MINISTRY OF HEALTH
MANATŪ HAUORA

Programme Business Case

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Tranche 1 Business Case

National Bowel Screening Programme

This business case:

- Sets out the justification, proposed approach, timing and cost of procuring a national bowel screening programme (including Waitemata Transition). [redacted] S9(2)(f)(iv) [redacted]
- Sets out the local context, proposed approach, timing and costs for the first implementation phase of the national bowel screening programme.

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Document Sign-off

Role	Name	Sign-off Date
Group Manager, Personal Health Service Improvement	Deborah Woodley	
Senior Responsible Owner	Jill Lane	
National Bowel Screening Governance Group	Stephen O'Keefe, Chair	

1 Executive Summary

1.1 Purpose of Business Case

This Business Case has been developed in response to the requirement for a report and business case to Cabinet, in support of a national bowel screening programme to reduce the mortality rate from bowel cancer by diagnosing and treating bowel cancer at an early curable stage.

Cabinet has previously considered and approved funding for a Bowel Screening Pilot [CAB Min 10 (12/6B)] and a two-year extension to the pilot as part of Budget 2015. On 1 July 2015 Cabinet agreed that the Ministry should consult on a national service delivery model, service configuration and the associated workforce and infrastructure needs, to inform a business case for the delivery of a national bowel screening programme [SOC Min (15) 14/7]. Cabinet noted the findings of the consultation on 2 December 2015 [SOC Min (15) 0064]. Budget 2016 allocated $39.3 million for the Programme establishment, subject to the approval of this restated Programme Business Case [CAB-16-MIN-0189.14].

This proposal is for a national bowel screening programme, to reduce the mortality rate from bowel cancer by diagnosing and treating bowel cancer at an early curable stage. The proposed rollout of a national bowel screening programme will capitalise on the outcomes of the Bowel Screening Pilot (currently underway in Waitemata DHB), as well as on the concurrent investment which has been made in colonoscopy services. If the proposal does not go ahead, then an opportunity to reduce bowel cancer mortality rates in New Zealand will be lost.

The business case outlines the need for a national bowel screening programme, describes the options considered, the financial implications, the commercial approach and how the programme would be implemented. The business case seeks:

- approval for the full roll out of a national bowel screening programme, including the implementation of Tranche 1 and the procurement approach for the National Coordination Centre.
- the release of the operating funding appropriated in Budget 16, with costs attributed in line with the expenditure set out in the re-stated business case.

The Treasury, the Office of the GCIO, the Capital Investment Committee (CIC), the Ministry of Business, Innovation and Employment (MBIE), Te Puni Kōkiri, the Ministry for Pacific Peoples, the Ministry of Social Development, and the Department of Corrections were consulted in the development of this paper. The Department of Prime Minister and Cabinet was engaged.

The business case takes into account the feedback received from these agencies, and was ratified at the Bowel Screening Governance Group on 28 July 2016. This business case was considered by the Health Capital Investment Committee (CIC) on 28 July 2016. CIC confirmed its support for the intent of the National Bowel Screening Programme, while noting concerns to be addressed. The key areas of concern for stakeholders are: the IT programme to support a national rollout; DHB capability, capacity and readiness; and overall implementation costs for DHBs. These are being addressed as part of the current programme review

The format and approach of the business case are as agreed with Central Agencies and are in line with Better Business Case requirements.

1.2 Need for Investment

Bowel Cancer in New Zealand

New Zealand has one of the highest rates of bowel cancer in the developed world. When compared with other Organisation for Economic Co-Operation and Development (OECD) countries, in 2011 (the latest year for which official figures are available for this comparison), New Zealand had the fifth highest rate of colorectal cancer mortality. In New Zealand, bowel cancer is the third most commonly registered cancer and is the second most common cause of cancer death.

New Zealanders with bowel cancer are more likely to be diagnosed with advanced stages than people in Australia, the United States and the United Kingdom. This translates directly to death rates, which are 35 percent higher in New Zealand than Australia for women and 24 percent higher for men. Bowel cancer is one of the few cancers for which Māori show lower registration and death rates than non-Māori. However, whilst bowel cancer occurs less frequently in Māori compared to non-Māori, once diagnosed, Māori are more likely to die of bowel cancer than non- Māori.

Benefits of a National Bowel Screening Programme

New Zealand is one of the few OECD countries not to have a national bowel screening programme in place. Bowel screening is an investment with health, social and economic benefits with a programme Net Present Value (NPV) estimated at **S9(2)(f)(iv)** (Appendix 8, Option 4). Bowel screening aims to reduce the mortality rate from bowel cancer, by diagnosing and treating bowel cancer at an early curable stage, as well as identifying and removing pre-cancerous advanced adenomas from the bowel before they become cancerous, which can, over time, lead to a reduction in bowel cancer incidence.

