

Contextualizing cross-country differences in health systems: Gateway to Global Aging's upcoming policy collection effort

David Knapp (USC)

Science for Health Systems Conference

October 29, 2025

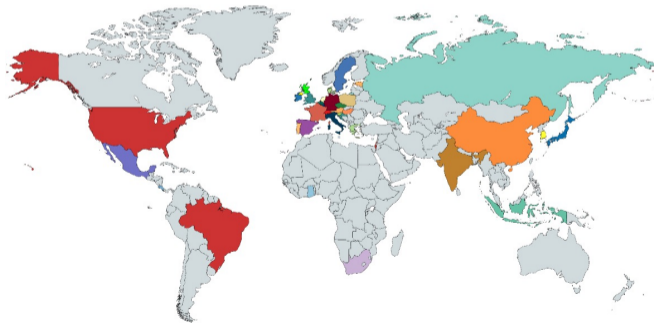
The Gateway is a free public resource designed to facilitate cross-national and longitudinal studies on aging using the HRS international network of studies (NIA Grant R01 AG030153)



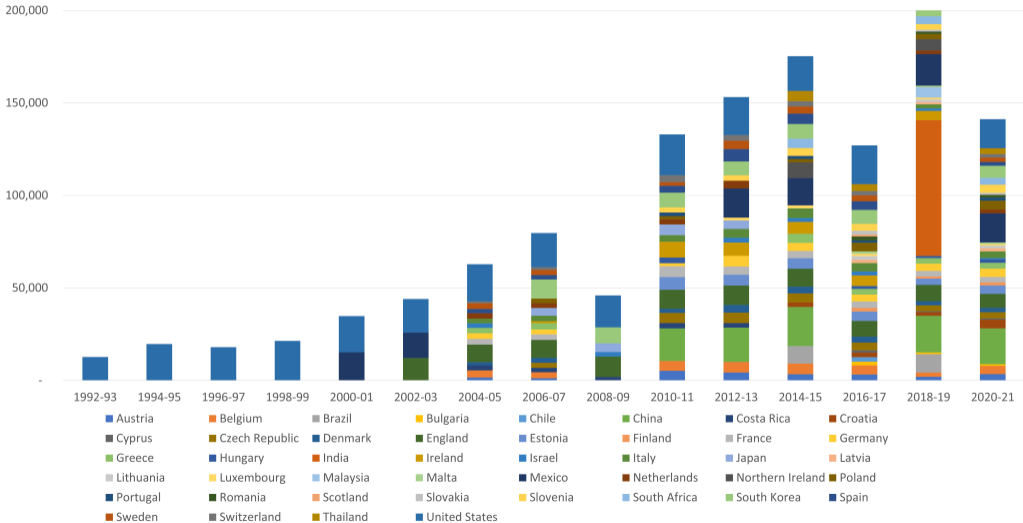
g2aging.org

Health and Retirement Study and its International Network of Studies (HRS-INS)

- | | | |
|--------------------|------------------|---------------------|
| 1. Austria | 21. Ireland | 41. Sweden |
| 2. Belgium | 22. Israel | 42. Switzerland |
| 3. Brazil | 23. Italy | 43. Thailand |
| 4. Bulgaria | 24. Japan | 44. UK (England) |
| 5. Chile | 25. Latvia | 45. UK (N. Ireland) |
| 6. China | 26. Lithuania | 46. UK (Scotland) |
| 7. Costa Rica | 27. Luxembourg | 47. United States |
| 8. Croatia | 28. Malta | |
| 9. Cyprus | 29. Mexico | |
| 10. Czech Republic | 30. Netherlands | |
| 11. Denmark | 31. Romania | |
| 12. Estonia | 32. Malaysia | |
| 13. Finland | 33. Poland | |
| 14. Hungary | 34. Portugal | |
| 15. France | 35. Slovakia | |
| 16. Germany | 36. Slovenia | |
| 17. Ghana | 37. South Korea | |
| 18. Greece | 38. Russia | |
| 19. India | 39. South Africa | |
| 20. Indonesia | 40. Spain | |



HRS-INS has grown to nearly 200,000 biannual respondents



HRS-INS: Core Content Areas

- Demographic
 - Age, gender, education, marital status, place of birth, rural/urban

HRS-INS: Core Content Areas

- Demographic
 - Age, gender, education, marital status, place of birth, rural/urban
- Health
 - Disease, cognition, physical functioning, health behaviors, depression, physical measures

HRS-INS: Core Content Areas

- Demographic
 - Age, gender, education, marital status, place of birth, rural/urban
- Health
 - Disease, cognition, physical functioning, health behaviors, depression, physical measures
- Healthcare Services
 - Insurance, utilization, expenditure, out-of-pocket spending

HRS-INS: Core Content Areas

- Demographic
 - Age, gender, education, marital status, place of birth, rural/urban
- Health
 - Disease, cognition, physical functioning, health behaviors, depression, physical measures
- Healthcare Services
 - Insurance, utilization, expenditure, out-of-pocket spending
- Work & Employment
 - Employment status/history, labor force, disability, retirement, pension

