

Cancer Early Detection: Understanding the Impact

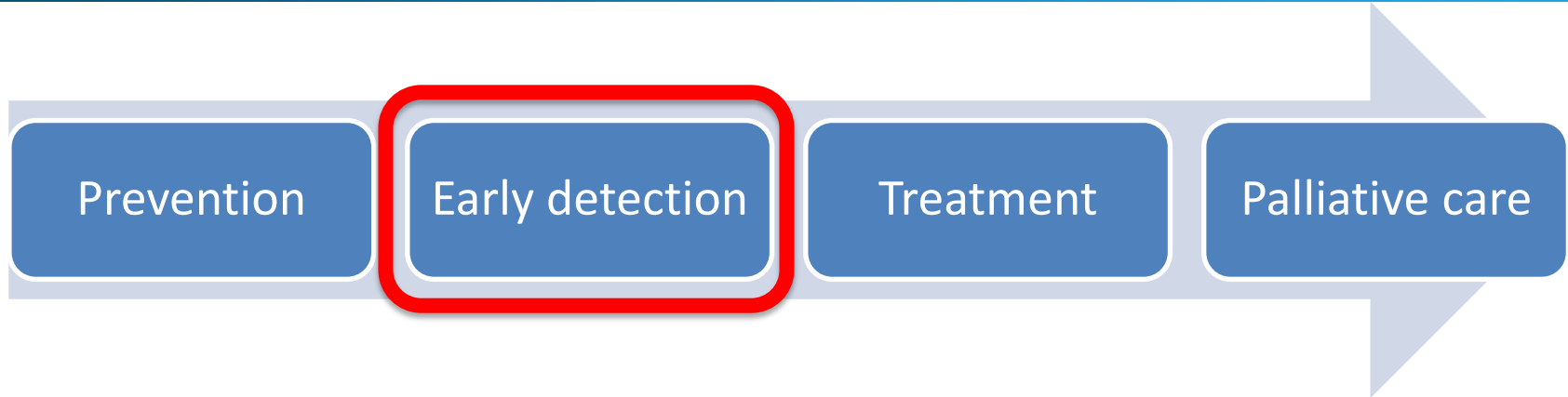
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Outline

- Comprehensive cancer control & definitions
- Assessing screening & its impact
- Current status of CRC screening in PAHO
- When to prioritize early diagnosis
- Factors for effective implementation

Comprehensive Cancer Control

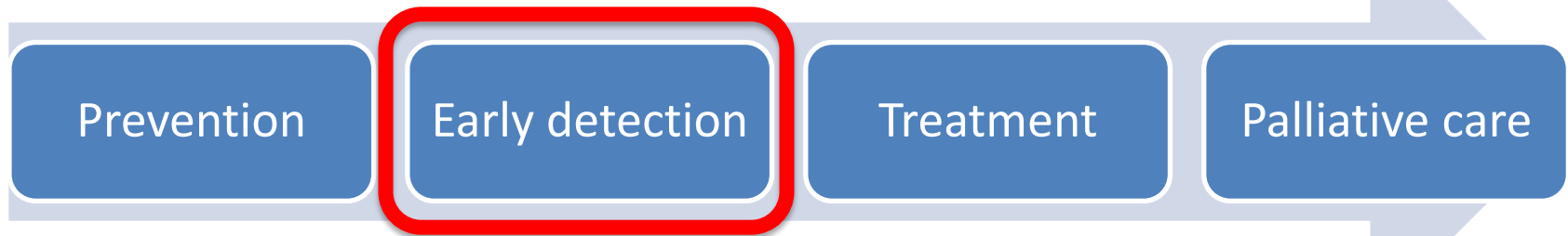


Early detection:

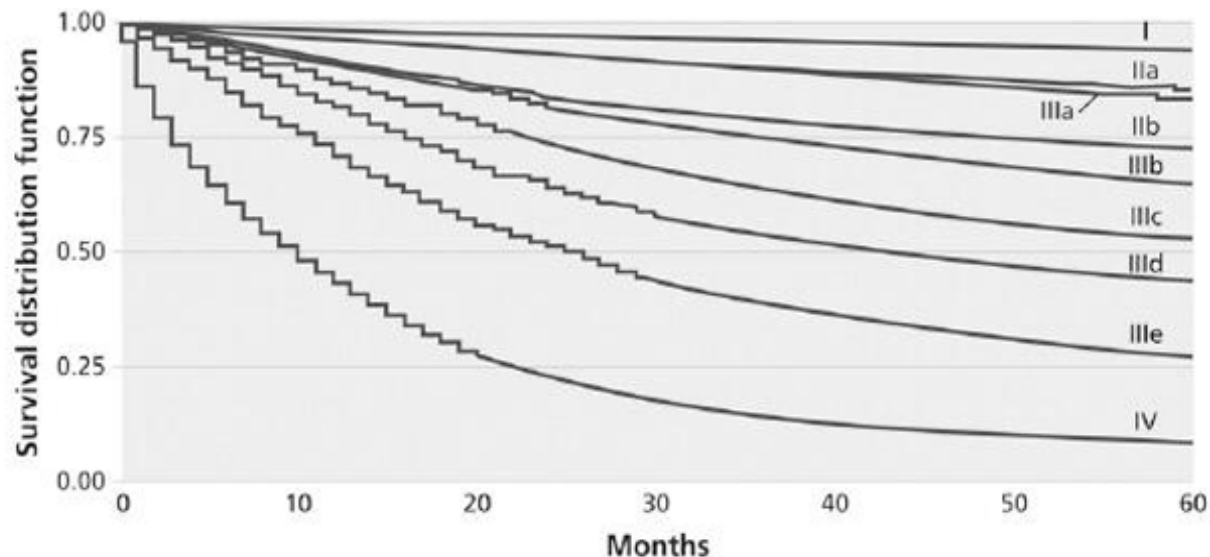
Aims to identify cancer in early stages or pre-cancerous lesions;