Screening detects cancers at an earlier, more treatable stage. 65-70 percent of cancers identified in the Bowel Screening Pilot in Waitemata DHB were Stage I or II (the earliest stages) compared with approximately 40 percent of all bowel cancers diagnosed in New Zealand through symptomatic services. Where cancer is diagnosed at an earlier stage, this is associated with lower treatment costs compared to the cost of treating more advanced cancer. One in ten of all cancers found during the BSP were identified at such an early stage that they required no further surgery, chemotherapy or radiotherapy post colonoscopy.

It is important to note however, that screening has the potential to benefit but also the potential to do harm. Participants in a screening programme should be assured that the screening programme can deliver the potential benefits and minimise the harms, and that the implementation of a screening programme will consider both the harms and the benefits.

The evaluation of the Bowel Screening Pilot has concluded that bowel screening will save lives, with data from international studies indicating that a screening programme may reduce mortality in the population offered screening from bowel cancer by at least 16-22 percent, and potentially up to 30 percent, after 8-10 years. The evaluation also concluded that a national bowel screening programme would result in significant cost-savings from reduced treatment of bowel cancer, which outweigh the cost of screening.

The main benefits of a national bowel screening programme would be:

- **Improved health outcomes** (reduced mortality, increased early detection and, potentially, reduced bowel cancer incidence rates).
- **More cost-effective health care** (lower cost of screening versus the cost of treatment, increased early detection resulting in lower (or no further) treatment costs and increase in quality life-years gained).

- **Improved service delivery** (increase in people receiving consistent and high quality services, reduction in symptomatic first presentation at Emergency Departments, and improved data capture and reporting). It is a common consequence of screening programmes that the required quality standards associated with population screening have a direct follow on to improvements in symptomatic services.
- **Significant social and economic benefits**, including Quality Adjusted Life Years (QALYs) saved (estimated at S9(2)(f)(iv) over the 20 year modelled period). The cost evaluation analysis undertaken to support this business case indicates that there is also a contribution to society, estimated at S9(2)(f)(iv) over the 20 year modelled period.

Programme Strategic Alignment and Stakeholder Support

Investment in a national bowel screening programme would support a number of key Government initiatives, including the New Zealand Health Strategy, the Faster Cancer Treatment Programme, the New Zealand Cancer Plan 2015-2018, the New Zealand Cancer Information Strategy and the Ministry of Health Statement of Intent 2015-2019.

Since 2013/14, the Government has invested over $15 million in additional colonoscopy capacity to reduce the number of people waiting for a procedure. This is a critical factor in enabling a rollout of a bowel screening programme, as colonoscopies are required for people with symptoms and for those with a history or greater risk of bowel cancer, and will be required for people identified through screening.

There is strong sector support for a national bowel screening programme. In June 2016, the Ministry received signed confirmation from all DHB CEOs that they agree in principle, with the support of their Board Chair, that delivery of the bowel screening services according to the national bowel screening pathway and standards is achievable for their DHB, subject to receiving funding to cover the cost of the Programme.

In April 2016, Health Workforce New Zealand confirmed that on the basis of the workforce planning and modelling undertaken, it supports the implementation of a national bowel screening programme.

1.3 Indicative Programme Costs

Indicative Costs

The Programme is seeking funding of S9(2)(f)(iv) over the 20-year modelled period. The business as usual cost (from 2020 onwards) is S9(2)(f)(iv) per year. The total projected Programme cost is S9(2)(f)(iv) over the modelled period (of which S9(2)(f)(iv) is capital), including screening programme funding and the brought forward DHB treatment costs associated with the delivery of the programme.

The programme indicative costs consists of capital and operating cost to deliver the screening programme and "brought forward" treatment costs relating to participants diagnosed with bowel cancer.

National Bowel Screening Programme	2016/17 $'M	2017/18 $'M	2018/19 $'M	2019/20 $'M	2020/21 & Outyears Total $'M	20 years $'M
IT Capital Required	S9(2)(f)(iv)					
Operational Required						
Total						
Brought Forward DHB Treatment Cost						
Total Expenditure						

Funding Drawdown

The funding drawdown of the screening programme cost is shown below. Budget 2016 allocated $39.3 million for the Programme establishment, subject to the approval of this restated Programme Business Case.

