

**BREAST
CANCER
INITIATIVE 2.5**
Making breast health a global priority



PLANNING

Improving Access to Breast Cancer Care

Knowledge Summary



Improving Access to Breast Cancer Care

INTRODUCTION

Disparities in breast cancer outcomes vary widely between low- and middle-income countries [LMICs] and high-income countries [HIC] as well as within countries. Although incidence rates in LMICs are lower than those in HICs, mortality-to-incidence ratios are significantly higher in the low-resource settings where more than 80% of women present with late-stage disease, requiring metastatic disease management and palliative care rather than curative care. In contrast, in HICs, more than 80% of breast cancer patients present with early-stage disease and are potentially curable.

Differences in outcomes between LMICs and HICs have been attributed to effective awareness and early diagnosis programs, timely access to appropriate treatment and reduced barriers to care. Increasing awareness of breast cancer and improving access to detection without addressing treatment can have negative consequences. HICs also have effective supportive care services, such as breast cancer survivor support networks, palliative care and access to pain management.

Improving access to care and reducing disparities in outcomes requires identifying, understanding and addressing numerous barriers across the cancer care continuum. Barriers differ by location and population, but can generally be characterized as structural, sociocultural, personal and financial. Reducing barriers to cancer care services can improve patient outcomes, provided appropriate diagnostic and treatment facilities are available, accessible and acceptable. Programs to improve structural barriers should emphasize multidisciplinary team approaches, follow protocols for referrals as well as track time from presentation to diagnosis as well as time from diagnosis to treatment. Programs to reduce sociocultural and personal barriers should engage community stakeholders and breast cancer survivors in program design, education campaigns and supportive services.

KEY SUMMARY

Structural barriers

- Structural barriers can include the geographic location of services, transportation needs, insufficient diagnostic or treatment services, shortages of essential medicines and insufficient or undertrained workforce. They can also include inefficient or poorly coordinated services requiring multiple visits to initiate definitive diagnosis, ineffective referral networks and inadequate patient navigation.
- Coordination of services, strong referral networks, patient navigators and other structural changes can improve patient access to timely breast cancer diagnosis and treatment.
- Human resource capacity building may also improve patient access to care [e.g., training frontline health workers in breast cancer risk factors, clinical breast exams and proper referral procedures] and improve early detection and outcomes.

Sociocultural barriers

- Sociocultural barriers include myths and misconceptions about the causes and treatment of cancer, stigma, language, discrimination, social class, gender and religious beliefs.
- Cancer survivors, advocates, nongovernmental organizations and civil society can be valuable partners in identifying and addressing patient access and quality of care issues.
- Community education about risk factors, early detection and treatment can reduce stigma, myths and misconceptions about breast cancer.
- Strengthening partnerships between health facilities and community partners can improve equitable access to care and reduce duplication of services.

Personal barriers

- Personal barriers may include mistrust of the health system, fear of a cancer diagnosis, low health literacy and competing family and work obligations.
- Improving health literacy and raising awareness about risk factors and early detection can reduce fear about seeking care for breast health concerns.
- Engaging cancer survivors in supportive care can help reduce psychosocial barriers to treatment.

Financial barriers

- Financial barriers to accessing care include out-of-pocket payment for services as well as indirect costs such as transportation, housing, childcare and lost wages.
- Health insurance, subsidized medicines and support for transportation and housing during treatment can reduce financial barriers.

Resource-stratified pathways across the continuum of care

- Develop programs based on identified needs and barriers, outcome goals and available resources.
- Pursue a defined resource-stratified pathway appropriate for available resources to ensure coordinated investment and incremental program development across the continuum of care.



POINTS FOR POLICYMAKERS:

OVERVIEW

Preplanning

- Identify current and previous efforts to address access to breast health care.
- Identify data that may provide insight into existing barriers and facilitators.
- Identify who will lead the process and stakeholders to be engaged.

Planning Step 1: Where are we now?

Investigate and assess

- Assess breast health services [accessibility, availability, affordability, acceptability].
- Assess community partnerships [advocacy groups, public health services, women's clinics].
- Identify barriers and facilitators to accessing breast health services [structural, sociocultural, personal and financial].

Planning Step 2: Where do we want to be?