Process includes diagnosis & link to treatment

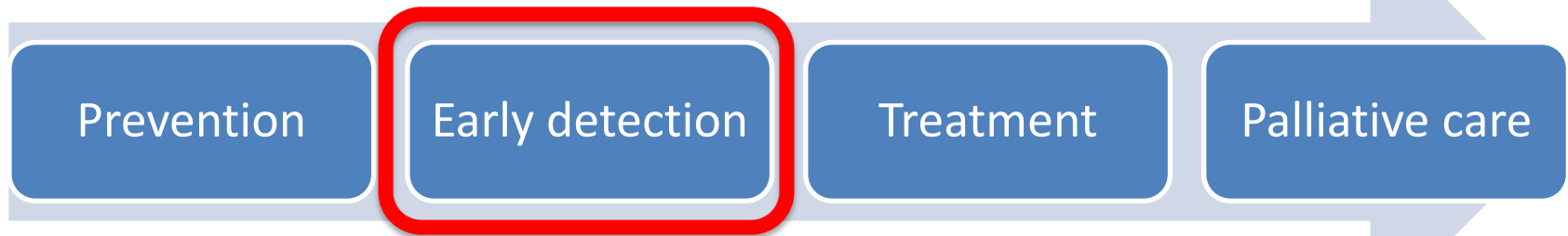
Objectives of Early Detection



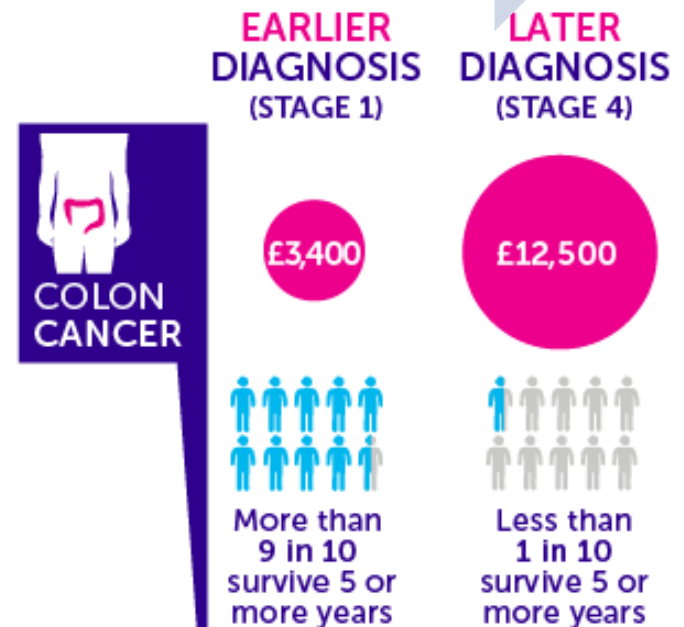
Goal = early identification → **Improve survival**



Objectives of Early Detection



- Goal = early identification
- **Reduced costs of care**
 - **Less morbid treatment**



Objectives of Early Detection

Prevention

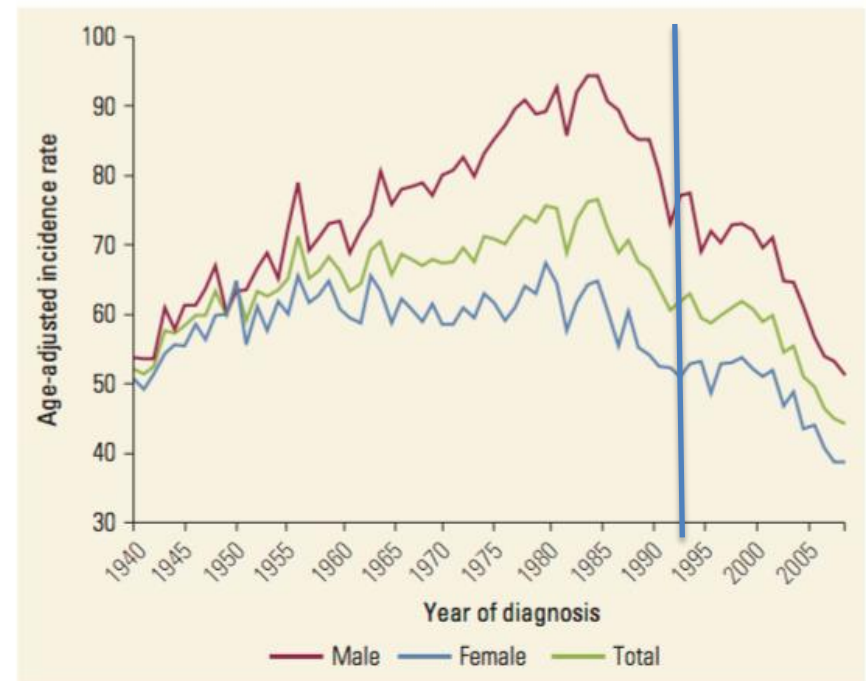
Early detection

Treatment

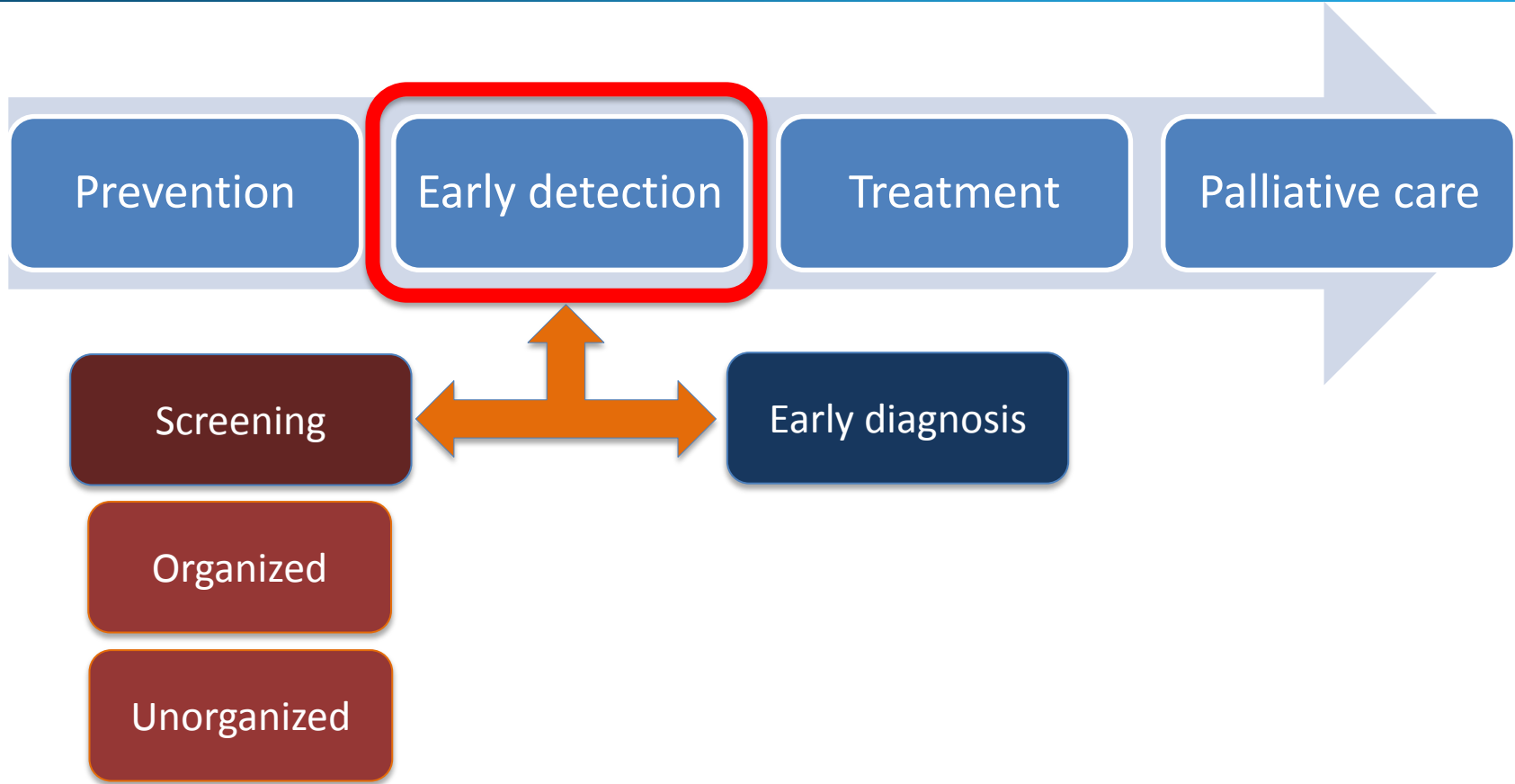
Palliative care

Goal (screening) =
early identification
(pre-invasive)

