful in assessing whether its prevention strategies are working at a national level. For example, process indicators around embolism prevention can be confronted with outcome measures on the incidence of DVT or PE after hip and knee surgery.”



5. Hospital acquired infection indicators

Nearly all countries have well established databases on healthcare acquired infections

In the **US**...CDC has been adding more measures of health care associated infections, not just in the ICU but also on general wards, including surgical site infections, MRSA, C-difficile, central infections and catheter associated infections in line with the introduction of more sophisticated ICD code sets

In **Canada**...Hospitalized Surgical Site Infections (SSIs): the rate of hospitalized SSIs occurring within 30 or 90 days after specific surgical procedures. This indicator picks up 29 procedures, relies on data linkage and is currently being validated.



6. Retrospective record review

Emerging interest in the use of retrospective record review to monitor patient safety

“In the last 2-3 years, there has been a focus on safety related deaths In NHS **England**. The Learning from Deaths Program uses a structured judgement method of case note review to identify and consider the causes of ‘avoidable deaths’. That is, deaths where the balance of probability suggests they were due to problems in care.

“The program encouraged the use of the Global Trigger Tool (GTT) and from 1 January 2013 the Tool was implemented across all 60 acute care hospitals in **Sweden**. The GTT program involves continuous monthly random audit of records. This data is then available to each hospital for regular internal and review and consideration to improve care and reported to a national registry.”



Long term care

National information infrastructure for this sector is poorly developed in most countries

“The **US** has a universal program for long term care through the CMS Medicare and Medicaid programs. Although most long term care organisations are privately owned and operated, they receive funding from the government and this provides leverage for data and performance monitoring.”

In **Canada**...“In the long-term care sector the application of InterRAI allows the monitoring of falls, pressure ulcers, infections, antipsychotic prescribing and restraint use from around 1,300 long term care facilities. Although there is limited coverage in some provinces, the data covers about 70% of the system.”



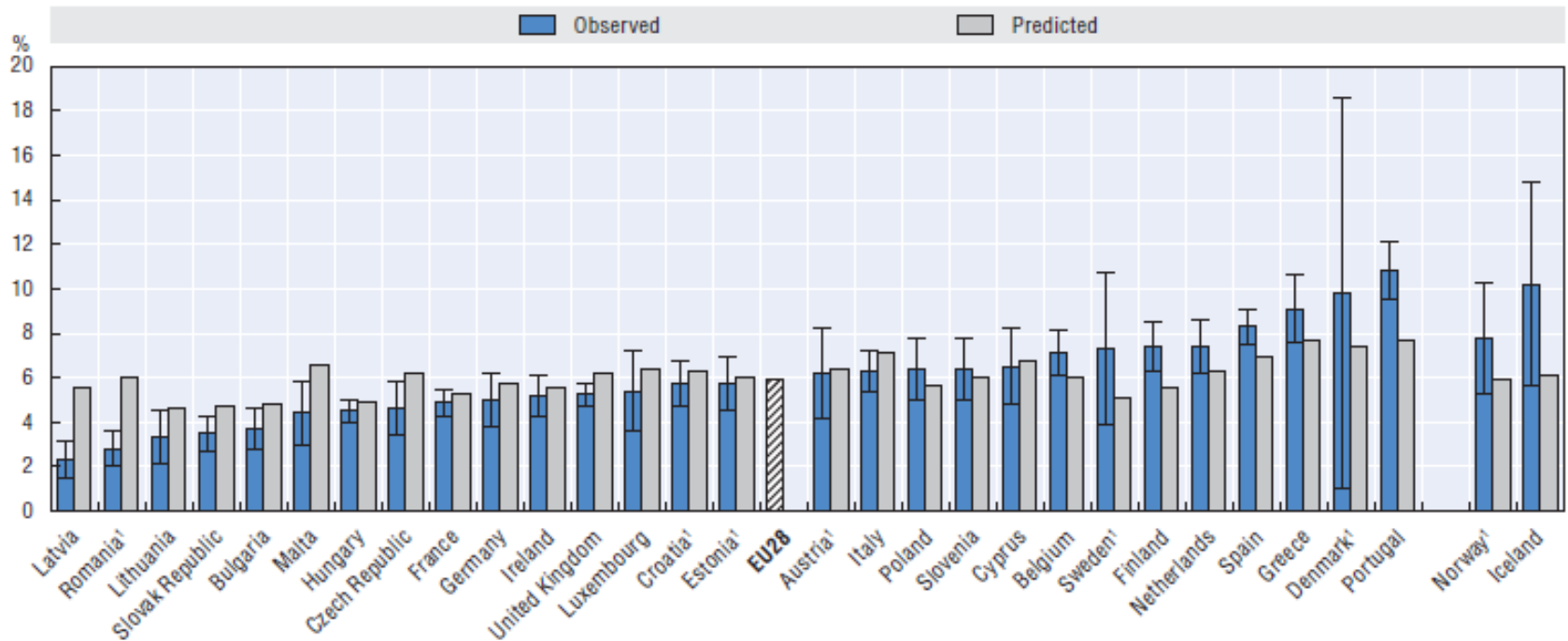
Point Prevalence Studies

- Healthcare acquired infections
 - US Centers for Disease Control and Prevention
 - European Centre for Disease Prevention and Control:
 - Acute care
 - LTC
- Synergies with other indicators
 - European Pressure Ulcer Advisory Panel



Health at a Glance Europe 2016

6.24. Observed and predicted percentage of hospitalised patients with at least one healthcare-associated infection, 2011-12



Note: 95% confidence intervals represented by H.

1. Data representativeness is limited in Austria, Croatia, the Czech Republic, Estonia, Norway and Romania and very limited in Denmark and Sweden.

Source: ECDC (2013), Point Prevalence Survey.

StatLink <http://dx.doi.org/10.1787/888933429593>



2. EXTEND



Additional patient safety indicators

- Sectors:
 - Acute Care
 - Death Rate among Surgical Inpatients with Serious Treatable Complications
 - Primary Care
 - Prescribing safety
 - Opioids
 - Polypharmacy
 - Long term Care
 - Retrospective record review/point prevalence studies
 - Nursing sensitive (e.g. infections, ulcers)
- Perspectives:
 - Patient reported indicators (including PRIMIS)



Key activities



Review of National and International Surveys



OECD Survey for Selecting a Core Set of Seven Questions



Priority questions/areas for further R&D

Domains	Sub-domains	Questions
Incident Prevention	Information sharing/ management	1. Did the health professional you consulted know important information about your medical history?
	Incident prevention	2. Did a member of staff confirm your identity prior to administering your medication?
		3. Did a member of staff confirm your identity prior to your procedure/operation/surgery?
	Medication safety	4. Did a member of staff explain the purpose of the medications you were to take at home in a way you could understand?
		5. Did a member of staff explain to you how and when to take the medications?



Priority questions/areas for further R&D

Domains	Sub-domains	Questions
Patient-reported Incidents	Diagnosis and treatment-related incidents	6. Did you experience a medication-related error (e.g. wrong prescription, wrong dose, wrong time, dispensing error in pharmacy, wrong administration route, reported allergic reaction, omitted by mistake)?
Incident Management	Incident reporting	7. Did you see, or were you given, any information explaining how to provide feedback or complain to the clinic/hospital about the care you received?
	Incident handling	8. If you experienced mistakes or unnecessary problems in connection with your clinic visit/hospital stay, did the staff handle the mistake or problem in a satisfactory way?



3. EXISTING



Ongoing R&D on existing indicators

- Supplementary data collection during HCQI data collection 2017
- Analysis to inform further refinement of specifications (e.g. short stay trim point)
- Development of appropriate approach to risk adjustment



Next steps

- Final report to European Commission on R&D - September 2017
- Existing acute care indicators:
 - Finalise ongoing R&D
 - Improve stability and visibility of specifications
 - Develop SAS code for calculations
- Pilot additional primary care prescribing indicators
- Progress patient reported safety indicator development
- Explore further use of point prevalence surveys for long term care safety indicators
- Continue consideration of the six options to strengthen patient safety indicator actionability.



