



# How to embed health promotion / primary prevention into organised screening programmes?

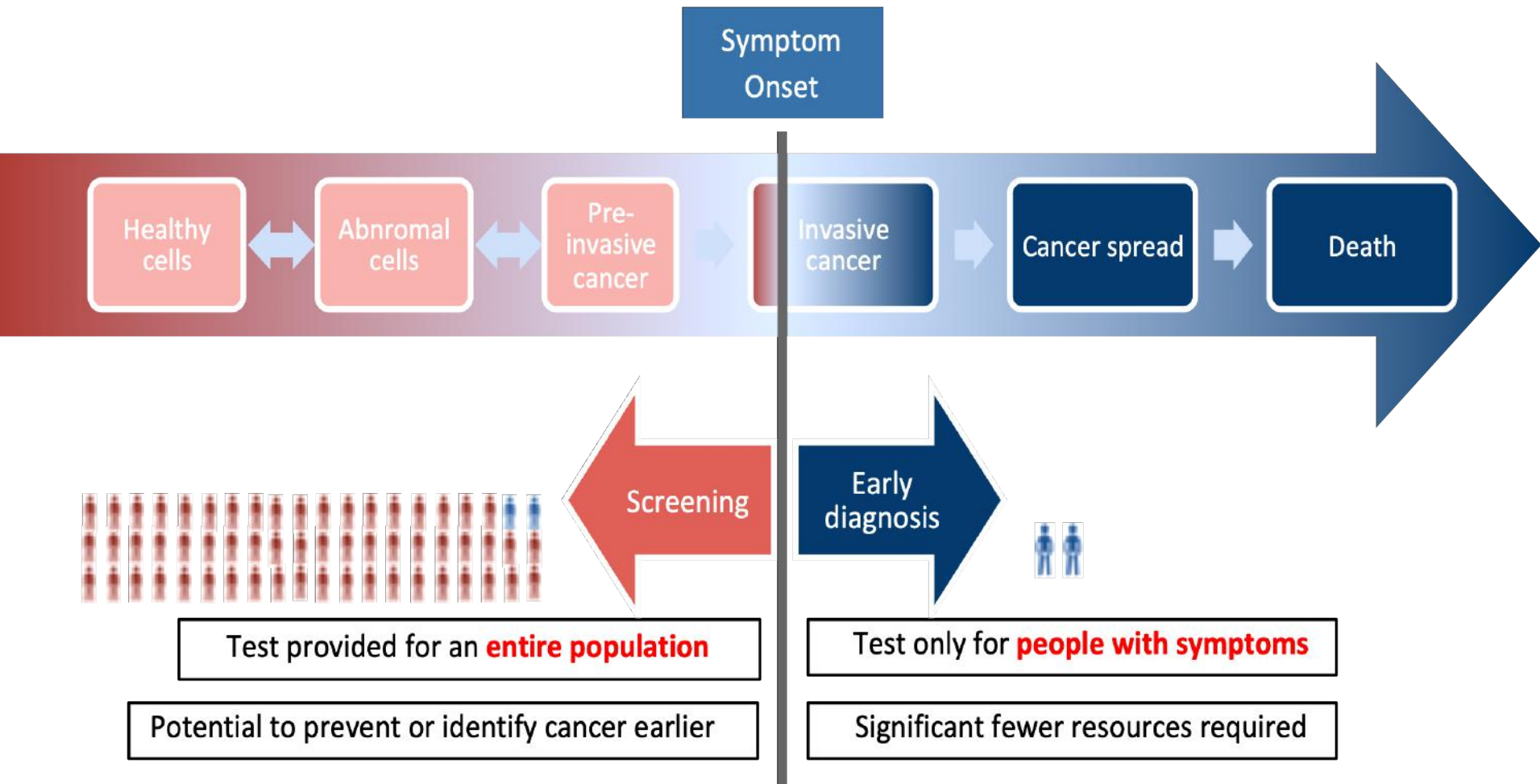
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International Agency for Research on Cancer

# Screening vs. Early diagnosis





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# Choosing priority strategies for risk prevention

- In constructing health policies for the prevention of well-known risks, choices need to be made between different strategies.
- Will preventing small risks in large populations avoid more adverse health outcomes than avoiding large risks in a smaller number of high-risk individuals?