→ **2° prevent cancer**
(eg, cervical, colorectal)



Comprehensive Cancer Control



Screening vs. Early Diagnosis

- **Screening:**

- Presumptive identification of unrecognized disease in general population
- More than a test

High quality,
accurate,
accessible
screening test

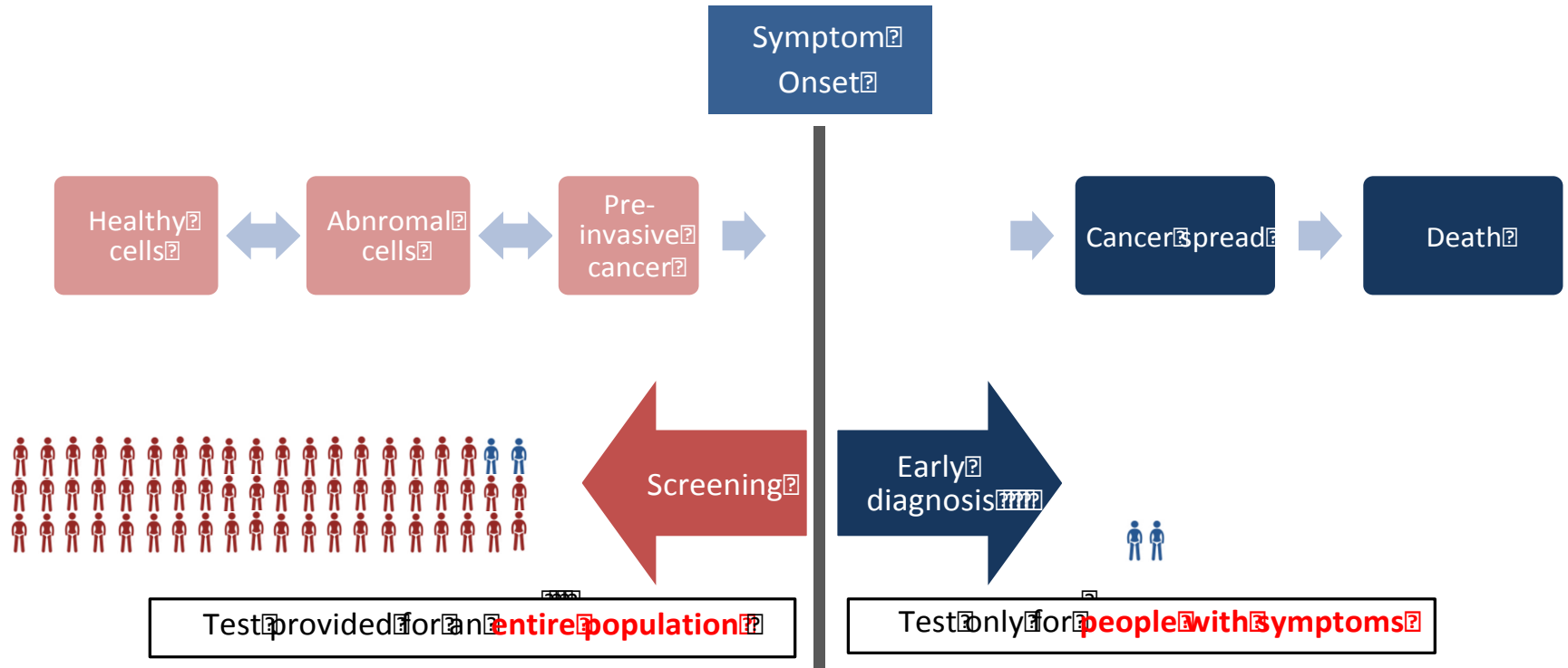
- **Early diagnosis:**

- Focuses on persons with disease
- More than symptoms awareness; link to health system

Awareness of
symptoms

Screening vs. Early Diagnosis

?



Organized Screening

WHO screening targets:

1. Organized:
 - a. Greatest impact
 - b. Fewest harms
 - c. Equitable
2. >70% participation

Criteria for Organized Screening

National program to make service available

Coordination, centralized at national/regional level

Protocol for screening frequency, target population

Mechanism of inviting target population systematically

Functioning health information system including registries

Monitoring & Evaluation program

Building Blocks of Cancer Screening

Components of Organized Screening

Coordinated service delivery

Competent health professionals

Adequately funded programme

National programme to promote access

Information system including quality assurance

Organizational resources and capacity

Benchmarks

High participation

Quality assured

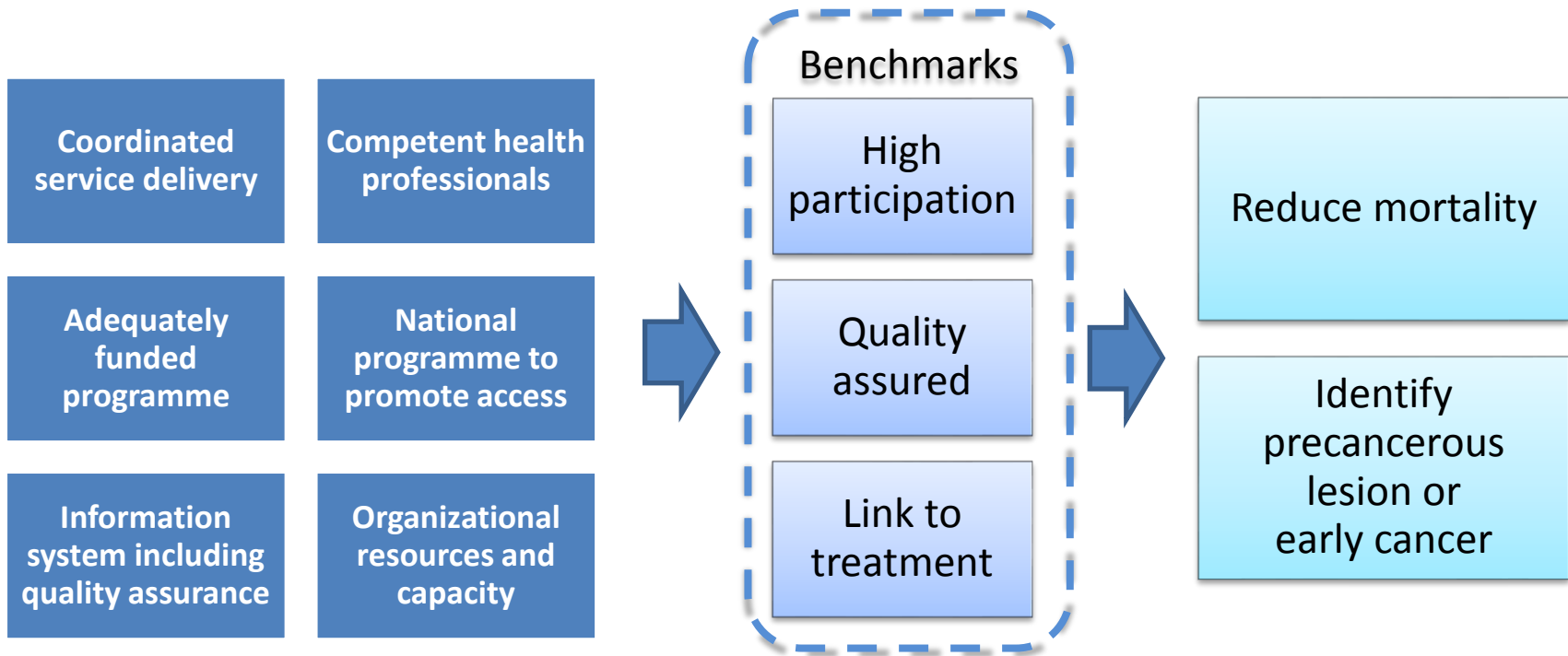
Link to treatment

Goals

Reduce mortality

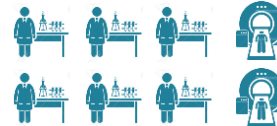
Identify precancerous lesion or early cancer

