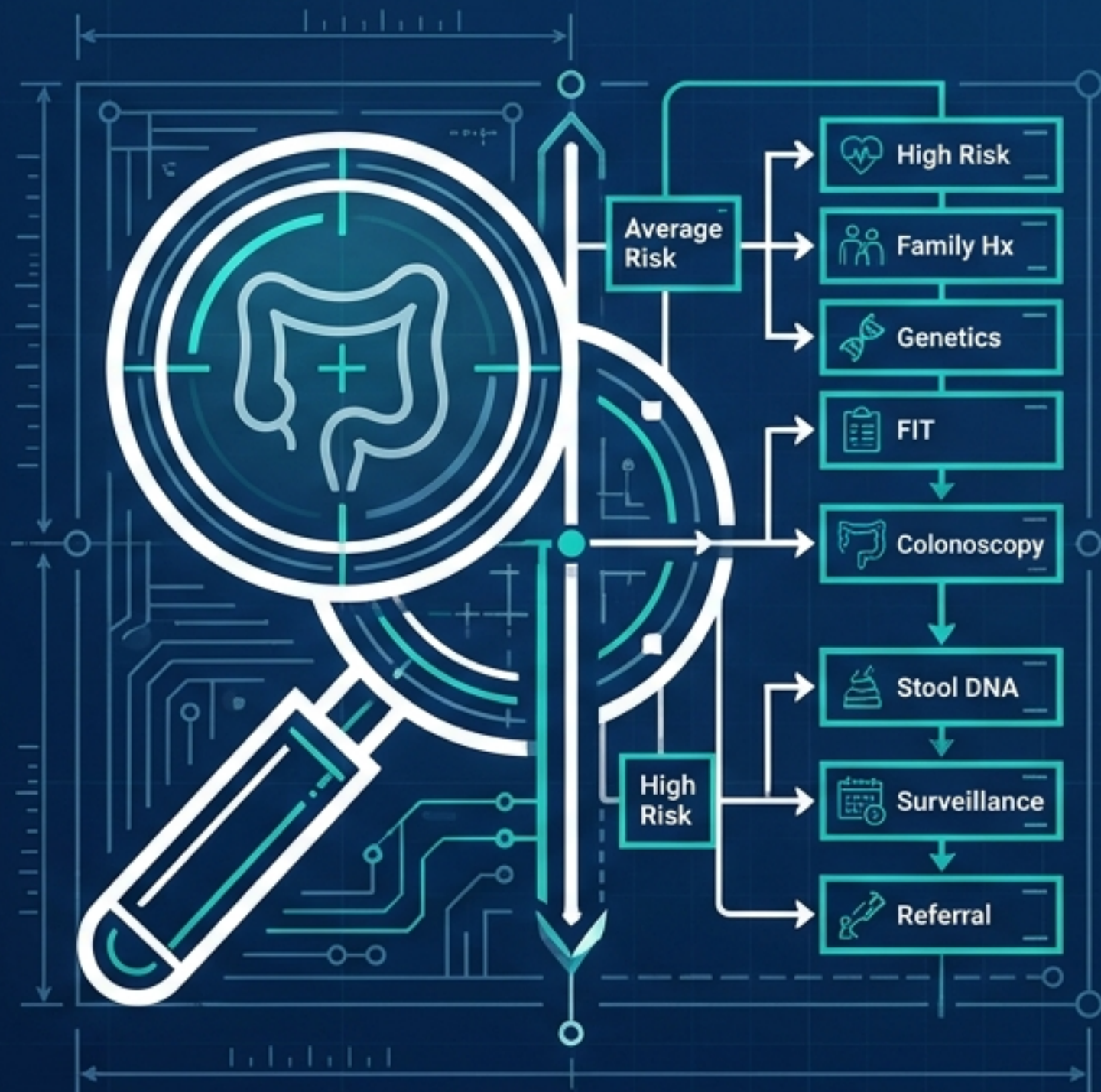


# Colorectal Cancer Screening in Primary Care

A highly visual, **step-by-step clinical blueprint** for risk stratification, modality selection, and patient management.



