Colorectal Cancer Screening Committee
Virtual Meeting:
Program and Abstracts

October 9, 2020
Virtual
Overview of content

- Program main meeting
- Overview of supporters
- Faculty overview
- Abstracts (in sequence of program)
Program

WEO Colorectal Cancer (CRC) Screening Committee (SC): Virtual Meeting

Friday, October 9, 2020 – 1.00pm - 5.00pm (Central Europe, Amsterdam, Berlin, Paris)
GMT+2
Corresponding Eastern Time: 7.00am – 11.00am
Corresponding Japanese Time: 8.00pm – 12.00am

Virtual meeting via Zoom Webinars, registered participants have received link for meeting.

Conveners:
Evelien Dekker (NL), Global Chair
Michal F. Kaminski (Poland), incoming European Co-Chair
Ernst Kuipers (NL), outgoing European Co-Chair

Themes:
Colorectal Cancer Screening in a COVID-19 era
Outreach & Increasing Participation in population-based programs
Looking hard for polyps
Programmatic issues

Goals of the meeting:
To provide updates on recent advances in CRC screening
To seek advice and comments on future initiatives
To reach consensus on controversial areas

Session 1: Colorectal Cancer Screening in a COVID-19 era
Chairs: Jill Tinmouth & Michael Bretthauer
Time: 1.00pm – 2.30pm

1.00 pm Welcome from CRC SC Global Chair Evelien Dekker
1.05 pm COVID-19: The forefront of virus management
1.20 pm Global news on CRC Screening in the COVID-19 era
1.32 pm Discussion on optimizing endoscopy efficiency and flow during and after COVID-19
1.44 pm COVID-19: Endoscopy services, PPE, pre-procedure testing
1.56 pm Experience in delays in endoscopy and impact on bowel cancer screening
2.08 pm Changes in the numbers of US patients with newly identified cancer before and during COVID-19
2.20 pm Break (10 minutes)

Session 2: Outreach & Increasing Participation in population-based programs
Chairs: Adriana Vaz Safatle-Ribeiro & Hermann Brenner
Time: 2.30pm – 3.30pm

2.30 pm Implementing Ontario’s ColonCancer Check Program: The first 10 Years
2.42 pm Organized CRC Screening outreach efforts in various countries and health systems
2.54 pm Model-based comparison of measures for longitudinal screening adherence
3.06 pm Participation in Competing Strategies for Colorectal Cancer Screening - a Randomized Health Services Study (PICCOLINO Study)
3.18 pm Break (12 minutes)
Session 3: Looking hard for polyps
Chairs: Rodrigo Jover & Cesare Hassan
Time: 3.30pm – 4.15pm

3.30 pm  AI for polyp detection  Raf Bisschops (Belgium)
3.40 pm  Optimizing polyp resection  Heiko Pohl (USA)
3.50 pm  Clinical features, outcomes and risk factors for bleeding after endoscopic resection of submucosal invasive colorectal neoplasms: ENTER-K, a KASID multicenter cohort study  Ji-Taek Hong (Korea)
4.00 pm  Polyp surveillance guidelines from US and EU  Samir Gupta (USA)
4.10 pm  Session 3 finishes

Break (5 minutes)

Session 4: Programmatic issues
Chairs: Roque Saenz & Michal F. Kaminski
Time: 4.15pm – 5.00pm

4.15 pm  Update on early onset CRC  Tom Imperiale (USA)
4.27 pm  Launching the European Commission Initiative on Colorectal Cancer (ECICC)  Elena Parmelli (Italy)
4.39 pm  Post-colonoscopy CRC over the globe  Matthew Rutter (UK)
4.51 pm  Closing remarks  Michal F. Kaminski (Poland) / Evelien Dekker (NL)
5.00 pm  Meeting adjourns
We thank the following partners for their support:

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COVID-19 took the screening community by surprise… as it did to most other providers of acute and chronic healthcare.

National foci gradually broadened from provision of acute services to shielding healthcare personal, the public generally and with growing understanding, to specific vulnerable groups. Preoccupied by COVID-19, screening services were not on any ‘political agenda’ and ad-hoc screening slowed and generally stopped.