Understanding the Impact



- Sample screening programme
- Evaluate impact & cost-effectiveness

Cancer Screening



Population sensitized to screening test

High quality, accurate, accessible screening test

Confirmatory pathologic diagnosis & staging

Referral for definitive treatment

Treatment accessible, high quality

Sample population: 1 million

100,000 people screened with FIT annually

5,000 with abnormal screening test

350 with confirmed cancer found on colonoscopy

4,650 with no cancer on colonoscopy (~750 polyps)

450 require treatment

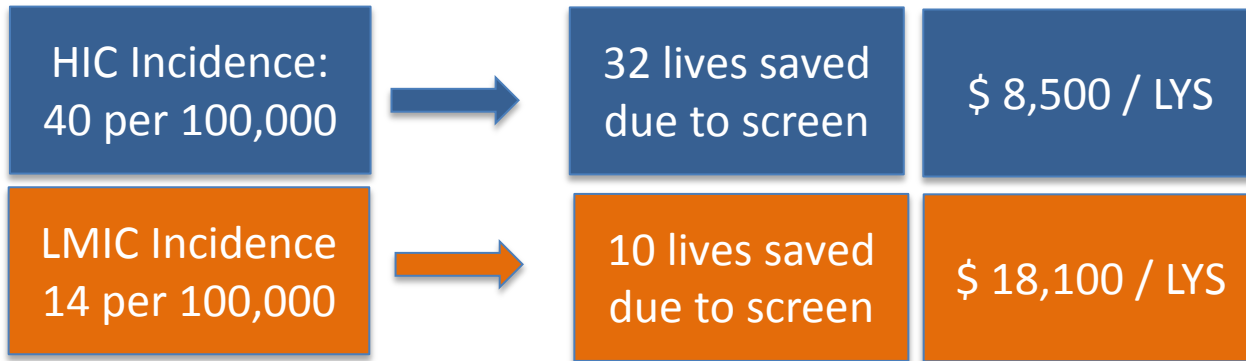
32 avoid death from CRC due to screening

