



National Institute for Public Health
and the Environment
Ministry of Health, Welfare and Sport

Overview of programme structure Colorectal Cancer Screening Programme *in the Netherlands*



Introduction

The Dutch Colorectal Cancer (CRC) Screening Programme targets men and women between the ages of 55 and 75 years. The National Institute for Public Health and the Environment – Centre for Population Screening (RIVM-CvB) directs, manages and coordinates this national population screening programme for the CRC. Its daily execution is performed by five regional Screening Organisations.

The screening programme process can be divided into five stages, as shown in Figure 1:

- Stage 1: Selection and invitation
- Stage 2: Screening
- Stage 3: Informing and referral
- Stage 4: Diagnostics
- Stage 5: Treatment and surveillance

A detailed overview of the process, including the parties involved, the materials, working documents and protocols, is depicted in the flowchart on the previous page.

An ICT system developed for this screening programme, called ScreenIT, is used in each stage. This factsheet describes the five stages and the other performing parties involved.

Invitees/participants, and all of the other parties involved, can find information about each of the stages on the RIVM website: www.rivm.nl/en/colorectal-cancer-screening-programme and the Screening Organisations website: www.bevolkingsonderzoeknederland.nl/en/darmkanker/

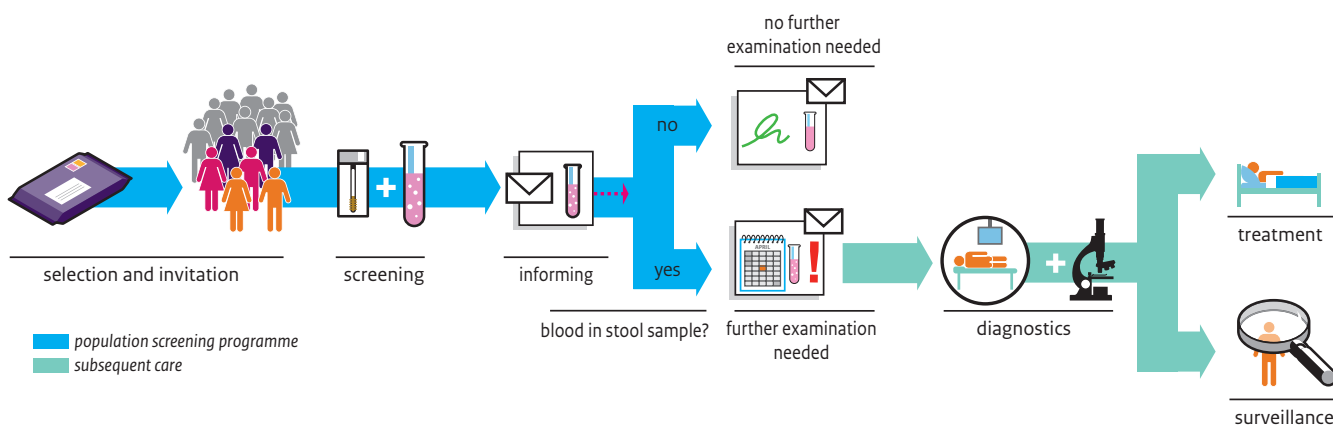


Figure 1: Primary process of the CRC screening programme

Stage 1: selection and invitation



The Screening Organisations select the target group invitees from the information provided by the national database of Dutch inhabitants. The individuals in the target group are invited every second year, which results in approximately 2.2 million invitees each year. The Screening Organisations use the ICT-system ScreenIT for their logistics and communication matters.

The individuals who are invited for the first time receive a preliminary notification to draw attention to the screening programme some three weeks before the actual invitation is sent. The set of invitation material containing an invitation letter, information folder, reply envelope, stool test (Faecal Immunochemical Test for Haemoglobin, FIT) and instructions for use is packed and sent to the invitee by a packing centre.

The invitee then decides whether to participate in the screening programme, or not. If no response is received, the screening organisation sends a reminder (one per invitation set). If the invitee is still unwilling to participate, a new invitation is sent after two years unless the participant has reached the age of 75 by then. The invitee can also proactively unsubscribe from this particular round or from the whole programme. Unsubscribing can be done via the screening organisation, by phone, email or online at the client portal. In light of privacy legislation, it is also possible for invitees at this stage to object to the use of their personal information for monitoring and evaluation purposes, and to the sending of personal information to the hospital after a positive test result, via the screening organisation website.

If the invitee decides to participate, the second stage of the process starts.

Stage 2: screening



The participant collects a sample from his/her stool by using the FIT test at home. Until the stool sample is sent to the laboratory, it must be kept in a refrigerator. The sample is then put into the reply envelope and sent to the screening laboratory by regular mail. (In the Netherlands, postal mail is usually delivered within two days.) Using the FIT test at home is a low burden for the participant and results in the Netherlands having a high percentage of participants taking part in the screening programme (around 71%).

