FIT in the Brazilian Unified Health System: Incorporating the Technology Is Only the First Step

FIT no SUS: incorporar a tecnologia é apenas o primeiro passo

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The incorporation of the fecal immunochemical test (FIT) into the Brazilian Unified Health System (SUS) marks an important milestone for colorectal cancer (CRC) screening in Brazil. As of August 2026, the test was added to the SUS list of procedures. It is intended for asymptomatic men and women aged 50 to 75 years and should be performed every two years. The new procedure will be recorded in SUS information systems beginning in September.[1] This decision has the potential to expand population access to screening and promote the early detection of CRC.

The significance of this measure extends beyond the incorporation of a new technology. Screening programs depend on a continuum of care capable of translating testing into clinical benefit, within the framework of what is known as value-based laboratory medicine. In the case of FIT, this continuum begins with instructions for sample collection, the collection device used, the interval between sample collection and analysis, sample transport and storage conditions, and the performance of the analytical system, all of which may affect the measured fecal hemoglobin concentration. Likewise, the definition of the cutoff has direct implications for the proportion of positive results and, consequently, for the demand for follow-up colonoscopy.[2]

It is precisely within this context that the laboratory assumes a central role. The apparent convenience of FIT for individuals, with at-home sample collection, no bowel preparation, and no dietary restrictions, should not be mistaken for operational simplicity within the healthcare system. Population-wide implementation requires laboratories that are prepared to process a large number of samples, maintain appropriate preanalytical conditions, monitor analytical performance, and ensure reliable results. It also requires recognition that different commercial FIT systems are not necessarily equivalent or interchangeable and that fecal hemoglobin values cannot be interpreted independently of the method and cutoff used.[3]

The article "Fecal Occult Blood Testing: Laboratory Aspects of FIT", published in this issue of the Brazilian Journal of Clinical Analyses (RBAC), is particularly relevant in this new context. By addressing the laboratory aspects of FIT, it draws attention to a dimension that may otherwise go unnoticed when the test is presented solely as a screening tool: the quality of the result depends on decisions and procedures distributed throughout the entire laboratory process. The discussion of fecal hemoglobin stability, sample collection, intermethod variability, quality control, verification of analytical

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performance, and interpretation of results provides a basis for understanding that the incorporation of FIT does not end with making the collection device available to the patient. It requires infrastructure, technical expertise, and laboratory organization.[3-5]

Particular attention should be given to the cutoff, which, in addition to constituting an analytical parameter, has direct implications for the screening strategy. In quantitative methods, its definition establishes a balance between the ability to identify individuals with a higher likelihood of neoplasia and the number of people who will be referred for follow-up colonoscopy. Raising the cutoff tends to reduce the positivity rate and the demand for colonoscopies but may decrease sensitivity for detecting colorectal cancer and precursor lesions.[6]

In Brazil, the preliminary report of the Brazilian Guidelines for Colorectal Cancer Screening issued by the National Committee for Health Technology Incorporation (CONITEC; *Comissão Nacional de Incorporação de Tecnologias no Sistema Único de Saúde,* in Portuguese) recommends qualitative or quantitative FIT for asymptomatic, average-risk individuals aged 50 to 75 years and adopts a cutoff of 50 ng/mL. This value corresponds approximately to 10 µg Hb/g feces, considering the characteristics of the sample collection system and sample dilution.[2] This information must be understood within its proper context: different units of measurement cannot be treated as equivalent through simple mathematical conversion because the relationship depends on the collection device and analytical system used. Thus, a cutoff should not be considered independently of the method that generates it. The choice of the cutoff must take into account the characteristics of the assay, the target population, the screening strategy, and, above all, the available capacity for diagnostic follow-up after positive results. In a population-based program, an apparently technical decision has direct repercussions for the organization of the healthcare network.

Likewise, the success of screening cannot be measured solely by the number of FITs performed. Following a positive result, the individual must have access to a structured healthcare network capable of ensuring appropriate diagnostic follow-up, including access to colonoscopy, follow-up of results, and monitoring of program indicators. The laboratory is part of this continuum of care. The effectiveness of screening depends on coordination among primary health care, laboratories, diagnostic services, and specialized care.

The incorporation of FIT into the SUS is undoubtedly an opportunity to advance CRC control in Brazil, but it is also an opportunity to reaffirm the role of the laboratory in public health policies. For a screening test to produce the expected benefit, its result must be technically reliable, generated under controlled conditions, and interpreted within the context of the screening strategy in which it will be used.

In this context, the article published in this issue of the RBAC comes at an opportune time. Beyond providing information on the method, it contributes to a discussion that should gain increasing prominence in Brazilian laboratories: how can the incorporation of FIT be transformed into an effective, safe, and high-quality screening strategy?

The challenge is clear. And for the Brazilian Society of Clinical Analyses, it begins with the quality of every result.

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