

#Pop Health Lab

Cancer screening outside of evidence-based age recommendations among older adults in Switzerland: *a population-based study*

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Cancer screening: definition and aims

“Cancer screening is looking for cancer before a person has any symptoms”

(National Cancer Institute, 2023)

“The idea behind the effect of screening is that early detection of disease (in an asymptomatic or precursor stage) improves prognosis.”

(Bretthauer and Kalager, Br J Surg 2012)

Cancer screening: definition and aims

“Cancer screening is looking for cancer before a person has any

Cancer screening aims to reduce cancer mortality and/or incidence

(Bretthauer and Kalager, Br J Surg 2012)

Harms of cancer screening



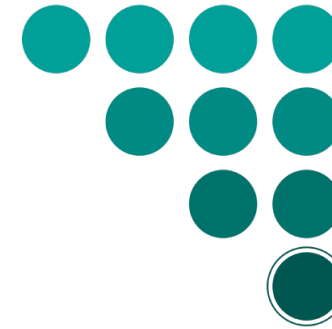
Fundamental principle of cancer screening



Evidence-based recommendations



**Canadian Task Force
on Preventive Health Care**



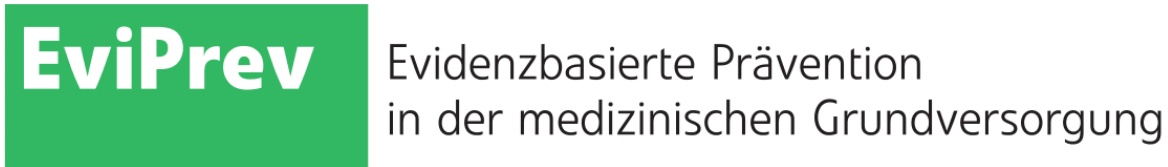
UK
National
Screening
Committee



EviPrev

Evidenzbasierte Prävention
in der medizinischen Grundversorgung

Evidence-based recommendations (Switzerland)



USPSTF Recommendations

Recommended:

A

B

Individualized
decision-making:

C

Discouraged:

D

Uncertainty:

I

Aim of Study

Describe the frequency of colorectal, breast, cervical, and prostate cancer screening outside of recommended age guidelines in Switzerland.

Recommended:

A

B

Individualized
decision-making:

C

USPSTF Recommendations (prior to 2022)

Screening type	Age (years)						
	20	30	40	50	60	70	80
Colorectal				45-49	50-75		76-85
Breast				40-49	50-74		75+
Cervical		21-65				66+	
Prostate					55-69	70+	

Recommendation grades:

A	B	C
D	I	

Methods (data source and population)