Organised national programmes, faced with redeployed administrative, laboratory and clinical staff, and with crippled postal services and closed community health facilities, ceased screening usually with optimistic declarations of when services would be reinstated. Organised programmes were able to request invitees not to return FIT kits, some maintained FIT analysis & test reports and then advise ‘FIT+ve patients’ of delayed colonoscopy appointments.

By mid-March 2020 most programmes, constrained by staff redeployment, sickness or ‘lockdown’, had formally ceased screening. China, Hong Kong and Taiwan ran ahead of the rest of the world and whilst northern Italy was affected early, the difference was marginal. Denmark and a few countries maintained their programme, but uptake of FIT and colonoscopy was reduced and has generally remained so.

Screening recommenced through mid-May to August. Resources were generally constrained due to redeployment, and many programmes are still not fully staffed with colonoscopy most affected. During July & August, clinical and media focus moved to cancer, initially delayed surgery, chemo and radiotherapy and then to screening and missed cancers.

With screening recommenced, the focus turned first to the ‘backlog’ of invitations and colonoscopies and latter to policies for handling the return of the pandemic during winter (northern hemisphere). Screening service shutdown and the shadow of the impending challenge of recovery, stimulated several programmes into lateral thinking. The major challenge was, and is, colonoscopy resource. Many countries are applying revised surveillance criteria, using sensitive FIT criteria to prioritise primary care referrals, and within the screening population identifying lower risk groups.

Recovery objectives are dependent on programme structures, ambition and… philosophy!
1 Restricted to participants caught in ‘mid-screen’ at ‘shutdown’
2 All who had their screening delayed for the period of shutdown (majority programmes)
3 Having cleared the backlog, increase the screening rate until future invitation dates return to those prior to ‘shutdown’ (at least one programme)

Most large programmes predict that full recovery (by their definition) will extend into 2021.
Summary of presentation –

The ongoing COVID pandemic is a challenge for patients and healthcare professionals. Since March, endoscopy operations worldwide have been reduced by 80-90% and CRC screening efforts have largely been halted. In the months since the pandemic started, new infection control protocols have been developed for endoscopy centres with the goal of maximizing safety of patients and staff while achieving efficiency and maintaining good access. Critical processes are developed around patient and staff safety, with pre testing protocols, symptom screens, remodelling of endoscopy areas and changes to patient flow. There is need for prioritization of indications for endoscopy, extra staff for screening, extra space for patients and endoscopy areas, extra PPE equipment and extra time needed for additional consent, interviews and room cleaning and turnover. Most endoscopy centres report resumption of services at 50-75% levels.
Endoscopy services have been negatively impacted by the Covid-19 pandemic. This presentation looks at the impact on Endoscopy services in the UK, the endoscopy staff and on screening participants.

Elective endoscopy virtually stopped in late March 2020 in the UK, due to a number of factors including the concern of bringing well, asymptomatic patients and people into hospital; in order to protect emergency services and to care for the large numbers of patients with Covid disease. Many endoscopy staff were redeployed and endoscopy units were re-purposed as emergency wards.

Very quickly the weekly diagnosis of colorectal cancers fell dramatically by 72%. In some services, including mine, for the month of April 2020 we performed no colorectal cancer screening procedures. The figures have slowly recovered but to a national level of only 50% of pre-Covid numbers.

Endoscopy teams faced a number of challenges during the height of the pandemic including personal fear of contracting the disease, working outside their usual practice, personal illness and exhaustion, lack of adequate personal protective equipment. When performing endoscopy during the recovery period, procedures were more demanding for a number of reasons: a pathology enriched patient group often requiring advanced therapeutic procedures, communication and working whilst wearing PPE, disparate teams spread across different sites.

Participants were reluctant to come to hospital for many reasons: fear of overwhelming the health service (as heavily publicised); fear of contracting and dying from Covid-19. Evidence has shown however that with good pathways, the risk of contracting Covid-19 (staff or patients) following elective GI procedures is very low and almost non-existent if appropriate measures are put in place. Recovery of endoscopy services and of Bowel Cancer Screening programmes needs to address these challenges to reassure staff and patients and to close the gap in cancer diagnosis so that the projected increase in cancer deaths can be reduced. Many services have already put these multi-factorial measures in place. A novel Endoscopy Toolkit is described which aims to support endoscopy teams to deliver safe endoscopy and to communicate efficiently. In this way we can protect Bowel cancer screening from further peaks of the global pandemic.

