



MINISTRY OF HEALTH MALAYSIA

ROADMAP TOWARDS DOWNSTAGING OF BREAST CANCER IN MALAYSIA 2025-2035

Take The Next Step



MINISTRY OF HEALTH MALAYSIA

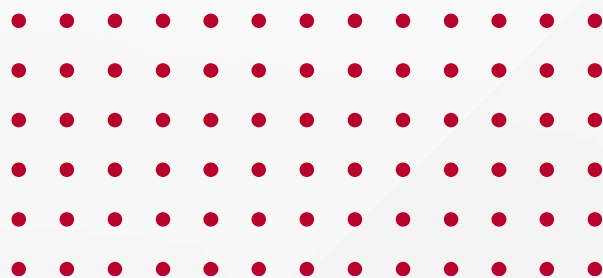
2025

First print 2025

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic, or mechanical methods, without the prior written permission of the Family Health Development Division, except in the case of brief quotations embodied in reviews and certain other non-commercial uses permitted by copyright law.

**Published by:
Family Health Development Division
Ministry of Health Malaysia
Level 7, Block E10, Parcel E
Federal Government Administrative Centre
62590 Putrajaya**

Accessible at <https://fh.moh.gov.my>



FOREWORD

MESSAGE FROM THE MINISTER OF HEALTH MALAYSIA



Breast cancer casts a long shadow over the lives of far too many Malaysian women and their families. As the most common cancer among women in our nation, its impact is profound, not only on individual health but on the very fabric of our communities. For years, we have witnessed an unyielding and heartbreaking trend: over half of the women are diagnosed at late stages, severely limiting their chances of survival and quality of life. This is a challenge we can, and must, overcome.

The Roadmap Towards Downstaging of Breast Cancer in Malaysia 2025–2035 signifies Malaysia's strong and united commitment to this exigent public health issue. It is more than just a policy; it is a pledge to the Malaysian people—vowing to mobilize all resources, overcome obstacles, and innovate at all levels to guarantee every woman equitable access to prompt screening, swift diagnosis, and compassionate, high-quality care.

This Roadmap is built upon five strategic pillars that will guide our mission: enhancing health promotion to empower our communities, strengthening screening and early detection programmes, ensuring timely diagnosis and staging, delivering comprehensive and integrated treatment, and harnessing the power of data and research. Our vision is clear: a nation where no life is limited by breast cancer.

Central to this endeavour is unwavering leadership and collaboration. This Roadmap aligns with the country's commitments under the World Health Organization's Global Breast Cancer Initiative, demonstrating our role on the global stage. However, its success hinges on a whole-of-nation and whole-of-society approach. Through this roadmap, the nation calls upon every healthcare professional, every advocate, every researcher, and every partner in industry to unite in purpose and action—to align their efforts and resources towards this national priority.

Downstaging breast cancer is part of revering this commitment and by applying a stepwise, resource-appropriate approach instituted on strengthening health systems and framed by women's health and gender equity, we can improve the health and well-being of women, families, and communities for generations to come.

YB. DATUK SERI DR. DZULKEFLY AHMAD
MINISTER OF HEALTH MALAYSIA

FOREWORD

MESSAGE FROM THE DIRECTOR GENERAL OF HEALTH MALAYSIA

The Roadmap Towards Downstaging of Breast Cancer in Malaysia 2025–2035 is not an isolated national effort but a structured and deliberate alignment with global public health consensus. It serves as Malaysia’s formal response to the World Health Organization’s (WHO) Global Breast Cancer Initiative (GBCI), a framework designed to reduce worldwide breast cancer mortality by 2.5% per year, thereby averting an estimated 2.5 million deaths globally between 2020 and 2040. The roadmap repeatedly references the key finding that countries with robust health systems have successfully reduced breast cancer mortality by 40% since 1990. This is not merely an aspirational statistic; it is presented as the achievable outcome that this roadmap is engineered to emulate. It demonstrates that significant reductions in mortality are possible with strategic, sustained investment in the very systems and pathways this document seeks to strengthen.



This roadmap represents a covenant for action, setting measurable commitments that extend beyond aspiration to tangible national responsibility. Its success will depend on three critical enablers: sustained political will, protected and strategic investment, and a culture of shared accountability across all stakeholders. The framework establishes Malaysia’s commitment to an integrated approach that brings together primary care, surgical and oncology services, research institutions, and community engagement. It serves as a structured mechanism to drive coordinated implementation, strengthen outcome monitoring, and safeguard equity in access to prevention, diagnosis, and treatment across all populations.

The shift is clear: moving beyond a reactive, treatment-focused approach to a proactive system built on early detection and timely diagnosis. Central to this strategy is the principle of ‘downstaging’—deliberately changing the diagnostic profile of breast cancer from late, complex stages to earlier, more manageable ones. It is in this shift that survival gains are most decisively realised and lives most profoundly safeguarded.

This document is the product of immense dedication from a broad coalition of experts across government ministries, academic institutions, professional bodies, and non-governmental organizations. I extend my deepest gratitude to every contributor who has helped to shape this vital work.

YBHG. DATUK DR. MAHATHAR BIN ABD WAHAB
DIRECTOR GENERAL OF HEALTH MALAYSIA

PREFACE

MESSAGE FROM THE DEPUTY DIRECTOR GENERAL (PUBLIC HEALTH)

The Ministry of Health's **Roadmap Towards Downstaging of Breast Cancer in Malaysia 2025–2035** is a comprehensive strategy towards achieving reduction in breast cancer mortality.

The juncture has arrived for an ambitious, inclusive strategic roadmap to accelerate this goal. This nation has set its path towards this destination, with the development of this roadmap.

In committing to 'leaving no one behind', plans are underway to implement the strategies outlined in ensuring all women receive equitable access to quality screening and care.

This roadmap sets forth five pillars to ensure efficient care encompassing health promotion, screening and early detection, timely breast diagnosis and staging, comprehensive breast cancer management and supportive care as well as data surveillance and research.

In order to navigate through this journey, we must strive to meet these targets; ensure at least 60% of invasive cancers are diagnosed at early stage, diagnostic evaluation of cases are made within 60 days and at least 80% of patients undergo complete multimodality treatment. The success of the impetus to reach these goals depends on political volition, country-led action investments, and global esprit de corps, as well as unceasing and versatile collaboration.

Thus, we are gratified to present this **Roadmap Towards Downstaging of Breast Cancer in Malaysia 2025–2035** to the partners involved in the fracas against breast cancer. Demonstrating exceptional care and positive outcomes for women diagnosed with breast cancer is pivotal in combating fear and stigma of this debilitating cancer.

Thank you.



YBRS. DR. ISMUNI BIN BOHARI
DEPUTY DIRECTOR GENERAL (PUBLIC HEALTH)



LIST OF CONTRIBUTORS

Dato’ Dr. Imi Sairi bin Ab Hadi

Head of Service for Breast and
Endocrine Surgery
Hospital Raja Perempuan Zainab II

Dr. Nik Mazlina binti Mohammad

Head of Service for Family Medicine
Klinik Kesihatan Presint 18

Dr. Zanariah binti Alias

Disciplinary Head for Anatomic Pathology
Hospital Kuala Lumpur

Dr. Fazlina binti Ahmad

Head of Service for Palliative Care
Hospital Sultanah Bahiyah

Professor Dr. Nur Aishah binti Mohd Taib

Consultant Breast and Endocrine Surgeon
University Malaya Medical Centre

Prof. Dr. Nirmala A/P Bhoo Pathy

Epidemiologist
Department of Social and Preventive Medicine
University of Malaya

Dr. Anita Baghawi

Consultant Breast and Endocrine Surgeon
Hospital Putrajaya

Dr. Zahurin bin Ismail

Consultant Radiology
Hospital Putrajaya

Dr. Artini binti Abidin

Consultant Family Medicine Specialist
Klinik Kesihatan Bandar Alor Setar

Dr. Nik Harlina Roza binti Nik Kazim

Consultant Family Medicine Specialist
Klinik Kesihatan Wakaf Bharu, Kota Bharu

Dr. Hamimah binti Saad

Consultant Family Medicine Specialist
Klinik Kesihatan Kuala Lumpur

Dr. Zakiah binti Mohd Said

Consultant Public Health Physician
Adult Health Sector
Family Health Development Division

Dr. Shantini A. Arasaratnam

Consultant Radiologist
Fellow of College of Radiology (CoR)
Academy of Medicine of Malaysia

Dr. Norlen bin Mohamed

Head of Non-Communicable Disease Sector
Disease Control Division, MOH

Professor Datin Paduka Dr. Teo Soo Hwang

Chief Scientific Officer
Cancer Research Malaysia

Dr. Aizuniza binti Abdullah

Consultant Public Health Physician
Prevention and Control of CVD, Diabetes and
Cancer Sector
Disease Control Division

Dr. Norhayati binti Omar

Consultant Pathologist
Hospital Kuala Lumpur

**Associate Professor Dr. Wan Faiziah binti
Wan Abdul Rahman**

Consultant Pathologist and Lecturer
School of Medical Sciences
Universiti Sains Malaysia

Associate Professor Dr. Ho Weang Kee

Statistician and Lecturer
Department of Applied Mathematics
University of Nottingham

LIST OF CONTRIBUTORS

Dr. Eznal Izwadi bin Mohd Mahidin

Clinical Oncologist
Department of Oncology and Radiotherapy
Hospital Kuala Lumpur

Dr. Moharzudi bin Mohamed

Consultant Pathologist (Breast and
Endocrine Pathology Special Interest)
Hospital Queen Elizabeth

Dr. Nurdini binti Jalaluddin

Consultant Pathologist (Breast and
Endocrine Pathology Special Interest)
Hospital Kuala Lumpur

Dr. Noranizah Wagino

Consultant Pathologist (Breast and
Endocrine Pathology Special Interest)
Hospital Pulau Pinang

Dr. Malisalaora binti Mohamed

Consultant Pathologist (Breast and
Endocrine Pathology Special Interest)
Hospital Pulau Pinang

Dr. Mohamad Rafie MD Kaslan

Consultant Pathologist (Breast and
Endocrine Pathology Special Interest)
Hospital Kuala Lumpur

Dr. Subasri Armon

Consultant Pathologist (Molecular Pathology
Special Interest)
Hospital Kuala Lumpur

Dr. Siti Norbayah binti Yusof

Public Health Physician
Head of National Cancer Registry
Institut Kanser Negara

Dr. Wan Mezlina binti Wan Zakaria

Radiologist
Hospital Putrajaya

Dr. Lim Shu Xian

Palliative Medicine Specialist
Hospital Kuala Lumpur

Kol. (Dr) Nurzeti binti Shaik Ahmad

Family Medicine Specialist
Head of Maternal Child Health Unit
Ministry of Defence

Dr. Shazimah binti Abdul Samad

Public Health Physician
Adult Health Sector
Family Health Development Division

**Dr. Tengku Ahmad Damitri Al-Astani bin
Engku Daud@Tengku Din**

Lecturer
Department of Chemical Pathology
School of Medical Sciences
Universiti Sains Malaysia

En. Bazli bin Sapiin

Deputy Director
Medical Radiation Surveillance Division

Dr. Adilah binti A. Bakar

Senior Principal Assistant Director
Surgical Medicine Services Unit
Medical Development Division

Dr. Nor Mashitah binti Jobli

Senior Principal Assistant Director
Surgical Medicine Services Unit
Medical Development Division

Dr. Wan Mohd Shariffuddin bin Zainudin

Senior Principal Assistant Director
Adult Health Sector
Family Health Development Division

Dr. Lee Lih Shin

Medical Officer
Awareness and Breast Cancer Research Unit
(Bestari USM)
Universiti Sains Malaysia

LIST OF CONTRIBUTORS

Dr. Wan Hilya Munira binti Mustapha

Senior Principal Assistant Director
Human Reproductive Division
National Population and Family
Development Board

Dr. Khansa' binti Abd Halim

Medical Officer
National Population and Family
Development Board

Dr. Nur 'Arifah binti Mohd Said

Medical Officer
National Population and Family
Development Board

Dr. Jason Chin Yu Aun

Operations Lead, Medical Officer &
Community Health
National Cancer Society of Malaysia

Dr. Vignesvari A/P Subramaniam

Deputy Director (Medical)
National Cancer Society of Malaysia

Puan Imelda Suhanti binti Ishak

Head of Department (Services)
National Cancer Council (MAKNA)

Mr. Nicholas Yee Liang Hing

Pharmacist
Institute for Clinical Research

Puan Nisha Sanita binti Mohd Norha

Head of Nursing Service
National Cancer Council (MAKNA)

Puan Norazilah binti Mohd Roslan

Health Education Officer
Kuala Langat District Health Office

Puan Aimi Nadiyah binti Mohamad Norzlen

Health Education Officer
Institute for Health Behavioural Research

Puan Nur Baizura binti Januri

Health Education Officer
Health Literacy Development Unit
Family Health Development Division, MOH

Puan Nur Huda binti Basiran

Psychology Officer
Hospital Sultan Idris Shah

Cik Azila binti Azmi

Health Education Officer
Kuala Muda District Health Office

Matron Fauziah binti Mohammad Kasim

Head of Nursing Supervisor
Adult Health Sector
Family Health Development Division

Puan Siti Illianna Amelia Binti Abdul Latif

Health Education Officer
Health Literacy Development Unit
Family Health Development Division

Matron Roziyah binti Ismail

Nursing Supervisor
Adult Health Sector
Family Health Development Division

LIST OF EDITORIAL GROUP



MAIN EDITOR

Dr. Shazimah binti Abdul Samad

Public Health Physician
Adult Health Sector
Family Health Development Division



Dr. Zakiah binti Mohd Said

Consultant Public Health Physician
Adult Health Sector
Family Health Development Division



