Report to the Members of the Health and Social Services Department

on:

HSSD Bowel Cancer Screening Programme 2011-2013

Evaluation and Recommended Next Steps

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25 January 2014

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Introduction

Guernsey has had a bowel cancer screening programme since October 2011. Although the programme nominally switched from a 'pilot' to a substantive service in January 2012, it has never been reviewed to the satisfaction of all parties, and there are a number of unresolved issues which have prevented its transfer into a permanent service.

This began to come to light in early October 2013, when the Minister and Deputy Chief Officer of HSSD met with representatives of the Medical Specialist Group (MSG). At that time, the priority was to ensure that payment issues did not prevent the ongoing delivery of the service. At that meeting, MSG raised their concern that a full review of the screening programme had not been conducted, meaning that, effectively, the service model had not been altered since the pilot.

It was agreed that HSSD would arrange a review of the service, and the Terms of Reference would be agreed between HSSD and MSG. The review was to be completed by the end of December 2013. Terms of Reference were prepared and agreed during October, semi-structured interviews took place in November and December to support the review, and an evaluation report was drafted during December.

Meanwhile, between October and December 2013, sudden political interest in the service focused attention on the financial aspects of Guernsey's bowel cancer screening programme. In the process of investigating the financial position, it became evident that there were significant and unresolved differences of opinion among the clinicians and professionals most closely involved with the bowel cancer screening programme, which were causing considerable tensions around the service.

Those differences of opinion had not been brought to the attention of the HSSD Corporate Management Team or Board until minutes of a meeting of the Gastro-Intestinal Tract Multi-Disciplinary Team (GIT MDT) were sent to senior officers of HSSD on 18 December 2013, expressing the team's concerns about the scope of the current service. Subsequent meetings between the HSSD Minister, Acting Chief Officer and relevant professionals allowed these issues to be explored in more detail.

The evaluation report was completed in early January 2014. It was submitted to the HSSD Board meeting on 9 January 2014 as a draft (prior to consultation with relevant parties) in order to give the Board assurance that the review was indeed in progress, and that the final product would enable them to make the necessary decisions about the future of the service. A clinical report on the service was also submitted.

At the Board meeting, it became apparent that the fundamental differences of opinion between various clinicians and professionals had not been resolved. This needed to be tackled before any review and evaluation could be finalised and accepted by the HSSD Board.

Consequently, the Deputy Chief Officer was directed to bring representatives of all the key parties involved in the bowel cancer screening programme together, to reach agreement on the service to date and the options for the future. A meeting was convened on 17 January 2014, involving:

- HSSD Consultant Pathologist / Lead Cancer Clinician (also representing the GIT MDT)
- HSSD Director of Public Health
- Medical Specialist Group Chair
- Lead Nurse for Cancer and Palliative Care Services, HSSD
- Manager, Day Patient Unit, HSSD

The MSG Consultant Gastroenterologist and the HSSD Modern Matron for Day Services were invited but unable to attend. Their views were represented by colleagues where possible.

It was not possible, within the scope of a single meeting, to review the whole of the service so far and to make considered recommendations to the HSSD Board on its future scope. All participants in the meeting felt that some of the problems with the service to date could be attributed to its rushed implementation, which was the result of political pressure. It was agreed that, as far as realistically possible, this should be avoided a second time around.

Therefore, at the meeting, all parties reached agreement on:

1. **Authoritative sources of information** on the local bowel cancer screening programme, and on bowel cancer in general. These sources would be drawn on to produce a reliable evaluation of the local service from 2011 to 2013.
2. **The appropriate process** for establishing the future scope of the service and making recommendations to the HSSD Board.
3. **The transitional management** of the service, while the options for the future are being decided and the future service model is being agreed and set up.
4. **The appropriate process** for agreeing the future service model, once the scope of the required service has been identified (following point 2 above).

This report is the result of that workshop, and was shared in draft, for comment, with all participants and invitees. It focuses primarily on the evaluation of the service from 2011 to 2013, following the pre-agreed Terms of Reference, but it also explains what is expected to happen over the coming weeks and months to enable the bowel cancer screening programme to transition into an acceptable form of permanent service.

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25 January 2014

Part 1: HSSD Bowel Cancer Screening Programme 2011 to 2013 – Evaluation

Bowel cancer screening is a method of identifying people who are at risk of developing bowel cancer, or who have already developed cancer but have not yet presented with symptoms.

According to the recently-published 2013 Channel Islands Cancer Registry Report, bowel cancer is the fourth most common form of cancer in Guernsey, after skin cancer, breast cancer and prostate cancer. On average, between 2007 and 2011, 42 people a year were diagnosed with bowel cancer and 13 people a year died from the disease, according to the report.

By way of comparison with deaths from other cancers or diseases, figures held by HSSD's Public Health Directorate show that, in the decade between 2003 and 2012, 350 people died from lung cancer, 140 from bowel cancer, 132 from prostate cancer and 91 from breast cancer. Over the same period, 546 people died from a stroke and 401 from a heart attack.[1]

Mortality rates from bowel cancer vary significantly depending on how advanced the cancer is when it is detected. The severity of bowel cancer is measured in 'Dukes' stages, from A (least advanced, affecting only part of the bowel wall) to C (most advanced, affecting the whole bowel wall and lymph glands). The five-year survival rates for people in different stages of bowel cancer are as follows[2]:

- Stage A ≈ 90%
- Stage B ≈ 50% to 65%
- Stage C ≈ 15% to 25%

It follows that identifying bowel cancer early can significantly improve a person's chances of survival, as well as potentially reducing treatment costs.

The risk of developing bowel cancer increases with age. More than 80% of people who develop bowel cancer are over the age of 60 at the time of presentation. According to the 2013 Channel Islands Cancer Registry Report, the mean age at which bowel cancer is detected in Guernsey is 70. Bowel cancer develops from a polyp in the bowel. If a polyp is going to become cancerous, it is usually thought to take around 10 years[3]. Thus, screening people in their 60s is an effective way of reducing the risk of cancer and intervening early to prevent the disease developing.

Polyps can be non-cancerous or pre-cancerous. Pre-cancerous polyps are classed as "low risk" or "high risk": it has been reported that a low-risk polyp has around a 5% chance of developing into cancer later in life, and a high-risk polyp has about a 40% chance[4]. Polyps classified as "high risk" of developing into cancer, and therefore in need of intervention, are those that are larger than 1cm across, villous or tubulovillous (finger-like in appearance), or

showing signs of high dysplasia (abnormalities in appearance verging onto cancer). A case may also be classified as "high risk" if there are several polyps in the bowel.

Bowel cancer screening in Guernsey is carried out through a process called 'flexible sigmoidoscopy'. This involves using a flexible tube to examine the left-hand side of the large bowel. Based on recent research, this method of screening is thought to be considerably more effective than the alternative (faecal occult blood testing, or FOBT) at identifying people who are at risk of cancer, and consequently at improving survival rates. FOBT has been reported to reduce the risk of death from bowel cancer by up to around 20% among those screened; and flexible sigmoidoscopy by up to around 40% among those screened[5].

Flexible sigmoidoscopy also tends to get a better participation rate than FOBT, which requires people to send small stool samples to a hospital lab for testing. In addition, FOBT requires chemical pathology skills which are unavailable on-island. For these reasons – the improved mortality reduction rate, the greater acceptability of the test, and the availability of skills – flexible sigmoidoscopy was the preferred method for bowel cancer screening in Guernsey when the service was introduced in 2011.

It should be noted that the effectiveness of screening methods is established by national trials with large sample populations, the like of which could not be carried out in Guernsey. The challenge for Guernsey is to implement an effective screening method in a way which will maximise the benefits to the island's population. Therefore, this evaluation does not focus on the effectiveness of the technique itself, but on the effectiveness of the way in which it has been implemented so far, and the potential areas for improvement.

