

# ABSTRACTS

THURSDAY  
14 MAY 2009  
10.45 – 12.15



## EX01 WORKING IN GENERAL PRACTICE IN THE NORDIC COUNTRIES– EXHIBITING AND DISCUSSING WHAT IT MEANS TO WORK IN GENERAL PRACTICE IN THE NORDIC COUNTRIES

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- (3) University of Tromsø, Norway
- (4) Västervik, Sweden
- (5) East of England Deanery, United Kingdom

What does it mean to work in general practice in the Nordic countries?

We are gaining still more scientific descriptions of the work in general practice, but the formats of journal articles and short presentations often restrict language and expressions present in our everyday lives working in general practice.

With an exhibition linked to a workshop we are therefore inviting GPs, GP trainees, and general practice staff to submit photographs, videos, poems or other kinds of narratives to visualize what it means to work in Scandinavian general practice today. The exhibition of photographs, videos, poems or other creative ways of describing the work in general practice will be positioned a central place of the conference location, and at a workshop we will explore the themes of the exhibition. Some of the contributors will be invited to present their submission in depth at a workshop – W18 – leaving time to discuss and develop the understanding of what it means to work in general practice today in the Nordic countries.

### OP01.1 REFERRALS FROM GENERAL PRACTICE IN DENMARK – A ONE-DAY REGISTRATION

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- (4) Research Unit for General Practice, University of Aarhus, Denmark

**Objectives:** To analyse general practitioners' (GPs') referral patterns in relation to the patient's disease and in relation to organisational factors.

**Methods:** All Danish GPs (n=3588) were invited to register all their referrals made during one day on a simple audit registration chart. A total of 1097 GPs (30.6%) accepted participation.

**Results:** The GPs recorded a total of 4671 referrals corresponding to an average of 4.3 referrals per day and 9.7% of their face-to-face contacts. Most referrals were made to practicing specialists (32%), out-patient clinics (24%), x-ray and other imaging (16%), practicing physiotherapist (11%) and hospital admission (8%). Nearly two thirds of referrals involved female patients. Half of the referrals were for further diagnosis and 12% were acute. The most frequent reason for referral was musculoskeletal disease (33%). Female GPs referred more frequently than male GPs. There were no differences with regard to practice size, number of patients listed and geography. However, the analyses were not adjusted for differences in patient composition.

**Conclusions:** A Danish GP made on average four referrals per day meaning that the referral rate is 10% of contacts. No organisational factors seem to play an important role in the referral pattern.

**Keywords:** Family practice, general practitioners, referral pattern.

## OP01.2 DEVELOPING GENERAL PRACTICE: THE ROLE OF THE APO METHOD

**Eva Lena Strandberg** (1)

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**Objectives:** To explore the role of the APO method in general practitioners' professional development. Method: Explorative case study methodology of the APO method, as a way of working with GPs continuous learning and quality assurance.

**Results:** General practice is a br OPd and multifaceted field of knowledge, which is under constant development. GPs have an understanding of society's demand for good and safe health care for everyone, but they make a clear distinction between demands coming from outside (top-down), and obligations from within the profession (bottom-up). Top-down demands are felt to encr OPch on professional autonomy, and the methods offered are rarely adapted to primary care. Instead GPs follow up their work with methods developed by the profession. Such methods include documenting one's own actions, with elements of collegial discussions, such as the APO method. The APO method functions in this way when it comes to hard data. The possibility of using the audit method for soft variables as well, was studied in a pilot audit about a holistic view and knowledge. The results show that the variables worked.

**Conclusions:** The APO method can have a role to play in the development of the field of general practice, both in clearly biomedical spheres and in more general aspects of the work. It is problematic to achieve systematism in work with quality since there is such a strong opposition between the need for professional autonomy and the methods offered. The APO method satisfies the profession's need for self-determination and reflection.

**Keywords:** Professional development.

## OP01.3 IMPLEMENTATION OF LOCAL GUIDELINE BY INTERACTIVE WORKSHOP IMPROVES ANTICOAGULATION THERAPY AND PATIENT SAFETY

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(1) City of Helsinki Health Care Unit, Finland

(2) Centre for Pharmacotherapy Development, Finland

**Background:** Helsinki Health Centre and ROHTO improve in co-operation clinical practices through workshops organized by trained facilitators. Anticoagulation therapy has potential serious complications and interactions.

**Objectives:** The aim was to implement a local anticoagulation guideline and to improve recording practices of anticoagulation therapy. Methods: A multiprofessional anticoagulation workshop in a primary care unit (12 GPs and 8 nurses for 27 000 inhabitants). An audit of patient data recordings (indication, target INR level, planned duration and strength of warfarin (mg)) and INR control levels. Audited was random samples of data of 100 patients with INR-test control during one week at baseline and 6, 12 and 18 months after the workshop. Feedback of the audit results was provided.

**Results:** The recording of patient data was improved. The indication was recorded for 54% of patients at baseline, for 73%, 82% and 93% at follow-ups. The corresponding figures for target INR level were 50%, 58%, 73% and 90% and for planned duration 54%, 46%, 58% and 78%, respectively. The strength of warfarin was recorded at 6 month follow-up for 68% of patients, and in the following audits for 89% and 92%. INR was within therapeutic range for 66%, 65%, 77% and 66% of the cases.

**Discussion:** Well planned local implementation with workshops, evaluation and feedback can improve recording practices. Improved recording gives all relevant information for treatment decisions and thus may improve patient safety. Changes in clinical practices take time.

**Keywords:** Anticoagulans, primary health care, medical audit, medical records.

#### OP01.4 DO CANCER PATIENTS' SYMPTOMS INFLUENCE THE PATTERN OF DELAY?

**Rikke Pilegaard Hansen** (1), P Vedsted (1), I Sokolowski (1), F Olesen (1)  
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**Objectives:** Delay in cancer patients' diagnostic pathways is the period between the patient's first cancer symptoms and onset of treatment and can be divided into patient delay, doctor delay and system delay. A short delay is a prerequisite for a better cancer prognosis. However, there is only little knowledge about the duration of and factors associated with the different delay stages. This study aims to analyse whether patients' symptoms influence the pattern of delay in cancer diagnosis.