3. HOSPITAL PERFORMANCE



Unit of measurement

National

Regional

Organisation

Person



Hospital performance project

- Objectives
 - Establish sustainable international data pipeline
 - Encourage capacity in member countries
 - Provide policy-driven analytics
- Scope
 - Cost, quality, access
 - Initial focus on quality and outcomes
 - Looking ahead to explore dimensions of value



Data development

- Initial consideration largely limited to existing AMI 30-day mortality indicator
- Progressive methodological development with ongoing expert advice on key issues
- Testing of feasibility and robustness through pilot data collections



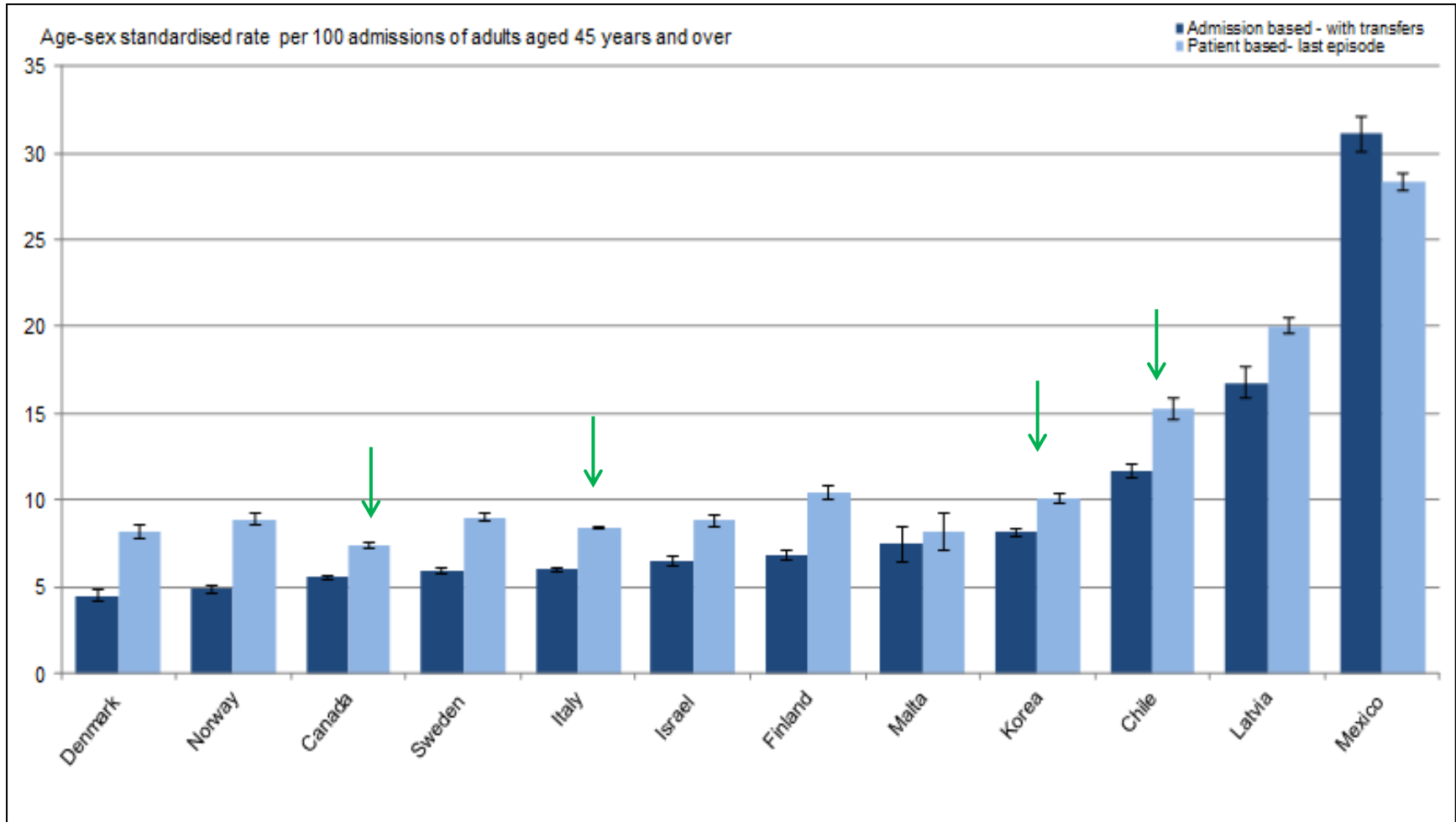
Current database

- AMI 30 day mortality
 - Over 3,000 public and private hospitals
 - From 17 countries
 - Includes 15 variables
 - Crude and standardised (indirect and direct)
 - Linked data and unlinked data calculations
- Hospital characteristics
 - Hospital characteristics
 - Size
 - Location
 - Ownership
 - Academic status
 - Existence of a cardiac catheter laboratory





Variation across countries



Note: Mexico admission and patient-based rates are drawn from different samples of national data and are not directly comparable.



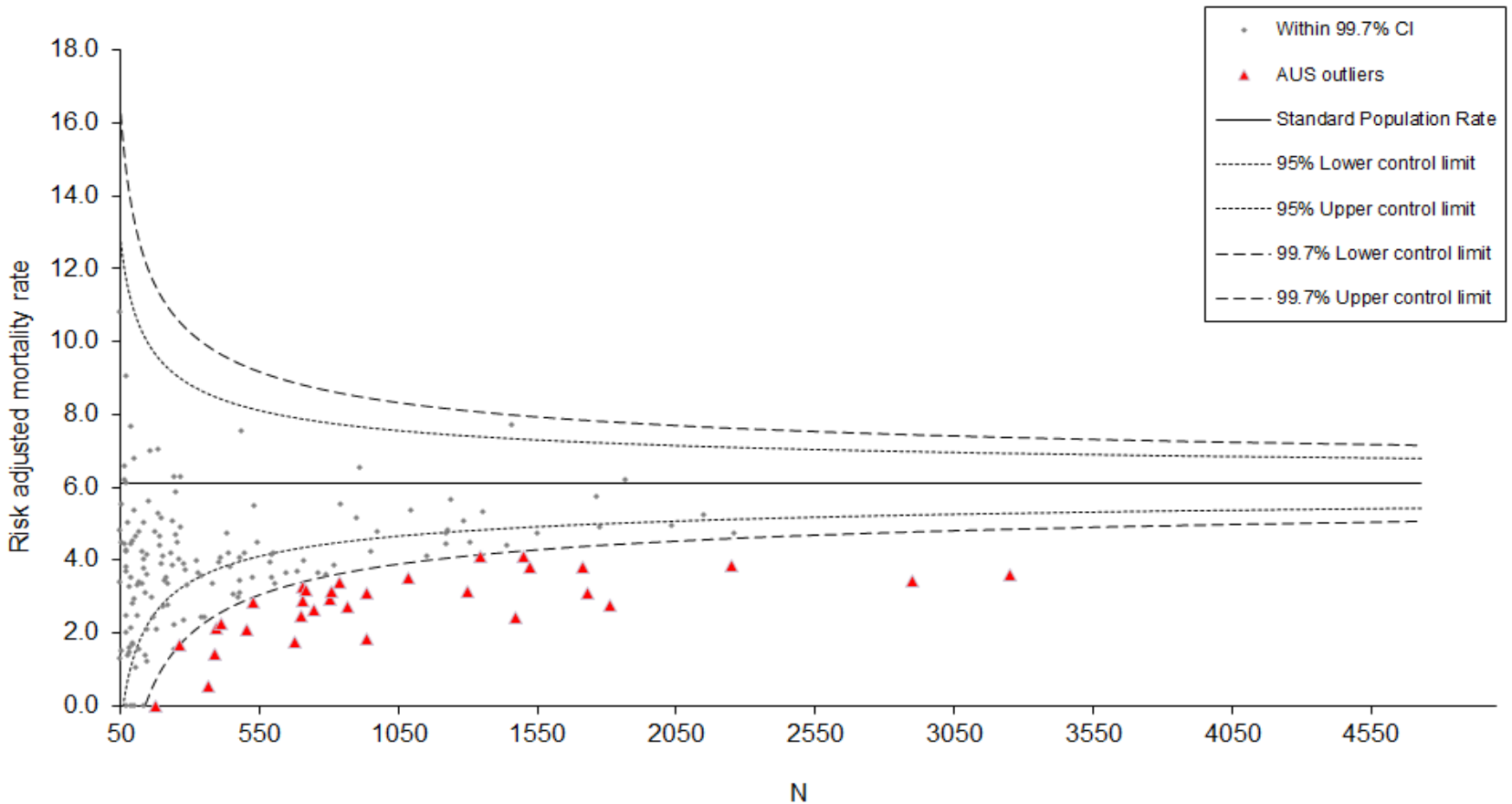
Variations within countries: Australia

AUSTRALIA 177 ACUTE HOSPITALS (N>=50) | 2013-2015

AMI 30-Day Case Fatality Rates

Source: Pilot Hospital Performance Data Collection 2017

Indicator: Admission-based/With transfers
Model: Age/Sex, co-morbidity
Reference population: All countries, unweighted