260 survive without screening

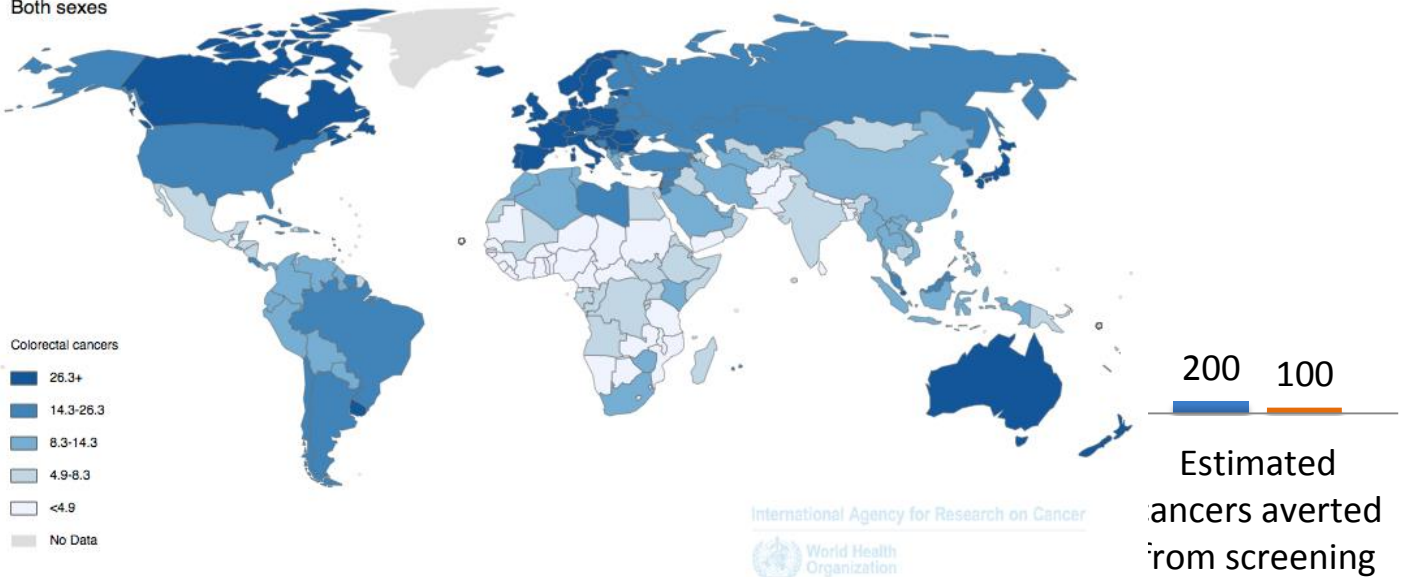
200+ cancers prevented by colonoscopy

Cost: \$ 200mil - \$ 1 bil

Incidence

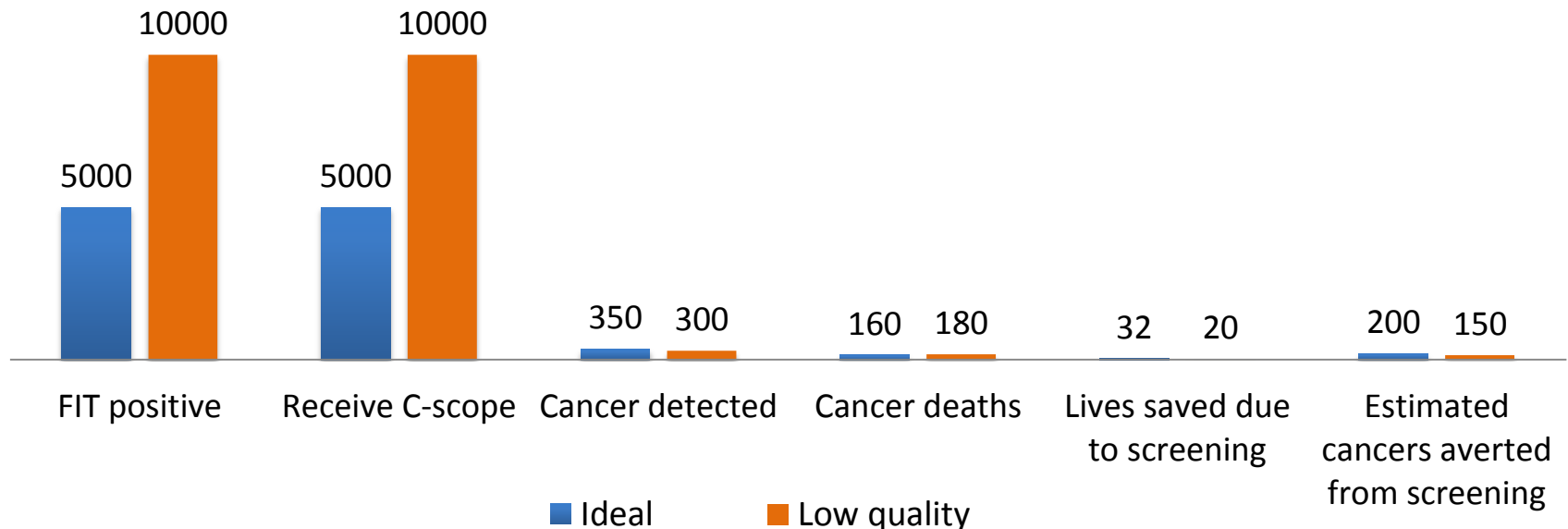
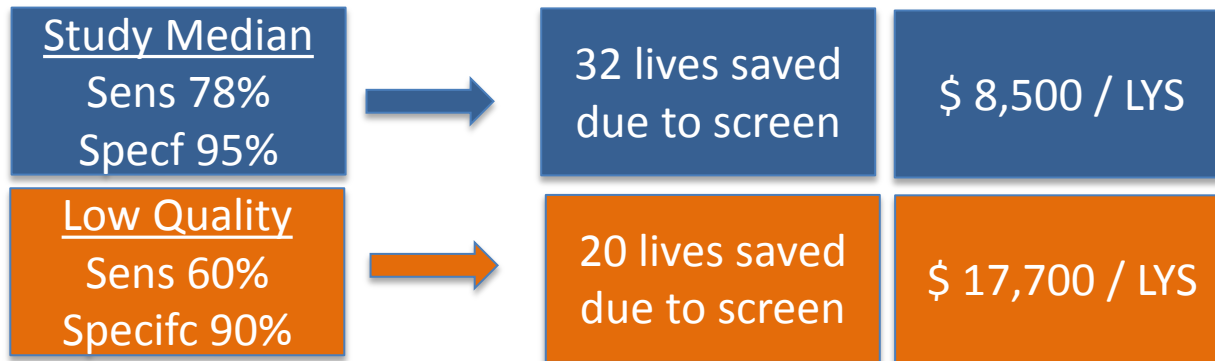


Incidence ASR
Both sexes

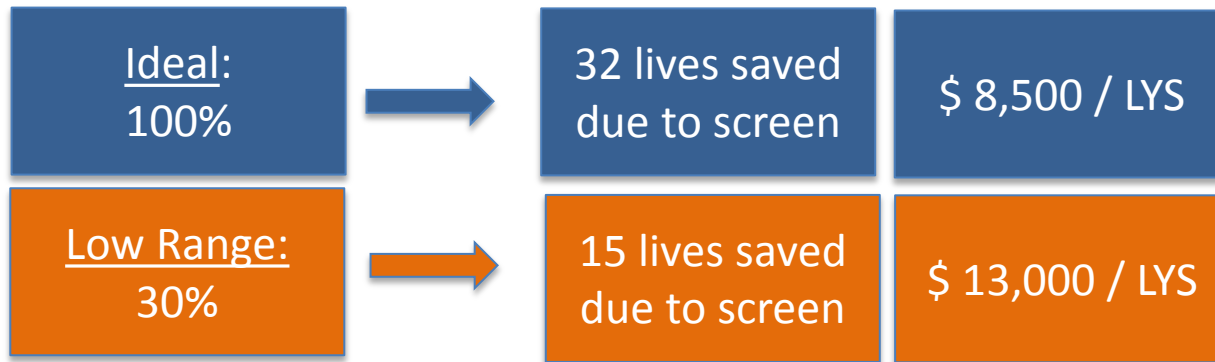


Source: GLOBOCAN 2012 (IARC)