## The Burden

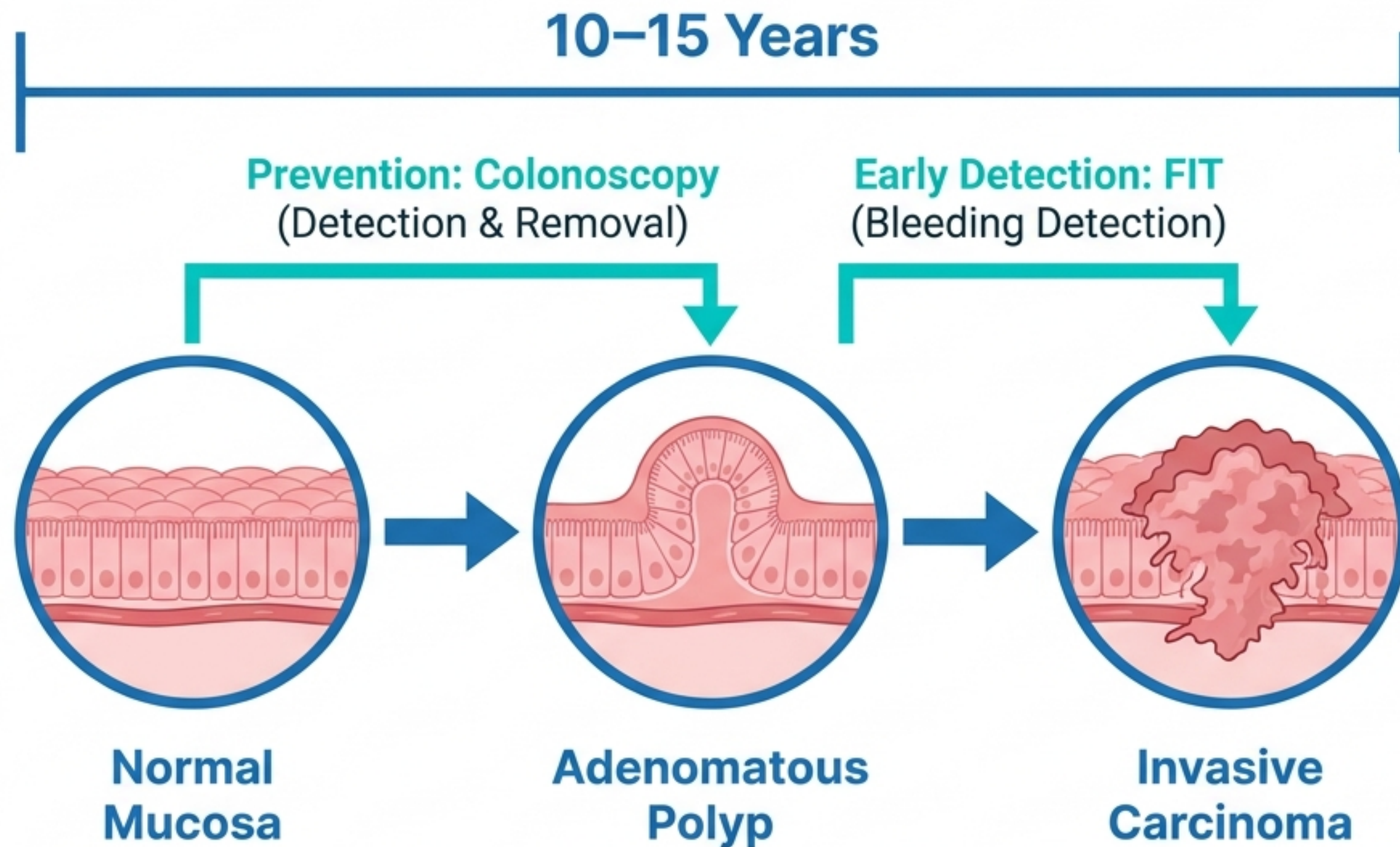
~15,500 new cases &  
~5,300 deaths annually  
(2nd most common  
cancer)