A. Review of Activity (2011-2013)

The bowel cancer screening programme appears to have delivered a good service, within the parameters agreed in 2011 (a one-off screen of people at the age of 60). Part 2 of this report will focus on the possible need to change those parameters, but this section evaluates how well the service has performed within the scope it was originally set.

1,196 people have been screened for bowel cancer since October 2011. 43 cases of high-risk polyps have been identified, and 46 colonoscopies have been carried out. 3 cancers have been detected.

The original proposals suggested that screening with flexible sigmoidoscopy should detect, on average, 6 cancers per 1,000 people and screening with FOBT should detect around 2 cancers per 1,000 people[6]. In Guernsey, 3 cancers have been identified in the first thousand people screened. While this looks a little lower than expected, it is too early to work out a reliable average detection rate, until several thousand people have been screened.

An average of 3.8% of participants have been referred for a colonoscopy since the start of the bowel cancer screening programme. The research suggested an expected referral rate

of around 5% with flexible sigmoidoscopy, or 2% with FOBT[7]. As above, the programme will need to screen many more people before a reliable average referral rate can be calculated.

On average, 8 to 9 procedures have been conducted per session since the start of the bowel cancer screening programme. This includes colonoscopies, which take place during screening lists and are the time equivalent of 3 flexible sigmoidoscopies.

The public have reacted well to the service. Most of those who responded to their invitation for bowel cancer screening in 2012 and 2013 accepted a pre-screening assessment. Pre-screening normally takes place a month or two before the screening appointment, so the difference between the number of people screened in a year and the number who have had pre-screening appointments is not a "drop-out" rate, but a natural backlog (though some participants may choose to cancel or postpone their appointment).

These results are promising. They appear to show that the bowel cancer screening programme is reaching and being accepted by the target population and that it is detecting high-risk polyps and early cancers. The cancer detection and colonoscopy rates are a little lower than the research (on which the original proposals were built) had suggested, although it is not appropriate to draw definitive conclusions when scarcely more than 1,000 people have been screened. These rates should, however, continue to be monitored in future.

Caution – Reliability of Data

The data used in this section has been drawn from the records kept within the bowel cancer screening service. Due to the lack of a suitable IT system (discussed in Section C below), the service relies on manual data collection, which creates a risk in terms of the accuracy of the data and analysis.

It should be noted that there was a temporary Administrator for five months in 2012, and record-keeping during that year was not as thorough as it has been in 2013 or during the pilot. Perhaps the most significant inconsistency in the 2012 data is the fact that 27 colonoscopies were recorded, but there were only 24 people with high-risk polyps. The differences identified are not substantial, and should not affect the general picture or the reliability of this evaluation, but should be mentioned for completeness.

It should also be noted that the absence of an appropriate IT system makes it difficult to track individuals and therefore to carry out any analysis based on participants' date of birth. For the purpose of this report, no such analysis has been attempted.

(i) Detection of Cancers and Polyps

The table below shows the number of people each year who were screened, and the number of cases where cancer, high-risk polyps or low-risk polyps were detected. The pie

chart illustrates the overall proportion of people who have undergone bowel cancer screening and have had high- or low-risk polyps detected since October 2011.

	2011	2012	2013	Total (2011-2013)
High-risk polyps detected	6	24	13	**43**
Low-risk polyps detected	20	80	93	**193**
No polyps or cancer detected	156	439	336	**931**
Procedure abandoned/incomplete*	--	--	29	**29**
Total n° of People Screened	**182**	**543**	**471**	**1196**
N° colonoscopies carried out**	6	27	13	**46**
Total n° procedures conducted	**188**	**570**	**484**	**1242**
Cancers detected	**1**	**2**	**0**	**3**

Table 1 – Number of Cancers and Polyps Detected by Bowel Cancer Screening Programme (2011-13)

*** Records of the number of incomplete/abandoned procedures were not kept separately in 2011 or 2012.**

**** As mentioned above, the number of colonoscopies recorded in 2012 =/= the number of people with high-risk polyps.**

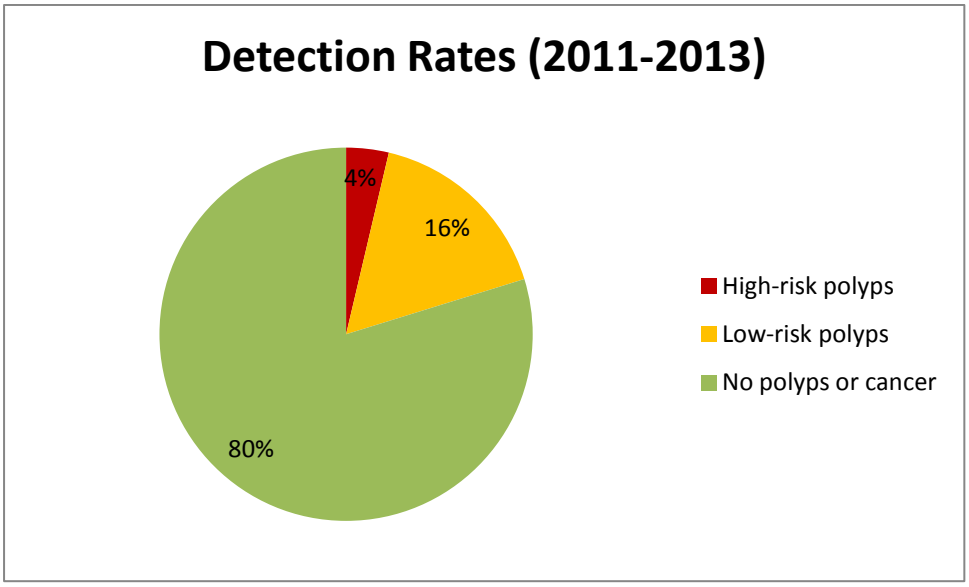


Fig. 1 – Detection rates (2011-2013)

(ii) Colonoscopies arising from Bowel Cancer Screening

The table below shows the number of people each year who had a colonoscopy following bowel cancer screening. Colonoscopies are used for further investigation of high-risk polyps and to remove these where possible. Colonoscopies investigate the right-hand side of the bowel, which is not covered by flexible sigmoidoscopy.

With the exception of 2012 (when records were less reliable, for the reasons explained above) the number of colonoscopies matches the number of people with high-risk polyps in Table 1, above.

	2011	2012	2013	Total (2011-2013)
Total No. of People Screened	182	543	471	**1196**
No. colonoscopies	6	27	13	**46**
Proportion sent for colonoscopy	3.3%	5.0%	2.8%	**3.8%**

Table 2 – Number and Proportion of Referrals for Colonoscopy following Bowel Cancer Screening (2011-13)

(iii) Screening sessions and participants

The table below shows the number of screening sessions that took place each year and the average number of procedures per session. It should be noted that there has been considerable variation in the availability of screening appointments, due to a number of factors. These factors include:

- **Capacity:** There were 8-10 appointments per session during 2011 and 2012. This was increased to 12 appointments per session from August 2013. If a colonoscopy has to be carried out during a session, this is equivalent to a minimum of 3 screening appointments.
- **Number of sessions:** There were 2 sessions per week until September 2012. This was then reduced to 1 session per week during the refurbishment of the Day Patient Unit (until late April 2013). After increasing to 2 sessions per week from May to July 2013, the service returned to one session per week, with an increased number of appointments, from August onwards.
- **Suspension of service:** The service stopped completely during December 2012 for financial reasons. A Board paper dated 18 December 2012 records that 20 routine bowel cancer screening appointments were cancelled.

It should also be noted that this can only be a rough indication of the relative productivity of the service from year to year. There are various reasons why a list cannot always be fully utilised: for example, in cases where a participant cancels with less than two days' notice, it is not possible to fill their space on a screening list, as the necessary preparation has to take place 48 hours in advance.

