

Regional Differences in Healthcare and Their Complex Background

Input Nationales Symposium Integrierte Versorgung

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Take Home Messages

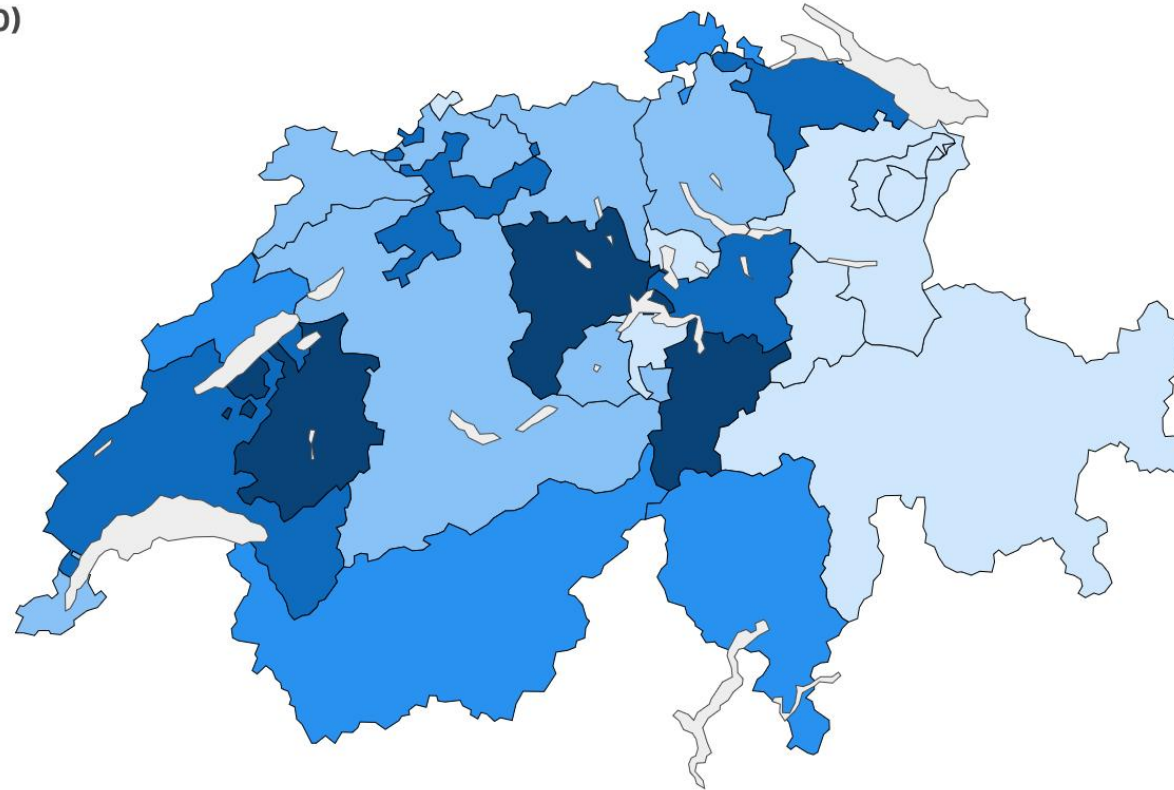
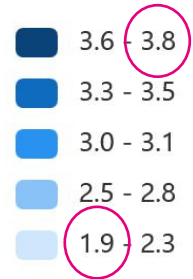
The Swiss healthcare system gives both providers (in shaping services) and the population (in using services) considerable freedom.

The resulting regional differences in care have multiple structural, professional, and societal causes — and raise important questions for the future development of healthcare.