The International Agency for Research on Cancer defines an organized screening program as having the following features: (1) an explicit policy with specified age categories, method, and interval for screening; (2) a defined target population; (3) a management team responsible for implementation; (4) a health care team for decisions and care; (5) a quality assurance structure; and (6) a method for identifying cancer occurrence in the population. This approach to colorectal cancer screening has been increasingly adopted around the world, though the various programs differ with respect to the details of the features described above. For example, not only does the screening age range differ, but some programs screen with guaiac FOBT while the majority FIT. In the United States, annual FIT is recommended while most other countries use biennial FIT. Some programs have little or no exclusion criteria while others exclude individuals on the basis of prior screening participation, comorbid terminal illness or residence in a nursing home.

There are also important differences in the process for invitation to screening, with some programs sending a letter inviting individuals to get an FOBT from their general practitioner while other programs mail both a primer letter to educate the individual about the value of screening and then a FOBT kit to complete at home. There is also variability in the use of subsequent reminders and patient navigation, with evidence supporting these interventions for improving screening participation.

Programs differ in the threshold used for defining an abnormal FIT result, largely based upon the impact of these thresholds on the demand for colonoscopy. In general, diagnostic colonoscopy for an abnormal FOBT is completed for the majority of patients in European studies, though lower rates are seen in some US studies, especially among those with Medicaid or other underinsured populations.

Through careful evaluation of the participation, diagnostic yield and population-health benefits of the various organized screening programs, we may identify the most valuable components for adoption and dissemination.

Selected References:
Background:
Longitudinal adherence is a key indicator of screening effectiveness in colorectal cancer (CRC) screening programmes using faecal immunochemical testing (FIT). Currently, adherence is reported using different measures, hampering international comparison. Therefore, the ICSN CRC screening working group recently reviewed measures previously used to measure repeat adherence to FIT and compared the estimates obtained when using these different adherence measures within Italian population-based screening programs. Building on this work, we studied the impact of different adherence measures on long-term CRC screening outcomes with the aim to contribute to decision making concerning the optimal longitudinal adherence measure to use.

Methods:
Firstly, for each of the adherence measures, we assessed how accurately they represented the observed frequency of all possible patterns, using the chi-square goodness of fit statistic. Secondly, the ASCCA model was set up to simulate in detail the observed adherence patterns over 4 rounds of biennial FIT-screening in Italy (reference scenario). Subsequently, the same was done using each of the six reported summarizing adherence measures: overall adherence, adherence per round, rescreening, adherence to the full programme (yes/no), regularity (never, inconsistent and consistent screenees) and number of times participated (scenarios 1 to 6). Through micro-simulation, the reduction in model-predicted CRC mortality due to screening was obtained for each scenario in which adherence in the model was based on a different measure. This was compared to the reduction under the true observed adherence pattern.

Results:
Of all summarizing measures, the measure number of times participated was most accurate in reflecting the observed adherence patterns, as the chi-square goodness of fit was smallest for this measure. Overall adherence and adherence per round were least accurate. Four screening rounds reduced model-predicted CRC mortality with 24.4% when simulating detailed observed adherence patterns. A similar reduction was predicted when the model input was based on the number of times participated. A slightly higher mortality reduction was predicted for the measures regularity and rescreening. The highest reduction of 26.8% was predicted when using the measures overall adherence and adherence per round.

Conclusions:
Of all summarizing measures, the number of times participated was most accurate in reflecting the observed adherence pattern, leading to similar model-predicted mortality reductions due to screening. Overall adherence and adherence per round were least accurate. However, only those last two measures can be reported when adherence data is not collected on an individual level.
Background: Primary colonoscopy and fecal immunochemical testing (FIT) are considered first tier tests for colorectal cancer (CRC) screening. Although colonoscopy is considered the most efficacious test, FIT may achieve higher participation rates. It is uncertain what the best strategy is for offering population-wide CRC screening.