Set objectives and priorities

- Define target population.
- Identify gaps and consider new policies and services to reduce barriers to care.
- Set objectives that promote one common goal of improving access to equitable cancer care services.
- Assess feasibility of interventions.

Planning Step 3: How do we get there?

Implement and evaluate

- Engage stakeholders [advocates, patients, providers] across disciplines and sectors.
- Pursue a resource-stratified approach to breast cancer care that considers available resources and equitable access to quality care for all women.
- Address barriers by building health system capacity, raising awareness and reducing financial barriers using a resource-stratified pathway.
- Monitor and evaluate policy implementation.

WHAT WE KNOW

Health care workforce: Health systems often face shortages of health care providers, especially those trained in screening, detecting, diagnosing and treating cancer. Integrating breast health care programs into maternal or women’s health services may be synergistic, but in already strained primary care settings may create additional barriers unless human resource allocations are adequately addressed. Introducing or expanding existing programs without providing additional human resources can result in ‘caregiver burnout’ as health professionals encounter more challenging working conditions, higher workload and inadequate infrastructure to perform their work [see Table 1].

Treatment: Increasing awareness of breast cancer and improving access to detection without addressing treatment can have negative consequences. Access to standard medications deemed essential for optimal breast cancer care can be limited by policy, cost and distribution systems. At a minimum, patients should have access to medications on the WHO Model List of Essential Medications (e.g., pain medications, tamoxifen). Access to pain medicine is a fundamental human right and global health policy priority, yet opioid analgesics are often undervalued as an essential treatment. Many patients remain unable to access these medicines due to policies and/or insufficient supply. However, expanding access to breast cancer medicines can be challenging. More research is needed to determine therapeutic interventions relevant to most LMIC populations. Surgery and radiotherapy are significant treatment modalities for breast cancer. Simple surgery techniques may be managed by general surgeons at primary and secondary care centers to reduce the burden on specialist surgeons in cancer centers. Despite the deficits in availability of radiotherapy facilities in LMICs, at least one specialist cancer center should be equipped with this intervention. According to the International Atomic Energy Agency (IAEA), as of 2008, only 30% of the world’s radiotherapy facilities were in developing countries, where 85% of the world’s population lives. Existing radiation equipment is often outdated or out of service. Limited access and long waits for radiotherapy can result in suboptimal breast cancer care and can limit effective treatment options.

Beliefs and perceptions: Beliefs and perceptions of health care are shaped by culture and society and influence health care-seeking and decision-making behavior. Stigma is also shaped by local beliefs and perceptions that may be based on myths and misconceptions about cancer. In communities where cancer is highly stigmatized, women may be less likely to access breast health services, as feelings of shame may lead them to remain silent or attempt to hide their condition. “Fatalism” is the belief that one does not have any control over disease, life or death. The belief that breast cancer is inevitably fatal is reinforced when breast cancer is not detected and treated at an early stage, when treatments can lead to cure or long-term survival. Women may opt not to utilize detection or screening services or pursue follow up evaluation after a positive screening if they believe cancer is not treatable or if they believe detection speeds death.

Relating an illness to events, situations or experiences in life is another cultural construct similar to fatalism that may interfere with a woman seeking medical evaluation and treatment. Other misconceptions about breast cancer (e.g., the idea that cancer is contagious, or from god) and breast cancer diagnosis (e.g., that the diagnosis process requires removal of the breast rather than a small biopsy) may also limit a woman’s willingness to seek care. Breast cancer survivors who are willing to speak publicly about their experience can play a vital role in reducing stigma, dispelling damaging myths and misconceptions and changing beliefs and perceptions.

Mental health: Psychological issues related to a breast cancer diagnosis and the associated stigma include depression, anxiety and distress. Various clinical assessment tools and protocols for treatment of depression and anxiety are available. Treatment includes supportive care (counseling) and, if available and appropriate, pharmaceutical therapies such as antidepressants and anti-anxiety medications. Long-term stress can also have physiologic effects such as lower immune responses, fatigue and insomnia, which may affect health outcomes. Addressing a patient’s mental health can improve her physical outcome. Fear is a common response to a serious health concern or a stigmatized condition. Fear related to breast cancer can be related to physical aspects of disease or treatment (e.g., pain and discomfort from biopsy or surgery, fear of nausea, hair loss or other toxic effects from radiation or chemotherapy), or psychosocial aspects (e.g., a changing role at home or work, loss of femininity or distorted body image).