	2011	2012	2013	Total (2011-2013)
Total n^{o} procedures conducted	188	570	484	**1242**
Total n^{o} of screening sessions*	22	75	52	**149**
Average procedures per session	8.5	7.6	9.3	**8.3**
Session Capacity	8-10	8-10	8-12	**--**

Table 3a – Average number of procedures per session (2011-13)

***52 sessions were recorded in 2013. There were some months with up to 2 sessions per week, some with 1 session per week, and a few weeks where no sessions were held. This averaged out (unplanned) as 1 session per week over the course of the year.**

As a colonoscopy equates to three flexible sigmoidoscopy (screening) appointments, in terms of the amount of time taken, it has been suggested that a fairer comparison would count each colonoscopy as 3 procedures. This would give the following results:

	2011	2012	2013	Total (2011-2013)
N° flexi-sig procedures conducted	182	543	471	**1196**
N° colonoscopies conducted x3	18	81	39	**138**
Total flexi-sigs + colonoscopies	200	624	510	**1334**
Total n° of screening sessions	22	75	52	**149**
Average procedures per session	9.1	8.3	9.8	**9.0**
Session Capacity	8-10	8-10	8-12	**--**

Table 3b – Average number of procedures per session (2011-13) – Colonoscopy counted as 3 procedures

(iv) Pre-Screening Assessments

The table below shows the number of people who were invited for a pre-screening session between 2011 and 2013; the number of those who responded and the number who accepted a pre-screening appointment (although the participant may subsequently have deferred his or her appointment).

A difference between the number of invitations sent out and the number of people who made contact with the service will be apparent. In 2011 and 2013, lists from GP practices were used to identify potentially eligible islanders. 86% of invitees made contact in 2011 and 70% in 2013. In 2012, the TRAK system was trialled as an alternative data source but, as the system is not a live record of people who are on- or off-island, it was much less accurate, and only 61% of invitations led to people making contact with the service.

It appears that the total number of people who accepted pre-screening (1,627) is rather higher than the total number of people screened to date (1,196). On the basis of the manual records currently maintained, it is not possible to completely explain this difference. Some of it is to do with individuals rescheduling or not attending screening appointments, and some of it is to do with a natural lag in the system, due to the fact that pre-screening normally takes place a month or two before the bowel cancer screening appointment. Thus, a number of those who attended pre-screening appointments in 2012 will have been screened in 2013 and will count in the 2013 figures in the tables above. Likewise, a number of those who attended pre-screening appointments in 2013 will be screened in 2014, and so on.

Currently, there are 7 lists (of up to 12 people) who have been pre-screened and are awaiting screening.

	2011	2012	2013	Total (2011-2013)
Invitations sent out	293	1556	836	**2392**
Eligible for pre-screening (contact made)	252	947	588	**1787**
Accepted pre-screening	205	863	559	**1627**

Table 4 – Response to Invitation to Bowel Cancer Screening Pre-Assessment Interviews (2011-13)

The UK NHS Bowel Cancer Screening Programme defines ‘uptake’ as the percentage of people who “adequately attend for bowel scope screening (numerator), out of those who

were routinely invited to participate in bowel scope screening (denominator)." Because of the lag between pre-screening assessment and screening appointment, it appears that the most appropriate way to measure this would be by birth year, rather than by year of screening. As explained above, the service currently relies on paper records, making this kind of analysis difficult to achieve.

However, this is an important measure, which would allow HSSD to gain a better understanding of the rate of uptake in the population as a whole, and to improve education and awareness-raising about bowel cancer screening, if needed. If and when an appropriate IT system is installed, this rate should be routinely monitored.

B. Review of Service Model and Staffing

The pilot study ran from October to December 2011. There were two screening sessions per week: one on a Friday morning and one on a Friday afternoon. Each session could accommodate 8 to 10 participants. Men and women aged 60 were invited for screening.

In the absence of an agreed review and evaluation, the service continued to follow the same model during 2012: two sessions for 8 to 10 participants each, with 60-year-old men and women being invited. In September 2012, the refurbishment of the Day Patient Unit meant that the service had to be reduced to one session per week. This continued until April 2013.

From May to July 2013, the service returned to two sessions per week. In August, no lists were held for 4 out of 5 weeks. The service was reduced to one session per week from August 2013, but the number of participants per session was increased to a maximum of 12.

Currently, the bowel cancer screening procedures (flexible sigmoidoscopies and colonoscopies) are all carried out by the Consultant Gastroenterologist and/or Consultant Surgeons. Pre-assessment interviews are carried out by a Bowel Cancer Screening Nurse, and nurses within the Day Patient Unit support the screening process from start to end. The service is coordinated and records are maintained by the Bowel Cancer Screening Administrator.

Two core members of staff (the Administrator and the Bowel Cancer Screening Nurse) are currently employed on bank contracts and, although the nursing headcount in DPU was increased in 2012 to enable the bowel cancer screening programme to be delivered, much of the other support work has been absorbed by existing staff, with an impact on their regular workload. Delays in recruiting permanent staff have been attributed to the ongoing uncertainty about the future of the programme.

The bowel cancer screening staff deliver the service to high standards, but the current staffing arrangements lack permanence and resilience, and would not suit an expanded service. Even at present, the sustainability of the programme depends to some extent on the goodwill of staff.

(i) The Patient Pathway

The Bowel Cancer Screening Administrator uses lists obtained from the three Guernsey GP practices and the two in Alderney to invite people approaching 60 for screening.

An invitation letter and information leaflet is sent out from HSSD, inviting these people to contact HSSD to confirm their screening appointment. Once contact is made, the person is interviewed in a pre-screening clinic, which is conducted by the Bowel Cancer Screening nurse in the Day Patient Unit. (For Alderney residents, and any Guernsey-based invitee who prefers it, the interview is conducted over the phone.)

At the pre-screening interview, the person is told about the risks and benefits of screening. The nurse will also record any relevant information about the person's medical condition(s). The pre-screening interview may identify that the person is not eligible for screening (for example, if he or she has had a colonoscopy or sigmoidoscopy in the past 5 years).

If the person is eligible for screening and decides to accept it, he or she will be given an appointment at the Day Patient Unit for flexible sigmoidoscopy (bowel cancer screening). The screening may identify:

- **No polyps or cancer:** A letter is sent to the participant (copied to their GP) to notify them of this. The participant is then discharged from the programme.
- **Polyps detected:** Where possible, the polyps are removed from the bowel and sent to the Pathology Department for analysis. The patient's case is discussed at the next Multi-Disciplinary Team (MDT) meeting.
    - **Low-risk polyps:** If the MDT classifies the polyps as low risk, the patient is notified by letter (copied to their GP) and discharged from the programme.
    - **High-risk polyps:** If the MDT classifies the polyps as high risk, the patient is invited for a follow-up colonoscopy by letter (copied to their GP).
- **Cancer detected:** The patient's case is discussed at the next Multi-Disciplinary Team (MDT) meeting, and will follow the usual patient pathway for cancer management from that point.

Once a patient with high-risk polyps has attended colonoscopy, the results of the colonoscopy are discussed by the MDT. The patient's case is managed according to the appropriate British Society of Gastroenterology guidelines, which will vary depending on what the colonoscopy identifies. Ordinarily, the colonoscopy will remove the polyp(s), but three- or five-yearly follow-up of some kind will be required. The patient will be notified of this by letter (copied to their GP and MSG) and discharged from the programme to MSG for follow-up.

For those who do not respond to the initial invitation, a 'Did Not Attend' letter is sent to their GP surgery, which attempts to contact them. If requested, a further appointment is then offered. If no contact is possible, the participant is discharged from the programme at

this point. Those who accept but then miss a pre-screening appointment are offered up to 3 more opportunities to be screened over the next 12 months before being discharged from the programme. Those who decline the invitation are sent an 'End of Service / Decline' letter and are asked to complete a declaration to confirm that they do not want to participate, and return this to HSSD via Freepost.