Total NBSP Funding	2016/17 $'M	2017/18 $'M	2018/19 $'M	2019/20 $'M	Total 4 Years to 2019/20 $'M	2020/21 & Outyears total $'M	Total 20 years $'M
			S9(2)(f)(iv)				
Total Budget 17							
Total Operating Funding							
Total Capital Funding							
Total NBSP Funding							

Proposed Funding Arrangements

The proposed funding arrangements are:

- **Ministry of Health (using programme funding of S9(2)(f)(iv)):** funds the screening pathway, via DHBs or national arrangements. This includes the cost of screening, training, the National Coordination Centre, Bowel Screening Regional Centres, colonoscopy service provision and ongoing surveillance colonoscopies as a result of screening. Screening services and surveillance colonoscopies are funded at a rate set by the Ministry, which includes depreciation, interest and capital charge.

  The Ministry also funds the development of the IT solution to support the National Bowel Screening Programme using capital, and partially funds IT integration with the relevant operational systems at DHBs using Non Departmental Expenditure (NDE).

- **DHBs:** fund treatment costs (i.e. radiology, Multi Disciplinary Meetings, surgery, oncology, assessments, follow ups etc.) and other costs not covered by the screening pathway, if any, within their annual funding arrangements. The majority of people diagnosed with bowel cancer through the screening programme would have been diagnosed and treated by their DHB at some stage in the future. The screening programme simply identifies them earlier (and likely at a more treatable stage), hence these costs are brought forward. The estimated total cost brought forward by the DHBs is S9(2)(f)(iv), across 8-10 years. DHBs would fund the brought forward DHB treatment cost within their annual funding arrangement.

  DHBs may also be required to use their own capital funds to increase colonoscopy capacity (i.e. facility expansion and additional equipment where required). Hospital building business cases would be required for facility expansion and equity funding for these business cases would be processed through the existing major capital process instead of the National Bowel Screening Programme. The Programme expectation is that alternative capacity (e.g. use of private providers, regional DHB collaboration) would be explored in the first instance.

  DHBs will also be responsible for partially funding a proportion of the costs to integrate with the IT solution.

1.4 Options and Recommended Way Forward

Programme

The potential options for the implementation of a national bowel screening programme were evaluated against the Programme Critical Success Factors and the Investment Objectives. The shortlisted options were further evaluated through multi-criteria analysis, to identify the preferred option. The outcome of the analysis was reviewed and the preferred option ratified at the Cross-Ministry Bowel Screening Steering Group in December 2015. On the basis of this analysis, **Option 4: Complete** has been identified as the preferred way forward.

IT Solution

The potential long-list of options for an IT solution to support the implementation of the National Bowel Screening Programme was analysed separately to the main options analysis, as there are separate Investment Objectives and Critical Success Factors specific to the IT solution. The analysis at the time concluded that the systems used in other countries would not fit current strategic and business needs without considerable resources to adapt the systems to the New Zealand context. The assessment of the options identified **Option 3: BSP+/NBSP** as the preferred IT solution.

An IQA was undertaken to provide a point-in-time review of the IT options analysis applied to the National Bowel Screening Programme. The review considered the IT options, including the methods used to create and assess the option, and the assumptions made in the assessment. The review concluded that the recommended approach is the preferred option by a significant margin and that, although some suggestions for improvement were made, nothing from discussions and review of documents and the options analysis process suggests that this approach is not the best option.

However, given the challenging implementation timeframes and associated risk, and the lapse in time since the preliminary assessment of other options was undertaken, a further market scan is underway. The Ministry commissioned an independent external review to confirm the preferred option and to provide assurance to decision makers and investors. This includes gathering further market intelligence on possible solutions. The findings and recommendations from this review will influence future decisions on the approach to procurement and confirmation of the recommended delivery approach for the national IT solution.

1.5 Recommended Approach - Programme Description

Service Model

The key elements of the proposed national bowel screening programme are described below.

- **Screening test:** The primary test for bowel screening would be the immunochemical Faecal Occult Blood Test (iFOBT), as used in the pilot. If strong evidence emerges to indicate that a more cost-effective and achievable alternative test is available, the programme would re-evaluate the preferred approach and, if required, would amend the programme accordingly.
- **Age range:** The age range of 60-74 aligns with the approach used in other countries. The age range parameters would be evaluated after the Programme has been fully implemented. The Programme would have an eligible population of over 700,000 men and women who would be invited for free screening for bowel cancer, over a two-year period (a screening round).

- **Screening pathway:** The screening pathway is based on international best practice and would largely mirror the Bowel Screening Pilot pathway. Eligible participants would be invited to participate every two years. The iFOBT test kit would accompany each invitation, and would require participants to take a small faecal sample at home and return it to the testing laboratory by post.
- **Primary care engagement:** The preferred approach for the national programme includes primary care participation in the management of results.
- **Screening colonoscopy, treatment and surveillance:** Participants with a positive result would be offered a colonoscopy, at which time biopsies would be obtained and polyps would be removed. Surgical and other cancer treatment, follow-up and ongoing colonoscopy surveillance for high risk polyps would be arranged by the participant's DHB.
- **Service delivery:** A central laboratory/coordination centre would be established to manage the distribution of invitations, as well as processing of iFOBT kits and results notification. Four regional centres would be established to oversee participants who require a colonoscopy and monitor quality indicators. DHBs would undertake colonoscopies for their populations and report through to a regional bowel screening centre.

