Virtual chromoendoscopy for real-time assessment of colorectal polyps during colonoscopy

Colorectal polyps may be detected during a colonoscopy. Polyps are not normally cancerous; however, some polyps (known as neoplastic polyps) will eventually turn into cancer if left untreated. In current clinical practice, all detected polyps are removed and their histology is examined to determine whether the polyp is neoplastic, and therefore at high risk of cancer, or non-neoplastic, and therefore at low risk of cancer. Conventional endoscopy is currently used to detect polyps and may be used in combination with dyes (chromoendoscopy). Virtual chromoendoscopy technologies aim to provide enhanced visualisation compared with conventional endoscopy, which may enable real-time differentiation of neoplastic and non-neoplastic colorectal polyps during colonoscopy. This could lead to: a reduction in complications due to fewer resections of low risk non-neoplastic polyps; the provision of quicker results and management decisions; and a reduction in resource use through fewer histological examinations. The NICE Diagnostics Assessment Programme will assess the clinical and cost-effectiveness of virtual chromoendoscopy in order to make recommendations on its use in the NHS.