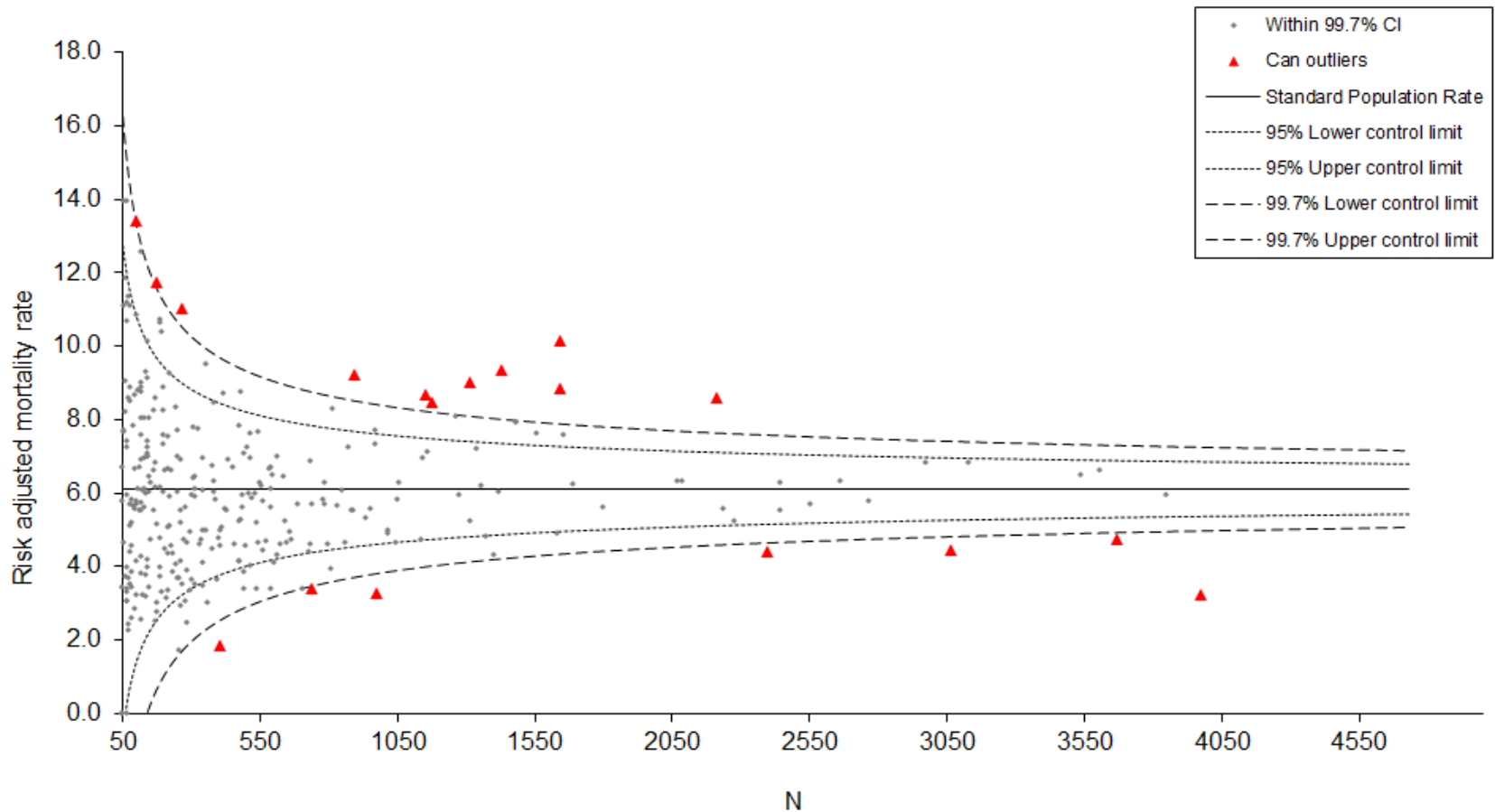
Variations within countries: Canada

CANADA, 311 ACUTE HOSPITALS (N>=50) | 2012-2014

AMI 30-Day Case Fatality Rates

Source: Pilot Hospital Performance Data Collection 2017

Indicator: Admission-based/With transfers
Model: Age/Sex, co-morbidity
Reference population: All countries, unweighted