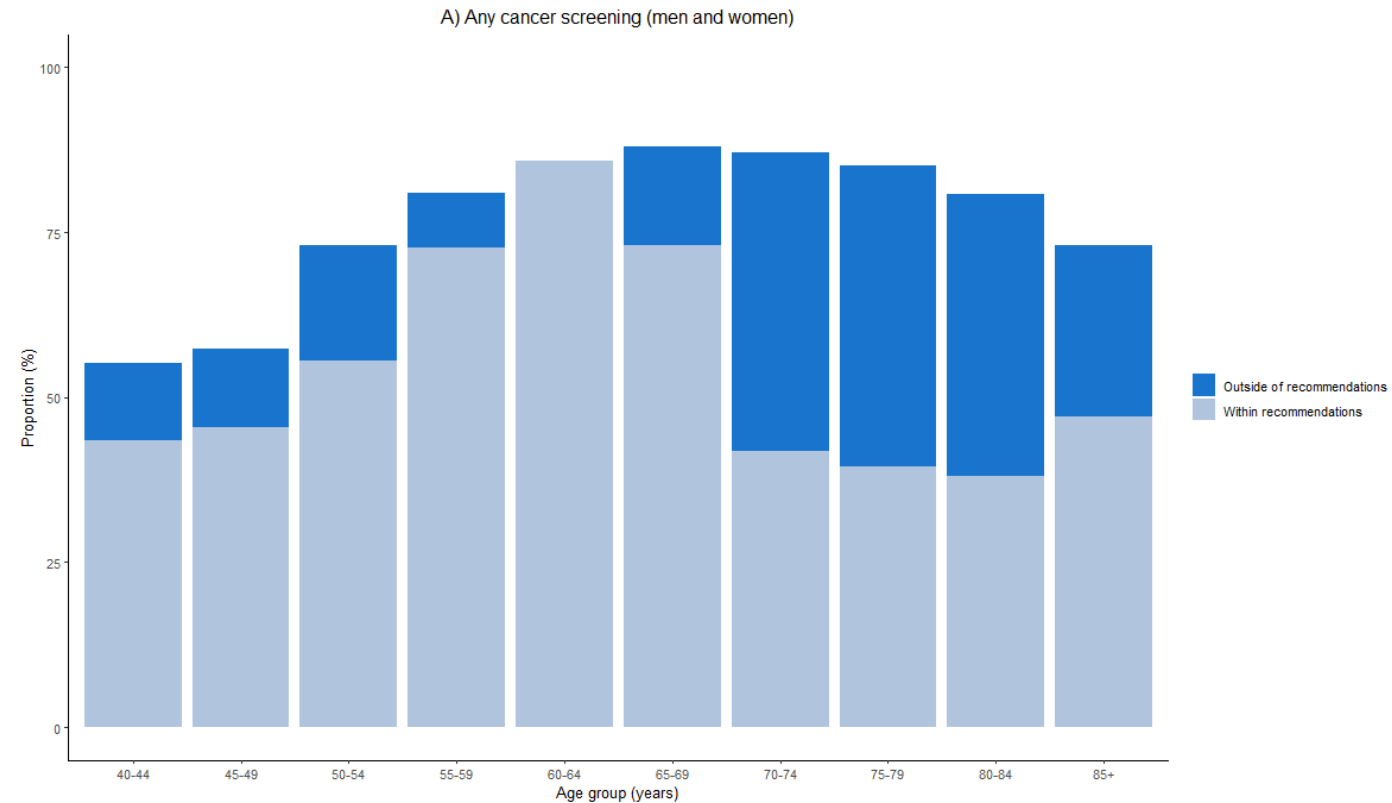
Data

- 2022 Swiss Health Survey (20,515 included participants)