In some cases, flexible sigmoidoscopy cannot be completed (for example, due to patient anxiety, poor bowel preparation, significant discomfort or scarring). In such cases, the MDT will discuss the patient's case and prescribe a repeat sigmoidoscopy or an alternative test, which may vary depending on the patient's other medical condition(s). Limited data is currently available as to the number of repeat sigmoidoscopies or alternative tests required.

Alternative tests in Guernsey include: barium enema; colonoscopy; virtual colonoscopy or CT colonograph; faecal occult blood testing. The patient's case and future care will be discussed again by the MDT on completion of the alternative test.

(ii) Staffing

The bowel cancer screening programme is supported by the following staff:

Bowel Cancer Screening Administrator (full-time): The Administrator coordinates the screening programme. The Administrator invites people in the relevant age bracket to participate in the programme, and maintains all the records relating to their pathway through the service. As there is no bespoke IT system to support the service, the amount of time spent manually maintaining records, sending out letters and managing appointments is significant. The Administrator post is currently employed on a "bank" staff basis.

Bowel Cancer Screening Nurse, Band 6 (full-time): The Bowel Cancer Screening nurse conducts pre-assessment interviews with participants and is involved in MDT meetings. Initially, there was a full-time Bowel Cancer Screening nurse, who was training up to be a Nurse Endoscopist (to do the screening procedure). However, she left HSSD in June 2013 and, due to uncertainty about the future service in general, and the responsibilities of this role in particular, a replacement has not been recruited. This work is therefore currently being done by a "bank" nurse on a part-time basis.

Day Patient Unit Nurses, Band 5 (during sessions): A number of nurses who are employed in the Day Patient Unit support the bowel cancer screening process. Although the screening sessions only take place on one day a week, the range of tasks involved mean that a number of nurses are required. This works out at 1 FTE for two sessions per week, or 0.67 FTE for one session (as at present). The headcount within the Day Patient Unit was increased by 1 FTE in 2012 to accommodate the additional demands on staff from the programme.

Consultant Gastroenterologist: The consultant gastroenterologist carries out all colonoscopies and shares the flexible sigmoidoscopy procedures with two other consultant

surgeons with relevant skills. The consultants also attend MDT meetings to discuss patient cases. The services of the consultants are procured via a Bowel Cancer Screening contract with MSG, which is separate to the main contract between MSG and the States for the provision of specialist services.

Sterile Services Technician (during sessions): Whenever possible, the Sterile Services Department sends a technician to the Day Patient Unit to assist in the cleaning, decontamination and reprocessing of endoscopes for the bowel cancer screening sessions.

Pathology Department: The Consultant Pathologist and Pathology technicians and biomedical scientists are involved in analysing specimens following a screening procedure to establish whether the patient has high- or low-risk polyps. In 2013, 118 specimens were submitted to the Pathology lab following screening, and 153 specimens were submitted in 2012. The Consultant Pathologist also attends MDT meetings to discuss patient cases.

Multi-Disciplinary Team (MDT): All cases in which polyps or cancer have been detected are assessed and managed by the Gastro-Intestinal Tract Multi-Disciplinary Team. The MDT members are:

- Consultant Pathologist / Lead Cancer Clinician (HSSD)
- Consultant Gastroenterologist / Lead Bowel Cancer Clinician (MSG)
- Consultant Surgeons (MSG)
- Consultant Radiologist (HSSD)
- Consultant Oncologist (MSG)
- Stoma Care Clinical Nurse Specialist (HSSD)
- Bowel Cancer Screening Nurse (HSSD)
- MDT Coordinator (HSSD)
- Superintendent Radiographer (HSSD)

Day Patient Unit: Screening procedures take place within the Day Patient Unit. The bowel cancer screening programme is therefore supported by the Day Patient Unit staff and infrastructure, and particularly the Manager of the Day Patient Unit and the Modern Matron for Day Services.

C. Review of Support Infrastructure

The paragraphs below show that the support infrastructure leaves much to be desired, particularly in terms of IT solutions. All of those who are involved with the bowel cancer screening service have indicated that effective screening software, such as the system used by HSSD's breast screening programme, is needed to support the long-term management of the programme, especially in the case of any planned expansion.

(i) Systems

The screening programme is not supported by an appropriate IT system, so records are kept and managed on paper and spreadsheets. This results in a considerable workload for the Bowel Cancer Screening Administrator and makes reliable collection and evaluation of statistics a challenge.

Some information about the screening service is recorded on TRAK, which is HSSD's primary clinical information system. Endobase, which is an information management system designed for use in endoscopy units, was installed at the end of 2013 with the help of IM&T. The bowel cancer screening team do not have access to an equivalent to the "Commit" software which is used to manage HSSD's breast screening programme, although the software does exist and has been installed to support Jersey's Bowel Cancer Screening Programme. This is felt to be a significant deficiency at present.

(ii) Equipment

Two colonoscopes, a stack system, a diathermy and a CO_2 insufflator were purchased for the bowel cancer screening service, using an HSSD routine capital budget of £95,000 and a donation of £27,000 from the Guernsey Bowel Cancer Awareness Charity.

The overall equipment requirements for endoscopy (including bowel cancer screening) within the Day Patient Unit are being reassessed, to establish whether additional resources are needed.

It should be noted, for completeness, that the endoscope washers and dryers, which were installed in 2012, require yearly maintenance. The next maintenance period is scheduled for March 2014. During the maintenance period (2-3 weeks), only a reduced service can be provided in the Day Patient Unit. This will affect a range of procedures, including bowel cancer screening.

(iii) Facilities

The bowel cancer screening sessions take place within the Endoscopy Suite in the Day Patient Unit. While the facilities for the service itself are fit for purpose (and newly refurbished), the Bowel Cancer Screening Administrator and Bowel Cancer Screening Nurse are based in makeshift offices (without a built-in power supply, no telephone/computer sockets in the nurse's office and limited secure storage) within the Unit.

It has been suggested that the bowel cancer screening programme would benefit from an improved waiting and pre-assessment area. There is some space available for a possible expansion of the Day Patient Unit, resources permitting; and consideration is being given to how best to use this space at present.

D. Review of Finances

In principle, the bowel cancer screening programme is in a reasonable financial position. The agreed initial level of service (a one-off screen of 60-year-olds) is being delivered well below budget. However, recent events have exposed significant problems with the financial governance of the service. This is now being improved.

Funding for the programme was allocated by the States through a New Service Development bid under the States Strategic Plan in 2011. HSSD's budget was increased by £294,000 in 2012 and £327,500 in 2013 to support the development of the programme.

No single cost centre was set up at the start of 2012, so overall costs have not been monitored throughout the programme. This has been remedied in 2014. In the meanwhile, as a result of thorough investigation of the financial position, it has emerged that there were significant underspends in 2012 and 2013.

It has proven difficult to establish the chain of decisions that led to the present scope and service model. It appears that some key meetings between clinicians and professionals were not minuted satisfactorily, or at all. At all events, it appears that the financials in the business case were worked out on the basis of a larger number of participants in the screening programme, and were not revised downwards to take account of a decision in early 2012 to continue screening only 60-year-olds.

Thus, more budget was allocated than is arguably needed to support the **current** service model and number of people being screened. However, as in any year when the organisation overspends on its total budget, any underspends against specific budget lines (including those for bowel cancer screening) are effectively used to absorb overspends in other areas, so there is no 'residual' budget from either 2012 or 2013.

The full financial information has been published separately in a letter to all States Members, and is available in Appendix 2 to this report. In summary:

	Allocated budget	Actual expenditure	Under / (over) budget
2011*	0	67,000	(67,000)
2012	294,000	207,608	86,392
2013	327,500	171,528	155,972

Table 5 – Budget and Expenditure on Bowel Cancer Screening (2011-13)

***It is reported[8] that £67,000 was allocated from savings elsewhere within HSSD to run the bowel cancer screening pilot programme in 2011. Actual expenditure has not been verified.**

	Actual expenditure	N° procedures	Cost per procedure
2011	67,000	188	£356
2012	207,608	570	£364
2013	171,528	484	£354

Table 6 – Average Expenditure per Procedure (2011-13)

In the UK roll-out of bowel cancer screening by flexible sigmoidoscopy, NHS Trusts will be paid £400 per screen[9] (including further diagnostic investigations, such as colonoscopy, when required; but excluding set-up costs). The Guernsey figures appear to compare well with the UK.