National Bowel Screening Programme – Enablers and Implementation

- **Ensuring safety:** The majority of the participants in any screening programme are healthy individuals, and exposing the population to the potential of major harm is always a major consideration. Considerable infrastructure and resource would need to be put in place to ensure that the quality of a national bowel screening programme is monitored and kept as high as possible. Safety of participants is of paramount importance. Psychological as well as physical harm must be minimised, whilst targeting those most at risk.
- **Addressing inequalities:** Māori are often diagnosed with bowel cancer at a more advanced stage than non-Māori and treatment options are more frequently complicated by a greater co-morbidity burden. Māori, therefore, have more potential to benefit from the prevention, earlier detection, more simple treatment options and better survival outcomes for early stage disease, that result from a screening programme. The proposed national bowel screening programme therefore includes actions to ensure equitable participation in bowel screening, including targeted actions for specific population groups and national monitoring of participation.
- **Workforce:** Health Workforce New Zealand (HWNZ) has undertaken extensive workforce modelling and projections of the gastroenterology, general surgery and pathology workforce and determined that New Zealand will have the workforce capacity to implement the NBSP. HWNZ will work with DHBs and the relevant professional bodies to ensure the gastroenterology workforce continues to increase to meet demand for colonoscopies.
- **Managing the transition for Waitemata DHB:** From July 2017, Waitemata participants will be tested at the Programme positivity threshold to ensure consistency across the country. Participants aged 50-59 will continue to be invited until December 2017. On 1 January 2018, once the pilot is complete, Waitemata will stop inviting any new participants who are aged 50-59. However, as there is a duty of care to any previously invited participants aged 50-59, this specific cohort will continue to be invited until they are old enough to be enter the national programme.
- **Information Technology to support a National Bowel Screening Programme:** A high quality screening programme needs to be underpinned by a high quality information system.[1] That is, an electronic database capable of providing a population register for people screened that can issue invitations for initial screening, recall individuals for repeat screening, follow those with identified abnormalities,

[1] Australian population health development principal committee, Screening Subcommittee. Population based screening framework. Commonwealth of Australia; 2008

correlate with morbidity and mortality results, monitor and evaluate the programme and its impact and has the capacity to support audit.

In Tranche 1, the existing pilot Bowel Screening Pilot system would be enhanced and extended to enable the solution to support the rollout of bowel screening to two additional DHBs. In addition, work on the NBSP IT solution would commence.

In Tranche 2, the first release of the NBSP IT solution would be rolled out, with Waitemata, Hutt Valley, and Wairarapa DHBs migrating to the national IT solution first, and then Tranche 2 DHBs would be added as the rollout progresses. In addition, work on the second release of the NBSP IT solution would commence. The updated NBSP IT solution would then be rolled out to the DHBs already providing NBSP screening services, followed by the remaining DHBs as they start delivering bowel screening services.

- **Quality management:** Rigorous quality standards have been developed for the pilot and would form the basis of national standards. In addition, it is expected that the NZ Global Rating Scale tool (a quality monitoring tool) would form the basis of monitoring endoscopy unit standards for the programme and, with information from the electronic reporting system, would allow monitoring of quality standards for the performance of colonoscopy.

1.6 Commissioning and Procurement

The Programme would:

- Procure the National Coordination Centre (including provision of test kits, analysers, laboratory services);
- Commission the Bowel Screening Regional Centres (4);
- Commission the design and integration of the National Bowel Screening IT solution;
- Commission the National Quality Assurance and Improvement Services.

The majority of the commissioning and procurement for the national bowel screening programme would be undertaken during 2016 and 2017 as part of Tranche 2, and would be required to be in place for when the Tranche 2 DHBs commence screening from January 2018. The indicative timeline is for the commissioning to commence in mid-2016 (assuming business case approval) and be complete by mid-2017.