**Methods:** General practitioners (GPs) completed questionnaires on the patients' diagnostic pathways, cancer symptoms and the GPs' interpretation of these symptoms (alarm symptoms, general symptoms or non-cancer-specific symptoms). The patient, doctor and system delay related to the three symptom categories were analysed and compared.

**Results:** The GPs interpreted the symptoms as alarm symptoms in 49%, as general symptoms in 24% and as non-cancer-specific symptoms in 27% of patients. Patients with non-cancer-specific symptoms had the longest delay. Presenting symptom category influenced the pattern of delay; Patients with alarm symptoms displayed long patient delay, and patients with non-cancer-specific symptoms experienced the longest doctor delay. System delay was almost unaffected by symptom category.

**Conclusions:** The GPs' diagnostic work-up and the present use of fast track referral for suspected cancer is complicated by the fact that more than half of the patients present with symptoms other than alarm symptoms. At present, the fast track referral system for suspected cancer does not include the non-cancer-specific symptoms, and alternative referral pathways for patients with these non-specific symptoms are needed.

**Keywords:** Cancer, delay.

#### OP01.5 DIAGNOSTIC DELAY IN CANCER IN PRIMARY HEALTH CARE – BEFORE AND AFTER THE INTRODUCTION OF URGENT SUSPECTED CANCER REFERRALS

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(1) The Research Unit for General Practice / Aarhus University, Denmark  
(2) The Research Unit for General Practice / Odense University, Denmark

**Introduction:** Urgent suspected cancer referrals were introduced in Denmark for four types of cancer (head and neck cancer, colorectal, lung and breast cancer). Patients with specific symptoms of one of these cancers should be referred urgently to fast track diagnosis to ensure timely start of relevant treatment.

**Aim:** The aim of this study was to analyze whether the introduction of urgent referral for suspected cancer influenced doctor delay in general practice.

**Methods:** All incident cancer patients were sampled from the patient administrative systems in the Central Denmark Region and the Region of Southern Denmark six months before and after the introduction of urgent suspected cancer referrals (October 2007-September 2008) (7,000 patients). Questionnaires were sent to the patients' general practitioners (GPs) asking them to provide information about the date of first contact with the GP and the date of first referral to secondary health care, thus enabling us to calculate doctor's delay in primary care. Patients were dichotomised into two groups referred either before or after the introduction of fast track referral. Furthermore, patients were divided into groups according to the month of diagnosis to enable us to analyze the monthly development in doctor's delay during the period.

**Results:** Analyses are ongoing. The hypothesis is that introducing urgent suspected cancer referrals will reduce delay in primary health care.

**Discussion/Conclusions:** Results from this study will contribute new knowledge about the influence of urgent suspected cancer referrals on cancer patients' delay in primary care.

**Keywords:** Health services research, early detection of cancer.

## OP02.1 ATTITUDES AND REACTIONS AMONG GENERAL PRACTITIONERS TO A NEW SET-UP FOR THE MANAGEMENT OF PATIENTS WITH DIABETES

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(1) Hvalsø General Practice, Hvalsø, Denmark

**Objectives:** To describe attitudes and reactions among general practitioners during the implementation of a new program in diabetes care in general practice in Denmark. The program contains data-capture, comparison of own data with those of the colleagues and a change in the payment of doctors toward a capitation system.

**Methods:** Completion of qualitative interviews in 9 general practices about the experiences with the model. Participation in the implementation of the model in 2 general practices during a 3 months period in the summer of 2008.

**Results:** The model has generally been well accepted in the general practices studied. The program has contributed to an improved overview and methodology resulting in a better division of tasks between doctors and nurses in some general practices. It is still uncertain whether the model is cost-effective from the general practitioners' point of view.

**Conclusions:** In general, the model may ensure a better and more homogeneous treatment of diabetic patients and could be a model for the treatment of other chronic diseases.

**Keywords:** Practice management, benchmarking, diabetes mellitus.

## OP02.2 6-YEAR VISION LOSS IN PATIENTS NEWLY DIAGNOSED WITH CLINICAL TYPE 2 DIABETES. WHAT CAN THE PATIENTS EXPECT?

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(2) University Eye Clinic, Rigshospitalet, Copenhagen, Denmark

**Background:** Diabetes with even mildly impaired sight has a negative impact on perceived quality of life and psychosocial functioning. For many type 2 diabetic patients fear of visual loss is intense and loss of vision is considered the worst complication of diabetes.

**Objective:** We studied patients' vision loss during 6 years and its possible predictors and implications for 5-year mortality.

**Methods:** Data were from a population-based general practice sample of 1,241 newly diagnosed patients aged 40 years or over. An eye examination was carried out by 164 practising ophthalmologists who estimated visual acuity and evaluated eye backgrounds.

**Results:** At diagnosis, median age was 65.5 years and 6.3% were blind or visually impaired. Among these patients with reduced sight, 76% had cataract and 58% retinopathy, usually age-related macular degeneration (AMD). During the first 6 years after diabetes diagnosis, the incidence of blindness was relatively high, 40 per 10,000 person-years. The prevailing baseline predictors of both level and speed of visual loss after diagnosis were AMD, cataract and age at diagnosis. The speed of the 6-year visual loss increased if the patient had diabetic retinopathy at diabetes diagnosis. Patients who were blind or visually impaired at diabetes diagnosis had markedly increased 5-year all-cause and cardiovascular mortality, and this relation persisted after controlling for eye complications at diagnosis.

**Conclusions:** Patients newly diagnosed with clinical type 2 diabetes face an inevitable age-related declining sight but also a vision loss which is widely preventable through diligent ophthalmological follow up organised by the general practitioner.

### OP02.3 CHANGES IN LEVELS OF HAEMOGLOBIN A1C DURING THE FIRST 6 YEARS AFTER DIAGNOSIS OF CLINICAL TYPE 2 DIABETES. CLINICAL IMPLICATIONS

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(2) Department of Clinical Biochemistry, Odense University Hospital, Odense, Denmark

**Background:** How can we use epidemiology to improve the treatment of the individual patient? Can we get inspired by observing groups of patients with special characteristics? Objective. To assess the variability in levels of glycosylated haemoglobin (HbA1c) during the first six years after diagnosis of clinical type 2 diabetes in relation to possible predictors.

