Interventions to overcome barriers in the cancer screening pathway
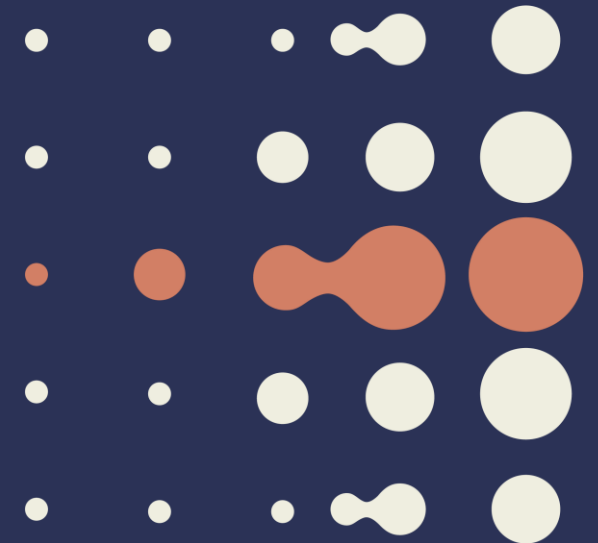
Development of a tool and its application to 23 countries in Latin America and the Caribbean (CanScreen5/CELAC project)

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International Agency for Research on Cancer
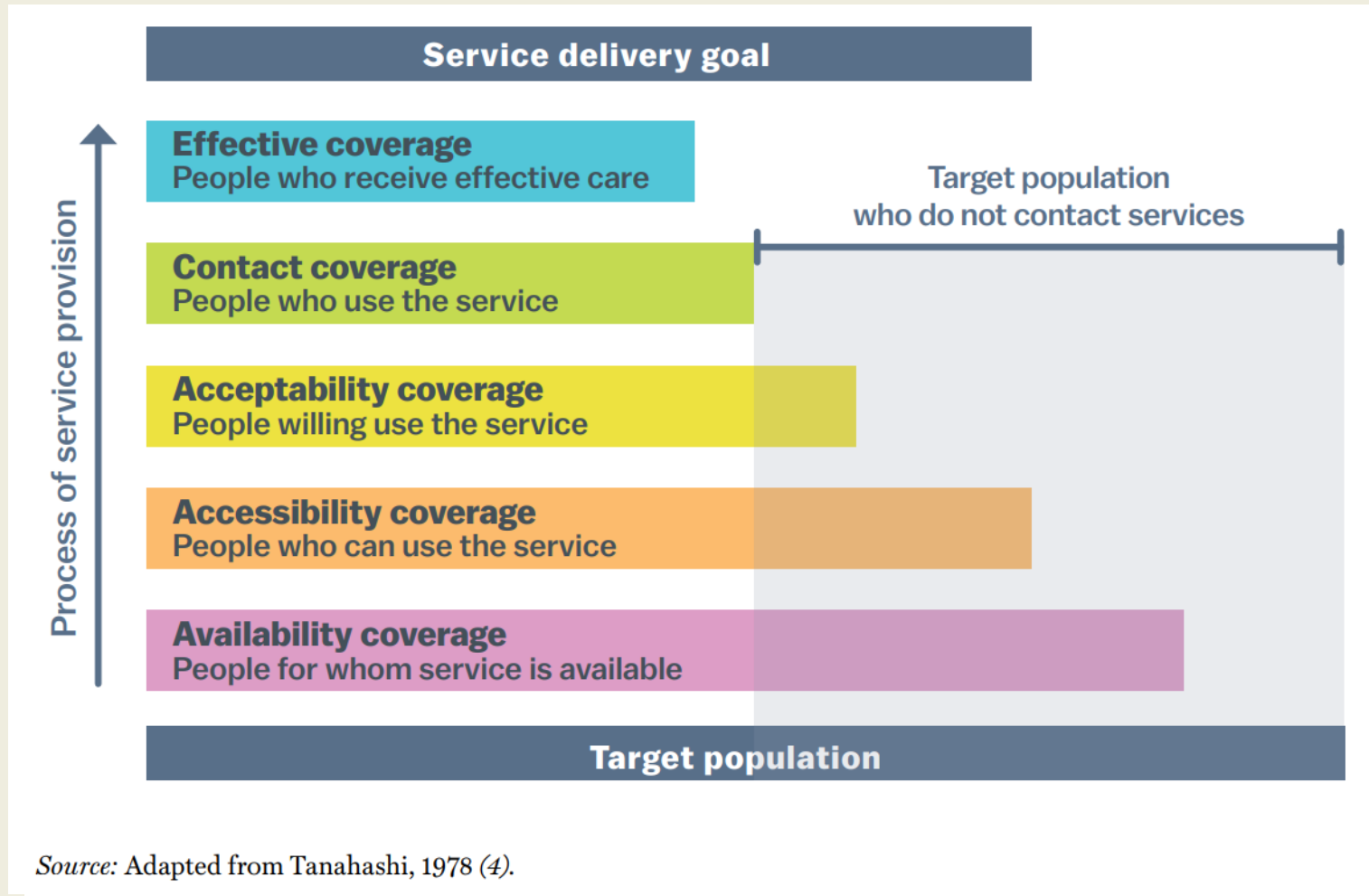
World Health Organization