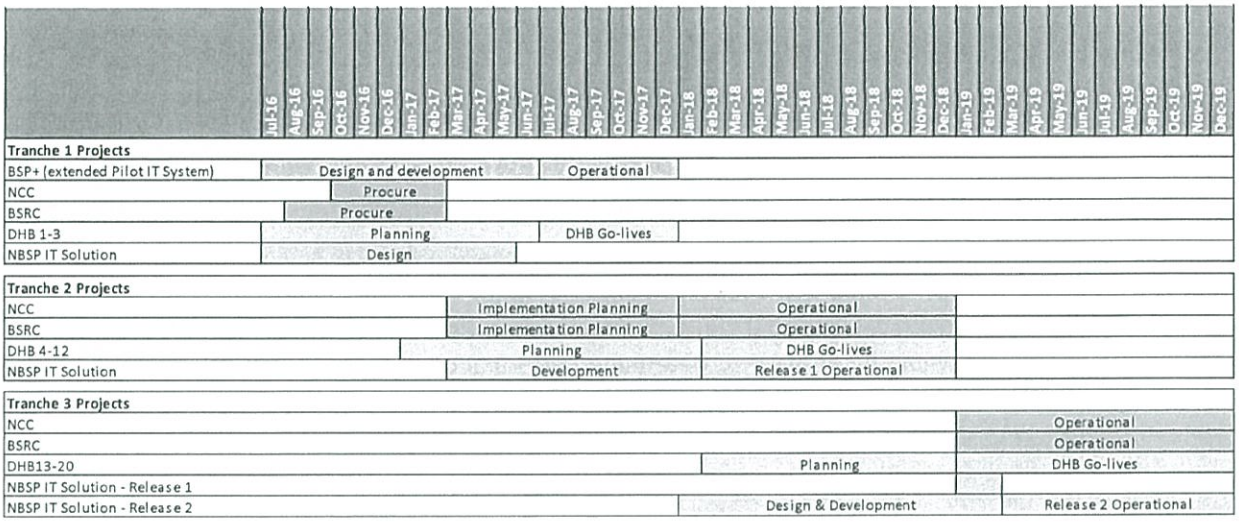
1.7 Project Tranches and Planned Rollout

The National Bowel Screening Programme comprises a number of related projects and activities that would be completed in several tranches between 2016 and 2020. It is proposed that the NBSP is rolled out in three Tranches. Each Tranche would have an associated business case, confirming the costs, deliverables and benefits for that Tranche.

Tranche 1 Projects	
BSP+ (extended Pilot IT System)	Design, develop and go-live
National Coordination Centre	Procurement
Bowel Screening Regional Centres	Procurement
DHB 1-3	Planning, go-live
NBSP IT Solution	Design
Tranche 2 Projects	
National Coordination Centre	Implementation planning, operational
Bowel Screening Regional Centres	Implementation planning, operational
DHB 1-3	Transition to NCC, BSRC, NBSP IT Solution
DHB 4-12	Planning, go-live on NCC, BSRC, NBSP IT Solution

NBSP IT Solution	Development, Release 1 operational
Tranche 3 Projects	
National Coordination Centre	Ongoing operation
Bowel Screening Regional Centres	Ongoing operation
DHB 13-20	Planning, go-live on NCC, BSRC, NBSP IT Solution
NBSP IT Solution	Release 1 Operational Design/development of Release 2, Release 2 Operational

The programme would be implemented over four years, commencing in 2016 with the development of the Tranche 1 business case and concluding in March 2020 with handover to 'business as usual'. The recommended sequencing and indicative timing is shown below.



The indicative split of DHBs into Tranche 2 and Tranche 3 is as shown below. The final allocation would be updated in the Tranche 2 business case.

Tranche 2 (alphabetical)

- Auckland
- Canterbury
- Capital and Coast
- Hawke's Bay
- Southern
- Taranaki
- Waikato
- West Coast
- Whanganui

Tranche 3 (alphabetical)

- Bay of Plenty
- Counties Manukau
- Lakes
- Mid Central
- Nelson Marlborough
- Northland
- South Canterbury
- Tairawhiti

All DHBs have confirmed their support for the Programme and the proposed timelines for go-live.

1.8 Programme Management and Delivery

Programme Governance: Two groups would oversee the NBSP implementation:

- The National Bowel Screening Programme Governance Group would provide leadership and strategic direction for the implementation of the NBSP (i.e. until January 2020).

- The NBSP Steering Group would oversee the operational aspects of the NBSP implementation and would have a rolling membership to ensure that the relevant DHBs are represented as each Tranche is progressed.

In addition, the Bowel Screening Advisory Group would provide advice to the programme team on the clinical and implementation aspects of the programme. This group would have members at a technical level. Independent Quality Assurance would be delivered at the programme level and would include the IT project.

Change Management: This would be a crucial element in successful programme delivery and would be resourced and managed accordingly. The Programme Manager, Project Manager, IT Change Manager, Relationship / Portfolio managers and Communication and Stakeholder Senior Advisors would all have responsibility for supporting change, and would work closely with DHB teams.