**Methods:** Data were from a population-based sample from general practice of 581 newly diagnosed diabetic patients aged 40 or over. Estimation of HbA1c was centralised. The changes in levels of HbA1c were described by HbA1c at diagnosis and a regression line fitted to the HbA1c measurements after 1-year follow-up for each patient. The predictive effect of patient characteristics for changes in HbA1c was investigated in a multivariate mixed model.

**Results:** A sharp rise in long-term glycaemic level was observed in a considerable number of the patients, especially the relatively young. Of 581 patients, 156 (26.9%) patients, however, experienced a fall in HbA1c after 1-year follow-up and another quarter showed constant or only slowly rising HbA1c. The changes in levels of HbA1c were only predicted by diagnostic HbA1c and age.

**Conclusions:** During the first 6 years after the diagnosis of clinical type 2 diabetes, changes in levels of HbA1c show considerable inter-individual variability with age as the only long-term predictor. The results indicate that it is important to monitor changes in HbA1c more closely and intensify treatment of those often relatively young patients who actually experience the beginning of an apparently relentless deterioration of their glycaemic control.

### OP02.4 16-YEAR EXCESS ALL-CAUSE MORTALITY OF NEWLY DIAGNOSED TYPE 2 DIABETIC PATIENTS

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(1) The Research Unit for General Practice in Copenhagen and Department of General Practice, Centre for Health and Society, University of Copenhagen, Denmark

**Objective:** To investigate the age- and sex-specific all-cause mortality pattern in patients with type 2 diabetes in comparison with the Danish background population.

**Research Design and Methods:** Population-based cohort study of 1323 patients, diagnosed with clinical type 2 diabetes in 1989-92 and followed for 16 years. The age- and sex-specific hazard rates were estimated for the cohort using the life table method and compared with the expected hazard rates calculated with Danish register data from the general population.

**Results:** In comparison with the general population, diabetic patients had a 1.5-2.5 fold higher risk of dying depending on age. The over-mortality was higher for men than for women. It decreased with age in both sexes, and among patients over 80 years at diagnosis the difference between the observed and the expected survival was small.

**Conclusions:** We found an excess mortality of type 2 diabetic patients compared with the background population in all age groups. The excess mortality was most pronounced in men and in young patients. Our results underline the importance of improving the treatment of type 2 diabetic patients right from diagnosis.

**Keywords:** Type 2 diabetes, mortality, cohort study, age, sex.

## S01 ARE PATIENTS WITH CHRONIC DISEASES A NEW CHALLENGE TO GENERAL PRACTICE?

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- (2) Department of General Practice, University of Aarhus, Denmark

**Aim of symposium:** To discuss different aspects of management of patients with chronic diseases in general practice. Content of symposium:

1. Introducing the topic. What challenges do we meet? Professor, PhD Jens Søndergaard. Institute of Public Health, Research Unit for General Practice, University of Southern Denmark
2. Patients with irritable bowel syndrome. How do we identify this patient group? Why do they seek medical care and what expectations do they have? How comprehensive should diagnostic processes be? PhD student, MD, Luise Begtrup. Research Unit for General Practice, University of Southern Denmark
3. Rehabilitation of patients with heart diseases. It should be very easy! – But where are the issues and what role does the GP play? PhD student, MD, Karen Kjær Larsen. Department of General Practice, University of Aarhus.
4. Patients with severe chronic obstructive pulmonary diseases (COPD). Low rate of readmissions indicates a good quality of care. How do GPs achieve this? Is this always beneficial to the patient? PhD student, GP, Jesper Lykkegaard. Research Unit for General Practice, University of Southern Denmark
5. Organizing preventive health services to patients with chronic illness Ideas of preventive care are introduced into clinical practice, but why do clinics not follow the same code of practice? PhD student, MPM, Loni Ledderer. Research Unit for General Practice, University of Southern Denmark
6. Finally aspects. Where are we going? PhD, Senior researcher, Dorte Ejj Jarbøl. Research Unit for General Practice in Odense, University of Southern Denmark

**Keywords:** Family practice, chronic disease.

## S02 NEWS IN RESPIRATORY DISEASES

**Thomas Gørlén** (1), M Lindbæk (2), L Bjerrum (3), G Moth (4), M Stubbe Østergaard (5), S Brorson (1), AD Guassora (5)

- (1) KvEAP respiratory-group (KvEAP: Quality Development- and Educational Center for General Practice in Region Hovedstaden), Denmark
- (2) Department of general practice and community medicine, University of Oslo, Norway
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- (5) Department of General Practice and Research Unit, University of Copenhagen, Denmark

New evidences on respiratory infections, childhood asthma, COPD and Smoking Cessation are presented, concerning problems of correct diagnoses and differential diagnosis, and the value of diagnostic tools including: Diagnostic symptom algorithms, CRP, StrpA, Lung Function Tests and Pulsoximetry. New Norwegian guidelines for respiratory infections and problems of over-diagnosing and over-use of antibiotics, based on an European survey will be presented. Finally, the dilemmas concerning smoking cessation advices in consultations, developed in a new Ph.D., will be discussed.

The issues of respiratory infections, asthma, COPD and smoking cessation will be further debated in two respiratory workshops in the afternoon.

## S03 THE NORDIC MATURITY MATRIX EXPERIENCE

**Tina Eriksson** (1), AGK Edwards (2), L Tapp (2), J Thesen (3), L Løgstrup (4), A Adeler (5)

- (1) Danish Quality Unit of General Practice – DAK-E, Copenhagen, Denmark
- (2) Department of Primary Care & Public Health, School of Medicine Cardiff University, 2nd Floor, Neuadd Meirionnydd, Cardiff, UK
- (3) The National Centre for Emergency Primary Health Care. The Centre is academically linked with the Department of Public Health and Primary Health Care at the University of Bergen, Norway
- (4) Department of General Practice, Institute of Public Health, University of Copenhagen, Denmark
- (5) Region Midt, Århus, Denmark

**Objectives:** To present the Nordic experiences with the Maturity Matrix (MM)

**Methods:** MM comprises a formative evaluation instrument designed for primary care practices to self-assess their degree of organisational development in a group setting, aided by an external facilitator. In the Nordic countries there are two different lines of development of the MM, reflecting the development of the instrument since the start in 1987. The International Maturity Matrix (IMM) developed in the years 2005-2007, involving GPs and others from more than 20 European countries, among those Norway, Sweden and Denmark. A feasibility study was conducted in 2008, including 12 countries and 73 practice teams. The Danish MM – the Praksis Matrix (PM) developed in the years 2004-06 and tested 2006-2008 in 57 primary care teams in DK.

