. The impact of imperfect compliance with screening, diagnostic followup or surveillance regimens cannot be investigated in great detail. Once an individual embarks on a screening schedule, the model assumes he or she sticks with it for the duration of the 35-year program. Adherence to diagnostic followup of any positive screening test is assumed to be perfect. A patient may refuse to comply with surveillance, but OTA assumes that if the patient complies with the first surveillance examination, he or she will continue for the duration of the surveillance period. Any patient who refuses to comply with surveillance is lost to the program altogether (i.e., no rescreening).

Finally, as a map of the true effects of a screening program, the model is limited by the current state of knowledge about the natural history of colorectal cancer, including the adenoma/carcinoma sequence. The model is based on the assumption that a given proportion of cancers begin as adenomatous polyps, and that adenomas remain detectable (with a given sensitivity) by available screening technologies for a given length of time. The evidence to support specific values for these assumptions is sparse. This paper analyzes the impact of changing the values of these key assumptions on the estimated cost-effectiveness of alternative strategies.

SCREENING STRATEGIES EXAMINED

In this paper OTA examines the following strategies for screening average risk adults for CRC beginning at age 50:

1. Annual FOBT;

2. FSIG every 3, 5 or 10 years;

3. DCBE every 3, 5 or 10 years;

4. CSCPY every 3, 5, or 10 years;

5. FSIG every 5 years and FOBT every year;

6. DCBE every 5 years and FOBT every year.