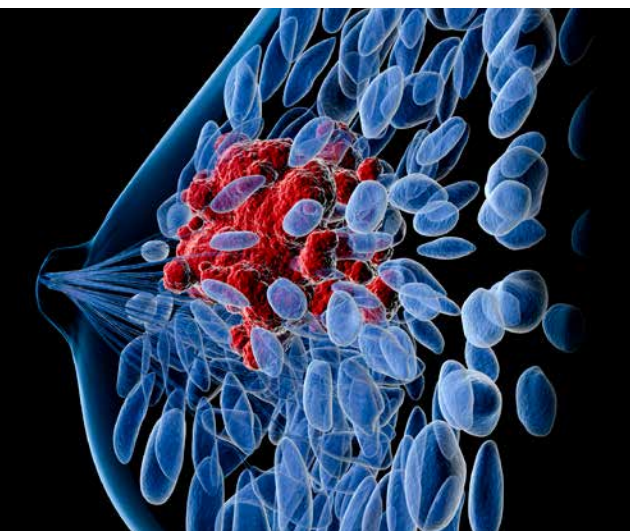
Family: A diagnosis of breast cancer can shift family roles and strain family dynamics. A woman may avoid seeking care for breast concerns if she fears that her spouse will leave her. If family members (husband, children, relatives) react negatively to a diagnosis of breast cancer, a woman may be left unsupported physically, psychologically, socially and financially, and may then require additional supportive services from the community and/or health system. Many women who self-identify a breast problem do not seek timely medical evaluation for these reasons.

Mistrust of the health care system: Attitudes toward health care providers shaped by past experiences or sociocultural and religious beliefs affect utilization of health services. In some settings, a lack of trust in the health care system and a preference for traditional healers can be a barrier to accessing care in a health care system. Consulting traditional healers first for breast cancer can delay early detection and reduce possible curative treatment options. Lack of trust in the health system includes concerns over reports of corruption and medical fraud, mistrust of individuals or groups of health care providers and reports or personal experience of negative or suboptimal care. Examples of suboptimal care include inadequate doses of treatment, expensive and unnecessary medications and interventions, paternalistic patient-provider relations, the withholding of diagnostic information from patients, a lack of female providers and culturally insensitive communication or practices.

Patient navigation: Cancer care is complex and can last months or years and require multiple tests and rounds of treatment and follow up. Navigating this process can be challenging for patients and their families, especially when referral networks fail, services are not coordinated and/or patients face delays, lack information about their treatment or need to travel long distances. The term “patient navigation” refers to how patients, their families and caregivers access and navigate available health services. “Patient navigators” are health professionals (nurses, physicians, social workers) or trained community workers or volunteers (breast cancer survivors, advocates) who assist patients in navigating the system by helping with appointment scheduling and coordination of care. More sophisticated patient navigation services may include arranging financial support, facilitating communication between

providers and ensuring patients adhere to treatment recommendations. Studies from HICs report that patient navigators improve rates of breast cancer screening, quality of life and patient satisfaction.

Cost of care: The inability to pay for care or the fear that services will lead to economic devastation prevents many women from seeking care at all resource levels. Women are more likely to seek care if they have health insurance or personal wealth. Conversely, user fees (private, out-of-pocket health expenditures) limit access to services. According to WHO, government-financed health services in most low-income countries are increasingly dependent on user fees paid by patients, which are nearly twice as high as the public health expenditure. Early diagnosis can result in more cost-effective treatment of breast cancer.



WHAT WORKS

Stakeholder engagement: Engaging the relevant stakeholders [e.g., health care providers, patients, survivors, advocates, caregivers] in identifying and assessing the existing barriers to accessing early detection services and treatment is the first step in reducing access barriers. Interviews, focus groups and surveys with breast cancer survivors, advocates and other stakeholders can be used to identify barriers and inform program direction [see *Planning: Developing Comprehensive Breast Cancer Programs*]. Demonstration projects can be used to assess the impact and effectiveness of interventions to reduce barriers. In low-resource settings where cost parameters and effectiveness of cancer programs are not well known, focusing on a limited geographic area that has a high-risk population can be more cost-effective and allows for adjustments to be made before scaling up or making additional investments.