**Results:** IMM Adrian Edwards and Laura Tapp present the results of the IMM feasibility study Janecke Thesen presents the Norwegian experiences with IMM from the perspective of the facilitator and user and the future perspectives of IMM in Norway. PM Tina Eriksson presents the results of qualitative and quantitative research evaluations of the PM study. Louise Løgstrup presents results of a survey among participating GPs and staff. Anny Adeler present the Danish experiences with PM from the perspective of the facilitator and user and the future perspectives of PM in DK.

**Conclusions:** The Nordic experiences with MM are positive, concluding that the tool is comprehensive and may indeed contribute to organisational development and quality improvement.

**Keywords:** Quality, primary health care, management quality circles.



## W01 PRIMARY CARE AND PREVENTION

**Susanne Reventlow** (1), **Roar Maagaard** (2), **B Starfield** (3)

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(2) GP and president of the Danish College of GP, Denmark

(3) Department of Health Policy and Management, Johns Hopkins University, USA

Barbara Starfield has praised the organisation of the Danish health care system, however she at the same time has identified some possibilities for development. A robust literature documents the connection between the way the healthcare system is organised and the effect of prevention, lifetime, costs, efficiency and greater equity in health within populations. Although sociodemographic factors undoubtedly influence levels of health, a healthcare system based on a strong primary care sector is a highly relevant policy strategy. A strong frontline has a clear and relatively rapid effect, particularly concerning the prevention of the progression of illness and effect of injury for younger people. Barbara Starfield emphasises how important it is that every person has access to a general practitioner.

Prevention makes up an increasing part of the work in general practice. Over time, the definition of prevention has expanded so that its meaning in the context of the health service has become unclear. A new approach to prevention requires a refocusing of attention from evidence relevant to individuals to evidence relevant to populations. In this understanding – what preventive services should be provided by general practice?

This workshop will take its point of origin in Barbara Starfield's keynote lecture: "General Practice as an Integrated Part of the Health Care System" and the workshop will address some of the questions the participants wish to discuss further.

Furthermore, this workshop will focus in detail on primary care and prevention and will address the following questions:

- What preventive services should be provided by primary care?
- Should prevention be disease-oriented?
- Is disease-monitoring prevention?

The aim of the workshop is to conceptualize and discuss prevention in general practice as a patient/population oriented activity rather than disease-prevention activity. Barbara Starfield will focus the discussion with a few slides.

## W02 THE PRACTICE CONSULTANT SYSTEM (PRAKSISKONSULENTORDNINGEN PKO) A TOOL FOR BETTER COOPERATION AND COMMUNICATION BETWEEN GENERAL PRACTICE AND SECONDARY CARE

**Olav Thorsen** (1), **J Rubak** (2), **S Thyrborg** (3)

(1) Klubbegaten legesenter, Stavanger, Norway

(2) Praksisenheden Århus, Århus, Denmark

(3) Vårdcentralen Ramlösa, Helsingborg, Sweden

The Practice Consultant System (PKO=praksiskonsulentordningen) started in Denmark in 1992, then in Norway and Sweden. The main reason for such a system is to create better cooperation and communication between general practice and hospital about patient logistics. The system consists of general practitioners (practice consultants) connected to hospital clinics, to facilitate all kinds of relationships between the two sectors of the health system. The practice consultants related to a hospital meet regularly, to discuss problems and challenges about patient handling, new procedures and new treatments. Courses and information letters are made to update doctors both in hospitals and in general practice on changes and challenges concerning patients and treatment. Each year representatives meet in one of the three Nordic countries to discuss the actual situation and the way further. In Denmark there was in 2002 a big evaluation report about PKO, which gave a positive and optimistic view on this system (Muusmannrapporten). In Norway an evaluation of the system was made in 2007-8 at the University of Stavanger. As this system has become a very important impact on the lines and canals for communication and cooperation between hospitals and primary health care, it is interesting to discuss a more academic approach to this system, with university education and more research on effects and outcomes, as well as a more international presentation. The work shop will be mainly on these topics, with oral introductions from Denmark, Norway and Sweden.

### W03 LÆGEHÅNDBOGEN/NEL; THE GP'S WEBSITE FOR UPDATED CLINICAL INFORMATION

**Hans Christian Kjeldsen** (1), F Klamer (2), A Damgaard (3), BL Ravn (3), T Johannessen (4), I Løge (5)

(1) University of Aarhus, Denmark

(2) The Danish eHealth Portal, Copenhagen, Denmark

(3) Danish Medical Association, Copenhagen, Denmark

(4) University of Trondheim, Norway

(5) Norsk Helseinformatik, Trondheim, Norway

**Objectives:** To provide insight into the opportunities for using Lægehåndbogen/NEL as an information and support tool in clinical practice.

**Methods:** Plenary introduction to Lægehåndbogen/NEL and workshop where clinical problems are solved using Lægehåndbogen/NEL. BRING YOUR OWN LAPTOP IF POSSIBLE for personal use or use in groups.

**Results:** Lægehåndbogen/NEL is a medical website aimed primarily at Danish and Norwegian GPs and patients. All information in Lægehåndbogen/NEL is presented with the intention to provide fast access to clinical knowledge. Lægehåndbogen/NEL offers GPs and patients updated and reliable online health information based on the principles of evidence-based medicine. It supports the spread of new academic knowledge among GPs, and gives GPs and patients a common platform in relation to health and sickness. The website contains approx. 6,000 medical articles about different conditions. All medical articles contain links to patient information. Lægehåndbogen/NEL is free of charge for doctors and patients in Denmark and Norway. In Norway, it was initiated in 1999 and is owned by Norsk Helseinformatik. In Denmark, it is owned by the Danish Regions since 2008, and handled by/based at Lægeforeningen. The website is currently translated into Danish and is available at the Danish National Health Portal, [www.sundhed.dk](http://www.sundhed.dk)

**Conclusions:** Lægehåndbogen/NEL is currently the primary medical website for GPs in Norway. We believe that the introduction in Denmark is the first step in a process, where Lægehåndbogen/NEL will ultimately become the primary medical website for updated clinical information for GPs in the Nordic countries.

