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## **Quality Assurance of Screening Colonoscopy is Crucial for Successful Screening**

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Colonoscopy is regarded as a gold standard in colorectal cancer screening and prevention. Some national multidisciplinary guidelines recommend colonoscopy as a preferred screening method. German annually acceptance rates of four percent in average reflects a substantial restraint of the people against colonoscopy. Quality assurance has to be implemented in order to increase acceptance by providing confidence in safety, cleanness and painlessness of the procedure.

Quality management in health care is internationally accepted as a tool to increase efficiency and performance in health care services. Two nationally and internationally awarded pioneers of quality assurance in health care are mentioned:

### ***Ernest Codman and Avedis Donabedian.***

For three reasons it is crucial to implement a quality management system, which is capable of increasing and maintaining a high efficiency and performance of screening colonoscopy:

**Firstly** for the people to create confidence in the procedure and provide a high safety standard

**Secondly** for the disease to prevent it by reducing the incidence and mortality

**Thirdly** for the provider to supply the community with a highly efficient and mostly available procedure

These goals can be accomplished by a functioning quality management and quality assurance program. An active example of a quality assurance program is shown by the experience of the German quality assurance for the screening and diagnostic colonoscopy, too. This program contains measures for structure, process and outcome quality:

**Qualification and competency** proved by medical board licensure and a volume of a minimum of 200 procedures and 50 polypectomies in the last 48 months

**Maintenance of competency** by a minimum of 200 procedures and 10 polypectomies annually proved by the examination of a sample of 20 complete procedures and 5 complete polypectomies

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**Hygiene control** by microbiological control of the endoscopes in a 6 month interval

A **electronically report and photodocumentation** of lesions detected, interventions performed and complications in a centralized nationwide registry.

Effectiveness of the infection control was shown by a microbiological surveillance of contamination rates in 2002 and 2004 in ambulatory care in the state of Bavaria, which reveals a 90 percent decrease of contamination rates of endoscopes<sup>2</sup> after the implementation of the micorbiological control. In Bavaria this registry forms the basis for an individual feedback systems, which shows the endoscopist's performance benchmarked against the overall statewide performance.

The recent publication by Brenner et al<sup>3</sup> published as online preview in the European Journal of Cancer shows the effectiveness of the German Screeing program with a standardized quality assurance intervention.

The national and international development of quality indicators for colonoscopy and screening colonoscopy, too, strengthens the confidence and safety of the colonoscopy. By these measures acceptance rates can be increased and therefore more lives can be saved. Moreover, quality indicators serve as tools for pay for performance programs, which allocates resources in favor of an increasing efficiency of the screening colonoscopy.

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<sup>2</sup> Birkner B, Crispin A, Mansmann U, Munte A Improved patient safety through online documentation of quality indicators and hygiene control in a series of 145,401 outpatient colonoscopies. ISQUA Conference, Boston, Oct2007. [http://www.isqua.org/isquaPages/Conferences/Boston/slides/POSTER%20DISPLAYS/495\\_birkner.pdf](http://www.isqua.org/isquaPages/Conferences/Boston/slides/POSTER%20DISPLAYS/495_birkner.pdf)

<sup>3</sup> Brenner et al. Expected reduction of colorectal cancer incidence within 8 years after introduction of the German screening colonoscopy programme: Estimates based on 1,875,708 screening colonoscopies. Eurp J Cancer 2009 (online preview)