Regional differences in healthcare provision

Example of large differences

Standardisierte Rate (pro 1000)



Coronary angioplasties (2022)

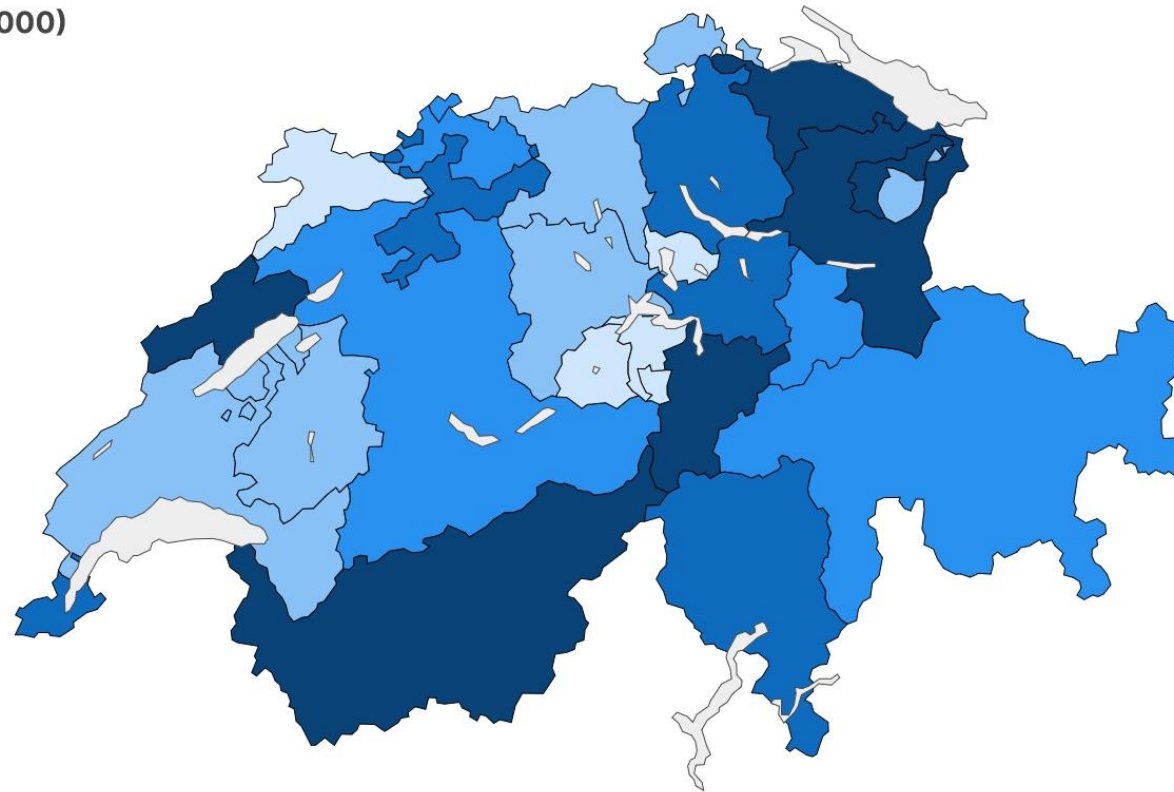
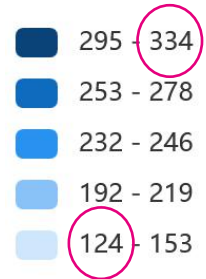
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[Indikator auf versorgungsatlas.ch](https://www.versorgungsatlas.ch)

Regional differences in healthcare provision

Example of large differences

Standardisierte Rate (pro 100 000)



Partial prostate removals (2022)