Objectives

Develop a tool to:

➤ Identify the main **barriers** to the cancer screening pathway

➤ **Match** each barrier with (evidence-based) interventions to overcome them

➤ **Pilot application** to the 23 Latin American and Caribbean countries

Tanahashi conceptual framework
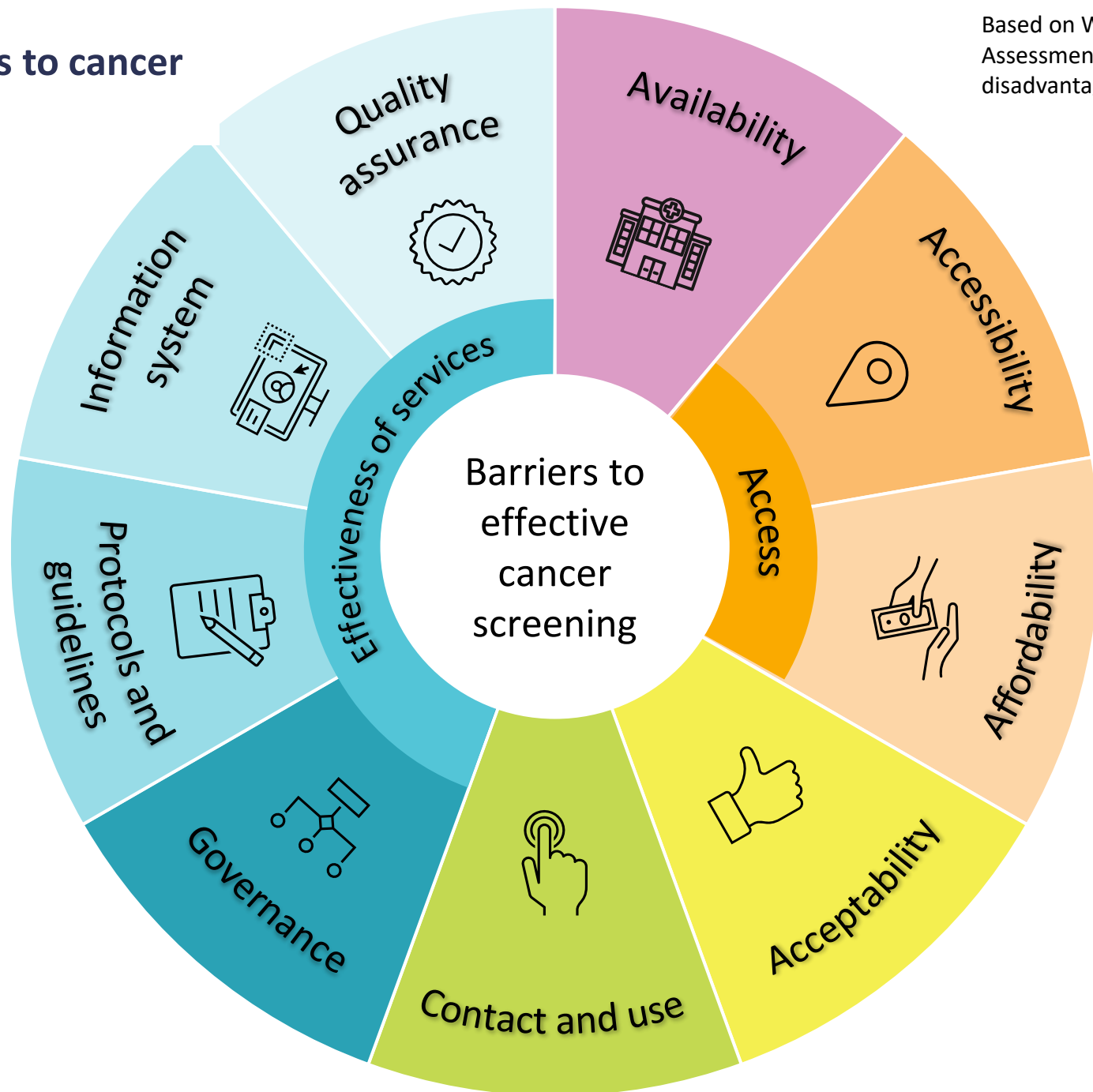
illustrating how different dimensions of coverage are necessary to achieve effective service delivery