The screening laboratory analyses the stool sample using the set norms (see factsheet on Quality Assurance for more information). The result is sent digitally to the Screening Organisations within 48 hours after receiving the sample. If the screening laboratory determines that the stool sample is not analysable, the Screening Organisation sends a new, complete invitation set to the participant.

Stage 3: informing and referral



The screening result of the FIT is either negative or positive (i.e. the Hb value is below, or equal to or higher than the cut-off point of 47µg/g). If the test result is negative, the participant receives a letter stating that no further examination is needed, and a new invitation for CRC screening will follow after two years.

If the FIT test is positive, the Screening Organisations arrange for an appointment to be made for the participant at a contracted colonoscopy centre so that a consultation can take place to discuss and schedule a colonoscopy (called an intake interview). The ScreenIT system contains

all possible appointment options at each colonoscopy centre to enable an intake interview to be booked and automatically fills in the next available appointment within 40 km of the home address of the participant. If the General Practitioner (GP) of the participant is known to the Screening Organisations, he/she is informed of the positive test result before the participant receives the test result. This offers the GP the possibility of contacting his/her patient.

The Screening Organisations then send a letter to the participant containing the result of the FIT, an information

folder, and details of the time and place of the appointment for the intake interview at the colonoscopy centre. The participant is asked to contact his/her GP, in order to send the medical dossier of the participant to the colonoscopy centre.

The date and place of the intake interview can be changed by the participant if either of them is inconvenient. This can be done by phone, email or via their personal client portal. If the participant does not attend the intake appointment

made for them, a single reminder is sent by the Screening Organisations, asking the participant to make a new appointment with them via the client portal.

If the participant still fails to attend, a new invitation to participate in the screening programme is sent after 2 years.

Attending the intake interview at the colonoscopy centre is the beginning of the diagnostics stage.

Stage 4: diagnostics



Intake interview

During the intake interview at the colonoscopy centre, the advantages and disadvantages of a colonoscopy are discussed with the participant. Based on the medical history, medical condition and medicine use, the participant makes an informed decision to have a colonoscopy or not, in consultation with the intake interviewer. The colonoscopy centre puts the outcome of the intake in the ScreenIT system.

If the participant chooses to have a colonoscopy, a pre-assessment is made and the participant is informed about the (preparation for) the colonoscopy. An appointment to perform the colonoscopy is made, within 15 weekdays of the intake interview, by the colonoscopy centre.

If the pre-assessment concludes that a colonoscopy should not be performed, or if the participant decides not to continue with a colonoscopy, the colonoscopy centre informs the Screening Organisations, through ScreenIT, that no colonoscopy will take place. The participant will then return to the screening programme within 2-10 years (unless the participant has reached the age of 75 years by then), or will not return at all, depending on the reason for not having the colonoscopy.

If contra-indications are present or the participant is unwilling to undergo a colonoscopy, a CT colonography can be performed.

Colonoscopy

After an explanation and instructions are given to the participant, the colonoscopy is performed. Polyps of up to 20 mm are usually resected right away. If abnormalities like polyps or cancer are found during the colonoscopy, histological material (i.e. the polyp or a biopsy) is taken by the gastroenterologist. The colonoscopy centre informs the participant after the colonoscopy and sends the histological material to a certified pathology laboratory. The pathologists assess the material and send the result to the colonoscopy centre.

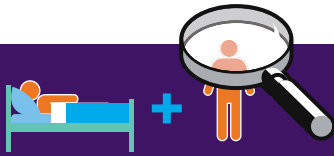
The outcomes of the colonoscopy examinations are sent by letter to the participant and GP, and to the Screenings Organisations, through ScreenIT. The steps that follow depend on the result of the colonoscopy.

- **No abnormalities found (or only one small tubular adenoma)**

The participant is sent a new invitation to participate in the colorectal screenings programme after 10 years, unless the age of 75 has been reached by then. Complications are registered on the National Complication Registry for gastroenterologists.

- **Abnormalities found**

If necessary, the colonoscopy centre will send the participant a referral to the hospital for further diagnostics and treatment and/or surveillance (Stage 5).