HRS-INS: Core Content Areas

- Demographic
 - Age, gender, education, marital status, place of birth, rural/urban
- Health
 - Disease, cognition, physical functioning, health behaviors, depression, physical measures
- Healthcare Services
 - Insurance, utilization, expenditure, out-of-pocket spending
- Work & Employment
 - Employment status/history, labor force, disability, retirement, pension
- Economic Status
 - Income and consumption: earnings, asset income, government transfers, food/non-food consumption
 - Wealth: financial assets, housing, non-financial assets

HRS-INS: Core Content Areas

- Demographic
 - Age, gender, education, marital status, place of birth, rural/urban
- Health
 - Disease, cognition, physical functioning, health behaviors, depression, physical measures
- Healthcare Services
 - Insurance, utilization, expenditure, out-of-pocket spending
- Work & Employment
 - Employment status/history, labor force, disability, retirement, pension
- Economic Status
 - Income and consumption: earnings, asset income, government transfers, food/non-food consumption
 - Wealth: financial assets, housing, non-financial assets
- Family Structure & Social Network
 - Parents' demographics, household structure, family transfers, caregiving, social participation



GATEWAY TO GLOBAL AGING DATA

A platform for population survey data on aging around the world

ALL GATEWAY SITES

[Main Gateway](#)[🔗 COVID](#)[🔗 Exposome](#)[🔗 End of Life](#)[🔗 HCAP
\(coming soon\)](#)[🔗 Life History
\(coming soon\)](#)[🔗 Data Enclave](#)

HEALTH & RETIREMENT STUDIES

are population representative, longitudinal, and multidisciplinary surveys of older adults with internationally coordinated survey instruments

What's available on the Gateway

- Overview of HRS family studies
 - Study overviews
 - Survey questionnaires
 - Search by keyword or by topic
 - Concordance tables
 - In-depth documentation of cross-study comparability
- Harmonized data
- Survey statistics & contextual data shown in interactive graphs and tables
- Policy Explorer
- Library of publications based on HRS family surveys
- Additional documentation and presentations

Gateway is collecting information on the evolution of policies

- The HRS is 33 years old
- Many other studies in the international network of health and retirement studies (HRS-INS) are 20+ years
- Policies have changed, in some cases substantially, over this period
 - This can be a barrier to cross-national research
- We support the broader Gateway effort by helping reduce these barriers for researchers





Gateway Policy Explorer

- The Policy Explorer currently captures historical policy across countries.
 - Retirement Policies
 - LTC Policies
 - Education Policies
- The key dimensions of the Policy Explorer are **policy**, **country**, and **time**.
- The Policy Explorer allows comparisons of multiple countries in a single year or one country across many years.
- Harmonized variables are being developed based on these policies

RETIREMENT POLICIES

The Retirement Policy Explorer captures historical retirement policies across countries. The key dimensions of the Explorer are policy, country and time. Select a policy and countries and then click View to see policy details. You can compare multiple countries during a single year or view one country's policy changes across many years. Watch our example video demonstrating the key features of the Policy Explorer [here](#) (3:00).

POLICY COUNTRY

Countries		Own Old-Age Benefits	Spousal Old-Age Benefits	Survivor Old-Age Benefits	Old-Age Social Assistance	Old-Age Health Insurance
 Austria	First law	1909	2005	1909	1955	1955
	Major changes since '92	1996, 1999, 2003, 2005	2016	2000	2010, 2019	
	Documentation	PDF	PDF	PDF	PDF	PDF
 Belgium	First law	1900	1900	1900	1969	1894
	Major changes since '92	1996, 2006, 2012, 2015		2014	2001, 2017	1994
	Documentation	PDF	PDF	PDF	PDF	PDF
 China	First law	1951		1951	1993	1951
	Major changes since '92	2010, 2014		2010, 2021	2010	2010, 2016
	Documentation	PDF		PDF	PDF	PDF
 Czech Republic	First law	1906		1906	1991	1991
	Major changes since '92	1997, 1999, 2001, 2002, 2010, 2014			2006	2007
	Documentation	PDF		PDF	PDF	PDF

Compare health insurance policies across countries using policy explorer

COMPARE

[Back to Retirement Policies Home](#)

