

Un atlas pour améliorer la qualité des soins?

Prof. Dr. med. Christoph A. Meier
Klinikdirektor, Klinik & Poliklinik für Innere Medizin

SPH Conference 2024 à Fribourg, 4 septembre 2024

Focus: Variability of (lucrative, preference-sensitive) procedures Most of our care is 'Gray-zone Medicine'



e.g. accidents

Mark Rothko: The Seagram murals

Gray-zone Medicine
preference-sensitive interventions

e.g. oncology, chronic diseases,
orthopedics, statins in 1° prevention, vitamins,
cancer screening,...

Clinical Review & Education

JAMA | Special Communication

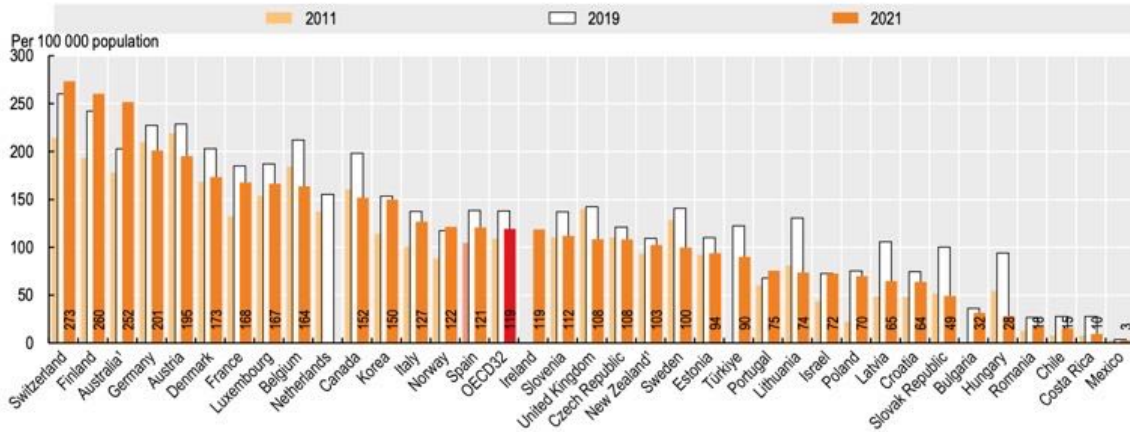
Waste in the US Health Care System
Estimated Costs and Potential for Savings

25%

William H. Shrank, MD, MSHS; Teresa L. Rogstad, MPH; Natasha Parekh, MD, MS

Variability across countries – Knee replacements

Figure 5.28. Knee replacement surgery, 2011, 2019 and 2021 (or nearest year)



1. Latest available data from 2020.
Source: OECD Health Statistics 2023.

Variability within countries – The Dartmouth Atlas

[Current Issue](#)
[First release papers](#)
[Archive](#)
[About](#)

Submit manuscript

1973

HOME > SCIENCE > VOL. 182, NO. 4117 > SMALL AREA VARIATIONS IN HEALTH CARE DELIVERY

ARTICLE

f X in

Small Area Variations in Health Care Delivery: A population-based health information system can guide planning and regulatory decision-making.

JOHN WENNBERG AND ALAN GITTELSON [Authors Info & Affiliations](#)

SCIENCE • 14 Dec 1973 • Vol 182, Issue 4117 • pp. 1102-1108 • DOI: 10.1126/science.182.4117.1102