Puan Fauziah binti Mohammad Kassim

Head of Nursing Supervisor
Adult Health Sector
Family Health Development Division



Puan Roziah binti Ismail

Nursing Supervisor
Adult Health Sector
Family Health Development Division



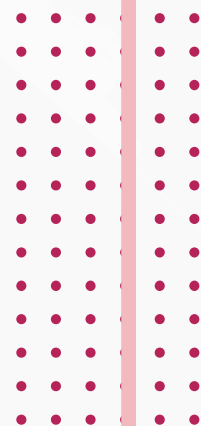
Cik Ainul Hayani binti Rohaizad

Research Officer
Adult Health Sector
Family Health Development Division



Puan Noor Hasliza binti Usup

Administrative Assistant
Adult Health Sector
Family Health Development Division



ACRONYMS AND ABBREVIATIONS

APHM	Association of Private Hospitals, Malaysia
ASCO	American Society of Clinical Oncology
ASR	Age standardized rate
ATM	Malaysian Armed Forces
Academia	The environment or community concerned with the pursuit of research or education
BCWA	Breast Cancer Welfare Association Malaysia
BKD	Digital Health Division, MOH
BKP	Disease Control Division, MOH
BookDoc	Mobile platform that connects patients with healthcare professionals.
BPK	Health Education Division, MOH
BPKA	Public Health Development Division, MOH (Bahagian Perkembangan Kesihatan Awam)
BPKK	Family Health Development Division, MOH
BPL	Training Management Division, MOH (Bahagian Pengurusan Latihan)
BPP	Medical Development Division, MOH
BSM	Human Resource Division, MOH
CBE	Clinical Breast Examination
CDC	Centre For Disease Control
CKAPS	Private Medical Practice Control Section
CRM	Cancer Research Malaysia
Dr	Doctor
ESMO	European Society for Medical Oncology
FELDA	Federal Land Development Authority
FHDD	Family Health Development Division
FM	Broadcasting station

ACRONYMS AND ABBREVIATIONS

FRHAM	Federation of Reproductive Health Associations Malaysia
GBCI	Global Breast Cancer Initiative
HIC	Health Informatic Centre
HICs	High-income countries
HIS	Hospital Information System
HIV	Human Immunodeficiency Virus
HPV	Human papillomavirus
IARC	International Agency for Research on Cancer
IEC	Information Education Communication
IHBS	Institute for Health Behavioural Research, NIH
IHSR	Institute of Health System Research, NIH
IKN	National Cancer Institute
IPTK	Institute of Behavioural Research, NIH
IPTS	Private Higher Educational Institutions (Institusi Pengajian Tinggi Swasta)
JAKIM	Department of Islamic Development Malaysia
JKN	State Health Department
JKKU	Medicine Safety Committee, MOH
JPA	Public Service Department
JPNIN	National Unity and Integration Department (Jabatan Perpaduan dan Integrasi Nasional)
KPI	Key Performance Indicator
KPLB	Ministry of Rural Development
KPWKM	Ministry of Women, Family and Community Development
KanWork	Kanser Network Association

ACRONYMS AND ABBREVIATIONS

LMICs	Low and middle-income countries
LO	Liaison officer
MaHTAS	Malaysian Health Technology Assessment Section, MOH
MAKNA	National Cancer Council of Malaysia
MAMPU	Malaysian Administrative Modernization and Management Planning Unit
MIMOS	Government own company, under Ministry of Science, Technology and Innovation
MKAK	National Public Health Laboratory
MMA	Malaysian Medical Association
MMC	Malaysian Medical Council
MMG	Mammogram
MOE	Ministry of Education
MOH	Ministry of Health
MOHE	Ministry of Higher Education
MSQH	Malaysian Society for Quality in Health
MyChampion	Community Health Agent, comprising community health agents, volunteers, influencers to empower individual, family and community to embrace healthy lifestyle
MyHDW	Malaysia Health Datawarehouse
NCD	Non communicable disease
NCR	National Cancer Registry
NCSM	National Cancer Registry
NGO	Non-governmental organization
NIH	National Institute of Health
NIP	National Immunisation Programme
NPFDB	National Population and Family Development Board

ACRONYMS AND ABBREVIATIONS

NPRA	National Pharmaceutical regulatory Agency
NSPCCP	National Strategic Plan for Cancer Control Programme
PIK	Health Informatics Centre
PKD	District Health Office
PRIS	Patient Registry Information System
Puspanita	Wives of officers and female civil servant association Malaysia (Persatuan Suri dan Anggota Wanita Perkhidmatan Awam Malaysia)
REBUNG	Reducing Barriers in Cancer Early Diagnosis in The Urban B40 Group. A research project by multi stakeholders spearheaded by University Malaya to find a pathway for the diagnosis of cancer within a reasonable and safe timeframe.
SOCSSO	Social Security Organization
SOP	Standard Operating Procedure
STD	Sexually transmitted disease
TPC-OHCIS	Sexually transmitted disease
WHO	World Health Organization

THE ROADMAP AT A GLANCE

ROADMAP TOWARDS DOWNSTAGING OF BREAST CANCER IN MALAYSIA 2025-2035

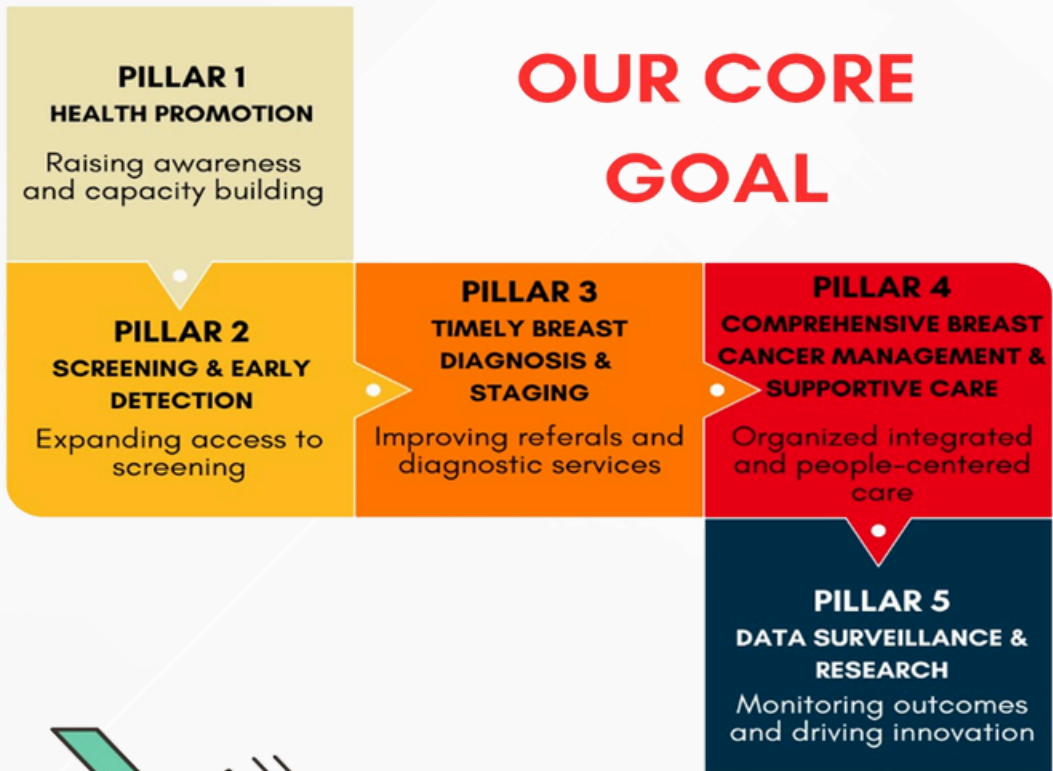
Take The Next Step



OUR VISION

A nation where every person has access to early detection, appropriate treatment, compassionate care, ensuring that no life is limited by breast cancer.

OUR CORE GOAL



ULTIMATE OUTCOME
Reduced overall breast cancer mortality
By 2035



TABLE OF CONTENTS

Foreword: Message From The Director General of Health Malaysia	iii
Foreword: Message From The Director General of Health Malaysia	iv
Preface: Message from The Deputy Director General (Public Health)	v
List of Contributors	vi – viii
Editorial Group	ix
Acronyms and Abbreviations	x – xiii
The Roadmap At A Glance	xiv
Introduction	1
International Mandates Supporting Breast Cancer Control Programme	1 – 2
Breast Cancer Screening	2 – 3
Visions, Goals and Objectives	4
Pillars For Action	5
Pillar 1: Health Promotion	6
Initiative 1.1: Strengthen A Culturally and Linguistically Appropriate Breast Cancer Promotion Strategies In The Community	6
Initiative 1.2: Equipping Healthcare Professional and Allied Health In Enhancing Breast cancer Awareness	7
Initiative 1.3: Upgrading Health Seeking Behaviour Among Communities to Ensure Timely Screening	7
Pillar 2: Screening and Early Detection	8
Initiative 2.1: Strengthen Screening Programme And Adherence to Screening	8
Initiative 2.2: Strengthening Referral Pathway Nationwide	8

TABLE OF CONTENTS

Pillar 3: Timely Breast Diagnosis And Staging

9

Initiative 3.1: Improving Access to Breast Care by Addressing The Existing Barriers

9

Initiative 3.2: Establish an Integrated and Comprehensive Diagnostic Network

10

Initiative 3.3: Intensify Multidisciplinary Team Effort in Assuring Early Diagnosis of Breast Cancer

10

Initiative 3.4: Timely Breast Cancer Staging

10

Pillar 4: Comprehensive Breast Cancer Management And Patients' Supportive care

11

Initiative 4.1: Safeguard Access To Quality and Effective Treatment

11

Initiative 4.2: Establish An Integrated and Comprehensive Treatment Centre

12

Initiative 4.3: Establish A Coordinated Care Throughout The Continuum In Ensuring Optimum Survivorship

13

Pillar 5: Data Surveillance and Research

14

Initiative 5.1: Strengthening Surveillance for Effective Monitoring and Evaluation

14

Initiative 5.2: Fostering Strategic Partnerships to Advance Breast Cancer Research and Outcomes

14

Annex: Roadmap Matrix

15 - 46

References

47 - 48

INTRODUCTION

Breast cancer is the most prevalent cancer among women globally, including in Malaysia, and is the leading cause of cancer deaths, particularly in low- and middle-income countries (LMICs) (Bray et al., 2024) where over 70% of deaths occur in women under 70 years old. Countries with strong health systems have successfully reduced breast cancer mortality by 40% since 1990 through strategic investments in health promotion, early detection, timely diagnosis, and comprehensive management (World Health Organization, 2023). The WHO's Global Breast Cancer Initiative Framework provides a roadmap for implementable strategies to reduce mortality over 20 years.



In Malaysia, breast cancer accounts for 17.6% of all cancers (Ministry of Health, 2024). The age-standardized incidence rate (ASR) increased from 34.1 per 100,000 population (2012–2016) to 38.9 per 100,000 populations (2017–2021) (Ministry of Health, 2024). Incidence peaks at ages 60–64, but Malaysian women are diagnosed at an earlier age, with 20% diagnosed before age 50, compared to 20% in Western countries (Bhoo Pathy et al., 2011). Breast cancer incidence is highest among Chinese (40.7 per 100,000), followed by Indians (38.1 per 100,000) and Malays (31.5 per 100,000). Over half of cases (50.5%) are detected at late stages (III & IV), an increase from 48% in 2012–2016. Delayed presentation is influenced by structural inadequacies, sociocultural barriers (e.g., belief in traditional medicine, negative perception of the disease), personal beliefs (fear, denial), and financial hindrance (Agarwal, Pradeep, Aggarwal, Yip, & Cheung, 2007). The overall 5-year relative survival in Malaysia is 66.8%, lower than developed countries where it reaches 90% (National Cancer Registry, 2018).

INTERNATIONAL MANDATES SUPPORTING BREAST CANCER CONTROL PROGRAMME

To address the growing breast cancer burden globally, at the 58th World Health Assembly, WHO passed a landmark resolution, on cancer prevention and control; WHO Cancer Resolution in 2005. This resolution urged member states to develop and reinforce comprehensive cancer control programmes in recognizing that cancers can be prevented or detected early in their development, treated and cured; and all countries should design and implement effective cancer control plans that enable a balanced, efficient and equitable use of resources (Union For International Cancer Control (UICC), 2017).

In 2015, United Nations Member States adopted the 2030 Agenda for Sustainable Development. Ensuring healthy lives and promoting well-being at all ages became the member states' goal. Achieving targets for premature mortality reduction from noncommunicable diseases (NCDs) (target 3.4) as well as ensuring access to quality essential health care services (target 3.8) support a comprehensive cancer control programme.

At the 70th World Health Assembly, an update of the 2017 Cancer Resolution, WHO Cancer Resolution focussed on cost-effective interventions, equity and access including timely access to medicines, vaccines and medical devices. Emphasis was placed on accurate data monitoring and reporting.