## The Gap

Only ~44% national  
participation in the  
NBCSP

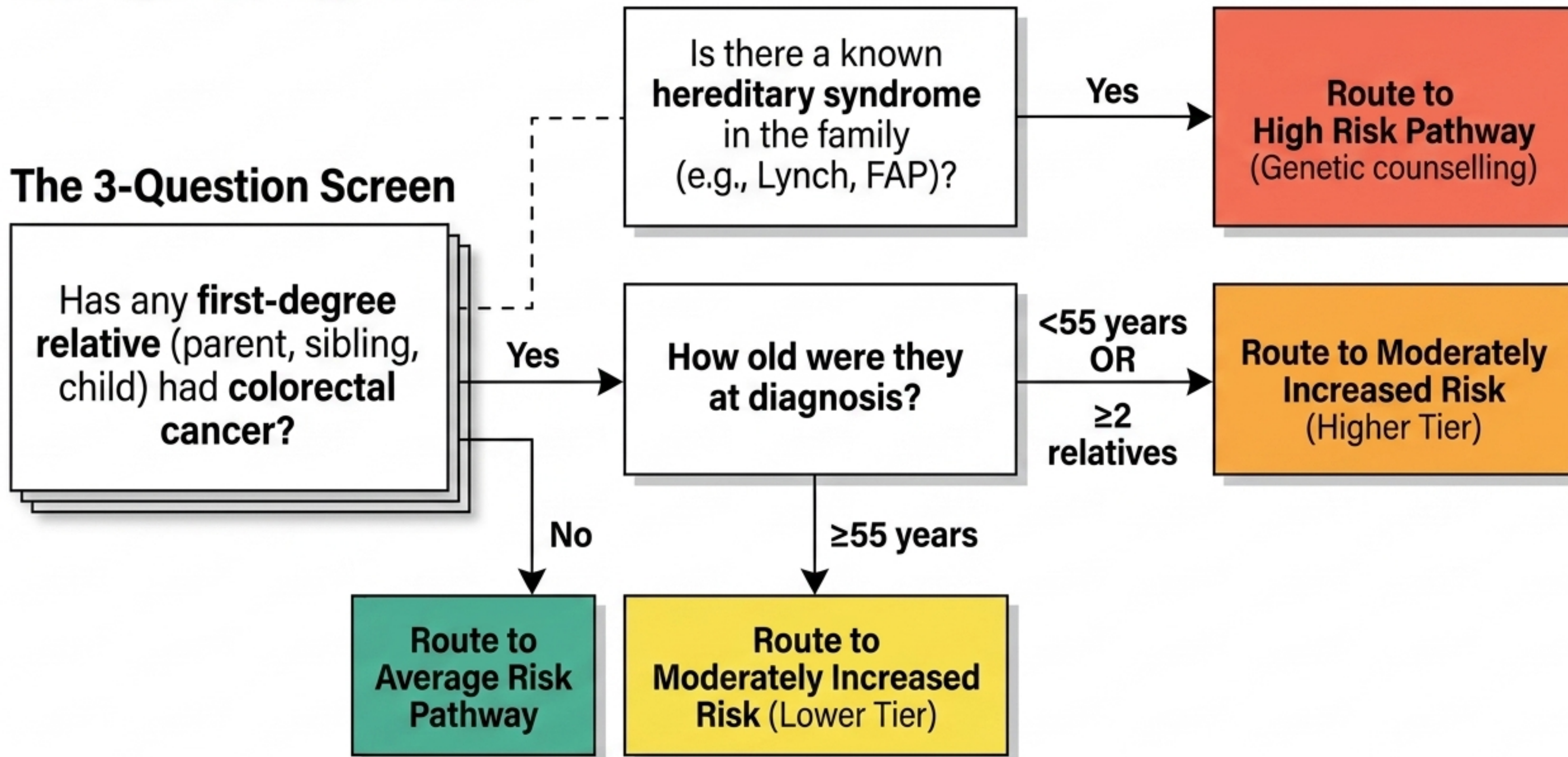
## The Stakes

>90% 5-year survival for  
localized disease vs. <15%  
for distant metastasis



Assessing family history takes less than 60 seconds.