Monitoring and Evaluation: The Programme has been assessed as 'High Risk' through the Treasury Risk Profile Assessment and would be subject to Treasury Major Projects Monitoring Assurance, ongoing monitoring and Gateway reviews. Internal Quality Assurance (QA) would be undertaken by the Bowel Screening Steering Group and the Ministry of Health Executive Leadership Team. Independent Quality Assurance (IQA) would be ongoing through the life of the Programme.

Ensuring Quality: At a national level, the Ministry would provide quality and clinical oversight of delivery and monitoring of the programme. A quality, monitoring and evaluation framework will underpin the programme. At a regional level, regional clinical and quality leads would provide this oversight. Quality assurance and controls would be in place to determine performance of the bowel screening services and enable development and improvement. The Bowel Screening providers must ensure the provision of timely data, to enable evaluation and monitoring of the programme. Regular reporting to the Ministry would ensure Bowel Screening Quality Standards and monitoring indicators are met.

At an overall quality level, performance monitoring and ongoing evaluation activities will focus on:

- Delivery of safe, timely and equitable services
- Maximising participating to ensure that the assumptions that underpin cost benefit modelling are realised
- Ensuring the performance indicators and levers balance the needs of both screening participants and other symptomatic patients requiring services.

2 Purpose, Format and Requirements

2.1 Purpose of this Business Case

Purpose

This Business Case has been developed in response to the requirement for a report and business case to Cabinet, in support of a national bowel screening programme.

This business case is the restated Programme business case for the National Bowel Screening Programme. It includes the Tranche 1 Implementation business case and the procurement approach for the National Coordination Centre.

Funding Requirements

The Programme is seeking funding of S9(2)(f)(iv) over the 20-year modelled period. The business as usual cost (from 2020 onwards) is S9(2)(f)(iv) per year. The summary Programme funding requirements are shown in Table 1.

Table 1: NBSP Programme Funding Requirements

National Bowel Screening Programme	2016/17 $'M	2017/18 $'M	2018/19 $'M	2019/20 $'M	2020/21 & Outyears Total $'M	20 years $'M
IT Capital Required	S9(2)(f)(iv)					
Operational Required						
Total						
Brought Forward DHB Treatment Cost						
Total Expenditure						

Recommendations

This business case and supporting Cabinet paper asks the Committee to:

1. **Note** that bowel cancer is the second most common cause of cancer death in New Zealand after lung cancer, with 3016 new cases and 1283 deaths in 2012.

2. **Note** that New Zealand is one of the only OECD countries without a national bowel screening programme.

3. **Note** that bowel screening detects cancers at an earlier, more treatable (and less costly to treat) stage, and reduces the mortality rate of bowel cancer.

4. **Note** that bowel screening has been shown to be cost effective in other countries, and that estimates for the proposed programme in New Zealand are that it will be very cost effective.

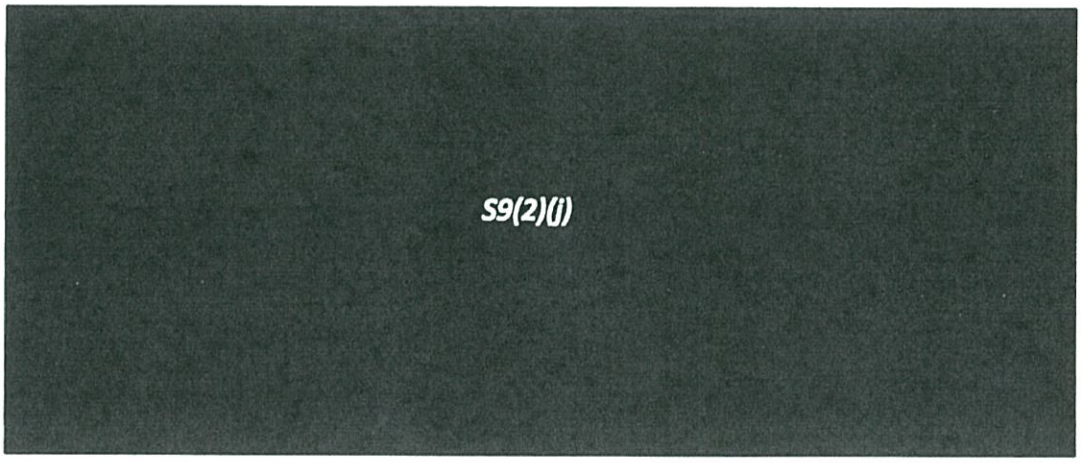
5. **Note** that once fully implemented, over 700,000 New Zealanders will be eligible to participate in the national bowel screening programme every two years, and approximately 500-700 cancers each year will be detected during the early rounds of bowel screening, assuming expected uptake levels.