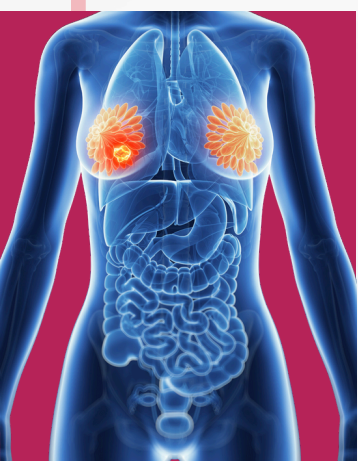
BREAST CANCER SCREENING

Breast cancer screening significantly reduces mortality rates and has proven cost-effective (Zielonke et al., 2019). In resource-limited countries, advanced stages are often diagnosed due to inefficient implementation of early detection, diagnosis, and treatment. Breast self-examination (BSE) and clinical breast examination (CBE) have been considered strategies for population-level screening. However, randomized studies have not supported BSE as an effective early detection method due to its low sensitivity (20–30%) and lack of association with reduced mortality (da Costa Vieira, Biller, Uemura, Ruiz, & Curado, 2017; Lam et al., 2018). There are organizations, like the Canadian Task Force on Preventive Health Care (CTFPH) and the American College of Obstetricians and Gynaecologists (ACOG), recommend against routine BSE teaching due to a lack of benefit and potential harm from false positives (American College of Obstetricians and Gynecologists, 2017; Baxter & Canadian Task Force on Preventive Health, 2001). International Agency for Research in Cancer (IARC) and World Health Organisation (WHO) have advised that countries to not propose screening through formal BSE but rather to focus on promoting breast cancer awareness as to encourage women to be aware of their normal breasts and recognize changes (International Agency for Research on Cancer Prevention (IARC), 2021).



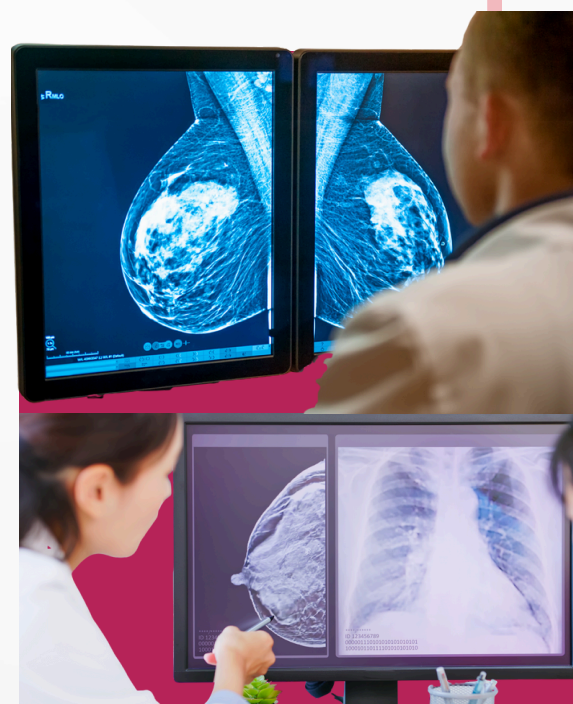
While CBE is used for symptomatic women, data on its effectiveness for screening asymptomatic women, alone or with mammography, is scarce. The American Cancer Society (ACS) recommends against CBE for average-risk women due to lack of established benefit and potential for false positives (Oeffinger et al., 2015). Conversely, a trial in India showed biennial CBE significantly downstaged breast cancer and reduced mortality in women aged 50 and above (Mittra et al., 2021). The US Preventive Services Task Force (USPSTF) and CTFPHC also do not recommend CBE for screening due to insufficient evidence. The WHO suggests CBE as a low-cost option in low-resource settings, but more evidence is needed (World Health Organization, 2014).

Mammography has a sensitivity of 63–95% in detecting abnormalities, though 10–30% of cancers may be missed due to various factors (Galukande & Kiguli-Malwadde, 2010). It should be combined with regular BSE and/or CBE and breast ultrasound in symptomatic women (Berg et al., 2004). Organized mammography screening is considered the best secondary prevention for the population, reducing breast cancer mortality by 20–30% in randomized controlled trials, and 38–49% in population-based screening programmes (da Costa Vieira et al., 2017; Lam et al., 2018; Sitt, Lui, Sinn, & Fong, 2018). Most guidelines recommend biennial mammography for average-risk women aged 50–74. However, WHO and CTFPHC suggest shared decision-making for women aged 50–69, as screening benefits are conditional on individual values and preferences (Qaseem, Lin, Mustafa, Horwitch, & Wilt, 2019). For women aged 70–75, WHO recommends screening only in the context of rigorous research and shared decision-making (World Health Organization, 2014). Disadvantages of mammography include false positives/negatives, overdiagnosis, overtreatment, and potential complications. Overdiagnosis is higher in women aged 40–49 (Barbeau, Stevens, & Beck, 2017; Myers et al., 2015; Nelson et al., 2016).



Enhanced surveillance with mammography is proposed for high-risk women, but its sensitivity is lower in younger women and those with genetic predispositions. MRI is recommended as an adjunct for high-risk women, particularly BRCA1/2 mutation carriers, due to its higher sensitivity (Cortesi et al., 2006; Gui et al., 2006; Kerlikowske et al., 2000; Lam et al., 2018; Maurice et al., 2006). No guidelines recommend MRI or ultrasonography as first-line screening for asymptomatic, average-risk women, as they lack evidence of impact on outcomes and require significant resources. Digital breast tomosynthesis (DBT) appears to reduce recall rates and increase cancer detection compared to conventional mammography (Melnikow et al., 2016).

In Malaysia, the Ministry of Health proposes offering CBE to women aged 30 and above, and mammography screening to women at elevated risk, as systematic screening for all women is not justified or resourced. Elevated risk factors include inherited genetic factors (BRCA1, BRCA2, and 9 other genes), strong family history, personal history of atypia/hyperplasia at previous biopsy, high mammographic density, history of chest irradiation at a young age, and a combination of at least two lifestyle/reproductive risk factors (nulliparity, menarche before 12, menopause after 55, hormone replacement therapy, BMI \geq 27.5). Regular screening for high-risk individuals should be made more accessible, ideally through public-private collaborations and in primary care settings. Risk assessment, though requiring validation for the Malaysian population, is crucial to identify women who may benefit from genetic counselling, enhanced screening (e.g., MRI), more frequent CBEs, or risk-reduction strategies.



VISION, GOALS AND OBJECTIVES

VISION

A nation where every person has access to early detection, appropriate treatment, compassionate care, ensuring that no life is limited by breast cancer.

OBJECTIVES

To reduce breast cancer mortality in Malaysia by improving early detection, timely diagnosis, access to quality treatment through:



Ensuring that at least 60% of breast cancer cases are diagnosed at Stage I or II at diagnosis



Safeguard that diagnostic evaluation are conducted within 60 days of initial presentation



Assuring that at least 80% of patients undergo multimodality treatment



PILLARS FOR ACTION

There are five (5) pillars established to ensure that Malaysian have the best outcomes and experiences of cancer care:

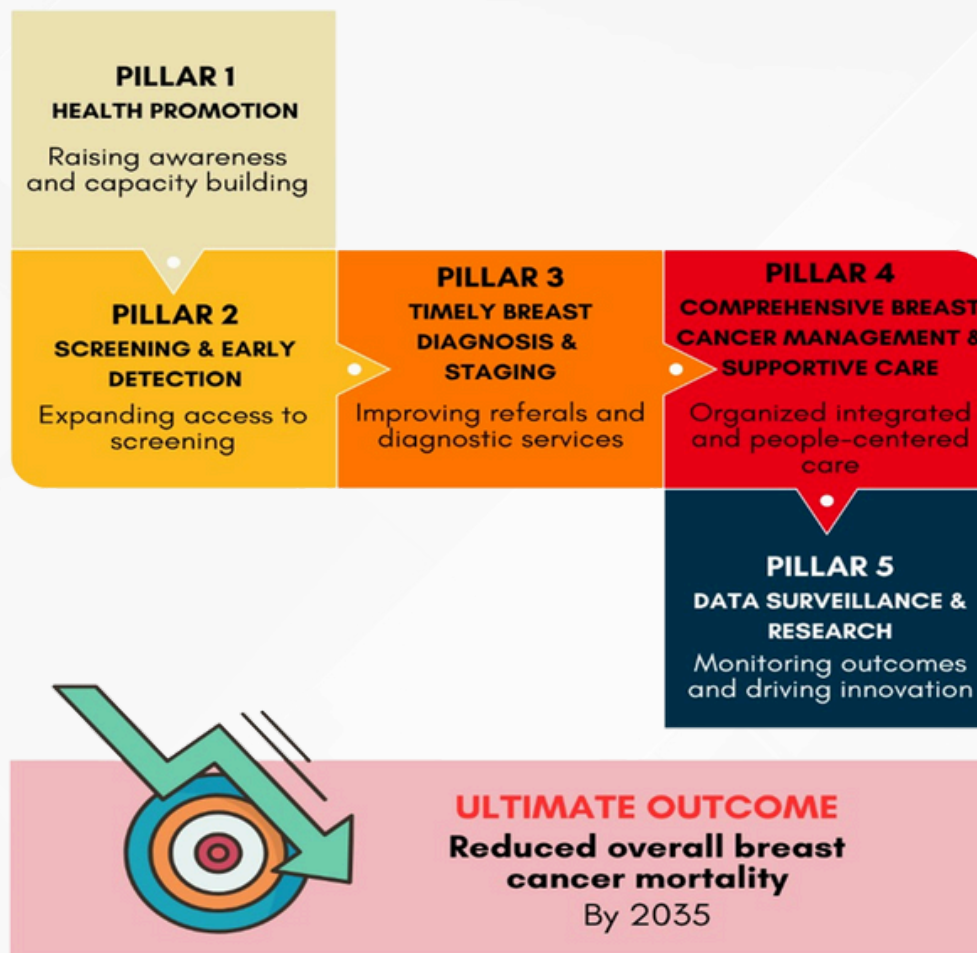


Figure 1: The pillars for action towards downstaging of breast cancer

All countries should aim to implement a national cancer control programme within a comprehensive, systemic framework. This is a proficient strategy to effectively reduce the cancer incidence and mortality, improve survival and quality of life, and reduce cancer risk factors by efficient use of resources.

1 HEALTH PROMOTION

There are three main components for health promotion: To empower the community with knowledge about breast cancer prevention, early detection, and the importance of seeking timely care, by fostering culturally appropriate awareness and enhancing health-seeking behaviours.

Initiative 1.1: Strengthen A Culturally and Linguistically Appropriate Breast Cancer Promotion Strategies In The Community

01 Establish taskforce at national and state levels involving government and non- government sectors.

01

02 Conduct pre-impact evaluation for health promotion strategies.

02

03 Develop strategies and activities for health awareness and promotion.

03

**Initiative 1.2:
Equipping Healthcare Professional and Allied Health In
Enhancing Breast cancer Awareness**



**Initiative 1.2:
Equipping Healthcare Professional and Allied Health In
Enhancing Breast cancer Awareness**

- 1** Addressing the social determinants of health (SDH) towards breast cancer screening
- 2** Mapping of available centres for breast cancer screening
- 3** Mapping of available support services for breast cancer in Malaysia
- 4** Sentiment analysis on breast cancer media campaign following health promotion strategies

2 SCREENING AND EARLY DETECTION

To establish and strengthen effective screening programmes across Malaysia, focusing on risk stratification and improving adherence, to ensure that breast cancer is detected at its earliest, most treatable stages.

Initiative 2.1: Strengthen Screening Programme And Adherence to Screening



To establish and strengthen effective screening programmes across Malaysia, focusing on risk stratification and improving adherence, to ensure that breast cancer is detected at its earliest, most treatable stages.



Improving adherence to SOP for screening programme – prioritizing monitoring and evaluation



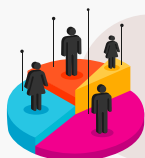
Regular audit of the CBE and mammogram screening programme



Implement targeted mammography screening for high-risk population



Ensure adequate human resources (gender sensitive)



Develop a population-based call-recall system for mammography to ensure adherence to repeat screening every 1-3 years (based on cancer screening registry)

Initiative 2.2: Strengthening Referral Pathway Nationwide



Adopt Patient Navigation Programme (PNP)



Improving access for patients referred from private/NGO facilities

3 TIMELY BREAST DIAGNOSIS AND STAGING

To ensure rapid and accurate diagnosis and staging of breast cancer through integrated networks, enhanced access to care, and intensified multidisciplinary collaboration, minimizing delays and improving treatment planning.

Initiative 3.1: Improving Access to Breast Care by Addressing the Existing Barriers

Mapping and clustering of diagnostic centres and health clinics.

Increase training opportunities.

Establish a National Breast Pathology Quality Assurance Programme to enhance quality and competency in breast cancer diagnosis.