However, it should be emphasised that these expenditure figures exclude overheads, as well as any work done by existing HSSD staff on top of their normal workload. The recruitment of a greater number of permanent staff to support the service would have the effect of increasing this expenditure; although, if the service was expanded, the cost per procedure might not alter significantly. This will have to be revisited in due course, as the permanent service model is determined.

E. Review of Governance

A small number of clinical or organisational incidents relating to the Bowel Cancer Screening Service were recorded on the HSSD Incident Reporting and Risk System in 2012 and 2013, of which the majority related to the availability or performance of the equipment. No specific concerns about the safety of the service have been raised during this review process.

Although funding was allocated for Quality Assurance during 2012 and 2013, no such reviews have yet been conducted. An appropriate form of quality assurance therefore needs to be put in place for the long term.

F. Review of Leadership

The semi-structured interviews carried out with key people involved in the bowel cancer screening programme during November and December 2013 identified lack of leadership and poor communication as a central theme and a cause of confusion and frustration.

Ownership of the business case and hence the project changed hands at least once within HSSD before the pilot project was set up, and the roles and responsibilities of senior professionals involved with the service have never been fully understood or accepted: either in terms of the day-to-day management of and long-term planning for the service, or in terms of reporting to the Corporate Management Team and the Board.

The primary concern is the lack of clear leadership at Director-level within HSSD. However, it should also be noted that the process of defining the remit and responsibilities of the 'clinical lead' for the service, and the way in which that role was assigned, was also felt to be unclear.

G. Conclusions

In summary, the performance of the service so far may be evaluated as follows:

Area	Status	Explanation
Detection rates	Promising	Detection rates for cancer, and rates of referral for colonoscopy, look promising. However, compared to national programmes, the number of people screened so far is very small. Rates should continue to be monitored.
Uptake	Promising	A high proportion of invitations received have been accepted, which looks very positive. The population uptake has not been calculated for the purpose of this report, given the difficulties with obtaining data. Once an IT solution is in place, this should be monitored.
Productivity	Promising, but some concerns	Productivity has been consistent at 8 to 9 procedures per session, including colonoscopies. The cost per person (between £354 - £364 a head) appears low, based on information about UK screening programmes. However, the service is thought to be under-resourced at present, suggesting the low per-person costs may not be sustainable in the long term.
Service model	Some concerns	While the service is delivered well by high-quality staff, there is a high reliance on temporary staff and on staff goodwill. These arrangements are not sustainable or suitable for a permanent service, particularly if changes to the scope are anticipated.
Support infrastructure	Some concerns	The facilities available to the service could be improved, and there may be additional equipment requirements across all endoscopy services. However, the main concern is the lack of a suitable IT system to support the bowel cancer screening programme.
Finances	Issues identified	The service has been delivered for substantially less than the planned budget. In principle, this is positive. However, there has been poor financial governance in respect of the service, which has had significant consequences for the Department.
Governance	Promising, but some concerns	While no concerns about the overall safety of the service have been raised in this process, no formal Quality Assurance has been put in place.
Leadership	Issues identified	Interviews with staff involved with the service identified the lack of clarity around leadership as a significant and ongoing problem in terms of planning and delivering the bowel cancer screening service.

It is important to emphasise that this is a retrospective evaluation of the bowel cancer screening service, as delivered between October 2011 and December 2013. Although issues have been identified in respect of the financial governance and leadership of the service, and concerns have been raised about the staffing and support infrastructure, work is now being done to improve the situation in 2014. The rest of this report will focus on the steps that are being taken to resolve the outstanding questions in relation to the scope of the service, and to establish a long-term model for the local bowel cancer screening service.

Part 2: Process for Establishing the Future Scope of the Service

At the workshop on 17 January 2014, all parties agreed that it was necessary to transition the service from its current pilot-like mode towards a permanent solution. In order for this to be done, there are certain outstanding issues, particularly relating to the scope of the service, which need to be resolved satisfactorily.

On 18 December 2013, the Gastro-Intestinal Tract MDT sent the minutes of its meeting on 11 December to senior officers of HSSD. The minutes included recommendations about the scope of the bowel cancer screening service, as follows:

"3.1 […] These are the views of the MDT on bowel cancer screening:

- The current sigmoidoscopy procedures on patients cannot be classified as a 'screening programme' because there is no re-call or follow up system or age range. In the UK where they do single flexisigmoidoscopy at 60, this is followed up by a stool test every two years. In the USA they offer flexisigmoidoscopy every 5 years or colonoscopy every 10 years;

- Screening people aged 60 was only meant for the pilot study and a second cohort at 65 was to be included;

- By offering flexisigmoidoscopy at the age of 60, this will potentially miss early cancers around the age of 65 and these patients present later with advanced disease. Furthermore by not offering a second cohort at 65 misses out the people who were 61-64 years old when the "screening" was introduced. Because of this GPs are referring patients for sigmoidoscopy because they missed out on screening at the age of 60; […]"

On similar lines, meetings with key professionals in December 2013 confirmed that the eventual decision to screen only one birth cohort per year, and not to invite people for a repeat screening later in life, was the primary source of disagreement and unhappiness among those most closely involved with the service.

(i) Questions to Answer

As it has been recommended that the scope of the future service should be altered, the HSSD Board needs definitive answers to the following questions:

- Should there be a repeat screen for people who have already been screened once?
- At what age(s) should people first be screened?
- At what age(s) should any repeat screen take place?
- If there is any capacity within the system at present:
    - Should the programme 'catch up' on people who were, say, 61+ in 2011?

- Or should it start targeting a younger age group (59 / 58 year olds)?

While the current recommendation from the MDT appears clear that all eligible 60 year olds and 65 year olds should be screened, it should be noted that earlier versions of the business case for this service variously recommended screening a much wider age range (people aged between 60 and 74) and screening people at age 60 and age 69 (rather than 65). The reasons why screening at 60 & 65 is now the preferred option need to be clearly stated.

(ii) Process for Reaching a Decision

Ultimately, any decisions on the scope of the service need to be made by the HSSD Board on the advice of the expert professionals. The agreed process for doing so (which reflects the process for service developments in other areas) is as follows:

(1) MDT to make recommendation to Professional Guidance Committee*. Any alternative professional views to be submitted to PGC for consideration.
(2) Professional Guidance Committee to evaluate MDT recommendation and any alternative views, and make its recommendation on the appropriate service model to the HSSD Board.
(3) HSSD Board to consider the PGC recommendation and decide whether or not to accept it.

As the MDT recommendation has already been received, at least in outline, this process can be set in train immediately, with a view to reaching the PGC agenda in February and the Board agenda in early March.

*N.B. The Professional Guidance Committee is made up of senior health and social care professionals from HSSD, MSG, and Primary Care. It exists to provide advice to the HSSD Board on the social and health impacts of potential new developments or service changes.

(iii) Ongoing Management of Changes

The ordinary process for managing changes within health services is that the relevant experts keep abreast of developments within their field, and services evolve under their guidance to keep pace with recognised good practice. If the changes are such that they require a significant change of modality, or a substantial investment of resources, the decision is escalated to the HSSD Corporate Management Team or the Board (via PGC) as appropriate.

Once the bowel cancer screening programme is established on a permanent basis, it is expected to be managed in this way, with further fundamental reviews by exception only.

Part 3: Transitional Management and Future Service Model

At the workshop on 17 January 2014, it was agreed that the current service model was not a sustainable way of delivering a bowel cancer screening programme in the long term. Noting that the current scope of the service was not accepted by the Multi-Disciplinary Team, it was stressed that any changes would invariably require a stronger infrastructure to be put in place than currently exists, in terms of permanent staff, effective IT solutions, and so forth.