Methods: This was a multicenter randomized health services study performed within the framework of the Polish Colonoscopy Screening Program (PCSP) between January 2019 and March 2020 on screening-naïve individuals. Eligible candidates were randomly assigned in a 1:1:1 ratio to participate in one of three competing invitation strategies: (I. control) invitation to screening colonoscopy only; (II. sequential) invitation to primary colonoscopy, and invitation for FIT for initial non-responders; or (III. choice) invitation offering a choice of colonoscopy or FIT. The primary outcome was participation in CRC screening within 18 weeks after enrollment. The secondary outcome was diagnostic yield for advanced neoplasia (AN).

Results: Overall, 12,452 individuals were randomized into three study groups. The participation rate in the control group (17.5%) was significantly lower compared to the sequential (25.8%) and choice strategy (26.5%) groups (p<0.001 for both comparisons). The colonoscopy rates for participants with positive FITs were 70.0% and 73.3% respectively, despite active call-recall efforts. In the intention to screen analysis, advanced neoplasia detection rates were comparable between the control (1.1%), sequential (1.0%) and choice groups (1.1%).

Conclusion: Offering a combination of FIT and colonoscopy as a sequential or active choice strategy increases participation in CRC screening. Increased participation in strategies with FIT do not translate into higher detection of AN. ClinicalTrials.gov Identifier: NCT03790475.
Adequate detection and removal of adenomas is crucial for prevention of colorectal cancer in patients that undergo colonoscopy. Studies have clearly shown that not all endoscopists are the same and that a low adenoma detection rate is associated with a higher risk of interval cancers after colonoscopy. Besides technical aspects related to endoscopic skills, endoscopic equipment and bowel preparation, polyp detection during colonoscopy may be hampered by several other factors that may influence the attention of the endoscopists like fatigue, reduced attention due to the repetitive nature of procedures or simple distraction by telephone calls or others. AI has the potential to overcome these factors.

Several systems for computer aided diagnosis for polyp detection (CADe), have been developed. For polyp detection, usually so called deep learning is used, where a training set containing the ground truth is subsequently validated. It is of paramount importance that we get insight in the development of these systems to understand at least the data input in the training data set and validation set. The quality, characteristics and variability of the input data is the determining factor for the output of the system. For instance if training data do not contain any sessile lesions, the CADe will also not be able to recognize them.

Recent data indicate an increase in ADR by CAD. In a RCT by Repici et al a CE approved system (GI Genius) increased ADR by 14%. In a back to back study, Wang et al showed a significant decrease in adenoma and polyp miss rate. A recent meta-analysis showed an ADR of 36.6% versus 25.2% in favour of CADe. In a recent trial using a real-time unblinding protocol, we showed that CADe was non-inferior to endoscopists with a high ADR. This study approach allows to detect the real time additional value and performance of the system without the need for randomization. How deal endoscopists clinically with false positive findings of the system? Some of these may be trivial to identify like stool, air bubbles. In other instances the false positive may in fact reflect what some may experience in real life as well when they see a thickened fold that needs closer inspection. Important is that the number of false positives remains limited in order not to annoy the endoscopists which may lead to discarding of the CADe input. In our hands CADe shows a false positive rate of 1.4 per minute clean withdrawal time (Sinonquel et al). For GI Genius it was shown that the time “lost” to false positives was only 0.7% of the total withdrawal time. These findings indicate that this is clinically acceptable.

After commercialisation, it will be important that the quality of endoscopy remains to be monitored. A potential pitfall of CADe is deskilling of the endoscopist with overreliance to the system. In the end, if a lesion is not shown to the system, it will not be detected. Therefore incorporation of automatic quality control, like clean inspection time, percentage of mucosa inspected and bowel preparation calculation will be crucial to maintain the increased quality of colonoscopy related to CADe.
Optimizing Polyp Resection
Heiko Pohl, Dartmouth Geisel School of Medicine

Complete removal of neoplastic colorectal lesions is central to the efficacy of colorectal cancer screening. Yet polyp resection if frequently incomplete. Incomplete resection contributes to the development of post-colonoscopy colorectal cancers in as many of 10 to 28% of cases and more than doubles the risk of segment metachronous neoplasia. Appropriate measures and means to assess completeness of polyp resection in clinical practice are missing. Endoscopists therefore need to strive to skillfully apply the right technique for the given situation.

