



PROPOSED INDICATORS TO MEASURE A NATIONAL HEALTH SYSTEMS RESPONSE TO BREAST CANCER

PURPOSE

Breast cancer is the most frequent cause of female cancer deaths in both developing and developed regions and is one of the leading causes of mortality in women of reproductive age in developing countries (1). The burden of breast cancer on populations and health systems and the existence of effective and efficient early detection methods that can be tailored to all resource settings support the urgent need for effective health system responses to manage and control this disease. The Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases (NCDs) recommends that Member States implement and monitor cost-effective approaches for the early detection of breast cancers (2). Subsequently, the Political Declaration on NCDs adopted unanimously by UN Member States included a commitment to promote increased access to early detection programmes for breast cancer (Para. 43k).

The second World Health Organization (WHO) discussion paper (version 22nd March 2012), presented an updated set of proposals on the development of global NCD targets and indicators, and includes the collection of data on cancer incidence and type to inform the planning of cancer control programmes as a WHO core indicator. Given that breast cancer is the most common cancer among women and the most likely cause of cancer-related deaths among women, this key recommendation supports indirectly measuring breast cancer incidence as part of a framework for national NCD surveillance.

Here, we provide supporting information for Member States for proposed indicators¹ to measure breast cancer burden and a health systems response to breast cancer at a country level. These indicators, in addition to the recommendation by WHO of measuring cancer incidence, will greatly facilitate the allocation of resources at a country level for addressing the breast cancer burden (for example, curative *versus* palliative) within a national cancer control plan.

1. ADOPTION OF POLICIES TO SUPPORT NATIONAL PROGRAMMES FOR EARLY DETECTION OF BREAST CANCER

Description

The breast cancer burden in all resource settings can be significantly reduced through practical interventions that are feasible and cost-effective (3). Effective and efficient breast cancer early detection methods including screening mammography, clinical breast

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examination (CBE) and breast self-examination (BSE) can be tailored to the resource setting and population-based need. In addition, making the public aware that breast cancer outcomes are improved through early detection should be part of an integrated approach to early detection programmes regardless of the breast cancer early detection technique and the resource setting.

We propose here that an appropriate performance indicator *is adoption of policies to support national programmes for early detection of breast cancer that are appropriate and feasible for the population-need and resource setting.*

Rationale

The development and implementation of policies and effective national programmes that support breast cancer early detection should be tailored to resources as well as social and cultural factors, with the flexibility for Member States to initiate and expand services as resource levels increase. Published evidence-based guidelines exist for the early detection of disease as they relate to resource allocation for public education and awareness, cancer detection methods, and evaluation goals (3).

Feasibility

Country level examples include both low- and middle-income countries to demonstrate integrated approaches to early detection of breast cancer that are appropriate for different resource settings.

2. MEDIAN PATHOLOGIC TUMOUR SIZE AT INITIAL DIAGNOSIS

Description

In developing breast cancer measurements for low- and middle-income countries, the median invasive tumour size at initial diagnosis is the most basic index for assessing the performance of breast cancer early detection in a given location (4). The tumour size should be collected as part of the pathological assessment at the time of diagnosis regardless of the resource setting (5).

Rationale

A reduction in the median size of breast tumours at initial diagnosis of breast cancer is an established predictor of better outcomes for women with breast cancer. There is also a direct relationship between the median invasive tumour size and access to early detection programmes (methods of early detection will be country-specific) and education/ awareness initiatives. Countries in which median invasive tumour size is large (5cm) are more likely to have high breast cancer case mortality rates, and also likely to lack public awareness regarding the importance of early detection and/or facilities where breast diagnostic procedures can be performed. Although a surrogate for downstaging of tumours, median invasive tumour size is not reliant on fixed cut-offs used for staging and the evaluation goal is to achieve downsizing of the median invasive tumour size at initial diagnosis.

Feasibility

Country level examples include both low- and middle-income countries to support the ability to routinely collect data on invasive tumour size at initial diagnosis. Data on tumour size can be obtained from hospital records and does not rely on the availability of a population-based cancer registry.



References

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