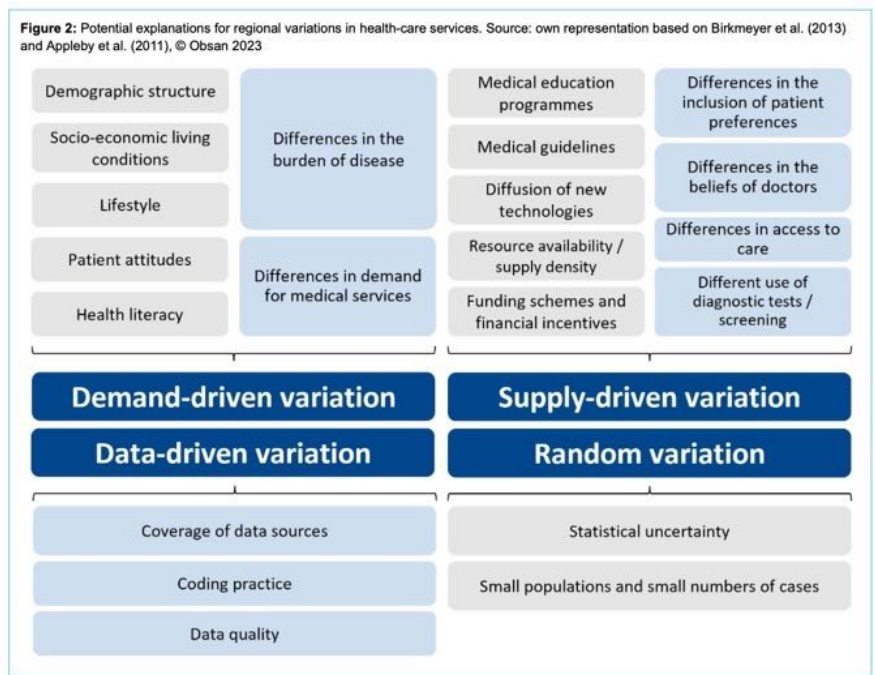
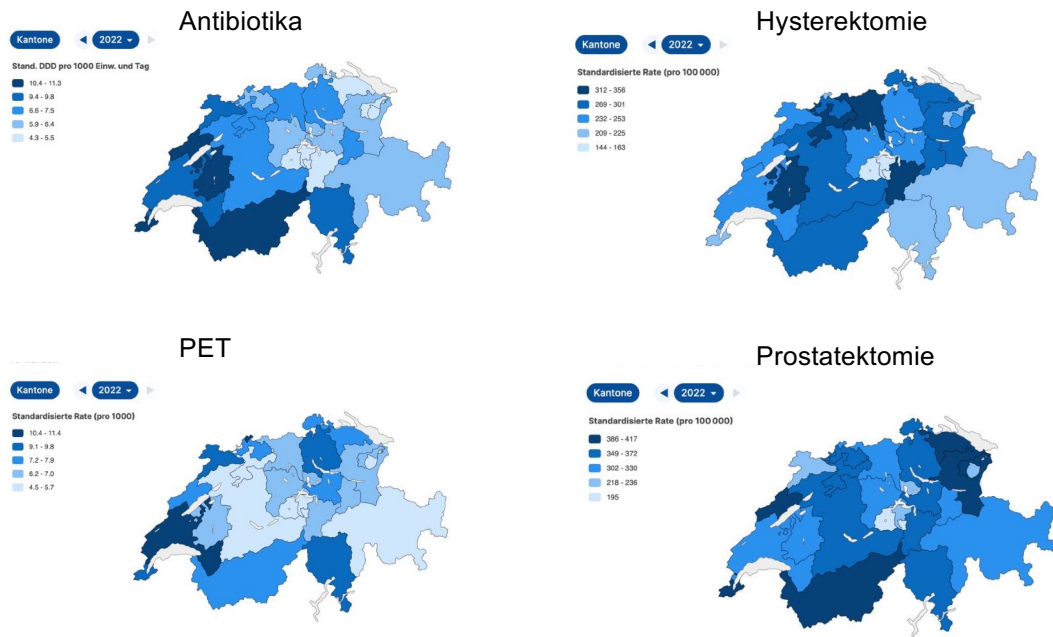
The Dartmouth Atlas of Health Care Website Archive (effective June 30, 2024)

For more than 25 years, The Dartmouth Atlas Project documented striking variations in how medical resources were distributed and used in the United States. The project used Medicare and Medicaid data to provide information and analysis about national, regional, and local markets, as well as hospitals and their affiliated physicians. This approach, which traces its intellectual roots to Jack Wennberg's original 1973 Science article, established the field of small area variations health services research.

What's New?