What are the new developments with choosing the right approach to resection? ESGE (2017) and the US Multisociety Task Force (US-MSTF 2020) recommend that all non-pedunculated polyps that are <10 mm should be removed with a cold snare (no electrocautery). According to the more recent US-MSTF guideline cold snare resection may be considered for 10-19 mm non-pedunculated polyps. In addition, all ≥10 mm polyps should be interrogated with an image enhanced technique to assess for possible invasive cancer before deciding on the approach to resection.

The recent to move from hot to cold snare resection is based on an increasing number of studies that have shown that cold resection is safer than hot resection for any size polyp. It is also at least as effective for any polyp <10 mm. In a recent meta-analysis cold resection of serrated polyp of any size was at least as effective and safer than hot snare resection. These findings support adopting cold snare resection of any serrated lesions as a new standard. Data on cold snare resection of large adenomatous polyps are emerging.

Clip closure of the resection defect should be attempted for all ≥20 mm non-pedunculated polyps in the proximal colon. Clipping reduces delayed bleeding following hot snare EMR by approximately 50% overall and to one third for proximal polyps. A benefit of clipping was not shown for <20mm polyps or those located distal to the transverse colon.

Direct and video-based skills assessment tools are available to assess quality of resection. However, the instruments contain in part many metrics and are less applicable to clinical practice. Instruments and assessment process should be modified to be integral to training and clinical practice. Measures of incomplete resection similar to ADR for detection are needed. Segment metachronous adenoma rate (SMAR) may represent such measure.

Aside from enhancing our resection techniques, understanding the limit of cold snare resection, and assessing quality, the next frontiers in polyp resection should consider and integrate the question of sustainability of our practice. For instance, most polyps are not destined to transition to cancer, yet intense resources are spent to remove all polyps. This overtreatment may not only be detrimental to patients but also to the environment.
AIM: One of the major complications associated with endoscopic resection (ER) including endoscopic submucosal dissection (ESD) and endoscopic mucosal resection (EMR) is bleeding. The present study aimed to investigate the incidence and its clinical outcomes of intra-procedural and delayed bleeding following ER for submucosal invasive colorectal neoplasms (CRNs) and its risk factors.

METHODS: Between January 2010 to December 2016, the medical records of 986 lesions resected via ER for submucosal invasive CRNs at ten hospitals in the Republic of Korea were reviewed retrospectively. We analyzed the relationship between risk factors for intra-procedural, delayed post-ER bleeding and major bleeding and the following factors using univariate and multivariate analyses: age, gender, BMI, presence of comorbidities, use of antithrombotic drugs, endoscopic lesion size, lesion location, lesion morphology, lesion histology, enbloc resection rate, pathologic lesion size, lateral and vertical margin, lymphovascular invasion, pathologic complete resection rate.

RESULTS: Procedure-related bleeding occurred in 109 lesions (11.1%): The overall rates of Intra-procedural, delayed, and major bleeding were 8.2% (81/986), 2.6% (26/986), and 3.2% (30/929), respectively. All major bleeding could be successfully managed with endoscopy or conservative observation without surgery. All cases of recognized bleeding were successfully managed by endoscopy (95.1%), conservative observation (3.9%), and angiography (1.0%). In the present large consecutive study with a median follow-up period of more than 4 years, no ER related death due to bleeding was observed. For intra-procedural bleeding, multivariate analysis revealed that pathologic lesion size (OR = 1.024, 95%CI: 1.003-1.044, P = 0.022) was independent risk factors. For delayed post-ER bleeding, multivariate analysis revealed that anticoagulant use (OR = 7.83, 95%CI: 2.06-29.769, P = 0.003) was independent risk factors. For major bleeding, ESD method compared to EMR (OR = 3.244, 95%CI: 1.552-6.780, P = 0.002) was independent risk factors.