**Keywords:** Decision making; computer-assisted, therapy; computer-assisted, decision support techniques.

**W04      MOTIVATIONAL INTERVIEWING – A PROMISING INTERVENTION FOR LIFESTYLE CHANGES IN GENERAL PRACTICE**

**Thomas Mildestvedt** (1), E Meland (1)  
(1) University of Bergen, Norway

**Background:** In order to deal with the increasing burden of disease and increasing numbers of possible interventions, we need other approaches than doctor's advice alone. In order to make preventive efforts efficacious, patients' rights must be respected by collaborative models and self-management. Lack of time, lack of knowledge and need of better skills training in the most important methods are limitations that hamper the general practitioner from implementing evidence-based interventions. Motivational Interviewing (MI) is a directive client-centred counselling style for helping clients explore and resolve ambivalence about behaviour change. MI has been applied to a variety of health behaviours including smoking, diet, exercise, alcohol abuse and drug use and has been used in a variety of diverse patient populations including older adults, pregnant women, adolescents and people with diabetes. MI highlights the importance of the interaction between clinicians and patients and argues that it is the quality of the interaction that is the key to behaviour change. A confrontational interviewing style is at least partly responsible for emerging resistance and denial. MI counselling has shown its efficiency also in brief interventions, applicable for a general practice setting.

**Objective:** In this workshop we will start with a short presentation of MI, its background and most recent research results. We will invite to reflect on the importance of doing lifestyle interventions in general practice in different clinical situations. Lastly we will discuss how this method can be implemented in everyday practice.

**Keywords:** Motivational interviewing lifestyle.

**W05      PUBLISHING FOR THE FUTURE: TRICKS FOR AUTHORS AND READERS. THE SCANDINAVIAN JOURNAL OF PRIMARY HEALTH CARE IN COLLABORATION WITH BRITISH MEDICAL JOURNAL**

**Jakob Kragstrup** (1), A Bærheim (1), A Håkansson (1), J Sigurdsson (1), H Varonen (1), P Vedsted (1), D MacAuley (2)

(1) Scandinavian Journal of Primary Health Care, Denmark, Sweden, Norway, Finland and Iceland

(2) British Medical Journal, United Kingdom

The purpose of this symposium is to discuss some aspects of the present and future for research publication in family medicine:

- 1) The traditional paper journals have a number of limitations and internet journals appear to be the future. What are the consequences for authors and readers?
- 2) A growing fraction of research in general practice is performed within the framework of a Ph.D.-study. What are the similarities and differences between the Nordic Countries? How is the Ph.D.-thesis published? How do you get access to this work?
- 3) Family medicine is a relatively young academic field but has developed dramatically in 25 years. Today the quality of research from general practice is comparable to other medical specialties and "publish or perish" has become a fact of life even for part time researchers. How do you optimize your chances for publication?

The symposium will also be an opportunity for readers, authors and editors to discuss the future of Scandinavian Journal of Primary Health Care, which is owned by the GPs in the Scandinavian countries.

**Conflicts of interest:** No conflicts of interest.

**Keywords:** Publishing, access to information, editorial policies.



# ABSTRACTS

THURSDAY

14 MAY 2009

13.30 – 15.00



### OP03.1 WHAT KIND OF SUPPORT DO GENERAL PRACTITIONERS WANT WHILE DEVELOPING THE STRUCTURE IN THEIR OWN PRACTICE

**Holger Rasmussen** (1), LG Johansen (1)  
(1) Region Syddanmark, Odense, Denmark

The Danish health care system is confronted with big challenges the coming years. An ageing population with larger needs, an increasing number of people with chronic diseases, the health system becomes more specialized and complex. GP is intended to have a continuous central role in the Danish health care system, as the local and primary health service, securing the coherence in treatment, being proactive in relation to patients with chronic diseases and a gatekeeper to the specialized health system. At the same time there is an increasing lack of general practitioners. In order to meet these challenges, it will be necessary to modify and develop the structure in GP and transfer some of the tasks to other employees in the primary sector. During the last years there have been efforts to support and contribute to improve the structure in general practice, but very little is known about the wishes and needs among our colleges. In order to imply the right kind of support, we decided to investigate this area. The investigation was carried out using 2 different methods: an electronic questionnaire to 867 doctors and 3 focus-group interviews with GP's. The results showed that there are need of and wishes for individual support. It is important to have economic security in the process of change. It is necessary to spend time to accomplish changes. Support should be carried out in the individual practices. There is a need of strengthening the skills as a leader among GP.

### OP03.2 HEALTH CARE PROVIDER BACK PAIN BELIEFS UNAFFECTED BY A MEDIA CAMPAIGN

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**Background:** Health care providers play a key role in transmitting knowledge and beliefs about LBP to their patients. There are differences in back pain beliefs between the various professional groups treating LBP patients. This study examined whether LBP beliefs changed among the health care providers exposed to a media campaign.

**Methods:** A quasi-experimental postal before-and-after survey of health professional beliefs accompanied a media campaign in two Norwegian counties, with a neighbouring county serving as control. The campaign aimed at improving beliefs about LBP in the general public, and included specific interventions also towards the health care providers.

**Results:** It was 243 doctors, physiotherapists and chiropractors that answered the questionnaire in 2002 and 2005. We observed a general tendency for all providers to have beliefs more in line with guidelines in 2005 compared to 2002, was irrespective of exposure status. Some baseline differences in beliefs between the professional groups were not only sustained but in fact seemed to increase from 2002 to 2005. This was particularly regarding LBP as a self-limiting condition.

**Conclusions:** A LBP mass media campaign with educational initiatives aimed at health care providers did not result in important improvement in LBP beliefs of providers exposed to the campaign. Important differences were observed between beliefs of the different health care provider groups in their view of LBP.

