

EARLY DETECTION

Early detection allows more effective treatment when the cancer is at an earlier, much more curable stage.

Detection of some cancers at an early stage combined with prompt treatment permits less aggressive treatment, leading to a better quality of life of the patient, and is associated with significantly reduced mortality. There are two distinct approaches to early detection—screening and early diagnosis.

Screening involves systematic examination of an apparently healthy and asymptomatic population at risk with a test to detect the disease at an early stage. However, implementation is quite complex and resource-intensive. Screening may be population-based (inviting the entire target population at the appropriate intervals) or opportunistic (at the initiation of the patient or upon invitation at an unrelated clinical encounter). To date, screening of the general population is recommended only for cervical, colorectal, and female breast cancer, depending on resources of the country. **MAP 30.1-3** Oral cancer screening is recommended for habitual users of tobacco or alcohol. Lung cancer screening is recommended in the United States for current and former heavy smokers aged 55-74 years. In addition to detection at an early stage, screening can prevent cervical and colorectal cancers through detection and removal of premalignant conditions. **FIGURE 30.2**

Early diagnosis is detection of a cancer at the earliest possible stage, usually through patient awareness of the early symptoms of common cancers, and training of healthcare workers to recognize and appropriately refer patients with probable early cancer symptoms. **FIGURE 30.1** While not as effective as screening, it can be used for

many of the most common cancers including breast, skin, and stomach, and in low-resource settings where screening may not be feasible. Early diagnosis is an important component of any early detection program because not all adults are invited to screening or attend screening, and screening programs fail to detect some cancers. Population awareness, trained healthcare providers, prompt referral systems, and diagnostic and therapeutic infrastructure are necessary for both screening and early diagnosis to function well.

ACCESS CREATES PROGRESS

Programs to raise awareness of breast cancer and promote clinical breast examination in countries where mammography screening is not feasible have resulted in more breast cancers being diagnosed at an early stage.

FIGURE 30.2
Decreases in cervical cancer incidence rates between 1960–2016, age-standardized rate (world) per 100,000