Variations within countries: Chile

CHILE, 85 ACUTE HOSPITALS (N>=50) | 2013-2015

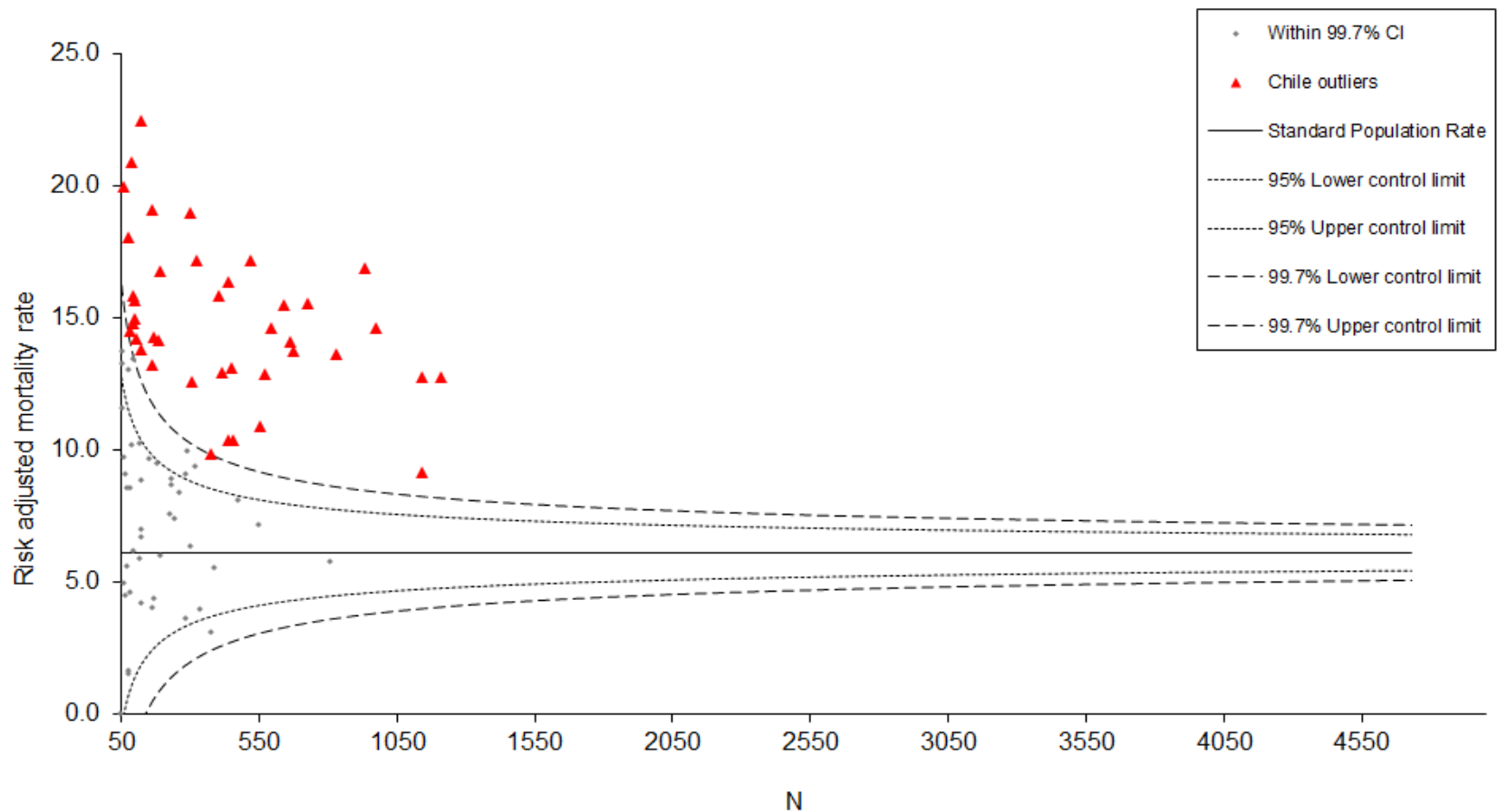
AMI 30-Day Case Fatality Rates

Source: Pilot Hospital Performance Data Collection 2017

Indicator: Admission-based/With transfers

Model: Age/Sex, co-morbidity

Reference population: All countries, unweighted





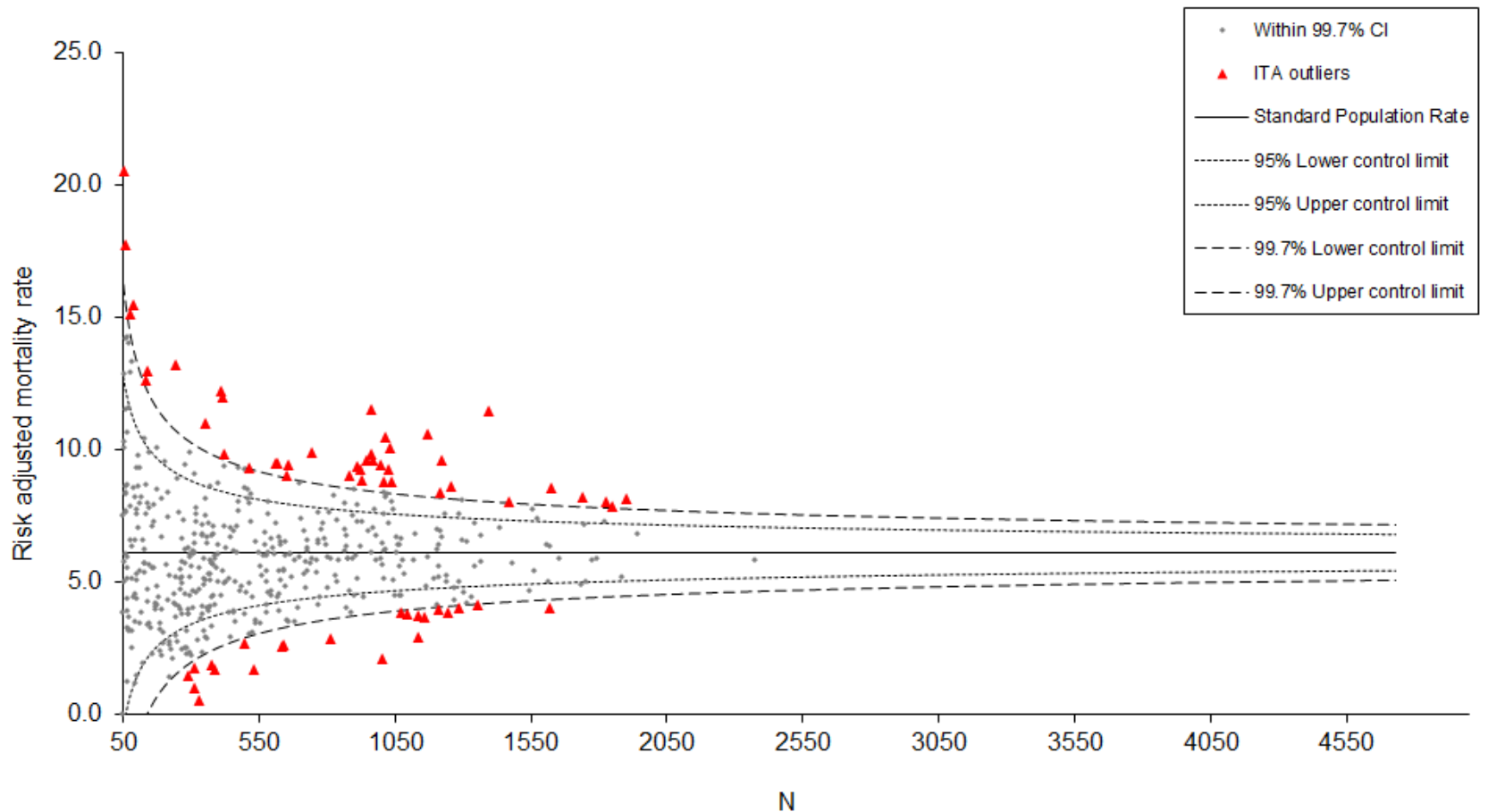
Variations within countries: Italy

ITALY, 497 ACUTE HOSPITALS (N>=50) | 2013-2015

AMI 30-Day Case Fatality Rates

Source: Pilot Hospital Performance Data Collection 2017

Indicator: Admission-based/With transfers
Model: Age/Sex, co-morbidity
Reference population: All countries, unweighted

