

Abstract nr. 1

Abstract code

## INVOLVING PATIENTS IN THE DEVELOPMENT OF A COLORECTAL CANCER RISK PREDICTION TOOL

Author - Walker, Jennifer, The University of Melbourne, Melbourne, Australia (Presenting author)

Co-author(s) - Saya, Sibel , The University of Melbourne , Melbourne , Australia

Co-author(s) - Kim, Grace , The University of Melbourne , Melbourne , Australia

Co-author(s) - Minshall, Jesse , The University of Melbourne , Melbourne , Australia

Co-author(s) - Harty, Elena , The University of Melbourne , Melbourne , Australia

Co-author(s) - Licqurish, Sharon , The University of Melbourne , Melbourne , Australia

Co-author(s) - Flander, Louisa , The University of Melbourne , Melbourne , Australia

Co-author(s) - Bickerstaffe, Adrian , The University of Melbourne , Melbourne , Australia

Co-author(s) - Hewabandu, Nadira , The University of Melbourne , Melbourne , Australia

Co-author(s) - Jenkins, Mark , The University of Melbourne , Melbourne , Australia

Co-author(s) - Emery, Jon , The University of Melbourne , Melbourne , Australia

Topic Cancer

Keywords

**Background** To increase risk-stratified colorectal cancer screening in Australia, we developed a cancer risk prediction tool (CRISP) for use in general practice. To maximise the successful implementation of CRISP, we included GPs, practice nurses, clinic administrative staff and GP patients in the research process. This paper describes how research participants informed the evolution of the CRISP tool.

**Methods** Three studies were conducted to optimise the design of CRISP, evaluate patient acceptability and usability, and identify potential patient implementation barriers and facilitators. The CRISP-Q study explored risk presentation formats to determine the optimum way to display CRISP risk outcomes; the CRISP-P study tested the feasibility of patients self-completing CRISP in the GP waiting room; and CRISP-IIA qualitatively explored barriers and facilitators to using CRISP in patients who had a CRISP consultation with a research nurse prior to their appointment with their GP.

**Results** CRISP-Q: The risk formats most closely associated with risk appropriate intention-to-screen were expected frequency trees and the Government recommendations which were then incorporated into the CRISP tool.

CRISP-P: 85% (428) people found CRISP 'simple' to use, however 41% were not able to self-complete CRISP accurately without assistance. People who were older, had had less education, and whose first language was not English were more likely to need help completing CRISP.

CRISP-IIA: CRISP was acceptable to patients when completed with a research nurse. Relaying the CRISP recommendations to the GP was a major barrier as patients ignored screening advice in favour of discussing more immediate health concerns once they went into the GP consultation.

**CONCLUSIONS** These studies reinforce the acceptability of CRISP as a clinician-led tool.

Implementation of CRISP will include methods for reinforcing the GP to act on the screening advice.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 2

Abstract code

**STILL BUILDING THE BRIDGE! BARRIERS TO TRANSITIONING TO PRIMARY HEALTH CARE FOR CANCER FOLLOW-UP CARE.**

Author - Miedema, Baukje, Dalhousie University, Fredericton, Canada (Presenting author)

Topic Cancer

Keywords

**Background:** Traditionally cancer patients were treated in tertiary care settings for the entire cancer treatment trajectory, including follow-up care. Due to the increasing number of cancer patients and survivors over the last two to three decades, it has become apparent that this model is not effective anymore. A call to transition cancer patients to primary health care for follow-up care is getting more persuasive because some research has demonstrated the benefits of this model. Cancer patients, particularly patients with co-morbidities, seem to have a better medical home in primary care due to its focus on continuity of care, and this model is also cost effective for the health care system. **Methods:** Relying on an extensive literature review, with a focus on countries with robust primary health care systems, barriers to and facilitators of the cancer follow-up care transition models from tertiary to primary health care are examined. **Results:** Currently there are still several significant barriers to the transitioning of cancer patients after acute treatment to primary health care. Some are patient related, others physician specific, and some are deeply rooted in the health care system itself. Although a small number of randomized control trials have demonstrated that cancer follow-up care in primary health care has similar outcomes as in tertiary health care, there is a scarcity of studies evaluating the efficacy of these transition models. Further, there is also a lack of knowledge regarding best practices for the implementation and evaluation of new care transitions models. **Conclusions:** Anecdotal evidence and a small number of studies support the conclusion that cancer patients can safely transition to primary health care for cancer follow-up care; however, after decades of discussions, there is still a dearth of evidence and therefore a lack of guidelines, to embrace transition models as usual care.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 3

Abstract code

## **EXTERNAL VALIDATION OF RISK PREDICTION MODELS FOR INCIDENT COLORECTAL CANCER USING UK BIOBANK**

Author - Usher-Smith, Juliet, University of Cambridge, Cambridge, United Kingdom (Presenting author)

Co-author(s) - Harshfield, Amelia , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Saunders, Catherine , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Sharp, Stephen , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Emery, Jon , University of Melbourne , Melbourne , Australia

Co-author(s) - Walter, Fiona , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Muir, Ken , University of Manchester , Manchester , United Kingdom

Co-author(s) - Griffin, Simon , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

### **Background**

Survival from colorectal cancer (CRC) is strongly related to stage at diagnosis and there is consistent evidence that national screening programmes reduce incidence and mortality. In many countries individuals are invited for screening based on their age. Stratifying screening based on individual risk could potentially provide a way of improving the efficiency of screening by targeting limited resources to those at highest risk. This study aimed to compare and externally validate risk scores developed to predict incident CRC that include variables routinely available or easily obtainable via self-completed questionnaire and could potentially be used to stratify the population.

### **Methods**

We performed external validation of fourteen risk models identified from a previous systematic review within the UK Biobank cohort. For the main analysis we included 373,112 participants with 5 year follow-up, no prior history of CRC and data for incidence of CRC through linkage to national cancer registries. We assessed discrimination of each risk model using the area under the receiver operating characteristic curve (AUC) and calibration graphically and using the Hosmer-Lemeshow statistic.

### **Results**

Among the 373,112 participants there were 1,719 (0.46%) cases of incident CRC. The performance of the risk models varied substantially. In men, the QCancer10 model and models by Tao, Driver and Ma all had an AUC between 0.67 and 0.70. Discrimination was lower in women: the QCancer10, Wells, Tao, Guesmi and Ma models were the best performing with AUCs between 0.63-0.66. Assessment of calibration was possible for six models in men and women. All would require country-specific recalibration if estimates of absolute risks were to be given to individuals.

### **Conclusion**

Several risk models based on easily obtainable data have relatively good discrimination in a UK population. Modelling studies are now required to estimate the potential health benefits and cost-effectiveness of implementing stratified risk-based CRC screening.

Presentation Preference Oral presentation

Audio/Visual Equipment  
Awards  
Additional information

Abstract nr. 4

Abstract code

## **DO PEOPLE WITH A DIFFERENT REGULATORY FOCUS MAKE DIFFERENT DECISIONS ABOUT COLORECTAL CANCER-SCREENING PARTICIPATION?**

Author - Douma, Linda, Amsterdam Public Health research institute, VU University Medical Center, Amsterdam, Nederland (Presenting author)

Co-author(s) - Uiters, Ellen , National Institute for Public Health and the Environment (RIVM) , Bilthoven , Nederland

Co-author(s) - Timmermans, Danielle , Amsterdam Public Health research institute, VU University Medical Center , Amsterdam , Nederland

Topic Cancer

Keywords

**Do people with a different regulatory focus make different decisions about colorectal cancer-screening participation?**

**Linda N Douma, Ellen Uiters, Danielle RM Timmermans**

### **Abstract**

*Background:* Previous studies have shown that having a promotion focus (e.g. wanting to achieve a state of being healthy) or prevention focus (e.g. wanting to avoid getting ill) can affect people's health-related decisions and behaviour by emphasising aspects and information that seem relevant in light of what they want to achieve. However, this issue has not yet been researched regarding colorectal cancer (CRC) screening. With our study, we aimed to examine the relationship between people's focus and their CRC screening participation, as this could provide insights for supporting people in making this complex decision.

*Methods:* An online survey was carried out among a sample of first-time CRC screening invitees (1282 respondents, response rate 49%). We assessed people's promotion and prevention focus, focus on the advantages or disadvantages of CRC screening, screening participation and main considerations (e.g. cancer is a serious illness) concerning their screening decision.

*Results:* Generally, CRC screening participants score higher on both a promotion and prevention focus than non-participants. A dominant focus was present among non-participants, namely a prevention focus. CRC screening participants show a dominant focus on the advantages of CRC screening. The relationship between people's focus and their screening participation is partially mediated by people's main considerations concerning CRC screening.

*Conclusion:* People's focus differs between CRC screening participants and non-participants. To optimally support people in making their screening decision, the provided information should appeal to their different foci/frames of mind regarding this decision. Future research could examine what this in reality means for developing information materials.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 5

Abstract code

## ADVANCE CARE PLANNING WITH CANCER PATIENTS: DESIGN AND TESTING OF A TAILORED COMMUNICATION SKILLS TRAINING WORKSHOP

Author - Urquhart, Robin, Dalhousie University, Halifax, Canada (Presenting author)

Co-author(s) - Sullivan, Dawn , Dalhousie University , Halifax , Canada

Co-author(s) - Grant-Nunn, Lindsay , Dalhousie University , Halifax , Canada

Topic Cancer

Keywords

**Background:** Advance care planning (ACP) is the process by which a patient considers options about future healthcare decisions. Although ACP is associated with improved outcomes as people near end-of-life, many providers report discomfort initiating ACP and subsequent goals-of-care conversations. The aim of this study was to develop a tailored workshop to improve care providers' comfort in initiating ACP and goals-of-care conversations with cancer patients.

**Methods:** A concurrent mixed-methods study was employed to design a tailored workshop: 1) a curricula review of undergraduate, post-graduate, and continuing education related to ACP in Nova Scotia, Canada; 2) interviews with cancer patients who are suitable candidates for ACP and family members of patients with advanced cancer; and 3) two focus groups with primary care providers. A half-day communication skills training workshop was piloted with providers in oncology, palliative, and primary care, and evaluated via a telephone-based survey eight weeks post-workshop.

**Results:** Fifteen providers (physicians, nurses, and social workers) participated in the workshop. Eleven reported minimal or moderate experience in initiating ACP conversations. 93% were satisfied with the workshop and 100% would recommend the workshop to colleagues. Only 43%, however, agreed the workshop provided enough time to practice communication skills. Post-workshop, 93% felt more confident in encouraging patients to reflect on and clarify their wishes through discussion on an ongoing basis. Only 67% felt more confident in providing patients with appropriate information about prognosis. Qualitative data revealed three key ways in which the workshop increased providers' confidence: built and reinforced knowledge related to ACP and EOL care; provided practice-level tools to guide conversations; and provided assurance that most patients actually desire these conversations.

**Conclusions:** A tailored workshop can increase providers' confidence in initiating ACP conversations. The workshop was refined based on the evaluation and subsequently implemented province-wide as part of quality improvement efforts.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 6

Abstract code

## OPTIMISING PATIENT-GP COMMUNICATION TO IMPROVE EARLY CANCER DIAGNOSIS

Author - Brindle, Lucy, University of Southampton, Southampton, United Kingdom

Co-author(s) - Whitaker, Katriina , University of Surrey , Guildford , United Kingdom (Presenting author)

Co-author(s) - Nicholson, Brian , University of Oxford , Oxford , United Kingdom (Presenting author)

Co-author(s) - Andersen, Rikke Sand , Aarhus University , Aarhus , Denmark (Presenting author)

Co-author(s) - Black, Georgia , University College London , London , United Kingdom (Presenting author)

Topic Cancer

Keywords

**Chair/Hosts:** Lucy Brindle and Katriina Whitaker

**Title of Workshop:** Optimising GP-patient communication to improve early cancer diagnosis

**Aims:** The aim of the workshop is to bring together GPs and health communication researchers from a range of disciplines to explore how GP-patient communication research could be employed to tackle barriers to early cancer diagnosis

**Speakers:** Dr Brian Nicholson, University of Oxford; Dr Rikke Sand Andersen, University of Aarhus; Dr Katriina Whitaker, University of Surrey; Dr Georgia Black, University College London; Dr Lucy Brindle, University of Southampton.

### **Titles of talks:**

The 'us' in GP-patient communications: How leaking professional boundaries stimulate communicative practices in GP clinics.

Understanding the GP-patient conversation in primary care: Insights from a video observation study.

Safety-netting discussions during primary care consultations

Managing patients' cancer concerns during the discussion of safety-netting, urgent referrals and direct access tests.

**Target audience:** GPs and researchers from a range of disciplines (health services research, health psychology, medical sociology, anthropology and linguistics) with an interest in the application of GP-patient communication research to improving earlier cancer diagnosis.

**Audience engagement:** Brief exemplars of current GP-patient communication research, and research taking account of the socio-cultural context of GP-patient communication, will be used to stimulate debate regarding the potential for identifying optimal GP-patient communication, as a basis for developing training for GPs.

Presentation Preference Workshop

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 7

Abstract code

## **SURVIVORSHIP CARE PLANS: DISCREPANCIES BETWEEN WHAT RCTS ASSESS AND WHAT STAKEHOLDERS EXPECT FROM THEIR USE**

Author - Urquhart, Robin, Dalhousie University, Halifax, Canada (Presenting author)

Co-author(s) - Birken, Sarah , Chapel Hill , United States of America

Co-author(s) - Munoz-Plaza, Corrine , Pasadena , United States of America

Co-author(s) - Zizzi, Alexandra , Chapel Hill , United States of America

Co-author(s) - Haines, Emily , Chapel Hill , United States of America

Co-author(s) - Stover, Angela , Chapel Hill , United States of America

Co-author(s) - Mayer, Deborah , Chapel Hill , United States of America

Co-author(s) - Hahn, Erin , Pasadena , United States of America

Topic Cancer

Keywords

**BACKGROUND:** Many US and Canadian organizations recommend or require the use of survivorship care plans (SCPs) to facilitate cancer survivors' transition from active treatment to well follow-up care. Qualitative and observational studies have found that survivors and primary care providers (PCPs) benefit from SCPs, yet the results of randomized controlled trials (RCTs) of SCPs' effectiveness are mostly null. RCTs may be null because they have evaluated outcomes on which SCPs have limited influence. Stakeholders (e.g., survivors, PCPs, oncologists) may expect outcomes that differ from those assessed in RCTs, including those that are more proximal and/or practical in nature. This study sought to determine whether the outcomes assessed in RCTs of SCPs align with the outcomes that stakeholders expect from SCPs.

**METHODS:** We identified outcomes assessed in RCTs using a PubMed literature review. We identified outcomes that stakeholders expect using semi-structured interviews with stakeholders, including survivors, caregivers, PCPs, cancer care providers, and cancer program administrators, in three healthcare systems in the US and Canada. We used an inductive approach to analyze interview data. Finally, we mapped outcomes assessed in RCTs onto the stakeholder-identified outcomes.

**RESULTS:** Outcomes assessed in RCTs did not fully address the outcomes that stakeholders expect from SCPs. Where alignment exists, it is largely from survivors' perspectives and not the perspectives of other stakeholders. For example, from a PCP perspective, SCPs are expected to enhance their role clarity related to follow-up care; improve their communication with cancer care providers; meet their informational needs (e.g., related to surveillance guidelines); and mitigate their concerns around ongoing responsibilities. None of these outcomes were assessed in the published RCTs.

**CONCLUSION:** RCTs have not assessed many of the outcomes that stakeholders expect from SCP use. To better understand SCP effectiveness, future research should assess outcomes that are relevant to multiple stakeholders, including PCPs.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 8

Abstract code

## COLORECTAL CANCER PATIENTS' PREFERENCES FOR TYPE OF CAREGIVER DURING SURVIVORSHIP CARE.

Author - Wieldraaijer, Thijs, Academic Medical Center , Amsterdam, Nederland (Presenting author)

Co-author(s) - Duineveld, Laura , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Donkervoort, Sandra , Onze Lieve Vrouwe Gasthuis , Amsterdam , Nederland

Co-author(s) - Busschers, Wim , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Weert, Henk van , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Wind, Jan , Academic Medical Center , Amsterdam , Nederland

Topic Cancer

Keywords

*Background*– Colorectal cancer (CRC) survivors in the Netherlands are currently included in a secondary care-led survivorship care programme. Efforts are underway to transfer this survivorship care to primary care, but meet with some reluctance by patients and caregivers. This study assesses (1) what caregiver patients prefer to contact for symptoms during survivorship care, (2) what patient factors are associated with a preferred caregiver, and (3) whether the type of symptom is associated with a preferred caregiver.

*Methods*– A cross-sectional study of CRC survivors at different time points. For 14 different symptoms patients reported *if* they would consult a caregiver, and *who* they would contact if so. Patient and disease characteristics were retrieved from hospital and general practice records.

*Results*– 260 patients participated (response rate 54%) of whom the average age was 67, 54% were male. The median time after surgery was 7 months (range 0–60 months). Patients were divided fairly evenly between tumour stages 1–3, 33% had received chemotherapy. Men, patients older than 65 years, and patients with chronic comorbid conditions preferred to consult their general practitioner (GP). Women, patients with stage 3 disease, and patients that had received chemotherapy preferred to consult their secondary care provider. For all symptoms, patients were more likely to consult their GP, *except* for (1) rectal blood loss, (2) weight loss, and (3) fear that cancer had recurred, in which case they would consult *both* their primary and secondary care providers. Patients appreciated all caregivers involved in survivorship care highly; with 8 out of 10 points.

*Conclusions* –CRC survivors frequently consult their GP in the current situation, and for symptoms that could alarm them to a possible recurrent disease consult both their GP and secondary care provider. Patient and tumour characteristics influence patients' preferred caregiver.

Presentation Preference Oral presentation

Audio/Visual Equipment

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Additional information

Abstract nr. 9

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## **CANCER SUSPICION AND URGENT REFERRAL IN RELATION TO A PERSON'S USUAL CONSULTATION PATTERN IN GENERAL PRACTICE**

Author - Jensen, Henry, Research Unit for General Practice, Department of Public Health, Aarhus univers, Aarhus C, Denmark (Presenting author)

Co-author(s) - Hoffmann Merrill, Camilla , Research Unit for General Practice, Department of Public Health, Aarhus univers , Aarhus C , Denmark

Co-author(s) - Vedsted, Peter , Research Unit for General Practice, Department of Public Health, Aarhus univers , Aarhus C , Denmark

Co-author(s) - Møller, Henrik , Cancer Epidemiology and Population Health, King's College London , London , United Kingdom

Topic Cancer

Keywords

### ***Background***

Patients who rarely consult a general practitioner (GP) in the 19-36 months before a cancer diagnosis are generally diagnosed with more advanced cancer than patients with more regular GP consultations. GPs are often claimed to be more inclined to suspect serious illness and to act more promptly when seeing a patient who rarely consults, but this remains untested in cancer patients. We aimed to estimate the GPs' suspicion of cancer and use of urgent referrals in sub-groups of cancer patients stratified by their usual consultation pattern in general practice.

### ***Methods***

We used data from sub-cohort 3 of the 'Danish Cancer in Primary Care' Cohort. This cohort comprised 3,990 incident cancer patients aged  $\geq 18$  years diagnosed in 2010 for the analyses. Using odds ratios (ORs) estimated by logistic regression analysis, we estimated the association between patients' usual GP use and the GPs' suspicion of cancer. We also estimated the association between consultation pattern and GPs' use of urgent referrals.

### ***Results (preliminary)***

The GPs tended to be more likely to suspect cancer in patients who usually contacted the GP rarely than in patients who usually contacted regularly: OR=1.14 (95% CI: 0.95-1.37). The GPs were less likely to suspect cancer in patients who usually contacted frequently than in patients who usually contacted regularly: OR=0.77 (95% CI: 0.65-0.91). The GPs' use of urgent referrals was not associated with the patients' usual use of GP services: OR= 1.01 (95% CI: 0.83-1.23) for rare consulters and OR=0.95 (95% CI: 0.80-1.13) for frequent consulters.

### ***Conclusion***

The preliminary results suggest that the GPs' suspicion of cancer is associated with the patients' usual consultation frequency; the GPs' suspicion of cancer was lowest among frequent consulters. However, the GPs' use of urgent referral does not seem to be associated with the patients' usual consultation frequency.

Presentation Preference Oral presentation

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Awards

Additional information

Abstract nr. 10

Abstract code

**BARRIERS AND FACILITATORS REGARDING (RETURN TO) WORK AND EXPERIENCED CHANGES IN EMPLOYMENT STATUS OF BREAST CANCER SURVIVORS 5-10 YEARS AFTER DIAGNOSIS.**

Author - Duijts, Saskia, UMCG, Groningen, Nederland (Presenting author)

Co-author(s) - Van Maarschalkerweerd, Pomme , Amsterdam , Nederland

Co-author(s) - Schaapveld, Michael , The Netherlands Cancer Institute , Amsterdam , Nederland

Co-author(s) - Paalman, Carmen , Amsterdam , Nederland

Co-author(s) - Aaronson, Neil , The Netherlands Cancer Institute , Amsterdam , Nederland

Topic Cancer

Keywords

**Background** Almost 90% of cancer survivors return to work within two years after diagnosis. However, breast cancer survivors have an increased chance of becoming unemployed, even 5-10 years after initial diagnosis, compared to healthy controls. This study aimed to qualitatively investigate experienced changes in employment status, and barriers to and facilitators of (return to) work 5-10 years after breast cancer diagnosis.

**Methods** We recruited breast cancer survivors from a larger cohort study to participate in an in-depth focus group study. All women were younger than 55 years and had been employed when diagnosed with breast cancer. Data were analysed by two independent researchers using thematic content analysis in Atlas.ti.

**Results** A total of 19 women (mean age 51.5 years; nine (47%) at work) participated in three semi-structured focus groups. Eight predetermined topics, which included experienced changes in employment status, meaning of work, and social support, were discussed in these groups. The majority of the women reported a change in employment status, such as job loss, 5-10 years after diagnosis. The perceived barriers to (return to) work shortly after breast cancer diagnosis tended to be disease- and treatment-related, while years later they were more personal- and work-related in nature. Participants recommended more open communication, for example with the employer, and more comprehensive information and support regarding work-related issues on dealing with breast cancer and work.

**Conclusions** Breast cancer survivors experience ongoing changes in their employment status 5-10 years after diagnosis. (Occupational) health care professionals should be alert that barriers for returning to work change over time. Overall, there is a lack of awareness and a shortage of interventions regarding work-related issues at long-term follow-up, and there is a need for better information provision and more collaboration between employer and employee, and other stakeholders.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 11

Abstract code

## THE ROLE OF THE GENERAL PRACTITIONER IN RETURN TO WORK AFTER CANCER – A SYSTEMATIC REVIEW

Author - Boer, Angela de, Academic Medical Center, Amsterdam, Nederland (Presenting author)

Co-author(s) - Jong, Femke de , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Frings-Dresen, Monique , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Dijk, Nynke van , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Etten-Jamaludin, Faridi van , Academic Medical Center , Amsterdam , Nederland

Co-author(s) - Asselt, Kristel van , Academic Medical Center , Amsterdam , Nederland

Topic Cancer

Keywords

*Background:* The number of cancer patients and survivors of working age is increasing. General practitioners may have a significant role in the follow-up of psychosocial cancer care, including work-related issues. Therefore, we performed a systematic literature review to identify the role of the general practitioner in work-related issues and work reintegration of cancer patients and/or survivors.

*Methods.* We searched PubMed, Embase, Cinahl, PsychInfo and Cochrane databases, regardless of study design. We found 4,863 articles and, after removing duplicates, we screened 3,388 articles on titles and abstract and reviewed 66 articles in full text. The Critical Appraisal Skills Programme tool was used to assess the methodological quality of included articles. We used narrative synthesis to describe the role of the GP.

*Results.* We included four qualitative studies from three countries. Two studies focused on the health care professionals' perspectives and two studies focused on patients' perspectives on the role of the GP. A lack of communication between health care professionals and a lack of consensus on the role of different health care professionals in return to work advice was found. Furthermore, lack of knowledge on work-related issues by GPs and limited resources including time and available guidelines were recurring themes. Fully establishing the role of the GP is difficult given the small number of studies on work-related issues in cancer patients in primary care.

*Conclusion.* There is little evidence regarding the role of the GP in cancer care and work guidance. Therefore, further research should focus on interventions to study the feasibility of GPs' involvement with cancer patients and their work situation. These interventions should also include guidance about RTW in each treatment phase, and focus on the information and education GPs need to be able to support cancer patients and survivors in solving their work-related problems.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 12

Abstract code

## **THE RAGE PROJECT: A STEP-WEDGE IMPLEMENTATION OF RAPID ACCESS GASTROINTESTINAL ENDOSCOPY (RAGE) SERVICES IN MELBOURNE, AUSTRALIA.**

Author - Emery, Jon D, University of Melbourne, Melbourne, Australia (Presenting author)

Co-author(s) -

Co-author(s) - Kyriakides, Mary , University of Melbourne , Melbourne , Australia

Co-author(s) - Chondros, Patty , University of Melbourne , Melbourne , Australia

Co-author(s) - Moss, Alan , Western Health , Melbourne , Australia

Topic Cancer

Keywords

### **Authors**

Jon Emery, Mary Kyriakides, Patty Chondros, Alan Moss.

### **Background**

Fast track pathways for patients with suspected gastrointestinal (GI) cancers are an effective approach to improve outcomes, especially in healthcare systems with long waiting times for diagnostic endoscopy.

### **Methods**

The RAGE pathway was developed by the Western Health Endoscopy Service in Melbourne, Australia to improve the triage process and provide more timely access to gastroscopy and colonoscopy for patients with symptoms suggestive of cancer. As part of the implementation of the RAGE pathway, we conducted a step-wedge trial to test the effect of the following complex intervention: a. academic detailing visits to general practices by Cancer Council Victoria nurses; b. an educational resource card including symptom risk assessment tools for oesophago-gastric and colorectal cancer. c. an electronic referral template embedded into the GP medical record. We collected data on all endoscopies at Western Health arising from a GP referral between October 2014 and June 2016.

### **Results**

193 practices were randomly allocated to one of three intervention steps; 55.1% of practices accepted at least one educational visit. We analysed data on 2,378 colonoscopies and 1,347 gastroscopies. There was a statistically significant change over time in the proportion of GP referrals triaged as urgent but no changes in conversion rates suggesting improved selection of patients for urgent referral. This was consistent with a significant increase in the number of symptoms reported in GP referral letters over time. There was a significant reduction in the waiting time for urgent colonoscopies. The median time from referral to cancer diagnosis was 55 days (lower GI cancers) and 32 days (upper GI cancers).

### **Conclusions**

GP education visits and symptom risk assessment tools improved patient selection for urgent GI endoscopy. This study has informed the model to implement Optimal Care Pathways for cancer in Victoria, Australia.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 13

Abstract code

## **DOES RURALITY PREDICT POORER CANCER SURVIVAL? – AN INTERNATIONAL META-ANALYSIS AND NARRATIVE SYNTHESIS OF EVIDENCE FOR POTENTIAL MECHANISMS**

Author - Murchie, Peter, University of Aberdeen, Aberdeen, United Kingdom (Presenting author)

Co-author(s) - Carriere, Romi , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Fielding, Shona , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Adam, Rosalind , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Barlas, Rapha , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Ong, Yuhan , University of Aberdeen , Aberdeen , United Kingdom

Topic Cancer

Keywords

**AIM:** To conduct a meta-analysis exploring the relationship between rural residence and cancer survival, and a systematic narrative review of evidence for potential underpinning mechanisms of any differences noted.

**BACKGROUND:** Studies from around the world separately appear to demonstrate that rural patients have poorer health outcomes than urban counterparts. Several studies appear to suggest that cancer outcomes are poorer in rural populations, but why has never been satisfactorily explained. Rurality, however, can be differently defined in different contexts and can be confounded by, for example, poorer socioeconomic status.

**METHODS:** [1] A systematic review was conducted following established techniques. Included studies reported on differential cancer survival between rural and urban populations making adjustments for socioeconomic status. [2] A meta-analysis was conducted to produce an overall hazard ratio for cancer survival in rural versus urban-dwellers. [3] A narrative commentary was written synthesising the potential mechanisms which investigators had hypothesized to underpin a rural-urban cancer survival difference.

**RESULTS:** Overall rural-dwellers were significantly more likely to die when they developed cancer (Hazard Ratio 1.06 (95% CI's 1.01 – 1.12)) than urban-dwellers. Little good evidence existed for why this difference existed but potential mechanisms offered by researchers could be grouped under the following themes: Patient Level Characteristics; Institutions; Community, Culture and Environment; Policy and Service Organization.

**CONCLUSIONS:** Living in a rural area appears to worsen cancer survival. This has effect has been observed in regions where rurality means different things. Several potential mechanisms have been suggested for the effect, but very little good evidence supports their true impact. More research is required to understand why rural populations do worse when they develop cancer.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards



Additional information

Abstract nr. 14

Abstract code

## **DOES RURALITY IMPACT PROCESSES AND OUTCOMES OF MELANOMA CARE? RESULTS FROM A WHOLE-SCOTLAND MELANOMA COHORT**

Author - Murchie, Peter, University of Aberdeen, Aberdeen, United Kingdom (Presenting author)

Co-author(s) - Adam, Rosalind , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Khor, Wei Lynn , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Raja, Edwin Amalraj , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Iversen, Lisa , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Brewster, David , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Lee, Amanda , University of Aberdeen , Aberdeen , United Kingdom

Topic Cancer

Keywords

**BACKGROUND:** Rural-dwellers have poorer cancer outcomes, but current evidence on how rurality impacts melanoma care and survival is contradictory.

**AIM:** To investigate impact of rurality on setting of melanoma excision and mortality in a whole-nation cohort

**DESIGN AND SETTING:** Analysis of linked routine healthcare data comprising everyone in Scotland diagnosed with melanoma, January 2005-December 2013.

**METHOD:** Multivariate binary logistic regression explored the relationship between rurality and setting of melanoma excision, Cox Proportional Hazards regression between rurality and mortality, with adjustments for key confounders.

**RESULTS:** 9519 patients were included, 54.3% (n= 5167) were female, mean age was 60.2 years (SD 17.48). 91.8% (n=8598) of melanomas were excised in secondary care (n=8598, 91.8%), 8.1% (n=771) in primary care. The odds of primary care excision increased with increasing rurality/remoteness. Compared with urban-dwellers, the most remote rural-dwellers were twice as likely to have their melanoma excised in primary care (adjusted OR 1.92, 95% CI 1.33-2.78) No significant association was found between urban or rural residency and all-cause mortality. Melanoma-specific mortality was lower in individuals residing in accessible small towns than in large urban areas (adjusted HR 0.54, 95% CI 0.33-0.88) with no trend towards poorer survival with increasing rurality.

**CONCLUSION:** Scottish rural-dwellers are more likely to have a melanoma excised in primary care. However, rural-dwellers not have significantly increased mortality from melanoma. Together these findings suggest that current UK melanoma management guidelines could be revised to be more realistic by recognizing the role of primary care in the prompt diagnosis and treatment of rural-dwellers.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 15

Abstract code

## DIFFERENTIAL ATTENDANCE RATES IN DUTCH NATIONAL CANCER SCREENING PROGRAMMES

Author - Bongaerts, Thom, Leiden University Medical Center, Leiden, Nederland (Presenting author)

Co-author(s) - Büchner, Frederike , Leiden University Medical Center , Leiden , Nederland

Co-author(s) - Middelkoop, Barend , Municipal Health Service Haaglanden , The Hague , Nederland

Co-author(s) - Guicherit, Onno , University Cancer Center Leiden/ The Hague , The Hague , Nederland

Co-author(s) - Daha, Nina , Leiden University Medical Center , The Hague , Nederland

Co-author(s) - Numans, Mattijs , Leiden University Medical Center , Leiden , Nederland

Topic Cancer

Keywords

**Background:** In the Netherlands there are three national population based cancer screening programmes (CSPs). These programmes concern breast, cervical and colorectal cancer. Each of these CSPs has its unique procedures and organization, in which the role of the general practitioner varies. Attendance rates are high in general, but differ widely between regions, socioeconomic and ethnic backgrounds. Within this systematic review, we aim to provide an overview of the three CSPs in the Netherlands and compare their design, attendance rates, specifically looking at low attendance groups and their characteristics.

**Methods:** A comprehensive literature search in the databases Academic Search Premier, Cochrane Library, Embase, Emcare, Pudmed, PsycInfo, as well as grey literature was conducted, including all articles published before October 2017. Search terms included: screening, cancer, Netherlands and participation. Returned articles were independently selected and reviewed by the first two authors on type of research and publication, outcome measurement (attendance rates) and determinant measurement (including health literacy, decision making or social and/or cultural differences).

**Results:** In total 18 of the 1232 identified studies were included. Latest published attendance rates are 78% (2014), 65%, and 73% (both 2015) for respectively the CSPs on breast, cervical and colorectal cancer. Compared to previous years a mild declining trend can be observed. Low attendance is especially seen among non-western migrants, low-SES groups, residents of urban area and younger age. Reason for non-attendance can be found in the medical, practical, cultural and emotional domain. Present communication strategies insufficiently reach subgroups.

**Conclusion:** Cancer screening programmes in the Netherlands have high attendance rates in general. Nevertheless, a declining trend is seen in all three the programs and uptake is different among subpopulations and region's in the Netherlands. Lowest rates are to be found in the highly urban areas. More research is needed to further identify attendance barriers for subgroups.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 16

Abstract code

## LUNG CANCER STAGE SHIFT FOLLOWING A SYMPTOM AWARENESS CAMPAIGN.

Author - Callister, Matthew, Leeds Teaching Hospitals, Leeds, United Kingdom (Presenting author)

Topic Cancer

Keywords

### Background.

Lung cancer outcomes in the UK are worse than in other developed nations and diagnostic delay is one possible cause. Symptom awareness campaigns aim to diagnose patients at an earlier stage to improve outcomes.