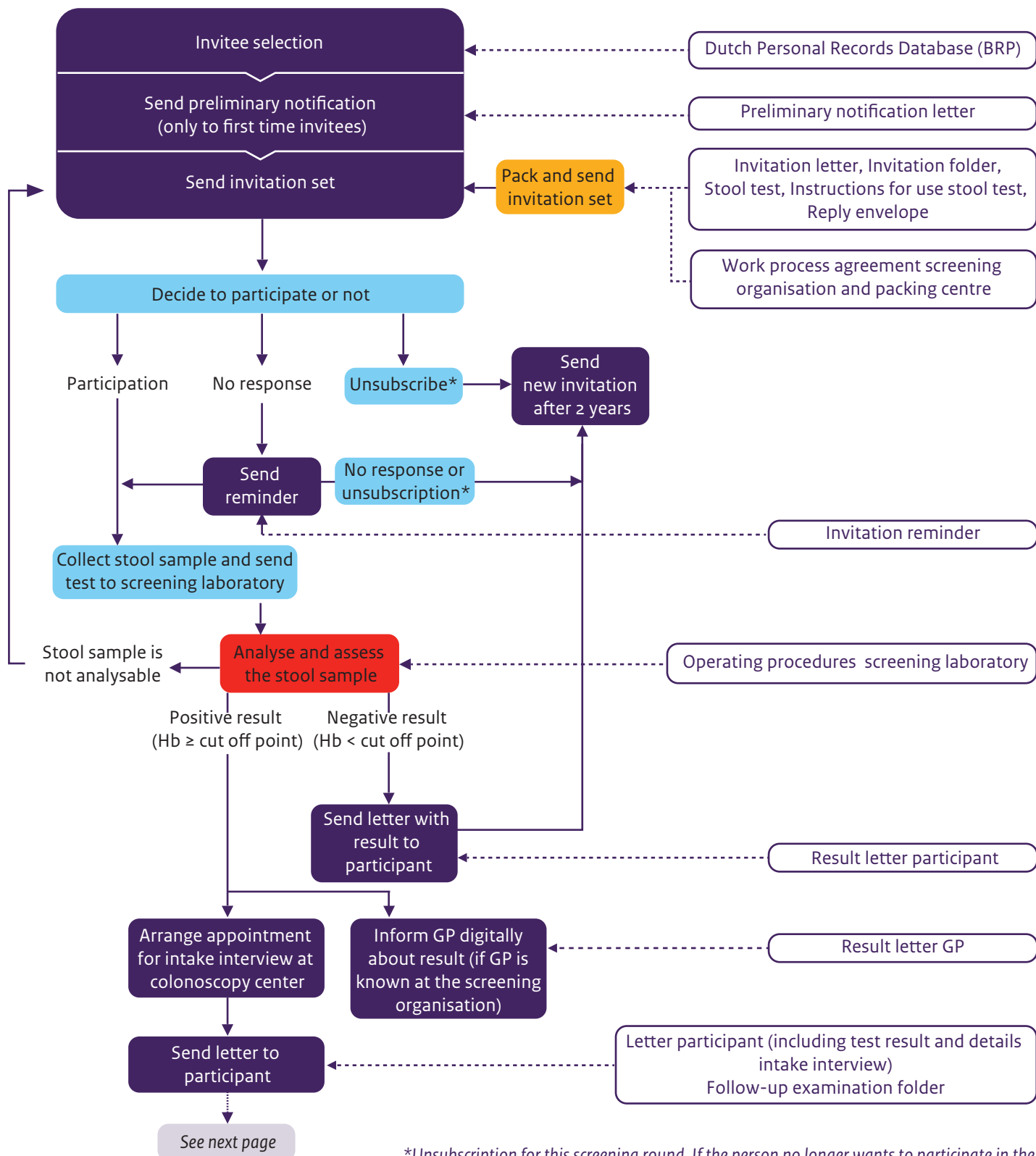
Stage 5: treatment and surveillance

If applicable, the patient will be further diagnosed and treated in the hospital, and consequently or directly be placed in a surveillance programme. A surveillance programme means that the patient receives periodical control-colonoscopy. If a patient participates in this programme, this information is given by the colonoscopy centre to the Screening Organisations through ScreenIT. If the patient ends the surveillance programme and is not yet 75 years old, he/she is invited to the colorectal cancer screening programme again after 15 years.