Strengthen the audit of image quality and radiology reporting

Enrollment of EQA programme for Breast Pathology to enhance quality and competency in breast cancer diagnosis for all breast diagnostic centres







Provision of affordable diagnostic care (MOH, MOHE, MINDEF) through:

Pooled procurement of diagnostic tests among public health facilities - pathology IHC, molecular testing (genetic testing), eg. in-situ hybridisation (ISH), BRCA, PDL-1 utilizing reference pricing to ensure health products are procured at or below a pre-defined price point

Pooled procurement for imaging and biopsy systems

Community patient navigation to address informational, socio-cultural, behavioural, financial and transport barriers to breast cancer diagnosis

Initiative 3.2: Establish an Integrated and Comprehensive Diagnostic Network

-  Provide timely optimal care pathway charter for breast cancer diagnosis for CBE or mammogram screened detected abnormalities including symptomatic patients from primary care to diagnostic facility.
-  Designate a complete multidisciplinary team at each breast cancer diagnostic centres (comprising general surgical/ breast and endocrine specialist, radiology and anatomical pathology +/- digital pathology support).
-  Provide hospital navigators and adequate space for a breast cancer resource centre to coordinate diagnostic and treatment of breast cancer in the designated diagnostic centres.
-  Provide equipped optimal imaging and pathology services; manpower and infrastructures in the designated breast cancer diagnostic centre.
-  Provide diagnostic evaluation (imaging, tissue sampling and pathology reporting) within 60 days from initial presentation tracked using MySejahtera.
-  Conduct Continuous Medical Education through virtual meetings

Initiative 3.3: Intensify Multidisciplinary Team Effort in Assuring Early Diagnosis of Breast Cancer

Implement regular inter and intrahospital multidisciplinary team meetings for diagnosis of breast cancer

Conduct a multidisciplinary team meeting for all breast diagnostic and treatment of newly diagnosed breast cancer

Initiative 3.4: Timely Breast Cancer Staging



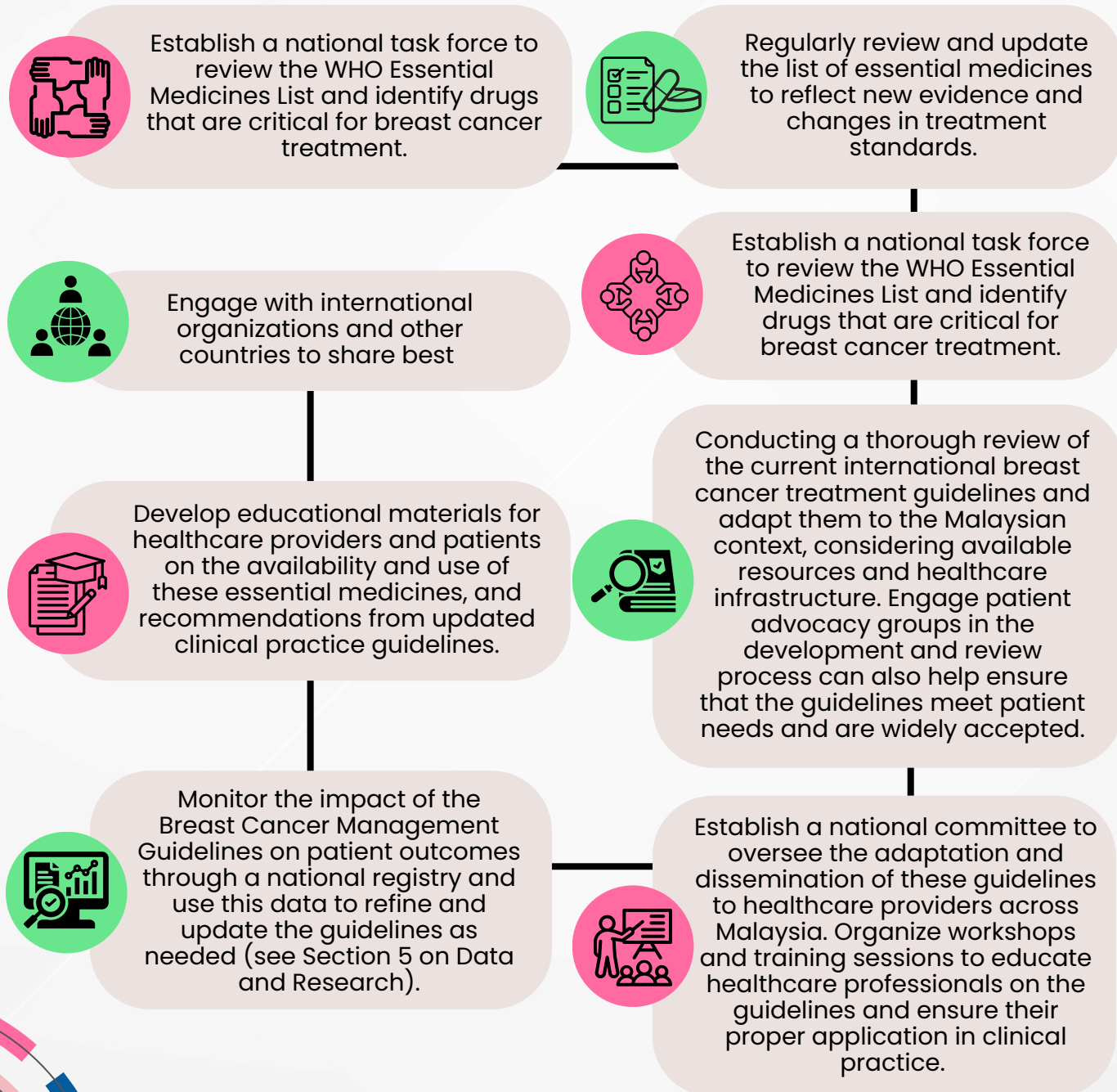
Perform timely staging for locally advanced and advanced breast cancer.

4

COMPREHENSIVE BREAST CANCER MANAGEMENT AND PATIENTS' SUPPORTIVE CARE

To ensure all breast cancer patients receive high-quality, evidence-based treatment and holistic supportive care throughout their journey, from diagnosis to survivorship, fostering well-being and minimizing treatment abandonment.

Initiative 4.1: Safeguard Access To Quality and Effective Treatment



Initiative 4.2: Establish An Integrated and Comprehensive Treatment Centre



Establish at least 5 new comprehensive treatment centres in areas of need (such as Northern, Southern, East coast, Sabah and Sarawak).



Upgrade existing centres, particularly in Klang Valley to handle anticipated increase in urban population (projected >10m by 2030).



Ensure sufficient specialists to support comprehensive treatment (including surgeons, oncologists, pathologists, breast radiologists, palliative medicine physicians, nuclear medicine specialists, geneticists, clinical psychologists).



Incorporate essential allied health professionals (such as genetic counselors, breast care nurses, oncologist nurses, palliative nurses, lymphoedema therapists, patient navigators, spiritual care providers) in the Allied Health Register, to create posts in MOH and ensure sufficient posts.



In each cancer treatment centre, establish a core multidisciplinary team (MDT) that includes specialists from surgical, medical, radiation oncology, pathology, radiology, palliative care, nuclear medicine and nursing to discuss patient cases and treatment plans for a cohesive and personalized approach to care.



Develop a secure digital platform for sharing patient information and treatment updates.



Establish training programmes for team members on the latest breast cancer management protocols to maintain high standards of care.



Progressively involve patients in the decision-making process to ensure that treatment plans align with their values and preferences, using patient decision aids for screening and treatment of breast cancers.



Integrate genetic counselling in the training or syllabus for undergraduate and postgraduates (e.g., family medicine specialist, surgical, oncology training programme).

**Initiative 4.3:
Establish A Coordinated Care Throughout The Continuum In
Ensuring Optimum Survivorship**

1

Implement a patient navigation programme to guide patients through the complex healthcare system, ensuring a timely and coordinated care.

2

Evaluate the effectiveness of the supportive care and patient navigation programmes through patient satisfaction surveys and outcome measures, and tailor the programmes based on feedback and results.

3

Integrate supportive and palliative care in the training or syllabus for undergraduate and postgraduate (e.g., family medicine specialist, surgical, oncology training programme).

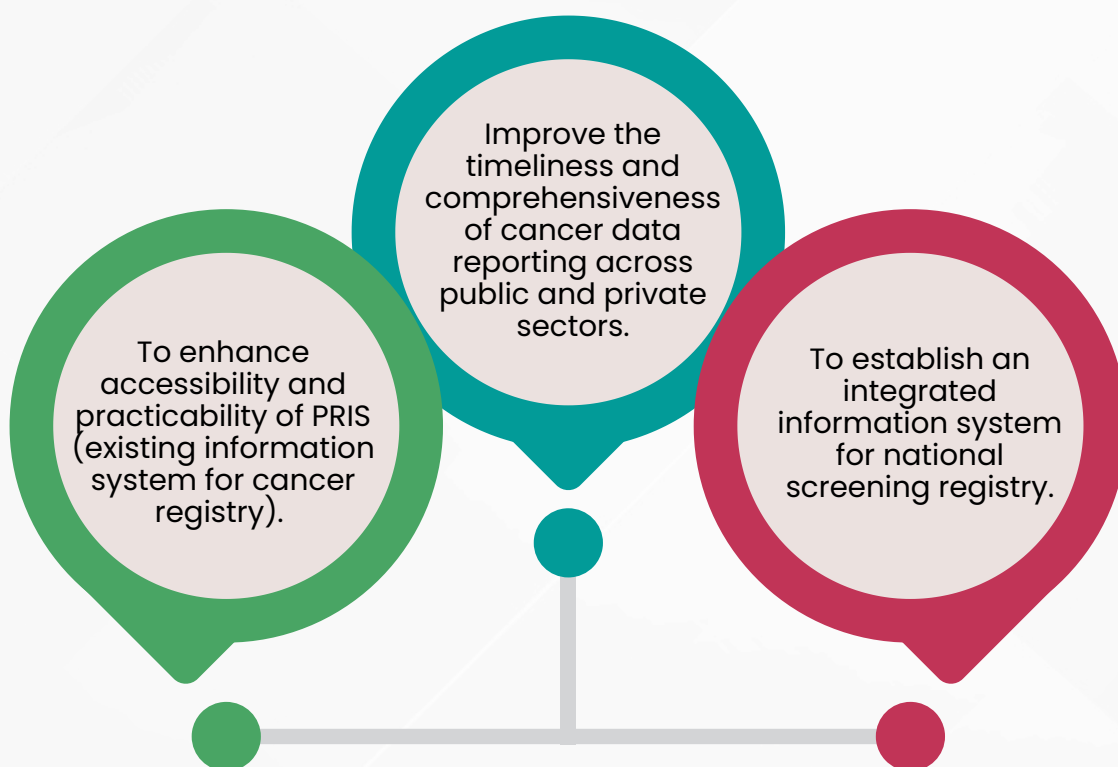
4

Establish supportive care services, including psychosocial and spiritual care support services and symptom management.

5 DATA SURVEILLANCE AND RESEARCH

To build a robust system for collecting, analyzing, and utilizing breast cancer data to monitor program effectiveness, inform evidence-based policies, and drive research and innovation.

Initiative 5.1: Strengthening Surveillance for Effective Monitoring and Evaluation



Initiative 5.2: Fostering Strategic Partnerships to Advance Breast Cancer Research and Outcomes



Enhancing research and innovation for breast cancer through strategic prioritisation and partnerships.

ANNEX: ROADMAP MATRIX

ROADMAP MATRIX TOWARDS DOWNSTAGING OF BREAST CANCER IN MALAYSIA 2025–2035

PILLAR 1: HEALTH PROMOTION**Initiative 1.1: Strengthen a culturally and linguistically appropriate breast cancer promotion strategies in the community**

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
1.1.1	Establish taskforce at national and state levels involving government and non-government sectors	i. Establish a National Health Promotion Taskforce comprising Breast Cancer Division from MOH and behavioural scientists ii. Establish a State Health Promotion Taskforce comprising Breast Cancer Division from State Health Department and behavioural scientists in the respective states	i. Engagement with government agencies to involve volunteers / <i>panel penasihat klinik kesihatan/ local leaders</i> ii. Develop MOU with business' owners to facilitate breast cancer awareness in the community	Form engagement with shopping malls & private-owned company	Continue engagement	Continue engagement	Continue engagement	Promotion and Advocacy Committee: - BPKK, MOH - BPP, MOH - BKP, MOH - NPFDB - IPTK, NIH - MAKNA - NCSM - BCWA - Pink Ribbon Foundation - KanWork - ProtectHealth Corp - SOCSO - Private HealthCare
1.1.2	Conduct pre-impact evaluation for health promotion strategies	i. Preparation of proposal ii. Budget defence iii. Run a pre-evaluation impact paper	-	-	-	-	-	- IPTK, NIH - BPKK
1.1.3	Develop strategies and activities for health awareness and promotion.	A) Media i. Develop or modify landing page and website for MyHealth portal (health promotion materials). ii. Compilation of breast cancer material amongst agencies ("Know Your Lemons")	A) Media Dissemination of Health Materials via various media	A) Media Dissemination of Health Materials via various media	A) Media Dissemination of Health Materials via various media	A) Media Dissemination of Health Materials via various media	A) Media Dissemination of Health Materials via various media	• Promotion and Advocacy Committee: - BPKK, MOH - BPP, MOH - BKP, MOH - BPK, MOH - NPFDB - IPTK, NIH - MAKNA - NCSM - BCWA - Pink Ribbon Foundation