POLICY

Old-Age Health Insurance

COUNTRY

4 selected

POLICY COMPONENT

Costs

YEAR

2022 | 1992 ————— 2023

- China
- France
- Ireland
- United States

PDF Source

Overview Rule Description: What costs are beneficiaries responsible for? ✕

Component	China [2016-2023]	France [2000-2022]	Ireland [2009-2023]	United States [1992-2022]
Out-of-pocket costs	<p>Out-of-pocket costs have four major components (State Council, 2010, Chapter 3, Statement 28; State Council, 2012):</p> <ul style="list-style-type: none"> Deductibles: 10% of local average wage according to the State Council guidelines. Local governments set their own amounts based on actual situations. <ul style="list-style-type: none"> Inpatient care: The deductibles apply to every stay. 	<p><u>Statutory health insurance (SHI)</u></p> <p>SHI reaches an agreement with contracted doctors and sets a negotiated standard rate for each medical service. Doctors in Sector 1 follow the agreement and charge the negotiated rates, while doctors in Sectors 2, and 3 may charge extra. Prices of medical services provided by health professionals are available through the health directory. SHI reimburses a certain percentage of the medical expenses, depending on the type of service, up to the amount</p>	<p><u>Medical Card</u></p> <p>Individuals that have a Medical Card may incur in out-of-pocket costs if they receive services from a GP that are not part of the scheme from the Health Service Executive (HSE), and pay a fraction of the cost of the prescribed drugs and medicines. In 2023, Medical Card holders must pay 1.50€ per item, up to a maximum of 15€ per month. Individuals age 70 and over are charged 1€ per item, up to a maximum of 10€ per month. The maximum amounts apply per person</p>	<p><u>Medicare: Part A</u></p> <p>Part A beneficiary costs differ by type of care received. There are four major types of care covered by Medicare Part A:</p> <ol style="list-style-type: none"> Hospital inpatient care <p>Part A beneficiary costs differ depending on the number of days spent in a hospital or skilled nursing facility during a "benefit period." A benefit period begins the day a beneficiary is admitted to a hospital or skilled nursing facility. The benefit period ends</p>

Health systems policy series objectives

- Identify key dimensions of health systems that alter **individual choices**.
 - Policy changes over time within countries
 - Policy differences across countries
- Collect and document health system policy
- Create policy measures linked to HRS-INS data



Before you see the GP, work out what you are worried about. Highlight your concerns. Think about how you would describe your symptoms. Get to the point don't keep important information to the end.



A SERIOUS ILLNESS MIGHT GET MISSED



**ONE APPOINTMENT
ONE PROBLEM
ONE PATIENT**

IT IS TEMPTING TO BRING A LIST OF UNRELATED PROBLEMS, BUT CONSIDER WHATS ACHIEVABLE IN 10 MINUTES!



TOO MANY PROBLEMS DISTRACTS THE DOCTOR ON DEALING WITH YOUR MAIN PROBLEM



DOCTOR MAY BE MORE LIKELY TO RUSH

Example from the UK (Riverside Medical Center), courtesy Irene Papinicolas

Documenting how health systems deliver care across settings

The Gateway plans to document how health systems organize and deliver care across routine and non-routine settings, and how system features shape **access** to medical care, including **diagnosis and treatment** of diseases and other health conditions over the life course.

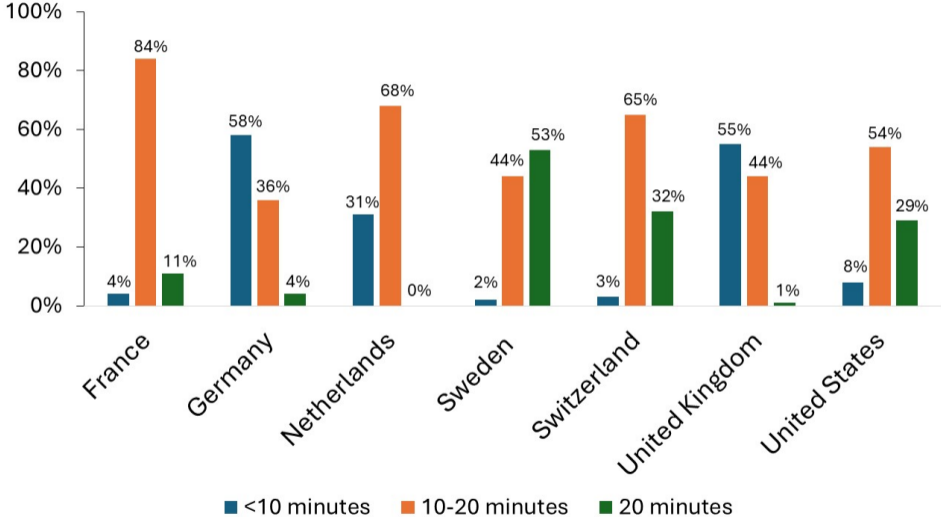
- Information on existing public health insurance policies
 - Population coverage
 - Who is covered under the health insurance scheme?
 - Benefits package
 - What types of services are covered?
 - User charges
 - What share of the costs is covered by the scheme versus users?
 - Are there exemptions?