### The 3-Question Screen



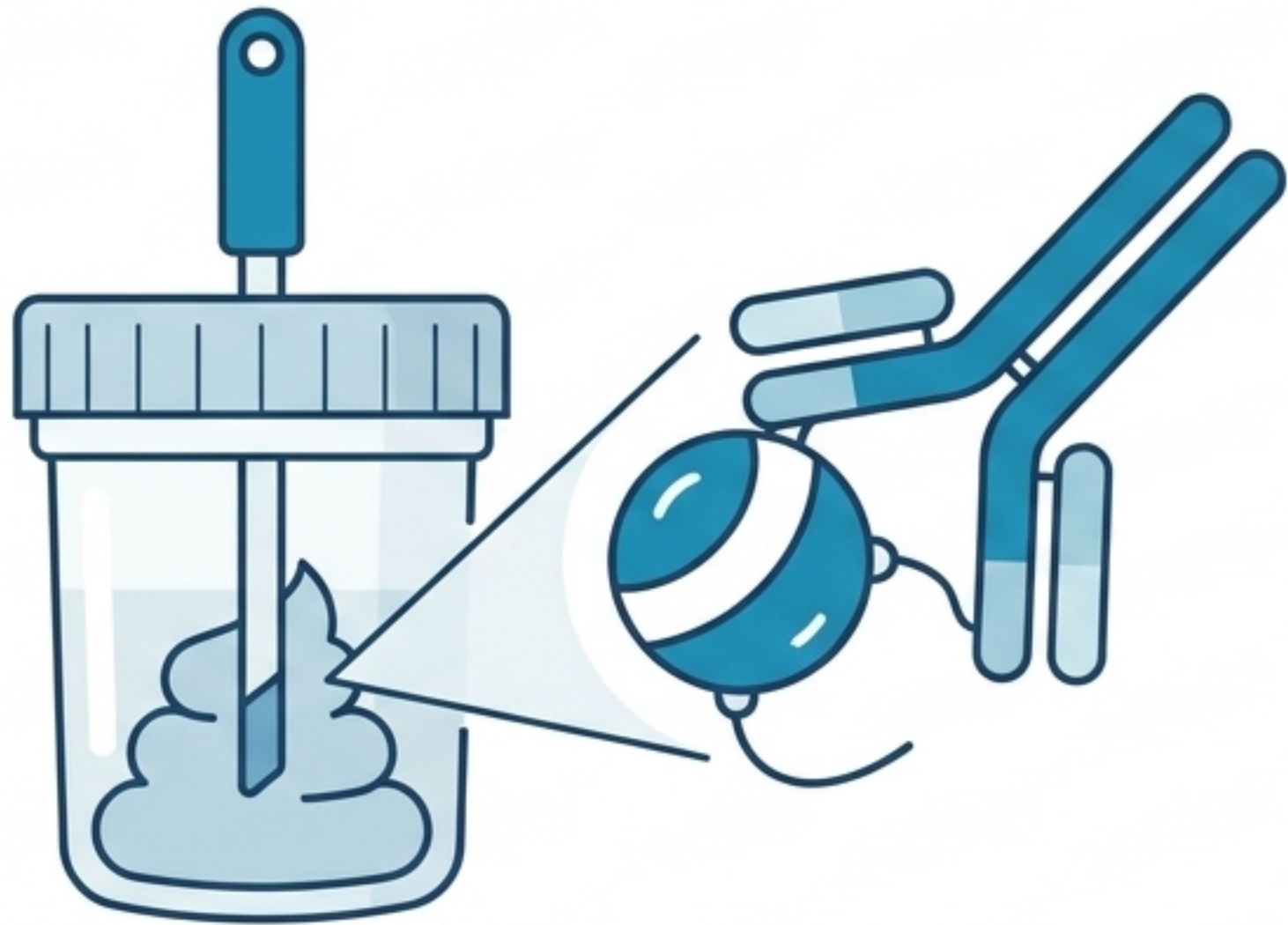
# Match the patient's risk profile to the correct screening protocol.

Average Risk	Moderately Increased Risk	High Risk
<p>No personal/family history of CRC, adenomas, or IBD. Asymptomatic.</p>	<p>1 FDR &lt;55 yrs, OR <math>\geq 2</math> FDRs any age, OR personal history of adenomas.</p>	<p>Lynch syndrome (HNPCC), FAP, MAP, or extensive IBD (&gt;8 yrs).</p>
<p>NBCSP FIT every 2 years.</p>	<p>Colonoscopy every 5 years</p>	<p>Specialist surveillance colonoscopy (1–3 yr intervals)</p>
<p>50 (Discuss from 45)</p>	<p>40 (or 10 years before youngest FDR diagnosis)</p>	<p>Individualised (e.g., Age 25 for Lynch; 12–15 for FAP)</p>

# Evaluating the diagnostic toolset.

Modality	Sensitivity (CRC)	Specificity	Interval	Funding & Availability	Best Use Case
FIT	~74% single-round	~95%	Every 2 yrs	Free (NBCSP) / MBS 66766	Population screening.
Colonoscopy	~95%	~90%	5–10 yrs	MBS 32222	Positive FIT, High risk, Surveillance.
Flexible Sigmoidoscopy	~70–75% (distal only)	~95%	Once-off (Age 55)	MBS 32218	Average risk alternative.
Stool DNA (e.g., Cologuard)	~92%	~87%	3 yrs	Private (Not funded)	Patients declining colonoscopy (warn of false positives).
CT Colonography	~90% (>10mm)	~86%	5 yrs	MBS 57721 (Specialist)	Colonoscopy contraindicated.

## First-line population screening: The Faecal Immunochemical Test (FIT)



Detects human globin – unaffected by dietary peroxidases.  
**NBCSP cut-off:** 100 ng/mL buffer (~20 µg Hb/g faeces).

### NBCSP Details

Sent every 2 years to ages 50–74.

Free, single-sample kit.

Requires active GP endorsement—a simple verbal recommendation boosts participation by up to 20%.

### Clinical Limitations

Reduced sensitivity for proximal (right-sided) cancers and sessile serrated lesions.

Relies on bleeding; non-bleeding adenomas will be missed.

Repeated biennial testing is essential for cumulative sensitivity.

# The gold standard: Colonoscopy enables simultaneous diagnosis and therapy

## The Procedure

The most sensitive and specific test.

Enables direct visualization, biopsy, and polypectomy.

Requires full bowel preparation and sedation (typically propofol-based).

## Quality Benchmarks

Ensure referral to GESA-accredited colonoscopists.

