Colorectal Cancer Screening Pilot Programme

Interim Report of the Screening Outcome for Phase One Participants

(Position as at 31 August 2017)
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Background

(1) Phase One of the Colorectal Cancer Screening Pilot Programme (Pilot Programme) was launched on 28 September 2016 to target Hong Kong residents born in the years 1946 to 1948. Phase Two started on 27 February 2017 to cover subsidised colorectal cancer screening to people born in the years 1946 to 1951.

(2) The screening workflow of the Pilot Programme comprises two stages:

(a) Eligible persons should first make an appointment with an enrolled Primary Care Doctor (PCD). After enrolment into the Programme, participants will receive a government subsidy to undergo the Faecal Immunochemical Test (FIT). Participants will collect stool specimens according to the instructions given and return the specimen(s) within four days counting from the day of first specimen collection to any collection box set up by the Department of Health (DH); and

(b) If the FIT result is positive, the participant will receive the second consultation when he or she will be referred to see an enrolled Colonoscopy Specialist (CS) to receive the subsidized Standard Package of Colonoscopy Service in order to find out the cause of occult bleeding in stool.

Purpose

(3) This report summarizes screening outcome of participants joining Phase One of the Pilot Programme, that is, those born in 1946 to 1948 and enrolled in the Pilot Programme between 28 September 2016 and 26 February 2017, both dates inclusive. Figures in this report are up to date as at 31 August 2017.
Screening outcome of Phase One Participants

Enrollment

(4) 13,915 persons were enrolled into the Pilot Programme and received FIT, constituting around 7.3% of the target population (13,915 / 190,000). The participation rate for population based colorectal cancer screening in Asia Pacific territories ranges from 10 to 30%. Direct comparison of Phase One participation rate with those of screening programmes elsewhere is not appropriate because overseas programmes (a) have a much wider age range of screening participants; and (b) have been carried out for much longer time. In the local situation, a participation rate of 7.3% represented a snapshot at the end of the first five months of operation, confined to people born in 1946-1948. Participation rate for people born in 1946-1948 is expected to increase as the Programme continues.

FIT screening

(5) Among the 13,915 participants, 13,705 (98.5%) submitted FIT tubes with interpreted results (FIT +ve / -ve). Among them, 1,982 participants were tested positive and the FIT positivity rate was 14.5% (1,982/13,705). The remaining 1.5% participants had uninformative¹ FIT results or did not submit FIT tubes.

(6) Among the 1,982 participants with FIT positive results, 1,978 participants (99.8%) attended a second consultation. All of the remaining four participants who did not attend the second consultation (a) had been informed of the FIT positive result by their PCDs over the phone and (b) had refused to attend the second consultations despite knowing a positive FIT result. Two of them said they would or had been arranging follow up in private sector outside the Pilot Programme. The remaining two were not willing to provide their reasons for not attending the second consultation.

¹ Uninformative results may be due to problems with the tubes (e.g. leakage / damaged / expired) or the forms (e.g. missing or wrong information, or a mismatch between the information on the form and the tube).
Colonoscopy screening

(7) Among the 1978 participants who attended a second consultation, 1,841 participants (93%) chose to continue to follow up under the Pilot Programme and completed pre-procedural consultation for the subsidized colonoscopy services. Further breakdown of the 7% of participants who exited from the Pilot Programme revealed that about 4% chose to be followed up in the Hospital Authority (HA), 1.5% in the private sector, 1% refused to proceed to colonoscopy, and 0.5% could not be contacted for their subsequent health care pathway.

(8) Among the 1,841 participants who attended pre-procedural consultation, a total of 1,758 participants (95.5%) completed colonoscopy examination under the Pilot Programme. Further breakdown of the 4.5% of participants who did not proceed to colonoscopy after pre-procedural consultation revealed that around 3.3% were considered medically unfit by the Colonoscopy Specialist for receiving colonoscopy under the Pilot Programme and were referred out of the Pilot Programme to HA or private sector for further management, and the remaining 1.2% was considered medically fit but the participants refused to receive colonoscopy, or received care/follow up outside the Pilot Programme, or could not be contacted for their subsequent health care pathway.

(9) Among the 1,758 participants who received colonoscopy under the Pilot Programme, 169 participants (9.6%) did not require polypectomy. 1,242 participants (70.7%) had adenoma, 108 (6.1%) had adenocarcinoma and the remaining 239 (13.6%) had hyperplastic polyps, inflammation of the bowel or no significant pathology.