Documenting how health systems deliver care across routine settings

- **Routine interactions**
 - **Primary care / wellness visits**
 - Frequency, provider type, visit duration, and screening schedule
 - **Tests and screenings (e.g., EKG, mammogram)**
 - Conducted routinely or in response to symptoms
 - Offered during wellness visits or as standalone procedures, with or without copayments
 - **Vaccinations**
 - Eligibility criteria, age group (adult vs. pediatric), and delivery site

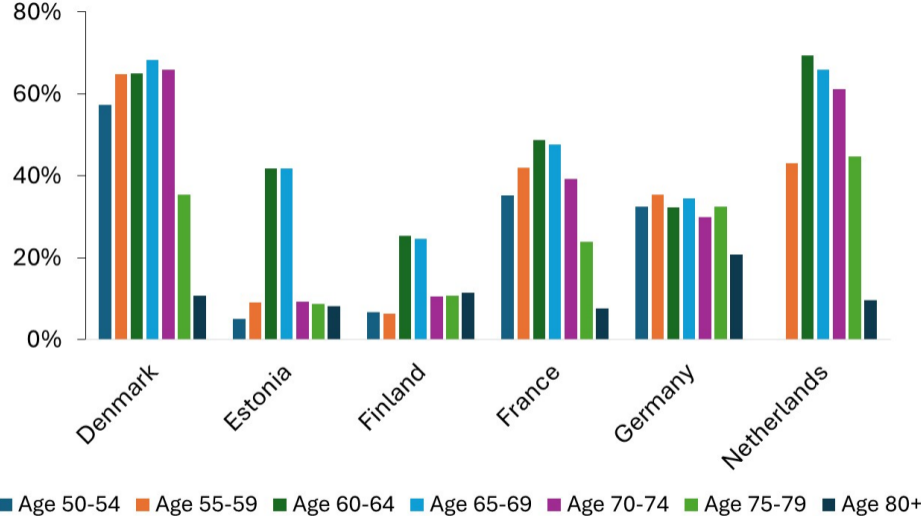
Cross-country differences in primary care visit duration

▶ US over time



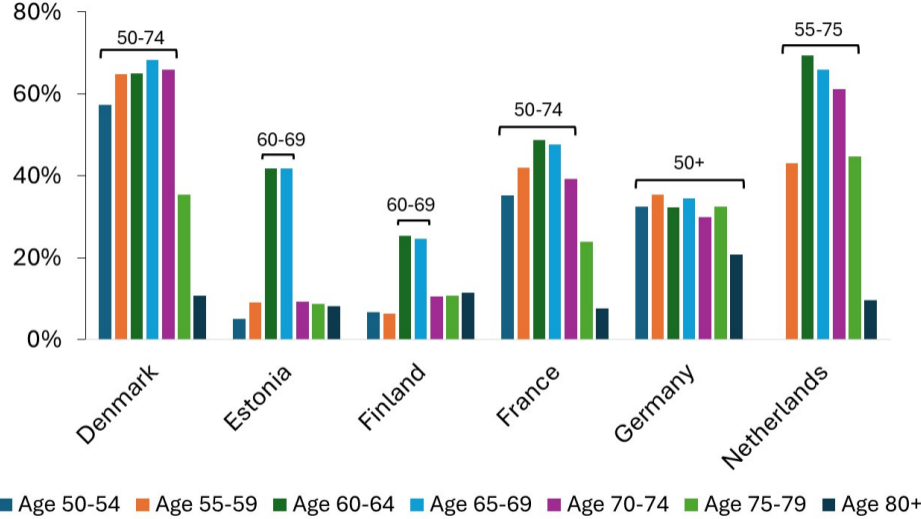
Source: Commonwealth Fund (2022)

Cross-country differences in colon cancer screening (1/2)



Note: Percent who received a colon cancer screening in last two years (SHARE w9, weighted)

Cross-country differences in colon cancer screening (2/2)



Documenting how health systems deliver care across non-routine settings

- **Non-routine interactions**
 - **Diagnosis**
 - Clinical guidelines, severity or levels
 - **Treatment**
 - Specialist involvement, referral requirements, wait times
 - **Method**
 - Surgery, therapy, medication, or other interventions (e.g., lifestyle changes)

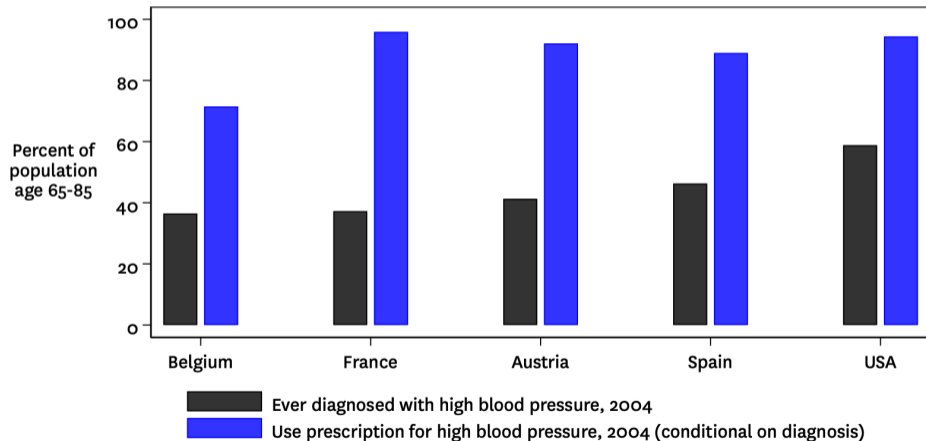
Documenting how health systems deliver care across non-routine settings