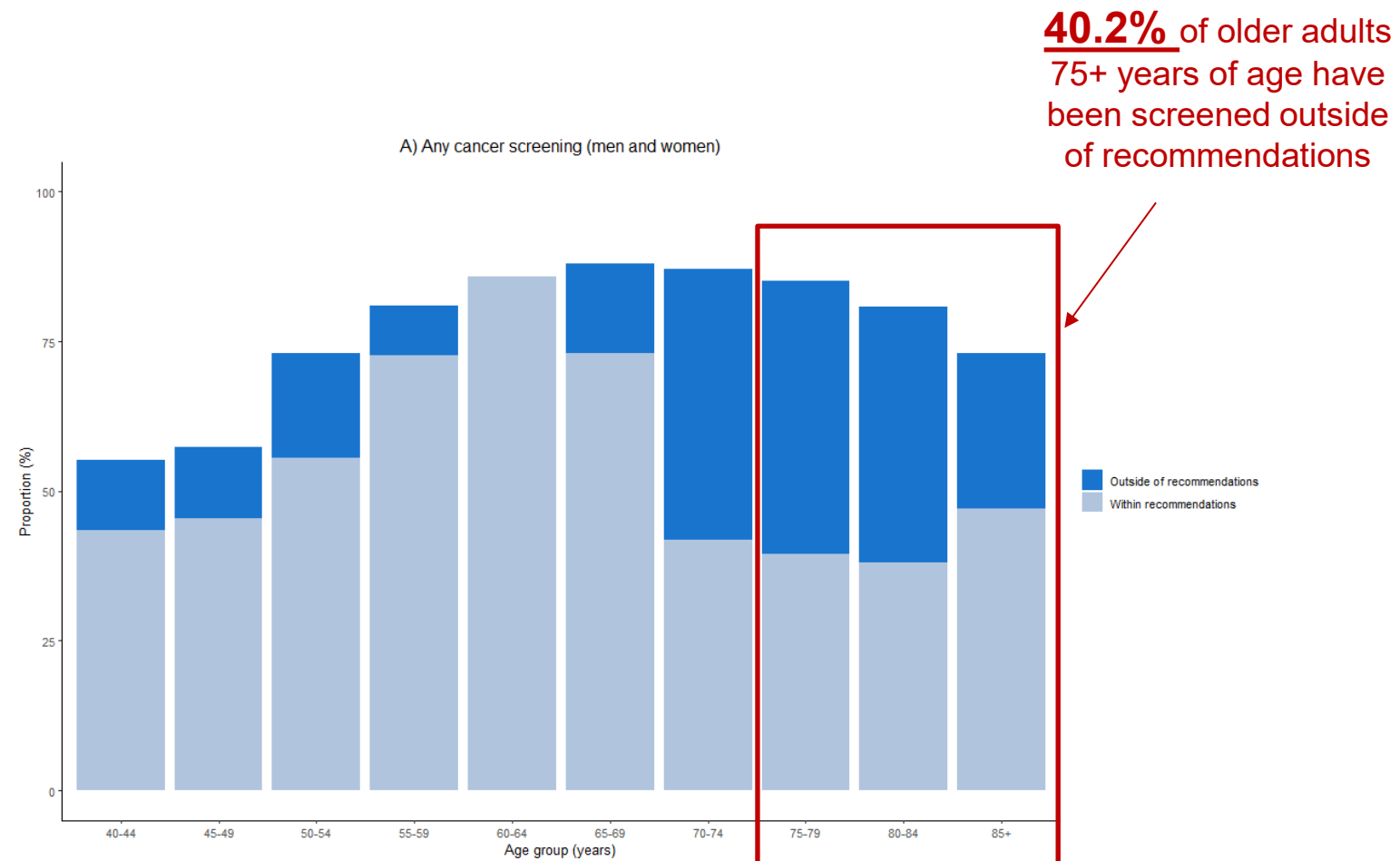
Variables of interest

- Age
- Self-reported use, reason, and timing of different cancer screening types:
 - Colorectal: Faecal occult blood test (FOBT) and colonoscopy
 - Breast: Mammography
 - Cervical: Uterine smear
 - Prostate: Prostate specific antigen (PSA) test or rectal exam

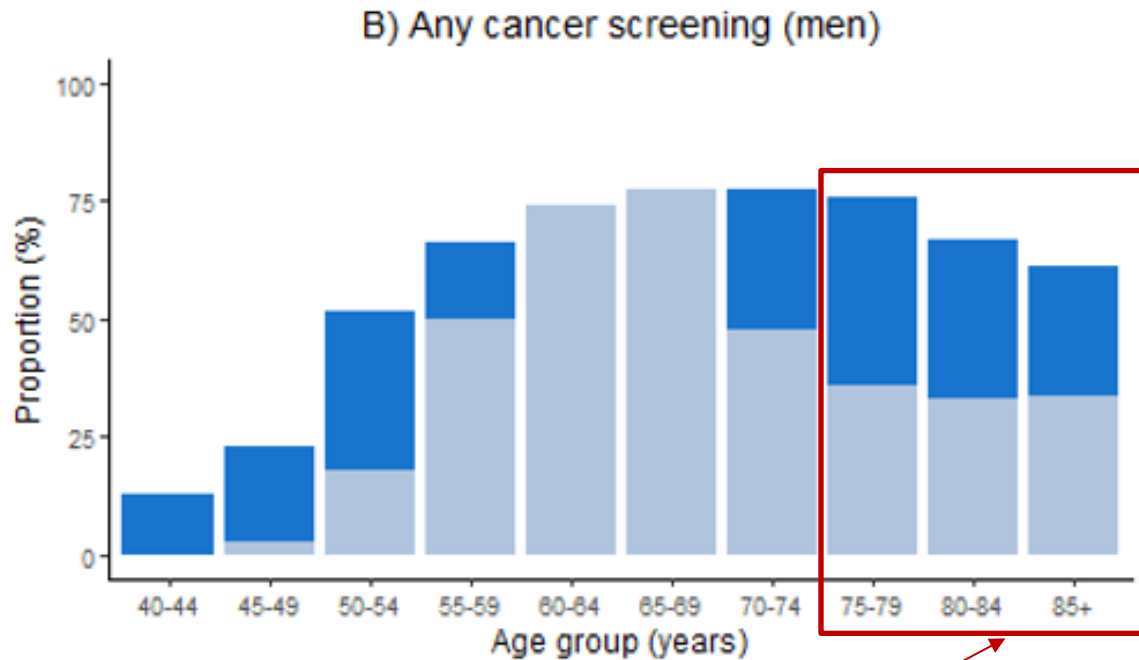
Results (A, B, and C recommendations)