The critical quality indicator: Caecal intubation rate must be >95%.

## Procedural Risks

Patients must be counseled on risks.

Perforation risk: ~1 in 1,000.

Significant bleeding risk: 1 in 200 (higher if polypectomy is performed).

# The Primary Care Action Checklist

## Age 45 - Initiate

- Initiate screening discussion (aligned with USPSTF/ACS updates).
- Consider FIT for patients with minor risk factors or specific preference.
- Conduct health assessment (e.g., 45-49yo health check).

## Age 50 to 74 - Act

- Confirm NBCSP FIT kit receipt and return.
- Flag non-responders in clinical software (Best Practice/Medical Director).
- Leverage chronic disease reviews (MBS 699) to endorse screening.

## Any Age - Vigilance

- Administer the 3-Question Family History Screen.
- Investigate any unexplained iron deficiency anaemia, especially in men and postmenopausal women.

# **CRITICAL RULE: Symptomatic patients are NOT candidates for screening.**



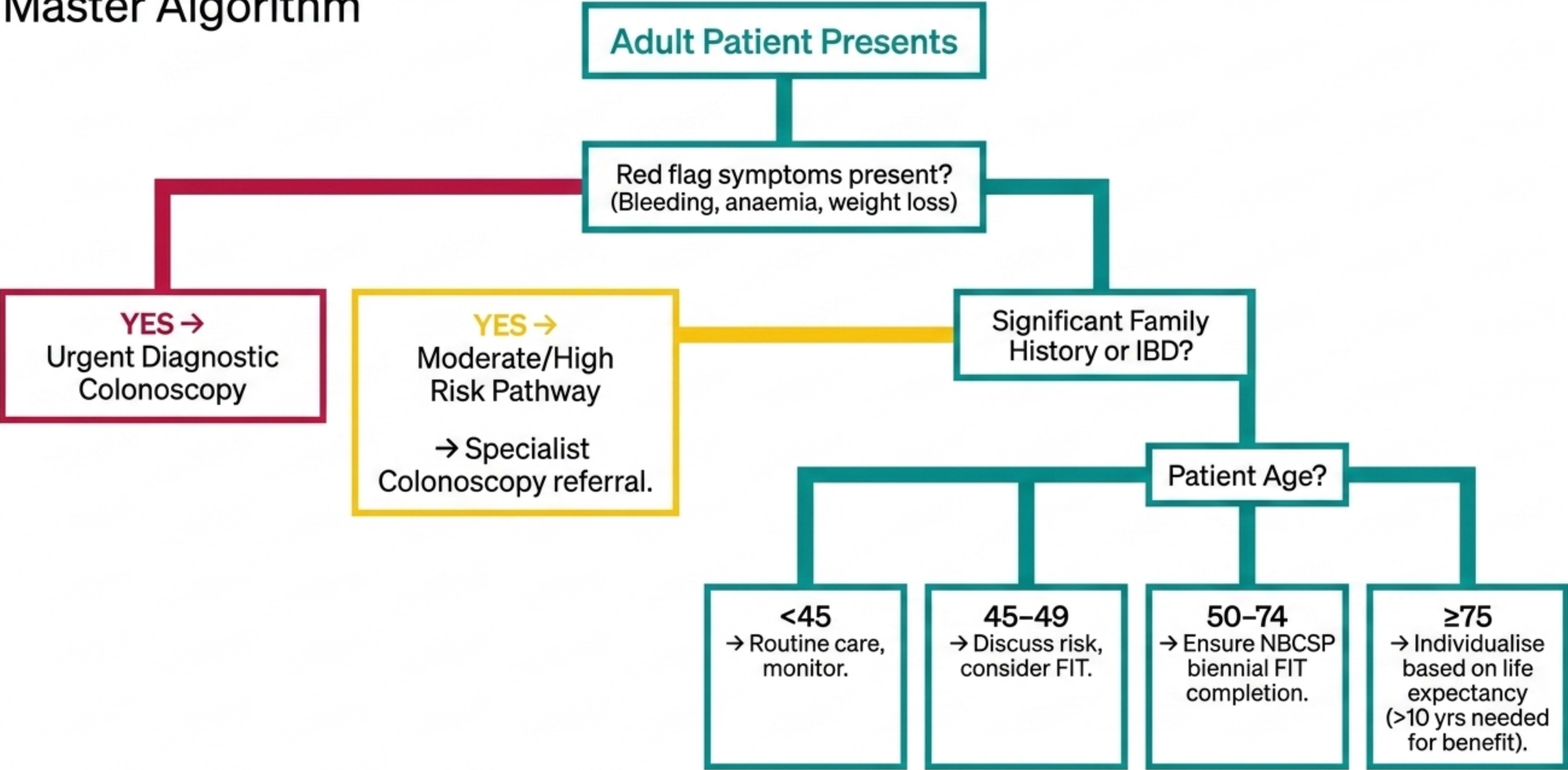
**A negative FIT does NOT exclude colorectal cancer in the presence of symptoms. Do not delay specialist referral based on age or a recent negative screening test.**