### Methods.

An early diagnosis campaign for lung cancer has run in Leeds, UK since 2011 comprising primary care education, public-facing marketing communications, a community education programme, and a self-request chest X-ray service for appropriate symptomatic patients. Primary endpoints were rates of community-referral for chest X-ray, and stage of lung cancer at presentation (TNM 7th edition). Allowing for a transition period following commencement of the campaign, parameters were compared over three year periods pre-campaign (2008-2010) and during the campaign (2013-2015).

### Results.

There was an 80.8% increase in community-ordered chest X-rays between the two time periods (56,728 in 2008-2010 vs. 102,583 in 2013-2015), but no significant change in the total number of lung cancer cases diagnosed (1,731 in 2008-2010 vs. 1,771 in 2013-2015). The number of patients diagnosed with stage I/II disease increased from 458 (26.5%) in 2008-2010 to 626 (35.3%) in 2013-2015 (8.8 percentage point increase) with a corresponding reduction in the number of patients with diagnosed with stage III/IV disease from 1254 (72.4%) in 2008-2010 to 1137 (64.2%) in 2013-2015 (8.2 percentage point decrease in proportion, 9.3% decrease in absolute numbers of patients, overall  $\chi^2(2)=35.8$ ,  $p<0.0001$ ). A significant reduction was also observed in the proportion of patients diagnosed following emergency presentation.

### Conclusions.

A causal link between the awareness campaign and the described stage-shift cannot be proven but appears plausible. A reduction in the actual number of patient presenting with late stage disease would suggest an effect independent of over-diagnosis. Limitations of the analysis include a lack of contemporary control population.

Presented on behalf of the Leeds Early Lung Cancer Campaign Team.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 17

Abstract code

## **CANCER RESEARCH UK FACILITATORS: A BRIDGE BETWEEN CANCER STRATEGIES AND CHANGE IN PRIMARY CARE**

Author - MacDonald, Lindsay, Cancer Research UK, London, United Kingdom (Presenting author)

Co-author(s) - Scott, K , HealthFocus Research , Salisbury , United Kingdom

Co-author(s) - Majewska, W , HealthFocus Research , Salisbury , United Kingdom

Co-author(s) - Kemmner, M , Cancer Research UK , London , United Kingdom

Topic Cancer

Keywords

### **Background**

Cancer Research UK Facilitators support healthcare professionals and organisations to improve prevention and early diagnosis. They have a unique position, working both directly with primary-care delivery and strategic planning organisations.

### **Methods**

A UK-wide evaluation of the Facilitator Programme was conducted in 2017. This involved quantitative impact monitoring and qualitative research exploring how and why the model of facilitation had an impact on Primary care, commissioning and strategic organisations. 61 depth interviews were conducted and thematically analysed (7 Strategic contacts, 15 Service Commissioners/Planners and 39 General Practice).

### **Results**

Monitoring data demonstrated that over 6 months, the programme had around 3000 engagements with Primary care, CCGs/Health Boards and Cancer Alliances resulting in 1023 agreed actions to improve cancer care. Areas where the Programme had been in place most intensively and longest had the greatest positive impact on bowel screening uptake. Practices attributed increases of up to 17% in bowel screening uptake to working with facilitators to introduce/improve processes.

Thematic analysis of qualitative data revealed how and why the Facilitator Programme had impact. Specifically, connecting strategic planning with on the ground delivery and engaging primary care staff with quality improvement. The Programme's independence, nationwide connectedness and ability to provide 'Practice Outreach' were significant factors.

Strategic Leads perceived that the Programme had played a significant role in introducing and embedding improvements in prevention and early diagnosis. Commissioners/planners described the Facilitators role as including; providing up-to-date evidence to inform QI, sharing best-practice, facilitating collaboration and feeding primary care intelligence into commissioning plans.

### **Conclusions**

The evaluation demonstrates that the Facilitator Programme is effective in increasing primary care engagement with improvements in cancer early diagnosis, and also helps to ensure that strategic and commissioning decisions are informed by up-to-date national evidence, best practice and a real understanding of general practice 'on the ground'.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 18

Abstract code

## **UNDERSTANDING THE INFLUENCES ON EARLY LUNG CANCER SYMPTOM PRESENTATION AND INTERVENTION PREFERENCES IN HIGH RISK GROUPS: A QUALITATIVE STUDY**

Author - McCutchan, Grace, Cardiff Univeristy, Cardiff, United Kingdom (Presenting author)

Co-author(s) - Hiscock, J , Bangor University , Wrexham , United Kingdom

Co-author(s) - Murchie, P , Aberdeen Univeristy , Aberdeen , United Kingdom

Co-author(s) - Hood, K , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Neal, R , Leeds University , Leeds , United Kingdom

Co-author(s) - Thomas, S , Public Health Wales , Cardiff , United Kingdom

Co-author(s) - Thomas, A , Cardiff , United Kingdom

Co-author(s) - Newton, G , Cardiff , United Kingdom

Co-author(s) - Brain, K , Cardiff University , Cardiff , United Kingdom

Topic Cancer

Keywords

### **Background**

Lung cancer is the leading cause of cancer-related death worldwide. People at highest risk for lung cancer- current or former smokers, aged over 40 years, with serious lung comorbidity and living in areas of deprivation- are more likely to prolong presenting to a GP with symptoms, leading to advanced stage diagnosis. This qualitative study sought to understand the influences on early presentation with lung cancer symptoms in high risk individuals and intervention preferences.

### **Methods**

Semi-structured interviews were conducted with 37 high risk individuals, recruited through GP practices in deprived areas of England, Scotland and Wales. A lung symptom attribution task was used to explore symptom interpretations, symptom presentation action planning, and beliefs surrounding lung cancer, underpinned by Leventhal's Common Sense model. Focus groups with members of the public (n=2) and local stakeholders (healthcare professionals and community partners; n=2) were conducted to explore intervention preferences. Data were analysed using Framework.

### **Results**

#### *Interviews*

Participants perceived greater control over their short-term health (managing chest infections) than longer term health (preventing or detecting lung cancer). Chest infections were described as controllable through constant symptom monitoring leading to quick appraisal/detection and effective treatment with antibiotics. In contrast, lung cancer was considered inevitable but incurable, and participants anticipated refusing treatment.

#### *Focus groups*

Suggestions for intervention content included information to raise awareness of lung cancer symptoms, modify negative lung cancer beliefs and highlight the importance of earlier diagnosis. Multi-faceted interventions were suggested including talks and stands in community venues, led by a trained, non-judgemental facilitator.

### **Conclusions**

Attributing lung symptoms to a 'treatable' cause means that high risk individuals manage their lung health in the short term, but potentially avoid/deny symptoms related to 'incurable' lung cancer. A

multi-faceted is being developed to highlight lung cancer symptoms and the importance of early diagnosis.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 19

Abstract code

## **DEVELOPING A FRAMEWORK FOR MEASURING QUALITY OF CANCER SURVIVORSHIP CARE**

Author - NEKHLUDOV, LARISSA, Brigham & Women's Hospital/Dana-Farber Cancer Institute , Boston, United States of America (Presenting author)

Co-author(s) - Mollica, Michelle , National Cancer Institute , Washington, DC , United States of America

Co-author(s) - Jacobsen, Paul B. , National Cancer Institute , Washington, DC , United States of America

Co-author(s) - Geiger, Ann M. , Washington, DC , United States of America

Topic Cancer

Keywords

**BACKGROUND:** One decade after the U.S. Institute of Medicine report recommended the development of quality of cancer survivorship care measures, there remains little progress in achieving that goal. Our study aimed to develop a framework for quality measurement in cancer survivorship care that may be used to drive research, policy and clinical care in both oncology and primary care settings.

**METHODS:** We conducted a scoping review to identify quality indicators for cancer survivorship care that included the following sources: (1) published cancer survivorship guidelines; (2) National Cancer Institute, Patient-Centered Outcomes Research Institute and American Cancer Society-funded cancer survivorship studies; (3) U.S. state comprehensive cancer control plans; and (4) indicators developed by national quality organizations. Within each of the sources, we focused on ascertaining cancer survivorship quality domains, constructs/indicators and metrics. We also reviewed published literature in this area. To refine our proposed framework, we are conducting interviews with key experts in cancer survivorship and quality.

**RESULTS:** We found domains in cancer survivorship quality to include those focusing on cancer and its treatment, specifically prevention and surveillance of recurrences and second cancers as well as surveillance and management of physical and psychosocial effects. As survivors have primary-care based needs, domains included management of multiple medical conditions and health promotion. Patient experience, communication, care coordination and health care delivery structure are important domains in cancer survivorship, particularly as there are often numerous providers caring for this patient population. Lastly, domains included outcomes such as avoidable/preventable health care utilization, health related quality of life and mortality.

**CONCLUSIONS:** The framework will promote a systematic approach to designing effective, evidence-based clinical care for cancer survivors in oncology and primary care settings, expanding research initiatives to address identified gaps in quality measurement and developing policy recommendations to encourage the implementation of standardized measures for quality improvement.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 20

Abstract code

**BEHAVIOUR CHANGE AND CANCER PREVENTION. MINUTES IN A CONSULTATION TO SAVE YOU TIME - SAVE A LIFE.**

Author - Roope, Richard, Cancer Research UK/Royal College of General Practitioners, London, United Kingdom

Co-author(s) - Bauld, Linda , Cancer Research UK/University of Stirling , Edinburgh , United Kingdom (Presenting author)

Co-author(s) - Llewellyn-Date, Karen , Cancer Research UK , London , United Kingdom

Topic Cancer

Keywords

Aim:

To raise awareness of the practical approach developed by Cancer Research UK and the Royal College of GPs to promote behaviour change and cancer prevention, supporting GPs and health professionals in different health settings.

Provide insight of impact on clinical practice from those interviewed, following completion of the CRUK RCGP e-learning module and other related activity.

Explore research gaps and barriers.

Background:

Up to 4 in 10 cancers are preventable. Health professionals tend to:

- Underestimate the importance and relevance of delivering very brief advice.
- Often deliver misleading or counterproductive advice.
- Not sufficiently focus on action to promote support for behaviour change.
- Lack confidence in understanding the right approach or set of words.

Content:

The workshop will include 3 x2 minute videos which outline how health professionals can support very brief advice with patients receptive/non-receptive to behaviour change and those wanting to change without the recommended support.

The audience of GPs and academic researchers will be encouraged to participate in discussion on the best way to support behaviour change within the confines of a routine appointment and the current inconsistency in practice.

Results of the qualitative evaluation (Narrative Health), will outline impact on health professionals practice:

- Positive increases in confidence results (pre and post) in delivery of very brief advice for different behaviours.
- Poor knowledge of the link between different cancers and behaviours among health professionals.
- Positive experience of applying the 3 As approach.
- Support that evidence and research aligned with practical advice was valued.

The evaluation results will inform workshop discussions.

Conclusion:

GPs and healthcare professionals are keen to support behaviour change and cancer prevention with their patients but require practical tools to deliver within a routine appointment. More

prevention research is required to evaluate impact over time.

Presentation Preference Workshop

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 21

Abstract code

## **INTERNATIONAL GUIDELINES FOR POST-TREATMENT CANCER SURVIVORSHIP CARE: WEB-BASED REVIEW**

Author - NEKHLUDOV, LARISSA, Brigham & Women's Hospital/Dana-Farber Cancer Institute , Boston, United States of America (Presenting author)

Co-author(s) - Pepen, Robert , Boston , United States of America

Co-author(s) - Alfano, Catherine , American Cancer Society , Washington, DC , United States of America

Topic Cancer

Keywords

**Background:** There is growing international emphasis on providing comprehensive and coordinated care for cancer survivors following completion of active cancer treatment. Guidelines have been developed, though mostly focusing on cancer surveillance and less commonly on other important domains; few have highlighted the role of primary care providers. At the 2017 Ca-PRI meeting, we held a workshop aiming to launch a systematic review of existing international guidelines. In this study, we conducted an online review of available guidelines and/or guidance for cancer survivorship care across the globe.

**Methods:** Using selected key terms, we searched the Internet using the Google browser for English-language links that provided guidelines (formal recommendations by national, professional or advocacy organization) or guidance (recommendations from other sources) about cancer survivorship care across the world. We included in our search the following regions: North America, Europe, the Caribbean, Middle East, Oceania, Asia, Central/South America and Africa. Each of the eight regions was comprehensively searched for all of its respective countries.

**Findings:** We found that Europe and North America had the most guidelines/guidance, followed by Oceania, Asia and the Middle East. Central/South America, Africa and the Caribbean had limited guidelines/guidelines. Despite being included in the "high prevalence" regions, numerous countries had no guidelines/guidance, including 30% of those in Europe and 40% in North America. Over 80% of countries in Central/South America, Africa and the Caribbean had no guidelines/guidance.

**Conclusions:** Our study provides a much needed worldwide landscape overview of the available cancer survivorship guidance/guidelines, and offers an opportunity to launch a more thorough investigation into each region and countries within. While we acknowledge that our study has important limitations, this effort and the planned next steps will allow us to evaluate and harmonize the existing guidelines/guidance, and promote the dissemination to those regions and countries that currently lack them.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 22

Abstract code

## HOW CAN ELECTRONIC CLINICAL DECISION SUPPORT (ECDS) FOR MELANOMA BE EFFECTIVELY IMPLEMENTED? A QUALITATIVE STUDY OF GPs AND PATIENTS IN ENGLISH PRIMARY CARE.

Author - Pannebakker, Merel, University of Cambridge, Cambridge, United Kingdom (Presenting author)

Co-author(s) - Mills, Katie , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Emery, Jon , University of Melbourne , Melbourne , Australia

Co-author(s) - Walter, Fiona , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

**Background:** Timely diagnosis of the serious skin cancer melanoma can improve patient outcomes. Clinical guidelines suggest that GPs use checklists, such as the 7-point checklist (7PCL), to assess pigmented lesions. In 2016 the 7PCL was disseminated by a leading GP clinical system as an electronic clinical decision support ('eCDS'). This study aimed to understand GP and patient perspectives on the implementation and usefulness of the eCDS.

**Methods:** Semi-structured interviews with GPs and patients were conducted in four East of England general practices following consultations using the eCDS for suspicious pigmented lesions. Interviews were recorded and transcribed verbatim. The Consolidated Framework for Implementation Research (CFIR, [www.cfirguide.org/](http://www.cfirguide.org/)) underpinned analysis using thematic approaches.

**Results:** Between August 2016 and January 2017 we completed 14 interviews with GPs (9 female; mean age 44 years, range 27-60; mean experience 17 years, range 1-33), and 14 interviews with patients (11 female; mean age 63 years, range 36-80), six of whom were referred to a specialist. Most GPs were familiar with the eCDS and felt that it was easy to use, but that key features such as family history and sun exposure were missing. They were less clear that it could meet policy or patient needs to improve early diagnosis, and some felt that it could lead to unnecessary referrals. Few felt that it had been sufficiently implemented at practice level. More felt confident with their own management of moles, and that the eCDS could be most useful for borderline decision-making. No patients were aware that the eCDS has been used during their consultation.

**Conclusions:** Successful implantation of a new tool such as eCDS for melanoma requires GPs to understand its value and how it can best be integrated into clinical practice. Disseminating a tool without such explanations is unlikely to promote its adoption into routine practice.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 23

Abstract code

## **WHEN A POLICY DECISION MEETS PRACTICE REALITIES: THE CASE OF CANCER SURVIVORSHIP CARE AND REHABILITATION NEEDS ASSESSMENT**

Author - Handberg, Charlotte Dr, Aarhus University / DEFACTUM, Aarhus C, Denmark  
(Presenting author)

Co-author(s) - Thorne, Sally Professor , University of British Columbia , Vancouver , Canada

Co-author(s) - Maribo, Thomas Dr , Aarhus University / DEFACTUM , Aarhus C , Denmark

Topic Cancer

Keywords

### **Purpose**

To analyze and describe health professionals' attitudes and perspectives on the complexities of cancer survivorship and rehabilitation needs assessment in a shared cancer care context.

### **Method**

The design and methodology for this study was Interpretive Description and the analysis was informed by Symbolic Interactionism as the theoretical framework. Between April and December 2015 an ethnographic fieldwork was carried out by the first author in haematological wards at two Danish hospitals and in two primary care settings conducting cancer survivorship care programs. Participants were 41 health professionals working with needs assessment.

### **Results**

The findings revealed an understanding of the health professionals' attitudes and perspectives and were distinguishable in relation to three structural conditions associated with the dimensions of survivorship care: *Patient Context*, *Workplace Priorities* and *Practice Culture*. Despite shared beliefs that needs assessment was essential to ensure survivorship care, the differential conditions surrounding the hospital and the primary care impeded the wider idea of formalized needs assessment, creating barriers to a seamless link between the sectors.

### **Conclusions**

Meaningful resolution of these disjunctures will require broad solutions, recognizing that the organization of healthcare into disconnected systems, with their different conditions, history, habits and traditions, will certainly plague the "transition" problems in healthcare unless a wider perspective is taken. Thoughtful and informed clinicians working with decision makers and those who know the evidence and can interpret systems in context can certainly bring better options to light in order to develop high quality survivorship care that will support patients throughout their cancer trajectory.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 24

Abstract code

## **THE ROLE OF PATIENTS' FACIAL CUES IN MODIFYING GENERAL PRACTITIONERS' SUSPICIONS ABOUT CANCER**

Author - Adam, Rosalind, University of Aberdeen, Aberdeen, United Kingdom (Presenting author)

Co-author(s) - Garau, Roberta , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Raja, Edwin , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Jones, Benedict , University of Glasgow , Glasgow , United Kingdom

Co-author(s) - Johnston, Marie , University of Aberdeen , Aberdeen , United Kingdom

Co-author(s) - Murchie, Peter , University of Aberdeen , Aberdeen , United Kingdom

Topic Cancer

Keywords

### **Background**

Intuition is known to play a role in general practitioners' (GPs) suspicions about cancer. In face to face human interactions, judgements about an individual's traits are formed within the first 100 milliseconds of exposure to the face. We investigated whether patients' visible facial characteristics influenced GP judgement about relative likelihood of cancer.

### **Methods**

We conducted an internet-based binary forced choice experiment with GPs from Northeast Scotland in which GPs were presented with pairs of face prototypes and asked to quickly select the patient more likely to have cancer. The on-line experiment was also opened to members of the general public for comparison. Faces were modified with respect to age, gender, and ethnicity. Choices were analysed using Chi-squared goodness-of-fit statistics with Bonferroni corrections.

### **Results**

Eighty two GPs participated. GPs were significantly more likely to suspect cancer in older patients. Gender influenced GP cancer suspicion, but this was modified by age: the male face was chosen as more likely to have cancer than the female face for young (72% of GPs;95% CI 61.0-87.0) and middle-aged faces (65.9% ;95% CI 54.7-75.5); but 63.4% (95% CI 52.2- 73.3) decided the older female was more likely to have cancer than the older male ( $p=0.015$ ). GPs were significantly more likely to suspect cancer in the young Caucasian male (65.9% (95% CI 54.7, 75.5)) compared to the young Asian male ( $p=0.004$ ).

Six hundred and twenty three individuals participated when the experiment was made publically available. Analysis of this data is in progress and will be available for presentation.

### **Conclusions**

Visible socio-demographic characteristics can influence GPs' first impressions about cancer. Tackling GP cognitive biases could be a promising way of reducing cancer diagnostic delays, particularly for younger patients. A comparison will be made between professional and public responses during the presentation.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 25

Abstract code

**CRITICAL REFLECTIONS CONCERNING COMBINED IN-DEPTH INTERVIEWS WITH OLDER PATIENTS WITH CANCER AND THEIR INFORMAL CAREGIVERS.**

Author - Jansen, Leontien, KU Leuven, Leuven, Belgium

Co-author(s) - Dauphin, Stephanie , KU Leuven , Leuven , Belgium

Co-author(s) - Burghgraeve, Tine De , KU Leuven , Leuven , Belgium

Co-author(s) - Schoenmakers, Birgitte , KU Leuven , Leuven , Belgium

Co-author(s) - Buntinx, Frank , KU Leuven , Leuven , Belgium

Co-author(s) - Akker, Marjan Van den , Maastricht University , Maastricht , Netherlands

(Presenting author)

Topic Cancer

Keywords

*Background* A cancer diagnosis can have a pervasive impact on a couple's relationship. Their roles and relationship changes from being partners to being a patient and a caregiver. These changes can have a profound influence on the psychosocial wellbeing both of the patient and his/her caregiver. In our combined research project we aim to investigate the meaning of these changes for a couple and what the impact is on their psychosocial wellbeing.

*Methods* The KLIMOP study is a Belgian/Dutch observational cohort study including older and younger patients with cancer, older patients without a previous cancer diagnosis and the informal caregivers of these patients. In in-depth interviews with patients and their informal caregivers we explore their cancer and caregiving experiences. These interviews are conducted separate but at the same time by two researchers.

*Results* While conducting our interviews we came across ethical, emotional and methodological concerns. Respondents became emotional while interviewing. Sometimes the researchers probed into issues that we felt the respondents were deliberately trying to avoid. When exploring the relationship between the patient and the caregiver the researchers found it hard to judge ad hoc whether it was ethically sound to explore this further. Methodologically the researchers felt that they lacked a clear framework in order to integrate the data in such a way that it rises above the individual level of investigated experiences.

*Conclusions* When necessary, the researchers provided 'aftercare'; they took their time to reflect on the topics and the accompanying emotions together with the respondent. When deemed appropriate they gave the respondent referral options. The researchers regularly reflect on the topics and their role together from their own perspective and try to integrate these reflections in the following interviews. Dyadic data analysis will serve as a methodological framework for the future interpretation and integration of the results.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 26

Abstract code

## THE PSYCHOSOCIAL WELL-BEING OF INFORMAL CAREGIVERS OF OLDER PATIENTS WITH CANCER

Author - Jansen, Leontien, KU Leuven, Leuven, Belgium (Presenting author)

Co-author(s) - Burghgraeve, Tine De , KU Leuven , Leuven , Belgium

Co-author(s) - Dauphin, Stephanie , KU Leuven , Leuven , Belgium

Co-author(s) - Schoenmakers, Birgitte , KU Leuven , Leuven , Belgium

Co-author(s) - Buntinx, Frank , KU Leuven , Leuven , Belgium

Co-author(s) - Akker, Marjan Van den , Maastricht University , Maastricht , Netherlands

Topic Cancer

Keywords

*Background* Cancer diagnosis has a profound impact on patients and their relatives. Caregivers can experience substantial pressure, which can entail burden and other psychosocial problems. With this project we want to examine the psychosocial well-being of the informal caregivers in relationship to the functional status and psychosocial well-being of the older patients with cancer ( $\geq 70$  years). The aim is to gain insights in the prevalence of caregiver burden and depression in caregivers of older patients with cancer and to identify possible risk factors for developing these psychosocial problems.

*Methods* KLIMOP is a prospective cohort, including older cancer patients ( $\geq 70$  years), middle-aged cancer patients (50-69 years), older patients without cancer ( $\geq 70$  years) and their caregivers. Participants received questionnaires within 3 months after diagnosis (baseline), after 1 year and 3 years. Caregiver questionnaires included amongst others the 15-item Utrecht Coping List and the 12-item Zarit Burden Inventory.

*Results* Data of 440 patient-caregiver dyads were analyzed. The prevalence of perceived caregiver burden showed no significant differences between the three groups of informal caregivers and over the three measurement moments. Regarding the possible risk factors developing psychosocial problems, we identify caregiver depression as a potential risk factor for developing caregiver burden, together with the age of the informal caregiver. Gender of the patient and a higher score of emotional loneliness and frailty of the patient seems to be also potential risk factors for the informal caregiver developing caregiver burden.

*Conclusions* These results indicate that a diagnose of cancer does not seem to be a potential risk factor on itself but the prevalence of caregiver burden more depends on the psychosocial well-being and functional status of the patient in general. Also depressive complaints of the informal caregiver seem to induce caregiver burden and vice versa. These results, further conclusions and implications will be presented.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 27

Abstract code

**SELECTION OF MEN FOR INVESTIGATION OF POSSIBLE TESTICULAR CANCER IN PRIMARY CARE: A LARGE CASE-CONTROL STUDY USING ELECTRONIC PATIENT RECORDS.**

Author - Shephard, EA, University of Exeter Medical School, Exeter, United Kingdom

Co-author(s) - Hamilton, WT , University of Exeter Medical School , Exeter , United Kingdom

(Presenting author)

Topic Cancer

Keywords

**Background**

Testicular cancer incidence has risen over the last two decades and is expected to continue to rise. There are no primary care studies on the clinical features of testicular cancer, with recent NICE guidance based solely upon clinical consensus. We aimed to identify clinical features of testicular cancer and to quantify their risk in primary care patients, with the aim of improving the selection of patients for investigation.

**Methods**

This was a matched case-control study in males aged seventeen or over, using Clinical Practice Research Datalink records. Putative clinical features of testicular cancer were identified and analysed using conditional logistic regression. Positive predictive values (PPVs) were calculated for those aged under 50.

**Results**

1,398 cases were available, diagnosed between 2000 and 2012, with 4,956 age, sex and practice-matched controls. Nine features were independently associated with testicular cancer, the top three being: testicular swelling, odds ratio 280 (95% confidence interval 110,690), testicular lump 270 (100,740) and scrotal swelling 170 (35,800). The highest PPV for 17-49 year olds was testicular lump 2.5% (1.1-5.6). Combining testicular lump with testicular swelling or testicular pain produced PPVs of 17% and 10% respectively.

**Conclusion**

Testicular enlargement carries a risk of nearly 3% - the current threshold for UK referral guidance. Contrary to traditional teaching, painful testicular enlargement may signify cancer. Some initial hydrocele diagnoses appear to be wrong, with missed cancers, suggesting an ultrasound may be useful where a hydrocele diagnosis is uncertain. These results support the existing NICE guidelines, and help to characterise when an ultrasound should be considered in symptomatic men.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 28

Abstract code

## **IMPACT OF HIGH-DEDUCTIBLE INSURANCE ON BREAST CANCER CARE AMONG LOW-INCOME WOMEN**

Author - Wharam, James, Harvard Medical School and Harvard Pilgrim Healthcare Institute, Boston, United States of America (Presenting author)

Co-author(s) - Zhang, Fang , Boston , United States of America

Co-author(s) - Lu, Christine , Boston , United States of America

Co-author(s) - Wagner, Anita , Boston , United States of America

Co-author(s) - Nekhlyudov, Larissa , Boston , United States of America

Co-author(s) - Earle, Craig , Toronto , Canada

Co-author(s) - Xu, Xin , Boston , United States of America

Co-author(s) - Soumerai, Steve , Boston , United States of America

Co-author(s) - Ross-Degnan, Dennis , Boston , United States of America

Topic Cancer

Keywords

**Background:** Primary care physicians play a key role in ensuring timely care for women with breast cancer. High-deductible health plans (HDHP) are increasingly common in the US but delay important breast cancer diagnostic tests and treatment. We hypothesized that such delays would be especially pronounced among low-income HDHP members.

**Methods:** We used 2004-2012 data from a large US health insurer and a pre-post controlled survival design. We included 79,468 low-income HDHP group members age 25-64 without evidence of breast cancer. These women were continuously enrolled for 1 year in a low-deductible ( $\leq$ \$500) plan followed by up to 4 years in a HDHP ( $\geq$ \$1000) after an employer-mandated switch. The comparison group included 685,574 contemporaneous, coarsened exact-matched low-income women whose employers offered only low-deductible plans. Measures were times to first diagnostic breast imaging, breast biopsy, incident early-stage breast cancer diagnosis, and breast cancer chemotherapy. Outcomes were analyzed using Cox survival models adjusted for baseline patient characteristics. We also analyzed measures among 193,465 higher-income HDHP members and their 1,726,781 higher-income matched controls.

**Results:** After the index date, low-income HDHP members experienced delays in receipt of breast cancer diagnostic imaging (adjusted hazard ratio, aHR: 0.92 [0.94,0.96]), biopsy (aHR: 0.90 [0.84,0.95]), and chemotherapy initiation (aHR: 0.82 [0.70,0.97]) compared with controls. Differences in early-stage breast cancer diagnosis did not reach statistical significance (aHR: 0.93 [0.81,1.07]). Corresponding hazard ratios among higher-income HDHP members (0.96 [0.94,0.97]; 0.92 [0.89,0.95]; 0.78 [0.70,0.86]; and 0.79 [0.73,0.86], respectively) were similar to those of low-income HDHP members and confidence intervals overlapped.

**Conclusions:** Both low-income and higher-income women who were switched to HDHPs experienced delays in diagnostic breast imaging, breast biopsy, and chemotherapy initiation. Further research should determine if such delays cause adverse health outcomes. Primary care physicians, oncologists, and population health managers should consider HDHPs a risk factor for delayed breast cancer services.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 29

Abstract code

**DIAGNOSIS OF COLORECTAL CANCER AND INFLAMMATORY BOWEL DISEASE:  
SYMPTOMS AS PERCEIVED BY PATIENTS AND DOCTORS AND FAECAL  
IMMUNOCHEMICAL TEST RESULTS.**

Author - Högberg, Cecilia, Umeå University, Umeå, Sweden (Presenting author)

Co-author(s) - Karling, Pontus , Umeå University , Umeå , Sweden

Co-author(s) - Rutegård, Jörgen , Umeå University , Umeå , Sweden

Co-author(s) - Lilja, Mikael , Umeå University , Umeå , Sweden

Topic Cancer

Keywords

**Background** Rectal bleeding and a change in bowel habits are considered to be alarm symptoms for colorectal cancer and they are also common symptoms for inflammatory bowel disease (IBD). However, most patients with these symptoms do not have any of these diseases. Faecal immunochemical tests (FITs) for occult blood are commonly used as diagnostic aids in Sweden but little is known about the symptoms patients have when FITs are requested. The objective of this study was firstly to determine patients' symptoms as perceived by patients and doctors when FITs were requested as diagnostic aids in primary care, and secondly to evaluate the relation between symptoms, FIT results and colorectal cancer or IBD.

**Methods** This prospective study included 364 consecutive patients in the region of Jämtland Härjedalen in Sweden for whom primary care doctors requested a FIT as a diagnostic aid. Patients and doctors completed questionnaires about symptoms and findings when the FITs were requested. The patients were followed for two years.

**Results** Concordance of positive answers about symptoms from patients and doctors was low. Rectal bleeding was reported by 151 patients, in 84 of these cases rectal bleeding was reported also by the doctor. For change in bowel habits, the numbers were 164 and 98 respectively. The positive predictive value (PPV) of rectal bleeding recorded by doctors for colorectal cancer or IBD was 12.1%, when combined with a positive FIT the PPV was 25.6%. With rectal bleeding and a negative FIT the negative predictive value was 100%.

**Conclusions** Doctors should be aware that, during consultations, they do not perceive all symptoms experienced by patients. FITs requested in primary care may be of help in prioritising referrals for patients.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 30

Abstract code

## **DISCRIMINATION OF THE AUSTRALIAN POPULATION INTO COLORECTAL CANCER SCREENING CATEGORIES USING RISK PREDICTION MODELS**

Author - Saya, Sibel Ms, The University of Melbourne, Melbourne, Australia (Presenting author)

Co-author(s) - Emery, Jon Prof , The University of Melbourne , Melbourne , Australia

Co-author(s) - Walker, Jennifer Dr , The University of Melbourne , Melbourne , Australia

Co-author(s) - Winship, Ingrid Prof , The Royal Melbourne Hospital , Melbourne , Australia

Co-author(s) - Jenkins, Mark Prof , The University of Melbourne , Melbourne , Australia

Topic Cancer

Keywords

**Background:** Most countries employ one-size-fits-all population colorectal cancer (CRC) screening programs, using family history to identify higher risk individuals. Interest has been growing in adding lifestyle and/or genomic models to better risk-stratify the population. These risk assessments will likely occur within primary care. This project sought to examine how different combinations of risk models can stratify the Australian population into CRC screening categories. **Methods:** We used data from population-based participants without CRC in the Australasian Colorectal Cancer Family Registry. We determined each participant's risk category using combinations of validated risk prediction models. These included: family history alone (per current Australian guidelines) then adding: 1. the CRISP lifestyle model (including BMI, diet, smoking, calcium and aspirin usage, CRC screening history); 2. a 45 genomic variant model; 3. both the CRISP and genomic models. After weighting to the Australian population, we determined proportions of the population in each screening category using each combination. **Results:** 5,018 people were included. Compared to current guidelines, each proposed model increased approximately five-fold the number of people above the population risk category (current: 2.2%, model 1: 9.1%, model 2: 10.1%, model 3: 11.8%), requiring earlier and more intensive screening. Additionally, a large proportion of those aged 50-60 were recategorised to the very low risk category (men: model 1: 10.5%, model 2: 8.0%, model 3: 21.8%; women: model 1: 33.0%, model 2: 31.9%, model 3: 44.7%) so may not require CRC screening until age 60. **Conclusions:** This study shows that risk prediction models offer more precise risk discrimination than family history alone, however using more than one type of model does not add extra precision. As each model varies in the resources needed to administer, cost-effectiveness, and predictive accuracy, further work is needed to determine which model will result in the most efficient gains within a population program.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 31

Abstract code

## OPPORTUNITIES FOR A SMOKING CESSATION DISCUSSION WITH FEMALE SMOKERS ATTENDING CERVICAL CANCER SCREENING: AN EXPLORATIVE QUALITATIVE STUDY

Author - Mansour, Marthe, Academic Medical Centre, Amsterdam, Netherlands (Presenting author)

Topic Cancer

Keywords

**Authors:** M.B.L. Mansour, K.M. van Asselt, M.R. Crone, N.H. Chavannes, H.C.P.M. van Weert

**Background:** In the Netherlands the cervical cancer screening program takes place in general practice. This visit to the general practice could be used to identify smokers who otherwise rarely visit their GP and to offer them a smoking cessation discussion, at an age when the prevalence of smoking related disease is still low. In this qualitative study we aim to study experiences and expectations of female smokers towards a smoking cessation discussion after cervical cancer screening, and to explore the determinants for a positive receipt of such a discussion.

**Methods:** 15 semi-structured in depth interviews were conducted with female smokers aged 30-65 years who had formerly participated in cervical cancer screening. Purposive sampling was used to ensure variation in age, socioeconomic status and nicotine dependence. A subset of smokers had experienced a smoking cessation discussion with the GP assistant after the cervical smear. Transcripts were analysed using thematic analysis.