WHO Regional Office for Africa, 2019: Assessment of barriers to accessing health services for disadvantaged adolescents in Nigeria

Framework of barriers to cancer screening pathway

Based on WHO Regional Office for Africa, 2019:
Assessment of barriers to accessing health services for disadvantaged adolescents in Nigeria

Courtesy of Hannah Theriault

Barriers to effective cancer screening

- Availability
- Accessibility
- Affordability
- Acceptability
- Contact and use
- Governance
- Protocols and guidelines
- Information system
- Quality assurance
- Effectiveness of services
- Access

Barriers to availability of services:

- Insufficient **infrastructure and/or financial resources** for screening (priority for 16/23 countries from CELAC; 69.6%)

- Insufficient **human resources** for further assessment (5/23; 21.7%)

Barriers to acceptability of services:

- Low **health literacy or beliefs** leading to non-participation in screening (8/23; 34.8%)

- **Lack of trust** in the healthcare system for participating in screening (3/23; 13.0%)

IARC unpublished data

Barriers to accessibility of services:

- **Distant** treatment centre (3/23; 13.0%)

- **Appointments** making screening attendance difficult (8/23; 34.8%)

- **Delays** for initiation of treatment (14/23; 60.9%)

Barriers to affordability of services:

- No financial coverage of **direct costs** for screening (6/23; 26.1%)

- Unaffordable **indirect costs** for treatment (8/23; 34.8%)

IARC unpublished data

Poor governance as a barrier:

- No well-defined **organizing body/system** to ensure appropriate management of screen positives (12/23; 52.2%)

- Inadequate **planning/logistics** for screening (10/23; 43.5%)

- Issues with establishing **protocols, processes and legal frameworks** (5/23; 21.7%)