**Any patient presenting with:**

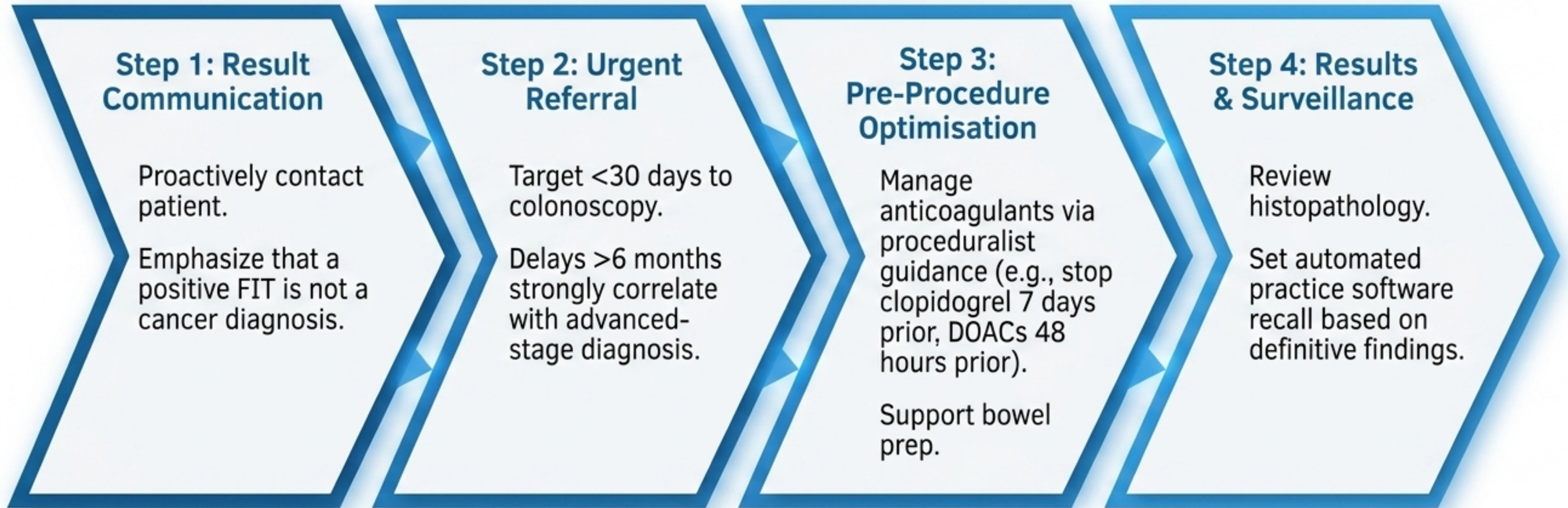
- Rectal bleeding
- Unexplained iron deficiency anaemia
- Change in bowel habit
- Abdominal mass or unexplained weight loss