- **Non-routine interactions**
 - **Diagnosis**
 - Clinical guidelines, severity or levels
 - **Treatment**
 - Specialist involvement, referral requirements, wait times
 - **Method**
 - Surgery, therapy, medication, or other interventions (e.g., lifestyle changes)

- **Conditions to potentially collect information on and their prevalence**
 - **Rates for USA, England, France (2014, ages 55-74)**
 - Hypertension: 54%, 40%, 40% (different cutoffs: 130/80 mmHg, USA; 140/80 mmHg, Europe)
 - Arthritis: 53%, 36%, 48%
 - Diabetes: 22%, 12%, 14%
 - Cardiovascular conditions: 19%, 17%, 15%
 - Lung disease: 9%, 6%, 10%
 - Stroke: 6%, 3%, 5%

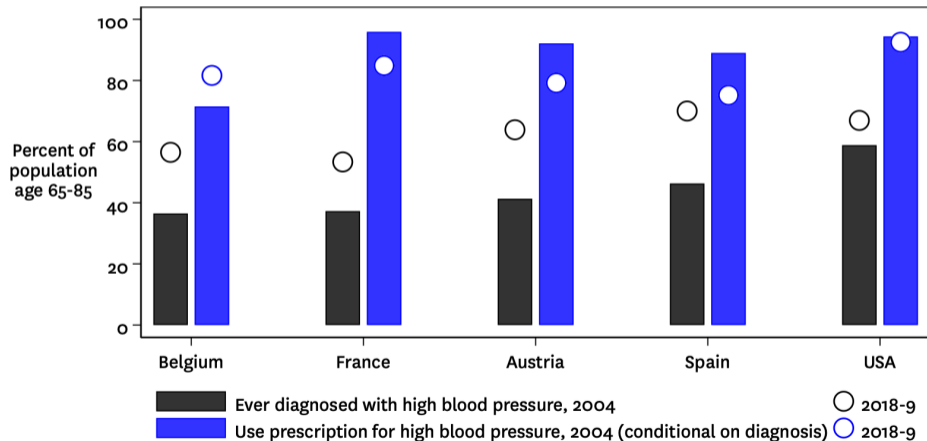
Cross-country differences in hypertension prevalence and drug use (1/2)

Using the HRS (USA) and Survey of Health, Ageing, and Retirement in Europe, we find differences in doctor-diagnosed high blood pressure and related drug use (2004).



Cross-country differences in hypertension prevalence and drug use (2/2)

From 2004 to 2018-19, we observe a general increase in diagnosed hypertension, but differences across countries in the share using drugs to address it.



Challenges, opportunities, and next steps

- National laws and policies alongside clinical guidelines
- Is consistent collection of historical guidelines possible?
- Compliance with clinical policy guidelines
 - Differ across countries
 - Differ across time

Challenges, opportunities, and next steps

- National laws and policies alongside clinical guidelines
- Is consistent collection of historical guidelines possible?
- Compliance with clinical policy guidelines
 - Differ across countries
 - Differ across time
- The Gateway is preparing its renewal application for Phase 5 (2027-32).
- As part of our policy initiative, we anticipate adding a policy series on cross-country differences in health systems from 1992-present.
- We welcome suggestions on policies to collect or measures to create for this new series.

Thank you!