# Choosing priority strategies for risk prevention

- What priority should be given to cost-effective interventions for primary rather than secondary prevention?
  - Lowering blood pressure distribution by reducing dietary salt intake compared with treatment of people with high blood pressure?
- Should priority be given to preventing environmental and distal risks to health?
  - Such as tackling poor sanitation or inadequate nutritional intakes, rather than the more obvious proximal risks in a causal chain?

# Choosing priority strategies for risk prevention

- What is the most appropriate and effective mix of these strategies?
- In practice there is rarely an obvious and clear choice.
- These strategies are usually combined so as to complement each other.

# Choosing priority strategies for risk prevention

In general, it is more effective to give priority to:

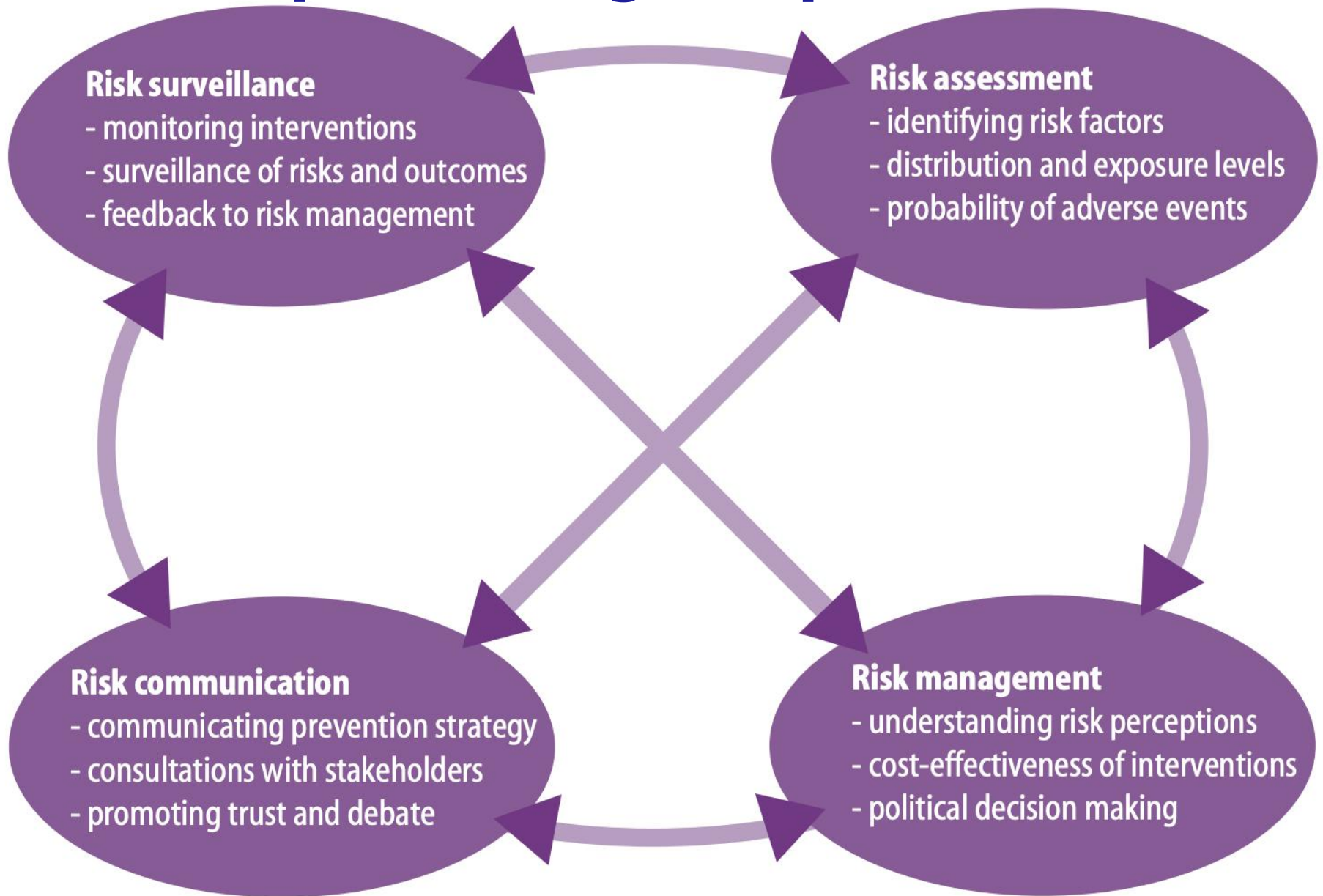
- population-based interventions rather than those aimed at high-risk individuals;
- primary over secondary prevention;
- controlling distal rather than proximal risks to health.