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p>iii. Amendment of the current breast cancer materials.</p> <ul style="list-style-type: none"> - e.g. self-breast examination (SBE) video <p>B) Education</p> <p>Mapping of schools by location for SBE education & breast cancer awareness.</p> <p>C) Family/Community</p> <p>i. Mapping of state government to tag together for “Family against Breast Cancer” = Men screening, Women screening, Children vaccinate. [Tag with Influencer as well artists' performances]</p> <p>Frequency: Once/month</p> <p>Deliverables: 1 per each state / month</p> <p>ii. Mapping of breast cancer awareness 5-minute via KRT/Resident Association (RA)/FELDA/JKKK</p> <p>Frequency: Once/quarterly</p>	<p>B) Education</p> <p>To include SBE in secondary school syllabus via video playback during Pink October. [By 5 Regions]</p> <p>C) Family/Community</p> <p>i. Roll out to state governments [By 5 Regions]</p> <p>ii. Roll out to KRT/RA/FELDA/JKKK [By 5 Regions]</p> <p>D) Religion</p> <p>Roll out to state governments [By 5 Regions]</p> <p>E) Arts & Entertainment</p> <p>KOL 8 FB/Insta/TikTok/year</p>	<p>B) Education</p> <p>To include SBE in secondary school syllabus via video playback during Pink October. [Next Region]</p> <p>C) Family/Community</p> <p>i. Roll out to state governments [Next region]</p> <p>ii. Roll out to KRT/RA/FELDA/JKKK [Next Region]</p> <p>D) Religion</p> <p>Roll out to state governments [Next Region]</p> <p>E) Arts & Entertainment</p> <p>KOL 8 FB/Insta/TikTok/year</p>	<p>B) Education</p> <p>To include SBE in secondary school syllabus via video playback during Pink October. [Next Region]</p> <p>C) Family/Community</p> <p>i. Roll out to state governments [Next region]</p> <p>ii. Roll out to KRT/RA/FELDA/JKKK [Next Region]</p> <p>D) Religion</p> <p>Roll out to state governments [Next Region]</p> <p>E) Arts & Entertainment</p> <p>KOL 8 FB/Insta/TikTok/year</p>	<p>B) Education</p> <p>To include SBE in secondary school syllabus via video playback during Pink October. [Next Region]</p> <p>C) Family/Community</p> <p>i. Roll out to state governments [Next region]</p> <p>ii. Roll out to KRT/RA/FELDA/JKKK [Next Region]</p> <p>D) Religion</p> <p>Roll out to state governments [Next Region]</p> <p>E) Arts & Entertainment</p> <p>KOL 8 FB/ Insta/TikTok/ year</p> <p>Begin Post-Health Campaign Evaluation</p>	<p>B) Education</p> <p>To include SBE in secondary school syllabus via video playback during Pink October. [Next Region]</p> <p>C) Family/Community</p> <p>i. Roll out to state governments [Next region]</p> <p>ii. Roll out to KRT/RA/FELDA/JKKK [Next Region]</p> <p>D) Religion</p> <p>Roll out to state governments [Next Region]</p> <p>E) Arts & Entertainment</p> <p>KOL 8 FB/ Insta/TikTok/ year</p> <p>Report on Health Promotion Campaign</p>	<ul style="list-style-type: none"> - KanWork - ProtectHealth Corp - SOCSO - Private HealthCare - REBUNG • JPNIN • FELDA • KPLB • Muslim, Hindu, Buddhist, Sikh, Christian Organizations • Persatuan Seniman • Influencer • Politicians • Puspanita • MyChampion

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p>D) Religion</p> <p>Mapping of breast cancer awareness 5-minute via religious teachers.</p> <ul style="list-style-type: none"> - Muslim, Hindu, Sikh, Buddhist, Christian organizations <p>Frequency: Once/quarterly</p> <p>E) Arts & Entertainment</p> <p>Encourage influencer/Key Opinion Leader (KOL) to do FB Vid/Insta Reel / Tik Tok about breast cancer in 4 languages (subtitles Bahasa Sabah & Sarawak):</p> <ul style="list-style-type: none"> - English - BM - Tamil - Chinese <p>Frequency: Quarterly</p> <ul style="list-style-type: none"> - Q1: International Women's Day + CNY + WCD - Q2: Mother's Day - Q3: "Raya Tanpa Ibu" - Q4: Pink October + Deepavali <p>Deliverables: 8 FB Video/Insta Reels/Tik Tok / year</p>	<p>F) Business</p> <p>Malls and Private-owned Companies - Collaborate with them to:</p> <p>a) QR Code Pillar = To scan to get video for SBE.</p> <p>b) VR Code Pillar (More expensive for more established companies) = To see a virtual demonstration of SBE.</p> <p>G) Government</p> <p>Traffic Lights, Roads etc. = 1 month before Pink October</p>	<p>F) Business</p> <p>1. Deodorant, Hair products, Dental Toiletries [Men's Care]- Collaborate with them to:</p> <p>"Have you brought the women in your life for breast cancer screening? - Breast Cancer commonest in Malaysia, 1 in 27]"</p>				

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p><u>F) Business</u></p> <p>i. Brassiere Company - Collaborate with them to:</p> <p>a) Put a message with every bra purchase "Have you done SBE"?</p> <p>b) Put QR Code about SBE on each bra produced.</p> <p><u>G) Government</u></p> <p>i. Local Municipal Councils (e.g. MPSJ, MBPJ)</p> <p>ii. Transport Companies (e.g. Prasarana)</p> <p>iii. Government Bodies / Government-Linked Corporations (GLC).</p> <p><i>QR Code Pillar = To scan to get video for SBE.</i></p>						

Initiative 1.2: Equipping Healthcare Professional and Allied Health in Enhancing Breast Cancer Awareness

No	Key Activity	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
1.2.1	Training of Healthcare Professionals (HCP) from government, private and NGOs about breast cancer and CBE	Compile & Modify Breast Cancer Screening Training Materials <ul style="list-style-type: none"> ● Statistics ● CBE ● Referral Pathway ● Screening Recommendations ● Communication Skills Modality: Physical	Incorporate CBE training into Nursing and Medical School syllabus	Incorporate CBE training into Nursing and Medical School syllabus	Incorporate CBE training into Nursing and Medical School syllabus	Incorporate CBE training into Nursing and Medical School syllabus	Incorporate CBE training into Nursing and Medical School syllabus	<ul style="list-style-type: none"> - BPL, MOH - Nursing Division, MOH - MOHE - IPTS

Initiative 1.3: Upgrading Health Seeking Behaviour Among Communities to Ensure Timely Screening

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
1.3.1	Addressing the social determinants of health (SDH) towards breast cancer screening	A) Economic Stability (Financial Support) <ul style="list-style-type: none"> i. Mapping of financial support from multi-sectoral agencies. ii. Display the messages at 1 place 	A) Economic Stability (Financial Support) <ul style="list-style-type: none"> i. Promote LPPKN Sponsorship & Subsidies ii. Promote CBE and MMG by PEKA B40 and PERKESO's 	A) Economic Stability (Financial Support) <ul style="list-style-type: none"> i. Get CSR Sponsorship from GLC and Private Corporations - e.g. Every "RM50" brings a woman for breast cancer screening. 	A) Reduce Screening Steps of referral /Policy <ul style="list-style-type: none"> i. Educate the public on referral pathway system (e.g. MySejahtera, Klinik Kesihatan) 	A) Economic Stability (Financial Support) <ul style="list-style-type: none"> i. Get international funds for breast cancer screening transportation and subsidies. <ul style="list-style-type: none"> - WHO - Bill Gates Foundation 	Post-Program Evaluation & Develop Report	- BookDoc

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p>B) Transportation</p> <p>i. Provide a reward for coming for breast cancer screening.</p> <p>ii. "Refer a friend reward" for breast cancer screening.</p> <p>C) Healthcare Access and Quality</p> <p>i. Encourage GPs to do CBE for those >30 years old and above</p> <ul style="list-style-type: none"> - Provide incentive to do CBE. - To get statistics via MMA PPS, AFPM, GCFM, CKAPS, etc. <p>D) Neighbourhood and Environment + Social and Community Context</p> <p>Encourage word of mouth & conversation</p> <p>Include breast cancer infographics in WhatsApp groups, PPR Information Board, Taman,</p>	<p>B) Transportation</p> <p>i. Engage with Grab, AirAsia Move, Maxim to provide free transportation for breast cancer screening</p> <ul style="list-style-type: none"> - Minimum 3 persons per car <p>C) Healthcare Access and Quality</p> <p>i. Work with Government bodies (e.g. LPPKN), NGOs and Private Hospitals to promote their breast cancer services.</p> <ul style="list-style-type: none"> - Joint collaborative posters, ads, promo video etc. <p>D) Neighbourhood and Environment + Social and Community Context</p> <p>- Nil</p>	<p>B) Transportation</p> <p>- Nil</p> <p>C) Healthcare Access and Quality</p> <p>- Nil</p> <p>D) Neighbourhood and Environment + Social and Community Context</p> <p>i. Politicians to talk about Breast Cancer screening</p> <p>ii. KRT, KOSPEN, MyChampion to talk about Breast Cancer Screening</p>	<p>2. New Policy</p> <p>Allow NGOs referral letter letterhead straight from NGO to Government Hospitals</p> <p>(without going through KK)</p> <p>B) Economic Stability (Financial Support)</p> <p>Engage with insurance companies and associations to provide free breast cancer screening.</p> <p>C) Healthcare Access and Quality</p> <p>- Nil</p> <p>D) Neighbourhood and Environment + Social and Community Context</p> <p>- Nil</p>	<p>- International Grants/International Foundations</p> <p>- Pink Ribbon Foundation</p> <p>B) Transportation</p> <p>- Nil</p> <p>C) Healthcare Access and Quality</p> <p>Rangkaian Pengasuh Anak - Saringan Payudara</p> <p>D) Neighbourhood and Environment + Social and Community Context</p> <p>- Nil</p>		

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		Places of Worship, 7-Eleven, KK Mart, Hair Salon, Barber, Spa, Minimarket, KOSPEN, MyChampion etc. *Call To Action (CTA): Visit your nearest breast cancer screening centre*.						
1.3.2	Mapping of available centres for breast cancer screening <ul style="list-style-type: none"> - Government - Hospital - Klinik Kesihatan - LPPKN - NGOs - Private Hospitals 	<p>To identify and compile screening centres</p> <p>i. To develop a directory with the Malaysian map.</p> <p>ii. To hover over states and all available centres listed out.</p> <p>Add a hyperlink from the directory to the respective hospital website.</p> <p><i>Sample of mapping</i> = http://mamogram.lppkn.gov.my/pmamogram.aspx = https://www.moh.gov.my/index.php/pages/view/4376?mid=1449</p>	<p>To identify and compile screening centres</p> <p>i. To develop a directory with the Malaysian map.</p> <p>ii. To hover over states and all available centres listed out.</p>	6-monthly update of the site for mapping of available breast cancer screening centres	Update & maintenance	Update & maintenance.	<p>Evaluate the usage of website</p> <p>- Which state hovered most?</p> <p>- Which hospital clicked on the most?</p>	

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		2. Use a Hotline for Cancer (i.e. NCSM & MAKNA) - WhatsApp Number - Toll-free office hour Calls - Email Address						
1.3.3	Mapping of available support services for breast cancer in Malaysia - MAKNA Halfway House - NCSM Hope of Hope	Compile support services on Breast Cancer Landing Site List out available services (e.g. Halfway House, Dietitian, Clinical Psychologist, Financial Support, Patient Navigation)	Compile support services on Breast Cancer Landing Site List out available services (e.g. Halfway House, Dietitian, Clinical Psychologist, Financial Support, Patient Navigation)	Compile support services on Breast Cancer Landing Site List out available services (e.g. Halfway House, Dietitian, Clinical Psychologist, Financial Support, Patient Navigation)	Compile support services on Breast Cancer Landing Site List out available services (e.g. Halfway House, Dietitian, Clinical Psychologist, Financial Support, Patient Navigation)	Compile support services on Breast Cancer Landing Site List out available services (e.g. Halfway House, Dietitian, Clinical Psychologist, Financial Support, Patient Navigation)	Evaluate the usage of website Which service was most requested?	
1.3.4	Sentiment Analysis on breast cancer media campaign following health promotion strategies	Sentiment Analysis on current breast cancer media campaign	-	-	-	-	Sentiment Analysis after breast cancer media campaign.	

PILLAR 2: SCREENING AND EARLY DETECTION

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
2.1.1	Establish dedicated cancer screening services in primary care clinics	<ul style="list-style-type: none"> i. to allocate resources for service establishment ii. to develop SOPs and tool kits for screening services 	Review of workflow and its feasibility and improve gaps	<ul style="list-style-type: none"> i. PDCA ii. Implementation 	PDCA	PDCA	Review of the whole system	<ul style="list-style-type: none"> - BPKK, MOH - BPP, MOH - Academia (University Hospitals) - LPPKN - ATM - MMA - APHM - NGO (NCSM, MAKNA, BCWA, etc)
2.1.2	Improving adherence to SOP for screening programme – prioritizing monitoring and evaluation	<ul style="list-style-type: none"> i. Review of SOPs of CBE and mammogram ii. Training programme on CBE/mammogram and the related SOPs iii. Develop monitoring and evaluation indicator (M&E) 	<ul style="list-style-type: none"> i. Training programme on CBE/mammogram and the related SOPs ii. Perform M&E 	<ul style="list-style-type: none"> i. Continue training programme ii. Perform M&E 	<ul style="list-style-type: none"> i. Continue training programme ii. Perform M&E 	<ul style="list-style-type: none"> i. Continue training programme ii. Perform M&E 	Review	<ul style="list-style-type: none"> - BPKK, MOH - BPP, MOH - Academia (University Hospitals) - LPPKN - ATM - MMA - APHM - NGO (NCSM, MAKNA, BCWA, etc)
2.1.3	Regular audit of the CBE and mammogram screening program	-	-	<ul style="list-style-type: none"> i. Develop KPI metrics ii. Data collection 	<ul style="list-style-type: none"> i. Develop KPI metrics ii. Data collection 	<ul style="list-style-type: none"> i. Develop KPI metrics ii. Data collection iii. Audit 	Review of the whole programme	<ul style="list-style-type: none"> - BPKK, MOH - BPP, MOH - Academia (University Hospitals) - LPPKN - College of Radiology - National Health Institutes - ATM - MMA

