Informing breast cancer control priorities in Namibia

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International Agency
for Research on Cancer
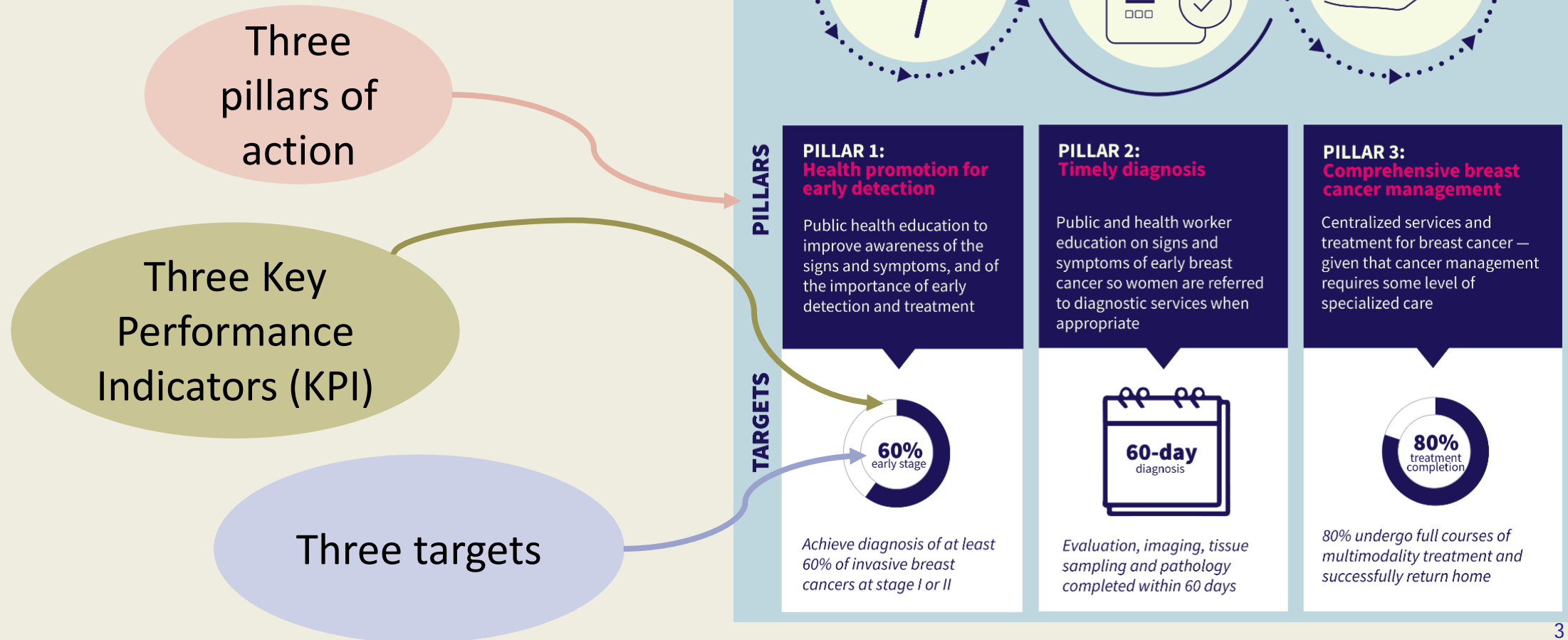
World Health
Organization

Introduction/Background/Motivation - Namibia

- Multiracial country (87% Black African, 6-7% Mixed ancestry and White) with large remaining inequities

- Breast cancer = 1st cancer in women

- Low 5-year survival after a breast cancer diagnosis: mortality/incidence ratio estimated to ~59% despite functional and low-cost diagnosis and treatment services

Introduction/Background/Motivation
 – Global Breast Cancer Initiative (GBCI)

GBCI = Initiative launched in 2021 by the **WHO** which aims to **reduce breast cancer mortality** worldwide

Three pillars of action

Three Key Performance Indicators (KPI)

Three targets

PILLARS

PILLAR 1:
Health promotion for early detection

Public health education to improve awareness of the signs and symptoms, and of the importance of early detection and treatment

PILLAR 2:
Timely diagnosis

Public and health worker education on signs and symptoms of early breast cancer so women are referred to diagnostic services when appropriate

PILLAR 3:
Comprehensive breast cancer management

Centralized services and treatment for breast cancer — given that cancer management requires some level of specialized care

TARGETS

60% early stage

60-day diagnosis

80% treatment completion

Achieve diagnosis of at least 60% of invasive breast cancers at stage I or II

Evaluation, imaging, tissue sampling and pathology completed within 60 days

*80% undergo full courses of multimodality treatment and successfully return home*