# Choosing priority strategies for risk prevention

- There is a "prevention paradox" which shows that interventions can achieve large overall health gains for whole populations but might offer only small advantages to each individual.
- This leads to a misperception of the benefits of preventive advice and services by people who are apparently in good health.

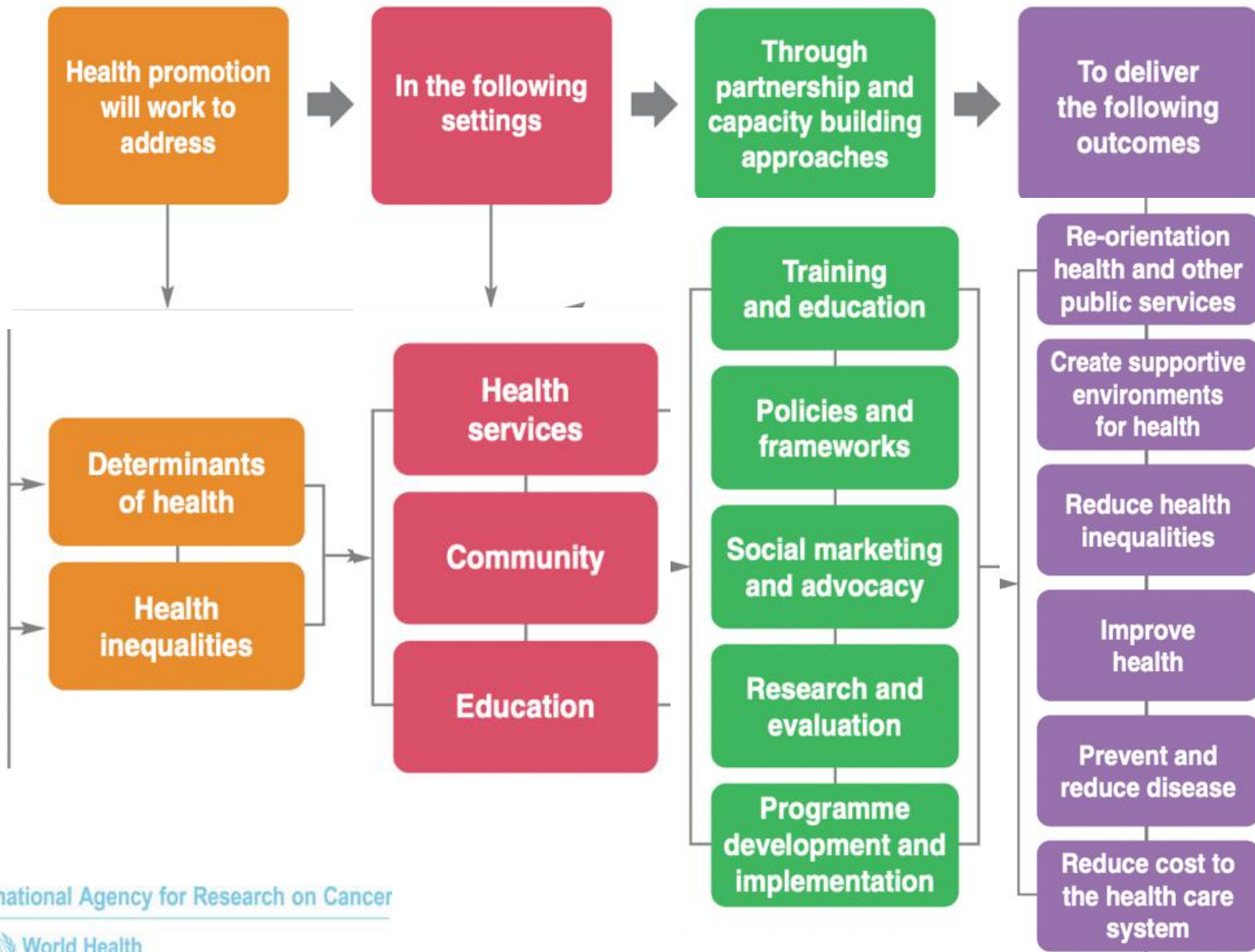


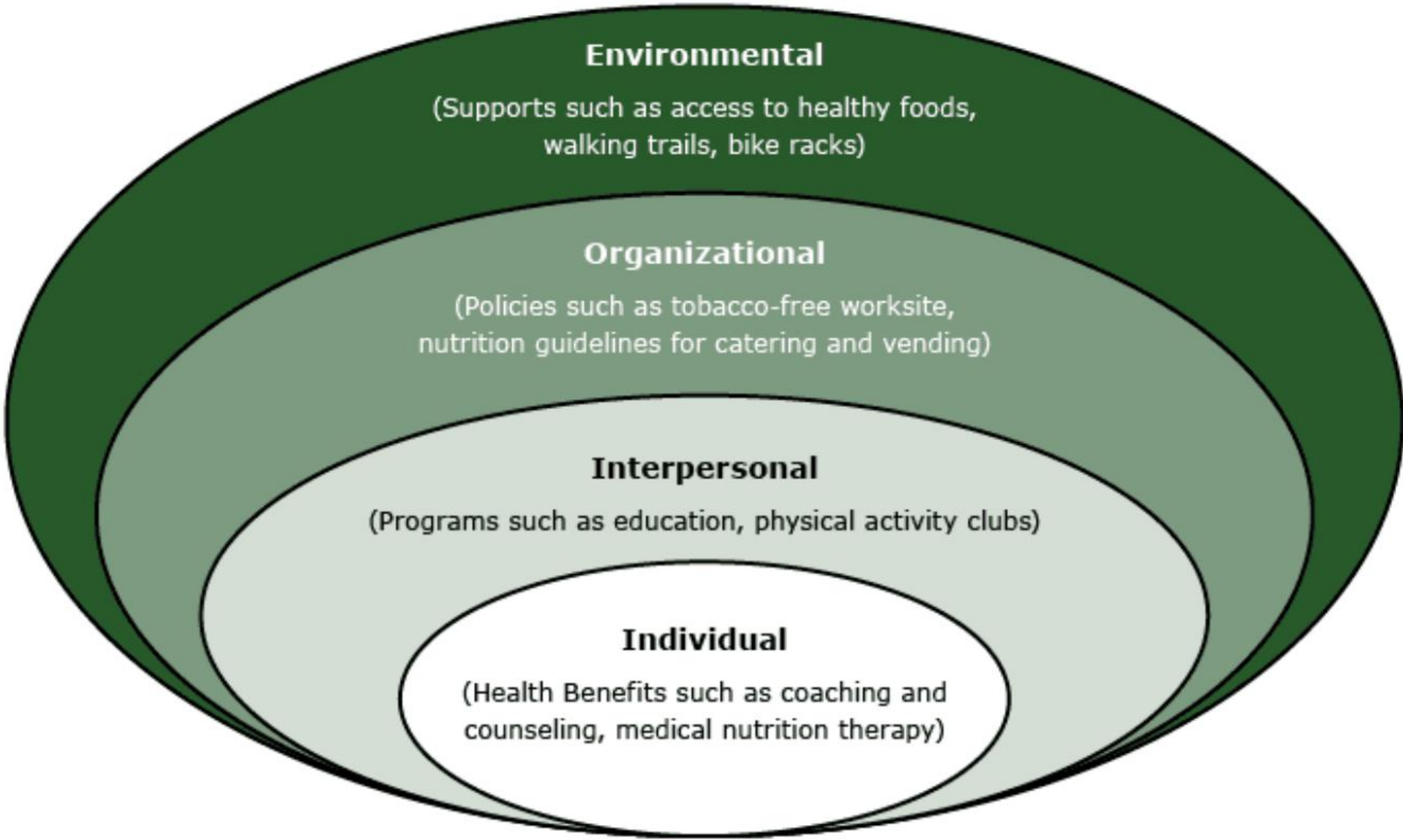
# Implementing risk prevention



World Health Report 2013 (WHO)



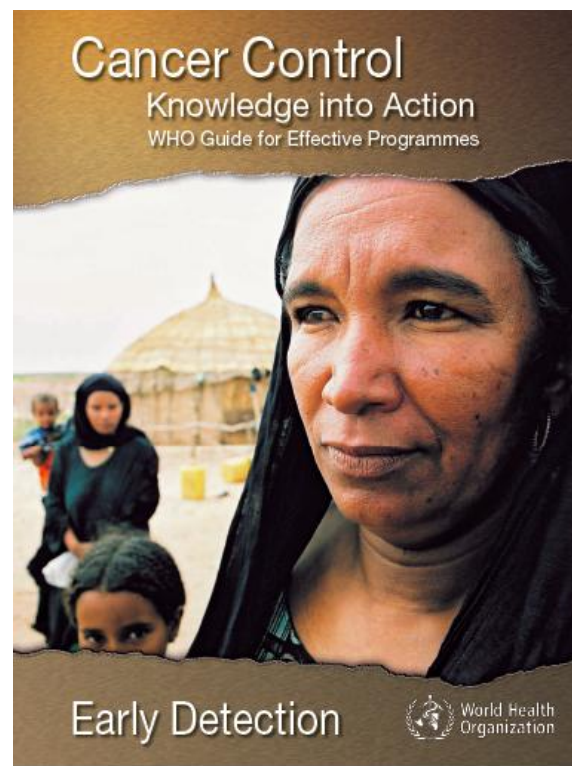




# Situational Analysis – Capacity Assessment

## What are the Strengths and Weaknesses?

- Governance, Organization and Regulation
- Health Information System
- Financing
- Resource Allocation
- Human Resources
- Service Delivery



# WHO Stepwise Framework for Implementation of Cancer Control Plan

## Core interventions

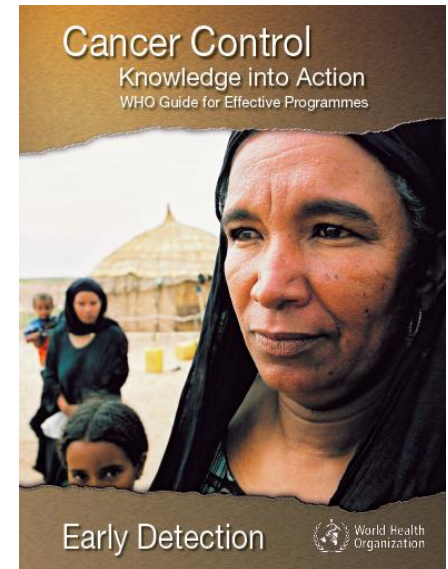
Interventions feasible with existing resources