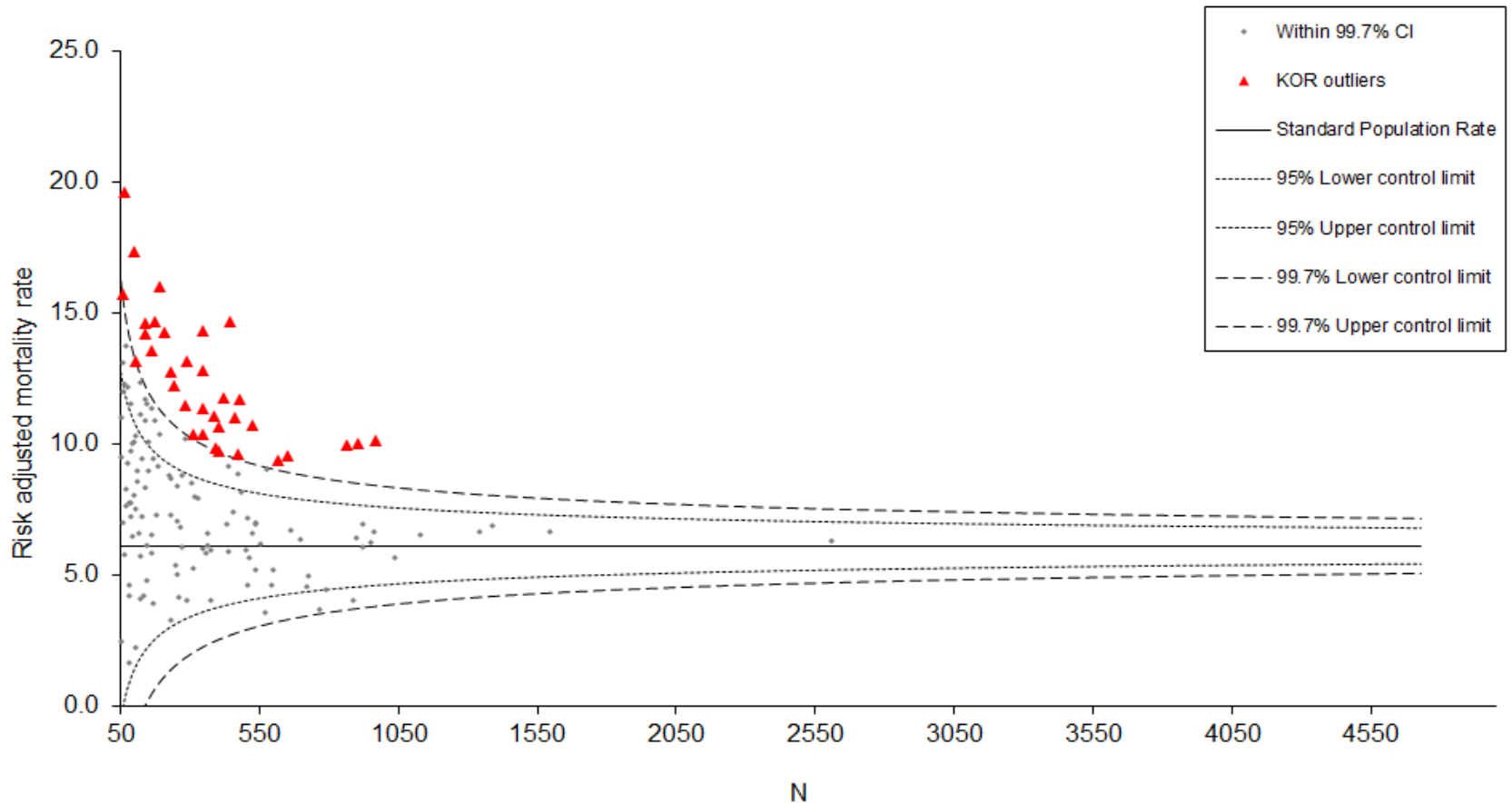




Variations within countries: Korea

KOREA 150 ACUTE HOSPITALS (N>=50) | 2013-2015
AMI 30-Day Case Fatality Rates
Source: Pilot Hospital Performance Data Collection 2017

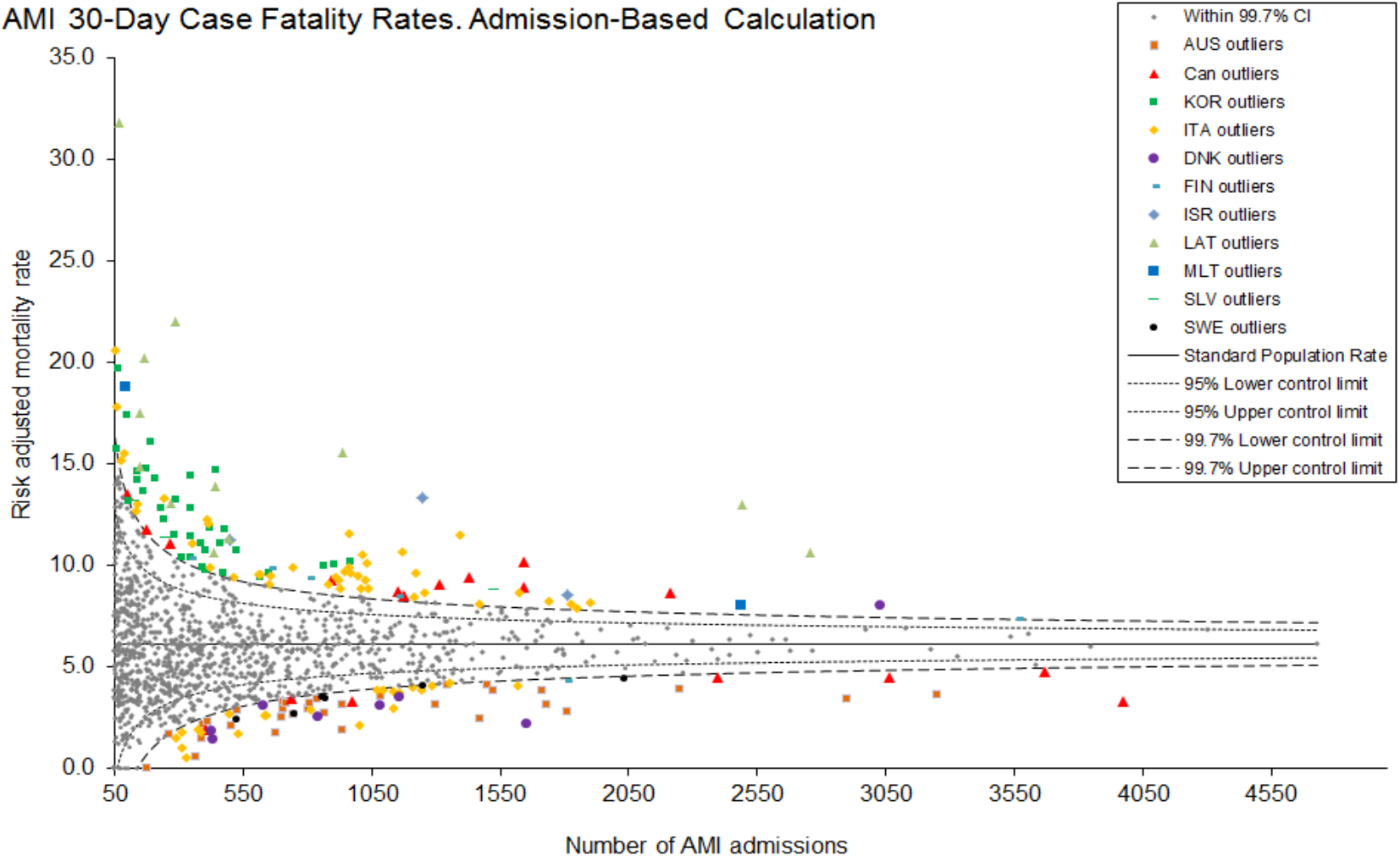
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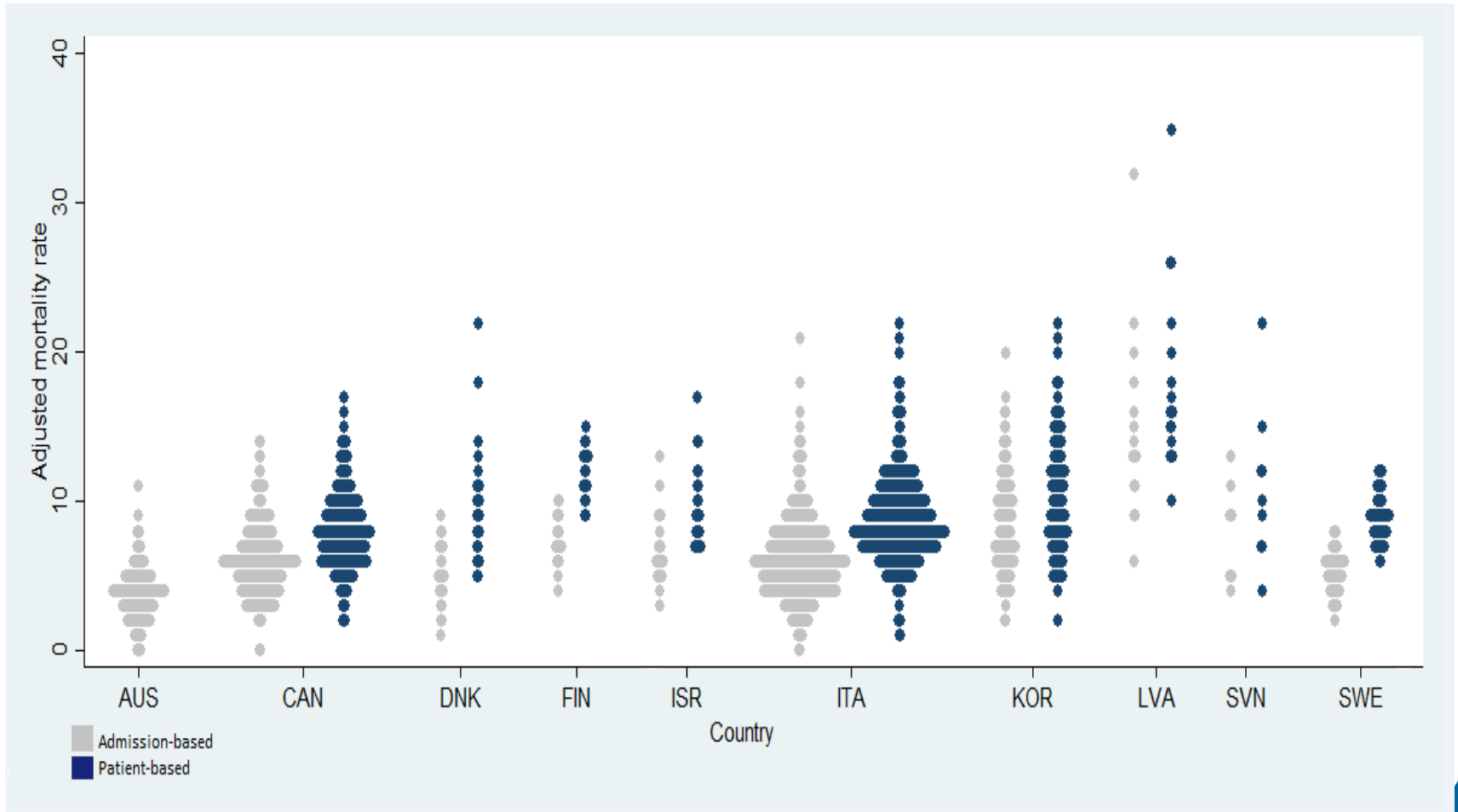
Variation across and within countries

