Quality assurance and performance standards for colorectal cancer screening

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Importance of quality assurance

“Quality assurance aims to ensure that an endeavour leads to the outcome for which it is intended.

This … also applies to complex systems, such as screening programmes designed to lower the burden of colorectal cancer … in the population.”

Sequence of Steps in Quality-controlled Implementation of Screening Programmes*

1. Comprehensive **planning** of screening process: feasibility of screening models, professional performance, organisation and financing, quality assurance (QA)

2. Preparation of all components of screening process to perform at requisite high level (including **feasibility testing**)

3. Expert **verification** of adequacy of preparations

4. **Piloting** and modification, if necessary, of all screening systems and components, including QA, in routine settings

5. Expert **verification** of adequacy of pilot performance

6. Transition of pilot to service screening and geographically phased programme rollout in other regions of the country

7. Intensive monitoring of programme rollout for early detection and correction of quality problems
Action plan for establishing population-based screening programmes

1. Governance
   - Establish steering committee
   - Appoint responsible coordinator of pilot screening programme(s)
   - Establish expert advisory board (include representatives of civil society)
   - Develop proposal for financing phases 2 and 3

2. Coordinator prepares work plans (for discussion with advisory board and approval by steering committee) including
   - Feasibility testing followed by piloting
   - Budgeting
   - Organizational development (pilot leads, reference centres and other capacity for direct scientific and technical support)

3. Feasibility testing in small scale studies
   - Screening modalities (invitation, testing, diagnostic work-up, treatment)
   - Quality assurance
   - Revision of work-plans depending on results of feasibility testing

4. Initial workshops and other training for screening and other relevant staff (continuous process adapted to scale of programme activities)
5. Pilot testing (large scale, “routine” setting)
   - Designate suitable regions to pilot routine screening programme
   - Two rounds of breast screening, similar minimum pilot duration for cervical and colorectal screening
   - Screening modalities (invitation, testing, diagnostic work-up, treatment)
   - Monitoring and managing performance
   - Other aspects of quality assurance, including training
   - Reporting results
   - Revision of work-plans depending on pilot results

6. Management and Evaluation (M&E) unit for the national programme (establish during the pilot phase)
   - Establish organizational entity for M&E
   - Develop database for nationwide programme implementation
   - Develop infrastructure for nationwide delivery of personal invitation
   - Monitor results of the pilot programme, and develop performance indicators
   - Develop quality criteria for phased rollout and revise work-plans accordingly

7. Countrywide roll out of the breast and cervical screening programmes after elaborating the same issues (see 5 and 6) in programme management.
   - Phased rollout, beginning in a given region only after quality criteria are fulfilled
   - Monitor results of the programme, and further develop performance indicators

8. Continuous quality improvement of programme based on
   - Performance monitoring and impact evaluation
   - International collaboration in quality assurance.
Considerable time is needed to successfully implement population-based cancer screening programmes

- Careful planning and feasibility study phase
  - 1-3 years

- Pilot phase: randomised or non-randomised pilot settings
  - from 3-5 to 10 years
  - depending whether to include performance only or also outcome evaluations

- Nationwide rollout
  - 5-10 years until fully established
Programme implementation - Key requirements

- Good governance, to assure
  - Long-term political commitment
  - Adequate, sustainable resources
  - Competent coordination and oversight (standards)

- Involvement of civil society
  - Engagement in discussion of benefits and harm of screening and in acceptability and effectiveness of screening process

- Autonomous programme management
  - Coordination of numerous stakeholders and activities
  - Organisational development
  - Control of resources (dedicated budget and staff)

- Cancer registration
  - Accurate assessment of cancer burden for effective monitoring and evaluation

- International collaboration
Thank you for your attention.