Objective

To identify **priority segments of the breast cancer journey** that need strengthening to reduce patient mortality in Namibia, through an assessment of the extent to which **GBCI pillars Key Performance Indicators** targets are met
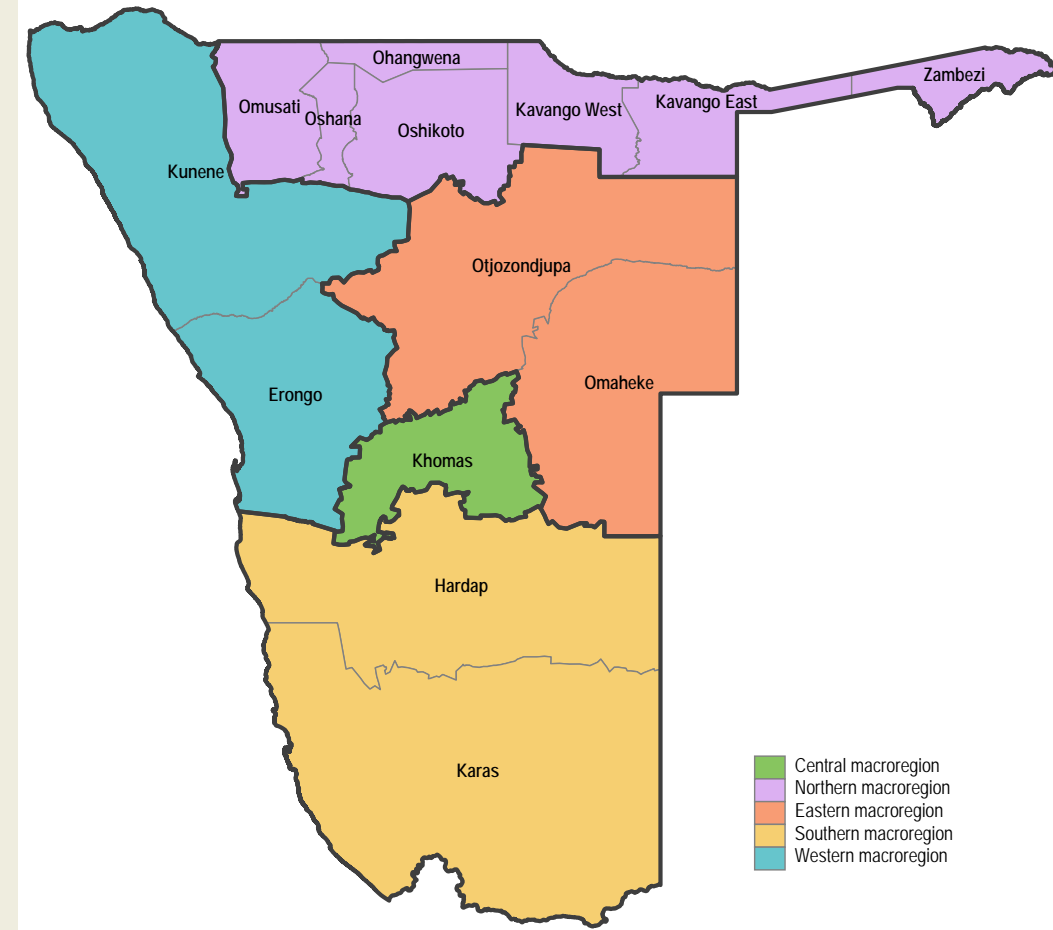
Design