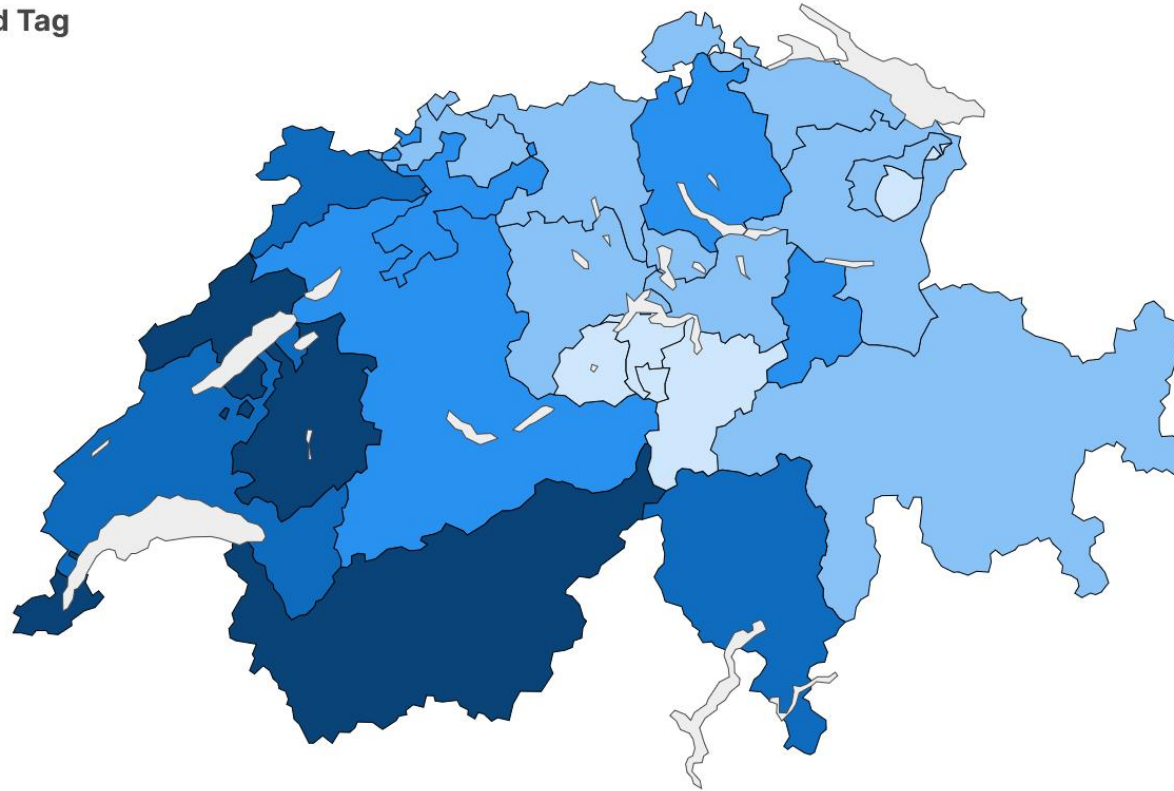
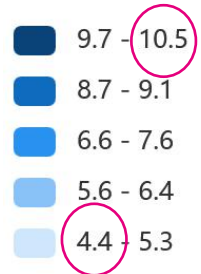
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Regional differences in healthcare provision

Example of large differences

Stand. DDD pro 1000 Einw. und Tag



Antibiotic prescriptions (2022)