Flowchart

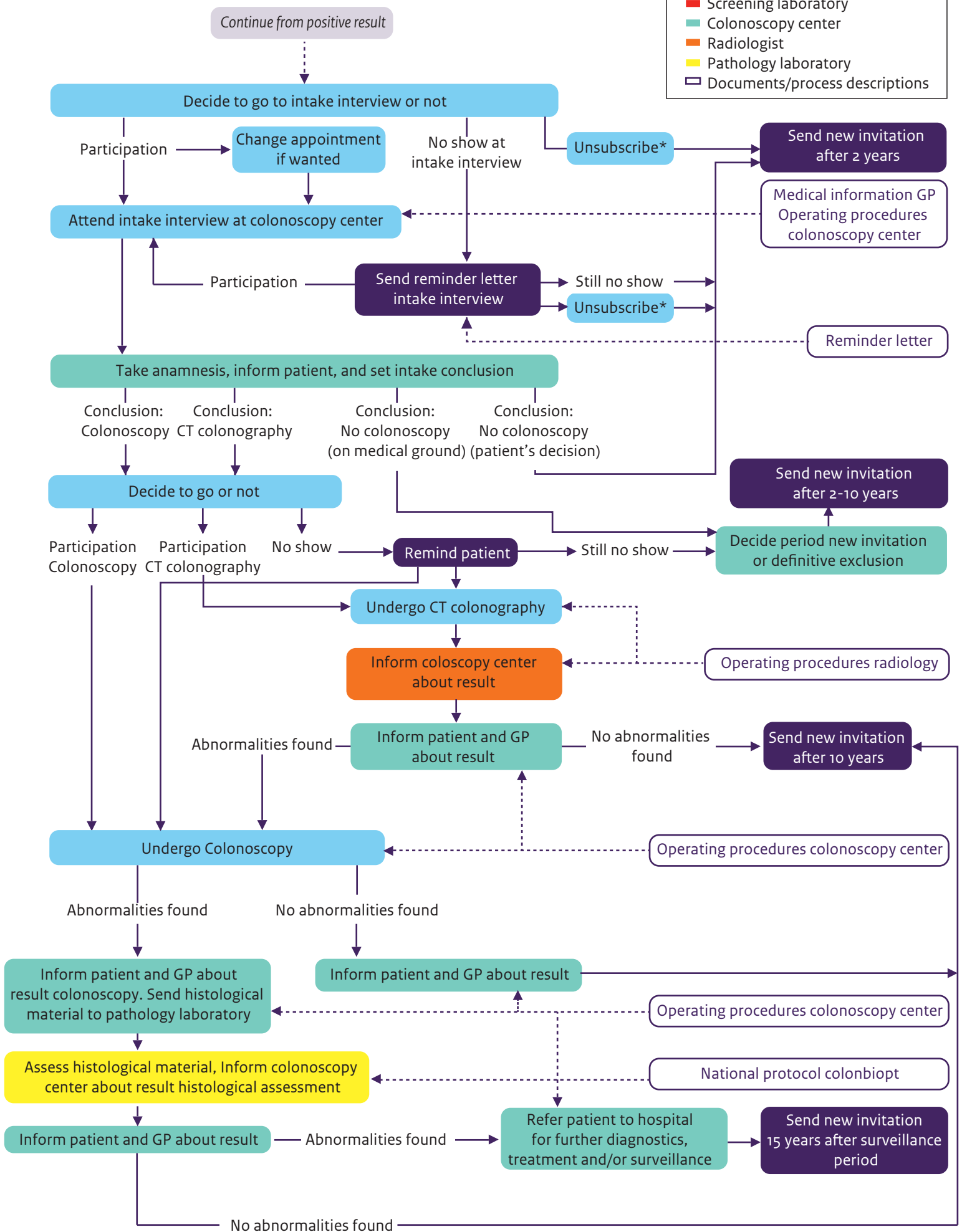
Colorectal Cancer Screening



*Unsubscription for this screening round. If the person no longer wants to participate in the whole screening programme, he/she of course receives no invitation at all anymore.

Legenda

- Screening organization
- Packing center
- Invitee/participant/patient
- Screening laboratory
- Colonoscopy center
- Radiologist
- Pathology laboratory
- Documents/process descriptions



The Dutch screening context

In the Dutch governmental context in which this screening programme was realised, various Dutch government parties are involved in considering, deciding and implementing population screening programmes.

In the Netherlands, it is the Minister of Health, Welfare and Sport (VWS) who is responsible for health screening programmes and who determines the priorities etc. The Netherlands Organisation for Health Research and Development (ZonMw) and the Health Council have primarily a preparatory role/task. The Centre for Population Screening of the National Institute for Public Health and the Environment (RIVM-CvB) is responsible for the coordination and five Screening Organisations implement the screening. ZonMw funds research programmes and the Health Council provides (independent) advice to VWS on health interventions.

We formulated the steps in this factsheet to be as general as possible. Each country, therefore, must take their own healthcare system into account when planning and realising their own population screening programme.

For more information

General information about the Dutch CRC screening can be found at:

www.rivm.nl/en/colorectal-cancer-screening-programme

An introduction to the CRC screening programme in the Netherlands is available at:

www.rivm.nl/documenten/factsheet-lessons-learned-from-introduction-of-colorectal-cancer-screening-programme

Factsheet Quality Assurance: www.rivm.nl/documenten/factsheet-quality-assurance

Questions? Please contact us at: cvb@rivm.nl

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