**Results:** Acceptability of a smoking cessation discussion after cervical cancer screening depends on motivation to quit, self-efficacy and on the attitude towards or experience with an unsolicited smoking cessation discussion. Especially younger female smokers with high self-efficacy might be responsive to such a discussion. Smokers' preferences for cessation support via their GP was determined by how female smokers had experienced previous quit attempts and their knowledge about cessation support. A subgroup of older and heavy smokers was identified who seek personalised or intensive quit support, but who are not aware this help can be provided via their GP.

**Conclusion:** A smoking cessation discussion after cervical cancer screening could trigger younger smokers with high self-efficacy. Older, heavy smokers who are in need of support but not aware of its availability, could be informed and offered support via their GP.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 32

Abstract code

## **DEVELOPMENT OF A PRIMARY CARE BEHAVIOUR CHANGE INTERVENTION TO EXPEDITE THE DIAGNOSIS OF SYMPTOMATIC CANCER: A MULTI-DIMENSIONAL APPROACH**

Author - Neal, Richard, University of Leeds, Leeds, United Kingdom

Co-author(s) - Law, Rebecca-Jane , Bangor University , Wrexham , United Kingdom (Presenting author)

Co-author(s) - Nafees, Sadia , Bangor University , Wrexham , United Kingdom (Presenting author)

Co-author(s) - Brain, Katherine , Cardiff University , Cardiff , United Kingdom (Presenting author)

Co-author(s) - Smits, Stephanie , Cardiff University , Cardiff , United Kingdom (Presenting author)

Topic Cancer

Keywords

### **Aims**

By the end of this workshop delegates will:

Have an understanding of the processes that we have gone through to develop an intervention aimed at primary care to expedite the diagnosis of symptomatic cancer

Have a broader understanding of a multi-dimensional approach to intervention development and how it may be applied

### **Speakers**

Richard Neal, University of Leeds, UK

Rebecca-Jane Law and Sadia Nafees, Bangor University, UK

Katherine Brain and Stephanie Smits, Cardiff University, UK

On behalf of the Wales Interventions and Cancer Knowledge about Early Diagnosis (WICKED) team

### **Titles of talks**

Welcome/Team introductions/Aims (*5 minutes*)

Developing a behaviour change intervention aimed at primary care to expedite the diagnosis of symptomatic cancer – overview of the WICKED programme

Use of the Behaviour Change Wheel (BCW) as an overarching theoretical framework to guide intervention development

Findings from a review of systematic reviews, and a realist review

Findings from interviews with GPs and focus groups with practice teams

Findings from an online survey, and discrete choice experiment with GPs

Synthesis of findings and application of the BCW (*20-25 minutes*)

Facilitated activity and discussion regarding the use of the different methodological approaches and what their application may be in the development of other studies (*25-30 minutes*)

### **Target audience**

The workshop is aimed at all people interested in, or involved in, the development of interventions. This includes clinicians, researchers and public/patient representatives.

### **Audience engagement**

We will encourage questions and discussion throughout the workshop. There will be a dedicated session in the second half of the workshop that will give attendees the opportunity to consider

applying the combination of methods used within the 'WICKED' programme (e.g., realist synthesis, survey, qualitative and behaviour change wheel methods) to their own research area. The pros, cons and common pitfalls will be considered and discussed.

Presentation Preference Workshop

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 33

Abstract code

## **PARTNERSHIP IN PROSTATE CANCER CARE: THE FEASIBILITY OF AN INTEGRATED SYSTEM TO IMPROVE PATIENT OUTCOMES AND EXPERIENCE. ICARE-P**

Author - Nanton, Veronica Dr, University of Warwick, Coventry, United Kingdom

Co-author(s) - Roscoe, Julia , University of Warwick , Coventry , United Kingdom (Presenting author)

Co-author(s) - Dale, Jeremy Prof , University of Warwick , Coventry , United Kingdom

Co-author(s) - Appleton, Rebecca , University of Warwick , Coventry , United Kingdom

Co-author(s) - Parashar, Deepak Dr , University of Warwick , Coventry , United Kingdom

Co-author(s) - Ahmedzai, Sam Prof , University of Sheffield , Sheffield , United Kingdom

Co-author(s) - Arvanitis, Theodoros Prof , University of Warwick , Coventry , United Kingdom

Co-author(s) - Badger, Douglas , South Warwickshire Prostate Support Association , Stratford upon Avon , United Kingdom

Co-author(s) - James, Nicholas Prof , Univerity Hospital Birmingham Foundation Trust , Birmingham , United Kingdom

Co-author(s) - Mendelsohn, Richard , Birmingham South & Central CCG , Birmingham , United Kingdom

Co-author(s) - Khan, Omar , University of Warwick , Coventry , United Kingdom

Co-author(s) - Patel, Prashant Mr , University Hospital Birmingham NHS Foundation Trust , Birmingham , United Kingdom

Topic Cancer

Keywords

### **Background**

Integration is a goal of UK health policy and digital technology is central to its achievement. Follow up of 'stable' cancer patients is increasingly undertaken outside specialist clinics with General Practice playing an important role. General Practice however, may offer holistic care to patients throughout the cancer journey. Men with prostate cancer experience short and long term needs and Primary Care teams with knowledge of patient comorbidities and circumstances can play a role in their identification and management.

Our study investigates the potential for care integration for all men with prostate cancer of online holistic needs assessment (HNA) enhancing communication between patients, primary and secondary care providers.

### **Method**

A non- randomised cluster design was adopted involving 10 intervention and 4 control practices. Phase 1 included development of a prostate-specific online HNA, training for primary care nurses, an IT peer supporter, and qualitative investigation. In phase 2, men in the intervention arm complete the HNA to identify concerns and share them with their care teams. The control arm receive usual care. Outcomes including quality of life, well-being, prostate-specific concerns, and patient enablement are measured 3 times over a 9-month period.

### **Results**

Men range in age from 51–85 and are at all stages of the care pathway.

Interview findings indicated enthusiasm for primary care involvement and for the online system by men and health professionals. Forty one men were recruited to phase 2 with 29 participating in the intervention. Early findings indicate the utility of the HNA in the identification of needs, a positive

impact of enhanced communication on care and the need for primary care training and support.  
The study reports in April 2018.

### **Conclusions**

A model of integrated care underpinned by digital technology has potential to improve patient outcomes and experience. Barriers to primary care engagement require further investigation.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 34

Abstract code

## **THE LONG AND WINDING ROAD - EXPLORING THE IMPACT OF DISTANCE ON CANCER EXPERIENCES**

Author - Virgilsen, Line Flytkjær, Aarhus University, Aarhus, Denmark

Co-author(s) - Offersen, Sara , Aarhus University , Aarhus , Denmark (Presenting author)

Co-author(s) - Turner, Melanie , University of Aberdeen , Aberdeen , United Kingdom (Presenting author)

Co-author(s) - Fielding, Shona , University of Aberdeen , Aberdeen , United Kingdom (Presenting author)

Co-author(s) - Murchie, Peter , University of Aberdeen , Aberdeen , United Kingdom (Presenting author)

Topic Cancer

Keywords

### **Why is this workshop important?**

Distance to cancer diagnostic and treatment facilities is increasing for rural populations due to active healthcare centralization policies throughout the developed world. Currently, however, it is not known how geographical distance to healthcare can actually affect patients' help-seeking behaviour, or impact important outcomes after cancer.

The aim of this workshop is to present the results of projects from Denmark and Scotland concerning geography, patient help-seeking behaviours and cancer outcomes. We will present the results of ongoing research in both settings. This research is being conducted from two different methodological perspectives: (1) quantitative methods using data-linkage, and (2) anthropological research to understand human processes. Secondly, we aim to facilitate international collaborations on cancer geography research with interested CaPRI colleagues.

### **What will we do?**

The workshop will be conducted in 3 parts:

#### **1. CONTRASTING METHODOLOGICAL PERSPECTIVES ON CANCER GEOGRAPHY**

Attendees will learn about Scottish and Danish epidemiological studies using registry-based data on distance to health care and their impact on cancer process (e.g. diagnostic intervals) and outcome measures (survival, stage at presentation). They will also learn about an anthropological project studying help-care seeking in rural areas using field observations and interviews.

#### **2. THEORIES AND RESEARCH PRIORTIES**

Subsequently participants will participate in a facilitated discussion of mechanisms and will attempt to identify key research priorities for future cancer geography research.

#### **3. POTENTIAL FUTURE COLLABORATIONS**

Finally, participants will discuss possibilities for future CaPRI collaboration on cancer geography.

### **What can I expect to gain from this workshop?**

After this workshop participants:

-Will learn of projects within the CaPri community about geography and help-care seeking, cancer

outcomes and of the complexity of these associations.

-Have engaged in discussions with international colleagues about possible mechanisms involved when discussing geography and cancer outcomes.

-Have engaged in discussions on the possibilities for international collaborations.

Presentation Preference Workshop

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 35

Abstract code

## **WHEN THE GP HAS A CANCER SUSPICION AT FIRST PRESENTATION: WHICH PATIENTS ARE NOT URGENTLY REFERRED?**

Author - Hvidberg, Line, Research Centre for Cancer Diagnosis in Primary Care (CaP), Aarhus, Denmark (Presenting author)

Co-author(s) - Jensen, Henry , Research Centre for Cancer Diagnosis in Primary Care (CaP) , Aarhus , Denmark

Co-author(s) - Pedersen, Anette Fischer , Research Centre for Cancer Diagnosis in Primary Care (CaP) , Aarhus , Denmark

Co-author(s) - Vedsted, Peter , Research Centre for Cancer Diagnosis in Primary Care (CaP) , Aarhus , Denmark

Topic Cancer

Keywords

### Background

Several countries have implemented urgent referral pathways to reduce patient distress and waiting time for patients suspected to have cancer. Although the pathways differ slightly across countries, they all operate with cancer alarm symptoms as a precondition for urgent referral. General practitioners (GPs) suspect cancer more often than they initiate urgent referral. Knowing that the GPs' suspicion of cancer has a similar positive predictive value as the most well known alarm symptoms of cancer, this study focus on cancer patients for whom a cancer suspicion was raised at first consultation. The aim of the study is firstly to analyse differences in respect to cancer type, patient characteristics and patients worry about cancer between urgently and non-urgently referred patients. Secondly, to analyse whether the triggers of GPs' cancer suspicion are different between the two groups.

### Method

The study is a population-based, cross-sectional study. Data collection is currently being finalised and will contain data from patient questionnaires, GP questionnaires and national registries. We included patients 30-99 years old, living in Denmark, registered with a first time cancer diagnosis between July 1 and December 20, 2016 and who gave informed consent to contact their GP. The study population for this study is restricted to patients where the GP has been involved in the diagnostic pathway and had a suspicion of cancer at first consultation.

### Results

Results will be presented at the conference. Currently, 4973 (48%) patients have returned a signed consent form. 3558 (74%) GPs have returned a questionnaire of which 2725 (77%) GPs were involved in the diagnostic pathway and 1338 (50%) had a suspicion of cancer.

### Conclusion

This study will provide valuable insight into reasons why GPs do or do not urgently refer patients when a cancer suspicion is raised and can potentially help optimise the referral guidelines.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 36

Abstract code

## DEVELOPMENT OF A BEHAVIOUR CHANGE INTERVENTION TO EXPEDITE THE DIAGNOSIS OF SYMPTOMATIC CANCER; FINDINGS FROM AN ONLINE SURVEY OF GENERAL PRACTITIONERS IN WALES

Author - Nafees, Sadia Dr, Bangor University, Wrexham, United Kingdom (Presenting author)

Co-author(s) - Stanciu, Marian , Wrexham , United Kingdom

Co-author(s) - Law, Rebecca-Jane , Wrexham , United Kingdom

Co-author(s) - Hendry, Maggie , Wrexham , United Kingdom

Co-author(s) - Goulden, Nia , Bangor , United Kingdom

Co-author(s) - Hoare, Zoe , Bangor , United Kingdom

Co-author(s) - Lewis, Ruth , Wrexham , United Kingdom

Co-author(s) - Williams, Nefyn , Liverpool , United Kingdom

Co-author(s) - Yeo, Seow , Bangor , United Kingdom

Co-author(s) - Edwards, Rhiannon , Bangor , United Kingdom

Co-author(s) - Surgey, Alun , Wrexham , United Kingdom

Co-author(s) - Hiscock, Julia , Wrexham , United Kingdom

Co-author(s) - Brain, Kate , Cardiff , United Kingdom

Co-author(s) - Smits, Stephanie , Cardiff , United Kingdom

Co-author(s) - Wilkinson, Clare , Wrexham , United Kingdom

Co-author(s) - Neal, Richard , Leeds , United Kingdom

Topic Cancer

Keywords

**Background:** Primary care practitioners play a pivotal role in improving cancer outcomes through earlier diagnosis. The Wales Interventions and Cancer Knowledge about Early Diagnosis ('WICKED') programme is designed to develop and evaluate an intervention to enable General Practitioners (GPs) to expedite cancer diagnosis. It comprises several inter-connected work packages including the survey that is reported here.

**Aim:** To explore GPs' perceived cancer knowledge, attitudes, and behaviour regarding referral and investigation for suspected cancer symptoms.

**Method:** An online questionnaire was developed through a review of reviews, expert consensus, and integration of the Capability, Opportunity, and Motivation-Behaviour (COM-B) model of the Behaviour Change Wheel (BCW). It was pilot tested with and launched on the SurveyMonkey platform. The final questionnaire comprised five sections: demographic information; questions about perceptions and attitudes towards early cancer diagnosis within their day-to-day practice; and the COM-B Self-evaluation Questionnaire (COM-B-Qv1) anchored to referral and investigative behaviour. All GPs in Wales were invited via email to achieve a minimum of 200 responders.

**Results:** 1,993 GPs were invited and 269 (13.5%) responses were received. 249 were deemed fully complete and used for analysis which will be completed by the end of January 2018. The results will describe GPs' views about the importance of timely diagnosis of different symptomatic cancers, confidence in their knowledge and management of potential cancer symptoms, areas of past clinical behaviour change and potential drivers of the change, and questions from the COM-B model in relation to early cancer diagnosis.

**Conclusions:** This survey measured GPs' knowledge, investigation, referral attitudes, and behaviours. Descriptive statistics for the quantitative data will be presented. The impact of the

survey findings on the subsequent development of the behaviour change intervention to expedite cancer diagnosis in primary care will be discussed.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 37

Abstract code

## **DIAGNOSING CANCER IN PRIMARY CARE: RESULTS FROM THE ENGLISH NATIONAL CANCER DIAGNOSIS AUDIT**

Author - Rubin, Greg, University of Newcastle, Newcastle upon Tyne, United Kingdom (Presenting author)

Co-author(s) - Swann, Ruth , Public Health England , London , United Kingdom

Co-author(s) - McPhail, Sean , Public Health England , London , United Kingdom

Co-author(s) - Witt, Jana , Cancer Research UK , London , United Kingdom

Co-author(s) - Shand, Brian , Public Health England , London , United Kingdom

Co-author(s) - Abel, Gary , Exeter University , Exeter , United Kingdom

Co-author(s) - Hiom, Sara , Cancer Research UK , London , United Kingdom

Co-author(s) - Rashbass, Jem , Public Health England , London , United Kingdom

Co-author(s) - Lyratzopoulos, Georgios , University College London , London , United Kingdom

Topic Cancer

Keywords

### Background

Continual improvements in diagnostic processes are needed to minimise the proportion of patients with cancer who experience diagnostic delays. Clinical audit is a means of achieving this. The 2nd English National Cancer Diagnosis Audit aimed to characterise the patient pathway from primary care to diagnosis.

### Method

Patients diagnosed with a malignant cancer in 2014 were selected from Public Health England's National Cancer Registration and Analysis Service (NCRAS) database. Patients were traced to their registered general practice at time of diagnosis using routinely collected data. Information on patient and tumour characteristics held by NCRAS was supplemented by information from GPs in participating practices, entered via a secure web portal. Data items included diagnostic timepoints, patient characteristics, and clinical management.

### Results

Data were collected on 17 042 patients from 439 practices. Patient characteristics reflected those of cancer patients diagnosed in 2014; 50.1% patients were male, 49.7% were aged 70 and above, with the majority of diagnoses being breast (15.9%), prostate (12.5%), lung (12.5%) and colorectal (11.6%) cancer. Participating practices were similar to non-participating ones, particularly regarding population age, urban/rural location, and practice-based patient experience measures. The median diagnostic interval for all patients was 40 days (interquartile range [IQR] 15–86 days). Most patients were referred promptly (median primary care interval 5 days [IQR 0–27 days]). GPs deemed diagnostic delays to have occurred in 22% of cases. Safety netting was recorded for 44% of patients. At least one primary care-led investigation was carried out for 45% of patients. Most patients (76%) had at least one existing comorbid condition; 21% had three or more.

### Conclusion

Our findings form a baseline for future audit of recent service improvements arising from the English Cancer Strategy (2015). They also identify novel targets for future quality initiatives that

address the cancer diagnosis pathway.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 38

Abstract code

**IMPROVING CANCER SYMPTOM AWARENESS AND HELP-SEEKING AMONG PEOPLE LIVING IN SOCIOECONOMICALLY DEPRIVED COMMUNITIES USING THE ONLINE HEALTH CHECK: A PROTOCOL FOR THE AWARENESS AND BELIEFS ABOUT CANCER (ABACUS) RANDOMISED CONTROL TRIAL.**

Author - Moriarty, Yvonne, Cardiff University, Cardiff, United Kingdom

Co-author(s) - Buckle, Peter , Member of Involving People Network , Cardiff , United Kingdom

Co-author(s) - Carter, Ben , Kings College London , London , United Kingdom

Co-author(s) - Dimitropoulou, Polyxeni , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Edwards, Adrian , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Hepburn, Julie , Member of Involving People Network , Cardiff , United Kingdom

Co-author(s) - Matthews, Maura , Tenovus Cancer Care , Cardiff , United Kingdom

Co-author(s) - Mitchell, Caroline , University of Sheffield , Sheffield , United Kingdom

Co-author(s) - Neal, Richard , University of Leeds , Leeds , United Kingdom

Co-author(s) - Owen, Sioned , Tenovus Cancer Care , Cardiff , United Kingdom

Co-author(s) - Padgett, Louise , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Playle, Rebecca , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Quinn-Scoggins, Harriet , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Robling, Michael , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Sewell, Bernadette , Swansea University , Swansea , United Kingdom

Co-author(s) - Smith, Pamela , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Smits, Stephanie , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Townson, Julia , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Wood, Fiona , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Brain, Katherine , Cardiff University , Cardiff , United Kingdom (Presenting author)

Topic Cancer

Keywords

**Background:**

Cancer survival rates are lower in disadvantaged communities, partly due to low awareness of symptoms, negative beliefs about cancer and delayed help-seeking.

We developed an interactive online Health Check to be delivered in disadvantaged communities by trained lay advisors. The intervention entails 29 questions about background, lifestyle and health and the production of a traffic light (red, amber, green) summary page, highlighting areas where individuals should take action. Tailored behaviour change advice is delivered by the lay advisor.

**Methods:**

A total of 246 participants, aged over 40, will be recruited from community (i.e. local groups/events) and healthcare settings (i.e. GP surgeries, pharmacies) in South Wales and Yorkshire. Randomisation is on a 1:1 ratio, to either Health Check (intervention) or standard treatment (control). Participants complete the adapted ABC (Awareness and Beliefs about Cancer), brief State Trait Anxiety Inventory, Client Service Receipt Inventory, and brief medical-history and basic demographic questionnaire at baseline, 2 weeks and 6 months post randomisation. A purposeful sample of participants will be invited to in vivo (10%) and audio-recorded (20%) observations of intervention delivery and qualitative interviews at 2 weeks (n=30)

and 6 months (n=15–20) post randomisation.

**Results:**

Data collection is ongoing (Dec 2017 – Oct 2018). Primary analysis will predict follow-up cancer symptom recognition using baseline scores and key demographic variables in a linear analysis of covariance model (ANCOVA). Secondary analysis will assess cancer beliefs, barriers and time to presentation, screening and lifestyle behaviours, anxiety, and intervention implementation costs. Qualitative data will be analysed thematically. A process evaluation will be conducted to assess fidelity, dose and contamination.

**Conclusion:**

The trial will test the effectiveness of the Health Check in improving cancer symptom awareness and help-seeking behaviour among adults living in socioeconomically deprived communities, with potential to lead to improved cancer outcomes in areas of deprivation.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 39

Abstract code

## **SENSITIVITY OF CHEST X-RAY FOR LUNG CANCER: SYSTEMATIC REVIEW**

Author - Bradley, Stephen, Academic Unit of Primary Care, Leeds, United Kingdom (Presenting author)

Co-author(s) - Grice, Adam , University of Leeds , Leeds , United Kingdom

Co-author(s) - Abraham, Sarah , University of Leeds , Leeds , United Kingdom

Co-author(s) - Rodriguez Lopez, Rocio , University of Leeds , Leeds , United Kingdom

Co-author(s) - Wright, Judy , University of Leeds , Leeds , United Kingdom

Co-author(s) - Shinkins, Bethany , University of Leeds , Leeds , United Kingdom

Co-author(s) - Farragher, Tracey , University of Leeds , Leeds , United Kingdom

Co-author(s) - Neal, Richard , University of Leeds , Leeds , United Kingdom

Topic Cancer

Keywords

### **Authors**

Stephen Bradley, Sarah Abraham, Adam Grice, Rocio Rodriguez Lopez, Judy Wright, Tracey Farragher, Beth Shinkins, Richard D. Neal

### **Background**

Lung cancer is a leading cause of premature death. Early diagnosis is associated with improved outcomes. While chest x-ray remains the first line investigation, individual studies have indicated that a proportion of lung cancers are not identified (false negatives) but no systematic review has been conducted. False negative chest x-ray is one cause of delayed diagnoses.

This study aimed to estimate the proportion of patients with lung cancer who have had a chest X-ray in the year prior to diagnosis which was not interpreted as having features suspicious for lung cancer.

### **Methods**

A broad search strategy was devised including several synonyms for chest x-ray and lung cancer. Screening data, pediatric data, studies from before 1999 and studies based on retrospective interpretation of radiology (i.e. after diagnosis) were excluded. Lesions not typically considered to constitute such as lymphoma and mediastinal tumours were also excluded. A 20% random sample screened by a second reviewer to ensure consistency. Quality assessment of studies was undertaken.

### **Results**

Analysis is almost complete. Preliminary findings are that 8,394 studies were identified, and 16 studies met the inclusion criteria. Heterogeneity precluded meta-analysis, however the combined population was 2,347 patients of whom 1585 (60.46%) had abnormality on x-ray. Sensitivity ranged from 16.19% to 93.27%.

### **Conclusions**

This review suggests that chest x-ray does not identify almost 40% of cases, although the findings may be affected by publication bias. This finding need to be replicated in a high quality study that could also demonstrate the potential consequences on diagnostic intervals and stage at diagnosis. The findings also suggest that studies to evaluate the effectiveness and cost-effectiveness of other imaging modalities (e.g. low-dose CT scan) are needed.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 40

Abstract code

**PATIENTS' PRESENTATION OF BODILY SENSATIONS – AN OBSERVATIONAL STUDY OF, INTERACTION, NEGOTIATION AND SHARED UNDERSTANDINGS AMONG PATIENTS AND HEALTHCARE PERSONNEL AFTER IMPLEMENTATION OF STANDARDIZED CANCER PATIENT PATHWAYS**

Author - Hultstrand Ahlin, Cecilia, Umeå University, Umeå, Sweden (Presenting author)

Co-author(s) - Coe, Anna-Britt , Umeå University , Umeå , Sweden

Co-author(s) - Lilja, Mikael , Umeå University , Umeå , Sweden

Co-author(s) - Senada, Hajdarevic , Umeå University , Umeå , Sweden

Topic Cancer

Keywords

**Background:** In Sweden, a majority of patients with symptoms indicating serious illness as cancer initially turn to primary care, which demonstrates the importance of primary care for achieving equal access to cancer care. How access to care is created in the encounters, and how the healthcare organization affect these encounters are sparsely explored. This study focuses on encounters in primary care as an entry to cancer care. Standardized Cancer Patient Pathways (SCPP) have been implemented in order to increase access and equity in access to care, and primary care is often the starter of such pathways. This ongoing study aims to explore how patients' presentation of bodily sensations are constructed and legitimized to further access to care with SCPP.

**Methods:** Observations of encounters, and of how patients present their bodily sensations, will be carried out at primary healthcare centres in two counties in northern Sweden. A power and gender perspective will be applied, as well as the framework of symbolic interactionism which allows analysing social processes, such as interaction during encounters. An emergent design will be employed and data will be analysed with grounded theory.

**Results:** It is known that the decision to seek care is complex, as well as patients' entry into cancer care. We assume that the results from this ongoing study will provide in-depth insights into how the encounter and interaction between healthcare personnel and patients affects access to care by SCPP. The preliminary results will be presented at the conference.

**Conclusions:** This innovative study shed light on patient encounters in primary care which is a previously unexplored field of research. By focusing on interactions between patient and healthcare personnel, in primary care, we put healthcare services in the continuum of cancer diagnosis.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 41

Abstract code

## THE DEVELOPMENT OF A PRIMARY CARE INTERVENTION TO EXPEDITE THE DIAGNOSIS OF SYMPTOMATIC CANCER; FINDINGS FROM INTERVIEWS WITH GPs AND FOCUS GROUPS WITH PRACTICE TEAMS

Author - Law, Rebecca-Jane, Wrexham, United Kingdom (Presenting author)

Co-author(s) - Hiscock, Julia , Wrexham , United Kingdom

Co-author(s) - Nafees, Sadia , Wrexham , United Kingdom

Co-author(s) - Hendry, Maggie , Wrexham , United Kingdom

Co-author(s) - Stanciu, Marian Andrei , Wrexham , United Kingdom

Co-author(s) - Lewis, Ruth , Wrexham , United Kingdom

Co-author(s) - Brain, Katherine , Cardiff , United Kingdom

Co-author(s) - Smits, Stephanie , Cardiff , United Kingdom

Co-author(s) - Williams, Lynne , Bangor , United Kingdom

Co-author(s) - Surgey, Alun , Wrexham , United Kingdom

Co-author(s) - Williams, Nefyn , Liverpool , United Kingdom

Co-author(s) - Wilkinson, Clare , Wrexham , United Kingdom

Co-author(s) - Neal, RD , Leeds , United Kingdom

Topic Cancer

Keywords

**Background:** Early diagnosis is a major contributor to improving cancer outcomes. The Wales Interventions and Cancer Knowledge about Early Diagnosis ('WICKED') programme includes a review of reviews, realist review, a GP survey and qualitative work. Overall, 'WICKED' aims to develop and evaluate a complex intervention to change knowledge, attitudes and clinical behaviour, with the intention of expediting cancer referral and diagnosis in primary care.

**Aim:** This abstract focusses on the qualitative component, which aims to elicit and describe: a) individual beliefs and behaviours amongst GPs, and b) formal and informal practice team systems and norms when identifying, investigating and referring patients with cancer signs and symptoms.

**Methods:** Twenty qualitative telephone interviews with GPs to explore individual beliefs and behaviours. Four focus groups with practice teams to explore practice systems and norms. Purposive sampling (rurality, deprivation, years since qualification, training practice status) to identify a range of participants. Data analysed using the Framework approach, underpinned by the Behaviour Change Wheel.

**Results:** Preliminary analysis of six interviews suggests that GPs find difficulty in referring patients with vague symptoms and describe sometimes practising over-defensive medicine to avoid feelings of blame or guilt. They explained feeling that they want their referral behaviour to align with others, to 'fit' with expectations in secondary care, and to feel trusted. GPs cited decision-making support and reassurance from primary and secondary care colleagues as a valuable aspect of day-to-day referral behaviour. Key areas emerging from the review work have been explored during the focus groups and include 'communication', 'significant event analysis', 'safety netting', 'tests and investigations'.

**Conclusions:** The qualitative element of 'WICKED' provides an in-depth understanding of the influences on early cancer diagnosis in primary care. Findings are being used to inform the development and testing of a complex intervention.



Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 42

Abstract code

## LOOK WHO IS TALKING NOW: CANCER IN PRIMARY CARE ON TWITTER

Author - Milley, Kristi, Primary Care Collaborative Cancer Clinical Trials Group (PC4), Melbourne, Australia (Presenting author)

Co-author(s) - Chima, Sophie , Primary Care Collaborative Cancer Clinical Trials Group (PC4) , Melbourne , Australia

Co-author(s) - Cummings, Kara-Lynne , Primary Care Collaborative Cancer Clinical Trials Group (PC4) , Melbourne , Australia

Co-author(s) - Emery, Jon , University of Melbourne , Melbourne , Australia

Topic Cancer

Keywords

### **Background:**

Twitter is a microblogging platform that helps capture and share bite-size information. It is a dynamic communication tool that has been embraced by many different types of users including consumers and health care professionals (HCPs). Currently, there are no data on how cancer in primary care features on Twitter. This exploratory study aimed to investigate the type of users and information shared about cancer in primary care on Twitter.

### **Methods:**

Tweets were searched between July 2015-June 2017 for the text 'GP', 'general practice', 'primary care', or 'general practitioner' in conjunction with 'cancer'. A random sample of 20% of the tweets were extracted and coded for geographic location, user type, type of tweet and theme. Tweet sentiment was analysed using R package *Sentimentr*. Content which gained traction was compared using metrics such as retweets, favourites, duration and number of countries engaged.

### **Results:**

3,413 tweets were produced by 1,611 users from 48 countries. Health organisations represented 27.3% of users followed by consumers (21.5%), media organisations (16.4%) and HCPs (13.9%). Health organisations focused on symptom awareness (37%) and cancer screening (9%). Whereas, nearly 60% of consumer tweets were comments about their personal cancer experience (26%) or delayed diagnosis (22%). Consumers also published more negative tweets than other user groups (41.1% vs 19.4-30.9%). More than half of media organisation tweets were about primary care news stories which featured delayed diagnosis (29%) or cancer screening (13%). Finally, tweets from HCPs shared news (15.5%) or journal articles (26.9%) about delayed diagnosis (13%) or survivorship/follow-up (12%).

### **Conclusions:**

A broad range of users engaged with Twitter to highlight cancer in primary care. The content promoted differed between user groups but diagnostic delay and symptom awareness were common themes. This study has provided a unique insight into how primary care across the cancer continuum is presented on Twitter.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 43

Abstract code

## **IDENTIFYING THE PREVALENCE OF PATIENTS AT INCREASED RISK FOR MELANOMA IN AUSTRALIAN GENERAL PRACTICE**

Author - Habgood, Emily, University of Melbourne, Melbourne, Australia (Presenting author)

Co-author(s) - Walter, Fiona , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Walker, Jennifer , University of Melbourne , Melbourne , Australia

Co-author(s) - Emery, Jon , University of Melbourne , Melbourne , Australia

Topic Cancer

Keywords

Skin cancers account for 80% of all newly diagnosed cancers in Australia, with melanoma being the most serious. Australia has the highest rates of melanoma worldwide. Early diagnosis reduces the mortality and morbidity from melanoma and primary care plays a major role in early detection and providing preventive advice. This study aimed to identify the prevalence of patients at increased risk for cutaneous melanoma in an Australian primary care population.

The MelaTools Q risk calculator was used to identify patients at increased risk. This tool was developed with the Primary Care Unit, Cambridge University and is based on the validated Williams melanoma risk prediction model. Patients aged 18 years and older were recruited from the waiting room of two large general practices in Melbourne, Australia. Participants completed an electronic questionnaire using iPads. The variables used in the model included age, sex, number of severe sunburns, hair colour, density of freckles on both arms, number of raised moles and prior non-melanoma skin cancer to identify populations at increased risk.

Of the 1,960 patients approached, 1,535 (78.3%) completed the questionnaire. 1,493 participants were eligible of which 16.9% were identified as at increased risk for melanoma and suitable for skin cancer screening and preventive advice. After weighting to the Australian age and gender distributions, different potential cut-offs from the model would allow between 5.3% and 19.8% of the population to be identified as higher risk, and those groups would contain 30% and 60% respectively of those likely to develop melanoma.

In addition to the prevalence of patients at increased risk for melanoma, this study demonstrates that it is feasible within an Australian general practice setting. Further research will examine how this method of real-time risk assessment can link to risk stratified cancer interventions focused on primary prevention and skin self-monitoring behaviours.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 44

Abstract code

## ACTIVITY IN GENERAL PRACTICE PRECEDING A DIAGNOSIS OF CANCER RECURRENCE

Author - Rasmussen, Linda A, Department of Public Health, Aarhus University, Aarhus, Denmark  
(Presenting author)

Co-author(s) - Virgilsen, Line F , Department of Public Health, Aarhus University , Aarhus , Denmark

Co-author(s) - Jensen, Henry , Department of Public Health, Aarhus University , Aarhus , Denmark

Co-author(s) - Carlsen, Anders H , Department of Public Health, Aarhus University , Aarhus , Denmark

Co-author(s) - Jensen, Jørgen B , Department of Clinical Medicine, Aarhus University Hospital , Aarhus , Denmark

Co-author(s) - Vedsted, Peter , Department of Public Health, Aarhus University , Aarhus , Denmark

Topic Cancer

Keywords

**Background:** The follow-up programmes for cancer patients in Denmark are under revision. General practice will play a key role in the future cancer follow-up. A central focus is early detection of cancer recurrence. To work out qualified follow-up programmes in general practice, we need more knowledge about the patient pathway in the period before cancer recurrence. The objective of this study is to describe the use of healthcare services in the year preceding a diagnosis of cancer recurrence.

**Methods:** The study population is curatively treated cancer patients in Denmark diagnosed in 2008-2014 with bladder, breast, lung, colorectal, malignant melanoma, endometrial or ovarian cancer. Patients who were later diagnosed with cancer recurrence were matched with cancer survivors without recurrence. The use of healthcare services in the 12 months preceding the recurrence diagnosis was estimated and compared to the use in the matched comparison population by incidence rate ratios (IRR).