- **Data protection regulations** preventing access to contact information of the eligible population (5/23; 21.7%)
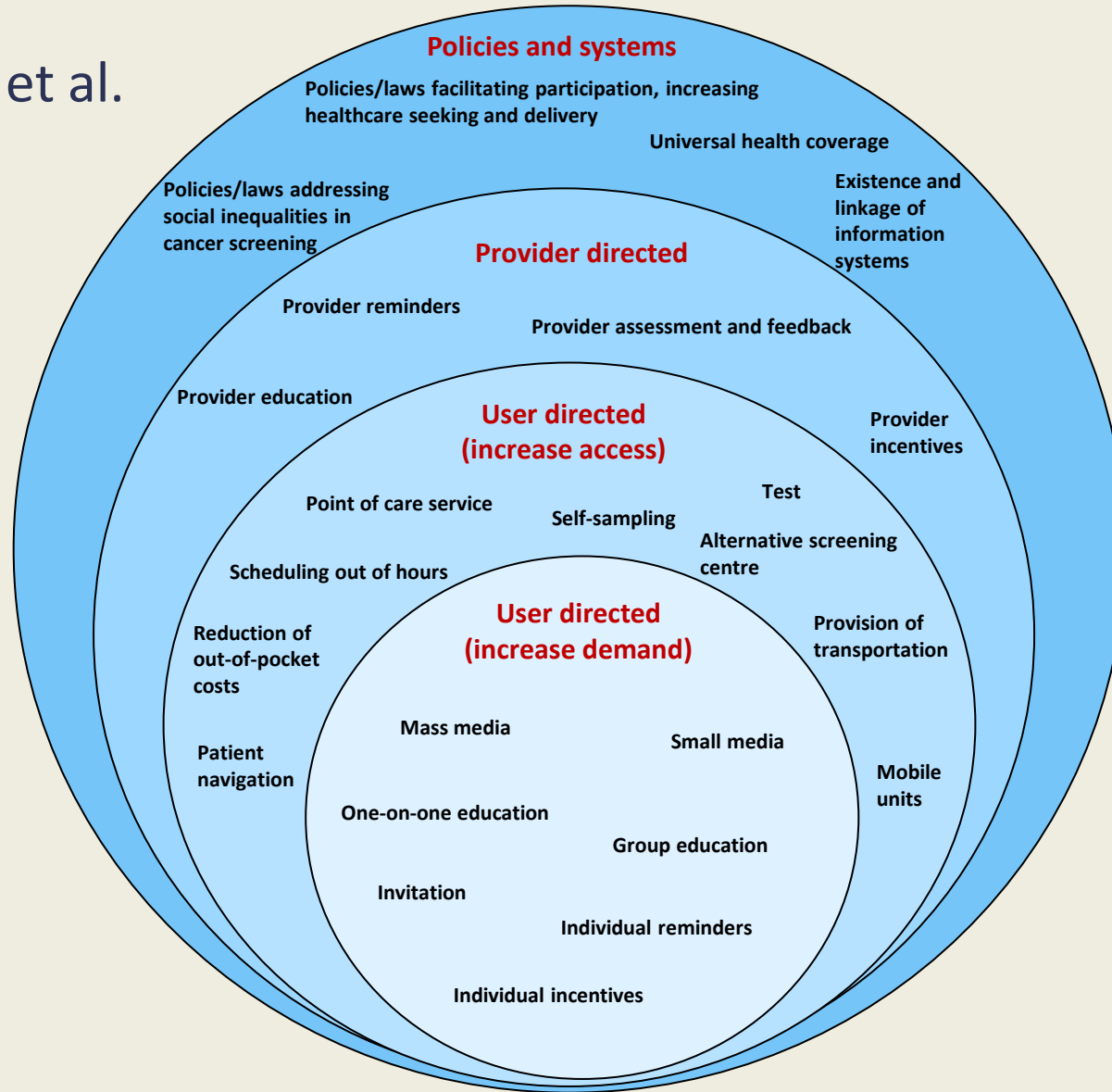
IARC unpublished data

Inadequate quality assurance as a barrier:

- Screening providers not **following protocols** and procedures (8/23; 34.8%)

- Insufficient monitoring of the quality of **screening experiences** (9/23; 39.1%)

- Insufficient **monitoring and evaluation** of non-responders to follow-up (15/23; 65.2%)

- No systematic monitoring/evaluation of **treatment outcomes** (13/23; 56.5%)

IARC unpublished data

Classification of **interventions** to increase screening participation by target of intervention
Adapted from Baron et al.