- [News: Atlas rates now available in dataverse](#)
- [News: John E. Wennberg, founder of Dartmouth Atlas, dies at 89](#)
- [News: Mapping out a new Dartmouth Atlas of Health Care. An interview with TDI Director Amber Barnato](#)
- [News: Atlas collection now available at the National Library of Medicine](#)
- [Report: Variations in Spending and Utilization Across Payer Types](#)

Variability within countries – *Der Versorgungsatlas (obsan)*



Coronary angioplasty (PTCA)

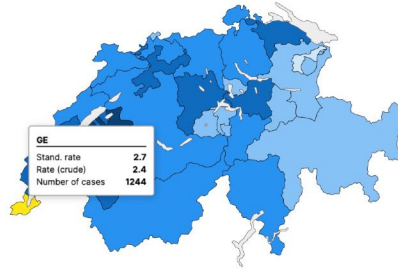
total (outpatient + inpatient) inpatient outpatient

www.versorgungsatlas.ch

Coronary angioplasty (PTCA: percutaneous transluminal coronary angioplasty) is a procedure that opens up narrowed or blocked coronary arteries using a balloon. Often a metal tube (stent) is fitted as well. Coronary angioplasty can be used to treat angina pectoris and heart attacks. The Swiss Atlas of Healthcare contains analyses on the frequency of coronary angioplasties in total and separate analyses on inpatient and outpatient settings.

Cantons 2021

Standardised rate (per 1000)



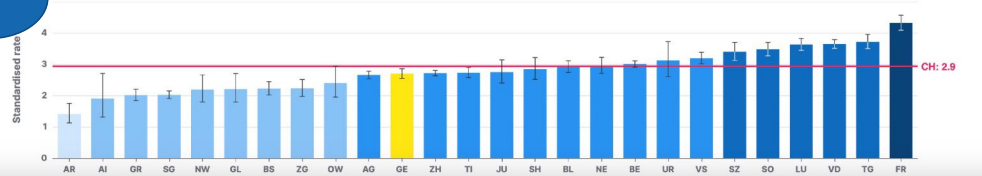
GE
Stand. rate 2.7
Rate (crude) 2.4
Number of cases 1244

Heart Cardiology

Informations

Sector	outpatient and inpatient
Measurand	Rate standardised by age and sex based on the number of cases per 1000 inhabitants
Population	Switzerland's permanent resident population
Data source	MS / Tarifpool
Key figures 2021	
Number of cases	25 893
Regional variation 2021	
Systematic variation (SCV)	5.0
Empirical Bayes estimator (EB)	5.7
Quintile Ratio (QR)	1.49
Spatial-temporal variation 2017 - 2021	
Coefficient of concordance (KCC)	0.88

Both can not be right!
Elliott S. Fisher



USZ Universitäts Spital Zürich

7

Supply-driven demand?