**Results:** The analysis was conducted for bladder cancer (BC) patients. By October 2016, 303 of 1427 curatively treated patients had been diagnosed with recurrence. An IRR of 1.4 (95% CI: 1.2-1.6) for monthly number of contacts in general practice was found seven months before recurrence, and the IRR increased to 2.0 (95% CI: 1.8-2.3) one month before recurrence. Correspondingly, the IRR for number of urine dip-stick tests increased from 1.8 (95% CI: 1.1-3.1) to 3.3 (95% CI: 2.1-5.1). The analyses are ongoing. A similar analysis for breast cancer is scheduled to be completed by the time of the Ca-PRI conference.

**Conclusion:** Patients with BC recurrence have increasing activity in general practice from seven months before the diagnosis of recurrence and consult their GP with symptoms from the urinary system. Thus, general practice may already play an important role in the early detection of cancer recurrence.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 45

Abstract code

## QUALITY IMPROVEMENT TO DRIVE THE EARLY DIAGNOSIS OF CANCER: LESSONS FROM THE NATIONAL CANCER DIAGNOSIS AUDIT IN ENGLAND

Author - Witt, Jana, Cancer Research UK, London, United Kingdom (Presenting author)

Co-author(s) - Swann, Ruth , Public Health England , London , United Kingdom

Co-author(s) - Bell, Debbie , Cancer Research UK , London , United Kingdom

Co-author(s) - Forster, Louise , Cancer Research UK , London , United Kingdom

Co-author(s) - McNulty, Sue , Cancer Research UK , London , United Kingdom

Co-author(s) - Harrison, Samantha , Cancer Research UK , London , United Kingdom

Co-author(s) - Nicola, Sophia , Macmillan Cancer Support , London , United Kingdom

Co-author(s) - Cunliffe, Anthony , Macmillan Cancer Support , London , United Kingdom

Co-author(s) - McPhail, Sean , Public Health England , London , United Kingdom

Co-author(s) - Lyratzopoulos, Yoryos , University College London , London , United Kingdom

Co-author(s) - Rubin, Greg , Newcastle University , Newcastle , United Kingdom

Co-author(s) - Hiom, Sara , Cancer Research UK , London , United Kingdom

Topic Cancer

Keywords

**Background:** The National Cancer Diagnosis Audit (NCDA) enables practices to review and reflect on processes, systems and behaviour, highlighting good practice and identifying areas for quality improvement.

**Methods:** General practices in England were invited to submit primary care data on patients diagnosed with cancer in 2014 between September 2016 and February 2017. Each practice was issued with a tailored feedback report in May 2017 and offered support from dedicated staff (Cancer Research UK Facilitators) and colleagues (Macmillan GPs) to reflect on their data and plan quality improvement activity in practice meetings. To support this, a toolkit developed by the Royal College of GPs was also made available. We conducted a follow up survey and collected case studies to understand the impact of audit reports and resulting quality improvement activities on clinical practice.

**Results:** One in twenty English practices (5.4%) submitted data to the audit and were offered a tailored feedback report which included a national comparator (based on n=17,042 patients) and a comparison to a cluster of equivalent practices. Over three quarters of practices (78%) viewed their reports within 6 months of them being made available. Where practices made concrete plans for change and quality improvement based on the audit findings, these most often focused on referral behaviours, safety netting protocols and bowel screening uptake. Case studies demonstrate a range of interventions that were implemented in response to the NCDA findings and allow practices to share learning with others.

**Conclusions:** As was also observed for a previous national audit, feedback of audit data can result in changes to clinical practice that could drive the early diagnosis of cancer in primary care. Tailored, easy-to-interpret feedback in combination with a support offer, as delivered in the NCDA, ensures audit results are seen as relevant and actionable, thus stimulating quality improvement activity.

Presentation Preference Oral presentation

Audio/Visual Equipment  
Awards  
Additional information

Abstract nr. 46

Abstract code

## **CANCER PATIENT PATHWAYS AND INVESTIGATIONS IN THE YEAR PRECEDING A DIAGNOSIS OF AN ABDOMINAL CANCER**

Author - Holt Jessen, Nanna, Research Centre for Cancer Diagnosis in Primary Care (CaP), Aarhus, Denmark (Presenting author)

Co-author(s) - Jensen, Henry , Research Centre for Cancer Diagnosis in Primary Care (CaP) , Aarhus , Denmark

Co-author(s) - Glerup, Henning , Diagnostic Center, Silkeborg Regional Hospital , Aarhus , Denmark

Co-author(s) - Gronbaek, Henning , Department of Hepatology and Gastroenterology , Aarhus , Denmark

Co-author(s) - Vedsted, Peter , Research Centre for Cancer Diagnosis in Primary Care (CaP) , Aarhus , Denmark

Topic Cancer

Keywords

### **Background:**

More than 11,500 abdominal cancers are diagnosed each year in Denmark. Abdominal symptoms are a common reason for patients to contact primary care. However, more than ten different cancer types can cause these symptoms, but the positive predictive value of abdominal symptoms to be caused by cancer is low in general practice. This challenges the diagnostic work-up and increases the risk of unnecessary investigations, lack of continuity of care and clinical variation. We aimed to explore the healthcare use for different abdominal cancer sites in the year preceding a diagnosis of abdominal cancer, and to investigate potential overlap in investigations and in cancer patient pathways (CPPs) for different cancer sites.

### **Methods:**

We conducted a national cohort study with consecutive first-time abdominal cancer patients aged  $\geq 18$  years diagnosed in 2014-2016. The cancer patients were identified in the Danish National Cancer Register. Data on healthcare use (investigations and abdominal CPPs) were obtained from Danish national registers and linked to sociodemographic variables at Statistics Denmark. We will provide absolute and relative proportions of abdominal investigations and CPP referral during the year preceding a diagnosis of abdominal cancer for selected cancer sites.

### **Results:**

Data are currently being processed. Descriptive statistics are expected to have been completed in March/April 2018. Approximately 30,000 patients diagnosed with abdominal cancer will be included. The data output will include proportions of patients diagnosed through a CPP and proportions of patients who had a colonoscopy, a gastroscopy, an abdominal ultrasound and/or a transvaginal ultrasound scan.

### **Conclusion:**

The project will provide new important insight into the examinations preceding an abdominal cancer diagnosis, including the number of and potential overlap across abdominal cancer sites. The results may help optimize the diagnostic strategies for patients presenting in general practice with unspecific or vague abdominal symptoms and ultimately provide more timely diagnosis.



Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 47

Abstract code

## TOGETHER IN LINE, THE POWER OF INFORMAL CARE IN GROUP

Author - Jansen, Leontien, KU Leuven, Leuven, Belgium

Co-author(s) - Burghgraeve, Tine De , KU Leuven , Leuven , Belgium (Presenting author)

Co-author(s) - Akker, Marjan Van den , Maastricht University , Maastricht , Netherlands

Co-author(s) - Buntinx, Frank , KU Leuven , Leuven , Belgium

Co-author(s) - Schoenmakers, Birgitte , KU Leuven , Leuven , Belgium

Topic Cancer

Keywords

*Background* The aging of the population and the related changing relations between the generations have important economic and social consequences. Informal care of older civilians becomes more complex and informal care in group is no longer an exception. In this group, the different members contribute to the care process in an equitable but non-proportional manner. A formal framework with a good communication to support these informal caregivers is therefore essential in order to provide good care for older patients with cancer ( $\geq 70$  years). The aim of this project is to develop tailored support for older civilians ( $\geq 70$  years), including older patient with cancer, and their informal care groups, adjusted to their needs, aimed to decrease the caregiver burden and increase the well-being of both older civilian and caregivers.

*Methods* The impact of a self-management tool on the psychosocial well-being of informal care groups will be tested through a before-and-after study design. Both the individual caregivers from an informal care group and the older civilian ( $\geq 70$  years) will be questioned at baseline and after 6 months about their everyday functioning, psychosocial and physical well-being, needs and functioning of the informal care group.

*Results & conclusions* The baseline data of the informal care groups will be analyzed and will be presented with the protocol of the intervention study at the congress. We will look at the psychosocial and physical well-being among the individuals of the informal care group. The physical and psychosocial functioning of the older patient with cancer ( $\geq 70$  years) will also be mapped out and an attempt will be made to establish links between the functioning of the patient, the well-being of the individual informal caregiver and the functioning of the informal care group.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 48

Abstract code

## **DEVELOPMENT AND VALIDATION OF LIFESTYLE-BASED PREDICTION MODELS FOR THE PREVENTION OF THE MOST COMMON PREVENTABLE CANCERS**

Author - Usher-Smith, Juliet, University of Cambridge, Cambridge, United Kingdom (Presenting author)

Co-author(s) - Sharp, Stephen , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Luben, Robert , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Griffin, Simon , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

### **Background**

Providing individualised estimates of risk of cancer in primary care settings, alongside demonstration of the impact of lifestyle change on that risk, may help motivate change among individuals and complement wider collective approaches to shifting population distributions of behaviour and risk factors. Most risk models for cancer are either specific to individual cancers or include complex or predominantly non-modifiable risk factors. The aim of this study was to develop and validate lifestyle-based prediction models for the five most common preventable cancers in men and women in the UK.

### **Methods**

For each of the included cancers (lung, colorectal, bladder, kidney and oesophageal for men and breast, lung, colorectal, endometrial and kidney for women), we selected lifestyle risk factors from the European Code against Cancer and obtained estimates of relative risks from meta-analyses of observational studies. We used mean values for risk factors from 25,621 participants from the EPIC-Norfolk cohort and mean 10-year estimated absolute risks from routinely available sources. We assessed the performance of the models in 21,880 participants in the EPIC-Norfolk cohort who were aged 40 or over at baseline, had 10-year follow-up, data for all risk factors, and no history of the five selected cancers at baseline.

### **Results**

In men the combined risk model showed good discrimination (AUC: 0.74, 95% CI 0.72-0.76) and calibration. Discrimination was lower in women (AUC: 0.61 95% CI 0.59-0.63) but calibration was good. In both sexes the individual models for lung cancer had the highest AUCs (0.83, 95%CI 0.80-0.85 for men and 0.83, 95% CI 0.77-0.88 for women). The lowest AUCs were for breast and endometrial cancer in women.

### **Conclusions**

The models could be used to identify those most likely to benefit from lifestyle interventions and to demonstrate the impact of change to individuals to contribute to decisions to change behaviour.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 49

Abstract code

## PROTOCOL FOR THE DEVELOPMENT OF A BRIEF DECISION AID FOR LOW-DOSE ASPIRIN USE AS A PREVENTIVE STRATEGY FOR BOWEL CANCER ALONGSIDE SCREENING

Author - Smits, Stephanie, Cardiff University, Cardiff, United Kingdom (Presenting author)

Co-author(s) - Brain, Kate , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Edwards, Adrian , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Lifford, Kate , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Seddon, Kathy , Public and Patient Involvement representative , Cardiff , United Kingdom

Co-author(s) - Dolwani, Sunil , Cardiff University , Cardiff , United Kingdom

Topic Cancer

Keywords

**Background:** Bowel cancer screening leads to a reduction in bowel cancer deaths of around 16%. Low-dose aspirin is associated with reduction in bowel cancer deaths of about 20%. Combining the two methods – bowel screening and low-dose aspirin – may bring additional benefit compared with either alone. In future, low-dose aspirin could be offered alongside bowel screening as a combined approach to preventing bowel cancer.

**Methods:** Three phases will be used to develop a brief decision aid for preventive low-dose aspirin use and explore its acceptability, feasibility, and implementation alongside the current bowel screening programme.

- 1) Explore bowel screening responders' and other stakeholders' perceptions of low-dose aspirin use to prevent bowel cancer in three focus groups, and collate the clinical evidence about preventive low-dose aspirin use in a scientific reference group.
- 2) Use the information gained from the focus groups, combined with clinical evidence, to develop a brief decision aid to assist people deciding whether or not to take low-dose aspirin as a preventive strategy, alongside bowel screening.
- 3) Gain feedback on the decision aid through interviews with 10-15 bowel screening responders.

**Results:** The main outcome of the study will be an acceptable brief decision aid, with a suggested pathway for use alongside the current bowel screening programme. The decision aid will present the benefits and risks of using low-dose aspirin as a preventive strategy for bowel cancer. Another outcome of the study will be a summary of the clinical evidence agreed by domain experts.

**Conclusions:** The developed decision aid will support people making a decision, personalised to their individual health context, about whether or not to take low-dose aspirin to reduce bowel cancer risk alongside the bowel screening programme. The development of this decision aid is necessary for future evaluation of a combined risk-reducing strategy for bowel cancer.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 50

Abstract code

## **HUMAN PAPILLOMAVIRUS (HPV) VACCINATION FOR YOUNG MEN WHO HAVE SEX WITH MEN (YMSM) IN PRIMARY CARE: INSIGHTS FROM THE YOUNG HIMMS STUDY**

Author - Merriel, S W D, University of Bristol, Bristol, United Kingdom (Presenting author)

Co-author(s) - Kesten, J M , Bristol , United Kingdom

Co-author(s) - Flannagan, C , Londonderry , United Kingdom

Co-author(s) - Shapiro, G K , Montreal , Canada

Co-author(s) - Nadarzynski, T , Southampton , United Kingdom

Co-author(s) - Rosberger, Z , Montreal , Canada

Co-author(s) - Prue, G , Belfast , United Kingdom

Topic Cancer

Keywords

### **Background**

Men who have sex with men (MSM) are at higher risk for human papillomavirus (HPV)-associated cancers. Vaccination prior to potential exposure to the virus (i.e. sexual debut) is likely to be most efficacious. Since 2016, MSM up to age 45 have been offered HPV vaccination at genitourinary medicine (GUM) clinics in a UK pilot programme, and primary care was recommended as a setting for opportunistic vaccination. This study aimed to explore the knowledge and attitudes of UK General Practitioners (GPs), sexual healthcare professionals (SHCPs), and young MSM (YMSM, age 16–24), regarding HPV vaccination.

### **Methods**

An online questionnaire utilising an adapted version of a validated questionnaire was delivered to GPs and SHCPs. YMSM were invited to participate in focus groups and complete questionnaires to explore knowledge, attitudes, barriers and facilitators towards HPV vaccination. Questionnaire data were analysed using descriptive statistics, and focus group data were analysed thematically.

### **Results**

38 GPs and 49 SHCPs (59 [67.82%] females, mean age=40.71) completed the online questionnaire. 17 YMSM (mean age=20.5) participated in four focus groups. GPs lack of time (65.79%) was the main reported factor preventing YMSM HPV vaccination. GPs were less likely than SHCPs to believe there was sufficient evidence for vaccinating YMSM (OR = 0.02, 95% CI = 0.01, 0.47) and less confident recommending YMSM vaccination (OR = 0.01, 95% CI = 0.00, 0.01). Over half of YMSM were aware of HPV (55.6%), yet few (16.7%) had discussed vaccination with their GP or a SHCP despite many wanting to understand the benefits. YMSM were divided over which clinical setting to receive the HPV vaccination.

### **Conclusions**

UK GPs have lower levels of knowledge and lower confidence regarding YMSM HPV vaccination compared to SHCPs. In order to promote opportunistic vaccination in primary care settings, further education for GPs and YMSM would be beneficial.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 51

Abstract code

## **PREDICTING PROSTATE CANCER PROGRESSION: RETROSPECTIVE COHORT STUDY IDENTIFYING PROGNOSTIC FACTORS FOR PROSTATE CANCER OUTCOMES USING ROUTINE PRIMARY CARE DATA**

Author - Merriel, S W D, University of Bristol, Bristol, United Kingdom (Presenting author)

Co-author(s) - May, M , Bristol , United Kingdom

Co-author(s) - Martin, R M , Bristol , United Kingdom

Topic Cancer

Keywords

### **Background**

Prostate cancer is the most common cancer in males in the UK, and the second most common cause of cancer death amongst men. 5-year age-standardised survival for prostate cancer patients is 83.6%; therefore, many men live with the disease rather than dying from it. Identifying clinically significant cases of prostate cancer with higher risk of progression remains a challenge. This study aimed to identify prognostic factors for prostate cancer progression in men using primary care data.

### **Methods**

Retrospective cohort study using the Clinical Practice Research Datalink (CPRD) to identify men with a new diagnosis of prostate cancer between 01/01/1987 and 31/07/2016, with linked cancer registry and Office for National Statistics (ONS) mortality data. Exposure to predetermined clinical, pharmacological, biochemical and lifestyle risk factors for prostate cancer mortality were extracted. Cox proportion hazard regression was utilised to determine factors associated with prostate cancer progression. The primary outcome was prostate cancer mortality. Secondary outcomes included all-cause mortality, developing locally invasive and/or metastatic disease, and commencing systemic therapy.

### **Results**

54,500 men (mean age 76.79 years [SD 9.31 years]) with prostate cancer were included. Mean follow-up was 13.14 years (SD 6.58 years). 15,786 died during the follow-up period, 6,684 (42.34%) of whom died of prostate cancer. Raised acute phase reactants (CRP HR 2.15 95% CI 1.94, 2.38; Ferritin HR 1.65 95% CI 1.41, 1.93) and HbA1c (HR 1.56 95% CI 1.37, 1.83) were associated with increased prostate cancer mortality. Obesity (HR 0.84 95% CI 0.78, 0.90) and statins (Atorvastatin HR 0.63 95% CI 0.56, 0.70; Simvastatin HR 0.67 95% CI 0.63, 0.72) were associated with reduced prostate cancer mortality.

### **Conclusions**

A number of clinical prognostic factors for progression of localised prostate cancer have been identified. These factors could inform the development and validation of a clinical risk prediction model to inform treatment decision-making.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 52

Abstract code

## **POSSIBLE MISSED OPPORTUNITIES FOR DIAGNOSING COLORECTAL CANCER IN DUTCH GENERAL PRACTICE: A MULTI-METHODS APPROACH**

Author - Brandenburg, D, University of Groningen, University Medical Center Groningen, Groningen, Netherlands (Presenting author)

Co-author(s) - Groenhof, F , University of Groningen, University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Siewers, Ilse , University of Groningen, University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Voort, Anna van der , University of Groningen, University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Walter, Fiona , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Berendsen, Annette , University of Groningen, University Medical Center Groningen , Groningen , Netherlands

Topic Cancer

Keywords

**Background** Early detection of colorectal cancer (CRC) is important to achieve better survival. Discriminating symptoms suggestive of colorectal cancer from benign conditions is a challenge for general practitioners since most known ‘alarm symptoms’ have low predictive values. We aim to further understand the diagnostic process in general practice in terms of health care use and by analysing factors related to diagnostic intervals.

**Methods** We performed a multi-methods approach comprising a historical prospective registry study and qualitative content analysis. Health care use in the year before referral for colonoscopy was compared between patients diagnosed with colorectal cancer and an age-, gender-, and GP-matched control population. Qualitative content analysis was performed on free texts in electronic patient records from a purposive sample of CRC patients.

**Results** CRC Patients had 41% (25-29%) more face-to-face contacts and 21% (7-37%) more medication prescriptions than controls. Forty-six percent of CRC patients had 2 or more contacts for digestive reasons, compared to 12.2% of controls. From qualitative analysis two themes emerged; “possible missed diagnostic opportunities” and “improvements in diagnostic process unlikely”. Possible missed diagnostic opportunities were related to patients waiting before presenting symptoms, doctors attributing symptoms to co-morbid conditions or medication use, or doctors sticking to an initial diagnoses.

**Conclusion** Less missed diagnostic opportunities might occur if GPs are aware of pitfalls in diagnosing CRC: the assumption that symptoms are caused by comorbid conditions or medication, or relating complaints to pre-existing medical conditions. GPs also need to be aware that repeated digestive complaints warrants rethinking earlier diagnoses.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 53

Abstract code

## **DEVELOPMENT AND IMPLEMENTATION OF A NOVEL QUESTIONNAIRE TO EVALUATE PATIENT EXPERIENCE OF THE MDC PATHWAY**

Author - Ablett-Spence, I, Newcastle University, Newcastle, United Kingdom (Presenting author)

Co-author(s) - Howse, J, Newcastle University, Newcastle, United Kingdom

Co-author(s) - Rubin, G, Newcastle University, Newcastle, United Kingdom

Topic Cancer

Keywords

### **Background**

The ACE (Acceleration, Coordination and Evaluation) programme was initiated in 2014 with the aim of developing a body of evidence that informs the operational improvement of early diagnosis cancer pathways.

Wave 2 ACE projects involved pilot sites trialling a diagnostic pathway for non-specific but concerning symptoms. These approaches draw on the Multi-Disciplinary Clinics (MDC) model first developed in Denmark.

We developed a questionnaire survey in order to evaluate patient experience of the MDC pathway.

### **Method**

We selected previously validated questions from the National Cancer Patient Experience Survey, the Manchester Cancer Survey and the ACE Patient Experience Survey. Questions from these surveys were mapped against the MDC pathway to identify those most relevant to patients experiencing a MDC pathway. Where appropriate questions were adapted, in particular they were reworded to not assume all recipients had a cancer diagnosis. In addition, some questions were developed by the research team to ensure that information was gathered relating to the whole MDC pathway experience. The draft questionnaire was shared with the pilot sites and final refinements were made in conjunction with them.

The final self-completion questionnaire comprised 21 items. Each of the 6 ACE Wave 2 pilot sites is distributing questionnaires to all patients who have been seen in the MDC. Completed questionnaires are returned to the research team for analysis.

### **Results**

The survey will continue until the end of February 2018. Interim results will be presented.

### **Conclusion**

We have developed a novel, validated self-completion questionnaire to evaluate patient experience of the MDC pathway. Interim findings will be reported.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 54

Abstract code

## **IMPACT OF HIGH-DEDUCTIBLE INSURANCE ON BREAST CANCER CARE AMONG LOWER-INCOME WOMEN**

Author - Wharam, JFW, Harvard Medical School and Harvard Pilgrim Healthcare Institute, Boston, United States of America

Co-author(s) - Zhang, FZ , Boston , United States of America (Presenting author)

Co-author(s) - Lu, CL , Boston , United States of America

Co-author(s) - Wagner, AKW , Boston , United States of America

Co-author(s) - Nekhlyudov, LN , Boston , United States of America

Co-author(s) - Earle, CE , Toronto , Canada

Co-author(s) - Xu, X , Boston , United States of America

Co-author(s) - Soumerai, S , Boston , United States of America

Co-author(s) - Ross-Degnan, D , Boston , United States of America

Topic Cancer

Keywords

**Background:** Primary care physicians assist in ensuring timely care for women with breast cancer. High-deductible health plans (HDHP) are increasingly common in the US but delay important breast cancer diagnostic tests and treatment. We hypothesized that such delays would be especially pronounced among lower-income HDHP members.

**Methods:** We used 2004-2012 data from a large US health insurer and a pre-post controlled survival design. We included 152,155 lower-income HDHP group members age 25-64 without evidence of breast cancer. These women were continuously enrolled for 1 year in a low-deductible ( $\leq$ \$500) plan followed by up to 4 years in a HDHP ( $\geq$ \$1000) after an employer-mandated switch. The comparison group included 1,316,548 contemporaneous, coarsened exact-matched lower-income women whose employers offered only low-deductible plans. Measures were times to first diagnostic breast imaging, breast biopsy, incident early-stage breast cancer diagnosis, and breast cancer chemotherapy. Outcomes were analyzed using Cox survival models adjusted for baseline patient characteristics. We also analyzed measures among 120,755 high-income HDHP members and their 1,095,592 high-income matched controls.

**Results:** After the index date, lower-income HDHP members experienced delays in receipt of breast cancer diagnostic imaging (adjusted hazard ratio, aHR: 0.93 [0.92,0.95]), biopsy (0.89 [0.86,0.93]), early-stage breast cancer diagnosis (0.89 [0.80,0.98]), and chemotherapy initiation (0.80 [0.71,0.90]) compared with controls. Corresponding hazard ratios among high-income HDHP members (0.96 [0.95,0.98], 0.93 [0.89,0.97], 0.77 [0.69,0.85], and 0.76 [0.68,0.86], respectively) were similar to those of lower-income HDHP members and confidence intervals overlapped. Findings were also similar when analyzing an even lower income HDHP subgroup.

**Conclusions :** Both lower-income and high-income women who were switched to HDHPs experienced delays in diagnostic breast imaging, breast biopsy, and chemotherapy initiation. Further research should determine if such delays cause adverse health outcomes. Primary care physicians, oncologists, and population health managers should consider HDHPs a risk factor for delayed breast cancer services.

Presentation Preference Oral presentation

Audio/Visual Equipment  
Awards  
Additional information

Abstract nr. 55

Abstract code

## **PATIENTS' EXPECTATIONS AND PREFERENCES REGARDING CANCER FOLLOW-UP CARE**

Author - Bock, GH de, UMCG, Groningen, Nederland (Presenting author)

Co-author(s) - Brandenburg, D , UMCG , Groningen , Nederland

Co-author(s) - Berendsen, AJ , UMCG , Groningen , Nederland

Topic Cancer

Keywords

**Background:** Most survivors of cancer enter a follow-up routine after their treatment, the aim of which is to detect recurrence, provide psychological support, monitor treatment-related side-effects, and to evaluate care. Due to rising numbers of people with cancer and better survival of these patients, current follow-up routines are under pressure. We reviewed the literature on patients' expectations and preferences regarding this care.

**Methods:** We systematically searched the databases of Pubmed, CINAHL, and PsychInfo. Studies were screened and data extraction was double performed by three authors. Data were collected from quantitative and qualitative studies and described thematically.

**Results:** After screening, 12 full-text articles were included, comprising 849 patients aged from 28 to 90 years. Patients expect follow-up visits to detect recurrence of cancer. They want to undergo extensive testing to get reassurance. Furthermore, patients expect relevant information to be provided and to get advice about different aspects of their illness. Psychosocial support is also expected. Patients express a desire for consistency of care as well as continuity of care, and prefer long and intensive follow-up.

**Conclusion:** After cancer, patients appear to lose confidence in their bodies and fear cancer recurrence after the end of treatment, which may lead to intensive screening wishes. This is not desirable, since care for cancer is already under pressure due to rising numbers of survivors. We have to ensure that follow-up routines are sustainable and effective. Patients should receive good information about the need for follow-up tests. Doctors should be trained to give this information. *Maturitas* 2017; 105: 58-63.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 56

Abstract code

## DIFFERENCES IN THE PRESENTATION OF BREAST CANCER IN NEW ZEALAND WOMEN

Author - Lawrenson, RA, The University of Waikato, Hamilton, New Zealand (Presenting author)

Co-author(s) - Lao, C , The University of Waikato , Hamilton , New Zealand

Co-author(s) - Campbell, I , The University of Auckland , Hamilton , New Zealand

Co-author(s) - Elwood, M , The University of Auckland , Auckland , New Zealand

Topic Cancer

Keywords

**Introduction:** Inequity in breast cancer outcomes in New Zealand are a concern for those from low SES communities and for ethnic minorities especially Māori and Pacific peoples. The major cause of these inequities is late diagnosis. This study analysed cancer stage at diagnosis and impact of demographic, biological and screening characteristics in a population-based series of women with invasive breast cancer.

**Methods:** All women diagnosed with invasive breast cancer between 2000 and 2013 were identified from two regional breast cancer registries. Factors associated with advanced (stages III and IV) and metastatic (stage IV) cancer at diagnosis were analysed in univariate and multivariate models adjusting for covariates.

**Results:** Of 12372 women included in this study 2415 (19.7 %) were advanced and 574 (4.6 %) were metastatic at diagnosis. While age was not associated with metastatic disease at diagnosis, SES was important with a 40% increase in risk of advanced cancer for those in quintile 4 and 5 compared to quintile 1. Ethnicity was also a significant factor Māori (OR = 1.9, 95% CI: 1.4-2.5) and Pacific (OR = 2.8, 2.0-3.9) compared with NZ Europeans. There were also geographical differences - rural (OR = 1.5, 1.1-2.0) compared with main urban residency. Women who had HER2 positive disease were more likely to be diagnosed with metastatic disease (OR 1.8, 1.4–2.3). Interestingly despite increased breast screening rates in New Zealand we saw a steady increase in the rate of metastatic cancer over time.

**Conclusions:** Those from low SES communities, from small rural towns and Māori and Pacific women are more likely to being diagnosed with advanced disease. This is likely to be influenced by poor access to primary care. While a focus on breast screening is important the barriers to early diagnosis for disadvantaged women with breast cancer also needs exploration.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 57

Abstract code

## **IMPROVING EARLY ACCESS TO LUNG CANCER DIAGNOSIS FOR MAORI AND RURAL COMMUNITIES**

Author - Lawrenson, RA, The University of Waikato, Hamilton, New Zealand (Presenting author)

Co-author(s) - Keenan, RL , The University of Waikato , Hamilton , New Zealand

Co-author(s) - Kidd, J , The University of Auckland , Hamilton , New Zealand

Co-author(s) - Cassim, S , The University of Waikato , Hamilton , New Zealand

Co-author(s) - Lao, C , The University of Waikato , Hamilton , New Zealand

Co-author(s) - Wong, J , Waikato District Health Board , Hamilton , New Zealand

Co-author(s) - Middleton, K , Waikato District Health Board , Hamilton , New Zealand

Topic Cancer

Keywords

### **Introduction**

Lung cancer survival in New Zealand is poor, as it is typically diagnosed at a late stage. Māori have 3-4 times the incidence of lung cancer. Late diagnosis can occur due to both patient and health system factors, including barriers relating to access to services, the relationship between patients and General Practitioners and awareness of lung cancer symptoms and treatment. In the Midland Cancer Region of NZ (population 750,000) 27% of patients are Māori.

### **Methods**

This is a mixed-methods study. The main study is a community-based intervention addressing the causes of diagnostic delay in Māori. The project involves qualitative research using Māori tikanga or culturally appropriate practices, with interviews with Māori patients, newly diagnosed with lung cancer to identify barriers to diagnosis. This will be followed by focus groups amongst Māori adults at risk of lung cancer to identify local barriers and enablers to diagnosis. Framework for the intervention will be informed by these qualitative findings and by engagement of communities in the co-design process.

### **Results**

The Region has a comprehensive, prospectively collected register of lung cancer patients, 683/2230 registrations (31%) were Māori. 216/2230 (10%) of cases were diagnosed as Stage 1, while 1455/2230 (65%) were Stage 4 or unknown. 2 year survival for Māori was 16% compared to 21.6% for non-Māori. Our presentation will include data on the presentation and outcomes from lung cancer in our region and detailed data on the barriers for Māori in accessing primary care services.

### **Conclusion**

In the Midland Cancer Region, late diagnosis of lung cancer is the norm. While this is true for both Māori and non-Māori, it is believed that the barriers to diagnosis are different for indigenous patients leading to poorer outcomes. Our study aims to explore these differences and establish an appropriate intervention.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 58

Abstract code

## **NATIONAL CANCER DIAGNOSIS AUDIT: AVOIDABLE DELAYS TO DIAGNOSIS**

Author - Swann, Ruth, PHE-CRUK partnership, London, United Kingdom (Presenting author)

Co-author(s) - Witt, Jana , Cancer Research UK , London , United Kingdom

Co-author(s) - Shand, Brian , Public Health England , Cambridge , United Kingdom

Co-author(s) - Lyratzopoulos, Georgios , University College London , London , United Kingdom

Co-author(s) - Hiom, Sara , Cancer Research UK , London , United Kingdom

Co-author(s) - Rubin, Greg , Newcastle University , Newcastle , United Kingdom

Co-author(s) - McPhail, Sean , Public Health England , Bristol , United Kingdom

Topic Cancer

Keywords

### **Background**

An earlier diagnosis of cancer can increase survival and quality of life. We aim to characterise avoidable delays to a patient's diagnosis of cancer to help direct quality improvement initiatives. We investigate the variation by cancer type and patient characteristics using primary care data collected as part of the National Cancer Diagnosis Audit (NCDA).

### **Methods**

English general practices participating in the NCDA (439) submitted primary care data on patients (17,042) diagnosed with cancer in 2014. Using a taxonomy developed from the National Audit of Cancer Diagnosis in Primary Care (2011), GPs reported delays to the diagnosis that in their judgement were avoidable.

### **Results**

In 22% of NCDA patient records (n=3,380), the GP considered there to be an avoidable delay to the patient receiving their cancer diagnosis. There was substantial variation by cancer type: 7% of breast cancer patients experienced delays compared to 34% of stomach cancer patients. For the location of the avoidable delays, 49% occurred in primary care and 38% in secondary or tertiary care. Assessing the stage of the pathway, 32% of avoidable delays occurred during the test performance and reporting stage of diagnostic assessment. 26% of delays were attributed to clinician factors and 33% to health care system factors; however for breast cancer patients specifically 50% were due to patient delay (all cancers – 26%). Results will be presented by patient characteristics and by the nature of the primary care investigation and referral.

### **Conclusions**

Avoidable delays during cancer diagnosis occur for multiple reasons. Primary care data from the NCDA can be used to better understand these delays and identify solutions for improving the diagnostic pathway in some cases. These insights can inform quality improvement initiatives, which should be directed at both clinical and organisational factors in primary care and hospital settings.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 59

Abstract code

## **USING PRIMARY CARE TO HELP INCREASE UPTAKE OF BOWEL SCOPE SCREENING IN YORKSHIRE: A PROTOCOL**

Author - McGregor, L, University College London, London, United Kingdom (Presenting author)

Co-author(s) - Kerrison, RS , University College London , London , United Kingdom

Co-author(s) - Green, T , Hull York Medical School , Hull , United Kingdom

Co-author(s) - Macleod, U , Hull York Medical School , Hull , United Kingdom

Co-author(s) - Duthie, G , Hull and East Yorkshire NHS Trust , Hull , United Kingdom

Co-author(s) - Hughes, M , Hull and East Yorkshire NHS Trust , Hull , United Kingdom

Co-author(s) - Morris, S , University College London , London , United Kingdom

Co-author(s) - Rees, C , South Tyneside NHS Foundation Trust , Newcastle , United Kingdom

Co-author(s) - Winfield, M , Patient and Public Representative , Leicester , United Kingdom

Co-author(s) - Wagner, C von , University College London , London , United Kingdom

Topic Cancer

Keywords

**Background:** Bowel scope screening (BSS) saves lives by removing pre-cancerous growths within the bowel, thereby significantly reducing an individual's risk of developing the disease. As part of the Bowel Cancer Screening Programme, BSS is offered to 55 year olds registered with a General Practice (GP) in England. National uptake is low (around 43%) and socially graded. This study will explore ways in which GP can help increase BSS uptake by disseminating paper and telephone based interventions that have been developed with active input from local community.