**Keywords:** Low back pain, beliefs, media campaign, health care providers.

### OP03.3 CHALLENGES AND PROBLEMS YOUNG DOCTORS FACE IN HEALTH CENTERS

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**Aim:** All young doctors, regardless of their specialty choice, are required to work for 9 months in a health center during their specific training in general medical practice. We wanted to study what problems they encounter.

**Design and methods:** A web questionnaire was presented to 121 doctors taking part in a course on social insurance during their specific training in general medical practice. The response rate was 81%. Altogether 98 responded; 79 women and 19 men. Median age was 28 years. From those who had worked in a health center after graduation (on average for 6 months) 90 responded to the open-ended question: "What are the main challenges and problems when working in a health center?"

**Results:** Two thirds of respondents mentioned being pressed for time as the main problem. About one third felt that they have too little control over their own work. Difficulty in reaching consultants, lack of guidance from GP colleagues and working alone were seen as problems. Some felt uncomfortable when treating patients with minor ailments or mainly social problems. Patients with multiple or complicated health problems were seen as a challenge. Feelings of uncertainty and inadequacy were mentioned, caused partly by demanding patients or patients with unexplained symptoms. Only a minority commented on organization and resources.

**Conclusions:** Young doctors working in health centers need more support and guidance from colleagues. Control over own work and a deeper understanding of GP's role when dealing with different kind of patients might make general practice more appealing.

### OP03.4 FINANCING HEALTH CARE SYSTEM AND THE ROLE OF CAPITATION IN THE SERBIAN CONTEXT

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**Objectives:** Starting the capitation system requires various changes and new tools to be developed and put in place not only in financial administration and management but also in many other functions in the Primary Health Care services delivery. Capitation project aims to assist Serbia to develop its Primary Health Care further to meet the changing needs of the people. One of the tools for better health services is the so called Capitation Payment System. The project has tested the implementation of the new capitation system in 28 Primary Health Care Centers (PHCC) in Serbia. The 28 PHCC are situated in 22 regions out of the 25 regions Serbia. Seven PHCC of the total of 16 PHCC in Belgrade are included. One of them is PHCC "Zemun". As Manager for Medical Programs in PHCC "Zemun" I everyday copy with serial problems according to successful implementation of named project. We started implementation 6 later than others. It was serious problem according to 191,000 habitants that PHCC "Zemun" cover.

**Results:**

- New management competencies of managers
- Changes of management skills (through education)
- Competencies in information technology and use of specific software (e.t. one third of the managers reported they have low competence or no competence at all in general IT skills)
- Capitation specific skills among managers, middle management and other staff
- In January 2009 119. 286 habitants were registered (62%).

**Conclusions:** Capitation has future in Serbia if we keep formulae transparent, simple and flexible.

**Keywords:** Capitation, financing, primary health care.

### OP03.5 STRENGTHENING CENTER FOR PREVENTION IN PRIMARY HEALTH CARE CENTER 'ZEMUN'

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**Objectives:** The highest burden of diseases in Serbia is attributed to non-communicable diseases. Until now, health service in Serbia was not effective in addressing the problem. Cardio-vascular diseases and malignant tumours contribute to more than three quarters of all causes of death in 2005. More than half of deaths in Serbia (56.8%) were deaths due to cardio-vascular diseases and almost every 5th death (18.5%) was a malignant tumour victim. Injuries and intoxications were responsible for additional 3.6% of deaths in Serbia, 2.7% were due to COPD (chronic obstructive pulmonary diseases), and complications of diabetes account for 2.4% of deaths. Taking all this into consideration a new organisational form was proposed. Center for Prevention as a new department within primary health care centers has a role to coordinate and conduct preventive activities on local level as well as to develop cooperation with partners in a community. Center for prevention in Zemun was established in 2006, but just since end of 2007 started with everyday work in different fields.

**Results:** In 2008 medical teams did:

- 4 subunits fully developed (Mobile, Counseling, Unit for Education and coordination and Open Line)
- More than 3000 visits
- School „Quit smoking“ (27 patients)
- Screening carcinoma mammae passed 440 patients
- 12 workshop themes chosen by patients
- 3 carcinoma screening programs
- 12 „Health Market“ events

**Conclusions:** This unit has shown an extremely important way to reach vulnerable citizens and should be developed as high priority.

**Keywords:** Center for prevention, general practice, health policy.



### OP03.6 A SYSTEMATIC REVIEW OF 4 INJECTION THERAPIES FOR LATERAL EPICONDYLOSIS

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**Objective:** Lateral epicondylitis (LE, tennis elbow) is a common, expensive and often refractory repetitive motion tendinopathy. We appraised existing evidence for prolotherapy, polidocanol, autologous whole blood and platelet-rich plasma injections for LE, each intended to address underlying “failure of healing” pathology of LE. Design: Systematic Review Data sources: Medline, Embase, CINAHL, Cochrane Central Register of Controlled Trials, Allied and Complementary Medicine. Study Selection: All human studies assessing the 4 therapies for LE.

**Results:** Results of 5 prospective case series and four controlled trials (3 prolotherapy, 2 polidocanol, 3 autologous whole blood and 1 platelet-rich plasma) suggest each of the 4 therapies is effective for LE. In follow-up periods ranging from 9 to 108 weeks, studies reported sustained, statistically significant ( $p < 0.05$ ) improvement on visual analog scale primary outcome pain score measures and disease specific questionnaires; relative effect sizes ranged from 51% to 94%; Cohen’s d ranged from 0.68 to 6.68. Secondary outcomes also improved, including biomechanical elbow function assessment (polidocanol and prolotherapy), presence of abnormalities and increased vascularity on ultrasound (autologous whole blood and polidocanol). Subjects reported satisfaction with therapies on single-item assessments. All studies were limited by small sample size.

**Conclusions:** There is strong pilot-level evidence supporting the use of these 4 injection therapies in the treatment of LE. Each can be performed in the primary care physician’s office. Rigorous studies of sufficient sample size are needed to determine long-term effectiveness and safety.

**Keywords:** Lateral epicondylitis, injection therapy, systematic review.

#### OP04.1 HYPERTENSION IN GENERAL PRACTICE – AN APO-AUDIT

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**Objective:** To identify the population of hypertensive patients in general practice and to improve treatment and monitoring of these patients.

