

AB041. Economic evaluation of colorectal cancer screening programme in Hong Kong

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Background: With the increasing incidence and mortality rate, colorectal cancer (CRC) has become a major public health problem for the Hong Kong (HK) population. At present, it has the highest incidence with the second-highest mortality rate among all cancers in HK, exerting enormous pressure on the local healthcare system which has already been pressurized by the problems of aging population and chronic diseases. This study aims to perform an economic analysis on the Colorectal Cancer Screening Programme (CRCSP) in HK for the prevention of CRC so as to evaluate the cost-effectiveness of the measure.

Methods: The incremental cost-effectiveness ratio (ICER) would serve as the core outcome of the cost-effectiveness analysis. The cost is defined as all items that would be associated with the CRCSP, including administrative cost, consultation fees, laboratory analysis, colonoscopy fee as well as co-payment fees. The effectiveness is measured as life-years gained (LYG), which is defined by the difference between the number of life-years lost due to CRC in the cohort participating in the CRCSP and the number of life-years lost due to CRC in the cohort not participating in the CRCSP.

Results: Compared to without screening, the ICER presented HK\$39,344/LYG for the CRCSP, which is lower than the willingness-to-pay threshold of HK\$50,000/LYG established. The additional costs incurred for the

implementation of the CRCSP is justified as it could provide effective prevention and protection for the HK population from the consequences and complications of CRC.

Conclusions: The CRCSP provides subsidized CRC screening tests for eligible HK citizens to prompt early detection, prevention and treatment of CRC. It is a cost-effective intervention, which increases survival rate of participants with justified costs incurred. More effort should be employed to promote eligible citizens in participating in the programme.

Keywords: Colorectal cancer; colorectal cancer screening; cost-effectiveness; economic evaluation

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Footnote

Conflicts of Interest: The author has no conflicts of interest to declare.

Ethical Statement: The author is accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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