Questions & comments are welcome

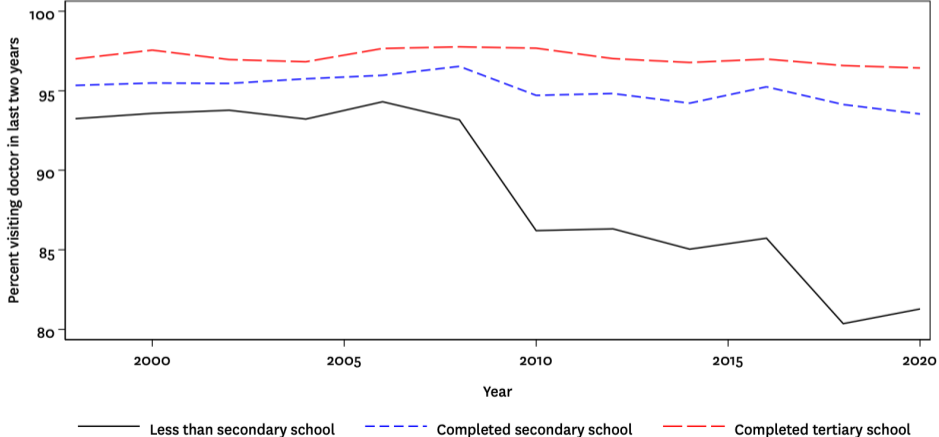
David Knapp
dmknapp@usc.edu



g2aging.org

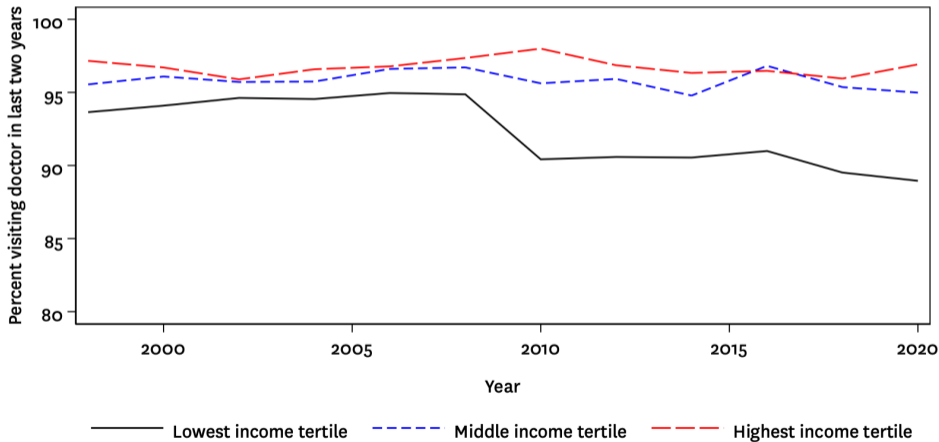
Suggestive evidence of behavioral changes to health system use over time

Using the HRS (USA), we find any doctor visits in the last two years decreased for those with less than a high school diploma — a trend not observed in other countries



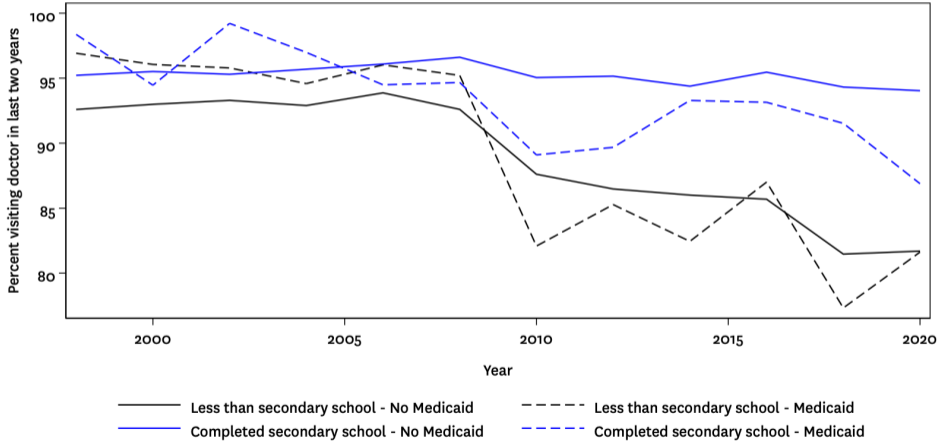
Suggestive evidence of behavioral changes to health system use over time

Using the HRS (USA), we find any doctor visits in the last two years (self-reported) decreased for those with low incomes (conditional on having Medicare coverage).



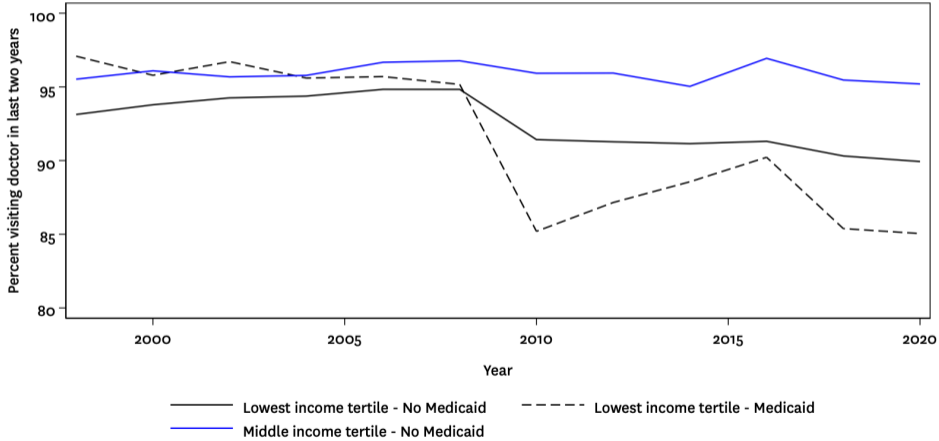
Suggestive evidence of behavioral changes to health system use over time

Medicaid v. non-Medicaid respondents by education group



Suggestive evidence of behavioral changes to health system use over time

Medicaid v. non-Medicaid respondents by income group



Colorectal cancer screening practices

Table 4.5.3 Colorectal cancer screening practices in countries in the European Union, and in European Council countries outside of the European Union

