

First results of the EU-TOPIA project

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Background Screening programmes vary substantially among countries yet few have conducted overall assessments of programme effectiveness. In 2015 the EU-TOPIA project began. Its objective is to systematically evaluate and quantify the harms and benefits of screening programmes for breast, cervical, and colorectal cancer in all European countries, identifying ways to improve health outcomes and equity for target populations. We will present an overview of the first results of this important EU funded project.

Methods First, we harmonized key quality indicators across cancer sites and prioritized key indicators for the effects of screening. Second, we systematically evaluated literature on mortality reduction due to cancer screening across European regions. Third, state-of-the-art decision models of the natural history of the cancers, using country-specific data, are being developed and validated against the findings of the literature review. These models will be used to identify the optimal screening strategy in different circumstances. Fourth, we designed an instrument based on soft systems analysis to undertake a structured assessment of the entire screening system, from creating a population register to ensuring effective clinical management. This instrument identifies and characterizes barriers hindering implementation of optimal screening programs. Fifth, a programme of workshops is being designed to build capacity to conduct comprehensive evaluation of cancer screening programmes across Europe.

Results We prioritized a set of 17 key quality indicators (7 benefits, 10 harms). The literature search provided evidence that cancer screening reduces mortality from the three cancers in all European regions where screening was implemented and monitored. The systems analysis identified a wide range of barriers, many outside the formal screening programmes.

Conclusions Important progress has been made within the EU-TOPIA project. In the next step, we will build upon the constructed tools and invite researchers and policy makers to join and together improve cancer screening across Europe.