**Methods:** More than 400 GPs from 189 Danish practices registered 7342 hypertensive patients on a simple APO registration chart during November 2007. Duration of hypertension, actual level of blood pressure, risk factors, complications and treatment were registered. The participating doctors were randomised into two groups, where one group attended courses and participated in other implementation activities directly after this first registration. A Second registration will be carried out after one and a half year by both groups, and the second group will subsequently receive the same courses as the first. A questionnaire to the patients was also included in the project.

**Results:** Main results from the first registrations showed that 50% of the patients included reached the target value (systolic BP below 140 mm Hg). More than 50% of the patients had a duration of the disorder of more than 5 years. The pattern of treatment showed that 1/3 received one drug, 1/3 two drugs and 25% received 3 or more drugs.

**Conclusions:** A large multipractice audit in Denmark with a complicated design is demonstrated and the primary results are shown. The study aims to elucidate whether intervention with registration of data from own patients together with training courses can improve the quality of treatment of hypertensive patients.

**Keywords:** Hypertension, clinical audit, drug therapy.

#### OP04.2 USE AND EFFECT OF DIFFERENT COMBINED MEDICATIONS OF HYPERTENSION IN FINNISH PHC

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- (1) Conmedic Oy, for the Cardiovascular Prevention Quality Network, Finland

**Objectives:** The aim of the study was to look at the use of different medications of hypertension in Finnish PHC and to find out what kind of combinations were used and what the effects of these were.

**Methods:** Finnish Quality Networks has measured the quality indicators of diabetes, hypertension and coronary disease once a year since 1994. All networks are run by Conmedic, a private company, started for this purpose. Conmedic does the coordination, teaching, measuring and benchmarking for the health centres. The Cardiovascular Prevention Network consists of 50 health centres in Finland. From the results of the last two week survey in autumn 2008 we analyzed the use of hypertension medication and compared it to the achieved blood pressure levels.

**Results:** 5310 patients were included. Medication data was obtained from 90% of the patients. Half of the patients were treated with monotherapy, 30% with a combination of two drugs, 10% with three drugs and less than 5% with more than three. 40% of all patients had a systolic blood pressure less than 140mmHg. Depending on the drug, with monotherapy between 37-45%, with 2 drugs between 29-59% and with 3 drugs 31-53% reached this level. Most of the differences were not significant, but a combination of a diuretic with another agent seemed to be most effective.

**Conclusions:** It seems that GP:s are reluctant to increase the medication from monotherapy although the effect remains unsatisfactory and more emphasis should be put on combined therapy. On behalf of Finnish Quality Networks.

#### OP04.3 DOES THE WEIGHT HISTORY OF PATIENTS WITH NEWLY DIAGNOSED TYPE 2 DIABETES INFLUENCE THE WEIGHT CHANGES AFTER DIABETES DIAGNOSIS?

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**Background:** During the last 10 years before diabetes diagnosis, relatively young patients often gain weight while weight loss is common among elderly patients. After diagnosis an average weight loss is observed. **Objective:** We studied the predictive value of patients' weight history before diabetes diagnosis for the observed weight changes after diagnosis.

**Methods:** Data were from a population-based cohort of 885 persons newly diagnosed in general practice with clinical type 2 diabetes. Patients' weight before and after diabetes diagnosis was recalled and measured, respectively. Analyses were done with multivariate linear regression models.

**Results:** More than 80% of patients were overweight at diagnosis. While patients generally were inclined to lose weight after diabetes diagnosis, 36% still gained weight. Similarly weight gain was common from 10 to 1 year before diagnosis, but 44% actually lost weight. Of all the weight changes before diabetes diagnosis only the weight change during the last year before diagnosis influenced the weight changes after diagnosis. Those patients who tended to gain weight during the year before diagnosis on average lost weight after diagnosis and vice versa for weight loss before diagnosis. Age and BMI at diabetes diagnosis were the only other statistically significant concomitants of weight change after diabetes diagnosis.

**Conclusions:** In an effort to facilitate weight reduction in newly diagnosed diabetic patients the general practitioner has to pay special attention to the last year of weight change before diagnosis, but it seems even more important to take into account age and degree of obesity.

#### OP04.4 PREDICTORS OF 5-YEAR MORTALITY OF 1,323 PATIENTS NEWLY DIAGNOSED WITH CLINICAL TYPE 2 DIABETES IN GENERAL PRACTICE

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**Background:** At diabetes diagnosis major decisions about life-style changes and treatments are made based on characteristics measured shortly after diagnosis. The predictive value for mortality of these early characteristics is widely unknown.

**Objective:** We examined the predictive value of patient characteristics measured shortly after diabetes diagnosis for 5-year all-cause and cardiovascular mortality with special reference to self-rated general health.

**Methods:** Data were from a population-based sample from 311 general practices of 1,323 persons newly diagnosed with clinical diabetes and aged 40 years or over. Possible predictors of mortality were investigated in Cox regression models.

**Results:** Multivariately patients who rated their health less than excellent experienced increased all-cause and cardiovascular mortality. These end-points also increased with sedentary life-style, relatively young age at diagnosis and presence of cardiovascular disease at diagnosis. Further predictors of all-cause mortality were male sex, low body mass index and cancer, while cardiovascular mortality increased with urinary albumin concentration.

**Conclusions:** We found that patients who rated their health as less than excellent had increased 5-year mortality, similar to that of patients with prevalent CVD, even when biochemical, clinical and life-style variables were controlled for. This finding could motivate general practitioners and practice nurses to discuss perceptions of health with newly diagnosed diabetic patients and be attentive to patients with suboptimal health ratings. Our findings also confirm that life-style changes and optimising treatment are particularly relevant for relatively young and inactive patients and those who already have CVD or (micro)albuminuria at the time of diabetes diagnosis.

#### OP04.5 THE EFFECT OF GPs' SEMINAR ATTENDANCE ON THE TREATMENT OF THEIR PATIENTS WITH DIABETES

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**Background:** During the 5-year follow-up of patients newly diagnosed with diabetes in the Diabetes Care in General Practice study, the GPs in the intervention arm of the study were invited to attend up to six study seminars about the treatment of type 2 diabetes.

