# QUALITY INDICATORS OF COLORECTAL CANCER CARE IN CANTON TICINO, SWITZERLAND: DIAGNOSIS, PATHOLOGY AND TREATMENT: THE QC<sub>3</sub> STUDY.

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#### **Introduction and Objectives**

Assessing the quality of cancer care has become increasingly important to providers, regulators and purchasers of care worldwide. Aim of this study is to analyze evidence-based quality indicators (QIs) for colorectal cancer (CRC) care in a population-based setting.

## **Materials and Methods**

All patients diagnosed with CRC in Canton Ticino (southern Switzerland) in the period 2011-2012 are selected. Lymphomas and carcinoids are excluded. QIs are defined using a two-step modified Delphi process involving two multidisciplinary expert panels (a local Working Group and an international Advisory Board) with expertise in CRC care, quality of care and epidemiology (Bianchi V, Spitale A, Ortelli L, *et al. BMJ Open* 2013;3:e002818. doi:10.1136/bmjopen-2013-002818). QIs are computed for available information, as proportion with the corresponding confidence interval (CI95%).

## Results

A total of 474 CRC are diagnosed in Ticino in the two-year considered period. Results of QIs are reported here below:

- QI1 = CRC according to the detection method: symptoms 86.9% (CI95%: 83.7%; 90.1%),
- screening 8.6% (CI95%: 6.0%; 11.3%), accidental finding 4.4% (CI95%: 2.5%; 6.4%);
- QI2 = CRC undergoing pre-operative colonoscopy: 90.2% (CI95%: 87.2%; 93.2%);
- QI3 = rectal cancers (RC) whose endoscopy/pathology exam report includes the distance *ab ano*: 83.1% (CI95%: 76.8%; 89.4%);
- QI4 = locally advanced RC, whose pathological examination report includes the information of neoadjuvant radio±chemotherapy (RT±ChT): 86.8% (CI95%: 77.7%; 95.9%);
- QI5 = CRC operated in emergency: 8.7% (CI95%: 5.9%; 11.5%);
- QI6 = CRC post-operative mortality (within 30 days from the surgery): 3.6% (CI95%: 1.7%; 5.4%);
- QI7 = CRC operated on with free margins (R0): 97.2% (CI95%: 95.5%; 98.8%);
- QI8 = CRC operated and a number of resected lymph nodes  $\geq$  12: 86.6% (CI95%: 82.9%; 90.3%);
- QI9 = colon cancer (CC) operated and AJCC stage II high-risk or III, undergoing adjuvant chemotherapy (ChT): 47.0% (CI95%: 38.0%; 56.1%);
- QI10 = CC operated and AJCC stage II high-risk or III, undergoing adjuvant ChT within 8 weeks from surgical resection: 93.9% (CI95%: 87.2%; 100.0%);
- QI11 = locally advanced RC undergoing neo-adjuvant RT±ChT: 66.7% (CI95%: 56.0%; 77.1%);
- QI12 = locally advanced RC undergoing neo-adjuvant RT±ChT, operated within 6-8 weeks after the end of neo-adjuvant RT±ChT: 74.0% (CI95%: 61.8%; 86.2%);

# **Discussion and Conclusions**

Although improvements are possible, results are generally positive, encouraging and sometimes more favorable in southern Switzerland in comparison with other international studies on QIs of CRC care. Further national and international population-based data are urgently needed for comparative analysis.

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