IARC unpublished data

Baron RC et al. Methods for conducting systematic reviews of evidence on effectiveness and economic efficiency of interventions to increase screening for breast, cervical, and colorectal Cancers. Am J Prev Med 2008;35(1S).

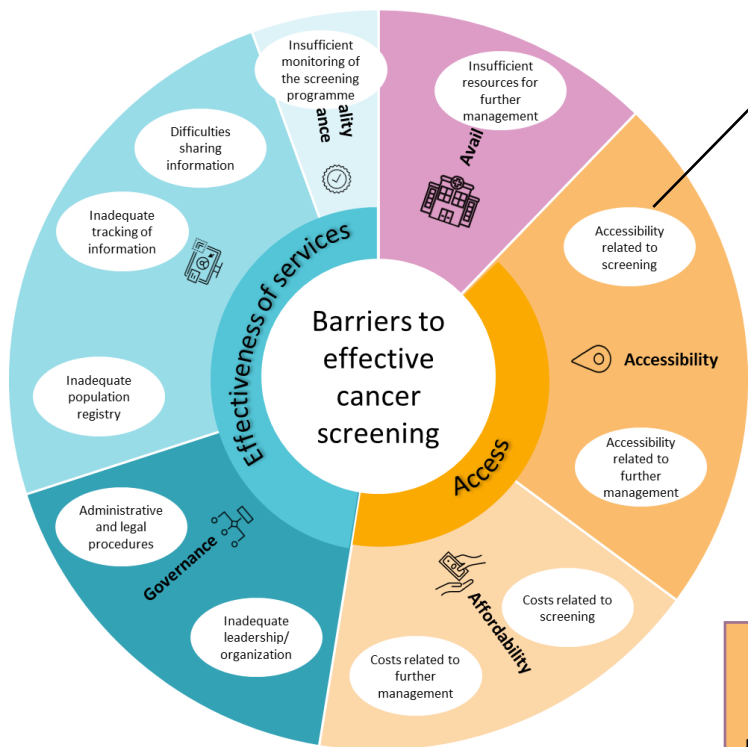**Dimensions of prioritized barriers** by representatives of MoH from 23 countries in Latin America and the Caribbean (CELAC) (% countries)
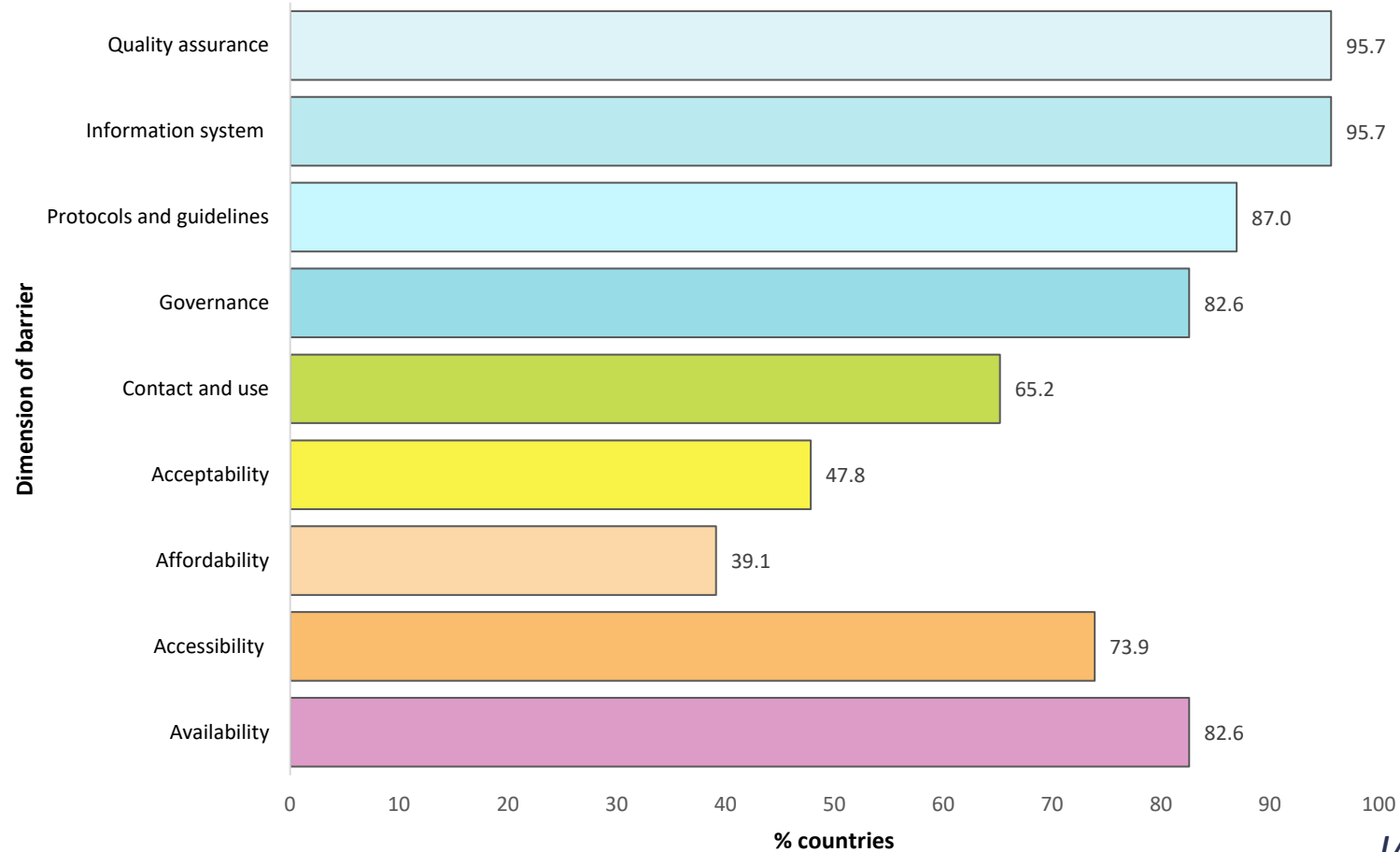
IARC unpublished data