CONCLUSION: In the present study, our results indicate an adequate safety profile about bleedings after endoscopic resection of submucosal invasive colorectal neoplasms. An increased risks of intra-procedural, delayed, and major bleeding were associated with pathologic lesion size, the use of anticoagulant medicines, and ESD treatment method, respectively. Therefore, careful and additional management is recommended for patients with these risk factors.

Keywords: Bleeding, Colorectal neoplasms, Submucosal invasion, Endoscopic resection
The European Society of Gastrointestinal Endoscopy (ESGE) and the United States Multi-Society Task Force on Colorectal Cancer (USMSTF) both issued updated recommendations for surveillance after colonoscopy with polypectomy. Though data reviewed to inform each group’s recommendations were similar, the guidance issued differed for many patient scenarios (Tables). Based on a review of the guidelines, it appears that the differences may be attributable to different points of emphasis in interpreting data, and different responses to scenarios for which data guiding advice are limited. Although multiple differences exist, consensus has been achieved for follow up recommendations for multiple scenarios, including for follow up of patients with adenomas >10 mm in size, 5-10 adenomas, adenomas or serrated lesions with high grade dysplasia, and serrated lesions >10 mm in size.

<table>
<thead>
<tr>
<th>Baseline Colonoscopy Finding</th>
<th>USMSTF</th>
<th>ESGE</th>
</tr>
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<tbody>
<tr>
<td>1 to 2 tubular adenomas &lt; 10 mm</td>
<td>7 to 10 years</td>
<td>Return to screening*</td>
</tr>
<tr>
<td>3 to 4 tubular adenomas &lt; 10 mm</td>
<td>3 to 5 years</td>
<td>Return to screening*</td>
</tr>
<tr>
<td>5 to 10 tubular adenomas &lt; 10 mm</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Adenoma ≥10mm</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Adenoma with tubulovillous or villous histology</td>
<td>3 years</td>
<td>Return to screening if no other surveillance criteria met*</td>
</tr>
<tr>
<td>Adenoma with high grade dysplasia</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>&gt;10 adenomas on single exam</td>
<td>1 year, consider genetic evaluation</td>
<td>Genetic evaluation</td>
</tr>
</tbody>
</table>

*colonoscopy ok if no organized screening program

<table>
<thead>
<tr>
<th>Baseline Colonoscopy Finding</th>
<th>USMSTF</th>
<th>ESGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 2 SSPs &lt; 10 mm</td>
<td>5 to 10 years</td>
<td>Return to screening*</td>
</tr>
<tr>
<td>3 to 4 SSPs &lt; 10 mm in size</td>
<td>3 to 5 years</td>
<td>Return to screening*</td>
</tr>
<tr>
<td>5 to 10 SSPs &lt; 10 mm in size</td>
<td>3 years</td>
<td>No recommendation</td>
</tr>
<tr>
<td>SSP ≥ 10 mm</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>SSP with dysplasia</td>
<td>3 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Hyperplastic polyp ≥ 10 mm</td>
<td>3 to 5 years*</td>
<td>3 years</td>
</tr>
<tr>
<td>Traditional serrated adenoma</td>
<td>3 years</td>
<td>3 years</td>
</tr>
</tbody>
</table>

* A 3 year follow up interval is favored if concern about consistency in distinction between SSP and HP locally, bowel preparation, or complete excision, whereas a 5 year interval is favored if low concerns for consistency in distinction between SSP and HP locally, adequate bowel preparation, and confident complete excision.

REFERENCES

This session will: 1) Review some of the basic epidemiology of EOCRC; 2) Discuss recent studies on genetic and phenotypic risk factors; 3) Discuss what is needed and what can be done now to stem EOCRC.

EOCRC has increased in several high-income countries, spanning at least 3 continents. It appears to have a cohort effect, suggesting that early life exposures are affecting risk. In the U.S., EOCRC represents 10-11% of all CRC (median age 44 years), with 75% occurring in 40-49 year olds, and 75% of the cancers found distal to the splenic flexure.

The younger the age at diagnosis, the more likely present are genes containing pathogenic variants. Using GWAS data from 3 large consortia, Archambault et al derived and validated a personalized risk score (PRS) that was more strongly associated with EOCRC than usual (or “late”) onset CRC, and was strongest for those without a first-degree relative (FDR) with CRC, but with only fair discrimination (c-statistic range, 0.58-0.65). (1) This PRS, when combined with lifestyle and environmental (“phenotypic”) risk factors, may identify individuals for early screening.

