



Screening to prevent bowel cancer

Colorectal adenocarcinoma, also known as colorectal cancer (CRC) or bowel cancer, is the second most common cause of cancer-related death in Australia. With one of the highest rates of CRC in the world, Australia was also the first country in the world to implement and sustain a national population-based organised CRC screening program using faecal immunochemical tests. NHMRC-funded researchers made key contributions to the program's initial development and ongoing conduct.



Origin

The normal cells lining the colon or rectum may develop into a pre-malignant lesion often called a polyp.

In about 5% of cases the lesion can evolve into a cancer that, if left untreated, may spread throughout the body, leading to death.

To reduce CRC death rates it would be necessary to develop a population-level screening process to detect premalignant lesions before they progressed into early-stage cancers.

Investment

NHMRC identified the importance of cancer detection as early as 1936, but began ongoing funding for key CRC researchers commencing in the 1970s.

Many other organisations provided funding for research contributing to the development of a national bowel cancer screening program, including: Cancer Australia, State Cancer Councils, Australia Cancer Research Fund, SA Strategic Health Research Program, Flinders Foundation, Australian Gastrointestinal Trials Group and the Hospital Research Foundation.

Research

NHMRC-funded researchers demonstrated that the standard testing technology (gFOBT) was unlikely to be acceptable to the public and had limited capacity to detect premalignant lesions or cancer. They recommended the use of an alternative: the faecal immunochemical test (FIT).

They also demonstrated that involvement from, and education for, General Practitioners was important, as was advanced notification before the screening test was provided. This strategy is now used both in Australian and around the world.

Translation

NHMRC-funded researchers helped to develop guidelines for the prevention, early detection and management of colorectal cancer. They advised the Australian Health Technology Advisory Committee and were members of the Bowel Cancer Screening Pilot Implementation Committee.

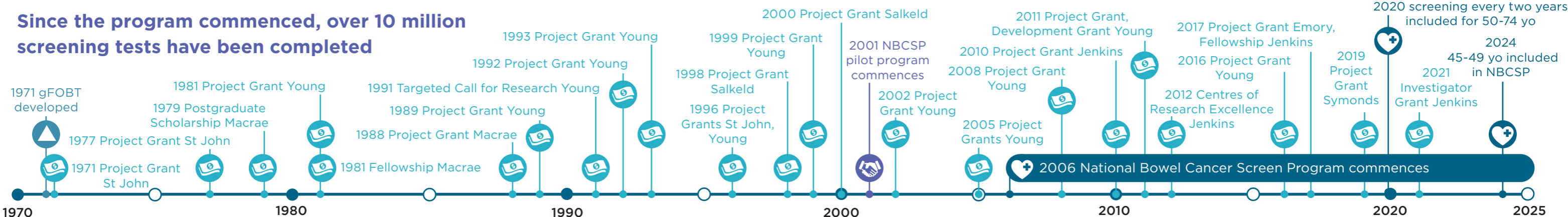
In 2005, the Committee reported that a National Bowel Cancer Screening Program (NBCSP) would be feasible, acceptable, and cost-effective in Australia. The NBCSP commenced in August 2006, based on FIT.

Impact

Between the program's commencement and 2023, over 10 million screening tests had been completed with about 4.5 million people participating at least once. The program has been contributing to reducing morbidity and mortality from bowel cancer in Australia.

From 2020, the NBCSP offered screening every two years to people aged 50-74 with expansion from 1 July 2024 to include those aged 45-49 years given the increasing incidence of CRC in that age group.

Since the program commenced, over 10 million screening tests have been completed



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