Data collection and analysis: Quantitative and qualitative data are essential for identifying barriers to access in a target population. Accurate data and record-keeping is an essential component of breast cancer care. Population-based data can help reveal barriers, bottlenecks, loss to follow up and other areas for health system improvement. According to WHO, the following information should be routinely collected: demographic and socioeconomic data [including information that can be used as a unique patient identifier]; legal data such as consents and authorizations; financial data related to fees and clinical patient data [diagnosis and treatments]. Documentation of breast cancer-specific data should include tumor site, stage and time and type of treatment. Other valuable data include economic indicators, access to finances for health care, public transportation costs and location of health facilities. Qualitative research conducted through focus groups and interviews with key informants and representatives of the target population can provide insight into beliefs, perceptions and experiences that affect utilization and access to care. These data can help researchers understand patient preferences, determine the profile of high-risk populations and identify competing health priorities, health care infrastructure barriers and available supportive care services.

Coordination of services and referral networks: Location and capacity considerations must also be part of breast cancer program improvements. Each health facility within a health system can play a role in promoting breast cancer care, but this requires coordination [e.g., designating some health facilities to offer specialty services through referrals from other health facilities]. Selecting which health facility offers which services requires balancing multiple priorities [e.g., proximity to a given population versus transportation barriers for other populations]. Understanding where women in the target population receive primary care is an important consideration in determining resource allocations for health professionals and their patients. Health centers, primary care clinics and district hospitals are often the primary point of contact for women with breast complaints. While specialty centers can improve outcomes [e.g., breast surgery outcomes can be superior in higher-volume facilities, and high-volume pathology labora-

tories can produce more accurate results], having all patients receive treatment at a centralized facility is not practical if a significant portion of a population lives in remote areas.

Timely communication between providers is needed to ensure that women receive integrated, effective care. Standard protocols for referrals should be developed between the primary point of contact and follow up breast cancer diagnosis and treatment facilities. Building local capacity and strengthening referral networks can help ensure timely and appropriate access to both local and centralized specialty care. For example, a facility with fewer available resources may perform diagnostic tests and initiate surgical treatment but refer patients to a regional center for chemotherapy and/or radiotherapy. This requires health system referral networks and coordination of services to minimize delays in services, and thus improve outcomes.

Comprehensive cancer centers: Comprehensive cancer centers [i.e., centralized services] can serve as core components within a larger health care network offering multidisciplinary expertise in clinical care, clinical guidelines, research priorities, public policy, advocacy and training. However, for a comprehensive cancer center to succeed, improvements in existing referral processes are often needed and patient access to centralized services must be addressed. Investment in comprehensive care centers must be balanced against geographic limitations in patient access to care and the need to advance the capacity of district, provincial and general hospitals that function as the primary point of contact for most cancer patients.

Investing in human resources capacity: When increasing breast cancer awareness and improving access to breast health services, it is essential to plan for how the health system will handle increases in breast concerns and detection of suspicious cases. Programs to address human resources capacity for health care are needed at all resource levels. Strategies to build capacity should combine nonmonetary and monetary policies designed to improve health worker retention and performance, such as providing continuing medical education, ensuring decent working conditions and wages and promoting a culture that supports employees. A multi-sectored and integrated-systems approach can help address existing and anticipated human resource deficits. Examples of integrated approaches include investing in training community health workers engaged in maternal child health by training them to counsel on breast awareness, or adapting palliative care programs developed for communicable diseases [e.g., HIV/AIDS] to include noncommunicable diseases, including breast cancer. Health systems can also partner with academic institutions and other stakeholders to develop training programs to increase the number of health professionals trained in breast health awareness and care [see Table 1].

Advocacy, education and outreach: Health systems can benefit from partnering with and supporting local advocacy groups to draw attention to the need for improved access to care and to ensure breast cancer awareness messages are consistent, culturally appropriate and reflect available services. Breast cancer survivors are valuable advocates because they are liv-

ing testimony that women can survive breast cancer and lead productive and quality lives. They can also provide important information about the health system from a patient perspective and help inform health policymakers about local, national and global breast cancer issues.