AMI 30-Day Case Fatality Rates. Admission-Based Calculation





Variation across and within countries





Next steps

- Shorter term
 - Expand indicators beyond AMI outcomes
 - Explore hospital and system drivers of variation
 - Provide access to analytics via interactive portal
- Longer term
 - Value of hospital care
 - Pathways of care



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Value-Based Health Care Delivery

Based on the research of Professor Michael Porter, **Value-Based Health Care Delivery** is a framework for restructuring health care systems around the globe with the overarching goal of value for patients—not access, cost containment, convenience, or customer service.

Key Concepts

CHOICE & COMPETITION

for patients are powerful forces to encourage continuous improvement in value and restructuring of care.

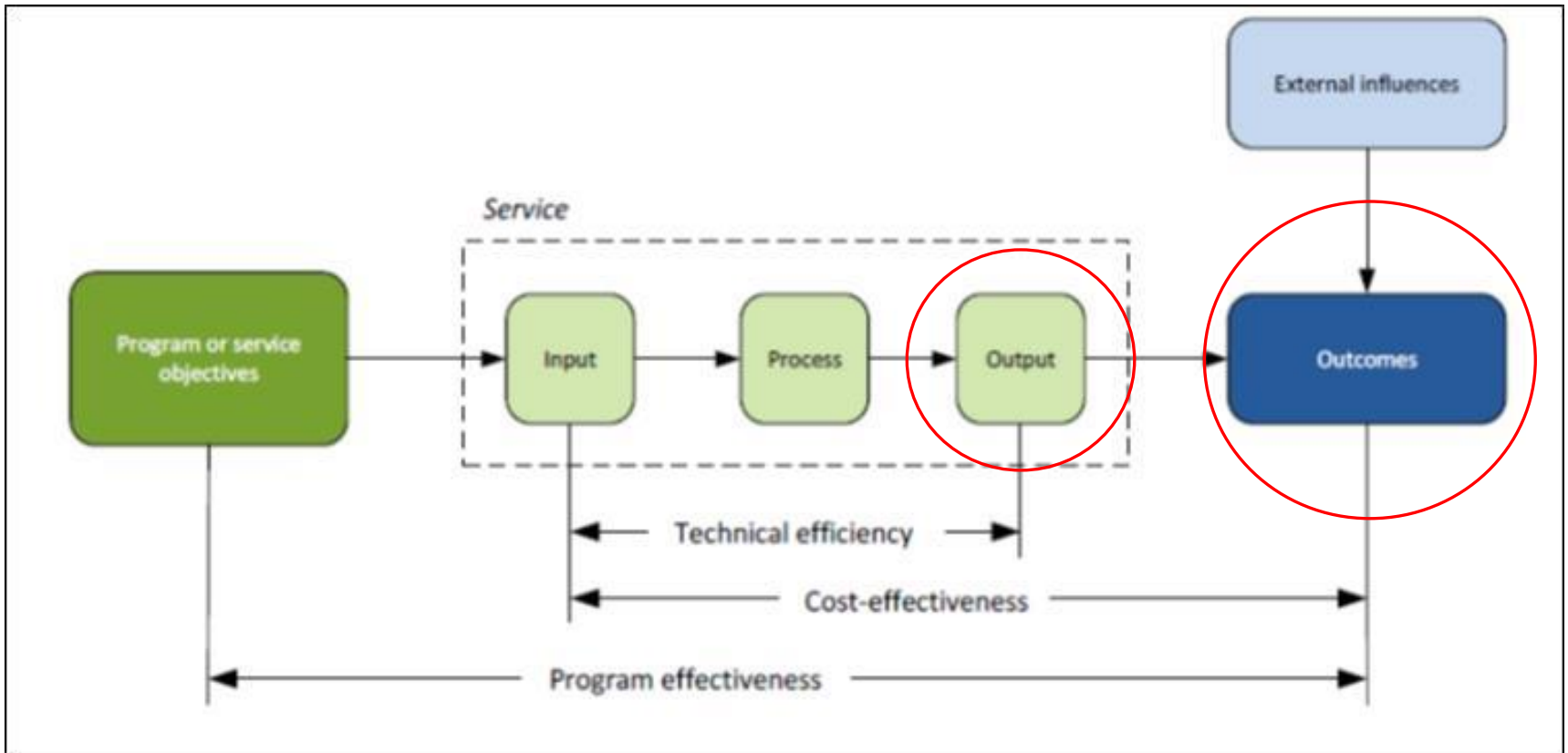
**VALUE = PATIENT HEALTH OUTCOMES
PER DOLLAR SPENT**

POSITIVE-SUM COMPETITION

on value for patients is fundamental to health care reform in every country.



Efficiency: outputs and outcomes



Source: Australian Steering Committee for the Review of Government Service Provision, 2015.



Cost of hospital outputs: AMI


- Pilot data collection 2016:
 - Hospital-level data
 - Average length of stay
 - Average cost
 - Selected outputs
 - AMI with PTCA and CABG
 - Others (e.g. C-section)
 - Participating countries:
 - Canada, (Alberta) France, Ireland and Israel
 - Pilot provided proof of concept
 - Additional data collection 2017
 - Capacity to link datasets

OECD publishing

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OECD Health Working Papers No. 94