## Expanded interventions

Interventions feasible with reallocated resources

## Desirable interventions

Interventions beyond reach of current resources



- Evaluate
- Apply lessons learned
- Modify as necessary
- Optimization

- Establish a baseline
- Identify priorities
- Set goals & standards
- Plans to achieve goals



- Monitor / measure
- Collect Data
- Analysis / Audit
- Document results
- Find and fix

- Implement actions
- Communication
- Training
- Awareness

# Conclusions - part 1

- Perform a Situation Analysis
- Tailor your needs and possibilities to a Health Promotion Strategic Framework
- Design your Cancer Control Plan including a interaction between Primary and Secondary Cancer Screening activities
- Measure your performance indicator
- Monitor your intervention



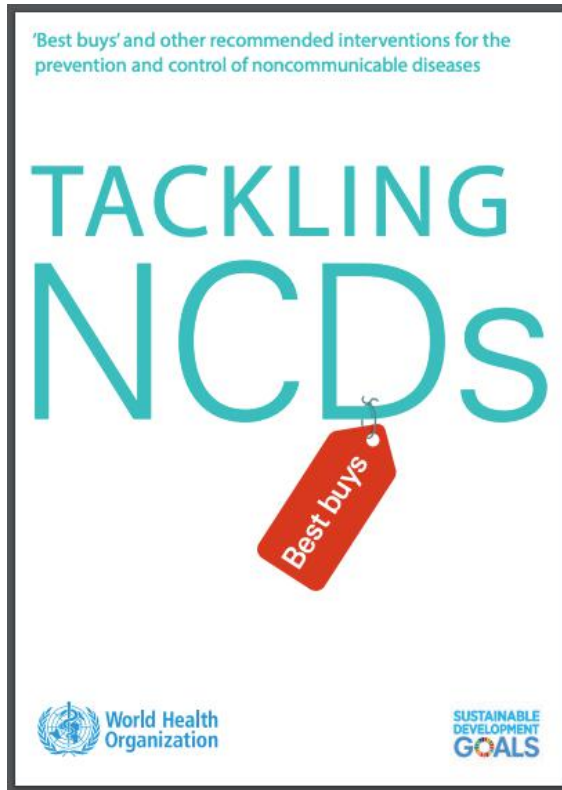
**Thank you for your attention**

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# Other Possible Missing Opportunities

# WHO - Appendix 3 of Global Non-Communicable Disease



- List of policy options and cost-effective interventions for NCD control
- Includes interventions including 'very cost effective & affordable interventions'
- Provides the evidence base for the recommendations

# What is Appendix 3 of Global NCD Action Plan?

- List of policy options and cost-effective interventions for NCD control
- Includes 89 interventions & enabling actions
- 16 bolded 'very cost effective & affordable interventions'
- Provides the evidence base for the recommendations

# Global NCD targets to be attained by 2025 (against 2010 baseline)

A **25%** relative reduction in risk of **premature mortality** from common NCDs

At least a **10%** relative reduction in the **harmful use of alcohol**

A **10%** relative reduction in prevalence of **insufficient physical activity**

A **25%** relative reduction in prevalence of **raised BP**



A **30%** relative reduction in prevalence of **tobacco use**

**Halt** the rise in **diabetes & obesity**

A **30%** relative reduction in mean population **intake of salt/sodium**

An **80%** availability of the **affordable basic technologies and essential medicines** to treat NCDs

At least **50%** of eligible people receive drug therapy and counselling to **prevent heart attacks and strokes**



# **Integrated NCD screening using community health workers for rural populations in India**

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A pilot study to evaluate home-based early detection for the common NCDs by community health workers (CHW) in a rural setting in India

## *Objectives*

### **Objectives**

- To evaluate the feasibility and efficacy of the CHW-driven service delivery model in screening for hypertension, diabetes, cervical and oral cancers and to create breast cancer awareness
- To assess the common risk factors for diabetes and hypertension

# A pilot study to evaluate home-based early detection for the common NCDs by community health workers (CHW) in a rural setting in India