Patient education and community outreach can improve participation in early detection programs and reduce misconceptions about breast cancer and breast cancer treatment. Educational programs will vary by region or country, and core messages should address the target population's cultural and social barriers. Strategic messaging about breast health can be conveyed by health professionals during patient encounters, or through organized breast awareness campaigns that involve breast cancer survivors, advocacy groups, community health workers, local volunteers and health professionals.

Cost-effectiveness and process metrics: Economic modeling and metrics are important policy tools and can help identify strategies to reduce financial barriers to accessing care, assess programmatic performance and ensure sustainability of a breast cancer program. Cost-effectiveness analysis can be used to assess the relative benefit of a health program or intervention. This type of analysis has shown that treating early-stage breast cancer with surgery and radiotherapy is more cost-effective than systemic chemotherapy for metastatic disease. However, cost-effectiveness analysis has limitations; for example it often assesses interventions as vertical programs, and cannot easily capture the benefit of integrated services. Economic modeling can be used to predict the health care cost for the patient (versus costs to the health system), a major barrier to care-seeking. Process metrics can be used at a local level to track improvement along a resource-stratified pathway and can be designed to minimize cost to the program while at the same time contributing to overall quality assurance [see WHO Health statistics and information systems tools http://www.who.int/healthinfo/country_monitoring_evaluation/documentation/en/].

Financing models and cost-sharing: National health plans should consider political, social and cultural factors affecting health system costs when proposing financing models and target populations for breast cancer programs. Communication and collaboration between health systems and other financial stakeholders should be ongoing to reduce cost and increase access to advanced therapies such as HER2 monoclonal antibody therapy or aromatase inhibitors. Strategies include matching the cost of medicines to the patients' ability to pay (i.e., subsidized medicines). Governments, health systems and other stakeholders can also improve access to medications through negotiations with pharmaceutical companies regarding prices, manufacturing of generic medications and drug donation programs. Alternative financing models such as conditional cash payments, prepayment or insurance schemes, may reduce financial barriers but are limited in scope and have the potential for corruption and misuse. Limiting the amount of out-of-pocket payments can reduce catastrophic health expenditure scenarios for patients and encourage participation. As the HIV/AIDS epidemic demonstrated, without access to

affordable treatment, people are unlikely to participate in early detection or screening programs.

Patient navigation and patient information: Studies in LMICs indicate that patient navigation can reduce the number of health encounters and unnecessary steps to receiving appropriate care. Patient-centered decision aids are another tool that can be used by patient navigators to improve a woman's understanding of her health, the implications of a breast cancer diagnosis and her treatment plan. Patient treatment summaries that patients can share with members of their health care team can help prevent duplication of tests or misinformation about a patient's condition, treatment or preferences.

Resource-stratified guidelines: Countries vary in wealth, culture and societal preferences with regard to health care; within countries there can be vast differences in both capacity and in cancer burden, particularly between urban and rural areas. Evidence-based resource-neutral guidelines from HICs cannot always be easily translated into practice in limited-resource settings. Resource-stratification is a process whereby standard health care interventions are grouped by attributes that affect their feasibility in different settings, including costs, level of complexity and demands on the health care system. Resource stratification does not promote suboptimal care, but lays out the necessary components of building a cancer program in the most efficient, effective and logical manner, beginning with a strong foundation.

The Breast Health Global Initiative (BHGI) applied an evidence-based consensus panel process to build a framework defining resource prioritization pathways for early detection, diagnosis, treatment and delivery systems at four levels of available resources: basic, limited, enhanced, and maximal. Resource stratified guidelines provide an alternative framework and allow ministries of health to identify deficits in resource allocations and facilitate breast cancer control planning. Resource-stratified breast cancer guidelines, such as those developed by the BHGI, have improved health system coordination and are now being applied to other cancer programs [see Table 1].

Resource-stratified pathways: With regard to access, resource-stratified pathways must consider how allocation of these resources (local versus centralized), payment for services (health insurance versus out-of-pocket) and socio-cultural affect utilization of services. The resource allocations determined using this approach are based not only on the type of services or resources required for a program (pathology lab, radiation equipment, surgical expertise, chemotherapy medications) but also the location of services (transportation and housing barriers), health professional capacity (expertise in breast cancer care and culturally sensitive communication skills) and patient access issues, including sociocultural barriers. The pace of progression along a resource-stratified pathway will be different for each region or country. The design of a resource-stratified pathway should balance the advantages of centralized services versus the potential barriers to equitable access that arise from centralization [see Table 1].