**Understanding variations in hospital length of stay and cost**

RESULTS OF A PILOT PROJECT

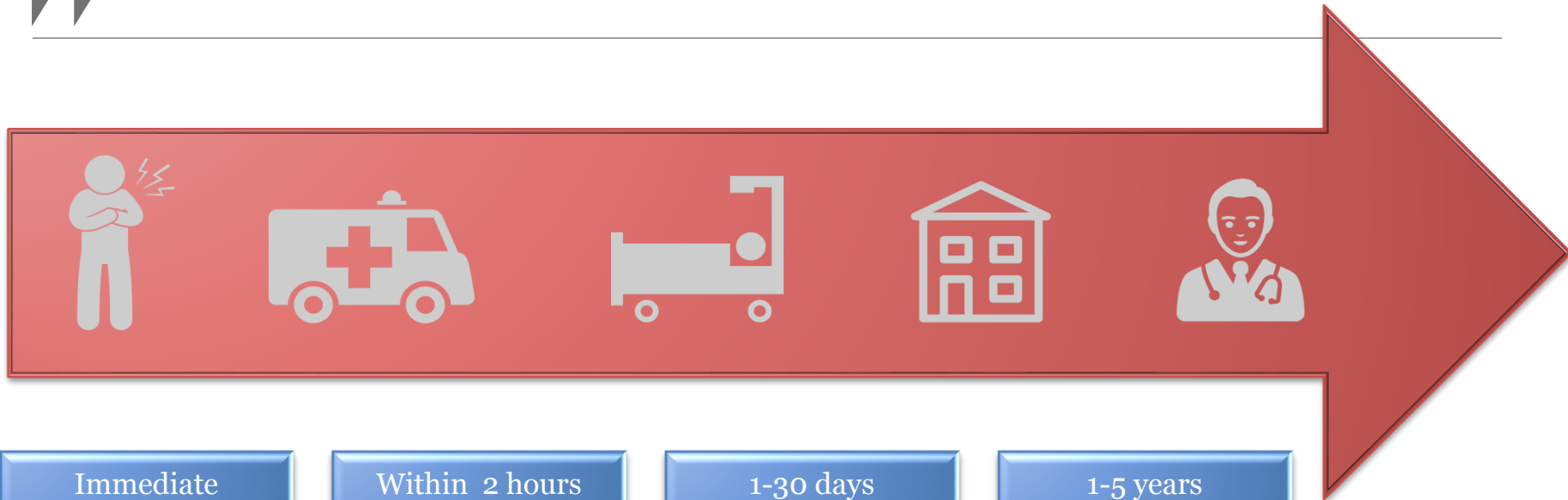
Luca Lorenzoni, Alberto Marino

JEL Classification: D24, I18

 OECD



AMI Pathway of Care



Immediate

- Self Care
- Health Literacy

Within 2 hours

- Ambulance
- Hospital ED

1-30 days

- Acute inpatient
- PCI/CABG

1-5 years

- Primary Care
- Community Care

Mortality

- 30-day case fatality
- 1 year survival
- 5 year survival

Complications

- Acute renal failure
- Postoperative infection
- Reoperations

PROMS

- Fatigue and tiredness
- Depression and anxiety
- Shortness of breath



4. LOW VALUE CARE



Low value care

- Along with Patient Safety, LVC a key area of clinical waste identified in the *Tackling Wasteful Spending on Health* report.
- OECD working with *Choosing Wisely* initiatives:
 - Bottom-up, profession-led identification of low value care lists
 - Started in US and now in over 10 countries (Australia, Canada, England, Germany, Italy, Japan, Netherlands, New Zealand, South Korea and Wales)
- Next meeting of international collaboration in the Netherlands 2017





Real challenges in monitoring progress

- Emerging international collaboration on monitoring *Choosing Wisely*:
 - Australia, Canada, Sweden and US
 - *Lancet* series published in January 2017
 - Canada CW & CIHI report in April 2017
- Initial OECD priorities:
 - Antibiotics for common colds
 - Imaging for lower back pain
 - Prescription of sedatives for older people

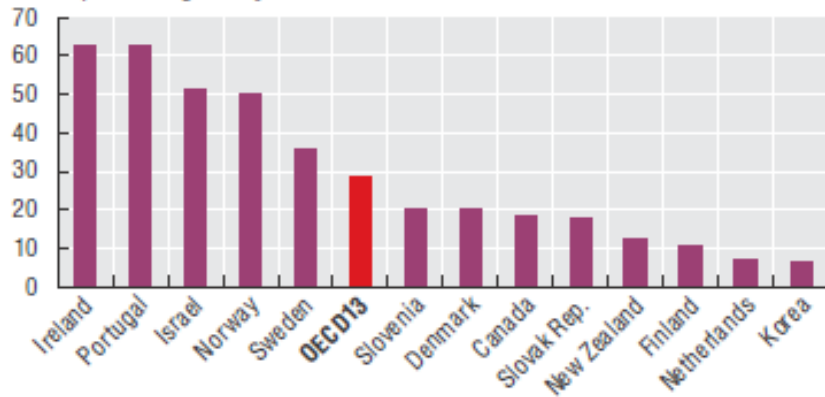





1. Prescribing sedatives for older people

8.8. Elderly people prescribed long-term benzodiazepines or related drugs, 2013 (or nearest year)

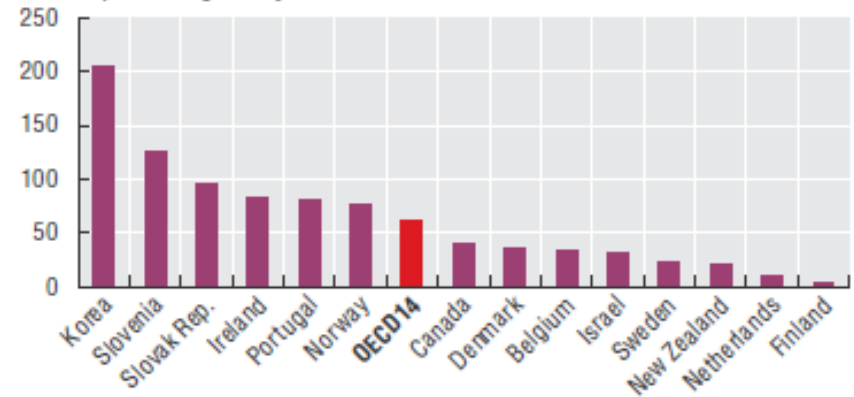
Per 1 000 persons aged 65 years and over



Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.
StatLink  <http://dx.doi.org/10.1787/888933281125>

8.9. Elderly people prescribed long-acting benzodiazepines or related drugs, 2013 (or nearest year)

Per 1 000 persons aged 65 years and over



Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.
StatLink  <http://dx.doi.org/10.1787/888933281125>

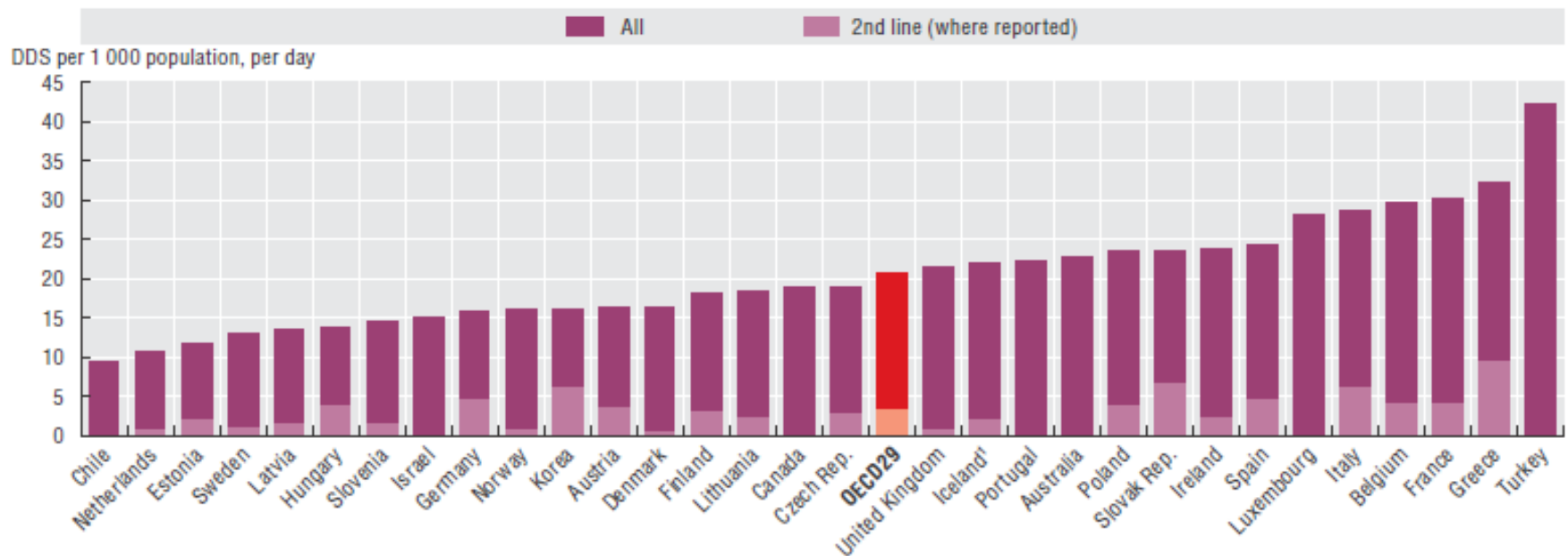
Information on data for Israel: <http://oe.cd/israel-disclaimer>



2. Antibiotics for common colds


- Linking utilisation data to diagnosis....