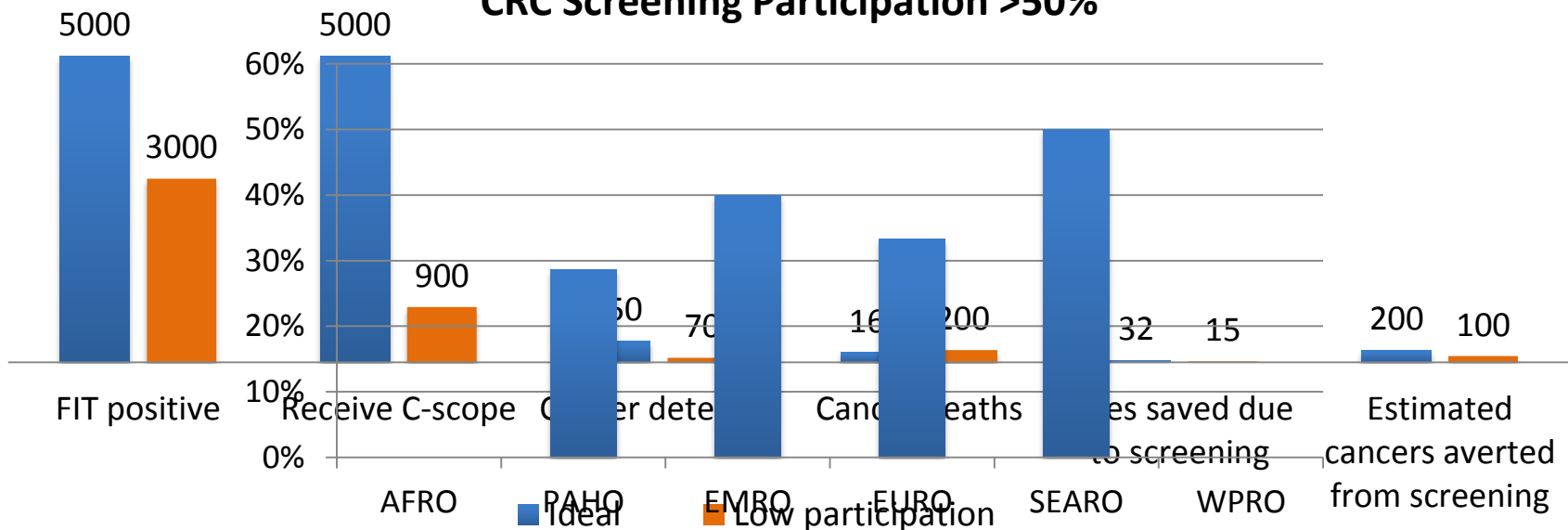
Test Quality



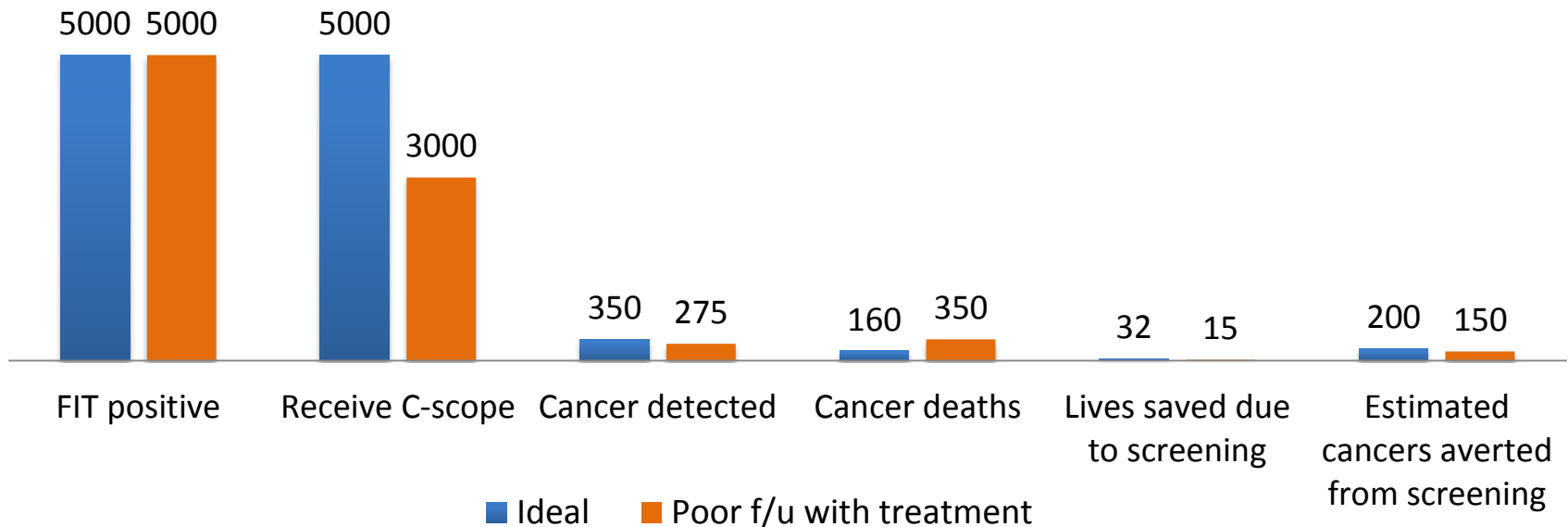
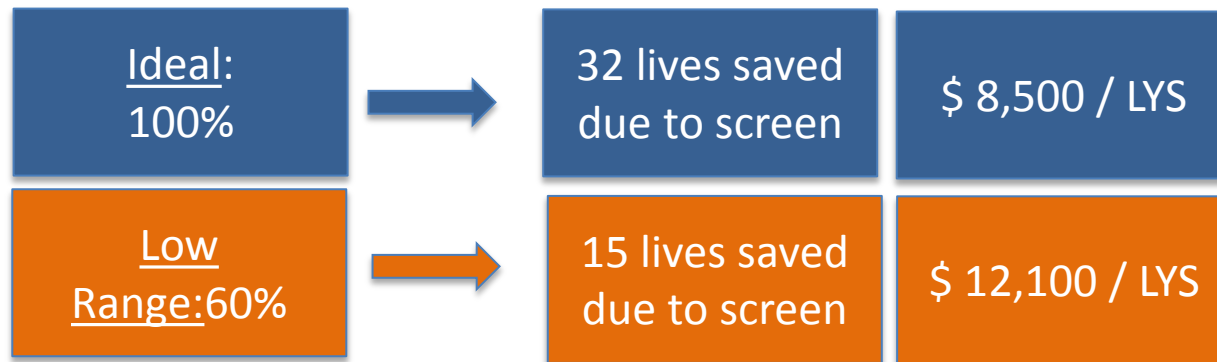
Participation Rates



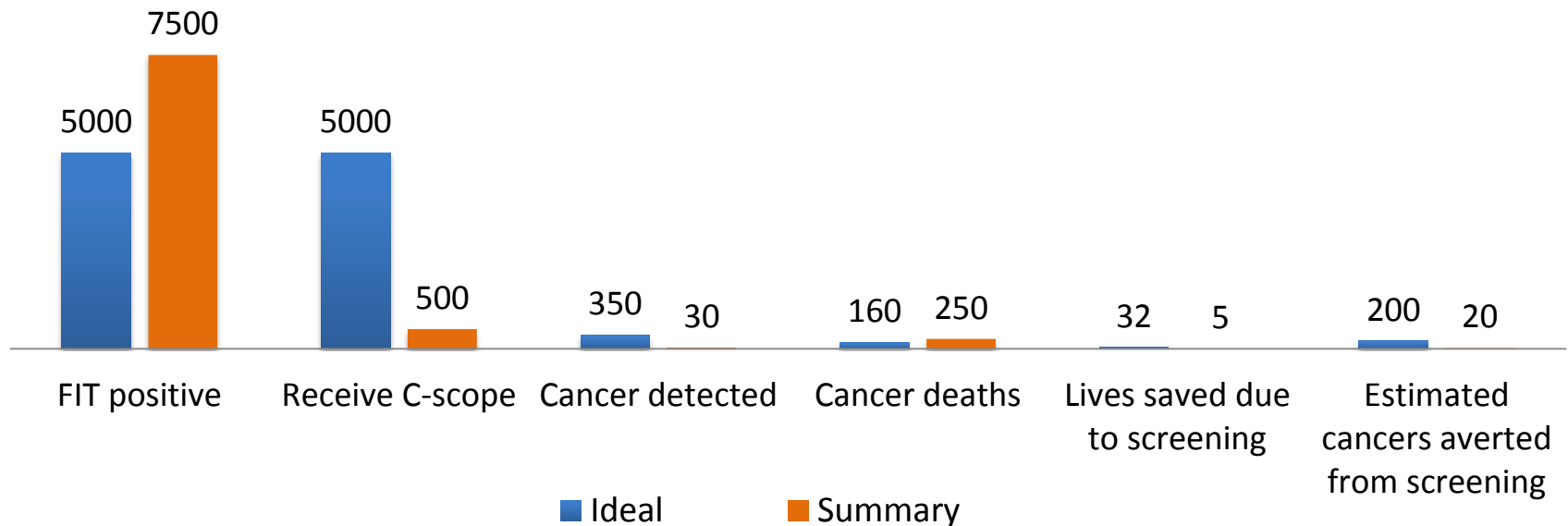
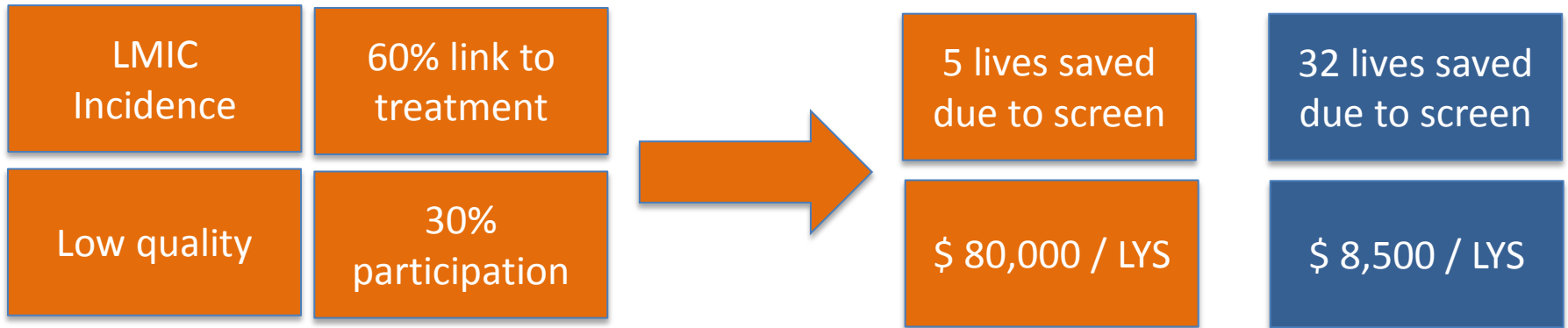
CRC Screening Participation >50%