Recent studies have identified several phenotypic / lifestyle factors associated with EOCRC, including age, male sex, FDR with CRC, smoking, high BMI, metabolic syndrome, previous antibiotic use, too much television time, and others, along with protective factors (physical activity, diet). (2, 3) There is a small literature on risk prediction models for advanced colorectal neoplasia (the combination of CRC and advanced, precancerous polyps) in persons younger than age 50 (4, 5) and one study combining risk stratification using the Asia Pacific Colorectal Screening (APCS) score with fecal immunochemical testing (FIT) to improve the yield of early screening. (6)

The field needs hypothesis-generating research (from population-based / “ecological” studies and lab-based research), observational research to further identify and validate risk factors for improved risk stratification, and large database research examining gene-environment (and possibly microbiome) interactions. In the meantime, patients / the public must be encouraged to report lower GI symptoms (especially bleeding), to look at their stools and toilet paper for blood, and to adhere to a healthy lifestyle. Doctors and other providers need to take thorough family histories (asking not just about CRC); inquire about constitutional and lower GI symptoms; consider at least sigmoidoscopy for unexplained rectal bleeding; use colonoscopy for unexplained iron-deficiency anemia, distal neoplasia, or an unrevealing sigmoidoscopy; obtain appropriate imaging for unexplained abdominal pain; and consider “early” screening for 45-49 year olds with multiple risk factors. Systems need to perform universal testing of CRCs for microsatellite instability and/or immunohistochemistry for defective mismatch repair genes.

REFERENCES:
In collaboration with the Directorate General for Health and Food Safety, the European Commission's Joint Research Centre in Ispra (Italy) will launch the European Commission Initiative on Colorectal Cancer (ECICC) at the beginning of 2021; the call for experts for this initiative will be announced by the end of 2020. As for the European Commission Initiative on Breast Cancer (ECIBC), the main objective of ECICC is to provide essential levels of quality care that are equally accessible across Europe through the development of up-to-date recommendations on colorectal cancer prevention, screening and diagnosis, and a European quality assurance (QA) scheme covering all steps of the colorectal cancer care pathway.

Starting from the experience and the lessons learnt during the ECIBC work, and then going through several steps, including also the organisation of a two-day workshop with experts in the field of colorectal cancer, guidelines and QA methodologies, we developed an innovative methodological framework that integrates guidelines and QA scheme supporting ECICC through a transparent and rigorous process.

This process will engage several actors:

- the ECICC Executive: a multidisciplinary experts’ group (approx. 15 individuals) including patients advocates providing high-level direction and having decision-making responsibility regarding guidelines and QA development;
- PICO Responsible Units: providing detailed guidance and expertise in planning work for each healthcare question of interest and identifying and summarising the research evidence to support the Executive decisions;
- a Systematic Review Teams: conducting systematic reviews;
- a Quality Assurance Teams: conducting quality assurance reviews;
- the Stakeholders’ forum: supporting the identifications of priorities and providing feedback on the development of the guidelines and the QA scheme;
- EC: political responsibility with DG SANTE; scientific and technical coordination of the project and of the groups involved with DG JRC.

ECICC will benefit of a transparent and rigorous process, involving patients advocates and stakeholders to offer to the EU citizens up-to-date and accessible information on colorectal cancer care through evidence-based guidelines’ recommendations and a modular, adaptable, and implementable QA scheme.
Summary of presentation

During my talk I will look at PCCRC definitions, rates, risk factors and individual case root cause analysis, focusing on the WEO consensus standardised methodology.

Summary:
2 different aspects to PCCRC

1. PCCRC rate
Gives important overview of quality of colonoscopy
Standardised methodology key
Large datasets & service/national level evaluation
Clear room for improvement in quality

2. PCCRC aetiology
Confirms most PCCRCs are preventable
Commonest cause = missed lesions
Certain high-risk cohorts of patients – especially IBD
INDUSTRY COOPERATION 2020

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