

### Isfahan University of Medical Sciences Vice Chancellor for Research and Technology

# Research Grant Application (Proposal Form) <sup>1</sup>

A)

#### **Application Summery**

Electronic Submission Code

49708

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Project title

## A comprehensive and multifaceted analysis of Colorectal cancer screening in Iran

#### Abstract max. 300 words

A brief description of the project aims, justification, strategy, and expected outcomes

Colorectal cancer (CRC) is the second leading cause of cancer-related mortality in United State and It's the third and second most commonly diagnosed cancer among Iranian men and women, respectively. Thus, the economic burden of the disease is quite substantial. However, many of those premature deaths can be avoided by a timely diagnosis of the cancer. Consequently, the economic burden will be significantly reduced. Thus, CRC screening program is being defined in many countries, particularly in developed countries where the incidence and prevalence is high.

In Iran, Isfahan province has been piloted for Irapen<sup>2</sup> program. The program aims to reduce mortality and morbidity due to non-communicable disease by the early detection of disease in those who involved. As a

<sup>&</sup>lt;sup>1</sup> Please submit the form as an English Word document (not PDF). Use Times New Roman font, 12 point in size, and make both left and right margins justified.

<sup>&</sup>lt;sup>2</sup> Package of Essential Noncommunicable (PEN) Disease

part of the program, CRC screening has been also done. All people aged 50-70 has undergone fecal immunochemical test (FIT). Those who get positive results have been recommended to undergo colonoscopy. After three years of starting the program, the cost-effectiveness of CRC screening among the general population has been questioned. Many of those with positive FIT have not followed the colonoscopy recommendation. Although if they wanted to follow, there was not enough facility to meet their needs. Given those facts, it seems necessary to systematically analyze the program to see to what extent it has worked so far, and it will work for the whole country in the future, taking into account the specific context of Iran. Thus, the aim of this study is to provide a comprehensive insight about CRC screening program by collecting all related evidences as well as to recommend an evidence-based national CRC screening program for Iran.

The study is designed in three phases i.e. descriptive phase, context analysis, and guideline development and approval. Each phase includes several small projects. According to a specific research question addressed by each project, appropriate quantitative, or qualitative or mixed research strategy will be used. These range from systematic review and meta-analysis to econometric modeling, economic evaluation and discrete choice experiment.

At present, there is no comprehensive evidence-based national screening program for colorectal cancer in Iran, so this project seeks to introduce this guideline to Iran health care system. In addition to developing a guideline for CRC screening, the project will consider a step by step approach for guideline implementation. So the project will take into account not only cost-effective strategies for CRC screening but also accessibility and affordability of/for them. Also, this is a multidisciplinary project and it is going to be an international research collaboration as the research team includes researcher from Exeter University in UK and from Maastricht university in the Netherlands. For capacity building some advance workshop on the topic will be organized by inviting the international collaborator of the project. In addition, some juniors will be trained by doing research in the project.