6. **Note** that the proposed age range for a national screening programme is 60-74 years, with an increased positivity threshold for the screening test.

7. **Note** that $39.312 million was approved as part of Budget 2016 for the implementation, including deliverables within Tranches 1, 2 and 3, of a national bowel screening rollout subject to submission of a restated Programme Business Case to Cabinet which included:

   - confirmation from the 20 District Health Boards that they agree in principle to the programme and that their input has informed the implementation timeframes and financial costings in the business case;
   - options analysis for the proposed national IT system and an Independent Quality Assurance (IQA) review for the preferred option;
   - a letter of support from the Chair of Health Workforce New Zealand confirming that a workforce plan has been provided that will ensure there is sufficient workforce capacity to deliver the programme; and
   - evidence that the findings from the final evaluation of the Waitemata bowel screening pilot support the Programme Business Case.

8. **Agree** that this Business Case covers off the above items and to release the funding as per the below profile (as set out in CAB-16-MIN-0189.14).



9. **Note** that the Budget 2016 funding enables a national bowel screening programme to be established in Hutt Valley and Wairarapa DHBs from July 2017, but operating costs of the programme from 1 July 2017 need to be sought as part of Budget 17.

10. **Note** that S9(2)(f)(iv) capital funding for the development of a national bowel screening programme IT solution was placed in contingency in Budget 2016, subject to Cabinet approval of the Implementation Business Case for the preferred option for the proposed national IT system.

11. **Note** that the estimated cost of the capital requirement has now reduced to S9(2)(f)(iv), although S9(2)(f)(iv) in operating for DHB IT interfaces, software changes and IT implementation costs may be sought. This will be explored further and a proposal will be submitted at the next tranche for this funding.

12. **Note** that the Interest, Depreciation and Capital Charge (IDCC) is included in the Health Information Systems Departmental Expenditure appropriation. It will be confirmed in the Tranche 2 business case.

13. **Approve** the attached Programme Business Case for the full national bowel screening roll-out which includes the implementation business case for Tranche 1 as well as the procurement approach for the National Coordination Centre.

14. **Approve** the release of the operating funding appropriated in Budget 16, with costs attributed in line with the expenditure set out in the re-stated Business Case.

15. **Note** that the funding for the full roll out of a national bowel screening programme will need to be considered as part of Budget 17. Indicative costs for Budget 17 are S9(2)(f)(iv) over four years, comprising S9(2)(f)(iv) to support Tranche 1 implementation costs not covered through Budget 16; and S9(2)(f)(iv) for Tranche 2 and 3 implementation.

16. **Note** that the plan for the procurement of the National Coordination Centre will be approved by the Director-General of Health with review by central agencies.

17. **Note** that the Ministry will develop Tranche 2 and Tranche 3 business cases for joint approval by the Ministers of Health and Finance.

18. **Note** that the Ministry and central agencies will work together to agree the proposed long term IT solution and engage closely in the development of the Tranche 2 and Tranche 3 Business Cases.

19. **Note** that pending approval of Tranche 2 and Tranche 3 business cases and Budget 2017 consideration, bowel screening will be fully implemented across New Zealand by December 2019 at the earliest.

20. **Note** that flexibility to extend the final roll-out date by another year may be required for some DHBs to help mitigate the risks of implementing the programme.

21. **Agree** that this Cabinet paper and minuted decisions be proactively released in due course, subject to any material being withheld as necessary, as if a request for release had been made under the Official Information Act 1982.

22. **Note** that the Ministry will release the final evaluation report on the Waitemata DHB bowel screening pilot, at the appropriate time.

2.2 Format of this Business Case

This business case comprises two elements:

Part A – Programme Business Case:

- Confirms the strategic assessment which identifies the need for investment.
- Supports the Budget 2016 initiative for setup costs and a proposed Budget 2017 bid for ongoing costs for a national bowel screening programme;
- Describes the options considered for the implementation of a national programme for bowel screening and for the IT solution to support the bowel screening programme, and recommends a preferred way forward. This includes an indicative programme timeline and budget requirements for the full programme implementation, phased across a number of tranches.

Part B:

- Details the first implementation, in the Hutt Valley and Wairarapa DHBs and the transition of Waitemata DHB from a pilot to support an expanded first implementation.
- Describes the establishment activities for the proposed National Coordination Centre and Bowel Screening Regional Centres.
- Includes the Tranche 1 DHB local context, proposed approach, timing and details the Tranche 1 ongoing operational costs.

The format and approach of the business case are as agreed with Central Agencies and are in line with Better Business Case requirements.