PLANNING STEP 1: WHERE ARE WE NOW?

Investigate and assess

Assess number patients in need of breast cancer care after curative treatment

- Examine data on breast cancer incidence and stage of disease at presentation to help estimate the number of patients who will likely need supportive care after curative treatment.

Assess the existing survivorship services

- Identify and review existing protocols for survivorship care and coordination of care. Review where supportive care services are being provided and who is providing them. Many applicable basic services are likely in place within a health system, including the ability to monitor for cancer recurrence and the treatment of long-term complications, even if a specific survivorship program does not exist.
- Consider the appropriate cultural and social context of the target population. Engage survivors in understanding the social and cultural norms and the types of psychosocial and sexual health interventions needed.
- Assess health care services that may currently exist within the health system for the management of common treatment-related toxicities.
- Include family and other caregivers in survivorship care planning. Educational and support services should be available to caregivers.
- Assessments should determine who is providing services (e.g., family members, community volunteers, health workers) as well as the population covered by existing services.
- Assessment tools have been developed to identify treatment-related physical and psychosocial complications. These tools can be used to improve patient-provider communication, strengthen referral systems, and inform future health system supportive care expansion.

Assess patient access and barriers to survivorship care

- Identify structural, sociocultural, personal and financial barriers to accessing survivorship care.
- Structural barriers may include legislative barriers, a lack of protocols for survivorship care, a lack of coordination of care, especially during the transition from oncology to primary care, a lack of trained health professionals and a general lack of awareness of the continued need for care for breast cancer patients after curative treatment.

- Consider focus groups with patients to understand sociocultural barriers to accessing survivorship services.
- Assess outreach to rural or hard-to-reach communities and marginalized populations.
- Engage community leaders in program development to help ensure activities are implemented in a manner relevant to the community.
- Investigate workplace attitudes, policies and practices regarding health care and employment protection. Barriers to care may be more extreme in low-resource settings and associated with cultural or psychosocial aspects of care related women's health issues (including sexual health).

Assess health system capacity

- Coordination of care is crucial. Effective survivorship care requires the coordinated involvement of patients, their families, community support services and health providers and may require additional health professional training.
- Assessing and managing psychosocial complications during treatment may require targeted training of existing health professionals and partnering with community services.
- Assess current referral systems from treatment to survivorship care.

Assess monitoring and evaluation capacity

- Review monitoring of treatment-related complications as a routine part of breast cancer care, including monitoring for psychosocial complications, such as reproductive or sexual health issues; surgical complications, such as lymphedema; systemic therapy complications, such as musculoskeletal, gastrointestinal, nervous system, hematologic and skin and nail toxicities; and pain management.
- Quality assurance programs should be in place to reduce treatment-related complications of surgical procedures, radiotherapy and systemic therapy.
- Assessment tools can assist health care providers identify treatment-related toxicities, surveillance strategies for recurrence and coordination of care between providers.

PLANNING STEP 2: WHERE DO WE WANT TO BE?

Set objectives and priorities

Identify community and health system partnerships

- Equitable access to timely diagnosis and treatment requires community and health system collaboration [e.g., local, centralized, women's clinics, public health services, civil society and academic institutions].
- Community leaders, health professionals, breast cancer specialists, survivors, advocates, health care management personnel and policymakers should contribute to program planning and provide feedback on interventions.
- Partnerships with stakeholders should aim to minimize barriers and cost of care to patients.

Set achievable objectives

- Objectives should promote one common goal: improving access to equitable, good-quality breast cancer care.
- Consider policy interventions to reduce structural barriers [recruitment and training of health professionals and/or access to essential medicines, including opioid analgesics].
- Consider policy interventions to reduce sociocultural barriers [education and strategic messaging to reduce stigma, myths and misconceptions about breast cancer].
- Consider policy interventions to reduce personal barriers [assess psychosocial needs and provide supportive care for patients, possibly through engaging survivor networks].
- Consider policy interventions to reduce financial barriers [alter the payment structure and reduce the risk of catastrophic health expenditures].