**Methods:** A three-arm randomised controlled trial involving 2000 BSS eligible people from Hull and surrounding areas in Yorkshire: 1) control group with no interventions; standard care, 2) A primer letter and information leaflet to increase engagement with the NHS invitation, followed by a self-referral reminder letter for those who do not attend their BSS appointment, 3) Same primer letter and leaflet as group 2, but a patient navigation call to those who do not attend their BSS appointment. Data will be obtained from the bowel cancer screening system to evaluate the impact of each intervention on BSS attendance and clinical outcomes. A survey with GP staff and patient telephone interviews will evaluate the acceptability of the interventions.

**Results:** Uptake in the control group is hypothesised to be 35%. The group to receive the primer letter and self-referral letter is predicted to show an 11 percentage point increase (46%) while the patient navigation call group is predicted to show a further increase of 7 percentage points (53%).

**Conclusions:** If either of the interventions show a significant increase in bowel scope screening, and are found to be acceptable to staff and patients, local GPs will be informed and implementation support provided. Funding to extend the research on a conceptual and geographical level will be sought.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 60

Abstract code

## **CORRESPONDENCE BETWEEN PRIMARY AND SECONDARY CARE ABOUT PATIENTS WITH CANCER: A DELPHI CONSENSUS STUDY**

Author - Stegmann, ME, UMCG, Groningen, Netherlands (Presenting author)

Co-author(s) - Homburg, TM , Groningen , Netherlands

Co-author(s) - Meijer, JM , Groningen , Netherlands

Co-author(s) - Nuver, J , Groningen , Netherlands

Co-author(s) - Havenga, K , Groningen , Netherlands

Co-author(s) - Hiltermann, TJN , Groningen , Netherlands

Co-author(s) - Maduro, JH , Groningen , Netherlands

Co-author(s) - Schuling, J , Groningen , Netherlands

Co-author(s) - Berendsen, AJ , Groningen , Netherlands

Topic Cancer

Keywords

**Background** To provide optimal care for oncological patients, timely and efficient communication between primary and secondary care is essential. However, both parties believe that the current correspondence can be improved. The aim of this study is to achieve consensus regarding the desired content of general practitioner's (GP's) referral and specialist's letter prior to and during the initial treatment of cancer in the Netherlands.

**Methods** In a two round Delphi procedure three expert panels, consisting of GPs, oncological specialists and patients, reviewed a list of 72 items for referral letters and 108 items for specialist letters.

**Results** Of the GPs 39 (42%), of the oncological specialists 42 (41%) and of the patient representatives 18 (69%) completed both rounds. The final consensus list for GPs' referral letters consisted of 12 items, for specialist letters of 35 items. GPs' referral letters should only contain medical facts, a short summary of symptoms and abnormal findings and a reason of referral. Specialists' letters need to include the same medical facts, but also detailed information about the diagnosis, treatment options and chosen treatment.

**Conclusions** This study is the first to show which information is perceived as essential and which as redundant in GP's referral and specialists' letters. This knowledge can improve the communication between primary and secondary care.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 61

Abstract code

## TIME TO REFERRAL FOR RELATIVELY UNCOMMON CANCER TYPES IN THE NETHERLANDS

Author - Erp, NF van, UMC Utrecht, Utrecht, Netherlands (Presenting author)

Co-author(s) - Ahsmann, NM , Utrecht , Netherlands

Co-author(s) - Bakker, S , Leiden , Netherlands

Co-author(s) - Jongerius, N , Utrecht , Netherlands

Co-author(s) - Kirana, V , Utrecht , Netherlands

Co-author(s) - Rooseboom de Vries, R , Amsterdam , Netherlands

Co-author(s) - Ruiters, SL de , Utrecht , Netherlands

Co-author(s) - Singor, L , Utrecht , Netherlands

Co-author(s) - Smeets, SM , Utrecht , Netherlands

Co-author(s) - Wiertsema, WHA , Groningen , Netherlands

Co-author(s) - Peeters, PHM , Utrecht , Netherlands

Co-author(s) - Wit, NJ de , Utrecht , Netherlands

Co-author(s) - Helsper, CW , Utrecht , Netherlands

Topic Cancer

Keywords

**Background:** Early recognition and efficient work-up of symptomatic cancer in primary care is important to reduce disease burden and optimize clinical outcomes. Aim of this study is to assess time to referral for Dutch patients with five relatively uncommon cancers and to identify characteristics associated with a relatively long diagnostic interval in primary care.

**Methods:** Retrospective observational study using manual exploration of anonymized free-text and coded routine primary care data of six Dutch primary care registries (approximately 730.000 patients in total). Patients diagnosed with stomach-, oesophageal-, kidney-, bladder- and ovarian cancer between 2010 and 2015 were included. For patients who presented symptomatically at their general practitioner (GP), time from first GP consultation to referral (IPC) was determined. Patient- and presentation characteristics were collected. For these characteristics IPC duration was stratified and uni- and multivariable logistic regression analyses were performed to assess their association with relatively long duration ( $\geq 75^{\text{th}}$  percentile value).

**Results:** Definitive results will be available at Ca-PRI 2018. Preliminary results are available for 90 symptomatic patients with gastric cancer, 122 with oesophageal cancer, 42 with kidney cancer, 194 with bladder cancer and 112 with ovarian cancer. Median durations to referral varied from 5 days (IQR 1-61) for kidney cancer to 18 days (IQR 2-74) for oesophageal cancer patients. Absence of cancer alarm symptoms was associated with relatively long duration for all cancer types: OR 3.1 (95%CI 1.2-8.2) for ovarian cancer to OR 8.5 (95%CI 1.5-49.5) for kidney cancer. Female gender was associated with long duration to referral for bladder cancer (OR 2.9 (95%CI 1.4-5.9)).

**Conclusions:** Time to referral for relatively uncommon cancer types in the Netherlands is generally short. Median time to referral is shortest for kidney cancer patients and longest for oesophageal cancer patients. Relatively long time to referral is mainly associated with absence of alarm symptoms.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 62

Abstract code

## **EXPLORING SYMPTOM EXPERIENCE AND HEALTH LITERACY IN THE TIMELY DIAGNOSIS OF OESOPHAGEAL AND GASTRIC CANCER: A QUALITATIVE STUDY**

Author - Humphrys, E, University of Cambridge, Cambridge, United Kingdom (Presenting author)

Co-author(s) - Burt, J , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Rubin, G , Newcastle University , Newcastle , United Kingdom

Co-author(s) - Emery, JD , University of Melbourne , Melbourne , Australia

Co-author(s) - Walter, FM , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

### **Background**

In recent years increasing symptom awareness and understanding, encouraging prompt help-seeking and facilitating timely referral have been a focus for improving cancer outcomes. This is particularly relevant for cancers such as oesophageal and gastric (OG) where 5-year survival is less than 20%. The aim of the qualitative phase of this mixed-methods study was to explore OG cancer diagnosis from the patient's perspective.

### **Methods**

Patients aged 18 and over and newly diagnosed with OG cancer at two hospitals in the East and Northeast of England were consecutively approached over an 18-month period. Participants completed a study questionnaire and were purposively sampled by location, gender, age and cancer for semi-structured, face-to-face in-depth interviews within 10 weeks of diagnosis. Interviews explored symptom experience, help-seeking, and aspects of health literacy (accessing, understanding and using health information, and navigating healthcare systems). Data were analysed using thematic analysis.

### **Results**

26 interviews were conducted with participants aged 55-88, 18 male, 13 East of England, 15 with oesophageal cancer. 'Heartburn', 'indigestion' and 'reflux' were common descriptions used by participants to describe their experiences of multiple upper gastrointestinal symptoms, from mild soreness through to severe pain. Many participants used proton-pump-inhibitors to alleviate symptoms, with help-seeking usually prompted by increased severity of symptoms or perceived lack of control. When engaging with healthcare professionals most participants felt able to talk with them but some felt unsupported, describing how they consulted multiple times prior to referral. Most participants showed confidence in navigating the healthcare system, from using community pharmacies through to primary and secondary care.

### **Conclusions**

This is the first study to qualitatively explore timely diagnosis of OG cancer from a patient's perspective and how health literacy may influence the pathway. The findings could be important for developing targeted awareness campaigns and enhancing GP/patient symptom communication.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 63

Abstract code

## **TIMELY DIAGNOSIS OF OESOPHAGEAL AND GASTRIC CANCER: QUANTITATIVE RESULTS FROM A MIXED-METHODS STUDY**

Author - Humphrys, E, University of Cambridge, Cambridge, United Kingdom (Presenting author)

Co-author(s) - Burt, J , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Rubin, G , Newcastle University , Newcastle , United Kingdom

Co-author(s) - Emery, JD , University of Melbourne , Melbourne , Australia

Co-author(s) - Walter, FM , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

### **Background**

Over 15,000 people are diagnosed with oesophageal and gastric (OG) cancer in the UK each year, with less than 20% surviving for 5 years. Facilitating timely diagnosis is therefore a priority for improving outcomes for these cancers. The quantitative phase of this mixed-methods study aimed to explore factors influencing the timely diagnosis of OG cancer.

### **Methods**

Patients aged 18 and over and newly diagnosed with OG cancer at two hospitals in the East and Northeast of England were consecutively approached over an 18-month period. Participants completed a study questionnaire exploring socio-demographic factors, symptoms, help-seeking and aspects of health literacy (Health Literacy Questionnaire, Osborne *et al*, 2013, scored 1-5). Data were analysed using descriptive statistics and univariable analyses.

### **Results**

127 participants were recruited (39% response rate), 109 (86%) within 6 weeks of diagnosis. Participants were aged 44–96 (median 71) and predominantly males (n=102, 80%). Most had oesophageal cancer (n=102, 80%), and 64 (50%) were late-stage at diagnosis. Commonest symptoms experienced prior to diagnosis varied between cancers (oesophageal: difficulty swallowing (n=66, 65%) and painful swallowing (n=55, 54%); gastric: fatigue/tiredness (n=20, 80%) and weight loss (n=13, 53%)).

Participants demonstrated high health literacy ability in engaging with healthcare providers (mean 4.18) and understanding information (mean 4.28). The mean time from noticing the initial symptom subsequently reported to a healthcare professional, to diagnosis (Total Diagnostic Interval, TDI) was 79.5 days (IQR 44.5-140.5, n=112). Univariable analysis showed that decreased appetite (p=0.027) and upper abdominal pain (p=0.034) were associated with a longer TDI, although the effect sizes were small and the analysis could not account for symptom combinations.

### **Conclusions**

This study suggests that patients and doctors may respond less promptly to some symptoms of OG cancer than others. The findings could be important for developing targeted awareness campaigns and promoting timely referral.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 64

Abstract code

## **BREAST CANCER PATIENTS: HOSPITAL AND PRIMARY CARE SHARED CARE**

Author - Gimferrer, N, Consorci Atenció Primària Salut Barcelona Esquerre, Barcelona, Spain  
(Presenting author)

Co-author(s) - Garrell, I , Consorci Atenció Primària Salut Barcelona Esquerre , Barcelona , Spain

Co-author(s) - De la Arada, A , Institut Català de la Salut , Barcelona , Spain

Co-author(s) - Muñoz, M , Hospital Clinic Barcelona , Barcelona , Spain

Co-author(s) - Gómez, M , Hospital Clinic Barcelona , Barcelona , Spain

Co-author(s) - Lozano, R , Hospital Clinic Barcelona , Barcelona , Spain

Co-author(s) - Rodriguez, AB , Hospital Clinic Barcelona , Barcelona , Spain

Topic Cancer

Keywords

### **BACKGROUND:**

To provide breast cancer patients an integral and shared approach between Hospital and Primary Care(PC), offering an holistic follow-up: regular monitoring of relapse, evaluation of cancer therapies' side effects, comorbidities control, psychological support and prevention and health promotion actions strategies.

### **METHODS:**

Disease-free patients once active hospital treatment is completed are considered candidates. Hospital specialists develop a follow-up report describing the characteristics of the tumour, treatments administered and complications, and detail the follow-up level recommended(basic-intermediate-high). Each level schedules a different number of annual visits and of years of hospital follow-up, and one annual PC visit. A standard protocol has been developed, with proposals for actions in different scenarios, in order to register and share the medical visits and performances. Theoretical and practical training is given periodically to all healthcare professionals with specific content, treatments, side effects and monitoring requirements. Support leaders have been identified in each PC centre, done training stays in hospital services, and have the role of leading the program and keeping track of the patients, and helping the PC professionals. Periodical coordination meetings evaluate and adapt the program to the needs identified.

### **RESULTS:**

7(64%) Primary Health Centres are participating, with >100 PC professionals, 1 hospital, 3 gynaecologists, 4 medical oncologists, 2 oncology radiation oncologists, 1 hospital project manager and 1 medical informatics specialist. There are 76 patients included, 47(62%) visits have already been made in PC, 4(5%) patients have not accepted the inclusion in the program, 3(4%) have been discharged because of development of disease recurrence or second malignancy. The program has had good initial acceptance by the centres and the patients.

### **CONCLUSIONS:**

In addition to usual hospital monitoring, patients can benefit from the PC expertise in the global approach centred on the patient instead of on the illness, and on the prevention and promotion of health.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 65

Abstract code

## **DEVELOPMENT AND VALIDATION OF THE AFRICAN BREAST AND CERVICAL CANCER SYMPTOM AWARENESS (ABCCSA) TOOL**

Author - Moodley, Jennifer, University of Cape Town, Cape Town, South Africa (Presenting author)

Co-author(s) - Walter, FM , London , United Kingdom

Co-author(s) - Mwaka, AD , Kampala , Uganda

Co-author(s) - Scott, S , London , United Kingdom

Co-author(s) - Constant, D , Cape Town , South Africa

Co-author(s) - Githaiga, JN , Cape Town , South Africa

Co-author(s) - Stewart, T , London , United Kingdom

Co-author(s) - Payne, AM , Fort Lauderdale , United States of America

Co-author(s) - Cairncross, L , Cape Town , South Africa

Co-author(s) - Somdyala, N , Cape Town , South Africa

Topic Cancer

Keywords

### **Background**

Measurement of cancer symptom awareness in Sub-Saharan Africa (SSA) is hampered by the lack of validated, culturally relevant measurement tools. This study aimed to develop and validate an African Breast and Cervical Cancer Symptom Awareness (ABCCSA) tool.

### **Methods**

Items assessing symptom and risk factor awareness and help-seeking behavior were generated by reviewing the UK Cancer Awareness Measurement (CAM) tools and relevant literature. SSA cancer experts (n = 28) scored items on clarity and relevance to estimate content validity. Cognitive interviews with community participants in Uganda (n= 10) and South Africa (n= 10) assessed faced validity. The tool items were revised and tested for reliability and validity. Community participants in Uganda (n = 68) and SA (n = 72), non-medical university staff (n = 23) and cancer experts in SSA (n =20) completed the revised tool. Internal reliability was measured for the combined groups using Cronbach's alpha ( $\alpha$ ). Test-retest reliability was assessed by administering the questionnaire to the non-medical staff twice over a 2-week period and comparing scores using Intra-Class Correlation (ICC). To assess construct validity the expert and community participant scores were compared using t-tests.

### **Results**

Cognitive interviews and cancer expert review resulted in re-phrasing of many items to improve clarity and 8 items being dropped: - the revised tool comprised 124 items. Internal reliability (Cronbach's  $\alpha$  = 0.79 for breast cancer and 0.80 for cervical cancer) and test-retest reliability of the revised tool were high (ICC coefficient = 0.79,  $p < 0.001$  and 0.74,  $p < 0.001$  for breast and cervical cancer, respectively). Experts had significantly higher scores than community participants for both breast ( $t = 13.585$ ,  $p < 0.001$ ) and cervical cancer ( $t = 4.909$ ,  $p < 0.001$ ) indicating good construct validity.

### **Conclusion**

The ABCCSA is a valid measure of breast and cervical cancer symptom awareness in SSA.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 66

Abstract code

## **INTERNATIONAL VARIATION IN CANCER-SPECIFIC 'ACCESS TO DIAGNOSTICS' DATA: AN INTERNATIONAL CANCER BENCHMARKING PARTNERSHIP STUDY**

Author - Reguilon, Irene, Cancer Research UK, London, United Kingdom (Presenting author)

Co-author(s) - Harrison, Samantha , Cancer Research UK , London , United Kingdom

Co-author(s) - Butler, John , Royal Marsden Foundation Trust , London , United Kingdom

Topic Cancer

Keywords

### **Background:**

Robust and timely data underpins cancer planning and control, shaping the policies and structures of health systems internationally. Access to diagnostics is crucial for ensuring a swift cancer diagnosis and appropriate treatment plan. Previous evidence has shown that delays in diagnosis can impact increased mortality. This International Cancer Benchmarking Partnership (ICBP) project aims to explore the contribution differences in access to diagnostics have on international cancer outcomes. Data is the foundation of international benchmarking, and accurate comparisons rely on its robustness.

### **Methods:**

Mixed methods including online and literature searches and discussion with local contacts were used to explore key diagnostic data variables across the seven participating countries of ICBP phase 2. The identification of routine and national datasets exploring use, capacity, workforce, location and financial variables relating to diagnostics was the primary goal of this scoping exercise. Modalities considered were imaging (PET-CT, CT and MRI) and endoscopy (colonoscopy, flexible sigmoidoscopy and upper GI endoscopy) tests.

### **Results:**

Several gaps and inconsistencies in diagnostics data were identified. Data items are disparately defined and collected, including at differing levels within a health system, making comparisons within and between countries challenging. Limitations in the coverage and reliability of data were raised by local contacts. Linkage of health data is poor or is not well understood within the context of the cancer patient population. The usage and allocation of workforce is poorly documented, especially relating to private- and public-sector differences.

### **Conclusions:**

Health data is disparately collected internationally, with little diagnostic data that can be linked to cancer populations. The data sources and gaps identified add weight to existing efforts to improve data collections and health service planning. International agreement on the key performance indicators, their definitions and how best to organise collected data is required to address gaps and enable robust comparisons.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 67

Abstract code

## INVOLVING THE GENERAL PRACTITIONER DURING CURATIVE CANCER TREATMENT: A SYSTEMATIC REVIEW OF HEALTH CARE INTERVENTIONS.

Author - Perfors, IAA, UMCU, Utrecht, Nederland (Presenting author)

Topic Cancer

Keywords

**Background:** The role of primary care providers in the collaborative care for patients with cancer is expanding. In the post-treatment phase, this role is increasingly recognized and structured. During treatment, however, the role remains largely undefined. This systematic review aims to map the content and effect of interventions aiming to actively involve the General Practitioner (GP) during cancer treatment with curative intent.

**Methods:** Studies were systematically identified from two academic databases (PubMed; EMBASE). Randomized controlled trials (RCTs) focusing on interventions designed to involve the GP during curative cancer treatment were reviewed.

**Results:** Six RCTs were included. Interventions and effects were heterogeneous across studies. Two RCTs implemented interventions where a healthcare worker took initiative for GP contact and four interventions where the patient took initiative for GP contact. In the majority of the studies the risk of bias is classified as medium to high. In addition, three studies show a low uptake of intervention. A positive effect on patient satisfaction with care is indicated by three studies. Subgroup analysis suggest more positive effects for elderly and those with higher mental distress on healthcare use and depression/anxiety, respectively.

**Conclusions:** Studies investigating interventions designed to actively involve the GP during curative cancer treatment are scarce and interventions are diverse. Even though uptake of interventions is generally low, evidence suggests a positive effect of GP involvement on patients satisfaction with care and designated effects for subgroups, but not on outcomes related to quality of life. However, more robust evidence for customized interventions is needed to enable the efficient and effective involvement of the GP during cancer treatment.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 68

Abstract code

## DEVELOPMENT AND USABILITY TESTING OF A VERY BRIEF INTERVENTION FOR PERSONALISED CANCER RISK ASSESSMENT TO PROMOTE BEHAVIOUR CHANGE IN PRIMARY CARE

Author - Mills, K, University of Cambridge, Cambridge, United Kingdom

Co-author(s) - Usher-Smith, JA , University of Cambridge , Cambridge , United Kingdom

(Presenting author)

Co-author(s) - Sutton, S , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Griffin, SJ , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

**Background:** Research has shown that many individuals are unaware of the link between lifestyle and cancer and discussions about lifestyle in primary care rarely mention cancer. Our aim was to develop a very brief intervention incorporating cancer risk which could be implemented within primary care.

**Methods:** We developed a prototype intervention following a literature review and pilot work with patients and healthcare professionals (HCPs). The intervention included a website where individuals could see their personalised cancer risk and a leaflet incorporating behaviour change techniques. We then conducted focus groups and interviews with 66 HCPs involved in delivering prevention activities using normalisation process theory to explore the format and content of the intervention, and barriers and facilitators to its implementation. The focus groups/interviews were audio-recorded and analysed using framework analysis. We used the findings to refine the intervention before 22 HCPs completed an online usability test and provided further feedback via a questionnaire incorporating a modified version of the NoMAD checklist.

**Results:** Suggested changes to the prototype intervention included signposting to local services and websites and the ability to print a summary and re-visit the website. In the usability testing all felt the risk questions and leaflet were clear, and it would be easy to collect the risk information. Over 90% felt the intervention would enable discussion about cancer risk and facilitate setting targets and had the potential to encourage lifestyle change. 91% believed it could easily be integrated into NHS Health Checks. However, only 36% agreed it could be delivered within 5 minutes and only 45% that there would be sufficient resources to support its implementation.

**Conclusions :** We have developed an intervention that is acceptable to HCPs in primary care and could be potentially integrated into NHS Health Checks. However, further work is needed to assess feasibility and potential effectiveness.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 69

Abstract code

## **EVALUATING CANCER DIAGNOSTIC TESTS FOR PRIMARY CARE**

Author - Walter, FM, University of Cambridge, Cambridge, United Kingdom (Presenting author)

Co-author(s) - Emery, J , University of Melbourne , Melbourne , Australia

Co-author(s) - Neal, RD , University of Leeds , Leeds , United Kingdom

Co-author(s) - Lyratzopoulos, Y , University College, London , London , United Kingdom

Co-author(s) - Hamilton, W , University of Exeter , Exeter , United Kingdom

Topic Cancer

Keywords

### **Aims**

To present the findings of a systematic review of methodological frameworks for the evaluation of diagnostic tests and discuss their applicability for studies of diagnostic tests for cancer in primary care. To present the CanTest framework and its novel aspects which make it more suitable for evaluating tests to support earlier detection of cancer in primary care. To discuss the applicability of the CanTest framework to the audience's own work on cancer diagnosis in primary care. To identify potential collaborators working on cancer diagnostics in primary care who wish to apply the CanTest framework.

### **Titles of short talks**

1. A systematic review of methodological frameworks for the evaluation of cancer diagnostic tests
2. The CanTest framework for the evaluation of cancer diagnostic tests for primary care
3. Research methods and designs supporting the CanTest framework

### **Target audience**

Researchers working on cancer diagnosis in primary care; developers of cancer diagnostic tests; clinicians and policy makers interested in cancer diagnostic tests and their evaluation

### **Audience engagement**

We will identify members of the audience who are working on cancer diagnostic test evaluation and discuss how the CanTest framework could be applied to their research. How does the framework fit with their work and does it provide a useful structure to identify the next most relevant research question? What might criteria for progression from one phase of test evaluation to the next be in the context of tests designed ultimately for use in primary care? Are there people interested in collaborating with the CanTest team to learn more about the application of the framework to their work?

Presentation Preference Workshop

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 70

Abstract code

## **BUILDING BRIDGES: VIDEO-ASSISTED COMMUNICATION BETWEEN A CANCER PATIENT, THE GENERAL PRACTITIONER AND THE ONCOLOGIST TESTED IN A RANDOMIZED CONTROLLED TRIAL**

Author - Hansen, Dorte Gilså, University of Southern Denmark, Odense C, Denmark (Presenting author)

Co-author(s) - Trabjerg, Theis B , University of Southern Denmark , Odense C , Denmark

Co-author(s) - Jensen, Lars Henrik , Vejle Hospital , Vejle , Denmark

Co-author(s) - Sisler, Jeffrey , University of Manitoba , Manitoba, Winnipeg , Canada

Co-author(s) - Søndergaard, Jens , University of Southern Denmark , Odense C , Denmark

Topic Cancer

Keywords

### **Background**

The different roles of the general practitioner and the oncologist regarding treatment and rehabilitation during and after cancer treatment are often obscure to patients. Patients may feel uncertain and their health care seeking inappropriate. An innovative and structured way of patient-centered, cross-sectional communication is tested in a RCT regarding clarity of responsibility, and patient-perceived continuity and quality of life during and following cancer treatment. This abstract covers the feasibility of recruitment and intervention.

### **Methods**

Adult patients treated with chemotherapy at the Oncologic Department, Vejle Hospital, have been invited for participation by the oncologist. Secondly, general practitioners of patients in the intervention group were invited for a structured, 10-20 minutes, video-based, common consultation including the patient and the oncologist. Patients in the control group and their GPs were communicated with as usual. The IT solution for communication was fully implemented at the hospital at study start, but a substantial number of the general practices needed installation of a specific screen following patient inclusion. This screen was freely installed.

### **Results**

The first of 85 patients were included MONTH YEAR. The recruitment process, the technology and the implementation of the intervention have been much harder than expected from the pilot-test. We have struggled with various un-expected barriers of for example patient recruitment, acceptance from general practices, and technological problems. The feedback following consultations have been very positive from both patients, GPs and the oncologist.

### **Conclusion**

Recruitment of patients has been hindered due to several factors at the department level. Furthermore, the set-up of the IT systems was prolonged and met resistance from some general practices, and the use was often problematic. It is possible to arrange common consultations thereby bringing patient, GP and external partners together at pre-scheduled timeslots and may be an innovative way of building bridges.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 71

Abstract code

## **ATTITUDES IN PRIMARY CARE TOWARDS FAECAL IMMUNOCHEMICAL TESTS IN PATIENTS AT INCREASED RISK FOR COLORECTAL CANCER: EVIDENCE FROM A UK BASED GENERAL PRACTITIONER SURVEY**

Author - Von Wagner, Christian, UCL, London, United Kingdom (Presenting author)

Co-author(s) - Stoffel, Sandro , UCL , London , United Kingdom

Co-author(s) - Laszlo, Helga , UCLH , London , United Kingdom

Co-author(s) - Sheringham, Jessica , UCL , London , United Kingdom

Co-author(s) - Nicholson, Brian , NHS , Oxford , United Kingdom

Co-author(s) - Freeman, Maddie , UCL , London , United Kingdom

Co-author(s) - Hirst, Yasemin , UCL , London , United Kingdom

Topic Cancer

Keywords

### **Background**

There is increasing interest in using Faecal Immunochemical Test (FIT) to rule-out colorectal cancer (CRC) among patients with high-risk symptoms in primary care but little is known about the attitudes of general practitioners (GP).

### **Methods**

Using a UK-based panel of health professionals, 1024 GPs across England took part in an online survey. Univariable and multivariable logistic regression were used to explore GPs' willingness to use FIT as a rule-out test of CRC compared to the urgent referral pathway.

### **Results**

Just over a third of GPs (n=365) preferred to use FIT as a rule-out test of CRC. Less than half were aware of the current FIT recommendation (n=432) and only 23% (n=236) knew that it could also be used to rule-out CRC. GPs were more likely to prefer FIT as a rule-out test if they were aged 46-55 (OR: 1.98; 1.12-3.49), thought FIT was highly accurate (OR: 1.62, 1.33-1.98), thought high-risk patients will benefit from FIT compared to colonoscopy (OR: 1.41; 1.19-1.67) and also were highly confident in discussing the benefits of FIT with patients (OR: 1.52; 1.27-1.82). GPs were less willing if they had more than 10 urgent CRC referrals in the last year (OR: 0.58; 0.38 - 0.91) and thought that longer consultations will be needed to discuss FIT (OR: 0.80; 0.69 - 0.92). By contrast, work experience in years, previous use of faecal tests and beliefs about ease of implementation in primary care were not associated with GPs' preference to use FIT.

### **Conclusions**

Findings suggest that acceptability of FIT as a rule-out test in primary care with the current knowledge is low. Any potential changes to guidelines about using FIT in a high-risk population are likely to require intensive efforts to increase confidence in the test and knowledge of how to use it in this context.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 72

Abstract code

## DISPARITIES IN BREAST CANCER DIAGNOSIS FOR IMMIGRANT WOMEN IN ONTARIO AND BC: RESULTS FROM THE CANIMPACT STUDY

Author - Lofters, AK, Toronto, Canada (Presenting author)

Co-author(s) - McBride, M , Vancouver , Canada

Co-author(s) - Li, D , Vancouver , Canada

Co-author(s) - Whitehead, M , Kingston , Canada

Co-author(s) - Moineddin, R , Toronto , Canada

Co-author(s) - Jiang, L , Toronto , Canada

Co-author(s) - Grunfeld, E , Toronto , Canada

Co-author(s) - Groome, P , Kingston , Canada

Topic Cancer

Keywords

**Background:** In Canada, clinical practice guidelines recommend mammography for breast cancer screening, but there are gaps in adherence to recommendations for screening, particularly among certain hard-to-reach populations. We compared stage of diagnosis, proportion of screen-detected breast cancers, and length of diagnostic interval for immigrant women versus long-term residents of BC and Ontario.

**Methods:** We conducted a retrospective cohort study using linked administrative databases in BC and Ontario. We identified all women residing in both provinces who were diagnosed with incident invasive breast cancer between 2007 and 2011, and determined who was foreign-born using the Immigration Refugee and Citizenship Canada database. We used descriptive statistics and bivariate analyses to describe the sample and study outcomes. We conducted multivariate analyses (modified Poisson regression and quantile regression) to control for potential confounders.

**Results:** There were 14,198 BC women and 46,952 Ontario women included in the study population; 11.8% and 11.7% were foreign-born respectively. In both provinces, immigrant women were significantly less likely to have a screen-detected breast cancer and had a significantly longer median diagnostic interval than long-term residents. Women from East Asia and the Pacific were less likely to have a screen-detected cancer and had a longer diagnostic interval, but were diagnosed at an earlier stage than long-term residents. In Ontario, women from Latin America and the Caribbean and from South Asia were less likely to have a screen-detected cancer, had a longer median diagnostic interval, and were diagnosed at a later stage than long-term residents. These findings were not associated with access to primary care.

**Conclusion:** There are inequalities in breast cancer diagnosis for Canadian immigrant women despite similar use of primary care. There are also particular immigrant groups that appear to have unique issues that need to be explored in order to effectively reduce these gaps in care.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 73

Abstract code

## **GENERAL PRACTITIONERS' AWARENESS OF THE RECOMMENDATIONS FOR FAECAL IMMUNOCHEMICAL TESTS (FIT) FOR SUSPECTED LOWER GASTROINTESTINAL CANCERS: A NATIONAL SURVEY**

Author - Von Wagner, Christian, UCL, London, United Kingdom (Presenting author)

Co-author(s) - Stoffel, Sandro , UCL , London , United Kingdom

Co-author(s) - Laszlo, Helga , UCLH , London , United Kingdom

Co-author(s) - Sheringham, Jessica , UCL , London , United Kingdom

Co-author(s) - Nicholson, Brian , NHS , Oxford , United Kingdom

Co-author(s) - Freeman, Maddie , UCL , London , United Kingdom

Co-author(s) - Hirst, Yasemin , UCL , London , United Kingdom

Topic Cancer

Keywords

### **Background**

In July 2017, the UK National Institute for Health and Care Excellence (NICE) diagnostic guidance updated the recommendation for quantitative faecal immunochemical tests (FIT) to be used as the test to guide referral for people with low-risk colorectal cancer (CRC) symptoms (DG30). Here, we report findings on awareness of these changes that were part of a wider survey of awareness and attitudes towards the use of FIT in primary care.

### **Methods**

In December 2017, GPs based in England took part in an online survey. We investigated associations between GPs' awareness of the FIT recommendation with previous experience using FIT and faecal occult blood (FOB) tests, number of Two Week Wait (2WW) referrals for CRC that GPs have personally made in the last year, and their sociodemographic and professional characteristics.

### **Results**

Of the 1,024 who completed the survey, 432 (42.2%) were aware of the current FIT recommendation and only 102 (10%) had used it to guide their referrals. Awareness of the FIT recommendation was positively associated with test usage after the NICE update (OR: 12.72, 95%CI 6.86-23.50), being active in research (OR: 1.46, 95%CI 1.02-2.11), having a specialist training (OR: 1.56, 95%CI 1.18-2.07), and negatively associated if they worked in Yorkshire and the Humber (OR: 0.61, 95%CI 0.38-0.99) or North West England (OR: 0.54, 95%CI 0.34-0.86). The number of 2WW referrals, the use of FOBt before the update, age and gender of the GP, the number of years as an active GP, the number of registered patients and the number of GPs working at the same practice were not associated with awareness.

### **Conclusions**

Our findings suggest that the awareness of the updated NICE recommendation for FIT is low among GPs across England. Clear communication strategies are needed to highlight the potential use of FIT for suspected CRC in primary care.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 74

Abstract code

## THE EXPERIENCE OF LIVING WITH AND BEYOND CANCER WITH COMORBID ILLNESS: A QUALITATIVE SYSTEMATIC REVIEW

Author - Cavers, Debbie, University of Edinburgh, Edinburgh, United Kingdom

Co-author(s) - Habets, Liset , Radboud University Medical Centre , Nijmegen , Netherlands

Co-author(s) - Cunningham-Burley, Sarah , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Watson, Eila , University of Oxford , Oxford , United Kingdom

Co-author(s) - Banks, Elspeth , Lanark , United Kingdom

Co-author(s) - Campbell, Christine , Univeristy of Edinburgh , Edinburgh , United Kingdom

(Presenting author)

Topic Cancer

Keywords

**Background:** There is a need to explore the needs of the growing number of people living with and beyond cancer with additional long term chronic conditions, with implications for cancer survivorship management and support. This review aims to identify the qualitative evidence on the experience of cancer and comorbid illness from the perspective of patients, carers and health care professionals to identify psycho-social support needs, experience of health care, and to highlight areas where more research is needed.