It should be noted that various service models have previously been discussed. These include a nurse-led service, with a trained nurse endoscopist carrying out the majority of the screening procedures, with on-call support from a consultant; or a consultant-led service, as at present. Plans for these different service models have been drawn up by HSSD and MSG staff in the past. The current service model is somewhat improvised, drawing on existing staff to support the process, with consultant-level input commissioned from MSG, and a couple of core members of staff on temporary contracts. It does not, at present, have the stability or resilience to deliver an expanded bowel cancer screening service.

There was a strong feeling from the workshop participants that the ideal would be to suspend the bowel cancer screening service for a number of weeks and re-establish it along sustainable lines. However, it was felt that this was unlikely to be politically or publicly acceptable at present, and the best alternative would be to work towards a sustainable solution in parallel, within a definite timeframe, while continuing to run the present service (without any modification to its scope) over the next few weeks or months as appropriate.

It was agreed that the following steps were a necessary part of the transition process:

1. MDT recommendation and any alternative views on future scope of bowel cancer screening programme to be considered by PGC. (**February 2014**)

2. PGC recommendation on future scope of bowel cancer screening programme to be considered by HSSD Board. (**early March 2014**)

3. Develop / revive plans for a service model that will deliver the desired service within the agreed cost envelope. (**March – April 2014**)

4. Establishment of roles and responsibilities – specifications for the role of “clinical lead” and “business lead”, which are central to the day-to-day management of the service, to be drawn up and agreed by all parties. (**March – April 2014**)

5. Plan(s) for future service model to be considered. Preferred business case to be accepted by the Corporate Management Team and the HSSD Board. (**early May 2014**)

6. Clinical lead and business lead to be formally identified. (**early May 2014**)

7. Recruitment, commissioning of IT solutions / equipment / other infrastructure to be undertaken; together with any other measures (such as the finalisation of a service specification) necessary to establish the long-term service. (**May 2014 onwards**)

If the process is carefully managed and all parties are fully engaged, it may be possible to have the permanent bowel cancer screening service agreed and in place by autumn 2014.

Recommendation

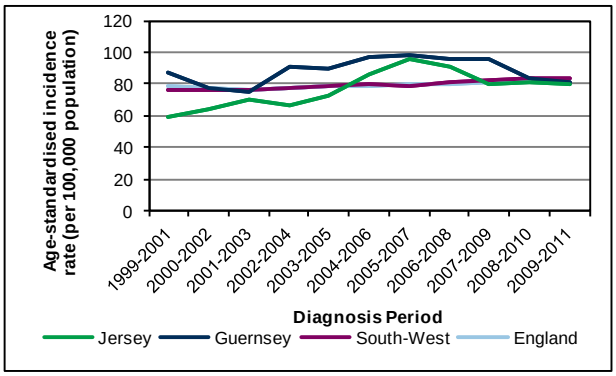
The HSSD Board is recommended to endorse the proposed steps (1-7 above) for establishing the Bowel Cancer Screening Programme on a permanent basis, and to direct HSSD officers to start the process immediately.

Appendix 1: Bowel Cancer Prevalence in Guernsey

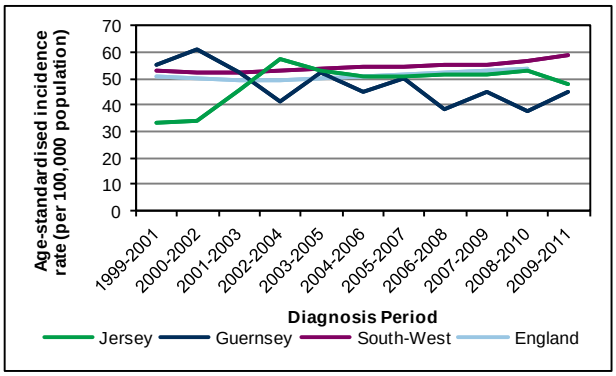
The following four pages are an excerpt from the newly-published Channel Islands Cancer Registry Report, prepared for Guernsey and Jersey by the UK's National Cancer Intelligence Network.

Colorectal Cancer (C18-C21) - INCIDENCE

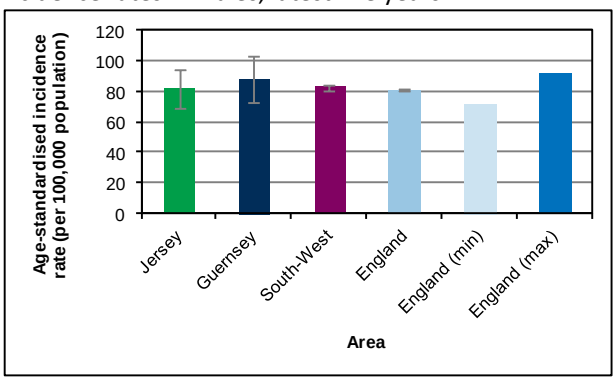
Incidence rates in males, 1999-2011



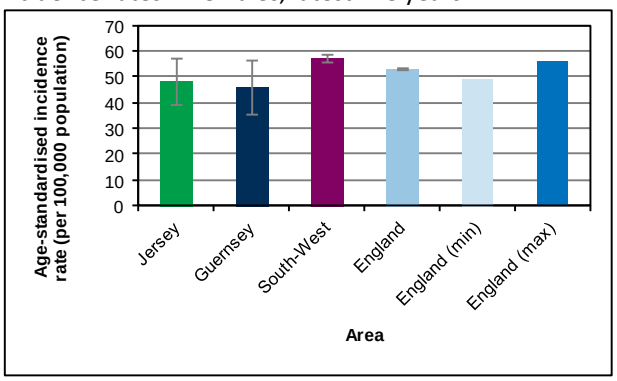
Incidence rates in females, 1999-2011



Incidence rates in males, latest five years



Incidence rates in females, latest five years



Age-standardised incidence rates (per 100,000 population), 1999-2011

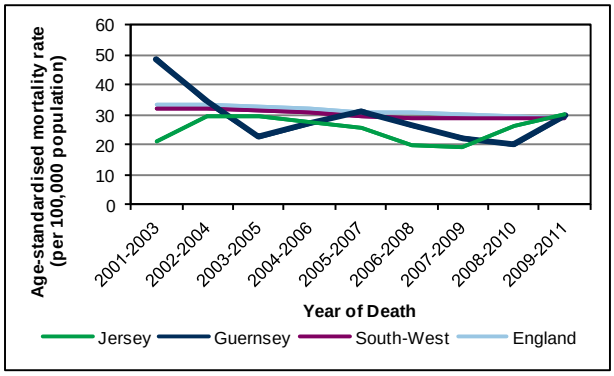
Years of Diagnosis	Jersey								Guernsey							
	Males				Females				Males				Females			
	Count	ASR	LCI	UCI	Count	ASR	LCI	UCI	Count	ASR	LCI	UCI	Count	ASR	LCI	UCI
1999-2001	60	58.5	43.6	73.4	47	33.2	23.2	43.2	65	86.8	65.4	108.1	55	55.2	39.4	71.0
2000-2002	66	64.1	48.6	79.7	48	33.8	23.6	44.0	56	77.1	56.7	97.5	61	61.0	44.5	77.6
2001-2003	72	69.5	53.4	85.6	60	45.3	33.2	57.5	54	74.8	54.7	95.0	50	52.0	36.5	67.4
2002-2004	71	66.7	51.1	82.4	75	57.5	43.8	71.2	66	91.3	69.0	113.5	44	41.0	27.9	54.2
2003-2005	81	72.9	56.9	89.0	74	52.9	40.2	65.7	65	89.9	67.9	112.0	52	52.2	36.8	67.6
2004-2006	97	86.1	68.7	103.4	77	50.9	38.8	63.0	73	96.9	74.5	119.2	49	45.0	31.3	58.8
2005-2007	110	95.5	77.5	113.6	77	51.0	38.9	63.0	78	98.4	76.4	120.3	49	49.9	35.1	64.8
2006-2008	106	90.5	73.1	107.9	76	51.8	39.5	64.0	80	95.7	74.5	116.8	40	38.7	25.9	51.4
2007-2009	95	79.8	63.6	96.1	74	51.4	39.1	63.7	83	95.5	74.8	116.3	45	44.8	30.9	58.7
2008-2010	97	80.6	64.4	96.8	75	52.8	40.4	65.3	74	83.4	64.2	102.7	41	37.8	25.4	50.3
2009-2011	97	79.4	63.4	95.3	69	47.8	36.0	59.5	72	81.3	62.3	100.3	48	44.8	31.2	58.4