2.3 Business Case Requirements

Cabinet Requirements

In Budget 2016, subject to a re-stated business case due in August 2016, Cabinet approved the next stage of the NBSP. This provides part-funding for the staged roll-out of the NBSP. This includes funding set-up costs, transitioning the Waitemata pilot, ongoing surveillance and workforce training. The capital funding required for Tranche 1 was put in a tagged contingency and the remaining funding for the programme's staged rollout is subject to a Budget 2017 bid.

The Cabinet requirements were [CAB-16-MIN-0189.14]:

- **agreed** that Cabinet approval of the restated Programme Business Case for the National Bowel Screening Programme be required before the operating funding for this initiative is spent;
- **agreed** that the restated Programme Business Case for the National Bowel Screening Programme must include requirements (see Table 2 below);
- **agreed** that a tagged contingency for Vote Health be established for use on the capital component of the National Bowel Screening Programme subject to Cabinet approval;
- **agreed** that Cabinet approval of the Implementation Business Case for the preferred option for the proposed national IT solution identified in the restated Programme Business Case be required before the capital funding for the initiative is drawn down.

Table 2: Cabinet Requirement for Restated Business Case

Requirement	Addressed	Section
Confirmation from the 20 DHBs that they agree in principle to the programme and that their input has informed the implementation timeframes and financial costings in the business case.	• Signed confirmation of support received from all 20 DHBs, June 2016.	• Appendix 11
Options analysis for the proposed national IT solution and an Independent Quality Assurance (IQA) review for the preferred option.	• Full analysis for IT option undertaken. • IQA of preferred option undertaken in July 2016. • Independent assessment of planned approach, including gathering further market intelligence on other possible solutions – July/August 2016.	• Appendix 7
A letter of support from the Chair of Health Workforce New Zealand confirming that a workforce plan has been provided that will ensure there is sufficient workforce capacity to deliver the programme.	• Letter of support received and attached.	• 5.5 • Appendix 9
Evidence that the findings from the evaluation of the Waitemata bowel screening pilot support the Programme Business Case.	• Evaluation confirms support for the recommended approach.	• 3.2 • Appendix 2

Central Agency Requirements

The Treasury, the Office of the GCIO, the Capital Investment Committee (CIC), the Ministry of Business, Innovation and Employment (MBIE), Te Puni Kōkiri, the Ministry for Pacific Peoples, the Ministry of Social Development, and the Department of Corrections were consulted in the development of this paper. The Department of Prime Minister and Cabinet was engaged. Feedback from these agencies has been incorporated into this business case.

This business case was considered by the Health Capital Investment Committee (CIC) in January 2016 and again in July 2016. CIC confirmed its support for the intent of the National Bowel Screening Programme, while noting a number of concerns to be addressed. These include IT implications for the start-up and the full term of the programme; workforce capacity; lead times; diagnostic capacity; unanticipated growth with the flow-on impact of testing outside of the screening programme target population; DHB capability and capacity; and the opportunity for sector review.

These issues are picked up within the overall key areas of concern for stakeholders, summarised in Table 3. The areas of concern are being addressed as part of the current programme review.

Table 3: Key Areas of Stakeholder Concern

Concern	Approach to Resolution
IT programme to support a national rollout	• Commissioned the Caravel Group to provide a point-in-time IQA of the IT options analysis, including the methods used to create and assess the option, and the assumptions made in the assessment. • Commissioned Accenture New Zealand to undertake an independent external review to evaluate the preferred option and provide assurance to decision makers and investors. The findings suggest there could be benefit in: o a wider international assessment of solutions; o re-evaluating Pilot IT system to determine whether any elements could be re-used in the national solution; o considering whether more than 3 DHBs could safely use the enhanced and extended Pilot IT solution in the interim, before moving to the national IT solution. • Further work, as described above, will be undertaken over the next three months. • In the interests of time, the Programme would progress with planning activity around the IT solution documents in the business case. • A final agreement on any componentry translatable from either international sources or from the Pilot IT system will be agreed in consultation with GCIO and Treasury by December 2016, and can be managed through the planned hybrid model approach.
DHB capability and readiness	• Further assessment will be undertaken: o Detailed capital requirements. o workforce needs (for the screening programme, and any associated flow-on treatment and surveillance monitoring). o change management capability. o IT implementation capacity. • The Programme is currently progressing engagement across the sector, and working towards agreement of detailed implementation needs across each DHB. • Outcomes of this activity will inform the final phasing for DHB implementation.
Overall implementation costs for DHBs	• A proposal may be submitted as part of the Tranche 2 business case for operational funding of S9(2)(f)(iv), for DHB IT interfaces, software changes and IT implementation costs. • Flow on costs of elective surgery can be supported through the existing parallel

Concern	Approach to Resolution
	priority of 'Improved access to elective surgery', which has been supported with additional funding through successive budget rounds.