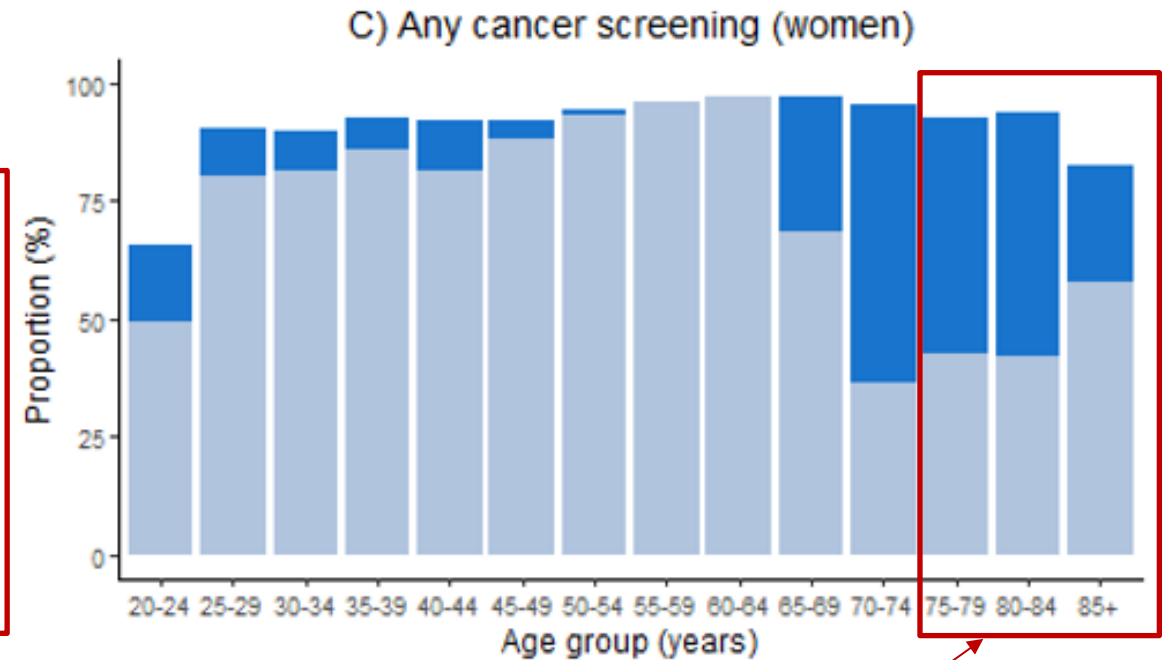
Results (A, B, and C recommendations)



Results (A, B, and C recommendations)



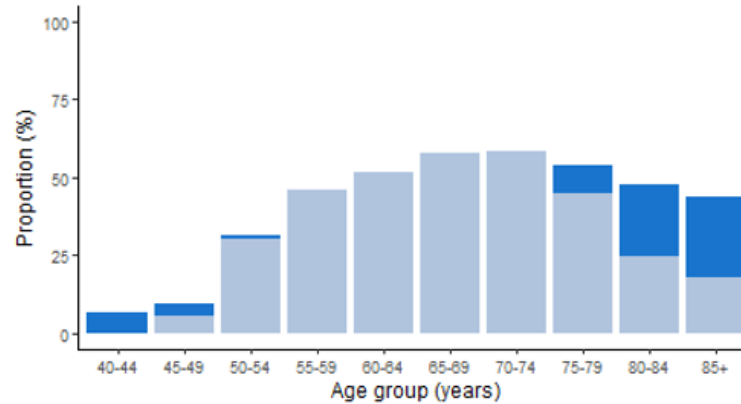
35.1% of older men 75+ years of age have been screened outside of recommendations



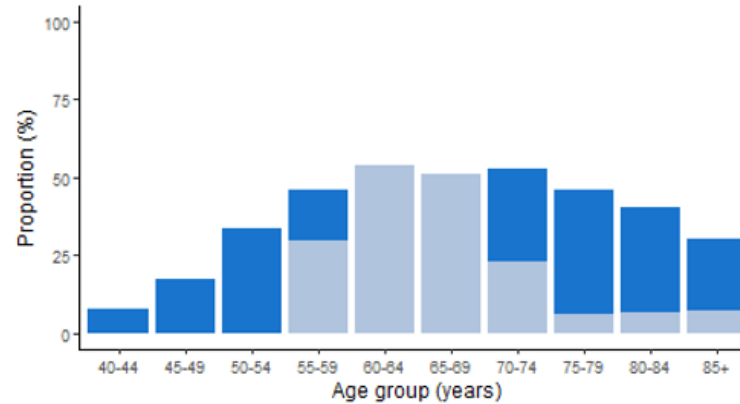
44.5% of older women 75+ years of age have been screened outside of recommendations

Results (A, B, and C recommendations)

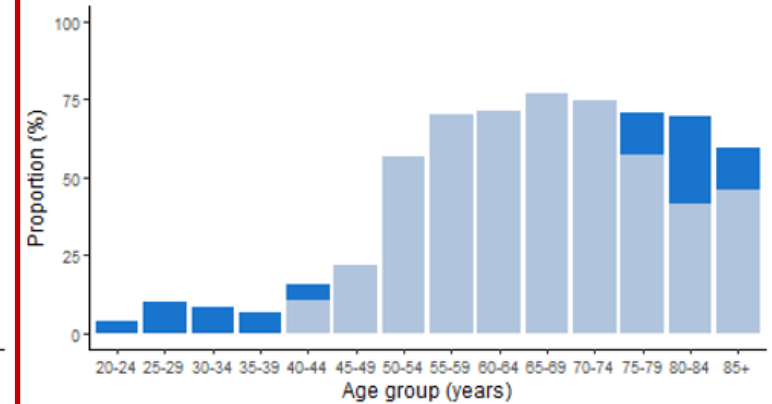
D) Any colorectal cancer screening (men & women)