Population:
- Prospective cohort of **405 women** with **incident breast cancer**
- Recruited into **ABC-DO** in Namibia
- Between Sept. 2014 and Oct. 2016
- At presentation to the **main national public oncology centre** to receive treatment
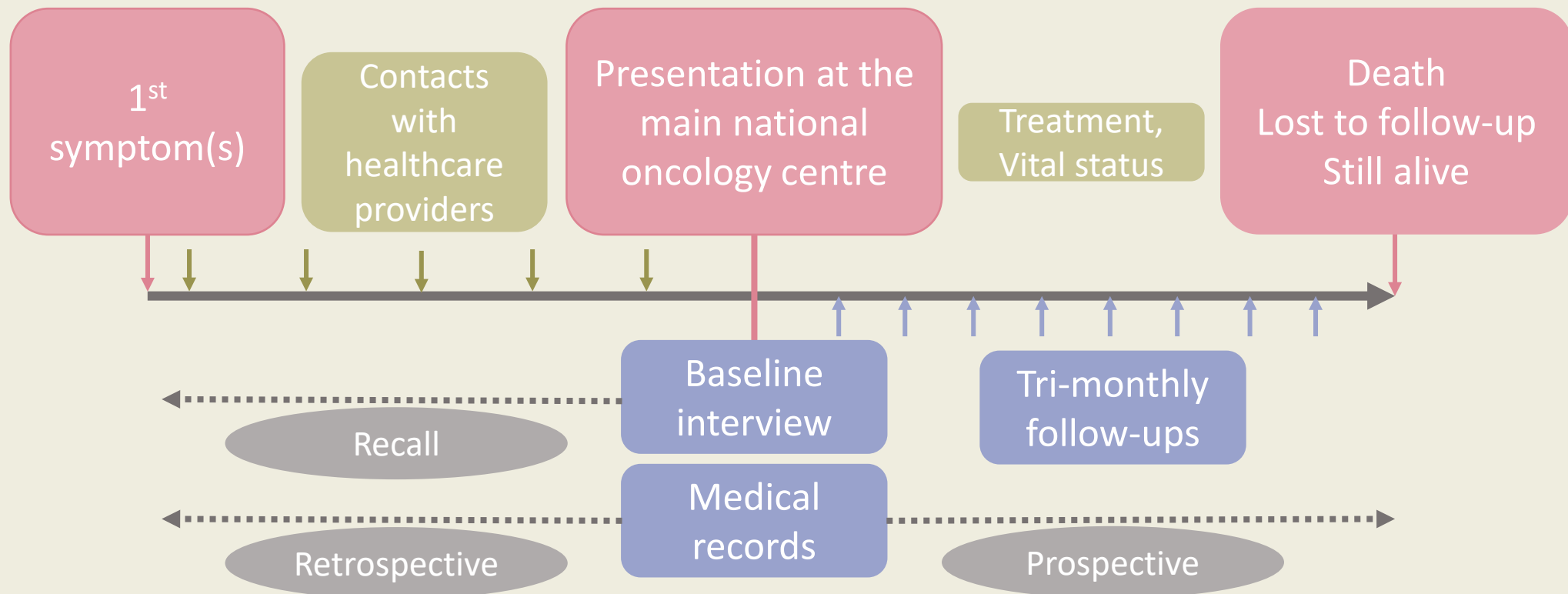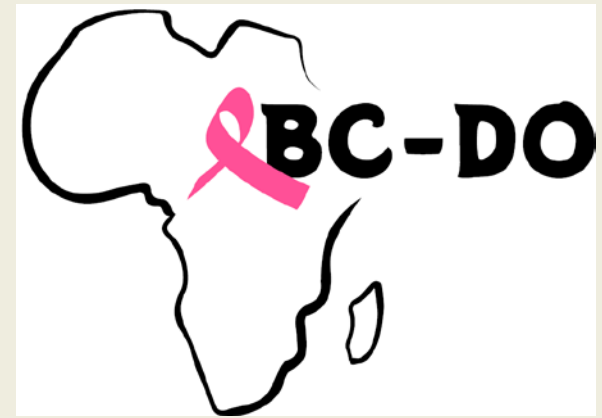
Analysis