(10) It is noteworthy that the adenoma detection rate reached 70%. These benign tumors, if not removed in the course of colonoscopy, could progress to cancer. This signifies the merit of screening by enrolling into the Pilot Programme for early detection of precancerous lesions, so that treatment can be commenced earlier to prevent progression into cancer.

(11) In addition, about 6% of participants completing the colonoscopy examination were diagnosed with colorectal cancer and subsequently referred for further assessment and treatment. It is believed that those screening-detected colorectal cancers are mostly in their early stages of disease given that they are
asymptomatic. With early detection and prompt treatment, the cure rates can be expected to be higher.

Conclusion

(12) Phase One of the Pilot Programme proceeded well to pick up a higher than expected number of adenoma and adenocarcinoma cases. These received clinical management well before symptoms occur, thus offering protection against cancer formation and better prognosis for cancer cases. Various programme components fitted well in the overall scheme of services and logistics, and participants generally navigated uneventfully through the screening pathway.
Figure One: Schematic diagram summarizing the screening outcomes of the Phase One Cohort:

- **Targeted population (born between 1946 – 1948)**
  - N = 190,000

- **Did not join Pilot Programme**
  - N = 176,085 (92.7%)

- **Join Pilot Programme with FIT issued**
  - N = 13,915 (7.3%)

- **Participants with uninformative result or did not submit FIT**
  - N = 210

- **Participants with interpreted results**
  - N = 13,705 (98.5%)

- **Participants with positive FIT**
  - N = 1,982 (14.5%)

- **Participants did not attend second consultation**
  - N = 4 (0.2%)

- **Participants attended second consultation**
  - N = 1,978 (99.8%)

- **Participants exited the Pilot Programme**
  - N = 137 (7%)

- **Participants attended pre-procedural consultation**
  - N = 1,841 (93%)

- **Participants receiving colonoscopy with claim submitted**
  - N = 1,758 (95.5%)

- **Adenoma**
  - N = 1,242 (70.7%)

- **Adenocarcinoma**
  - N = 108 (6.1%)

- **Hyperplastic Polyps, Inflammation of the bowel or no pathology, etc.**
  - N = 239 (13.6%)

- **Colonoscopy without polypectomy**
  - N = 169 (9.6%)

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<sup>a</sup> Adenoma includes tubular adenoma, tubulovillous adenoma, villous adenoma, sessile serrated adenoma, and traditional serrated adenoma.
### Table One: Screening Outcomes of the Phase One Cohort at the PCD Level

<table>
<thead>
<tr>
<th>Participant (n)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants attending first consultation with FIT issued</td>
<td>13915</td>
</tr>
<tr>
<td>Number of participants with positive FIT ((a))</td>
<td>1982</td>
</tr>
<tr>
<td>Number of participants with negative FIT ((b))</td>
<td>11723</td>
</tr>
<tr>
<td>Number of participants with uninformative result</td>
<td>69</td>
</tr>
<tr>
<td>Number of participant did not submit FIT</td>
<td>141</td>
</tr>
<tr>
<td>Number of participants attending second consultation</td>
<td>1978</td>
</tr>
</tbody>
</table>

### Table Two: Screening Outcomes of the Phase One Cohort at the CS Level

<table>
<thead>
<tr>
<th>Participant (n)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participants with pre-procedural consultation</td>
<td>1841</td>
</tr>
<tr>
<td>Number of participants with colonoscopies performed (claim submitted) ((d))</td>
<td>1758</td>
</tr>
<tr>
<td>Number of participants without polypectomy ((c))</td>
<td>169</td>
</tr>
<tr>
<td>Number of participants with: Histopathology findings ((e)):</td>
<td></td>
</tr>
<tr>
<td>Adenoma*</td>
<td>1242</td>
</tr>
<tr>
<td>Hyperplastic polyp, inflammation of the bowel or no pathology</td>
<td>239</td>
</tr>
<tr>
<td>Adenocarcinoma</td>
<td>108</td>
</tr>
</tbody>
</table>

*Adenoma includes tubular adenoma, tubulovillous adenoma, villous adenoma, sessile serrated adenoma, and traditional serrated adenoma.

ENDS