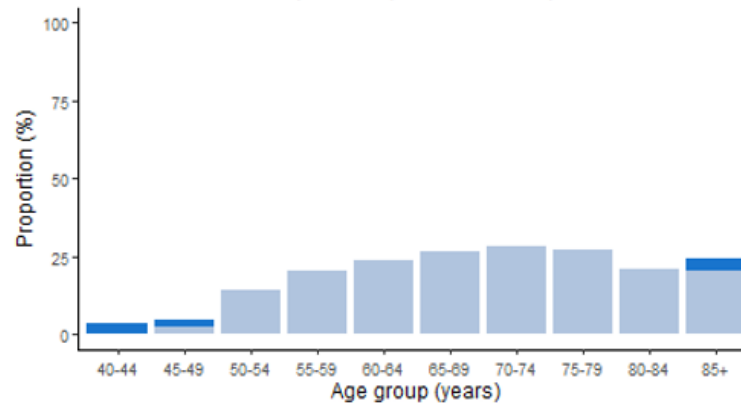
E) Prostate cancer screening (men)



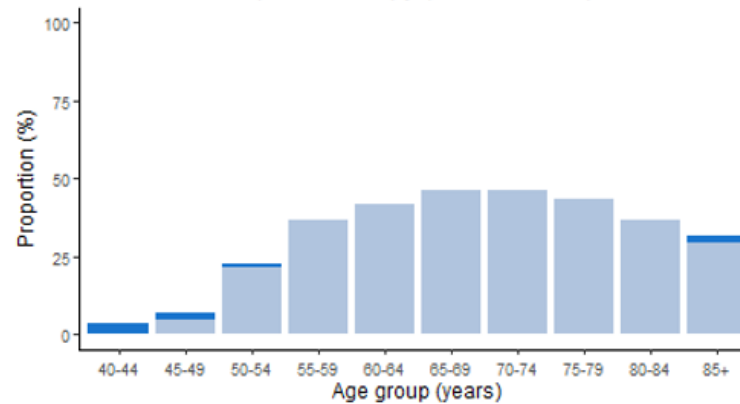
F) Breast cancer screening (women)



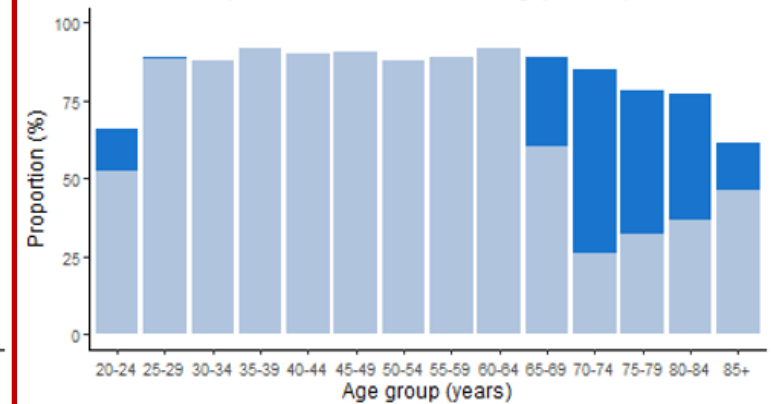
G) FOBT (men & women)



H) Colonoscopy (men & women)



I) Cervical cancer screening (women)



Outside of recommendations Within recommendations

Limitations

Results may not be nationally representative

- 36.2% participation rate in 2022 Swiss Health Survey
- Healthy volunteer bias
- Limitations of survey weights

Cancer screening data is self-reported

- Prone to inaccuracies
- Could have led to misclassification
- Research suggests likely overestimates of screening use

Additional data limitations

- Cannot know screening history of people whose last test were diagnostic tests
- Cannot know screening age of people who screening 5+ years ago (10+ for colonoscopy)

Key conclusions of findings

Cancer screening outside of evidence-based age recommendations is very common in Switzerland

- Particularly true among older adults 75+ y/o.
- Similar to findings observed in the United States.
- Indicates that cancer screening practices in Switzerland are often not evidence-based and, therefore, can be considered low-value.

Thank you for your interest

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