- Self-reported ethnicities aggregated into 3 races

- Namibian regions aggregated into 5 macro-regions

- **Cox models** to estimate 3-year overall survival

- **Summary statistics** of GBCI pillars KPIs

- By race and macro-region of residence

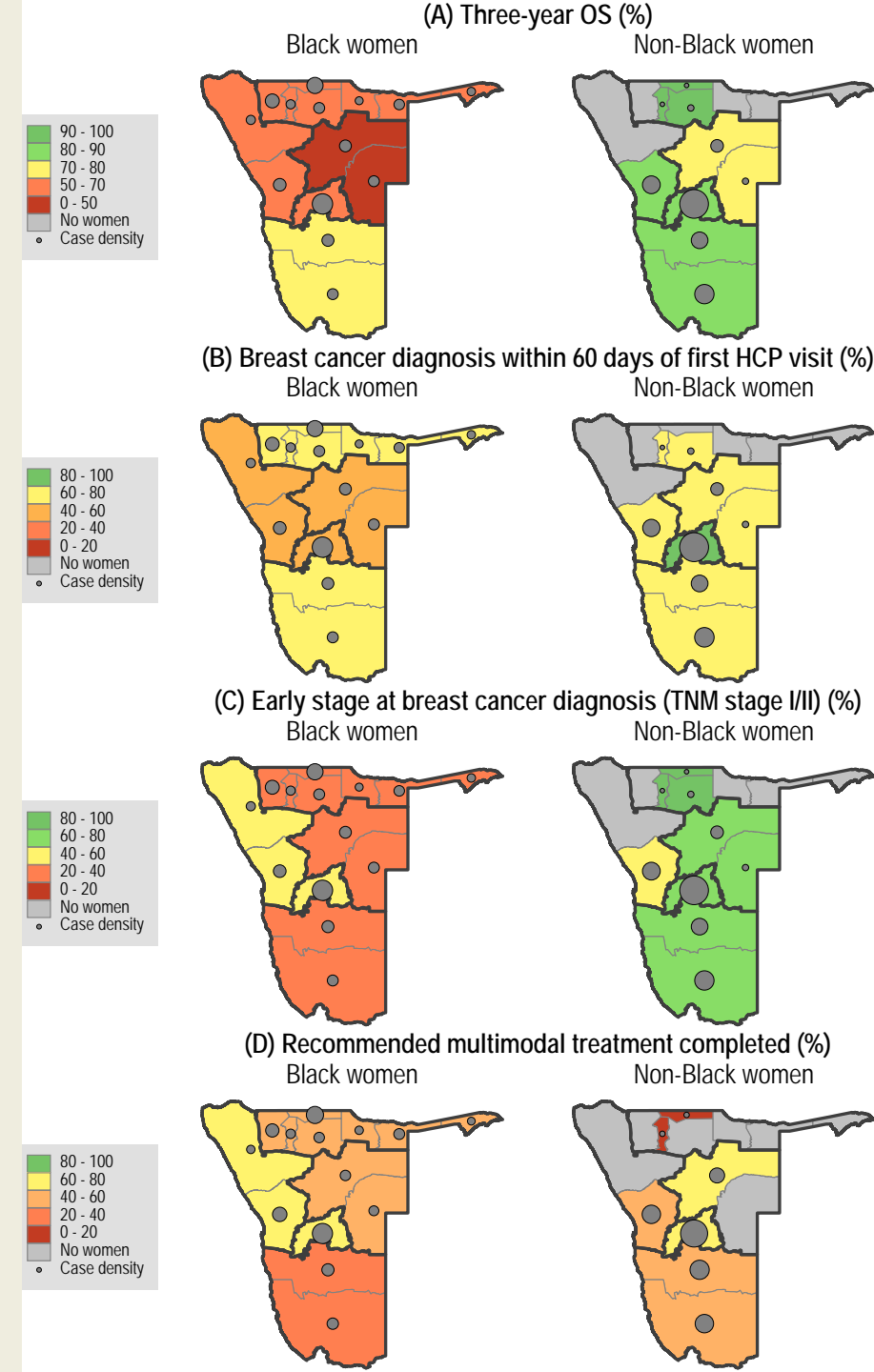Legend:
- Central macroregion
- Northern macroregion
- Eastern macroregion
- Southern macroregion
- Western macroregion

Results

	Black (300)	Mixed ancestry (49)	White (56)
% Three-year overall survival	60	80*	89*
% Early stage at diagnosis target >60%	37	76*	75*
% Diagnosed timely target 100% <60 days	60	71	83*
% Women who completed surgery and chemotherapy target 80%	53	61	62

*: p-value <0.05 in comparison to Black women

➤ **Suboptimal 3-year survival** and **GBCI KPI estimates**

➤ Estimates **lowest in Black women**

➤ **Racial disparities** across regions

(A) Three-year OS (%)

(B) Breast cancer diagnosis within 60 days of first HCP visit (%)

(C) Early stage at breast cancer diagnosis (TNM stage I/II) (%)

(D) Recommended multimodal treatment completed (%)

Discussion and Conclusions

Public health impact of this work:

1. Informs the Namibian MoH and Cancer Association on **key local issues** to strengthen breast cancer control
2. Provides a basis to decide on **priority interventions needed** to improve breast cancer survival at specific weak points in the cancer journey

What next? → Implementation of local **interventions** to address the identified issues:

➢ Targeting both the **community** and **healthcare providers**

➢ **Context-specific** and **accessible** to all women (address illiteracy, multiple languages)

Key take-home messages

1. **Survival** after a breast cancer diagnosis is **suboptimal** in Namibia paralleled by **marked racial inequities** in accessing healthcare

2. **Main priorities** to reduce breast cancer mortality in Namibia are to:

   ➢ Shorten the precontact and diagnostic intervals

   ➢ Strengthen multimodal treatment completion rates

   ➢ Promote earlier diagnosis in Black Namibians