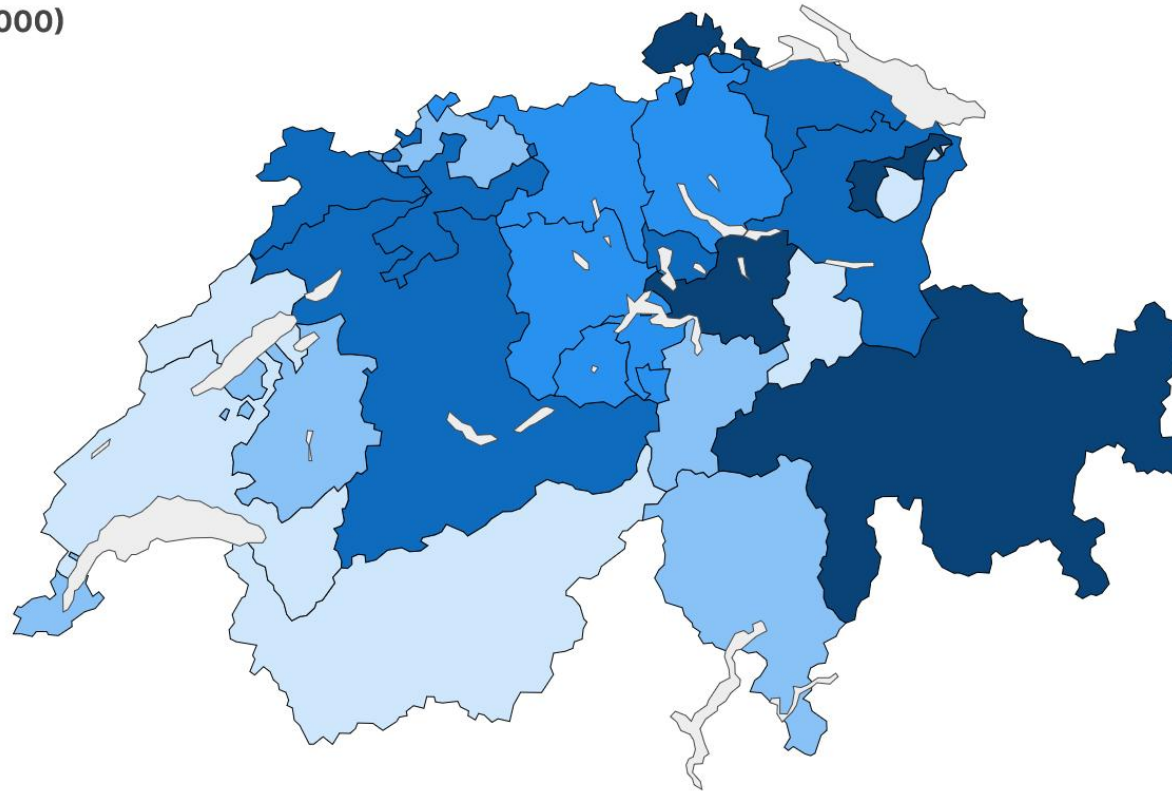
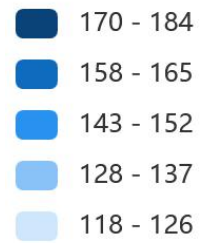
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Regional differences in healthcare provision

Examples of smaller differences

Standardisierte Rate (pro 100 000)



Appendectomies (2022)

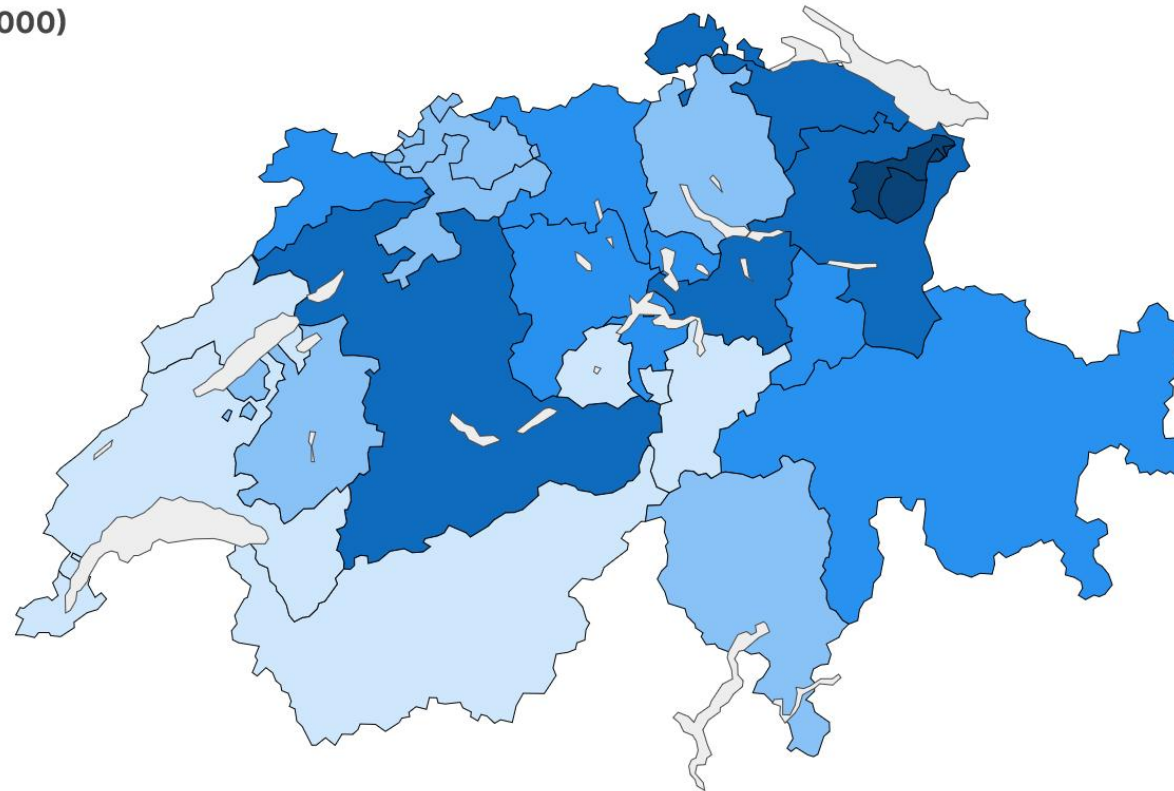
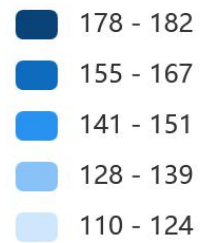
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Regional differences in healthcare provision