**Action: Bypass FIT. Mandate direct, urgent referral for diagnostic colonoscopy.**

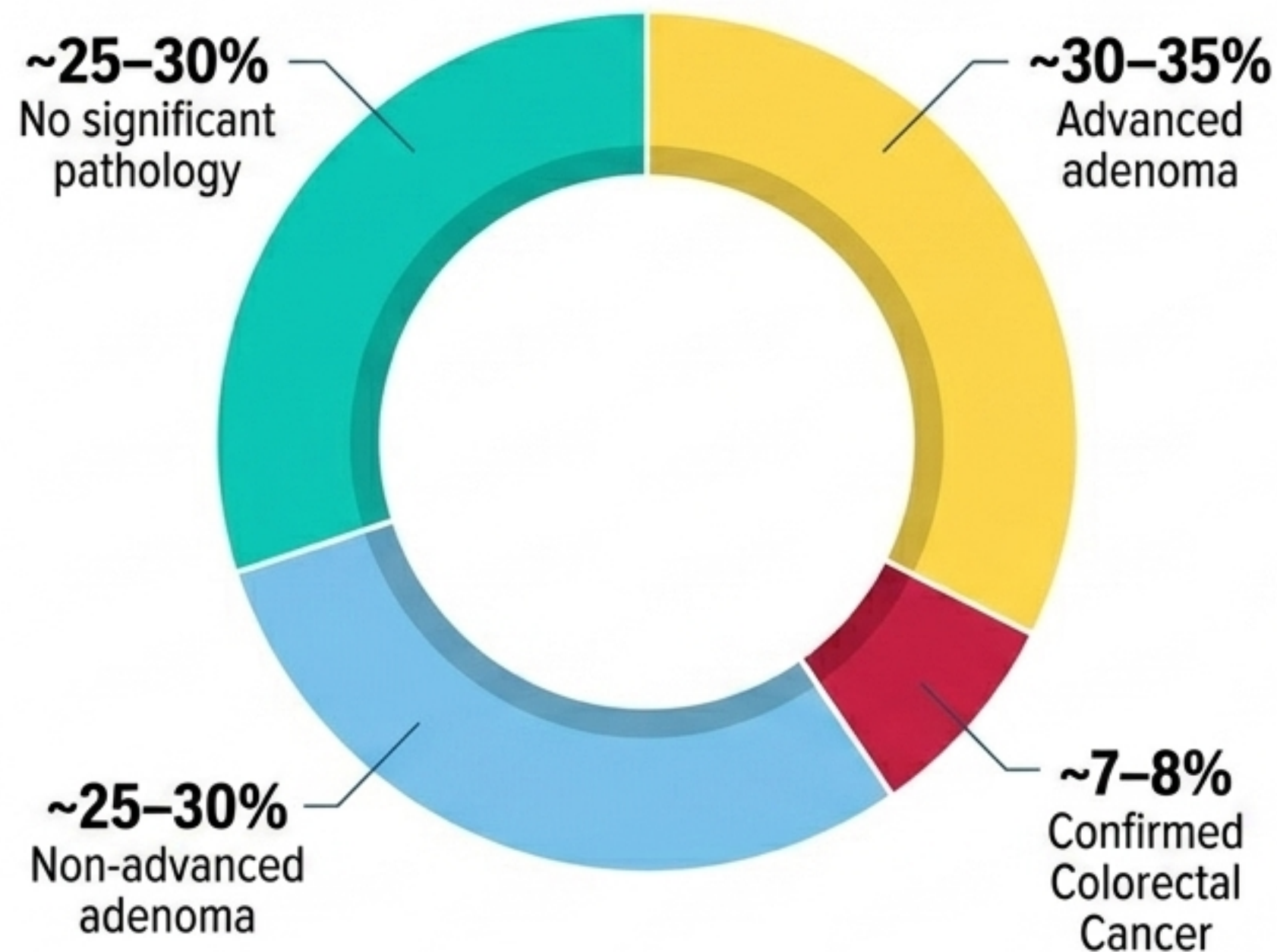
# The CRC Screening Master Algorithm



# Navigating a Positive Non-Invasive Test



# Colonoscopy Yield: What to expect after a positive FIT.

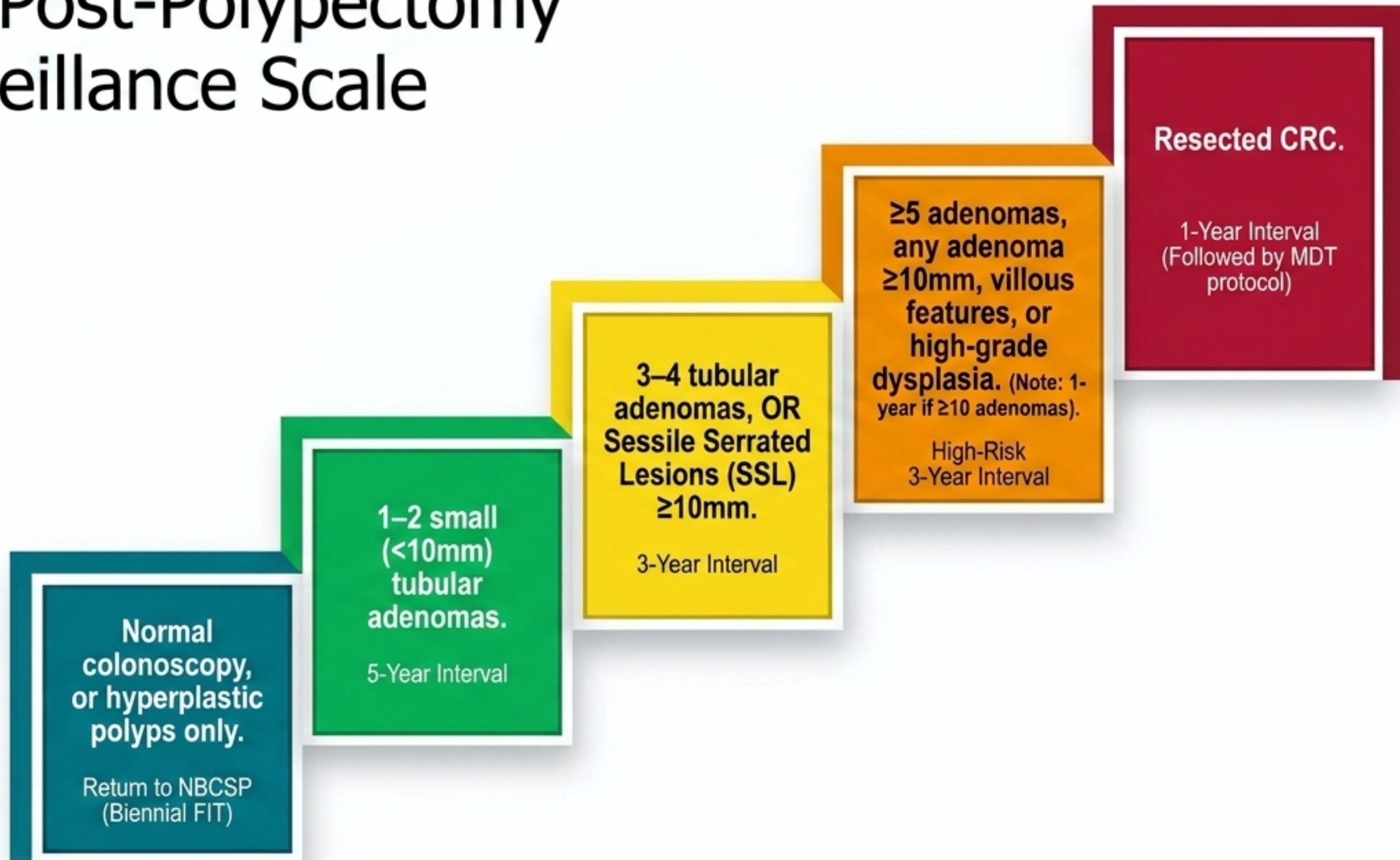


## Safety Net:

Never assume a positive FIT is a false positive without a colonoscopy.

If colonoscopy is perfectly normal, consider an upper GI source, particularly if iron deficiency anaemia is present.

# The Post-Polypectomy Surveillance Scale



# Closing the Gap: First Nations Health & Equity

## The Disparity

Mortality rates are 1.5 to 2 times higher for Aboriginal and Torres Strait Islander peoples, driven by later-stage diagnosis and lower NBCSP participation (~25–30%). Wait times in remote areas can exceed 6 months.



## Clinical Vigilance

Emerging data shows earlier disease onset. Maintain a markedly lower threshold for investigating rectal bleeding or anaemia in younger Aboriginal and Torres Strait Islander adults.

## Strengths-Based Action

Leverage MBS Item 715 health checks.  
Empower Aboriginal Health Workers (AHWs) to lead culturally safe, shame-free screening education.  
Community-Controlled Health Services (ACCHSs) consistently demonstrate superior wrap-around care.

# Clinical Nuance: Managing Special Populations.



## Pregnancy

Defer routine screening to postpartum. If symptomatic, flex sig (no sedation) is safe. Colonoscopy limited to 2nd **trimester** if absolutely critical.