The screening centre is far.

	Breast	Cervical	Colorectal
Evidence-based interventions			
Mobile unit	✓	✓	✓
Patient navigation	✓	✓	✓
Self-sampling	NA	✓	✓
Interventions within a multicomponent strategy			
Provision of transportation	✓	✓	✓
Limited evidence interventions			

Mobile unit

Definition: Vehicle or other traveling clinic that is staffed by health workers and outfitted with equipment for cancer screening and/or further management of individuals with screen positive result.

Elements to consider: areas where it will intervene, frequency and information of target population of their presence and timetables in the area. Information can include direct invitation by mail, telephone or home visits, publicity (flyers, radio, car loudspeaker, newspapers), word of mouth, or physician referral.

Examples of countries where studies were conducted: Australia, Belgium, Brazil, Canada, France, Greece, India, Ireland, Italy, Korea, Mexico, Peru, Saudi Arabia, South Africa, Sweden, Taiwan, Thailand, United Kingdom, USA.

Useful link: Greenwald ZR, El-Zein M, Bouten S, Ensha H, Vazquez FL, Franco EL. Mobile Screening Units for the Early Detection of Cancer: A Systematic Review. Cancer Epidemiol Biomarkers Prev. 2017 Dec;26(12):1679-1694. doi: 10.1158/1055-9965.EPI-17-0454. E

Conclusions

Countries should conduct a **systematic assessment of barriers**, including their prioritization.

It would facilitate the **identification of (evidence-based) interventions** to overcome the barriers to improve screening programmes.

Governments and policymakers could make better **informed decisions**.

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International Agency for Research on Cancer

World Health Organization