**Methods:** PRISMA guidance was used to review the evidence. Relevant research databases were searched using an exhaustive list of search terms. Two reviewers independently screened titles and abstracts and discussed variations. Included articles were subject to quality appraisal before data extraction of article characteristics and findings. Thematic synthesis of extracted findings was undertaken following Thomas and Harden's prescribed method.

**Results:** 29 articles were included in the review covering a range of cancer types and comorbid conditions; with varying time since cancer diagnosis and apparent severity of disease for both cancer and other conditions. Studies are set in developed countries and include the views of patients and professionals but not carers. Few studies focused exclusively on the experience of living with comorbid conditions alongside cancer. Key themes identified included: the interaction between cancer and comorbid conditions; the added symptom burden; illness identities and ageing; self-management; prioritising conditions, and treatment decision-making.

**Conclusions:** In addition to a better understanding of the complex experience of such illness to illuminate developing models of patient-centred care, the review will combine with patient engagement work to inform an interview study with the defined patient group.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 75

Abstract code

## THE IMPACT OF THE WELSH BOWEL SCREENING PROGRAMME ON EMERGENCY PRESENTATION FOR COLORECTAL CANCER

Author - Govil, S, Cardiff University, Cardiff, United Kingdom

Co-author(s) - Lifford, KJ , Cardiff University , Cardiff , United Kingdom (Presenting author)

Co-author(s) - White, C , Public Health Wales , Cardiff , United Kingdom

Co-author(s) - Heard, H , Public Health Wales , Pontyclun , United Kingdom

Co-author(s) - Huws, D , Public Health Wales , Cardiff , United Kingdom

Co-author(s) - Dolwani, S , Cardiff University , Cardiff , United Kingdom

Topic Cancer

Keywords

**Background:** Colorectal cancer (CRC) screening using faecal occult blood testing (FOBT) is effective in reducing mortality. However, more than 20% of all CRC cases present as an emergency due to bowel obstruction which is associated with poorer outcomes. The Welsh bowel screening programme, using biennial FOBT, has been running since October 2008 for people aged 60-69 years, since extended to 74 years. Previous data from an English site showed a decrease in mortality and emergency presentations of CRC. The impact of the Welsh bowel screening programme on emergency presentations for CRC is not known.

**Methods:** Welsh participants diagnosed with CRC aged 60-74 years between 1999 and 2015 were identified from the Welsh Cancer Intelligence and Surveillance Unit register. Data was extracted from the Patient Episode Database for Wales and Bowel Screening Wales to determine route to presentation and screening uptake. Other individual, geographical and cancer-related variables were also examined for their association with emergency presentation. The primary analysis compared emergency presentation for CRC prior to and after the implementation of screening.

**Results:** Preliminary analyses showed that 15059 people were diagnosed with CRC, with data available for route to diagnosis on 13022 (62% male, 38% female; mean age at diagnosis 67.7 years). The proportion of those presenting with CRC as an emergency prior to the screening programme implementation was greater than those presenting as emergencies after implementation. However, this needs to be interpreted in the context of 1) screening uptake differences over time, 2) stage differences at diagnosis over time, and 3) overall absolute numbers of cancers detected.

**Conclusions:** Preliminary analyses suggest that the implementation of screening has reduced the proportion of emergency presentations for CRC, but further interrogation of the data is needed to aid interpretation. The impact of demographic and clinical factors on emergency presentation will be discussed.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 76

Abstract code

## **PUBLISH OR PERISH: MAPPING PUBLICATIONS OF CANCER IN PRIMARY CARE IN THE LAST 5 YEARS**

Author - Chima, S, Primary Care Collaborative Cancer Clinical Trials Group (PC4), Melbourne, Australia (Presenting author)

Co-author(s) - Milley, K , Primary Care Collaborative Cancer Clinical Trials Group (PC4) , Melbourne , Australia

Co-author(s) - Cummings, KL , Primary Care Collaborative Cancer Clinical Trials Group (PC4) , Melbourne , Australia

Co-author(s) - Emery, JD , University of Melbourne , Melbourne , Australia

Topic Cancer

Keywords

### **Background:**

The role of primary care in cancer is increasingly recognised as a vital component of cancer services world-wide. The Primary Care Collaborative Cancer Clinical Trials Group (PC4) is an Australian based organisation focused on increasing the number of cancer in primary care clinical trials. An important area for PC4 is to identify under-represented and emerging areas to develop targeted studies. The aim of this study was to map the distribution of publications about cancer in primary care to recognize gaps in current literature and inform future research directions.

### **Methods:**

The tailored search strategy included primary and secondary studies as well as narrative articles between 2013-2017. Titles and abstracts of 2,567 papers were reviewed. The research areas were mapped across the cancer continuum and further categorised by cancer type, country, study type and journal impact factor (IF).

### **Results:**

1,715 papers were included, which were published in 562 journals. Journal IF ranged from 0.09 to 187, but 82.7% were published in journals with an IF of less than five. Cross-sectional studies represented 18% of publications (primarily surveys), 12% were narrative and 5% were RCTs. Across the cancer continuum 12% were prevention, 19% screening, 38% diagnostic, 26% survivorship and 5% palliative care. The top three cancer types investigated were colorectal, breast and lung. The USA produced the most publications but based on population size Denmark, UK and Australia were the top three publishers.

### **Conclusions:**

To the best of our knowledge, this is the first attempt to map cancer in primary care research outputs. It has provided a foundation to better understand the distribution of primary care research across the cancer continuum. It highlights to both PC4 and the broader research community the need for greater focus on prevention and palliative care studies, and improve efforts to increase the number of trials.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 77

Abstract code

## PROSTATE CANCER FOLLOW-UP CARE IN SECONDARY AND PRIMARY HEALTH CARE (PROSPEC STUDY): STUDY PROTOCOL FOR A RANDOMISED CONTROLLED TRIAL

Author - Wollersheim, Barbara, AVL-NKI, Amsterdam, Nederland (Presenting author)

Co-author(s) - Weert, H.C.P.M. van , AMC , Amsterdam , Nederland

Co-author(s) - Asselt, K.M. van , AMC , Amsterdam , Nederland

Co-author(s) - Poel, H.G. van der , AVL-NKI , Amsterdam , Nederland

Co-author(s) - Aaronson, N.K. , AVL-NKI , Amsterdam , Nederland

Co-author(s) - Poll-Franse, L.V. van de , AVL-NKI , Amsterdam , Nederland

Co-author(s) - Boekhout, A. , AVL-NKI , Amsterdam , Nederland

Topic Cancer

Keywords

**Background:** Prostate cancer is the most common cancer in men in the Netherlands. Currently, patients who have completed primary treatment for localised prostate cancer are included in a specialist-based follow-up care programme. However, with the increasing number of prostate cancer survivors and with the competing demands on cancer specialists' time and resources, it is necessary to optimise the current organization of follow-up care. Since prostate cancer survivorship requires long-term physical and psychosocial monitoring, there is a need for a more sustainable model. Given the older age of many prostate cancer survivors, primary care based follow-up may enhance the management of comorbid conditions. General practitioners, who traditionally play a crucial role in providing continuous and comprehensive care for most chronic disease patients, could similarly consider the role of providing survivorship care to cancer survivors. This paper describes the study protocol for a randomised controlled trial of a primary care based follow-up programme for prostate cancer survivors in the Netherlands.

**Methods/design:** This study will compare specialist-based (usual care) versus general practitioners-based (intervention) follow-up care of prostate cancer survivors who have completed primary treatment (prostatectomy or radiotherapy) for localized prostate cancer. Eligible men will be randomised (1:1) to the current hospital follow-up care (N=135) or intervention (N=135), and will be followed during a two-year study period. The two arms will be compared in terms of adherence to the prostate cancer surveillance guideline, the time from a biochemical recurrence to retreatment decision-making, the management of treatment-related side effects, health-related quality of life, anxiety, continuity of care, and cost-effectiveness. The outcome measures will be assessed prior to randomisation, and at 8, 16, and 24 months after randomisation.

**Discussion:** This study will provide information regarding the (cost-)effectiveness of a primary care-based follow-up programme for prostate cancer survivors.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 78

Abstract code

## HOW DOES THE HEALTH LITERACY OF DANISH CANCER PATIENTS INFLUENCE THEIR INTERACTION WITH THEIR GP?

Author - Petersen, Gitte Stentebjerg, Danish Cancer Society, Copenhagen, Denmark (Presenting author)

Co-author(s) - Laursen, Soren , Danish Cancer Society , Copenhagen , Denmark

Topic Cancer

Keywords

### *Background:*

The Danish Cancer Society conducts the largest and most comprehensive survey of Danish cancer patient's experiences across the entire cancer care pathway from initial diagnosis, treatment and after care. A subseries of questions address issues of how patients experience the involvement of GP's in their cancer trajectory.

This presentation will focus on the rarely studied issue of how the health literacy (HL) of cancer patients (i.e. the degree to which individuals have capacity to obtain, process, and understand basic health information and services) influences the patients' perception of their consultation with GP's, the trust in their GP, and perceived delay in general practice.

*Methods:* The data presented is from the third nationwide population-based survey of Danish cancer patients' perception of quality of cancer care. A population of more than 10.000 patients registered with a first-time cancer diagnosis from 1<sup>st</sup> of July 2016 until 20<sup>th</sup> of December 2016 was sampled from *The Danish National Registry of Patients*. In total, 5.389 (52%) returned the questionnaire containing 129 questions. HL is measured by 4 scales from the validated Health Literacy Questionnaire (HLQ) by Osborne, et al (2013).

### *Results:*

All results will be presented at the conference. Analysis of data is currently ongoing.

Preliminary findings are:

No difference between cancer patients level of HL and their propensity to consult their GP with symptoms

Patients that experience GP delay as too long have lower HL

Patients that are most satisfied with their GP have the highest HL

### *Conclusions:*

Our preliminary findings indicate that further efforts to improve patient-centred primary care and tailoring communication to those patients with low HL is necessary. Recognition of and properly addressing a patient's health literacy in general practice may save time and effort and improve patient satisfaction and health outcomes.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 79

Abstract code

**IMPLEMENTATION OF A TIME OUT CONSULTATION IN PRIMARY CARE BEFORE TREATMENT DECISION FOR PALLIATIVELY TREATED CANCER PATIENTS: A MIXED METHODS PILOT STUDY EVALUATING PATIENTS' AND PHYSICIANS' EXPERIENCES.**

Author - Noteboom, Eveline, UMC Utrecht, Utrecht, Nederland (Presenting author)

Co-author(s) - Wall, Elsken van der , UMC Utrecht , Utrecht , Nederland

Co-author(s) - Quality of Life group, Quartz , Elkerliek Hospital , Helmond , Nederland

Co-author(s) - Wit, Niek de , UMC Utrecht , Utrecht , Nederland

Co-author(s) - Helsper, Charles , UMC Utrecht , Utrecht , Nederland

Topic Cancer

Keywords

*Background:* Increasing complexity of cancer treatment choices and the need to personalize treatment have increased the urgency for shared decision making (SDM). To improve personalized decision making and to facilitate continuous general practitioners' involvement we developed a "Time Out consultation" (TOC), performed in primary care before cancer treatment decision. We present the first experiences with a pilot implementation of a TOC in cancer care.

*Methods:* TOC for patients with lung or gastro-intestinal cancer, treated with palliative intent, was implemented in the Netherlands from April until October 2016. Evaluation included mixed-methods analyses of questionnaires and semi-structured interviews among patients, their GPs and treating physicians.

*Results:* 40 patients were offered a TOC, 31 (78%) of whom had a TOC. Patients, GPs and treating physicians expressed added value for all the steps of the SDM process, including awareness of choice, reflection on and preparation for treatment decision and making an informed shared decision. In interviews, added value was ascribed to "an extra moment outside the hospital to think about treatment options, wishes and to discuss uncertainties". In general, experiences with implementation were valued positive.

*Conclusion:* First experiences with implementation of TOC in primary care to palliatively treated patients with lung or gastro-intestinal cancer, suggest that implementation is feasible and considered of added value for the SDM process, according to most patients and physicians. More research is needed to confirm and elaborate on these findings.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 80

Abstract code

## **A QUALITATIVE STUDY OF THE PRESENTATION OF POTENTIAL LUNG CANCER SYMPTOMS IN SMOKERS**

Author - Hendry, Annie, Bangor University, Bangor, United Kingdom (Presenting author)

Topic Cancer

Keywords

### **Title**

A qualitative study of the presentation of potential lung cancer symptoms in smokers

### **Authors**

Hendry, A. Hiscock, J. Neal, RD.

### **Background**

Previous research has shown that smokers often delay visiting their GP with chest symptoms. As most cases of lung cancer are attributable to smoking, this project sought to explore the reasons behind those delays. This presentation will focus on participants' experiences of their symptoms and the factors which most influenced their decision making in seeking primary care.

### **Methods**

40 qualitative interviews were carried out with a purposive sample of recently diagnosed lung cancer patients in North Wales, followed by three focus groups with current smokers. The interviews were designed to explore the experiences of lung cancer patients with particular reference to patient intervals and smoking related factors. Topic guides for the interviews were built upon evidence gathered from systematic and narrative literature reviews. All interviews were fully transcribed and analysed using Nvivo software.

### **Results**

Analysis shows the complexity of patient intervals and that consulting decisions are influenced by a variety of factors. A lack of symptom awareness or a tendency to normalise symptoms was apparent in participants who had gradually accommodated their worsening health. Others believed that new symptoms were due to pre-existing health problems or were 'normal for smokers'. Decreased risk perception and views on legitimate help seeking were also a feature of participant's accounts.

### **Conclusion**

This study has found new and important insights into the consulting decisions of people who smoke and experience cancer symptoms. This deeper understanding will allow for further research into the development of interventions designed to encourage primary care usage potentially facilitating earlier diagnosis and improved outcomes.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 81

Abstract code

**“IT IS IMPORTANT THAT THE PROCESS GOES QUICKLY, ISN'T IT?” A QUALITATIVE MULTI-COUNTRY STUDY OF COLORECTAL OR LUNG CANCER PATIENTS' NARRATIVES OF THE TIMELINESS OF DIAGNOSIS AND QUALITY OF CARE**

Author - Malmström, Marlene, Lund University and Region Skåne, Lund, Sweden

Co-author(s) - Bernhardson, Britt-Marie , Karolinska Institutet , Stockholm , Sweden

Co-author(s) - Hajdarevic, Senada , Umeå University , Umeå , Sweden

Co-author(s) - Eriksson, Lars , Karolinska Institutet , Stockholm , Sweden

Co-author(s) - Andersen, Rikke , Aarhus University , Aarhus , Denmark

Co-author(s) - MacArtney, John , University of Oxford , Oxford , United Kingdom (Presenting author)

Topic Cancer

Keywords

*Background*

The emphasis on early diagnosis to improve cancer survival has been a key factor in the development of cancer pathways across Europe. The aim of the study was to explore how the emphasis on early diagnosis and timely treatment is reflected in patient's narratives of care, from the first suspicion of colorectal or lung cancer to their treatment.

*Method*

We recruited 155 adult patients in Denmark, England and Sweden ( $\geq 18$  years) via hospitals and social media, who were within six months of being diagnosed with lung or colorectal cancer. Data were collected via semi-structured narrative interviews and analysed using a thematic approach.

*Results*

Participants' accounts of quality of care were closely related to how quickly (or not) diagnosis, treatment and/or healthcare processes went. Kinetic metaphors as a description of care (such as treadmill or roller coaster) could be interpreted positively as participants were willing to forgo some degree of control and accept disruption to their lives to ensure more timely care. Drawing on wider cultural expectations of the benefits of diagnosing and treating cancer quickly, some participants were concerned that the waiting times between interventions might allow time for the cancer to grow.

*Conclusion*

Initiatives emphasising the timeliness of diagnosis and treatment are reflected in the ways some patients experience their care. However, these accounts were open to further contextualisation about what the speed of diagnosis or healthcare processes meant for evaluating the quality of their care. Healthcare professionals could therefore be an important patient resource in providing reassurance and support about the timeliness of a patient's diagnosis or treatment.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 82

Abstract code

## **BUILDING BRIDGES BETWEEN PRIMARY AND SECONDARY CARE: IS SPEED DATING AN OPTION?**

Author - Harrison, Samantha, London , United Kingdom

Co-author(s) - Nekhlyudov, Larissa , Brigham & Women's Hospital/Dana-Farber Cancer Institute, Harvard Medical School , Boston , United States of America (Presenting author)

Co-author(s) - Ireland, Jill , Cancer Research UK , London , United Kingdom (Presenting author)

Topic Cancer

Keywords

### **Aims**

To review where primary and secondary care interact along the cancer trajectory, highlighting barriers to effective communication and care coordination

To describe and share lessons learnt from a novel 'speed dating' intervention for earlier cancer diagnosis referral pathways between primary and secondary care

To host group discussions, focusing on addressing research gaps and approaches used in other countries to encourage communication

To brainstorm and promote international collaborations to advance research in this field

Quality patient-centred cancer care relies on close collaboration and communication between primary and secondary care. Working together is vital to providing coordinated and integrated approaches, ensuring the best patient experience across this interface and achieving optimal cancer outcomes. Barriers experienced between these groups have been described, yet, there are still gaps in communication and coordination.

A simple, but novel initiative aimed at tackling these barriers are 'speed dating' events. **Cancer Research UK Facilitators** have run these events with a diverse group of health care professionals, including GPs, community nurses, specialists, among others. Event feedback highlights that speed dating offers a relaxed and informal opportunity for a diverse range of health professionals to ask questions and build relationships. These events may also help to establish processes to the implementation of timelier cancer pathways and aid communication between providers.

### **Presentations**

**Primary and secondary care communication across the cancer trajectory: research insights**

**Facilitating primary and secondary speed dating: lessons learnt from a Cancer Research UK intervention Discussion**

**What priority research gaps should be addressed? What other local initiatives have facilitated communication between primary and secondary care? Are there opportunities for international collaboration? Audience: Primary/secondary care clinicians, allied health professionals, researchers, patients**

**Engagement: The workshop offers an opportunity to understand the state of communication between primary and secondary care, share learnings from an UK initiative, learn from other countries and to explore future research collaborations.**

Presentation Preference Workshop

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 83

Abstract code

## **SECOND PRIMARY CANCERS: A MIXED-METHODS SYSTEMATIC REVIEW OF PATHWAYS TO DIAGNOSIS**

Author - Bikker, Annemieke, University of Edinburgh, Edinburgh, United Kingdom (Presenting author)

Co-author(s) - Kanguru, L , Edinburgh , United Kingdom

Co-author(s) - Cavers, D , Edinburgh , United Kingdom

Co-author(s) - Barnett, K , Edinburgh , United Kingdom

Co-author(s) - Brewster, D , Edinburgh , United Kingdom

Co-author(s) - Weller, D , Edinburgh , United Kingdom

Co-author(s) - Campbell, C , Edinburgh , United Kingdom

Topic Cancer

Keywords

### Background

A second primary cancer (SPC) is a new primary cancer that occurs in the same or a different site, but has a different pathology to the first cancer. As more people survive an initial cancer diagnosis, the incidence of SPCs has increased globally. However, there is limited understanding of the pathways to diagnosis of an SPC, and the associated patients' and health practitioners' experiences.

### Methods

We searched ten electronic databases, including Medline, Embase and Psychinfo for relevant articles, with no date or language restrictions. Titles, abstracts and full-text were independently screened by two reviewers against pre-specified inclusion and exclusion criteria. Two reviewers carried out data extraction and quality assessment using modified Critical Appraisal Skills Programme (CASP) tools. A narrative synthesis approach was adopted.

### Results

Forty nine of the 25,116 studies retrieved by our search met the inclusion criteria. The most commonly reported SPCs were breast, lung, colorectal, and melanoma (n= 15, 7, 5, 4 respectively). All included studies reported on the mode of detection of the SPC (30 symptomatic presentation, 18 screen detected, 34 other modes). The routes to detection (whether the SPC was diagnosed during routine follow-up/surveillance, or self-referral) varied by cancer type. Very few studies reported the interval between presentation of the SPC symptom and diagnosis. Only two studies described provider experiences of diagnosis of an SPC; no study reported on the patients' experiences. Although many studies provided a definition of an SPC, these varied across the included studies, making comparability difficult.

### Conclusions

This study provides early insights into diagnosis of an SPC. It has also identified that there is a dearth of quantitative and qualitative evidence on the pathways to diagnosis of an SPC: primary studies are much needed to inform the development of interventions and strategies that target the pathways to diagnosis for an SPC.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 84

Abstract code

**EXAMINING THE IMPACT OF MULTIMORBIDITY ACROSS THE CANCER CARE CONTINUUM  
– A DATA LINKAGE STUDY INVESTIGATING BOTH COLORECTAL AND LUNG CANCER.**

Author - Barnett, Karen, University of Edinburgh, Edinburgh, United Kingdom (Presenting author)

Co-author(s) - Williams, Linda , Edinburgh , United Kingdom

Co-author(s) - Weller, David , Edinburgh , United Kingdom

Co-author(s) - Brewster, David , Edinburgh , United Kingdom

Co-author(s) - Guthrie, Bruce , Dundee , United Kingdom

Co-author(s) - Mercer, Stewart , Glasgow , United Kingdom

Co-author(s) - Hubbard, Gill , Stirling , United Kingdom

Co-author(s) - Ward, Hester , Edinburgh , United Kingdom

Co-author(s) - Campbell, Christine , Edinburgh , United Kingdom

Topic Cancer

Keywords

### Background

Cancer survival rates in Scotland are among the poorest in Europe. Multimorbidity has huge potential to influence all stages of cancer care: current evidence has focused on treatment patterns and survival, with limited evidence on the impact of multimorbidity on diagnostic pathways.

### Aim

A data-linkage study to examine the impact of multimorbidity across the cancer continuum among colorectal and lung cancer patients including; screening participation, cancer stage at diagnosis, treatment and survival.

### Methods

Patients aged >17 years diagnosed with colorectal or lung cancer between 2010 and 2014 were identified from the Scottish Cancer Registry. A proxy measure for multimorbidity was calculated using national prescribing data. Descriptive, univariate and multivariable regression analyses, adjusting for demographic and clinical variables, were conducted to explore the association between cumulative/individual morbidities and stage, treatment, one-year survival, all-cause/cancer specific mortality, and screening participation (colorectal).

### Results

We identified 19,043 (55% male) colorectal and 25,678 (51% male) lung patients - median (interquartile range) number of conditions were; 3 (1-6) and 5 (2-7), respectively. Logistic regression showed no association between multimorbidity and late stage among colorectal cancer patients [OR 1.00 (0.99, 1.01),  $p=0.77$ ], but a statistically significant reduced risk of late stage among lung cancer patients [adjusted OR 0.95 (0.94, 0.96),  $p<0.001$ ]. Multimorbidity was significantly associated with a reduced likelihood of receiving treatment (surgery, chemotherapy or radiotherapy) for both colorectal and lung cancer patients [adjusted ORs 0.94 (0.93, 0.96),  $p<0.001$ , and 0.95 (0.94, 0.96),  $p<0.001$ , respectively]. Additional results relating to survival, mortality and screening participation will be presented, including results relating to the impact of individual morbidities.

### Conclusions

Results will provide a deeper insight into the impact of multimorbidity on cancer outcomes and help to inform cancer referral guidance for GPs following a widespread call for improvements in

clinical practice guidelines to take better account of multimorbidity.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 85

Abstract code

**'LATE EFFECTS OF CANCER (TREATMENT)' - ACCORDING TO THE SURVEY  
DONEERJEERVARING.NL**

Author - Engelen, Vivian, Nederlandse Federatie van Kankerpatientenorganisaties (NFK), Utrecht, Nederland (Presenting author)

Co-author(s) - Velting, Mirjam , Borstkankervereniging Nederland (BVN) , Utrecht , Nederland

Topic Cancer

Keywords

### **Background**

More people survive from cancer. Therefore, it is possible to understand the possible effects cancer (treatments) can have over time. The Dutch Federation of Cancer Patients (NFK) wants to know to what extent (ex-)cancer patients experience late effects, how these patients are dealing with these effects and what level of understanding is they experience within their family, friends and at work.

### **Methods**

In October 2017, a nationwide survey was conducted via 'share your experience' ([www.doneerjeervaring.nl](http://www.doneerjeervaring.nl)). More than 3600 (ex-)cancer patients completed the survey.

### **Results**

24% of the respondents never heard of late effects. Late effects were experienced by 65% of the respondents. The most common late effects experienced are fatigue (68%), reduced physical fitness (54%), sexual problems (44%), concentration problems (40%) and memory problems (37%).

Most of the respondents (73%) talked about the late effects they experience with their partners, family or friends. Many (56%) engage in sports or exercise and 55% makes changes to their activities to prevent overload.

Respondents express that they mainly experience limitations from late effects when participating in activities relating to 'hobby/sport' (67%) and 'work/school' (61%).

In relation to late effects, respondents generally experience understanding within their family and friends. This is in contrast to their work environment which seems to be less understanding.

### **Conclusions**

We conclude that the majority of (ex-)cancer patients experience late effects (of various nature) from cancer (treatments). It is important that both healthcare providers and patients understand that late effects can occur so should these effects appear they can be dealt with a timely, appropriate (specialized) treatment, if necessary.

Notable are the results relating to work. A large group of (ex-)cancer patients feels limited at work due to late effects. They also experience a lack of understanding in their work environment.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 86

Abstract code

## OVARIAN CANCER OUTCOME AND VARIATION IN REFERRAL RATES FOR TRANSVAGINAL ULTRASOUND EXAMINATION FROM GENERAL PRACTICE

Author - Baun, Marie-Louise Ladegaard, Aarhus University , Aarhus , Denmark (Presenting author)

Co-author(s) - Hjertholm, Peter , Aarhus University , Aarhus , Denmark

Co-author(s) - Falborg, Alina Zalounina , Aarhus University , Aarhus , Denmark

Co-author(s) - Petersen, Lone Kjeld , Odense University Hospital , Odense , Denmark

Co-author(s) - Vedsted, Peter , Aarhus University , Aarhus , Denmark

Topic Cancer

Keywords

**Background & Aim:** Ovarian cancer (OC) is the seventh most common cancer in women worldwide. As the disease is often diagnosed at a late stage, OC has a poor prognosis. In Denmark, more than 60% are diagnosed in FIGO stages III and IV with a 5-year survival of 30% and 15%, respectively, compared to 87% in FIGO I.

Knowledge is sparse about the consequences of variation in referral rates to transvaginal ultrasound (TVU) examination through general practice.

We aim to investigate the association between referral rates to TVU examination in general practice and OC outcomes in Denmark.

**Method:** We conducted a national register-based cohort study based on data collected in 2004-2014 and included women who were gynaecological cancer-free, living in Denmark and aged  $\geq 40$  years. The analyses consisted of two steps. First, we ranked the women's general practices into four groups based on their annual TVU referral rate. Second, these groups were used as exposure for both OC stage distribution and radical surgery in the following years, and results were compared in the four groups.

**Preliminary results:** We found an almost three-fold higher referral rate and a more favorable stage distribution among the general practices that referred the most compared to the group who referred the least. The analysis is ongoing, and detailed results will be presented.

**Conclusions:** Variation in the referral to TVU from general practice may have consequences for OC. This study will provide an evidence base for the benefits of direct access to TVU through general practice.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 87

Abstract code

## **UNDERLYING ASSUMPTIONS AND MECHANISMS ABOUT THE DETECT CANCER EARLY (DCE) PROGRAMME IN SCOTLAND**

Author - Calanzani, N, University of Edinburgh, EDINBURGH, United Kingdom (Presenting author)

Co-author(s) - Weller, D , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Campbell, C , University of Edinburgh , EDINBURGH , United Kingdom

Topic Cancer

Keywords

**Background:** The Detect Cancer Early (DCE) Programme was launched in 2012 in Scotland with the aim to improve cancer survival. A multi-stage theory-based evaluation of both its processes and outcomes was developed: assumptions and mechanisms about a programme are first made explicit and then investigated. This abstract describes findings in the development of the process evaluation of the DCE programme.

**Methods:** The UK Medical Research Council's Framework for process evaluation of complex interventions guided the study. 159 policy documents informed the development of a logic model which was refined after nine interviews with programme stakeholders. Interviews also resulted in an understanding of DCE's programme theory, specifically elucidation of several underlying assumptions and mechanisms. Implementation outcomes (feasibility, acceptability, sustainability, appropriateness, sufficiency, reach and communication, and adaptability) were used to operationalise assumptions about implementation, while the COM-B (capability, opportunity, motivation and behaviour) model was used to conceptualise mechanisms.

**Results:** Four key assumptions and mechanisms were identified, to be further investigated in the next stage of process evaluation. Assumptions were: 1) stakeholders bought into the programme and its targets; 2) there was appropriate communication about the programme aims and what was expected from everyone; 3) resources were sufficient to meet objectives; and 4) flexibility was permitted when allocating resources. Mechanisms were: 1) DCE was in line with what professionals perceived as their role; 2) additional funding from the programme resulted in more equipment and/or workforce; 3) increased screening or consultation demand worked as a driver for action; and 4) performance targets showed where resources were needed and increased pressure to act.

**Conclusions:** We have identified underlying assumptions and mechanisms within a national cancer strategy. The process evaluation is now examining the extent to which these are confirmed by stakeholders, through interviews and an online questionnaire. Final results are expected later in 2018.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 88

Abstract code

## **DESIGNING A LUNG HEALTH MEDIA CAMPAIGN USING STAKEHOLDER ANALYSIS WORKSHOPS**

Author - Walabyeki, Julie, University of Hull, Hull, United Kingdom (Presenting author)

Co-author(s) - Skinner, James , University of Hull , Hull , United Kingdom

Co-author(s) - Macdonald, Sara , University of Glasgow , Glasgow , United Kingdom

Co-author(s) - Whitaker, Katriina , University of Surrey , Surrey , United Kingdom

Co-author(s) - Macleod, Una , University of Hull , Hull , United Kingdom

Co-author(s) - Mitchell, Elizabeth , University of Hull , Hull , United Kingdom

Topic Cancer

Keywords

### **Background**

Lung cancer is a leading cause of death in Hull, where incidence and mortality are greater than England as a whole, and higher than in any other region of Yorkshire. In addition, Hull has the highest prevalence of smoking in England. *PEOPLE-Hull* is a Yorkshire Cancer Research funded study that aims to combine primary care and community engagement interventions to improve early diagnosis for lung cancer. As part of this, we used stakeholder workshops to design a media campaign to address negative narratives around lung cancer diagnosis and treatment, and increase awareness and help-seeking around lung health.

### **Methods**

We recruited representatives of the local Hull population (n=40), and conducted two stakeholder analysis workshops with 20 participants each. The workshops consisted of a range of group exercises and tasks, including a) stakeholder assessment of previous media campaigns on lung health and lung cancer, b) discussion of the findings of previous lung cancer research, and c) participant design of mock-ups of locally responsive lung campaigns likely to be effective in the Hull population. These models were then used to design the *PEOPLE-Hull* media campaign.

### **Results**

We will present preliminary findings from the workshops, including the messages around lung health and help-seeking behaviour that most appealed to workshop participants, and will demonstrate mock-ups of the campaigns that the stakeholders designed.

### **Conclusions**

Understanding how best to generate locally responsive campaigns is key to improving awareness and help-seeking for potential cancer symptoms. This presentation will consider the value and implications of using stakeholder analysis workshops, not only for this media campaign, but also for future campaigns delivered to similar populations.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 89

Abstract code

## **VALIDITY OF THE "GUT FEELINGS" OF FAMILY PHYSICIANS FOR THE DIAGNOSIS OF SERIOUS DISEASE AND CANCER: A STUDY PROTOCOL**

Author - Magdalena, Esteva, Majorca Department of Primary Care, Palma de Mallorca, Spain  
(Presenting author)

Co-author(s) - Bernardino, Oliva , Majorca Department of Primary Care , Palma de Mallorca , Spain

Co-author(s) -

Co-author(s) -

Co-author(s) - Gaspar, Tamborero , Majorca Department of Primary Care , Palma de Mallorca , Spain

Co-author(s) - David, Medina , Majorca Department of Primary Care , Manacor , Spain

Co-author(s) -

Co-author(s) - Maria, Martin-Rabadan , Eivissa Department of Health , Eivissa , Spain

Co-author(s) - Carmen, Benede , Servicio Aragonés de salud , Zaragoza , Spain

Co-author(s) - Paola, Herrera , University of Zaragoza , Zaragoza , Spain

Topic Cancer

Keywords

Objectives: 1) To know prevalence of gut feelings in GP consultations and its relation with patient characteristics (sociodemographic and clinical) and professional (gender, experience, type of practice and knowledge of the patient). 2) To assess the validity of gut feeling to predict severe disease and cancer in GP consultations. 3) To estimate the relationship of gut feelings (sense of alarm) with testing and referrals to specialist consultations.

Methods: Prospective observational study of diagnostic validity. Sample size: 2745 patients attending consultation. Variables: Patient (socio-demographic data, type of visit, date, Gut Feelings questionnaire), professional (training, environment, years of experience, scale practice style, Rational-Experiential Inventory, knew the patient?), consultation (cancer related symptoms). Tracking variables 6 months: incident diagnosis of serious disease and cancer, tests, referrals, visits.

Analysis: Objective 1: descriptive analysis of the variables and prevalence of gut feelings, senses of reassurance and alarm. OR calculation and logistic regression with the main variables.