Country	Starting age (years)	Stopping age (years)	Interval (years)	Attendance (%)	Primary test
<i>European Union countries</i>					
Austria ^a	40	80	1	61	gFOBT
	> 50		10	2	TC
Burgenland	40	80	1	ND	FIT
	> 50		10	ND	TC
Belgium	50	74	2	28	FIT or gFOBT
Wallonia–Brussels	50	74	10	6–7	TC
	56	74	2	ND	FIT
	56	74	10	47–49	TC
Flemish Region				ND	
Bulgaria	40	60	1	ND	FOBT
Croatia	50	74	2	15	gFOBT
Cyprus	50	69	2	ND	FIT
Czechia	50	54	1	21–26	FIT
	≥ 55		2	(total FIT)	FIT
	≥ 55		10	1–2	TC
Denmark	50	74	2	ND	FIT
Estonia ^b	60	69	2	ND	FIT
Finland	60	69	2	14–17	gFOBT
France	50	74	2	25–28	gFOBT
Calvados				22–27	FIT
Germany	50	54	1	19	gFOBT/FIT
	≥ 55		2	ND	gFOBT/FIT
	≥ 55		10	3–4	TC
Greece	50	70	2	8	FOBT/gFOBT
	50	70	5	ND	TC
Hungary	50	70	2	1	FIT
Ireland	60 ^c	69 ^c	2	12	FIT
Italy	50	69	2	29 ^d	FIT
Piedmont	58	60	Once in a lifetime	ND	FS ^e
	59	69	2	ND	FIT
Latvia	50	74	1	11	gFOBT
Lithuania	50	74	2	47–58	FIT
Luxembourg	55	74	2	ND	FIT/TC
Malta	55	66	2	45	FIT
Netherlands	55	75	2	27–28	FIT
Poland	55	64	≥ 10	2	TC
Portugal	50	70	2	1	FIT/gFOBT
Romania	–	–	–	ND	–
Slovakia	> 50	–	–	ND	TC
Slovenia	50	74	2	43–52	FIT
Spain	50	69	2	8–9	FIT
Sweden	60	69	2	11–13	gFOBT
United Kingdom	60	74	2	56 ^f	gFOBT
England	60	74	2	50–60	gFOBT
				ND	FS
Scotland	50	74	2	61–65	gFOBT
<i>Non-European Union countries</i>					
Bosnia and Herzegovina	> 50	–	–	ND	FOBT
Georgia	50	69	2	53	gFOBT
Iceland	55	75	2	84	FOBT
	50	59	–	ND	TC
Monaco	50	80	2	60	FIT
Montenegro	50	74	–	33	FIT
Norway	55	64	2	ND	FIT
				65	FOBT + FS
Russian Federation	48	75	–	ND	FIT
Saint Petersburg				ND	FOBT + DRE
Kazan/Tatarstan					
San Marino	50	79	2	65	FIT
Serbia	50	74	2	58	FIT
Switzerland	50	80	2/10	22	FOBT or TC
	50	80	–	ND	FOBT and/or TC
	50	69	–	ND	TC
					FIT or TC
Turkey	50	69	–	30	FOBT
Ukraine	–	–	–	ND	ND

Source: de Koning HJ, Basu P, Segnan N. Variations in implementation of cancer screening in European countries: Striving for best practice. In: Wild CP, Weiderpass E, Stewart BW, editors. World Cancer Report: Cancer research for cancer prevention. Lyon (FR): International Agency for Research on Cancer; 2020. 4.5.

Table notes: DRE, digital rectal examination; FIT, faecal immunochemical test; FOBT, faecal occult blood test; FS, sigmoidoscopy; gFOBT, guaiac faecal occult blood test; ND, no data available; TC, colonoscopy.

^a In Austria, a population-based screening programme has been implemented only in the state of Burgenland. In the rest of the country, screening is opportunistic.

^b In Estonia, the population-based pilot programme started in 2016 among a cohort aged 60 years, with an intended target group of age 60–69 years.

^c Ireland is planning to extend the target age range to 55–74 years.

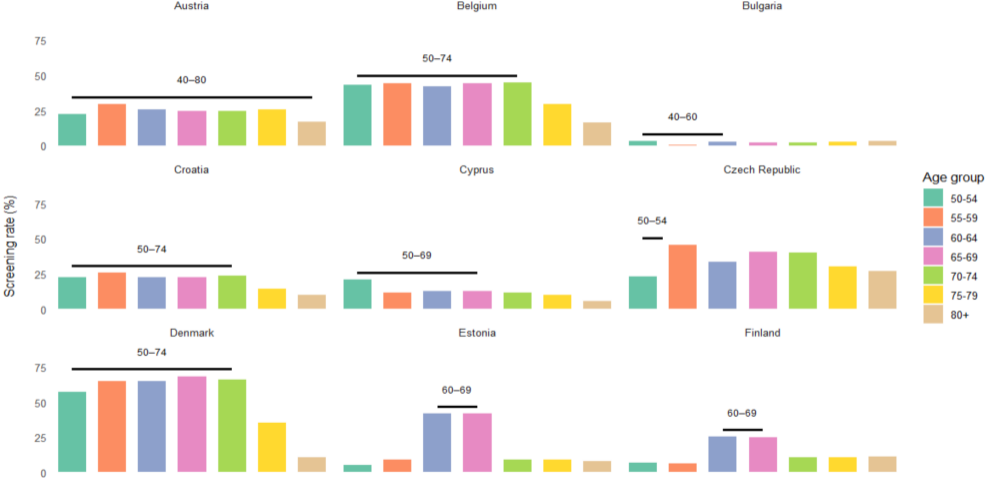
^d In Italy, large regional differences can be seen in attendance: North, 48–52%; Centre, 21–24%; South, 8%; Piedmont (FS + FIT), 17–20%.