## Paediatrics

CRC is exceedingly rare; if <30 years old, suspect hereditary syndromes (FAP, Lynch). **Genetic testing** indicated.



## Elderly $\geq 75$

Screen only if life expectancy >10 years. **High risk of dehydration** from prep. Weigh competing mortality risks carefully.



## Renal Impairment

Sodium phosphate preps are **STRICTLY CONTRAINDICATED** (eGFR <30) due to fatal hyperphosphataemia risk. Use PEG-based preps. FIT validity is unaffected.



## Hepatic Impairment

Coagulopathy requires hematology input before polypectomy. Increased sensitivity to sedatives; consider anaesthetist-led sedation.



## Immunocompromised / IBD

Extensive colitis (>8 years) drastically increases risk. Mandates surveillance colonoscopy with chromoendoscopy every 1–3 years.

# Reference: The Advanced Diagnostic & Staging Workup.

## Staging Imaging

Confirmed CRC requires CT chest/abdomen/pelvis (MBS 55054). Rectal cancers specifically mandate pelvic MRI for local staging and margin assessment.

## Tumor Markers

Baseline serum Carcinoembryonic Antigen (CEA) is required for post-treatment surveillance tracking.

## Molecular Testing

All CRC specimens undergo Microsatellite Instability (MSI) and Mismatch Repair (MMR) testing to identify Lynch syndrome candidates and guide immunotherapy.

## Germline Genetics

Medicare-funded genetic testing is triggered by MSI-high tumors, Bethesda criteria, or strong family history. Enables cascade testing for relatives.