KSB



USZ



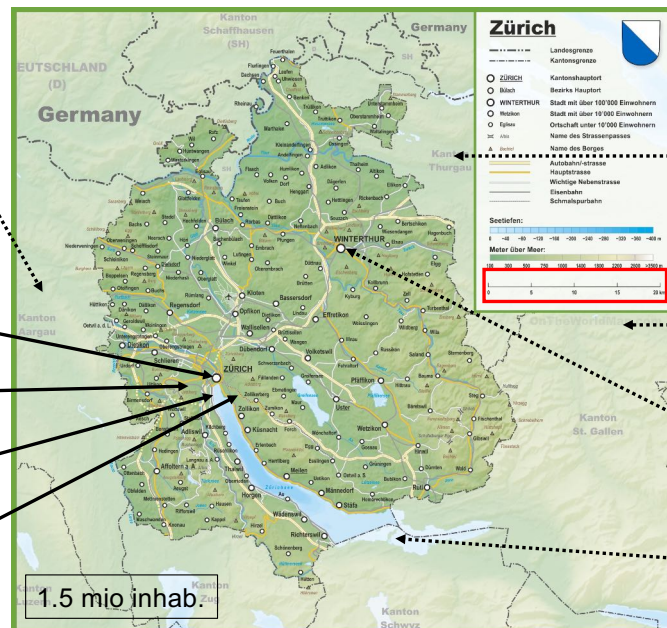
Triemli



Hirslanden 1



Hirslanden 2



Thurgau



Wetzikon



KSW

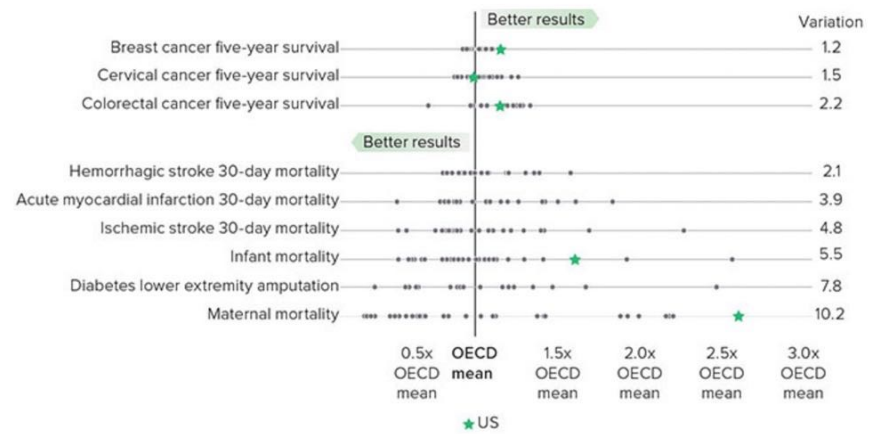


Cardiance Präfikon

USZ Universitäts Spital Zürich

Additional variables? *Variability of outcomes*

FIGURE 1.4 Health outcomes can vary as much as tenfold across countries.



The chart plots the degree of outcomes variation across selected OECD countries for nine common health conditions. In many, US outcomes lag the OECD mean—in the case of maternal mortality, by more than two-and-a-half times.

Note: AMI stands for acute myocardial infarction. Most recent data are from 2016 to 2019 (infant and maternal mortality), 2015 to 2017 (AMI, stroke, and diabetes), and 2010 to 2014 (cancer survival). Not all metrics reported by United States.

Source: OECD.

Additional variables? *Variability of practice*

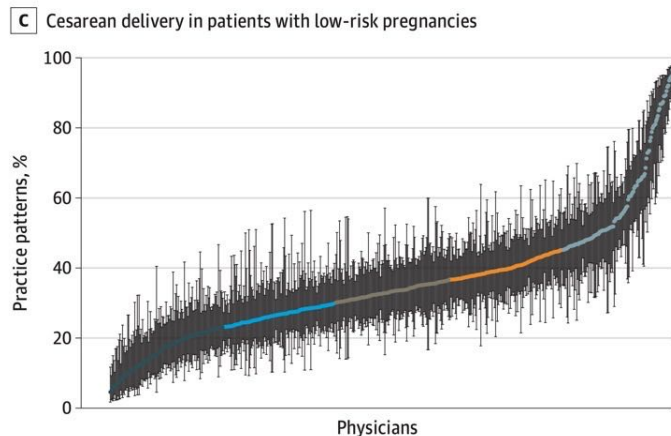
JAMA Health Forum™

JAMA Health Forum. 2022;3(1):e214698. doi:10.1001/jamahealthforum.2021.4698

Original Investigation

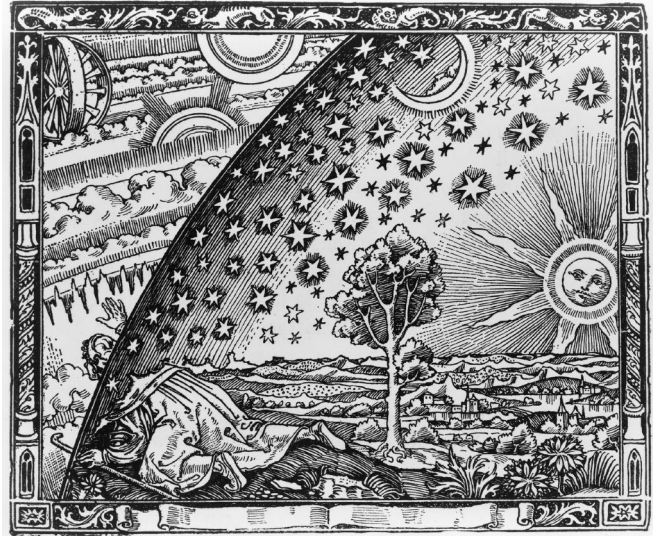
Physician Practice Pattern Variations in Common Clinical Scenarios Within 5 US Metropolitan Areas

Zirui Song, MD, PhD; Sneha Kannan, MD; Robert J. Gambrel, MS, MA; Molly Marino, PhD, MPH; Muthiah Vaduganathan, MD, MPH; Mark A. Clapp, MD, MPH; Jacqueline A. Seiglie, MD; Patricia P. Bloom, MD; Athar N. Malik, MD, PhD; Matthew J. Resnick, MD, MPH



*It is difficult to get a man
to understand something,
when his salary depends on
him not understanding it.*

*Upton Sinclair
(1878 – 1968)*



Flammarion, Paris 1888