## *Methods*

### **Methodology**

- Trained female CHWs (N=10) performed the following procedures at home
  - **For men** (age 30-60 years): Awareness about healthy lifestyle; measuring height, weight, BP and random blood sugar; oral visual examination for tobacco/alcohol habitués
  - **For women** (age 30-60 years): Awareness about healthy lifestyle; measuring height, weight, BP, random blood sugar, oral visual examination for tobacco/alcohol habitués; awareness about breast cancer early symptoms; collection of self-collected vaginal sample for HPV test
- Men and women with positive screening tests and women with breast symptoms were referred to a primary health center for further evaluation & management



**Men & Women of 30-60 years of age**

**Community Health Workers make home visits**

**Awareness about healthy life style & ill effects of tobacco**

**Blood pressure check with digital machine**

**Random sugar with glucometer**

**Oral visual exam for tobacco habitués**

**Breast Awareness\*\***

**Self-sampling for HPV test\*\***

**BP  $\geq$ 140/90**

**$\geq$ 140 mg/dl**

**Positive**

**Self-detected abnormalities**

Care HPV test

**Positive**

**Primary health center**  
Medical consultation to confirm hypertension/diabetes  
Oral/breast examination by trained clinician  
Visual assessment for treatment by gynecologist

**Referral to GBH hospital for**  
Treatment of breast/cervix and oral cancer

\*\* for women only

# A pilot study on NCDs early detection by CHW in a rural setting in India

## *Key findings*

- Screening of 5.000 women and 2.000 men completed in 6 months
  - Overall, 90% of the targeted individuals accepted screening
- Tobacco and/or alcohol consumption was highly prevalent in men;
  - current chewers- 51.8%;
  - current smokers- 27.7%
  - current alcohol consumers- 29.5%
- High BP (140+/90+ mm Hg) was detected in:
  - 48.0% men and 26.4% women at screening visit;
  - 42.3% of them were confirmed with hypertension on further investigation
- High blood sugar (140+ mg/dl) detected in
  - 10.7% men and 6.2% women at screening visit;
  - 35.0% of them were confirmed with diabetes on further investigation

## *Key findings*

- Of the tobacco/alcohol habitués,
  - 2.6% were positive on oral visual examination;
  - no oral cancer was detected
- HPV test on self-collected samples
  - positive in 8.6% women;
  - 10 CIN 2/3 and;
  - 1 cancer were detected in them
- 0.6% women complaining of breast symptoms;
  - none had breast cancer

# Cancer Screening Examination Coverage per tumor type Women 50 – 59 yo

	<b>Breast Screening %</b>	<b>Cervical Screening %</b>	<b>Colon Screening %</b>
Estonia	<b>43.3</b>	<b>50.1</b>	
Finland	<b>69.1</b>	<b>63.5</b>	<b>18.0</b>
France	<b>52.3</b>		<b>26.0</b>
Latvia	<b>53.4</b>	<b>31.4</b>	
Netherlands	<b>49.6</b>	<b>63.3</b>	
Slovenia	<b>17.3</b>		<b>49.7</b>
Spain	<b>43.2</b>		<b>9.6</b>

# Does mammogram attendance influence participation in cervical and colorectal cancer screening? A prospective study among 1,856 French women

	<b>Breast Screening only %</b>	<b>Breast + Cervical Screening %</b>	<b>Breast + Colon Screening %</b>	<b>Breast + Cervical + Colon %</b>	
<b>Overall</b>	11.2	32.1	10.5	46.2	
Age stratification					<b>p</b>
<b>50–59 yo</b>	9.3	40.5	8.2	42.0	<b>&lt;0.001</b>
<b>60–65 yo</b>	12.9	24.1	12.7	50.3	

# Conclusions – Part 2

- Think of implementing cancer prevention activities/ awareness (ECAC and screening) into NCD awareness/screening programmes
- Think of implementing cancer screening awareness into organized cancer screening programmes
- Keep your eyes open for new possibilities/ opportunities

# Thank you again

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