Link to Diagnosis & Treatment

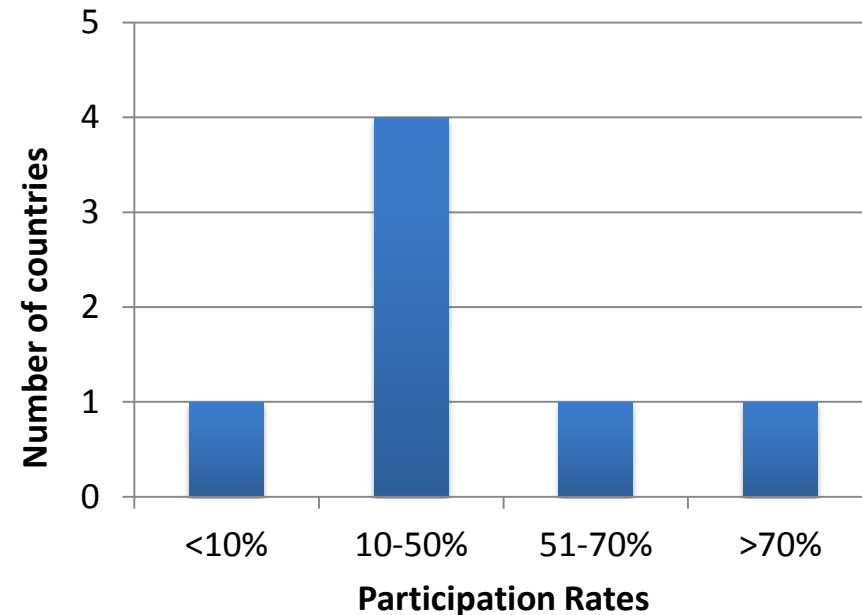
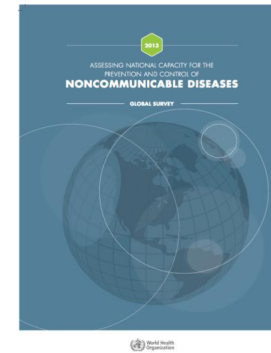


Putting it all together...



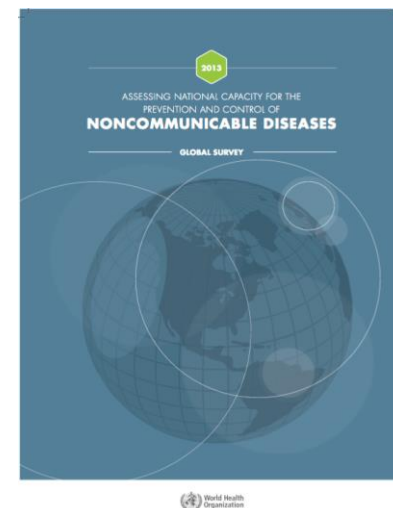
Where Are We Now?

- WHO 2015 NCD CCS
- PAHO
 - 9 / 26 countries perform CRC screening
 - 4 organized / 5 unorganized
 - 5 FOBT/FIT & 2 endoscopy
 - 2 / 7 have participation rates >50%



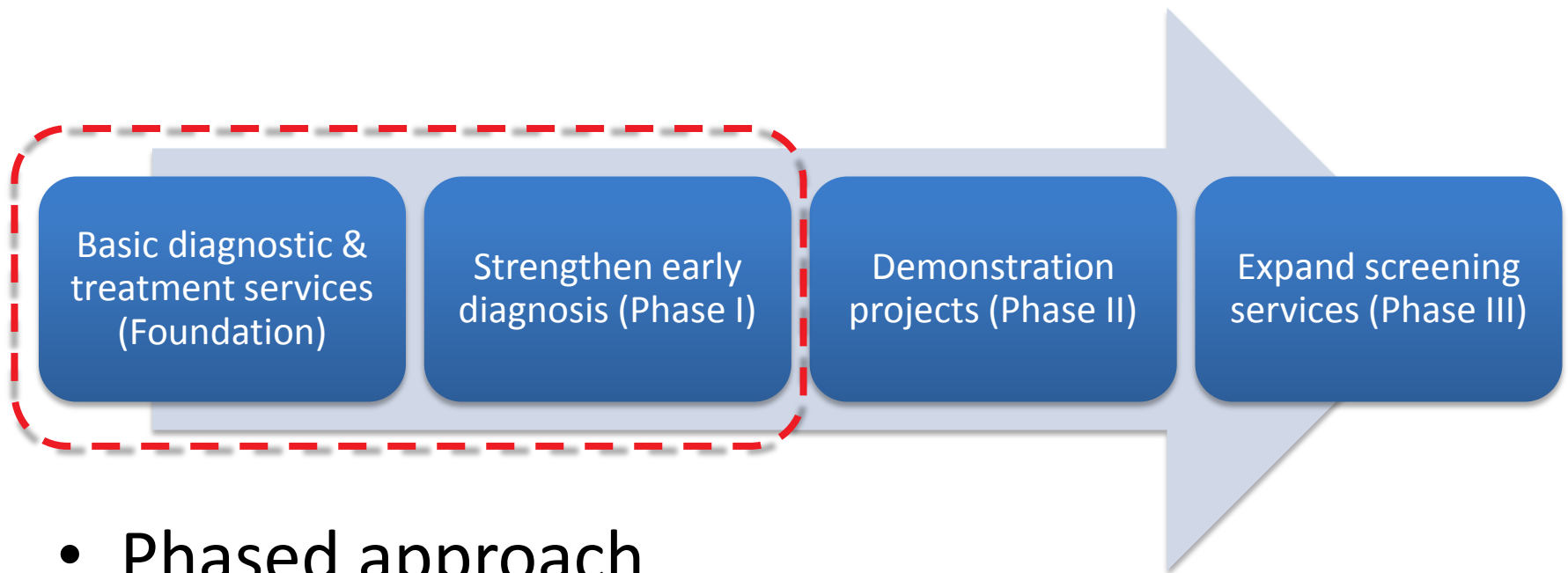
Understanding the Building Blocks

- Preparedness for CRC control in PAHO
 - Referral mechanism: 17 / 30
 - Early diagnosis strategy: 12 / 32
 - Cancer diagnosis & treatment
 - Pathology: 28 / 33
 - Cancer treatment center: 23 / 33
 - Access to surgical oncology: 25 / 33
 - Access to subsidized chemotherapy: 22 / 32



Screening cannot succeed without basic cancer services & strong health system.