Examples of smaller differences

Standardisierte Rate (pro 100 000)



Caesarean sections (2022)

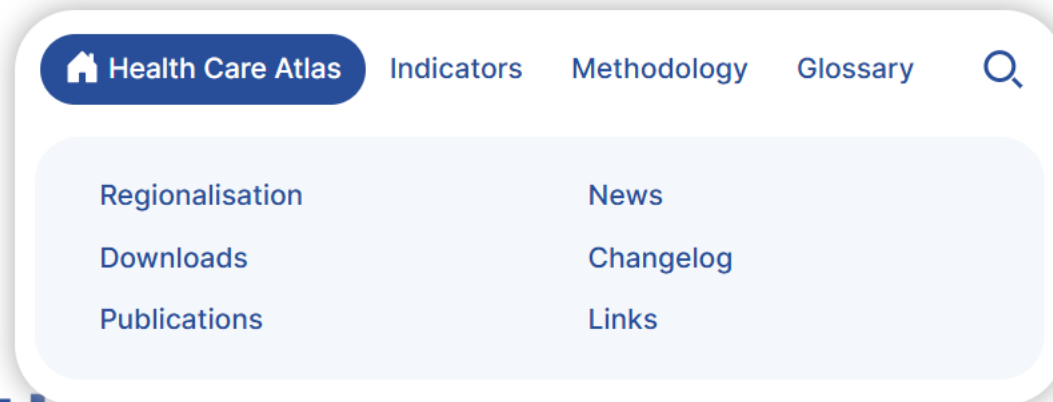
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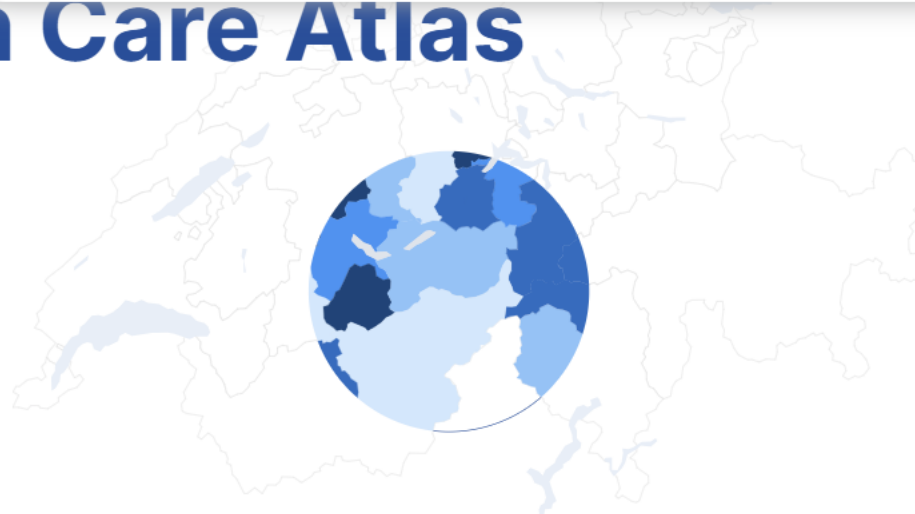
Source of the graphics