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
2.1.4	Ensure adequate human resources (gender sensitive)	<ul style="list-style-type: none"> i. Develop a gender-inclusive healthcare workforce planning ii. Identify categories of staff (e.g. staff nurse, assistant medical officer, radiographer) 	Review and improve gaps	Review and improve gaps	Review and improve gaps	Review and improve gaps	Review and improve gaps	<ul style="list-style-type: none"> - BPKK, MOH - BPP, MOH - Academia (University Hospitals) - LPPKN - ATM - MMA - APHM - NGO (NCSM, MAKNA, BCWA, etc)
2.1.5	<p>Implement targeted mammography screening for high-risk population</p> <ul style="list-style-type: none"> i. Develop breast cancer risk prediction model specific for Malaysia ii. HCW to profile women's breast cancer risk (to adopt risk prediction model) 	<ul style="list-style-type: none"> i. Identify collaborators ii. Develop model 	Develop model	Develop model/pilot	Evaluate	Implement	Evaluate	<ul style="list-style-type: none"> - BPKK, MOH - Academia (University Hospitals) - NGO (NCSM, MAKNA, BCWA etc) - LPPKN - APHM
2.1.6	Develop a population-based call-recall system for mammography to ensure adherence to repeat screening every 1-3 years (based on cancer screening registry)	Identify/ develop platform e.g. MySejahtera/ SMRP/ new collaboration	Pilot	PDCA	PDCA	Implement	Evaluate	<ul style="list-style-type: none"> - BPKA, MOH - BPP, MOH - PIK, MOH - Academia - Jabatan Digital Negara - MAMPU - NGO - IARC - International collaborators

Initiative 2.2: Strengthening referral pathway nationwide

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
2.2.1	<p>Adopt Patient Navigation Programme (PNP).</p> <p>(Different from Pillar 4.3.1)</p> <p>A community-based navigation programme to guide symptomatic individuals/general population through the complex healthcare system, ensuring timely diagnosis.</p>	Identify PNP models that work locally/ regionally	<p>i. Test the feasibility of selected models</p> <p>ii. Formulate policy</p>	Pilot model(s)	PDCA	PDCA	Implementation	<ul style="list-style-type: none"> - MOH BPP, MOH - BPKK, MOH - University Hospitals - Community NGOs - LPPKN - APHM - IKN
2.2.2	<p>Improving access for patients referred from private/NGO facilities</p> <p><i>Suspicious mammogram lesions or confirmed cases referred from private facilities to government breast endocrine facilities presently charged as 1st class patient</i></p>	<p>i. Strengthen the referral flow from private and government facilities</p> <p>ii. Commence discussion with agencies involved for Fee Act</p>	<p>i. Test the feasibility of selected models</p> <p>ii. Formulate policy</p>	Pilot model(s)	PDCA	PDCA	Implementation	<ul style="list-style-type: none"> - BPP, MOH - BPKK, MOH - University Hospitals - Community NGOs - LPPKN - APHM - IKN

PILLAR 3: TIMELY BREAST DIAGNOSIS AND STAGING**Initiative 3.1: Improving access to breast health care by addressing the existing barriers**

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
3.1.1	Mapping and clustering of diagnostic centres and health clinics	<p>Exploration phase (Jan- June 2025)</p> <p>i. Stakeholder engagement</p> <p>ii. Appointment of steering committee (MOH, MOHE, NGO) and technical committee (JKN)</p> <p>iii. Situational analysis- BPKK, JKN</p> <p>a) identify the primary care-diagnostic centre clusters, networking between public, private and university hospital, NGOs, MINDEF</p>	<p>i. Synchronize and implement networking between public, private and university hospitals, NGOs, MINDEF in terms of coverage area, human resource and facilities in 6 zones (south, north, central, east coast, Sabah and Sarawak)</p> <p>ii. Ensure Sustainability</p>	Pilot (phase 1)	Phase 2	Phase 3	Evaluation to see the impact	<ul style="list-style-type: none"> - National Institutes of Health, MOH - BPP, MOH - BPKK, MOH - University Hospitals - Community NGOs - LPPKN - APHM - IKN

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<ul style="list-style-type: none"> b) Identify manpower needs for efficient diagnostic process (radiology / radiographer, pathology, surgical, nursing team) c) Mapping facilities for diagnostics (surgery, radiology and pathology) d) Policy analysis of the involvement of NGOs in public health facilities iv. Create a human resource's policy of permanent navigator's post v. Establish a public private partnership policy 						

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p>Planning phase</p> <ul style="list-style-type: none"> i. Optimal care pathway charter. Identify-Roles and responsibilities ii. Budget iii. Identify KPIs for monitoring and evaluation iv. Implementation research (IHMS, MOE) <p>Implementation phase</p> <ul style="list-style-type: none"> 1- Training (3.1.2) 2- Care pathway 						
3.1.2	<p>Increase training opportunities</p> <ul style="list-style-type: none"> i. Subspecialty fellowship training for breast cancer subspecialties e.g. breast and endocrine, pathology, surgery, and radiology. ii. Training for science officer (SO) / MLT for molecular testing of breast cancer. 	<p>Implementation in year 2026</p> <ul style="list-style-type: none"> i. Ascertain number of specialists for subspecialties training for each discipline involved, each year ii. Planning the training for SO/MLT in technical processing 	<ul style="list-style-type: none"> i. Ensure candidates are sent for subspecialty fellowship training ii. Periodical laboratory attachment for molecular testing iii. Train the trainer courses 	<ul style="list-style-type: none"> i. Continuous subspecialty and lab training ii. On-site training at all healthcare facilities in each state 	On-site training at all healthcare facilities in each state	On-site training at all healthcare facilities in each state	On-site training at all healthcare facilities in each state	<ul style="list-style-type: none"> - MOH - MOHE - IHBS - Industrial partner

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
	iii. Training breast nurses' navigators; and iv. Training NGO community navigators (MOH, MOHE)	analysis for molecular testing iii. Planning the training for nurses (TOT to network community nurses and diagnostic nurses) according to the projected numbers. iv. Implementation research						
3.1.3	Enrolment of EQA programme for Breast Pathology to enhance quality and competency in breast cancer diagnosis for all breast diagnostic centres	2025 Planning and preparation: i. To include a quality assurance programme for breast pathology in breast pathology reporting guideline ii. Expansion of EQA programme to all breast diagnostic centre	i. Enrolment of EQA programme in the breast diagnostic centres ii. Ensure concordance to KPI>80% for each centre	Monitoring the KPI and implement corrective actions	Monitoring the KPI and corrective actions	Monitoring the KPI and corrective actions	Monitoring the KPI and corrective actions	- MOH - MOHE - Private Practitioners - CPath AMM - Mindef

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p>2026</p> <p>iii. Budget acquisition to sustain the yearly programme</p>						
3.1.4	Strengthen the audit of image quality and radiology reporting	<p>Planning:</p> <p>i. Strengthen the quality of internal audit of mammogram using PGMI. (self-assessment-random audits)</p> <p>ii. Setup and incorporate additional quality audits for radiology reporting in Guidelines for implementing QAP in radiology and MSQH (College of Radiology, MSQH)</p> <p>iii. Setup external auditor (College of Radiology)</p>	Implementation:	On-site training at all healthcare facilities concerned in each state	On-site training at all healthcare facilities concerned in each state	On-site training at all healthcare facilities concerned in each state	On-site training at all healthcare facilities concerned in each state	<ul style="list-style-type: none"> - College of Radiology - MOH - MOHE - IHBS

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		iv. Adding the external audits to the existing licensing processes. v. Monitoring and evaluation reporting to BPKK on errant providers vi. Implementation research						
3.1.5	Digitalisation of optimal care pathway for healthcare facilities in assuring accessible mammogram, ultrasound, CT scan, MRI etc. by all healthcare facilities to solve incompatible systems.	(C/CAN) Greater Petaling City Cancer Challenge - (Health system coordination and management) Output 1 Standard cancer patient pathways for Breast & Colorectal Cancer and the Operational charter [implementation strategy] of the referral system from primary to tertiary care for the Breast / Colorectal pathways in Public Institutions.						<ul style="list-style-type: none"> - MOH - MOHE - ATM - Private practitioners - NGOs - IHBS

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		<p>Output 2</p> <p>Functional and technical requirements for the digital infrastructure required to support the referral system.</p> <p>-Healthcare provider, navigator and patient interphase for tracking of appointments, and other supportive care (MySejahtera)</p> <p>-Interoperability image retrieval systems</p> <p>-Governance /PDPA framework for data sharing of patients' data across healthcare facilities and NGOs)</p> <p>Output 3</p> <p>i. Define and conceptualise a patient navigation programme for the city (3.1.7)</p>						

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
		ii. Implementation research (IHMS, MOE)						
3.1.6	Provision of affordable diagnostic care through: <ul style="list-style-type: none"> i. Pooled procurement of diagnostic tests among public health facilities - pathology IHC, molecular testing (genetic testing), e.g. in-situ hybridisation (ISH), BRCA, PDL-1 ii. Pooled procurement for imaging and biopsy systems 	2025 Explore the mechanism and processes of pooled procurement for providing affordable diagnostic care 2026 Prioritise tests	Detail discussion among the stakeholders especially on procurement policy	Implementation	Implementation	Implementation	Implementation	<ul style="list-style-type: none"> - BPP, MOH - BPPK, MOH - MOF - MOHE - ATM
3.1.7	Community patient navigation to address informational, socio-cultural, behavioural, financial and transport barriers to breast cancer diagnosis	(Refer 3.1.5- Output 3)						

Initiative 3.2: Establish an integrated, high quality and comprehensive diagnostic network

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
3.2.1	Provide timely optimal care pathway charter for breast cancer diagnosis for CBE or mammogram screen detected abnormality and symptomatic patients from primary-care to diagnostic facility.	CPG adherence to evidence based diagnostic processes	Roadshow to ensure implementation of these timeliness standards in all healthcare facilities involved.	Clinical Audit	Improvement of the standards			- BPP, MOH - BPKK, MOH
3.2.2	Designate a complete multidisciplinary team at each breast cancer diagnostic centres (comprising general surgical/ breast and endocrine specialist, radiology and anatomical pathology +/- digital pathology support)	i. Established MDT in each centre/ inter hospital ii. Improving the facilities set up for effective MDT (Digital pathology e.g. Digital radiology imaging) iii. Encourage MDT discussion on discrepant cases from triple assessment	Monitoring the implementation of continuous MDT in each centre by surgical discipline	Monitoring the implementation of continuous MDT in each centre by surgical discipline	Monitoring the implementation of continuous MDT in each centre by surgical discipline	Monitoring the implementation of continuous MDT in each centre by surgical discipline	Monitoring the implementation of continuous MDT in each centre by surgical discipline	- BPP, MOH - BPKK, MOH - IHBS - MOE
3.2.3	Provide hospital navigators and adequate space for a breast cancer resource centre to coordinate diagnostic and treatment of breast cancer in the designated diagnostic centres.	Planning Training for navigators	Implementation					- BPP, MOH - BPKK, MOH - MOE - NGOs

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
3.2.4	Provide equipped optimal imaging and pathology services; manpower and infrastructures in the designated breast cancer diagnostic centre.	i. Identify the breast cancer diagnostic centres in each zone ii. Set minimum number of human resources required (surgeon, pathologist, radiologist, and technical staff) at each centre. iii. Identify the requirement for infrastructure and equipment at each centre	Fulfil the requirement by phases					- BPP, MOH - BPKK, MOH - BSM, MOH
3.2.5	Provide diagnostic evaluation (imaging, tissue sampling and pathology reporting) within 60 days from initial presentation tracked using MySejahtera.	Planning i. Clinical audit for TAT ii. Setting up the committees for monitoring the performance	Implementation	Implementation	Implementation	Implementation	Implementation	- BPP, MOH - BPKK, MOH - BKD, MOH - Planning Division, MOH
3.2.6	Conduct Continuous Medical Education through virtual meetings	(ECHO UM) Planning for CME through virtual involving all stakeholders e.g. ECHO UM						- MOH - MOE

Initiative 3.3: Intensify multidisciplinary team effort in assuring early diagnosis of breast cancer

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
3.3.1	Implement regular inter and intra hospital multidisciplinary team meetings for diagnosis of breast cancer	i. Mapping of services and membership of MDTs in designated breast diagnostic centres. ii. Provide digital platform for MDTs (ECHO Breast Cancer MDT) iii. Monitoring and evaluation for MDT audits from the C/Can (City Cancer Challenge) Breast MDT Best practices document)						- MOH - MOE
3.3.2	Conduct a multidisciplinary team meeting for ALL breast diagnostic and treatment of newly diagnosed breast cancer	i. Regular meeting at centre level ii. Monitoring and evaluation	Implementation					- MOH - MOE

Initiative 3.4: Timely Breast Cancer Staging

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
3.4.1	Perform timely staging for locally advanced and advanced breast cancer.							-

PILLAR 4: COMPREHENSIVE BREAST CANCER MANAGEMENT AND PATIENTS' SUPPORTIVE CARE**Initiative 4.1: Safeguard access to quality and effective treatment**

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.1.1	Establish a national task force to review the WHO Essential Medicines List and identify drugs that are critical for breast cancer treatment.	Establish national task force and develop process for review of WHO essentials medicines list and incorporation of recommendations into the formulary	Obtain approval from stakeholder for process and move forward with annual review meeting	Evaluate and monitor progression	Evaluate and monitor progression	Evaluate and monitor progression	Evaluate and monitor progression	- JKKU (Oncology) - Pharmacy Practice & Development Division - NPRA - BPP, MOH
4.1.2	Regularly review and update the list of essential medicines to reflect new evidence and changes in treatment standards.		Annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	- JKKU (Oncology) - Pharmacy Practice & Development Division - NPRA - BPP, MOH
4.1.3	Collaborate with government agencies to ensure these medicines are included in the national formulary and are budgeted for in the healthcare system.	Obtain approval from stakeholder for process and move forward with annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	Annual or biennial review meeting	- MOH - MOF
4.1.4	Conducting a thorough review of the current international breast cancer treatment guidelines and adapt them to the Malaysian context, considering available resources and healthcare infrastructure. Engage patient advocacy groups in the development and review process can also help ensure that the guidelines meet patient needs and are widely accepted.		Initiate the development 4th Edition of the Management of Breast Cancer Guideline (target 2028)	Launch the 4th Edition of the Management of Breast Cancer Guideline (target 2030)				- BPP, MOH - MaHTAS, MOH
4.1.5	Establish a national committee to oversee the adaptation and dissemination of these guidelines to healthcare providers across Malaysia.	Obtain approval from stakeholder for process and move forward;	Obtain approval from stakeholder for process and move forward	Launch workshop to train healthcare professionals on the 4th Ed of the guidelines;	Continue workshop to train healthcare professionals on the 4th Ed of the guidelines			- BPP, MOH - MaHTAS, MOH - BPK, MOH - BPKK, MOH - Head of Service: • Surgery