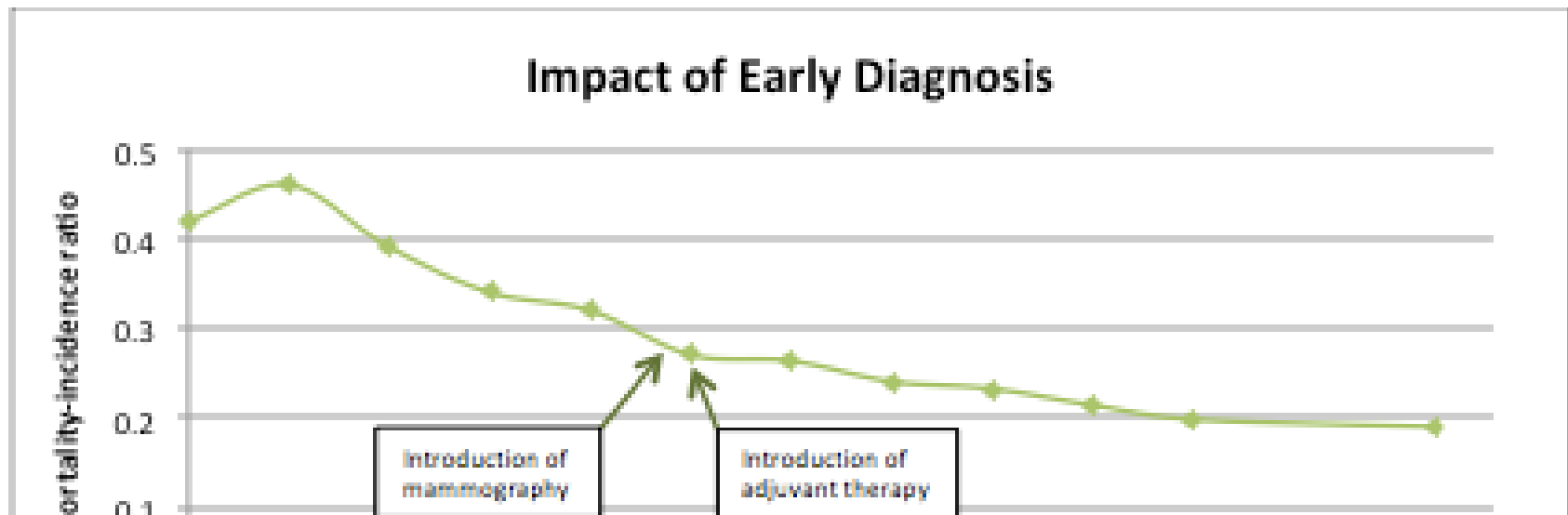
Building the Health System



- Phased approach
- Utilize building blocks of health systems
- Prioritize demonstration projects before population level screening

Early Diagnosis

- Building health system for cancer control



“Up to 50% of all premature NCD deaths are linked to weak health systems that don’t respond effectively and equitably to the needs of the people with NCDs”

CANCER EARLY DIAGNOSIS

Awareness
& access
to care

Clinical
evaluation,
diagnosis
& staging

Access to
treatment

>80%

of patients aware of
symptoms

>80%

of patients receive
timely diagnosis

>80%

of patients initiate
treatment

<90 days from symptom onset to initiating treatment

Awareness of symptoms

Accurate clinical
diagnosis

Confirmatory
pathologic
diagnosis & staging

Referral for
definitive
treatment

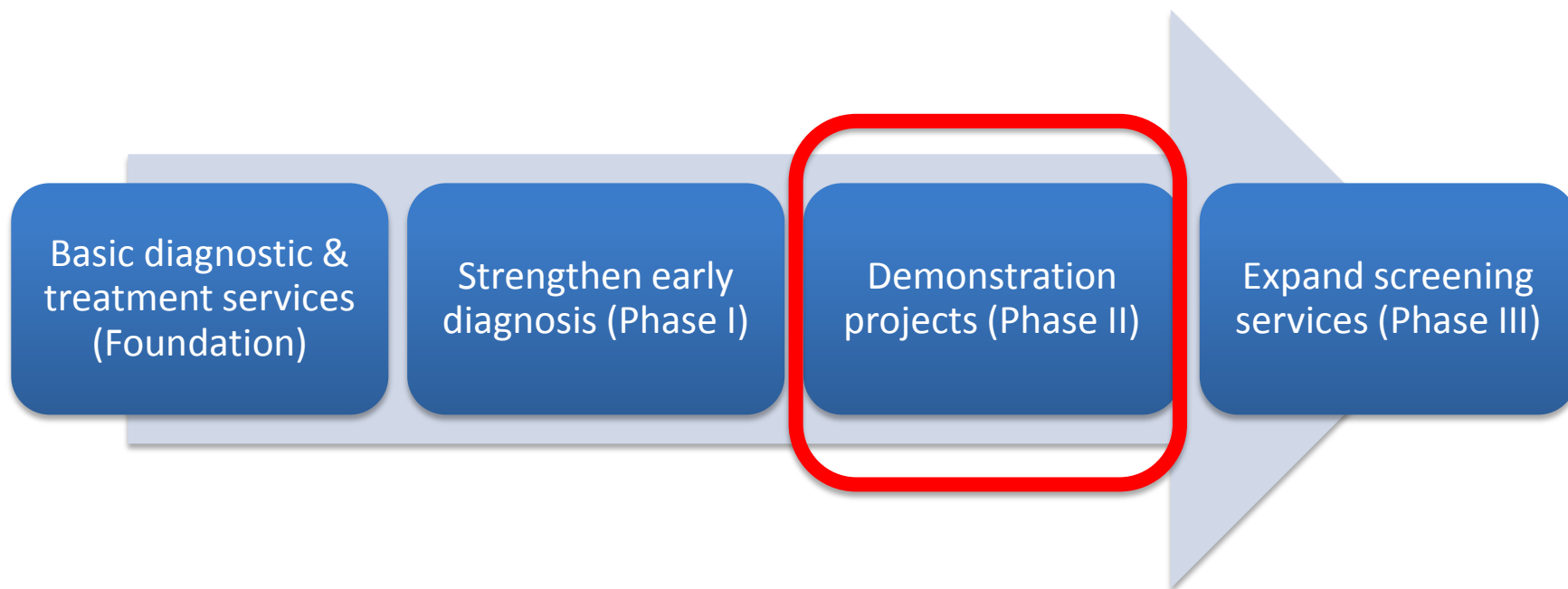
Accessible,
equitable,
quality
treatment



Building the Health System

Requirement	Early diagnosis
Human resources	Endoscopists - 2 Pathologist - 0.1
Basic devices & medicines	Endoscopy units - 1
Service delivery	Awareness about CRC symptoms Strong referral mechn
Adequate funding	Central funding
Monitor programme function	M&E framework

Building the Health System



Assessing Readiness & Priorities

- Perform SAT of early diagnosis & screening



1. Focus on early diagnosis
2. Provide basic diagnostic tests & treatment



1. Focus on improving coordination of services
2. Consider limiting screening activities to one demonstration project



1. Identify deficits in screening services
2. Devise programme to strengthen screening, focus on regional demonstration projects

THANK YOU

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