Set priorities and determine feasibility of interventions

- Pursue a resource-stratified pathway that considers how allocation of resources, payment for services and sociocultural issues affect utilization of services.
- Use available and relevant economic metrics and modeling, including cost-effectiveness analysis, to set priorities.
- Consider long-term feasibility and affordability of interventions.
- Demonstration projects may help ensure program feasibility [quality and sustainability] prior to population-wide implementation.

PLANNING STEP 3: HOW DO WE GET THERE?

Implement and evaluate

Establish political and financial support

- Secure necessary political and financial resources for policy interventions.
- Consider alternative financing models, such as conditional cash payments, prepayment, or insurance schemes to reduce financial barriers.

Implement and disseminate

- Partner with national and local stakeholders, survivors and advocates to coordinate dissemination of policy changes and implementation of programs plans [goals, objectives and best practices].
- Balance national and centralized program implementation and expansion with resources to assure equitable access to services.

Monitor and evaluate

- Establish assessment, process and quality metrics and outcome measures.
- Collect and analyze data to assess the impact of policy interventions and identify additional barriers, bottlenecks and loss to follow up.

CONCLUSION

Improving access to and utilization of breast care programs can affect breast cancer incidence and survival. An essential first step to improving access is identifying the existing structural, sociocultural, personal and financial barriers. Strategies for improving equitable access to breast cancer care should be customized to meet the needs of a target community. Cancer survivors, advocates and health care providers should be engaged in identifying and addressing barriers. Programs should consider local resource availability, sociocultural traits of the community and economic variables. Health professionals can be advocates and promoters of breast care health through participation in continuing medical education, providing breast counseling to patients and participating in health system improvement projects.

Table 1. Breast care programs: resource-stratified human resource allocation and support systems

	Basic	Limited	Enhanced	Maximal
Services	Diagnostic/pathology services Nursing services Oncology services Palliative services Psychosocial services Primary care services Surgical services	Imaging services Peer support services Radiation oncology services	Cancer follow up Group support Screening programs Rehabilitation services Survivorship services	Universal access to screening Individual psychosocial care
Human resource capacity building	Primary care provider education [breast cancer detection, diagnosis and treatment] Nurse education [cancer patient management and emotional support] Pathology technician education [tissue handling and specimen preparation]	Nurse education [breast cancer diagnosis, treatment and patient management] Imaging technician education [technique and quality control]	Organization of national volunteer network Specialized nursing oncology training Home care nursing Physiotherapists and lymphedema therapists On-site cytopathologist	Organization of national medical breast health groups
Patient and family education	General education regarding primary prevention of cancer, early detection and breast health awareness	Group or one-on-one counseling involving family and peer support	Survivorship education Lymphedema education Home-care education	
Patient navigation	Field nurse, midwife or health care provider triages patients to central facility for diagnosis and treatment	On-site patient navigator [staff member or nurse] facilitates patient triage through diagnosis and treatment	Patient navigation team from each discipline supports patient "handoff" during key transition from specialist to specialist to ensure completion of therapy	
Record keeping	Individual medical records and service-based patient registration	Facility-based medical records and centralized patient registration Hospital-level cancer registry	Resource room[s] for education/outreach Facility-based follow up Regional cancer registry	Representative national cancer registry
Cancer care facility	Health facility Operating facility Outpatient care facility Pharmacy Home hospice support External consultation pathology laboratory	Clinical information systems Health system network Imaging facility Radiation therapy	Centralized cancer referral center[s] Radiation therapy: low energy linear accelerator, electrons, brachytherapy, treatment planning system	Satellite [noncentralized or regional] cancer centers
Breast cancer center	Breast health care access integrated into existing health care infrastructure	"Breast Center" with clinician, staff and breast-imaging access Breast prostheses for mastectomy patients	Multidisciplinary breast programs Oncology nurse specialists Physician assistants	

Source: Anderson BO, Yip CH, Smith RA, et al. Guideline implementation for breast health care in low-income and middle-income countries: overview of the Breast Health Global Initiative Global Summit 2007. *Cancer*. 2008 Oct 15;113(8 Suppl):2221-43.

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