^e In Piedmont, Italy, FIT is offered to individuals aged 59–69 years if they are unwilling to undergo FS. For both FIT and FS together, the attendance is 17–20%.

^f In the United Kingdom, regional differences can be seen in gFOBT attendance: England, 50–60%; Northern Ireland, 54%; Scotland, 61–65%; Wales, 52–56%.

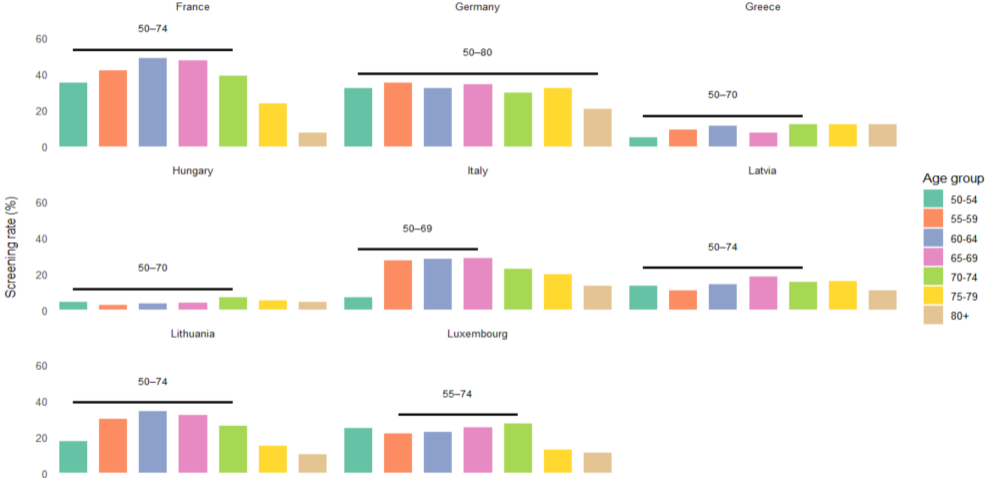
4.5.3 Harry J. de Koning. Compiled from EU-topia (2018). EU-topia: towards improved cancer screening in all of Europe. Available from: www.eu-topia.org; Ponti A, Anttila A, Ronco G, Senore C, Basu P, Segnan N, et al. (2017). Against Cancer. Cancer screening in the European Union. Report on the implementation of the Council Recommendation on cancer screening. Brussels, Belgium: European Commission. Available from: https://ec.europa.eu/health/sites/health/files/major_chronic_disease_s/docs/2017_cancerscreening_2ndreportimplementation_en.pdf.

Received colon cancer screening in the last two years (1/3)



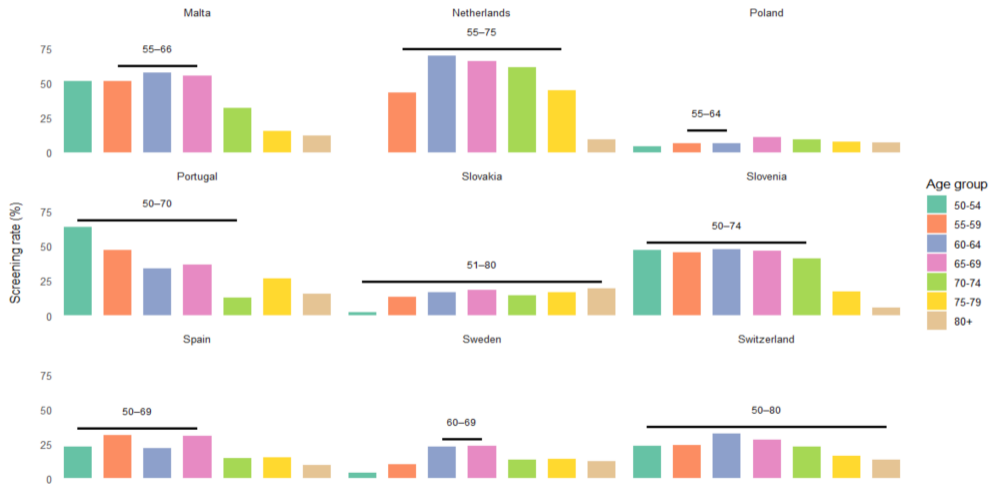
Notes: SHARE w9, weighted

Received colon cancer screening in the last two years (2/3)



Notes: SHARE w9, weighted

Received colon cancer screening in the last two years (3/3)



Notes: SHARE w9, weighted