8.5. Overall volume of antibiotics prescribed, 2013 (or nearest year)



1. Data refer to all sectors (not only primary care).

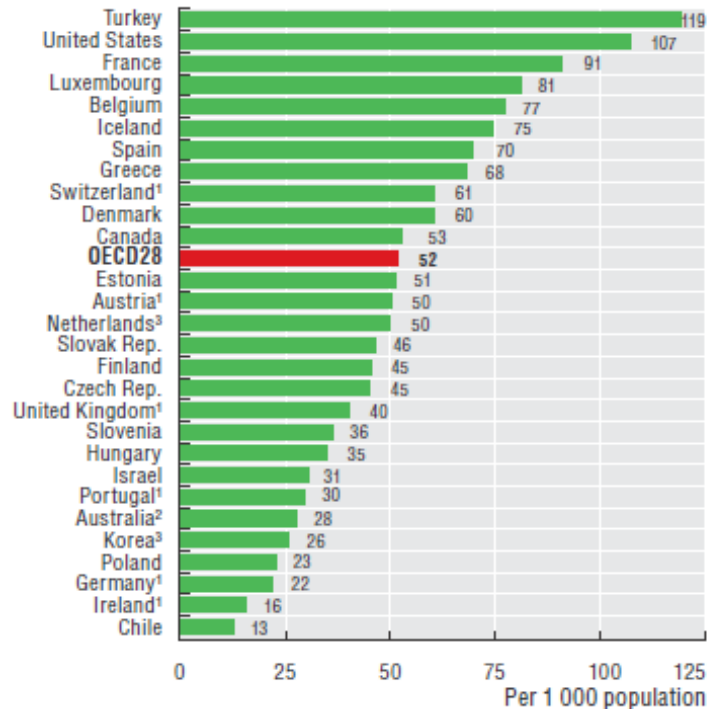
Source: European Centre for Disease Prevention and OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

StatLink  <http://dx.doi.org/10.1787/888933281125>

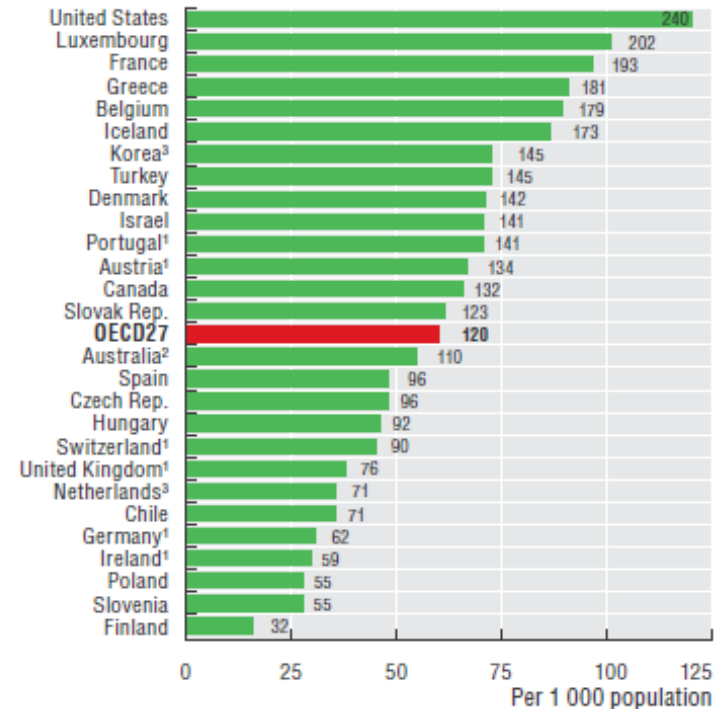


3. Imaging for lower back pain

6.5. MRI exams, 2013 (or nearest year)



6.6. CT exams, 2013 (or nearest year)



1. Exams outside hospital not included (in Ireland, exams in private hospital also not included).
2. Exams on public patients not included.
3. Exams privately-funded not included.

Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

StatLink <http://dx.doi.org/10.1787/888933280972>

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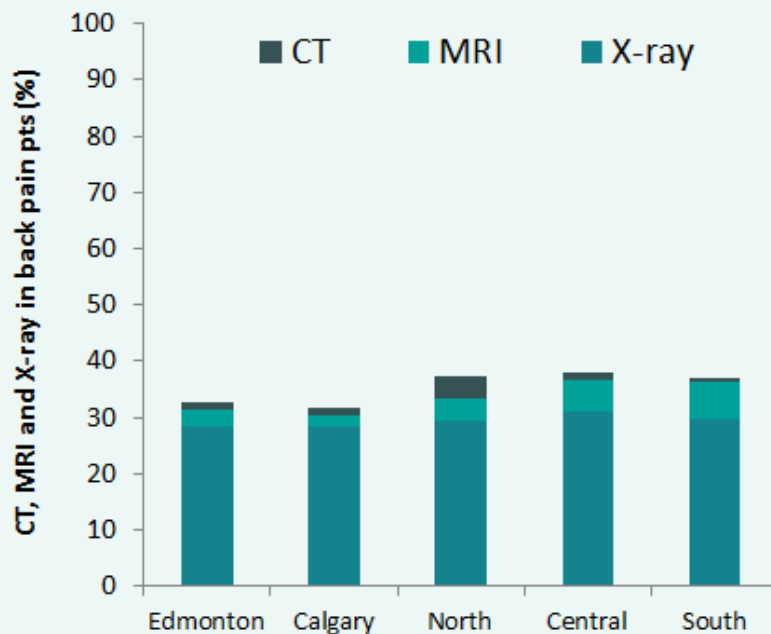
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StatLink <http://dx.doi.org/10.1787/888933280972>



Don't do imaging for lower-back pain unless red flags are present



30% of patients who visit their physician for lower-back pain have at least one scan within 6 months, in Alberta

Data Source: Canadian Institute for Health Information's Discharge Abstract Database (DAD), National Ambulatory Care Reporting System (NACRS), Patient Level Physician Billing (PLPB), 2012-2013.



5. DEMENTIA CARE



Collaborative action on dementia

- International Workshop of how big data can support research and care
- WHO Ministerial Conference on Global Action Against Dementia
- Joint framework for improving policies around dementia care



‘Need for comparative metrics on dementia care to assess performance and success of policies’

Dementia Research and Care
CAN BIG DATA HELP?

OECD
ONTARIO BRAIN INSTITUTE
INSTITUT DU CERVEAU
INSTITUTE OF HEALTH POLICY, MANAGEMENT & EVALUATION
UNIVERSITY OF TORONTO

Icons: Profile of a head with gears, test tubes, ECG heart rate, and a globe.



Dementia care indicators

- 2017 international pilot data collection:
 - Participation by 15 countries
 - Set of six indicators
 1. All-cause hospital admissions
 2. Hospital admissions for hip fracture
 3. Hip fracture surgery initiated within 2 calendar days after admission to the hospital
 4. Average length of stay for hip fracture surgery
 5. Mortality following surgery for hip fracture
 6. Proportion of people aged 65 and over prescribed antipsychotics



Longer term development of indicators

- **Improving quality of life** is the ultimate goal of many dementia policies.
- **Patient-reported measures** are an OECD priority .



Exploratory work on carer-reported measures

- OECD is partnering with Geoff Anderson and Ivy Wong from the University of Toronto (UT) to carry out exploratory research on **carer-reported measures**.
- UT held an **expert meeting in November** to explore the possibility of developing standardised carer-reported measures.
- UT is working with countries interested in participating in this study.



6. HEALTH DATA INFRASTRUCTURE



Better use of health data

- Scope to improve quality of care:
 - Linking data across providers
 - Providing access via EHR systems
- Data privacy protection issues
- OECD Council Recommendation
 - Establish effective governance:
 - 12 high-level principles
 - ongoing monitoring of progress





Common underlying theme

- Building capacity
 - where national datasets do not currently exist:
 - Primary care (e.g. prescribing)
 - Long term care (e.g. pressure ulcers)
 - Patient reported indicators (e.g. PROMS, PRIMS)
- Improving quality
 - Where variations in coding quality exist
 - Principal diagnosis (e.g. STEMI)
 - Secondary diagnosis coding depth (e.g. comorbidity)
 - Gold standard indicators require linked datasets
 - Acute care
 - Patient safety



Thank you

Health Care Quality Indicator Program

Key Contacts:

- Niek Klazinga (niek.klazinga@oecd.org)
- Ian Brownwood (ian.brownwood@oecd.org)