Replicate multivariate subgroup analysis will be evaluated, possible interactions and application of random effects, considering a multilevel model. Objective 2: sensitivity, specificity, PPV and NPV, accuracy, LR + and LR- of the senses of alarm and reassurance. Objective 3: bivariate analysis of main variables of diagnostic test and referral, exploring relation to the sense of alarm and reassurance. Multivariate logistic regression analysis. Secondary

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 90

Abstract code

## **DEVELOPMENT OF PERSONALISED RISK INFORMATION TO PROMOTE SMOKING CESSATION IN A LUNG CANCER SCREENING CONTEXT**

Author - McCutchan, Grace, Cardiff Univeristy, Cardiff, United Kingdom (Presenting author)

Co-author(s) - Brain, K , Cardiff University , Cardiff , United Kingdom

Co-author(s) - Quaife, S , London , United Kingdom

Co-author(s) - Smith, P , Cardiff , United Kingdom

Co-author(s) - Callister, M , Leeds , United Kingdom

Co-author(s) - Crosbie, P , Manchester , United Kingdom

Co-author(s) - Murray, R , Nottingham , United Kingdom

Topic Cancer

Keywords

### **Background**

CT screening and smoking cessation have additive effects on reducing lung cancer mortality. Despite widespread adoption of CT screening in North America, several important questions remain about implementation, including how to most effectively embed smoking cessation support into lung cancer screening programmes. This study aimed to explore participant views and preferences regarding different formats for presenting personalised risk information to support smoking cessation in a lung cancer screening context.

### **Methods**

An online survey was circulated to a panel of current smokers to elicit preferences regarding visual format (bar chart, pictogram, pie chart), time frame (3, 5, 7 or 10 years), and gain versus loss framed written statements relating to personalised risk information. Further, three focus groups with current smokers and recent quitters (within one year) over the age of 55, living in areas of deprivation are being conducted in January/February 2018 to gauge format preferences, comprehension (including relative vs absolute risk and time frame) and potential influence of personalised risk information on motivation to quit smoking.

### **Results**

Findings from the online survey with eight smokers indicated preferences for displaying personalised risk as pictograms, highlighting risk reduction in a contrasting colour, and coupled with gain framed statements. Preliminary focus group findings suggest a preference for a shorter time frame for risk information, and that scan images that were more representative of their heart or lungs may motivate a quit attempt.

### **Conclusion**

Pictograms and scan images displaying personalised risk information with positively framed statements were preferred by smokers. This work will inform the development of materials to be tested in a funded trial of personalised risk information vs standard best care as methods to support smoking cessation in a lung cancer screening context.

Presentation Preference E-poster

Audio/Visual Equipment



Awards

Additional information

Abstract nr. 91

Abstract code

## **INCIDENCE OF LOCAL BREAST CANCER RECURRENCE: A SYSTEMATIC REVIEW**

Author - Korevaar, Joke, NIVEL, Utrecht, Netherlands (Presenting author)

Co-author(s) - Spronk, Inge , NIVEL , Utrecht , Nederland

Co-author(s) - Burgers, Jako , CAPHRI , Maastricht , Netherlands

Co-author(s) - De Bock, Trudy , UMC Groningen , Groningen , Netherlands

Co-author(s) - Schellevis, Francois , NIVEL , Utrecht , Nederland

Topic Cancer

Keywords

An increasing number of women is surviving breast cancer and due to that at risk of developing an ipsilateral breast tumor recurrence (IBTR) or a contralateral breast cancer (CBC). Patients' main concern is cancer recurrence. Patient counseling on breast cancer recurrence is challenging. In order to provide healthcare professionals and patients more guidance, a systematic literature review of the incidence of IBTR and CBC in women diagnosed with early invasive breast cancer was performed. Medline, EMBASE and the Cochrane Library were searched from 2000 until October 2015. Studies reporting an IBTR or CBC rate in curatively treated adult females diagnosed with invasive breast cancer were included. The initial search yielded 6,998 potentially relevant articles. Twenty were eligible for inclusion, representing 24 recurrence incidence rates. Both IBTR and CBC recurrence rates steadily increased with the length of follow-up, indicating that local breast cancer recurrences occur even more than 15 years after diagnosis. The median annual incidence rate of local breast cancer recurrence in women diagnosed with an early invasive breast cancer was 0.6% (range: 0.4 – 1.2%) for IBTR and 0.5% (range: 0.2 – 0.7%) for CBC. Based on the current literature, these rates are the best available estimates of IBTR and CBC annual incidence rates. Healthcare professionals could use these rates in their communication with patients recently diagnosed with early invasive breast cancer.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 92

Abstract code

## **FEASIBILITY OF THE IMPLEMENTATION OF CYTOSPONGE™ AS A TRIAGE TEST FOR REFLUX SYMPTOMS IN PRIMARY CARE: BARRETT'S ESOPHAGUS SCREENING TRIAL 3 (BEST3)**

Author - Wilson, Ashley, Queen Mary University of London, LONDON, United Kingdom  
(Presenting author)

Co-author(s) - Debiram-Beecham, Irene , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Bowers, Ben , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Muldrew, Beth , Queen Mary University of London , London , United Kingdom

Co-author(s) - Aigret, Benoit , Queen Mary University of London , London , United Kingdom

Co-author(s) - Khan, Zohrah , Queen Mary University of London , London , United Kingdom

Co-author(s) - O'Donovan, Maria , Cambridge University Hospitals NHS Foundation Trust , Cambridge , United Kingdom

Co-author(s) - Tripathi, Monika , Cambridge University Hospitals NHS Foundation Trust , Cambridge , United Kingdom

Co-author(s) - Offman, Judith , King's College London , London , United Kingdom

Co-author(s) - Smith, Sam , Leeds Institute of Health Sciences , Leeds , United Kingdom

Co-author(s) - Pesola, Francesca , King's College London , London , United Kingdom

Co-author(s) - Kaimi, Irene , Queen Mary University of London , London , United Kingdom

Co-author(s) - Haynes, Beverley , Cambridge University Hospitals NHS Foundation Trust , Cambridge , United Kingdom

Co-author(s) - Maroni, Roberta , Queen Mary University of London , London , United Kingdom

Co-author(s) - Sleeth, Michelle , Queen Mary University of London , London , United Kingdom

Co-author(s) - Walter, Fiona , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Rubin, Greg , Newcastle University , Newcastle , United Kingdom

Co-author(s) - Morris, Stephen , University College London , London , United Kingdom

Co-author(s) - Sasieni, Peter , King's College London , London , United Kingdom

Co-author(s) - Fitzgerald, Rebecca , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

**Background:** Early detection of esophageal cancer improves outcomes. The Cytosponge™, a non-endoscopic device, combined with the biomarker Trefoil Factor 3 (TFF3) has been tested in 4 clinical studies numbering >2,500 procedures. The BEST3 Trial evaluates whether offering the Cytosponge™-TFF3 test to patients on long-term acid suppressants leads to an increase in Barrett's esophagus (BE) diagnosis within the context of earlier detection of esophageal pre-cancer in primary care and will determine the operational requirements of implementing a novel clinical technique in primary care.

**Methods:** The BEST3 Trial is a multi-site, cluster-randomised controlled trial of 120 UK primary care sites. Main inclusion criteria are men and women aged ≥50 years with records of at least 6 months of acid-suppressant prescriptions in the preceding year. TFF3-positive patients are invited for confirmatory upper gastro-intestinal endoscopy to test for BE. Either a research nurse or practice-employed nurse model is used for intervention delivery.

**Results:** The procedure has been performed in 20 practices with 400 tests administered by 12

newly trained research nurses and 6 practice nurses. Device administration was successful in 96% of patients (87% first attempt, 9% second attempt). After shadowing 10 training procedures, nurses were competent to administer the test. Samples are processed by a Good Clinical Laboratory Practice (GCLP) compliant laboratory with clinical results reported on average within 25 days. A TFF3 result suggestive of Barrett's and other abnormal findings (e.g. dysplasia or ulceration) was communicated to the physician via an immediate electronic notification and led to a clinical decision in 100% of cases.

**Discussion:** This large-scale trial explores the feasibility of deploying a nurse-led novel procedure in primary care via collection and analysis of a complex biomarker. Our findings so far suggest the Cytosponge™-TFF3 test can be easily administered by newly-trained nurses as part of routine primary care and processed to GCLP in a clinically-meaningful timeframe.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 93

Abstract code

## TITLE – DEVELOPING INTEGRATED CANCER CARE IN EUROPE

Author - Weller, David, University of Edinburgh, Edinburgh, United Kingdom (Presenting author)

Co-author(s) - Van Hemelryck, Françoise , European Cancer Organisation , Brussels , Belgium

Co-author(s) - Banks, Ian , European Mens Health Forum , Brussels , Belgium

Co-author(s) - Berendsen, Annette , University of Groningen , Groningen , Netherlands

Co-author(s) - Price, Richard , European Cancer Organisation , Brussels , Belgium

Co-author(s) - Ungan, Mehmet , WONCA , Ankara , Turkey

Topic Cancer

Keywords

300 words

**Background** ECCO is a not-for-profit federation that exists to uphold the right of all European cancer patients to the best possible treatment and care, promoting interaction between all organisations involved in cancer at European level. It encourages progressive thinking in cancer policy, training and education and promotes European cancer research in prevention, diagnosis, treatment and quality care. Recently, it has taken on the task of better defining roles for primary care in cancer control in Europe, and has produced a position statement for discussion. Ca-PRI was asked to engage in this exercise, along with WONCA and other patient and professional organisations

### **Methods**

The position statement brings together sector, profession and patient representatives at the primary care track of ECCO2017 Congress in Amsterdam, January 2017 (which included several presentations from Ca-PRI members). For the first time at a European oncology congress, the roles for primary care in cancer prevention, screening and management as well as healthcare delivery approaches integrating primary and secondary care were presented and discussed. The position statement of ECCO addresses all health care professionals involved in cancer control as well as EU and national policy makers influencing healthcare systems and the organisation of cancer care. It addresses all cancer types and the entire patient journey.

### **Results**

The statement advocates:

a multidisciplinary and patient-centric approach to integrated cancer care

coordination of the care process, with clearly defined roles and responsibilities for all healthcare professionals

improvement of communication between differing professionals and sectors involved in cancer care,

the development of integrated care models which reflect the differing patient needs associated with different cancer types

### **Conclusions**

The task now is to consult widely, and to promote the concepts of the position statement. The project should provide a deeper understanding of the role primary care can play in improving cancer outcomes across Europe

Presentation Preference E-poster

Audio/Visual Equipment  
Awards  
Additional information

Abstract nr. 94

Abstract code

## DAILY LIFE ACTIVITIES COMPROMISE INTESTINAL INTEGRITY IN COMMUNITY-DWELLING OLDER ADULTS: A PILOT STUDY.

Author - Stokmans, Suzanne, University Medical Center Groningen, Groningen, Nederland  
(Presenting author)

Co-author(s) - Plas, Matthijs , University Medical Center Groningen , Groningen , Nederland

Co-author(s) - Buurman, Wim , University of Maastricht , Maastricht , Nederland

Co-author(s) - Spoorenberg, Sophie , University Medical Center Groningen , Groningen , Nederland

Co-author(s) - Wynia, Klaske , University Medical Center Groningen , Groningen , Nederland

Co-author(s) - Heineman, Erik , University Medical Center Groningen , Groningen , Nederland

Co-author(s) - Leeuwen, Barbara van , University Medical Center Groningen , Groningen , Nederland

Co-author(s) - Haan, Jacco de , University Medical Center Groningen , Groningen , Nederland

Topic Cancer

Keywords

**Background:** Malnutrition is highly prevalent in elderly patients presenting with cancer and associated with increased morbidity and mortality. In order to develop strategies improving nutritional status, more insight in the underlying factors is needed. Splanchnic atherosclerosis affects the capability to adapt mesenteric blood flow to changes in oxygen demand. Therefore, daily activities that increase oxygen demand in the intestinal wall, such as consuming a meal after physical activity, may induce a disturbed intestinal integrity in elderly. Compromised intestinal integrity can affect the uptake and processing of nutrition contributing to a poor nutritional state. Before starting trials in elderly cancer patients, we first aim get a proof of principle in community-dwelling individuals.

**Methods:** Participants (>75 years) performed a standardized walking test and received a standard meal directly afterwards. Through a venous drip, eight blood samples were collected: at baseline, directly after the walking test, directly after the meal and every fifteen minutes in the 75 minutes postprandially. Intestinal fatty acid binding protein (I-FABP), a plasma marker for enterocyte damage, was used as measurement for intestinal integrity. A 50% increase of I-FABP in plasma compared to baseline was defined as relevant loss of intestinal integrity.

**Results:** Thirty-four participants were included. The median age was 81 years. A 50% I-FABP increase in at least one of the measurements was observed in twelve persons (35%). No differences were observed between the group with an I-FABP peak of  $\geq 50\%$  and the group with a peak  $< 50\%$  regarding baseline parameters.

**Conclusion:** A considerable part of participants showed a relevant I-FABP increase after the performance of a walking test followed by a meal, indicating that intestinal integrity is compromised during daily life activities. Future research should determine the presence in older cancer patients and the consequences of a disturbed intestinal integrity on gastrointestinal function and nutritional state.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 95

Abstract code

## SHARED-CARE FOLLOW-UP AFTER CHEMOTHERAPY FOR TESTICULAR CANCER SURVIVORS.

Author - Boer, H, University Medical Center Groningen, Groningen, Netherlands (Presenting author)

Co-author(s) - Lubberts, S , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Bunskoek, S , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Nuver, J , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Lefrandt, JD , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Steursma, G , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Sluiter, WJ , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Siesling, S , Netherlands Comprehensive Cancer Organisation , Enschede , Netherlands

Co-author(s) - Berendsen, AJ , University Medical Center Groningen , Groningen , Netherlands

Co-author(s) - Gietema, JA , University Medical Center Groningen , Groningen , Netherlands

Topic Cancer

Keywords

**Background:** Testicular cancer survivors are at risk for cardiovascular disease, often preceded by early development of cardiovascular risk factors during the years after chemotherapy. Therefore, close collaboration between oncologists and primary care physicians (PCPs) is needed during follow-up to monitor and manage these cardiovascular risk factors. We designed a shared-care survivorship program in which testicular cancer survivors alternately visit their oncologist and their PCP. The objective of this study was to test the safety and feasibility of shared-care follow-up after treatment for metastatic testicular cancer.

**Methods:** The study was an observational cohort study with a stopping rule to check the safety of follow-up program. Safety boundaries were defined for failures of an adequate response to signals indicating cancer recurrence. Secondary outcomes were quality of cardiovascular risk management performed by PCPs, psychosocial status (RAND-36 and HADS-anxiety questionnaires) and an evaluation questionnaire.

**Results:** In January 2017, 162 patients (69% of eligible testicular cancer patients) were enrolled and 241 primary care visits took place. All but one (99%, n = 150) of the approached PCPs agreed to participate. No failures occurred in detection of relapsed testicular cancer. Four follow-up visits were considered as failures because of organizational issues, but this was within the predefined safety boundaries. Cardiovascular risk management performed by PCPs was adequate and in accordance with the primary care guideline. Patients were satisfied with the knowledge level of PCPs and 83% of the patients would recommend shared-care follow-up to other cancer patients. PCPs were willing to further extend their role in follow-up care for different patient categories.

**Conclusions:** Shared-care follow-up is safe and feasible in testicular cancer patients after completion of chemotherapy. Patients benefit from personalized care, partly close to their home. Within shared-care, PCPs have an important role in cardiovascular risk management.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 96

Abstract code

## **BRACED: THE BRAIN TUMOUR EARLY DETECTION STUDY OF PATIENT PERSPECTIVES ON FACTORS AFFECTING TIMELY DIAGNOSIS OF PRIMARY BRAIN TUMOURS**

Author - Walter, FM, Cambridge, United Kingdom

Co-author(s) - Scott, SE , London , United Kingdom (Presenting author)

Co-author(s) - Penfold, C , Cambridge , United Kingdom

Co-author(s) - Curtis, S , London , United Kingdom

Co-author(s) - Sage, W , Cambridge , United Kingdom

Co-author(s) - Brodbelt, A , Liverpool , United Kingdom

Co-author(s) - Jenkinson, M , Liverpool , United Kingdom

Co-author(s) - Price, S , Cambridge , United Kingdom

Co-author(s) - Watts, C , Cambridge , United Kingdom

Co-author(s) - Bell, J , Cambridge , United Kingdom

Co-author(s) - Johnson, M , Cambridge , United Kingdom

Co-author(s) - Hamilton, W , Exeter , United Kingdom

Co-author(s) - Joannides, A , Cambridge , United Kingdom

Topic Cancer

Keywords

**Background:** The prognosis for primary brain tumours remains poor; only 40% of people diagnosed with malignant brain tumours live more than a year. Timely diagnosis can improve patient outcomes yet patients and GPs may find it difficult to recognise early symptoms. This study aimed to develop a richer understanding of patients' experiences of symptom appraisal, help-seeking and routes to diagnosis to inform increased awareness and drive service change.

**Methods:** Qualitative in-depth interviews focussing on the experience and appraisal of symptoms and patients' perspectives of the pathways to diagnosis were undertaken with 39 adult patients recently diagnosed with a primary glioma brain tumour and their family members, in the Eastern or North West regions of England. Interviews were analysed using the Framework approach and thematic analysis.

**Results:** 21 men and 18 women (median age 56 years), with primary gliomas (29 grade III-IV, 10 grade II), were interviewed within four weeks of diagnosis. Half the participants noticed a combination of physical and cognitive symptoms, including changes in cognition, sleep, personality, seizures, one-sided weakness, dizziness, headache and other head sensations, more than six months before seeking help. Symptoms were 'explained' by other external or internal factors, or interpreted as innocuous, especially when subtle or intermittent.

**Conclusions:** This study has identified challenges for patients in appraising and seeking help for symptoms or changes associated with a subsequent diagnosis of primary brain tumour. Refined information for patients and guidance for clinicians could shorten time to diagnosis and potentially improve both patient experience and outcomes.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 97

Abstract code

**DIAGNOSING OVARIAN CANCER IN PRIMARY CARE: RESULTS FROM THE CATALAN DIAGNOSIS AUDIT (OVACC STUDY).**

Author - Marzo, Mercè, Catalan Institut of Health. IDIAP, Barcelona, Spain (Presenting author)

Co-author(s) - Vela, Carmen , Catalan Institut of Health. IDIAP , Santa Coloma de Gramanet , Spain

Co-author(s) - Aliste, Luisa , Catalan Health Department , Hospilatet de Llobregat , Spain

Co-author(s) - Manchon, Paula , Catalan Health Department , Hospitalet de Llobregat , Spain

Co-author(s) - Gimferrer, Núria , Consorci d'Atenció Primària de Salut de l'Eixample y Gesclínic SA , Barcelona , Spain

Co-author(s) - Guiriguet, Carolina , Catalan Institut of Health. IDIAP , Barcelona , Spain

Topic Cancer

Keywords

Background: Epithelial ovarian cancer is the most lethal of the gynaecologic malignancies, largely due to the advanced stage at diagnosis. Diagnosing ovarian cancer on the basis of women's symptoms and risk factors is a core role for GP. The objective of this study is to evaluate the pre-diagnostic pathways of women with ovarian cancer and to analyse the interval between the time of first symptomatic presentation and definitive diagnosis or treatment

Methods: Multicentre, retrospective, population based cohort study of 527 women with ovarian cancer who underwent surgery in hospitals of the public health system of Catalonia. Descriptive and multivariate analysis of an audit of sociodemographic and clinical profile in the context of primary and specialized care, and time intervals in compliance with the Aarhus Statement were performed. Limitations: selection bias (private centres not included) and information bias (retrospective data). Financed on competitive call and approval by the Ethics Committee.

Results: Provisional results indicate that about 1/3 of women have been diagnosed with signs of advanced disease (ascites, palpable pelvic mass). 60% of women have previously consulted the GP for nonspecific symptoms associated with ovarian cancer. In 25% of them, these symptoms were the reason for encounter more than twice. 23.5% of women were diagnosed by incidental findings: controls of previous gynaecological pathology (12%), controls of non- gynaecological pathology (7.3%), gynaecological screenings (2.3%) and surveillance in high-risk population (2.1%). Emergency services made the suspect diagnosis for 27.3% of cases, GP 16.4%, primary care gynaecologist 13%, hospital gynaecologist 14% and other specialists 19.9%. In a significant number of cases, the overall diagnostic interval exceeds more than 180 days.

Conclusions: A better knowledge of diagnosis intervals of ovarian cancer and their related factors, would facilitate the implementation of actions to improve the process of care of women with ovarian cancer in Catalonia.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 98

Abstract code

## **A SYSTEMATIC REVIEW OF HEALTH SYSTEM LEVEL INITIATIVES PROMOTING THE EARLIER DIAGNOSIS OF CANCER AMONG THE ADULT POPULATION**

Author - Calanzani, N, University of Edinburgh, EDINBURGH, United Kingdom (Presenting author)

Co-author(s) - Nijenhuis, L , Radboud University Nijmegen , Nijmegen , Netherlands

Co-author(s) - Shahaj, O , Ministry of Health and Social Protection , Tirana , Albania

Co-author(s) - Weller, D , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Campbell, C , University of Edinburgh , EDINBURGH , United Kingdom

Topic Cancer

Keywords

**Background:** The increased burden of cancer has driven the development of health system level initiatives worldwide promoting early diagnosis. We aimed to identify, describe and categorise the evidence on such initiatives.

**Methods:** We searched electronic databases, cancer organisations' websites worldwide, reference lists of included studies and relevant systematic reviews. We included quantitative, qualitative, mixed-methods studies and reviews/overviews about a single initiative. Initiatives were included if they were in high income countries, targeted adults aged 18 or older, aimed to promote early diagnosis, addressed the patient/public and at least two more levels of contextual influence (according to a model of multilevel influences on cancer care), and were at a national level or equivalent. Study selection, quality assessment and data extraction were carried out by two reviewers. Narrative synthesis was used to analyse the findings.

**Results:** Twenty initiatives from 10 countries were identified in 263 publications. Data were extracted from 104 core publications about 19 initiatives. It was possible to assess the quality of 35 core publications. Initiatives focused on fast-track for patients with alarm symptoms or other referral pathways for those with other symptoms or abnormal test results (n=11), national awareness campaigns for the public (n=4), and strategies with multiple components (n=4). Tools developed for professionals included referral guidelines and online referral systems. Initiatives involving referral pathways showed some improvements in diagnostic intervals, and limited evidence on the impact on staging. Performance targets were often not met. Results from awareness campaigns indicated improvement in awareness; evidence regarding changes in health-seeking behaviour was limited. Barriers and facilitators were described, including availability of specialist staff.

**Conclusions:** Robustness of methods/outcomes could not always be assessed as several publications were reports or government documents. Evidence on the impact of initiatives regarding longer-term outcomes is limited. Described barriers and facilitators may help to inform future initiatives.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 99

Abstract code

## **GENERAL PRACTITIONERS' PERSPECTIVES ON BOWEL CANCER SCREENING: A QUALITATIVE INTERVIEW STUDY FROM A DUTCH CONTEXT**

Author - Bertels, L.S., Academic Medical Center, University of Amsterdam, Amsterdam, Netherlands (Presenting author)

Co-author(s) - Van der Heijden, S. , Amsterdam , Netherlands

Co-author(s) - Hoogsteyns, M. , Amsterdam , Netherlands

Co-author(s) - Dekker, E. , Amsterdam , Netherlands

Co-author(s) - Van Asselt, K.M. , Amsterdam , Netherlands

Co-author(s) - Van Weert, H.C.P.M. , Amsterdam , Netherlands

Co-author(s) - Knottnerus, B.J. , Amsterdam , Netherlands

Topic Cancer

Keywords

### **Background**

In the Dutch bowel cancer screening programme, individuals receive a fecal immunochemical test (FIT) at home, detecting blood in their stools. After a positive FIT result, a colonoscopy is recommended to identify relevant abnormalities: bowel cancer or advanced adenomas. Although general practitioners (GPs) have no formal role in the screening programme, they may influence participation rates of their patients. Therefore we explored GPs' perspectives on the programme, focusing on three main subjects: experience, attitude and knowledge.

### **Methods**

Using purposive sampling, GPs from eight districts in Amsterdam were approached for semi-structured interviews. Interviews were transcribed verbatim and analysis was performed according to the principles of open coding and constant comparison.

### **Results**

Eleven GPs were interviewed. Data saturation was reached after nine interviews. Within the three main subjects of this study we found several themes:

#### *Experience*

The screening programme required little time from the interviewed GPs, as few patients came with questions. For potentially distressed patients with a positive FIT result, GPs used reassurance strategies emphasizing the low probability of cancer.

#### *Attitude*

All GPs were positive towards screening in general. However, most took a positive FIT result less serious than a positive breast or cervical cancer screening result.

#### *Knowledge*

Most GPs underestimated the combined probability of bowel cancer and advanced adenomas being found during colonoscopy after a positive FIT result. When they were told the actual probability (57.2% in 2015), some stated that this might change the way they inform their patients.

### **Conclusions**

GPs in Amsterdam with a positive attitude towards screening get few questions from patients

about the Dutch bowel cancer screening programme, use reassurance strategies in potentially distressed patients, tend to take a positive screening result less serious for bowel than for breast or cervical cancer and may underestimate the probability of relevant abnormalities after a positive FIT result.

Presentation Preference Oral presentation  
Audio/Visual Equipment  
Awards  
Additional information

Abstract nr. 100

Abstract code

## IT TAKES TWO TO TANGO: A QUALITATIVE STUDY OF SERIOUS ILLNESS CONVERSATIONS IN PATIENTS WITH ADVANCED CANCER

Author - Geerse, Olaf, University Medical Center Groningen, Groningen, Netherlands (Presenting author)

Co-author(s) - Lamas, Daniela , Ariadne Labs , Boston , United States of America

Co-author(s) - Sanders, Justin , Ariadne Labs , Boston , United States of America

Co-author(s) - Paladino, Joanna , Ariadne Labs , Boston , United States of America

Co-author(s) - Henrich, Natalie , Ariadne Labs , Boston , United States of America

Co-author(s) - Berendsen, Annette , University Medical Center Groningen , Groningen , United States of America

Co-author(s) - Hiltermann, Jeroen , University Medical Center Groningen , Groningen , United States of America

Co-author(s) - Fromme, Erik , Ariadne Labs , Boston , United States of America

Co-author(s) - Block, Susan , Ariadne Labs , Boston , United States of America

Topic Cancer

Keywords

### Abstract

**Background** Conversations with seriously ill patients about their values and goals have been shown to be beneficial in terms of quality of life, distress, and enhancing goal-concordant care near the end of life. Through a systematic review of audio-recorded clinical encounters, we sought to describe how clinicians and patients interact in discussing values, goals, and care preferences.

**Methods** We conducted a qualitative analysis of clinician-patient conversations from a cluster-randomized controlled trial assessing the impact of a multi-component communication intervention in an outpatient oncology setting. Clinicians assigned to the intervention arm of this trial systematically identified patients with advanced cancer and received skills training to use the Serious Illness Conversation Guide. All conversations were transcribed verbatim, and independently coded by two raters; we used thematic coding to analyze them.

**Results** A total of 25 unique serious illness conversations, conducted by 16 clinicians (11 physicians, four nurse practitioner, and one physician assistant) were included. The median duration of each conversation was 14 minutes (range 4 – 37) and clinicians spoke a little of half of the time (53%). Thematic analyses demonstrated: 1) Patients' willingness to discuss emotionally challenging topics with their clinicians, particularly surrounding life-sustaining treatment; 2) Warmth and empathy on the part of clinicians, but difficulty responding to emotional or ambivalent patient statements; 3) Challenging discussing prognosis, with clinicians avoiding time-based estimates and frequently using ambiguous or medically charged language.

**Conclusions** Our data suggest that patients faced with a serious illness are open to discussing values and goals with their clinician. Clinicians experience difficulty when sharing prognosis and frequently fail to explore emotions, especially ambivalence, or patient preferences about life-sustaining treatment in a way that could lead to clarity about what care the patient desires.

Presentation Preference Oral presentation

Audio/Visual Equipment



Awards

Additional information

Abstract nr. 101

Abstract code

**TOWARD PATIENT-CENTERED SURVIVORSHIP CARE: A QUALITATIVE EXPLORATION OF A PRIMARY CARE BASED HEALTH COACHING INTERVENTION TO IMPROVE SELF-MANAGEMENT IN POST-TREATMENT CANCER SURVIVORS**

Author - O'Malley, Denalee, Rutgers Robert Wood Johnson Medical School, New Brunswick, United States of America (Presenting author)

Topic Cancer

Keywords

Denalee M. O'Malley Ph.D. LSW; Stacy Davis Ph.D.; Heather Lee Ph.D.; Ashley Rogers, B.S.; Lynn Clemow, Ph.D.; Suzanne M. Miller, Ph.D.; Shawna V. Hudson, Ph.D.

**Background:** Post-treatment self-management behaviors include engaging in regular follow-up visits, understanding signs of recurrence, adjusting to the impacts of cancer, and adopting healthy lifestyle behaviors. Due to the absence of standard models of cancer survivorship care survivors often navigate their self-management with little guidance. This study aims to explore survivors' priorities for self-management in a primary care based, health coaching (HC) survivorship program.

**Methods:** Survivors of localized (Stage I-III) breast, prostate and colorectal cancers (n=20) were recruited from two primary care clinics in New Jersey to participate in a National Cancer Institute-funded RCT testing mHealth and HC interventions (R01 CA176838). This analysis focuses on survivors' goal setting priorities for the two arms that included the telephone HC interventions (HC only and HC/mHealth). A content analysis of the audio-recorded HC sessions was conducted to explore survivor generated self-management goals.

**Results:** The most common goal among survivors was weight loss/maintenance (n=9) and increasing physical activity (n=6). A fifth (n=4) of the sample identified the need to strategize to engage a new or existing health provider for a follow-up need identified in an earlier session (i.e., clarification about results, scheduling screenings, etc.). One survivor identified a symptom that may be associated with recurrence and advocated for herself to be examined promptly with the health coach's support. Improving stress management, coping with recurrence fears, and resuming dating while coping with sexual changes were also goals nominated by survivors in session.

**Conclusions:** Future research is needed to explore which survivors are most able to benefit from this type of intervention and to refine elements of HC interventions to be responsive to goals that are highly prioritized by survivors.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 102

Abstract code

## **PRESENTING SYMPTOMS OF CANCER AMONG TEENAGERS AND YOUNG ADULTS: PRELIMINARY FINDINGS FROM THE BRIGHTLIGHT COHORT**

Author - Koo, Minjoung, University College London, London, United Kingdom (Presenting author)

Topic Cancer

Keywords

**Authors:** Minjoung Monica Koo (PhD student), Georgios Lyratzopoulos, Annie Herbert, Rachel Taylor, Julie Barber, Faith Gibson, Jeremy Whelan, Lorna Fern

**Background:** Recently reported evidence has described variation in intervals before cancer diagnosis among a uniquely large cohort of teenager and young adults (TYAs) (Herbert et al., 2018). We sought to examine the nature and frequencies of presenting symptoms in this population.

**Methods:** The BRIGHTLIGHT study collected information on the diagnostic experience of TYA cancer patients aged 12-24 years, chiefly through face-to-face interviews. Participants were asked whether they had experienced 16 specified symptoms before diagnosis (yes/no responses), or other symptoms (free-text responses). We calculated the frequencies of common presenting symptoms across the cohort, and the ensuing 'symptom signatures' of lymphoma, germ cell tumours, leukaemia, carcinoma, bone tumours, soft tissue sarcomas, CNS tumours and melanoma.

**Results:** Preliminary findings suggest that among 803 TYA cancer patients who reported one or more symptoms before diagnosis, lump or swelling was most common (52%) followed by extreme tiredness (38%), pain for no apparent reason (35%), night sweats (24%), lymphadenopathy (24%), and weight loss (24%). Symptom frequencies were much higher compared to previous evidence from primary care records (Dommett et al., 2013), and four-fifths (79%) of patients reported multiple symptoms.

Symptom signatures varied by cancer type: lump or swelling was reported in more than 50% of patients with lymphoma, testicular tumours, carcinoma, bone tumours, and soft-tissue sarcomas, while it was rarer among leukaemia (13%) and CNS tumour (3%) patients. Extreme tiredness and pain were common across all cancer types (reported by at least 10% and 20% of cancer patients respectively) apart from those diagnosed with melanoma (each reported by 3%).

**Conclusions:** TYA cancer patients experience a range of (often multiple and non-specific) symptoms before diagnosis. Further examination of presenting symptoms and their combinations could be informative.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 103

Abstract code

## **THE DIAGNOSTIC PERFORMANCE OF FAECAL IMMUNOCHEMICAL TESTING IN PATIENTS MEETING THE 2015 NICE GUIDELINE CRITERIA FOR SUSPECTED COLORECTAL CANCER IN PRIMARY CARE.**

Author - Nicholson, Brian, University of Oxford, Oxford, United Kingdom (Presenting author)

Co-author(s) - James, Tim , Oxford University Hospitals Trust , Oxford , United Kingdom

Co-author(s) - East, James , Oxford University Hospitals Trust , Oxford , United Kingdom

Co-author(s) - Grimshaw, David , Oxford Clinical Commissioning Group , Oxford , United Kingdom

Co-author(s) - Paddon, Maria , Oxford University Hospitals Trust , Oxford , United Kingdom

Co-author(s) - Justice, Steve , Oxford University Hospitals Trust , Oxford , United Kingdom

Co-author(s) - Shine, Brian , Oxford University Hospitals Trust , Oxford , United Kingdom

Topic Cancer

Keywords

### Background

The 2015 NICE guidelines recommend that UK General Practitioners (GPs) use faecal occult blood (FOB) testing to investigate low risk symptomatic patients in primary care with positive results triggering an urgent referral for investigation of colorectal cancer. We evaluated Faecal Immunochemical Testing (FIT) and guaiac FOB (gFOB) in this context.

### Methods

Stool samples sent from routine primary care to a large English hospital laboratory for FOB testing were analysed by a standard gFOB method and a new FIT method. Clinical data including symptoms triggering testing, endoscopy and histology were obtained at regular intervals for up to 21 months. Any evidence of significant gastrointestinal pathology including colorectal adenocarcinoma was documented. Changes in workload and measures of diagnostic accuracy, including the rate of positive test results, were assessed.