Age at diagnosis, 2007-2011 combined data (2006-2010 for England)

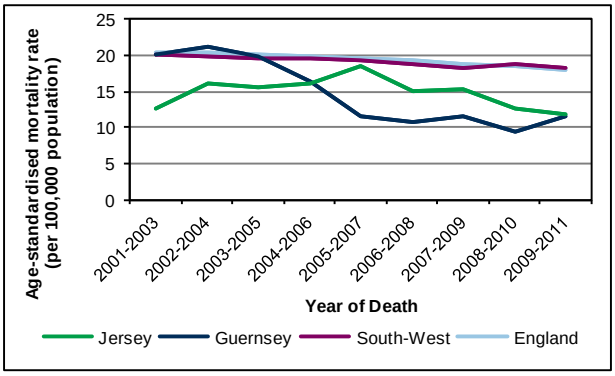
	England	South West	Jersey	Guernsey
Mean	71.2	71.9	70.0	70.2
Median	73	73	70	72
5th percentile	49	50	50	50
95th percentile	88	89	88	87

Colorectal Cancer (C18-C21) – MORTALITY

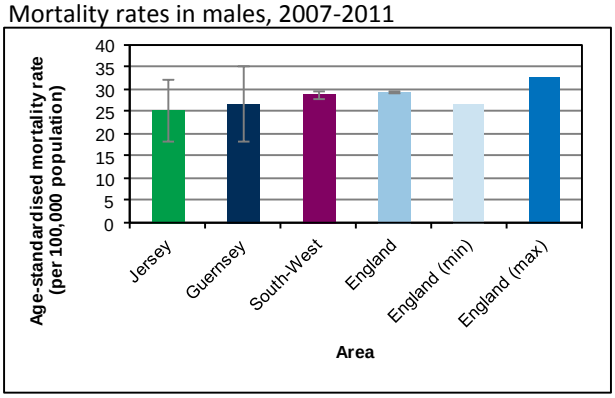
Mortality rates in males, 2001-2011



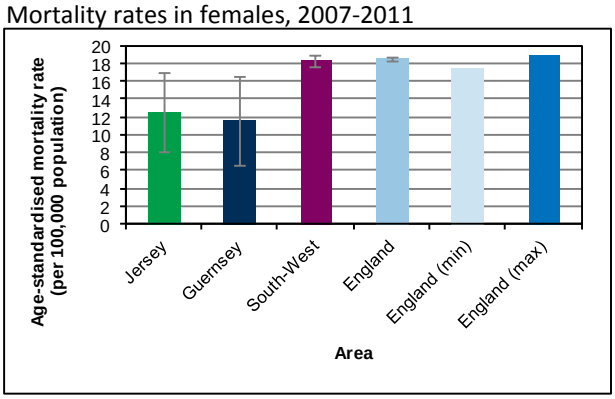
Mortality rates in females, 2001-2011



Mortality rates in males, 2007-2011



Mortality rates in females, 2007-2011



Age-standardised mortality rates (per 100,000 population), 2001-2011

Years of Death	Jersey								Guernsey							
	Males				Females				Males				Females			
	Count	ASR	LCI	UCI	Count	ASR	LCI	UCI	Count	ASR	LCI	UCI	Count	ASR	LCI	UCI
2001-2003	22	20.9	12.1	29.7	18	12.6	6.4	18.9	37	48.7	32.8	64.7	24	20.2	11.2	29.2
2002-2004	32	29.7	19.3	40.1	23	16.2	9.2	23.2	27	34.2	21.1	47.2	28	21.2	12.4	30.0
2003-2005	32	29.3	19.0	39.6	23	15.7	8.9	22.6	18	22.7	12.1	33.4	26	20.0	11.3	28.7
2004-2006	31	27.7	17.8	37.6	24	16.2	9.3	23.1	21	27.0	15.4	38.6	21	16.4	8.6	24.2
2005-2007	30	25.8	16.5	35.1	28	18.6	11.3	25.9	25	31.1	18.8	43.5	15	11.6	5.2	18.1
2006-2008	24	19.9	11.8	28.0	23	15.1	8.6	21.6	22	26.3	15.2	37.5	13	10.7	4.2	17.2
2007-2009	24	18.9	11.2	26.6	24	15.3	8.9	21.7	20	22.1	12.2	32.0	15	11.6	5.0	18.1
2008-2010	33	26.2	17.2	35.3	21	12.7	7.0	18.5	19	19.9	10.8	28.9	13	9.5	3.7	15.3
2009-2011	39	30.4	20.7	40.1	19	11.9	6.2	17.5	28	29.5	18.5	40.6	16	11.7	5.1	18.2

1-year survival from colorectal cancer in males is rising everywhere. 5-year survival is unchanged in Guernsey, and rising in Jersey, the South West and England.

1-year survival from colorectal cancer in females is unchanged in Guernsey and Jersey, and rising in the South West and England. 5-year survival is falling in Guernsey, and rising in Jersey, the South West, and England.

1-year survival for colorectal cancer in males is similar to England in Guernsey, Jersey and the South West. 5-year survival is similar to England in Guernsey and Jersey, but higher in the South West.

Appendix 2: Detailed Financial Information (2012 and 2013)

2012							
Description in Outline Financial Case (OFC)	**Value in OFC**	**Allocated to HSSD budget as:**	**Budget Allocated**	**Outturn (2012)**	**Under/Over Budget**		**Comments**
Screening Costs							
Procedure Services*2012 Phase 1 (Pre T)	32,500.00	MSG contract costs	82,500	96,200	(13,700)		(The first two lines in the business case both relate to the MSG contract; only one budget line was used.)
Procedure Services*2012 Phase 2 (Pst T)	50,000.00	MSG contract costs - see line above	N/A	N/A	N/A		
Nurse Endoscopist/BCS Nurse (B6)	36,667.00	Band 6 Bowel Screening nurse (full time)	36,667	34,806	1,861		Full-time Band 6 Bowel Screening nurse employed during 2012.
Extra Endoscopy Nurse (B5)	33,333.00	Band 5 Nurse time (1 WTE)	33,333	30,402	2,931		Business case allowed for 1 nurse to be appointed. In practice, tasks are covered by a pool of Band 5 nurses within DPU, amounting to 1 FTE.
DPU Endoscopy Technician (PSE C 0.5 WTE)	15,500.00	Technician cover from Sterile Services dept (0.2 WTE)	15,500	-	15,500		Work absorbed by existing technician from Sterile Services.
A4C Bonus Scheme	-	Not counted separately to staff costs	N/A	N/A	N/A		
Self Admin enemas and consumables	10,000.00	Equipment and medicine for screening procedures; equipment maintenance	10,000	2,505	7,495		2012 Endoscopy maintenance & consumables spend of £2,505 looks light compared to 2013, however the costs are covered under warranty for the first 12 months of operation. (The scope maintenance costs alone were around £6,000 p.a after the first year.)
Extra pathology Sessions	30,000.00	Consultant Pathologist's time (0.03 WTE)	30,000	-	30,000		Work absorbed by existing Consultant Pathologist.
PMLA (0.5 WTE)	17,000.00	Pathology assistant's time (0.5 WTE)	17,000	8,000	9,000		Work absorbed by existing PMLA staff although some extra hours paid to cover tests.
Biomedical Support	10,000.00	Pathology technician's time (0.25 WTE)	10,000	-	10,000		As above - extra hours cost for this post within PMLA line.
Procedure Costs [Total]	**235,000.00**		**235,000**	**171,913**	**63,087**	**Under-spent**	