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
	Organize workshops and training sessions to educate healthcare professionals on the guidelines and ensure their proper application in clinical practice.	To promote education on relevant fields related to CPG such as genetic counselling (e.g. online course - Mainstreaming for Genetic Testing via future learn platform)						<ul style="list-style-type: none"> ▪ Oncology ▪ Radiology ▪ Pathology ▪ Palliative ▪ Breast Care Nurse - NGOs
4.1.6	Monitor the impact of the Breast Cancer Management Guidelines on patient outcomes through a national registry and use this data to refine and update the guidelines as needed. (see Section 5 on Data and Research)							- IHSR - BPP, MOH
4.1.7	Develop educational materials for healthcare providers and patients on the availability and use of these essential medicines, and recommendations from updated clinical practice guidelines. (refer to 4.2.6 below) *Extending Community Health Outcomes (ECHO)	Establish ECHO programme for continual training and launch in 2 cancer centres	Expand ECHO programme for continual training and launch in additional cancer centres; biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress	Expand ECHO programme for continual training and launch in additional cancer centres; biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress	Expand ECHO programme for continual training and launch in additional cancer centres; biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress	Expand ECHO programme for continual training and launch in additional cancer centres; biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress	Expand ECHO programme for continual training and launch in additional cancer centres; biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress	- BPL, MOH - BPK, MOH - MaHTAS, MOH - BPKK, MOH - MOHE - NGOs

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.1.8	Engage with international organizations and other countries to share best practices and learn from their experiences in medicine adoption, and recommendations from updated clinical practice guidelines.		Annual or biennial participation at regional conference or working groups such as ESMO Asia, Asia Pacific Breast Cancer symposium	Annual or biennial participation at regional conference or working groups such as ESMO Asia, Asia Pacific Breast Cancer symposium	Annual or biennial participation at regional conference or working groups such as ESMO Asia, Asia Pacific Breast Cancer symposium	Annual or biennial participation at regional conference or working groups such as ESMO Asia, Asia Pacific Breast Cancer symposium	Annual or biennial participation at regional conference or working groups such as ESMO Asia, Asia Pacific Breast Cancer symposium	<ul style="list-style-type: none"> - NGOs - Professional associations such as Malaysian Oncological Society (through international associations such as ESMO, ASCO, Breast Surgery International)

Initiative 4.2: Establish an integrated and comprehensive treatment centre

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.2.1	Establish at least 5 new comprehensive treatment centres in areas of need (such as Northern, Southern, East coast, Sabah and Sarawak)	<ul style="list-style-type: none"> i. Incorporate budget request for 1 new cancer centre in the budget; ii. Explore public-private partnership 	<ul style="list-style-type: none"> i. Incorporate budget request for 1 new cancer centre in the budget; ii. Track progress on 1 new cancer centres iii. Explore public-private partnership 	<ul style="list-style-type: none"> i. Incorporate budget request for 1 new cancer centre in the budget; ii. Track progress on 2 new cancer centres iii. Explore public-private partnership 	<ul style="list-style-type: none"> i. Incorporate budget request for 1 new cancer centre in the budget; ii. Track progress on 3 new cancer centres iii. Explore public-private partnership 	<ul style="list-style-type: none"> i. Incorporate budget request for 1 new cancer centre in the budget; ii. Track progress on 4 new cancer centres iii. Explore public-private partnership 	<ul style="list-style-type: none"> i. Establish minimum 5 new comprehensive treatment centres ii. Explore public-private partnership 	<ul style="list-style-type: none"> - BPP, MOH - Development Division, MOH - Planning Division, MOH - MOF - Association of Private Hospitals (APHM)
4.2.2	Upgrade existing centres, particularly in Klang Valley to handle anticipated increase in urban population (projected >10m by 2030)	<ul style="list-style-type: none"> i. Establish taskforce with the Department of Statistics Malaysia to determine projected population size of Klang Valley; ii. Explore public-private partnership 	<ul style="list-style-type: none"> i. Incorporate budget request to handle anticipated increase in urban population in Budget; ii. Explore public-private partnership 	Explore public-private partnership	Explore public-private partnership	Explore public-private partnership	Explore public-private partnership	<ul style="list-style-type: none"> - BPP, MOH - Development Division, MOH - Planning Division, MOH - MOF - Association of Private Hospitals (APHM)

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.2.3	Ensure sufficient specialists to support comprehensive treatment (including surgeons, oncologists, pathologists, breast radiologists, palliative medicine physicians, nuclear medicine specialists, geneticists, clinical psychologists).	<ul style="list-style-type: none"> i. Biennial review of manpower plan for cancer control plan ii. Private public partnership iii. Strategy to retain manpower e.g. Establish and expands Rakan MOH hospitals nationwide, improve financial and non-financial incentives 	<ul style="list-style-type: none"> i. Biennial review of manpower plan for cancer control plan ii. Private public partnership iii. Strategy to retain manpower e.g. Establish and expands Rakan MOH hospitals nationwide, improve financial and non-financial incentives 	<ul style="list-style-type: none"> i. Biennial review of manpower plan for cancer control plan ii. Private public partnership iii. Strategy to retain manpower e.g. Establish and expands Rakan MOH hospitals nationwide, improve financial and non-financial incentives 	<ul style="list-style-type: none"> i. Biennial review of manpower plan for cancer control plan ii. Private public partnership iii. Strategy to retain manpower e.g. Establish and expands Rakan MOH hospitals nationwide, improve financial and non-financial incentives 	<ul style="list-style-type: none"> i. Biennial review of manpower plan for cancer control plan ii. Private public partnership iii. Strategy to retain manpower e.g. Establish and expands Rakan MOH hospitals nationwide, improve financial and non-financial incentives 	Achieve ideal number of specialists across the multidisciplines (e.g. 1 oncologist per 100000 population)	<ul style="list-style-type: none"> - BPL, MOH - BPP, MOH - Nursing Division, MOH - BSM, MOH - JPA - MOHE - National Curriculum Committee (MMC, Academy of Medicine) (development of parallel pathway)
4.2.4	Incorporate essential allied health professionals (such as genetic counsellors, breast care nurses, oncologist nurses, palliative nurses, lymphoedema therapists, patient navigators, spiritual care providers) in the Allied Health Register, to create posts in MOH and ensure sufficient posts.	Develop proposal and justification of the need of the posts	<ul style="list-style-type: none"> i. Biennial review manpower plan ii. Achieve 20% of ideal of posts and manpower 	<ul style="list-style-type: none"> i. Biennial review manpower plan ii. Achieve 20% of ideal of posts and manpower 	<ul style="list-style-type: none"> i. Biennial review manpower plan ii. Achieve 20% of ideal of posts and manpower 	<ul style="list-style-type: none"> i. Biennial review manpower plan ii. Achieve 20% of ideal of posts and manpower 	Achieve the ideal number of posts and manpower	<ul style="list-style-type: none"> - BPL, MOH - BPP, MOH - Nursing Division, MOH - BSM, MOH - JPA - MOHE
4.2.5	In each cancer treatment centre, establish a core multidisciplinary team (MDT) that includes specialists from surgical, medical, radiation oncology, pathology, radiology, palliative care and nursing to discuss patient cases and treatment plans for a cohesive and personalized approach to care. (see Section 5 on Data and Research for evaluation of the impact of MDT on patient outcomes)	Establish MDT in 1 hospital per state	Establish MDT in 30% of specialist-led hospitals	Establish MDT in remaining 70% of specialist-led hospitals	<ul style="list-style-type: none"> i. Ensure MDT is practiced in all specialist-led hospitals; ii. Establish methods to evaluate the effectiveness of the MDT through regular audits 	Evaluate the effectiveness of the MDT through regular audits and tracking of patient outcome, allowing for continuous improvement of care delivery	Evaluate the effectiveness of the MDT through regular audits and tracking of patient outcome, allowing for continuous improvement of care delivery	<ul style="list-style-type: none"> - BPP, MOH - CKAPS, MOH - MSQH - MOHE

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.2.6	Develop a secure digital platform for sharing of patient information and treatment updates.	Establish a taskforce to evaluate the feasibility of a secure digital platform	Launch platform in 2 pilot centres	Launch platform in 2 additional centres	Launch platform in all state hospitals	Launch platform in all state hospitals	Launch platform in all specialist-led hospitals	<ul style="list-style-type: none"> - BPM, MOH - BPP, MOH - Ministry of Communication - Ministry of Digital
4.2.7	Establish training programmes for team members on the latest breast cancer management protocols to maintain high standards of care. (refer to 4.1.7 above for details) *Extending Community Health Outcomes (ECHO)	Establish ECHO programme for continual training and launch in 2 cancer centres	<ul style="list-style-type: none"> i. Expand ECHO programme for continual training and launch in additional cancer centres ii. Biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress 	<ul style="list-style-type: none"> i. Expand ECHO programme for continual training and launch in additional cancer centres ii. Biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress 	<ul style="list-style-type: none"> i. Expand ECHO programme for continual training and launch in additional cancer centres ii. Biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress 	<ul style="list-style-type: none"> i. Expand ECHO programme for continual training and launch in additional cancer centres ii. Biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress 	<ul style="list-style-type: none"> i. Expand ECHO programme for continual training and launch in additional cancer centres ii. Biennial presentation at local conference such as ASCOMOS, Malaysian Breast And Endocrine Surgical Conference (MBESC), Malaysian Hospice and Palliative Congress 	<ul style="list-style-type: none"> - BPL - MaHTAS - MOHE - NGOs
4.2.8	Progressively involve patients in the decision-making process to ensure that treatment plans align with their values and preferences, using patient decision aids for screening and treatment of breast cancers.	<ul style="list-style-type: none"> i. Incorporate use of patient decision aids for treatment of breast cancer in 4 centres; develop decision aid for screening ii. Develop partnerships with NGOs that provide patient support 	<ul style="list-style-type: none"> i. Incorporate use of patient decision aids for treatment of breast cancer in additional centres ii. Develop decision aid for screening (uptake and repeat screening) 	Evaluate and progressively improve methods of incorporating patients in shared decision- making	Evaluate and progressively improve methods of incorporating patients in shared decision- making	Evaluate and progressively improve methods of incorporating patients in shared decision- making	Evaluate and progressively improve methods of incorporating patients in shared decision- making	<ul style="list-style-type: none"> - Nursing Division, MOH (Breast care nurse) - NGOs e.g. Cancer support group)

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.2.9	Integrate genetic counselling in the training or syllabus for undergraduate and postgrad (e.g. FMS, surgical, oncology training programme)	Planning to incorporate genetic counselling in the syllabus of undergraduate and post-graduate programmes	All undergraduate to integrate genetic counselling in their syllabus	Post grad training for FMS, Surgical and Oncology to integrate genetic counselling in their syllabus	Evaluate training and effectiveness of the programme	Evaluate training and effectiveness of the programme	Evaluate training and effectiveness of the programme	- BPL, MOH - MOE

Initiative 4.3: Establish a coordinated care throughout the continuum in ensuring optimum survivorship

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
4.3.1	<p>Implement a patient navigation programme to guide patients through the complex healthcare system, ensuring they receive timely and coordinated care.</p> <ul style="list-style-type: none"> - These patient navigators must be trained to provide personalized assistance, helping patients to schedule appointments, understand their treatment options, and access financial and social support services. 	<p>i. Hospital-based navigation: expansion from 4 centres to 8 centres</p> <p>ii. Community-based navigation: support continued partnership efforts between MOH and NGOs</p> <p>(4 centres = HTAR, HTJ, HUS, HQEII) (4 planned new centres = Sg Petani, Ipoh, KB, KL)</p>	<p>i. Hospital-based navigation: expansion from 8 centres to 14 centres (1 per state)</p> <p>ii. Community-based navigation: support continued partnership efforts between MOH and NGOs</p>	<p>i. Continue programmes, implement evaluation and progressively improve programmes</p> <p>ii. Expand the services to specialist-led district hospitals</p>	<p>i. Continue programmes, implement evaluation and progressively improve programmes</p> <p>ii. Expand the services to specialist-led district hospitals</p>	Continue programmes, implement evaluation and progressively improve programmes	<p>i. Continue programmes, implement evaluation and progressively improve programmes</p> <p>ii. Expand the services to health clinic with FMS</p>	<ul style="list-style-type: none"> - BPP, MOH - BPKK, MOH - NGOS (CRM, NCSM, BCWA)
4.3.2	Evaluate the effectiveness of the supportive care and patient navigation programmes through patient satisfaction surveys and outcome measures, and adjust the programmes based on feedback and results.							<ul style="list-style-type: none"> - IHSR (MOH) - NGOs (CRM, NCSM)