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Schweizerisches Gesundheitsobservatorium
Observatoire suisse de la santé
Osservatorio svizzero della salute
Swiss Health Observatory



Swiss Health Care Atlas



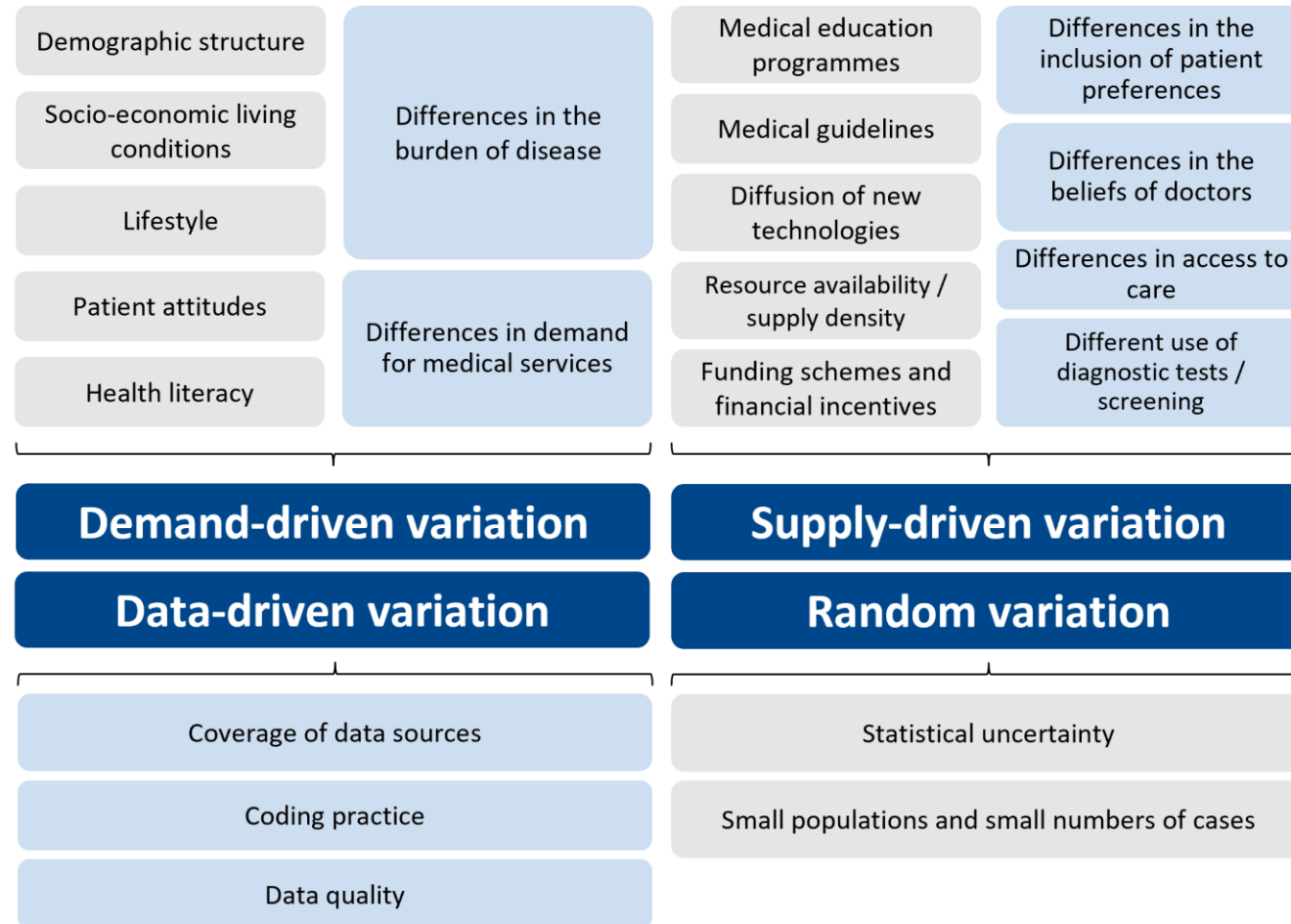
www.versorgungsatlas.ch

To the indicators →

Regional differences are well documented — but what causes them?

No simple answers to a complex question

The atlas website provides categories of possible causes (not linked to specific indicators)



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 Darstellung auf versorgungsatlas.ch
 Basierend auf Übersichtsarbeiten: [Birkmeyer et al. 2013](#) und [Appleby et al. 2011](#)

How well do we understand the complex interplay behind these differences?

Sources of interpretation:

1. Regression analyses (e.g. showing links of variation to deductibles, degree of urbanization)
2. Mixed-methods including literature review, interviews and discussion rounds:
Project “The Health Care Atlas shows differences — what now?”

Project “The Health Care Atlas shows differences — what now?”

Are the indicators interpretable?

Do they imply a need for action?

Methods:

- 12 indicators selected
- Literature review
- 44 interviews
- 6 discussion rounds with important stakeholders (public, physicians, researchers, authorities, insurers)



Key insights

Causes of differences can be identified — Many expert hypotheses, little scientific evidence

Example: Very limited knowledge about differences between German-speaking and French-speaking Switzerland

Regional variation has hardly been a topic

Examples:

- Strong engagement and openness to discuss, but hardly any topic among medical societies and cantons
- Little prior work combining research with real-world discussion

Majority conclusion: Need for action is high — differences are often too large

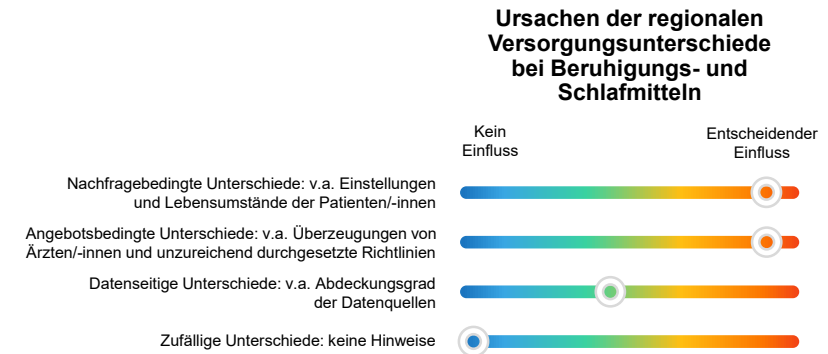
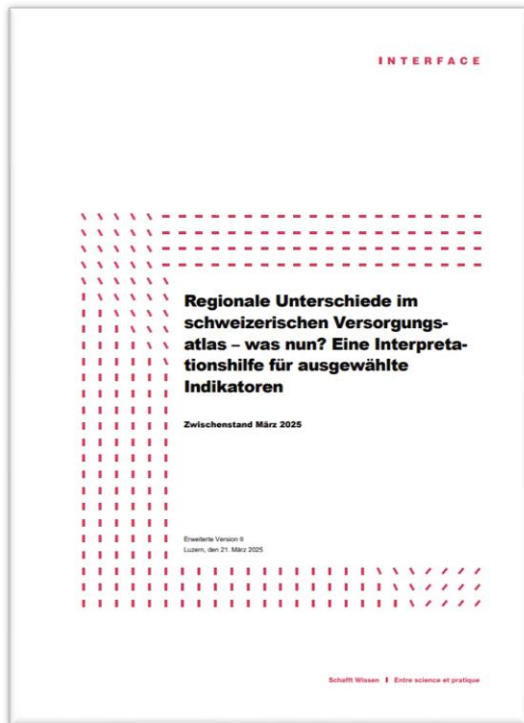
Debate about:

- How to define the degree of unwanted variation
- Risks and opportunities of variation
- What to do next

Output 1

Ongoing **interpretation guide** (living document)

and initial ideas for visualization of findings



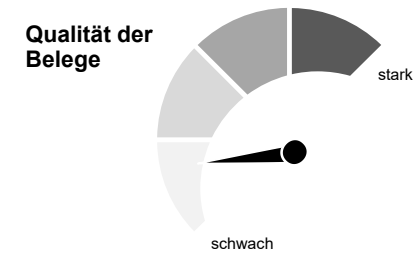
Einflussfaktoren	
Nachfragebedingte Variation Einstellungen und Lebensumstände der Patienten/-innen	Angebotsbedingte Variation Überzeugungen von Ärzten/-innen, unzureichend durchgesetzte Richtlinien
Datenseitige Variation Abdeckungsgrad der Datenquellen	Zufallsvariation Keine Hinweise

Skala von keinem (weiss) bis entscheidendem Einfluss (dunkelrot)



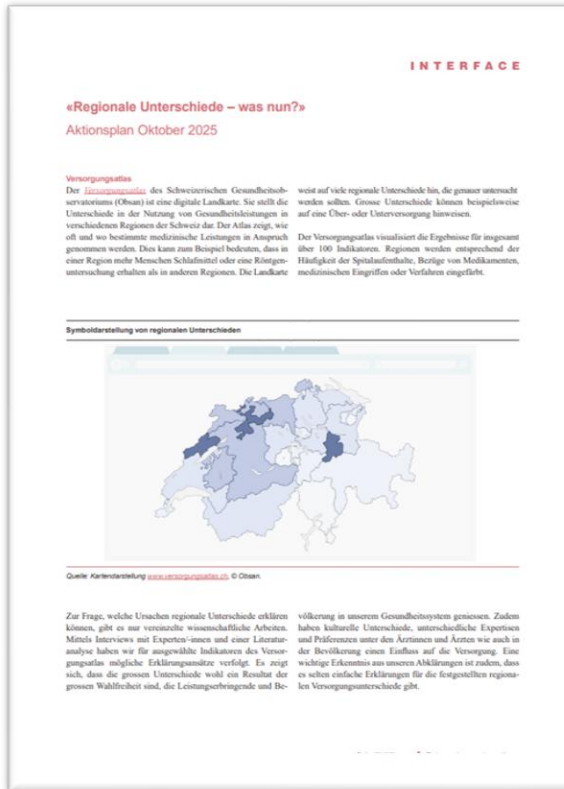
Evidenzlage

tief	mittel	hoch
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Output 2

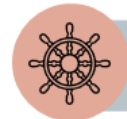
Action plan



Expand dialogue and participation



Increase transparency and data quality



Improve governance, quality assurance, and standards

Open questions for debate

What level of regional variation is acceptable to society?

Which differences reflect healthy diversity vs. problematic structures?

Are large differences inherent to the system — or evidence of missing shared goals?

Closing quote and further information

John Wennberg (1934-2024): «Much of the variation in use of healthcare is accounted for by the willingness and ability of doctors to offer treatment rather than differences in illness or patient preference. Identifying and reducing such variation should be a priority for providers.»

Wennberg J. (2011): Time to tackle unwarranted variations in practice. BMJ 342, 687-690.

<https://www.bmj.com/bmj/section-pdf/186247?path=/bmj/342/7799/Analysis.full.pdf>

Link to project website:

[https://www.interface-pol.ch/projekt/
der-schweizer-versorgungsatlas-zeigt-grosse-regionale-
unterschiede-was-nun](https://www.interface-pol.ch/projekt/der-schweizer-versorgungsatlas-zeigt-grosse-regionale-unterschiede-was-nun)

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