Administration Support	22,000.00	BCS Programme Administrator (full time)	22,000	27,200	-5,200		Full-time administrator employed during 2012.
HSSD Training/Travel/CPD	6,000.00	Training costs	6,000	4,821	1,179		Cost of Gastroenterology Masters + conference for Band 6 Bowel Screening nurse.
Quality Assurance	15,000.00	Quality Assurance reviews	15,000	-	15,000		No reviews have yet been carried out.
QA's GP's Submission	1,000.00	Cost of obtaining cohort data from GPs	1,000	-	1,000		This was for the cost of getting patients' addresses from GP practices. No costs were incurred in 2012 as an alternative data source was trialled.
Maintenance Costs	2,000.00	Maintenance costs	2,000	2,000	-		Based on a proportion of the overall yearly maintenance costs for the Day Patient Unit.
Software Licenses	3,000.00	Software license costs	3,000	650	2,350		Most IT costs were covered by capital; this line relates to the cost of new Windows licences only
Stationery & Marketing	10,000.00	Stationery costs	10,000	1,024	8,976		Stationery costs.
Administration Costs [Total]	**59,000.00**		**59,000**	**35,695**	**23,305**	**Under-spent**	
Programme Costs [TOTAL]	**294,000.00**		**294,000**	**207,608**	**86,392**	**Under-spent**	

N.B. Only incremental costs (e.g. where new staff have been recruited) have been counted. The costs of the service have been analysed against the budget lines in the Outline Financial Case in the SSP business case. This case did not include overheads (which range from management time to facilities and cleaning), which are part of the true cost of providing the service.

2013							
Description in Outline Financial Case	**Value in OFC**	**Allocated to HSSD budget as:**	**Budget Allocated**	**Outturn (2013)**	**Under/Over Budget**		**Comments**
Screening Costs							
Procedure Services*2012 Phase 1 (Pre T)	-	MSG contract costs	82,500	68,900	13,600		Based on bills raised to W1 December + estimate for last 3 weeks of 2013.
Procedure Services*2012 Phase 2 (Pst T)	100,000.00	MSG contract costs - see line above	N/A	N/A	N/A		
Nurse Endoscopist/BCS Nurse (B6)	44,000.00	Band 6 Bowel Screening nurse (full time)	36,667	29,365	7,302		Full-time Band 6 Bowel Screening nurse employed until June 2013. Post covered by Band 5 nurse from July onwards (first DPU staff, then bank) at approx 20 hrs per week.
Extra Endoscopy Nurse (B5)	40,000.00	Band 5 Nurse time (1 WTE)	33,333	24,221	9,112		Business case allowed for 1 nurse to be appointed. In practice, tasks are covered by a pool of Band 5 nurses within DPU, amounting to 1 FTE when to sessions were running and 0.67FTE in 2013 for one session p.w.
DPU Endoscopy Technician (PSE C 0.5 WTE)	15,500.00	Technician cover from Sterile Services dept (0.2 WTE)	15,500	-	15,500		Work absorbed by existing technician from Sterile Services.
A4C Bonus Scheme	2,000.00	Not counted separately to staff costs	N/A	N/A	N/A		
Self Admin enemas and consumables	10,000.00	Equipment and medicine for screening procedures; equipment maintenance	10,000	8,750	1,250		Apportionment based on overall DPU spending on consumables (which is in line with budget).
Extra pathology Sessions	30,000.00	Consultant Pathologist's time (0.03 WTE)	30,000	-	30,000		Work absorbed by existing Consultant Pathologist.
PMLA (0.5 WTE)	17,000.00	Pathology assistant's time (0.5 WTE)	17,000	8,000	9,000		Work absorbed by existing PMLA staff although some extra hours paid to cover tests.
Biomedical Support	10,000.00	Pathology technician's time (0.25 WTE)	10,000	-	10,000		As above - extra hours cost for this post within PMLA line.
Procedure Costs [Total]	**268,500.00**		**235,000**	**139,236**	**95,764**	**Under-spent**	
Administration Support	22,000.00	BCS Programme Administrator (full time)	22,000	28,002	-6,002		Full-time administrator employed during 2013.

HSSD Training/Travel/CPD	6,000.00	Training costs	6,000	268	5,732		Endobase kit training + flights for one staff member. No major training in 2013.
Quality Assurance	15,000.00	Quality Assurance reviews	15,000	-	15,000		No reviews have yet been carried out.
QA's GP's Submission	1,000.00	Cost of obtaining cohort data from GPs	-	450	- 450		Cost of getting patients' addresses from GP practices (preferred option, returned to in 2013).
Maintenance Costs	2,000.00	Maintenance costs	2,000	2,000	-		Based on a proportion of the overall yearly maintenance costs for the Day Patient Unit.
Software Licenses	3,000.00	Software license costs	3,000	672	2,328		Most IT costs were covered by capital; this line relates to the cost of new Windows licences only
Stationery & Marketing	10,000.00	Stationery costs	9,500	900	8,600		£800 spent to Nov - £900 projected at year end. Budget reduction to £9.5k due to cross-cutting stationery savings.
Administration Costs [Total]	**59,000.00**		**57,500**	**32,292**	**25,208**	**Under-spent**	
		Additional funding not allocated to bowel screening budgets in 2013	35,000	-	35,000		
Programme Costs [TOTAL]	**327,500.00**		**327,500**	**171,528**	**155,972**	**Under-spent**	

N.B. Only incremental costs (e.g. where new staff have been recruited) have been counted. The costs of the service have been analysed against the budget lines in the Outline Financial Case in the SSP business case. This case did not include overheads (which range from management time to facilities and cleaning), which are part of the true cost of providing the service.

Appendix 3: References

[1] Statistical release from HSSD Public Health Directorate, dated 20 December 2013

[2] Dr Catherine Chinyama, "Case for Implementing Bowel Cancer Screening in Guernsey" (2010), para 3.2

[3] Muto T, Bussey HJR, Morson BC. The evolution of the cancer of the colon and rectum. Cancer 1975; 36: 2251-2270. (Originally cited in Dr Chinyama's "Case for Implementing Bowel Cancer Screening in Guernsey" 2010)

[4] Dr Catherine Chinyama, verbal communication to HSSD Board. Minutes of Board meeting on Thursday 9 January 2014.

[5] Atkin WS et al. Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicentre randomised controlled trial. Lancet 2010, 375: 1624-1633. (Originally cited in Dr Chinyama's "Case for Implementing Bowel Cancer Screening in Guernsey" 2010)

[6] Dr Catherine Chinyama, "Case for Implementing Bowel Cancer Screening in Guernsey" 2010, para 18.2: "… if 800 people are screened, it is estimated that the screening programme will detect at least five new cancer patients per year and some larger polyps which cannot be removed endoscopically. The number of cancers is much higher than predicted for FOBT screening which was going to detect approximately ten new cancers per year after screening 5,000 people."

[7] Atkin WS et al. Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicentre randomised controlled trial. Lancet 2010, 375: 1624-1633. (Originally cited in Dr Chinyama's "Case for Implementing Bowel Cancer Screening in Guernsey" 2010)

[8] Dr Stephen Bridgman, HSSD Board paper 2011/6/12 – "Cancer Services – Bowel Cancer Screening – Project Progress."

[9] Public Health England. "NHS Bowel Cancer Screening Programme: Bowel Scope Screening – 2nd Wave: Advice to the NHS and Bidding Process." (September 2013)