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
	(see Section 5 on Data and Research for evaluation of the impact navigation programmes on patient outcomes)							
4.3.3	Establish supportive care services, including psychosocial support services and symptom management	Develop structured training programme (post basic) for Breast Care Nurse	<ul style="list-style-type: none"> To improve human resource to provide quality supportive services: <ol style="list-style-type: none"> Breast Care nurses: 20 trained nurses Hospital-based Palliative Care: 30 palliative physician in MOH Community palliative services: 5 FMS subspecialty in Palliative Pain Specialist Develop partnerships with NGOs who provide patient support to be part of clinical services 	<ul style="list-style-type: none"> To improve human resource to provide quality supportive services: <ol style="list-style-type: none"> Breast Care nurses: 40 trained nurses Hospital-based Palliative Care: 50 palliative physician in MOH Community palliative services: 10 FMS subspecialty in Palliative Pain Specialist Develop partnerships with NGOs who provide patient support to be part of clinical services 	<ul style="list-style-type: none"> To improve human resource to provide quality supportive services: <ol style="list-style-type: none"> Breast Care nurses: 60 trained nurses Hospital-based Palliative Care: 70 palliative physician in MOH Community palliative services: 14 FMS subspecialty in Palliative Pain Specialist Develop partnerships with NGOs who provide patient support to be part of clinical services 	<ul style="list-style-type: none"> To improve human resource to provide quality supportive services: <ol style="list-style-type: none"> Breast Care nurses: 80 trained nurses Hospital based Palliative Care: 80 palliative physician (min 5 per state) Community palliative services: 20 FMS subspecialty in Palliative (at least 1 per state) Pain Specialist Develop partnerships with NGOs who provide patient support to be part of clinical services 		<ul style="list-style-type: none"> - BPP, MOH - BPKK, MOH - BPL, MOH - Nursing Division, MOH (Breast care nurses and palliative nurses) - BSM, MOH - JPA - NGOs
4.3.4	Integrate supportive and palliative care in the training or syllabus for undergraduate and postgraduate (e.g. FMS, surgical, oncology training programme)	Planning to incorporate supportive and palliative treatment in the syllabus of undergraduate and post-graduate programmes	All undergraduate to integrate supportive and palliative treatment in their syllabus	Post grad training for FMS, Surgical and Oncology to integrate supportive and palliative treatment in their syllabus	Evaluate training and effectiveness of the programme	Evaluate training and effectiveness of the programme	Evaluate training and effectiveness of the programme	<ul style="list-style-type: none"> - BPL, MOH - MOHE

Initiative 5.1: Strengthening Surveillance for Effective Monitoring and Evaluation

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033/2034	2035	Agencies Responsible
5.1.1	To enhance accessibility and practicability of PRIS (existing information system for cancer registry)	<ul style="list-style-type: none"> i. To determine reasons for underutilisation of current system ii. To develop and implement standardised data reporting guidelines, clearly defining reporting pathways, roles, responsibilities, and timelines at both facility and state levels to improve coordination and ensure timely and complete reporting. 	<ul style="list-style-type: none"> i. Improve the usability of the current system for end users ii. To ensure linkage between PRIS and hospital information system and lab information system 		<ul style="list-style-type: none"> i. Evaluation of the effectiveness of the improved system ii. To further improve the system based on the findings in (i) 	Ongoing monitoring and improvement of the system to achieve fully digitalisation of cancer data registration by 2035.		<ul style="list-style-type: none"> - NCR - HIC - NIH - State Health Department - BPP, MOH
5.1.2	Improve the timeliness and comprehensiveness of cancer data reporting across public and private sectors.	<ul style="list-style-type: none"> i. Improve competency of healthcare service providers in public and private health care facilities in cancer registration. ii. Ensure timely dissemination of information on unnotified and incomplete cancer cases identified 	Strengthening Cancer Notification Through Policy, Regulation, and Performance Monitoring: <ul style="list-style-type: none"> i. Cancer notification as part of hospital accreditation criteria. ii. Cancer notification as compulsory regulation under Act 586 Private Healthcare Facilities and Services Act 1998. iii. Facility-based scorecard for cancer registration performance 			Complete cancer data information for at least 80% of breast cancer cases diagnosed in Malaysia are notified into the cancer registry system		<ul style="list-style-type: none"> - NCR - BPKK, MOH - BPP, MOH - CKAPS - BKP

No	Key Activities	2025/2026	2027/2028	2029/2030	2031/2032	2033/2034	2035	Agencies Responsible
		<p>through National Registration Department (JPN) and pathology reports to facilitate active follow-up by the state health department or relevant health facilities.</p> <p>iii. Regular audit on cancer notification & submission at hospital level.</p>						
5.1.3	To establish an integrated information system for national screening registry	<p>i. To establish a dedicated team responsible for the coordination, implementation and monitoring of the national cancer screening registry</p> <p>ii. To identify and link existing cancer screening registries from different sources (public, private, NGOs)</p>	<p>i. To digitalise national cancer screening registry</p> <p>ii. To ensure linkage between national screening registry, national cancer registry, hospital information system</p>		Evaluation of the effectiveness of the system	Ongoing monitoring and improvement of the system.		<ul style="list-style-type: none"> - NCR - BPKK, MOH - BKP - BPP - NGOs - Academic Institutions - LPPKN

Initiative 5.2: Fostering Strategic Partnerships to Advance Breast Cancer Research and Outcomes

No	Key Activity	2025/2026	2027/2028	2029/2030	2031/2032	2033-2034	2035	Agencies Responsible
5.2.1	Enhancing Research and Innovation for Breast Cancer Through Strategic Prioritization and Partnerships	i. Identify priority areas for breast cancer research based on the national needs* (RMK-13 and onward) ii. Identify partners and stakeholders for the research projects	i. Facilitate information and data-sharing between relevant stakeholders and research partners ii. Monitor research coordination to avoid duplication iii. Evaluate research uptake and research impact iv. Evaluate the outcome and impact of the cancer prevention and control programme					- NIH - BPKK, MOH - BKP - Head of service e.g. oncology - Cancer expert working group - Academic Institutions

*Example:

- 1) Evaluate the Breast Cancer Management guidelines on patient outcomes through a national registry and use this data to refine and update the guidelines as needed;
- 2) Evaluation the impact of MDT on patient outcomes;
- 3) Conduct modelling studies to compare the cost effectiveness of various screening strategies (e.g. age of starting and ending, frequency, risk stratification etc.).
- 4) Evaluate the effectiveness of communication tools for CBE and MMG (refer to group 6 and 7);
- 5) Development of risk assessment tools

REFERENCES



- Agarwal, G., Pradeep, P., Aggarwal, V., Yip, C.-H., & Cheung, P. S. (2007). Spectrum of breast cancer in Asian women. *World journal of surgery*, *31*, 1031-1040.
- American College of Obstetricians and Gynecologists. (2017). Breast cancer risk assessment and screening in average-risk women. *ACOG Practice Bulletin*, *130*(1), e1-e16.
- Barbeau, P., Stevens, A., & Beck, A. (2017). Breast cancer screening: Part A. An evidence report to inform an update of the Canadian Task Force on Preventive Health Care 2011 guideline (Prepared by the Knowledge Synthesis Group, Ottawa Methods Centre, Ottawa Hospital Research Institute for the Canadian Task Force on Preventive Health Care under contract by the Public Health Agency of Canada). *Canadian Task Force on Preventive Health Care*. Retrieved from https://canadiantaskforce.ca/wp-content/uploads/2018/2018/11/Evidence-Report-Breast-Cancer-Screening_FINAL.pdf
- Baxter, N., & Canadian Task Force on Preventive Health, C. (2001). Preventive health care, 2001 update: should women be routinely taught breast self-examination to screen for breast cancer? *CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne*, *164*(13), 1837-1846.
- Berg, W. A., Gutierrez, L., NessAiver, M. S., Carter, W. B., Bhargavan, M., Lewis, R. S., & Ioffe, O. B. (2004). Diagnostic accuracy of mammography, clinical examination, US, and MR imaging in preoperative assessment of breast cancer. *Radiology*, *233*(3), 830-849.
- Bhoo Pathy, N., Yip, C. H., Taib, N. A., Hartman, M., Saxena, N., Iau, P., . . . Verkooijen, H. M. (2011). Breast cancer in a multi-ethnic Asian setting: Results from the Singapore–Malaysia hospital-based breast cancer registry. *The Breast*, *20*, S75-S80. doi:<https://doi.org/10.1016/j.breast.2011.01.015>
- Cortesi, L., Turchetti, D., Marchi, I., Fracca, A., Canossi, B., Battista, R., . . . Federico, M. (2006). Breast cancer screening in women at increased risk according to different family histories: an update of the Modena Study Group experience. *BMC Cancer*, *6*(1), 1-9.
- Da Costa Vieira, R. A., Biller, G., Uemura, G., Ruiz, C. A., & Curado, M. P. (2017). Breast cancer screening in developing countries. *Clinics (Sao Paulo, Brazil)*, *72*(4), 244-253. doi:10.6061/clinics/2017(04)09
- Galukande, M., & Kiguli-Malwadde, E. (2010). Rethinking breast cancer screening strategies in resource-limited settings. *African health sciences*, *10*(1).
- Gui, G., Kadayaprath, G., Darhouse, N., Self, J., Ward, A., A'Hern, R., & Eeles, R. (2006). Clinical outcome and service implications of screening women at increased breast cancer risk from a family history. *European Journal of Surgical Oncology (EJSO)*, *32*(7), 719-724.
- Kerlikowske, K., Carney, P. A., Geller, B., Mandelson, M. T., Taplin, S. H., Malvin, K., . . . Rosenberg, R. (2000). Performance of screening mammography among women with and without a first-degree relative with breast cancer. *Ann Intern Med*, *133*(11), 855-863.
- Lam, T., Wong, K., Chan, K. K., Chan, M. C., Chao, D. V., Cheung, A. N., . . . Lam, K. (2018). Recommendations on prevention and screening for breast cancer in Hong Kong. *Hong Kong medical journal= Xianggang yi xue za zhi*, *24*(3), 298-306.



REFERENCES



- Maurice, A., Evans, D. G. R., Shenton, A., Ashcroft, L., Baildam, A., Barr, L., . . . Wilson, M. (2006). Screening younger women with a family history of breast cancer—does early detection improve outcome? *European Journal of Cancer*, *42*(10), 1385-1390.
- Melnikow, J., Fenton, J. J., Whitlock, E. P., Miglioretti, D. L., Weyrich, M. S., Thompson, J. H., & Shah, K. (2016). Supplemental screening for breast cancer in women with dense breasts: a systematic review for the US Preventive Services Task Force. *Ann Intern Med*, *164*(4), 268-278.
- Ministry of Health. (2024). Summary of The Malaysia National Cancer Registry Report 2017-2021. Putrajaya: National Cancer Institute.
- Ministry of Health Malaysia. (2019). Clinical Practice Guidelines: Management of Breast Cancer 3rd Edition. Retrieved from <https://www.moh.gov.my/index.php/pages/view/148>
- Mittra, I., Mishra, G. A., Dikshit, R. P., Gupta, S., Kulkarni, V. Y., Shaikh, H. K. A., . . . Pramesh, C. (2021). Effect of screening by clinical breast examination on breast cancer incidence and mortality after 20 years: prospective, cluster randomised controlled trial in Mumbai. *Bmj*, *372*.
- Myers, E. R., Moorman, P., Gierisch, J. M., Havrilesky, L. J., Grimm, L. J., Ghatge, S., . . . McCrory, D. C. (2015). Benefits and harms of breast cancer screening: a systematic review. *Jama*, *314*(15), 1615-1634.
- National Cancer Registry, National Cancer Institute, Ministry of Health Malaysia,. (2018). Malaysian Study on Cancer Survival (MySCan). Putrajaya: National Cancer Institute.
- Nelson, H. D., Pappas, M., Cantor, A., Griffin, J., Daeges, M., & Humphrey, L. (2016). Harms of breast cancer screening: systematic review to update the 2009 US Preventive Services Task Force recommendation. *Ann Intern Med*, *164*(4), 256-267.
- Oeffinger, K. C., Fontham, E. T., Etzioni, R., Herzig, A., Michaelson, J. S., Shih, Y.-C. T., . . . LaMonte, S. J. (2015). Breast cancer screening for women at average risk: 2015 guideline update from the American Cancer Society. *Jama*, *314*(15), 1599-1614.
- Qaseem, A., Lin, J. S., Mustafa, R. A., Horwitch, C. A., & Wilt, T. J. (2019). Screening for breast cancer in average-risk women: a guidance statement from the American College of Physicians. *Ann Intern Med*, *170*(8), 547-560.
- Reinert, T., de Souza, A. B. A., Rosa, M. L., Bedin, S. R., & Barrios, C. H. (2021). Perspectives on the Systemic Staging in Newly Diagnosed Breast Cancer. *Clinical Breast Cancer*, *21*(4), 309-316. doi:<https://doi.org/10.1016/j.clbc.2021.03.010>
- Sitt, J. C., Lui, C., Sinn, L. H., & Fong, J. C. (2018). Understanding breast cancer screening—past, present, and future. *Hong Kong Med J*, *24*(2), 166-174.
- World Health Organization. (2014). *WHO position paper on mammography screening*. Switzerland: World Health Organization.
- World Health Organization. (2023). *Global Breast Cancer Initiative Implementation Framework: Assessing, Strengthening And Scaling-Up of Services For The Early Detection And Management Of Breast Cancer*. Geneva: World Health Organization.
- Zielonke, N., Gini, A., Jansen, E. E., Anttila, A., Segnan, N., Ponti, A., . . . de Koning, H. J. (2019). Evidence for reducing cancer-specific mortality due to screening for breast cancer in Europe: A systematic.





MINISTRY OF HEALTH MALAYSIA