### Results

In 238 patients the sensitivity and specificity for detection of adenocarcinoma using gFOB were 85.7% and 65.8% respectively compared to 85.7% and 89.6% for FIT. The Positive Predictive Value (PPV) for gFOB was 7.1% and Negative Predictive Value (NPV) 99.3%. Comparatively PPV for FIT was 19.4% and NPV 99.5%. For the detection of any significant lower GI pathology, FIT had reduced sensitivity, 65.0% to 55.0%, but improved specificity, 67.0% vs 90.8%. The consequent PPV for FIT was 35.5% vs 15.3% for gFOB. FIT was associated with a positive result rate of 12.8%, whereas it was 28.8% gFOB.

### Conclusion

In this patient group, which was representative of the low risk symptomatic population recommended by the 2015 NICE guidance, the proportion of samples considered positive by FIT was considerably lower than the gFOB method with the same rate of adenocarcinoma detection. This supports the NICE recommendation that FIT can be reliably used to fast track patients for investigation of suspected colorectal cancer but further analysis in a larger cohort is required.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 104

Abstract code

## **LONG-TERM PSYCHOLOGICAL DISTRESS IN A POPULATION-BASED COHORT OF EARLY BREAST CANCER SURVIVORS AND THEIR MATCHED CONTROLS.**

Author - Maass, Saskia, UMCG, Groningen, Nederland (Presenting author)

Co-author(s) - Boerman, L.M. , Groningen , Nederland

Co-author(s) - Verhaak, P.F.M. , Groningen , Nederland

Co-author(s) - Berendsen, A.J. , Groningen , Nederland

Co-author(s) - Bock, G.H. de , Groningen , Nederland

Topic Cancer

Keywords

### **Background**

Breast cancer patients often experience psychological distress in the first years after diagnosis. However, the long-term psychological effects are not well established. The aim of this study is to assess psychological distress in long-term breast cancer survivors as compared to age and general practitioner(GP) matched controls.

### **Methods**

Cross-sectional cohort study was performed among 350 women who survived early breast cancer, diagnosed 5 years ago and 350 women, from the same age and GP. The time of diagnosis and duration of follow-up of the breast cancer survivor was made identical for the matched control (median 10 years (interquartile range of 7-14)). The primary outcome was the self-reported score on the Hospital Anxiety and Depression Scale (HADS). In univariate logistic regression analysis, it was evaluated whether breast cancer survivors were at higher risk for symptoms of depression (HADS-D  $\geq 8$ ), severe symptoms of depression (HADS-D  $\geq 11$ ), symptoms of anxiety (HADS-A  $\geq 8$ ), or severe symptoms of anxiety (HADS-A  $\geq 11$ ) compared to controls. In multivariate logistic regression, the duration of follow-up was assessed for impact on these relations.

### **Results**

The odds of having symptoms of depression (OR 2.3, 95%CI 1.3-4.2) and severe symptoms of depression (OR 3.3, 95%CI 1.1-10.3) were significantly greater for breast cancer survivors when compared to controls. Also, for severe symptoms of anxiety the odds were significantly greater for breast cancer survivors (OR 2.1, 95%CI, 1.1-4.0). No significant difference was seen for mild symptoms of anxiety. There was no effect of duration of follow-up on symptoms of depression or anxiety. The effect of diagnosis of breast cancer on the symptoms remained significant over time.

### **Conclusions**

Long-term breast cancer survivors experience more (severe) symptoms of depression and more severe symptoms of anxiety compared to women of the same age and GP. This effect remains up to a long time since diagnosis.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 105

Abstract code

**“A WORD I USE ALMOST EVERY DAY BUT ACTUALLY WHAT DOES IT MEAN?” AN INTERVIEW STUDY OF ENGLISH GPs’ UNDERSTANDING AND PRACTICE OF SAFETY NETTING FOR POTENTIAL CANCER PRESENTATIONS.**

Author - Nicholson, Brian, University of Oxford, Oxford, United Kingdom (Presenting author)

Co-author(s) - Ziebland, Sue , University of Oxford , Oxford , United Kingdom

Co-author(s) - MacArtney, John , University of Oxford , Oxford , United Kingdom

Co-author(s) - Bankhead, Clare , University of Oxford , Oxford , United Kingdom

Co-author(s) - Rose, Peter , University of Oxford , Oxford , United Kingdom

Co-author(s) - Evans, Julie , University of Oxford , Oxford , United Kingdom

Topic Cancer

Keywords

### **Background**

Safety netting is a diagnostic strategy used in UK primary care to ensure patients are monitored until their symptoms or signs are explained. Despite being recommended in cancer diagnosis guidelines, little evidence exists about which components of safety netting are effective. We aimed to understand the reality of safety netting for symptoms that could suggest cancer in contemporary primary care.

### **Method**

We interviewed GPs about their knowledge and experience of safety netting and sought to elucidate factors that enable and detract from safety netting practice. In-depth interviews were conducted with a purposive sample of 25 qualified GPs in Oxfordshire, United Kingdom. Interviews were recorded and transcribed verbatim and analysed thematically using constant comparison by a multi-disciplinary research team.

### **Results.**

English GPs revealed uncertainty about which aspects of clinical practice are considered safety netting despite regarding it as an essential component of best practice. They use bespoke personal strategies, often developed from past mistakes, without knowledge of their colleagues practice. Safety netting varies according to the perceived risk of cancer, the perceived reliability of each patient to follow advice, GP working patterns and time pressures. Increasing workload, short appointments, and a reluctance to over-burden hospital systems or create unnecessary patient anxiety, have together led to a strategy of selective active follow-up of patients perceived to be at higher risk of cancer or less able to act autonomously. This leaves patients with low-risk-but-not-no-risk symptoms of cancer with less robust or absent safety netting.

### **Conclusions.**

GPs would benefit from clearer guidance on which aspects of clinical practice contribute to effective safety netting (for cancer). Further research is therefore required to develop and evaluate which interventions are efficient in terms of reduced workload and delays in (cancer) diagnosis. Practice systems that enable active follow-up of patients with low-risk-but-not-no-risk symptoms warrant further investigation.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 106

Abstract code

## **SURVIVAL FOLLOWING DIAGNOSIS OF A SECOND PRIMARY CANCER (SPC): A NATIONAL LINKAGE STUDY IN SCOTLAND**

Author - Kanguru, Lovney, University of Edinburgh, Edinburgh, United Kingdom (Presenting author)

Co-author(s) - Bikker, Annemieke , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Barnett, Karen , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Cavers, Debbie , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Brewster, David , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Weller, David , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Campbell, Christine , University of Edinburgh , Edinburgh , United Kingdom

Topic Cancer

Keywords

**Introduction:** As an increasing proportion of patients survive an initial cancer, the number who develop a second primary cancer (SPC) is also increasing. We examined the incidence, mortality and survival following an SPC diagnosis, when compared to that of a first primary cancer (FPC).

**Methods:** Patients aged 18+, diagnosed with a FPC between 01/01/1980 and 31/12/2010 and subsequently diagnosed with a second primary cancer (>60 days following a FPC), were identified through the Scottish Cancer Registry: records were linked to episode level data on hospital inpatient and day case discharges, and the National Register of Scotland death records. The cases were matched (1:1) for age, gender and cancer type to controls (individuals diagnosed with an FPC only within the same 5-year period). Analyses included descriptive statistics and survival analysis calculating five-year survival estimates following an SPC diagnosis adjusted for covariates and Cox proportional hazard model to estimate the hazard ratio.

**Results:** 37,193 people were diagnosed with an SPC (51.6% females and 48.3% male). The proportion of SPC among people diagnosed with a FPC within a 5-year period ranged between 2.3% (1980 – 1985) and 31.2% (2006 – 2010). Trachea, bronchus and lung cancer (21.3%), colorectal cancer (13.9%), breast (12.9%) and prostate (7.3%) were the most frequently diagnosed SPCs in this population. These four cancers also accounted for the highest number of deaths in both sexes. Compared with people diagnosed with FPC (390 days: *IQR* 17 – 1825 days), those diagnosed with SPC had shorter median survival days (379 days: *IQR* 17 – 1825 days), which was statistically significant ( $P=0.001$ ,  $\chi^2_{4df}=163.2$ ). Survival results for the major SPC cancer sites adjusted for deprivation, comorbidity and prognostic variables will be available in April.

**Conclusions:** Results have important implications for follow-up/surveillance in both primary and secondary care as well as secondary prevention and early detection.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 107

Abstract code

## **SOCIAL ENVIRONMENT OF OUTPATIENTS. SOCIAL INEQUALITIES AND SOCIO-TECHNICAL NETWORKS**

Author - SENGHOR, Abdou Simon, LASA/Université de Franche-Comté, Besançon, France  
(Presenting author)

Co-author(s) - DUCOURNAU, Pascal , LASA/Université de Franche-Comté , Besançon , France

Topic Cancer

Keywords

In line with the stated intention of the health authorities to make the patient an actor of his health and in accordance with the objectives of the continuous reduction of the costs of hospitalization, the extra-hospital care of chronic diseases is more and more promoted in the health system today. This is particularly the case of the treatment of cancers where extra-hospital care is facilitated by the recent introduction of oral chemotherapy. How do patients experience this new situation of "out of wall" hospitalization? This is indicated by an increased mobilization of skills of the patient and his ability to rely on himself resources for its support. New social inequalities with regard to the disease can arise from this new configuration, some patients having for example more capacity than others to be able to mobilize social resources (members of the entourage, various "social supports"), economic (resources financial) or socio-technical ("social networks", Internet, etc.) to organize their care at home. Our study, supported and funded by the INCa and titled « Social environment of outpatients. Social inequalities and socio-technical networks » aims to clarify and analyze this new configuration. It is based on the empirical reconstitution of 60 trajectories of cancer patients, based on a cross between the stories from the patient and the person he identifies as his "caregiver". These patients are here chosen from those with cancer pathologies having the strongest capacity to differentiate socially patients and their trajectories (breast cancer and / or prostate cancer VS lung). Ultimately, this project will, on the one hand, improve our knowledge of social inequalities in health and, on the other hand, the development of a tool, dedicated to care teams, to enable them to accompany the outpatient care by designing an environmental diagnosis "the most appropriate possible.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 108

Abstract code

## **IMPROVING ORAL AND CERVICAL CANCER OUTCOMES IN RURAL INDIA: A PRIMARY CARE-BASED INTERVENTION USING M-HEALTH TECHNIQUES**

Author - Weller, David, University of Edinburgh, Edinburgh, United Kingdom (Presenting author)

Co-author(s) - Isaac, Rita , Christian Medical College , Vellore , India

Co-author(s) - Finkel, Madelon , Weill Cornell Medical College , New York , United States of America

Co-author(s) - Grant, Liz , University of Edinburgh , Edinburgh , United Kingdom

Co-author(s) - Trevena, Lyndal , University of Sydney , Sydney , Australia

Co-author(s) - Batt, Shreya , MedicMobile , Mumbai , India

Co-author(s) - Evans, Jay , MedicMobile , Kathmandu , Nepal

Topic Cancer

Keywords

### **Background**

India has some of the highest mortality rates from oral and cervical cancer in the world. A lack of organised screening programmes, combined with poor diagnostic and treatment facilities, means that cancers are typically diagnosed at a late stage. Christian Medical College, based in Tamil Nadu has, for some years, run a cervical screening programme targeting women in a poor, rural area, as one of their outreach programmes. Interventions targeting low-health-literacy groups have been delivered by primary care health workers (PCHWs). This project sought to extend this approach to include oral cancer, and to include 'mobile health' (m-Health) techniques.

### **Methods**

PCHWs underwent training programmes which covered oral and cervical cancer epidemiology, risk factors (including tobacco use), oral cancer screening techniques (mouth inspection) and use of a bespoke m-Health intervention which enabled recording and transmission of data + follow-up of patients with suspicious lesions. There were also 'refresher' components on 'screen and treat' techniques for cervical cancer. We gathered qualitative data through in-depth interviews with 15 PHCWs & key individuals involved in the delivery of the programme. Data underwent thematic analysis using a grounded theory approach.

### **Results**

Several important themes emerged: 1) it was difficult to target screening to high-risk groups; particularly men who used tobacco 2) the concepts of primary prevention, screening and early diagnosis are often at odds with local culture and health beliefs – fear and stigma associated with cancer were prominent 3) other barriers to participation included financial concerns, husbands disallowing wives to participate, and beliefs in alternative healers, and 3) the m-Health intervention helped the PHCWs considerably in delivering screening and early diagnosis messages

### **Conclusions**

Much of the global burden of cancer is in the world's poorest regions. Inexpensive primary care-based approaches, combined with m-Health techniques, show promise in improving outcomes in these vulnerable populations.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 109

Abstract code

## **PATIENT PATHWAYS TO DIAGNOSIS, FROM REFERRAL TO PRESENTATION**

Author - McPhail, Sean, Public Health England, Bristol, United Kingdom (Presenting author)

Co-author(s) - Swann, R , London , United Kingdom

Co-author(s) - Elliss-Brookes, L , Bristol , United Kingdom

Co-author(s) - Rubin, G , Newcastle , United Kingdom

Co-author(s) - Lyratzopoulos, Y , London , United Kingdom

Topic Cancer

Keywords

Patient pathways to diagnosis, from referral to presentation Sean McPhail<sup>1,2</sup>, Ruth Swann<sup>1,3</sup>, Lucy Elliss-Brookes<sup>1</sup>, Greg Rubin<sup>4</sup>, Georgios Lyratzopoulos<sup>1,2,1</sup> National Cancer Registration and Analysis Service, Public Health England, <sup>2</sup>University College London, <sup>3</sup>Cancer Research UK, <sup>4</sup>Newcastle University Background Emergency presentation of cancer recorded at secondary care has been explored in recent years by Routes to Diagnosis and other studies. In parallel, multiple studies based in primary care have examined the nature of referral for suspected cancer by GPs. There are, however, few examples which follow the patient from primary to secondary care and examine both. Methods 439 English general practices participating in the National Cancer Diagnosis Audit (NCDA) submitted primary care referral data on 17,042 patients diagnosed with cancer in 2014. These are linked at patient level to Routes to Diagnosis (RTD) categories derived from secondary care datasets, and the nature of the referral and presentation are compared. Results 61% of cancer patients underwent a 'normal end-to-end' referral from primary care to presentation at secondary care by either a routine or urgent route, and 7% via screening services. 24% of cases have either an emergency referral or emergency presentation: 4% with emergency referral only; 9% with emergency presentation only; and 11% with both. The final 8% are not well characterised by the GPs, but are not emergency referrals or presentations. Conclusions While the majority of cancer patients present by managed referral pathways about a third do not. Referral type (NCDA) and diagnostic route (RTD) differ in some patients indicating that disease progression, patient choice, or other factors change the 'pathway trajectory' between referral and presentation. We show that GPs are involved in the pre-diagnostic pathway of the large majority of cancer patients, and a better understanding of these pathways between primary and secondary care may allow patient journeys to be further optimised.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 110

Abstract code

## **ASSOCIATION BETWEEN USE OF URGENT CANCER REFERRAL PATHWAYS AND SURVIVAL: A 5 YEAR NATIONAL COHORT STUDY**

Author - Round, T, King's College London, London, United Kingdom (Presenting author)

Co-author(s) - Gildea, C , Public Health England , Sheffield , United Kingdom

Co-author(s) - Møller, H , King's College London , London , United Kingdom

Topic Cancer

Keywords

There is considerable variation between practices in their use of suspected cancer urgent referral pathways. We aimed to find whether association between use of urgent referral and mortality of patients with cancer is replicated in a more recent and longer time period, and for the main cancer types.

National cohort study of 1,469,106 patients diagnosed with cancer in England 2011-2015. Referral data from primary care was available for 1,352,515 patients. Cox proportional hazards regression quantifying hazard of death over five years from any cause in relation to quintiles of practice referral indices (referral ratio, conversion rate, and detection rate) for all cancers combined and the main subtypes, with adjustment for potential confounders.

Increased referral ratio and detection rate were significantly associated with reduced five year mortality. Patients in the highest referral ratio and detection rate quintiles had 4% (hazard ratio (HR) 0.96; 95% CI 0.95-0.97) and 6% reduced hazard of death (HR 0.94; 95% CI 0.94-0.95) respectively. Mortality reductions for highest referral ratio and detection rate quintiles were also found for colorectal (5% and 5%), lung (5% and 2%) and prostate (12% and 5%) cancers. Breast cancer patients from the highest referral quintile had 4% reduced hazard of death (HR 0.96; 95% CI 0.93-0.99), but no association with detection rate. Conversion rate was not associated with survival for all cancer patients combined, or for lung and breast cancer, however was associated with colorectal (HR 0.94; 95% CI 0.92-0.97) and prostate cancer (HR 0.90; 95% CI 0.87-0.93) survival.

The relationship between propensity to use urgent referral and reduced cancer patient mortality is sustained over more recent and longer time periods. There is evidence of variable impact on mortality for different cancer pathways. Further work understanding the association between referral and stage and impact of 2015 updated NICE referral guidelines is warranted.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 111

Abstract code

**BRIDGING PRIMARY CARE, RADIOLOGY AND ONCOLOGY: LUNG CANCER SCREENING NAVIGATION FOR CURRENT SMOKERS IN COMMUNITY HEALTH CENTERS A RANDOMIZED CONTROLLED TRIAL**

Author - Percac-Lima, Sanja, Massachusetts General Hospital, Boston, United States of America (Presenting author)

Co-author(s) - Ashburner, Jeffrey , Massachusetts General Hospital , Boston , United States of America

Co-author(s) - Rigotti, Nancy , Massachusetts General Hospital , Boston , United States of America

Co-author(s) - Park, Elyse , Massachusetts General Hospital , Boston , United States of America

Co-author(s) - Chang, Yuchiao , Massachusetts General Hospital , Boston , United States of America

Co-author(s) - Atlas, Steven , Massachusetts General Hospital , Boston , United States of America

Topic Cancer

Keywords

Background: Annual chest computed tomography (CT) can decrease lung cancer mortality in high risk individuals. Patient navigation (PN) has been shown to improve cancer screening rates in underserved populations. We evaluated the impact of PN on lung cancer screening (LCS) in current smokers in community health centers (CHC).

Methods: Current smokers aged 55-77 receiving care in five CHC affiliated with Massachusetts General Hospital were randomized to intervention (n=400) or control (n=1200) groups. In the intervention arm, patient navigators (PNs) determined eligibility for LCS, provided brief smoking cessation counseling, introduced shared decision making about LCS, scheduled appointments with the primary care provider (PCP), reminded patients about appointments and PCPs to order CTs, and helped patients attend testing and follow-up with oncology if needed. Control patients received usual care. The primary outcome was the proportion of patients in each group who had any chest CT during the study period. Secondary outcomes included proportion of patients receiving lung screening CTs and the number of lung cancers diagnosed in each group.

Results: Baseline patient characteristics were similar between randomized groups. From March 2016-January 2017, PNs contacted 335 (84%) of intervention patients; 76 refused further participation. Of 259 participating patients, 124 (48%) were ineligible for screening: 119 had smoked<30 pack/years and 5 had competing comorbidities. Among 135 eligible participants in the intervention group, 124 (92%) had any chest CT performed. In intention-to-treat analyses, 124 intervention patients (31%) had chest CT vs. 138 control patients (17.3%, p<0.01). Lung cancer screening CTs were performed in 94 intervention patients (23.5%) vs. 69 control patients (8.6%, p<0.01). Eight lung cancers were diagnosed in intervention patients (2%) vs. 4 in controls (0.5%).

Conclusions: By bridging primary care, radiology and oncology patient navigators significantly increased lung cancer screening among current high-risk smokers in community health centers.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information



Abstract nr. 112

Abstract code

## HEALTHCARE USE IN MEN WITH SYMPTOM OF POSSIBLE PROSTATE CANCER

Author - Martins, Tanimola Martins, University of Exeter, Exeter, United Kingdom (Presenting author)

Co-author(s) - Hamilton, William , University of Exeter , Exeter , United Kingdom

Co-author(s) - Walter, Fiona , University of Cambridge , Cambridge , United Kingdom

Topic Cancer

Keywords

**Background:** Black men have poorer outcomes of prostate cancer compared to men from other ethnic origins. We previously showed in a vignette-based study that Black men were less likely than White men to accept Prostate Specific Antigen testing (PSA) or digital rectal examination (DRE) once they had seen their GP. This reduced willingness for investigation may contribute to diagnostic delay , although we are uncertain whether when in real disease situation patients would choose as they did in that study. This study, therefore, aimed to investigate ethnic differences in; a) medical help-seeking; b) primary care investigation; and c) time to diagnosis of possible prostate cancer.

**Methods:** Multi-methods study, comprising a survey, review of selected patients' records, and semi-structured face-to-face interviews with men with urinary symptoms. The present abstract focuses on the survey. We aimed to survey 600 men who presented urinary symptoms to their general practices in London area. Analysis used simple descriptive statistics and multiple regression models.

**Results:** 276 men from 57 practices were recruited: 36 (13%) Asian, 41 (15%) Black and 196 (71%) White men. Nocturia (30%) was the most common symptom prompting help-seeking. Most men in our cohort consulted their GP within the first 3 months of symptoms onset, with 70% of cases with haematuria seeking help within a week of onset. However, ~25% of men delayed consultation for more than 1 year regardless of symptoms or ethnic background. GPs offered a PSA test or DRE to 63% of the patient, though Asian men were less likely to be offered a PSA test (odds ratio 0.38; 95% confidence interval = 0.15 to 0.92;  $P < 0.03$ ). There appears to be no difference by ethnicity in time to diagnosis.

**Conclusion:** We found no difference by ethnicity in medical help-seeking and primary care interval among men with symptoms of possible prostate cancer.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 113

Abstract code

## **LONG-TERM EFFECTS OF DIFFERENT BREAST CANCER TREATMENTS.**

Author - Heins, Marianne, NIVEL, Utrecht, Nederland (Presenting author)

Co-author(s) - Verloop, J , IKNL , Utrecht , Nederland

Co-author(s) - Ligt, K. de , IKNL , Utrecht , Nederland

Co-author(s) - Siesling, S , IKNL , Utrecht , Nederland

Co-author(s) - Korevaar, J , NIVEL , Utrecht , Nederland

Topic Cancer

Keywords

### **Background:**

Breast cancer survivors may consult their general practitioner for the (late) side effects that related to their treatment. To assist breast cancer patients in making informed treatment choices, understanding of the relation between the late side effects and the treatment they received for their breast cancer is essential. We therefore studied the health problems presented to general practitioners after breast cancer treatment and relate the late side effects to the different treatment regimes.

### **Methods:**

The Primary Secondary Cancer Care Registry is a large database in which data on patient, tumour and treatment characteristics retrieved from the Netherlands Cancer Registry (NCR) are combined with data from primary care (NIVEL primary care database). We selected three relatively common treatment groups: 1) breast conserving therapy (BC) and radiotherapy (RT), 2) BC+RT and hormone therapy (HT), 3) BC+RT/HT and chemotherapy (CT). We assessed the diagnoses made by the GP 5-10 and 10-15 years after diagnosis and compared them to the period before diagnosis, corrected for differences in age.

### **Results:**

These are the first tentative results, in April we will present additional and more final results. We analysed data from 6300 patients. A first glance showed that those receiving BC+RT seem to experience relatively many neurological problems 5-10 years after diagnosis (mostly dizziness). Those receiving BC+RT/HT/CT seem to experience relatively many ear problems 10-15 years after diagnosis (mostly otitis media and vertigo). In all patient groups there seems to be an increase of urological problems (mostly urinary tract infection).

### **Conclusions:**

The PSCCR, containing primary care data on a large, well defined group of women with breast cancer up to 15 years after diagnosis, allowed us to study symptoms that are more often presented to the general practitioner after specific treatments.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 114

Abstract code

**INFLUENCING CONFIDENCE AND INTER-PROFESSIONAL COLLABORATION THROUGH ONLINE LEARNING FOR CANCER CARE AT THE PRIMARY CARE LEVEL.**

Author - Patel, Kunal, Iheed, Dublin, Ireland

Co-author(s) - Simpson, Bill , P-value Consulting , Ontario , Canada

Co-author(s) - Smithson, W Henry , University College Cork , Cork , Ireland (Presenting author)

Co-author(s) - Reeves, Scott , St George's University of London , London , United Kingdom

Co-author(s) - O'Reilly, Seamus , Cork University Hospital , Cork , Ireland

Topic Cancer

Keywords

**Background:** This research seeks to measure the impact of an online, inter-disciplinary, short-course on medical professionals dealing with cancer within the primary care setting. The research team, have developed a six-week course targeted particularly at primary care workers in Ireland. Targeted specifically at educational gaps identified following the publication of the Irish National Cancer Strategy, a blended, online course was developed, with guided research and case-based discussions. This course brings together participants on a weekly basis for online, multi-disciplinary tutorials. Data to be presented will highlight the measurement of course impact, particularly on (1) confidence in dealing with cancer in primary care, and (2) collaboration across multidisciplinary teams.

**Methods:** Using accredited and validated scales and tools, participants will be assessed before and immediately after the course to gauge their confidence in dealing with Cancer within their primary care settings, they will also be asked to complete two assessments on inter-professional collaboration. Participants will be asked to re-take the surveys six months after completion to gauge lasting impact on clinical practice. Students will also be asked to complete a reflective journal on completion of the course determining changes in practice not captured by the collaboration tools chosen

**Results:** Data to be presented will highlight and focus on an impact evaluation of the course to guide the further development and offering of similar courses with a collaborative and interprofessional focus on a global scale. Initial results will be available for the conference in April.

**Conclusions:** Data to be presented and discussion points will reflect the outcomes of the study and presented at the conference.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 115

Abstract code

## WHICH ASPECTS OF PATIENT EXPERIENCE PREDICT SATISFACTION WITH CARE? EVIDENCE FROM THE ENGLISH CANCER PATIENT EXPERIENCE SURVEY

Author - Lyratzopoulos, Georgios, UCL (University College London), London, United Kingdom  
(Presenting author)

Co-author(s) - Abel, Gary , University of Exeter , Exeter , United Kingdom

Co-author(s) - Gomez-Cano, Mayam , University of Exeter , Exeter , United Kingdom

Topic Cancer

Keywords

**Background:** Patient experience surveys are increasingly used for measuring the quality of cancer services. However, the large number of questions typically included in such surveys prevents their effective use in improvement efforts. Examining which domains of care experience are the key drivers of overall satisfaction with cancer care can help targeting of improvement efforts.

**Methods:** We used logistic regression models to predict overall satisfaction with cancer care from other survey questions, after adjustment for socio-demographic characteristics. Not all survey questions were relevant to all patients, therefore we identified 10 questions representing domains of care that should apply to all. A series of models were used based on these 10 questions, and up to 6 questions specific to particular patients groups (e.g. those receiving radiotherapy or chemotherapy).

**Results:** 68,340 patients rated their overall satisfaction of whom 58,697 (85%) in the high satisfaction category. Experience of administration of care (Q56) was the strongest predictor of overall satisfaction (OR= 2.11, 95%CI 2.05, 2.17,  $p<0.0001$ ) together with integration of care (Q54) (OR= 2.03, 95%CI 1.97, 2.09,  $p<0.0001$ ). Involvement in decisions about care and treatment (Q16) had the next strongest association with care satisfaction. These three questions (Q56, 54 and 16) remained the strongest predictors of care satisfaction even when considering various patient subgroups, though several domain-specific questions predicted overall satisfaction more strongly some of the other 8 core questions (for example, being able to discuss worries/fears as outpatient, and length of waiting time for clinic appointments).

**Conclusion:** Positive experiences of care coordination and administration are the aspects of patient experience most strongly associated with patient satisfaction across a diverse range of care pathways of cancer patients. Prioritising improvements in communication between care providers, and in informational integration is justified given our findings, and may result in substantial improvements in patient satisfaction.

Presentation Preference Oral presentation

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 116

Abstract code

## **UNDERSTANDING ASSOCIATIONS OF ONLINE RESPONSE TO CANCER PATIENT EXPERIENCE SURVEYS WITH PATIENT CHARACTERISTICS, PATIENT EXPERIENCE AND SURVEY NON-RESPONSE**

Author - Lyratzopoulos, Georgios, UCL (University College London), London, United Kingdom

Co-author(s) - Abel, Gary , University of Exeter , Exeter , United Kingdom

Co-author(s) - Gomez-Cano, Mayam , University of Exeter , Exeter , United Kingdom

Co-author(s) - Pham, Tra My , UCL (University College London) , London , United Kingdom

(Presenting author)

Topic Cancer

Keywords

**Background:** Patient experience surveys have great potential as tools to improve cancer diagnosis, treatment and survivorship. In spite of overall high response rates certain patient groups are under-represented in these surveys (Abel et al., 2015). The English Cancer Patient Experience Survey programme has introduced an online response option in 2015, complementing postal response options.

**Methods:** Using data from the 2015 and the 2010 Cancer Patient Experience Surveys, we examined: 1) Patient characteristics associated with greater probability of online response; 2) Whether, after adjustment for patient characteristics, online response is associated with more or less critical evaluation of cancer care; 3) Whether the introduction of online response option affected non-response rates particularly for younger cancer patients and those from minority ethnic groups.

**Results:** About 8% the 2015 survey participants responded online; men, younger, least deprived and majority ethnic group (white) patients were more likely to respond online. Online respondents gave higher ratings of overall satisfaction with care, but there were inconsistent or no associations between online response option and 10 key aspects of care experience. Non-response rates were greater in the 2015 vs the 2010 survey (adjusted odds ratio=1.06, 95% CI 1.04 to 1.08,  $p < 0.001$ ). Non-response was greatest for younger and older patient in the 2010 survey; these inequalities were accentuated for younger and attenuated for older patients in the 2015 (mixed mode) survey. Non-response rates were somewhat greater for women in the 2010 survey but this difference was greatly diminished in the 2015 (mixed response mode) survey.

**Conclusion:** Online responders have different characteristics and provide different ratings of care satisfaction compared with postal responders. The introduction of an online response option does not seem to have been associated with improved response rates and seemingly inconsistently impacted inequalities in non-response.

Presentation Preference E-poster

Audio/Visual Equipment

Awards

Additional information

Abstract nr. 117

Abstract code

## ARE INDICATORS OF CLINICAL QUALITY ASSOCIATED WITH INDICATORS OF DIAGNOSTIC ACTIVITY IN PRIMARY CARE? EVIDENCE FROM ENGLISH GENERAL PRACTICES

Author - Lyratzopoulos, Georgios, UCL (University College London), London, United Kingdom  
(Presenting author)

Co-author(s) - Abel, Gary , University of Exeter , Exeter , United Kingdom

Co-author(s) - Mendonca, Silvia C , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - Rubin, Greg , University of Newcastle , Newcastle , United Kingdom

Co-author(s) - Hamilton, Willie , University of Exeter , Exeter , United Kingdom

Co-author(s) - Walter, Fiona M , University of Cambridge , Cambridge , United Kingdom

Co-author(s) - McPhail, Sean , Public Health England , London , United Kingdom

Co-author(s) - Gildea, Carolynn , Public Health England , London , United Kingdom

Topic Cancer

Keywords

**Background:** Higher general practice rates of urgent referrals for suspected cancer, and gastrointestinal endoscopies, have been associated with improved clinical outcomes for cancer patients who attend 'high referring' practices. While this is an ecological association, it is important to examine potential predictors of higher / lower use of diagnostic activity indicators in primary care.

**Methods:** We used general practice-level data from the Quality and Outcomes Framework (QOF, a pay-for-performance quality incentivisation scheme for English general practices) and the English General Practice Profiles for Cancer (a public reporting scheme for diagnostic investigation and referral rates for English General Practices). We examined associations between the practices' QOF clinical quality summary score and 10 different practice indicators relating to rates (number /1000 registered practice population / year) of urgent referrals for suspected cancer and rates of gastrointestinal endoscopy. Models were adjusted for the socio-demographic profile of general practice populations.

**Results:** None of the examined associations between the clinical quality QOF summary score and the diagnostic activity indicators examined reached the effect size of minimal practical significance i.e. all Odds or Rate Ratio effect sizes were smaller than 4% from parity (Table 2). Additionally, of the 10 associations, only 1 reached levels of statistical significance at <0.01, specifically two-week wait referral rates for suspected skin cancer.

**Conclusions:** The findings suggest that practice-level competencies in chronic disease management (as measured by the QOF scheme) are not associated with either higher or lower propensity to refer or investigate patients through the two-week referral pathway or through gastrointestinal endoscopies. These findings support the view that quality of treatment/management and quality of diagnosis are mostly independent.

Audio/Visual Equipment  
Awards  
Additional information

Abstract nr. 118

GENERAL PRACTITIONER'S CANCER-RELATED GUT FEELINGS RELATED TO TRIGGERS AND DIAGNOSIS  
— A PROSPECTIVE COHORT STUDY

Donker, GA, Nivel, Utrecht, the Netherlands (Presenting author)

Co-authors: Wiersma, E , Heins, M

Background

General practitioners (GPs) use gut feelings to diagnose cancer in an early stage, but little is known about its impact.

Method

Prospective cohort study of patients in 44 general practices throughout the Netherlands, from January 2010 until December 2013. GPs completed a questionnaire regarding gut feelings, patient and GP characteristics, if they noticed a cancer-related gut feeling during patient consultation. Follow-up questionnaires were sent 3 months later requesting information about the patient's diagnosis. Chi-square, univariate and multivariate logistic regression and multilevel analyses were performed.

Results

A gut feeling (N=366) is most often triggered by weight loss (24%, N=85) and rare GP visits (22%, N=76), but all triggers were not predictive of cancer in a multivariate analysis. Of all anticipated diagnoses tongue, mouth or salivary gland cancer (N=10) was predicted correctly more often (N=0.02), but none of the other diagnoses. The average positive predictive value of cancer-related gut feeling was 35%, and it increased with 2% for every year a patient becomes older, and with 3% for every year a GP becomes older.

Conclusions

GPs' gut feeling for cancer proves to be a useful tool in diagnosing cancer and its relative high predicting value increases if the GP is older or more experienced and when the patient is older. Triggers and anticipated diagnosis hardly influence the predictive value.