**Objective:** We investigate whether the GPs' attendance to these seminars affects the quality of treatment. Here, quality is measured by their patients' level of Haemoglobin A1c, which was measured approximately yearly for each patient during follow-up.

**Results:** Data includes 641 patients, covering 201 GPs. Relating the patients' level of Haemoglobin A1c, measured at the final follow-up examination, to the number of study seminars attended by their GP shows a clear trend ( $p=0.0106$ ) of low control for GPs that attended one seminar only, to high control for GPs that attended all six seminars. However, a more careful analysis reveals that this gradient is a product of the natural course of glycaemic control and the effect of seminar attendance is small.

**Conclusions:** GP seminar attendance has, if any, only a marginal influence on their patients' glycaemic control and is only beneficial when all study seminars are attended.

**Keywords:** Diabetes mellitus, type 2, continuing medical education, haemoglobin A glycosylated.

#### OP04.6 END-OF-LIFE CARE IN A PHYSICIAN'S WORK IN FINNISH HEALTH CENTRES

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**Objectives:** Primary health care is expected to share the growing workload of end-of-life (EOL) care related to cancer. Here, the aim was to study general practitioners' involvement and experiences of cancer patients' EOL care in health centres in Finland.

**Methods:** A questionnaire was mailed in April 2003 to all health centre physicians ( $N=319$ ) in Pirkanmaa Hospital District, 196 responded. Of them, 141 had completed the questionnaire and 55 reported that they did not belong to the target group. Thus, RR was 53%.

**Results:** GPs' mean age was 44 years, 93 were female, and 39% had worked as a doctor more than 20 years. 68% were specialists/in specialist training in general practice. Most of the respondents (84%,  $n=118$ ) had sometimes treated EOL cancer patients, 17% ( $n=24$ ) had these patients at the moment (14 in health centre wards, 7 in home care and 3 in both). The physicians were mostly satisfied with co-operation with hospitals, except when transfer of patient information was concerned. Economic aspects had affected treatment choices, most often when choosing the unit for EOL care. 72% reported that ethical decisions about treatment options had caused emotional distress, 33% reported of feeling guilty sometimes because of these decisions. Most of the respondents had no supervision. Almost all thought they need more education and training in palliative care.

**Conclusions:** EOL care is not usual in primary health care, and thus, there is room to improve daily practices and collaboration as well as to increase supervision, education and training.

## OP05.1 THE RISK-DRINKING\* PROJECT – AN EFFECTIVE APPROACH TO ACHIEVE CHANGES IN YOUR PATIENTS HABITS OF DRINKING ALCOHOL

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\* Use of alcohol that is/may become harmful, but where no addiction is present. Introduction Risky drinking has large impact on many of the common diagnoses in family medicine. The GP's most effective intervention is to raise the question with the patient and motivate change. This has been acknowledged by the Swedish government, which has initiated the largest concentration on further education and quality development in the history of Swedish health-care. The Risk-drinking project was started to coordinate and inspire regional authorities in their efforts to reach doctors and other healthcare workers with this message. Aims The Project commissioned a study to set a baseline for evaluation of further achievements, and map out knowledge and attitudes to alcohol prevention among Swedish GPs. Design and methods 3845 questionnaires were sent out to Swedish GPs. Reply-rate was 46.1% nationally, and varied in different counties from 37.0% to 67.5 %. Results GPs agree that it is important that patients with a risk-drinking profile are identified and get advice on changing habits. Contrary to this, only 50% ask patients about use of alcohol. 75% think they cannot influence how much their patients drink, while 97,1% wish to get more education in the field. Conclusions There is great need of education on how to handle the patients risky drinking practices. Our strategy on how to do this will be further addressed at the oral presentation.

**Keywords:** Risk-drinking preventive alcohol.

## OP05.2 WHEN STATE-OF-THE-ART MEDICAL TECHNOLOGIES FOR PREVENTION OF LIFESTYLE RELATED HARM MEETS EVERYDAY GENERAL PRACTICE

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Pro-active prevention with regard to alcohol, tobacco, food and exercise is in focus for the role of the general practitioner (GP). Technologies for screening and brief intervention to prevent alcohol related harm have been trend-setting for preventive general practice.

**Objectives:** We critically reviewed the evidence base and we implemented and researched such prophylactic activity for alcohol related harm in real-life circumstances (everyday practice of 39 highly motivated Danish GPs) to evaluate effectiveness and compatibility of the proposed technologies.

**Methods:** Meta-analysis of the screening and intervention efficacy evidence base, validation of a state-of-the-art screening tool, a pragmatic RCT to evaluate impact on drinking, qualitative methods to explore the GPs' experiences.

**Results:** Mostly published. The existing evidence base consisted mostly of efficacy trials and we found no evidence to support screening for risky drinking. The GPs who implemented the technologies in their practice reported mainly negative experiences and had concerns regarding the doctor-patient relationship. The effectiveness study revealed that only 17.9% of subjects exposed to a brief intervention attended a suggested follow-up consultation. At one-year follow-up, average weekly consumption had increased in both intervention and control groups. Adverse intervention effects for women on secondary drinking outcomes were observed.

**Conclusions:** The evidence base of recommended technologies to modify risky drinking is fragile and the technologies are incompatible with everyday practice. Health behaviours are not necessarily positively affected just because such pro-active technologies are implemented by the GP. Negative effects of advice-giving should be considered.

**Keywords:** Family practice, health promotion, preventive medicine, alcohol drinking.

### OP05.3 STRENGTHENING THE PATIENT'S POWER TO IMPLEMENT LIFE STYLE CHANGES

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Motivating patients to implement life style changes to prevent and treat diseases is a great challenge to physicians. Traditional information concerning risk factors and treatment is important, but successful changes of life style also have to be anchored in the patient's identity, affiliation and values. This project examines how physicians can stimulate the patient to implement life style changes by focusing on ethical reflection, using Habermas' theory of communicative action as a theoretical framework. Habermas offers a dialogue procedure which focuses on openness, no abuse of power and exploration of and reflection upon the life world. The procedure has a potential for leading patients and physicians to a new understanding of clinical reality and better answers to practical ethical questions raised by the prospect of life style changes. The study is based on observation of 15 consultations with subsequent interviews of patients and physicians. 3 months later the patients were interviewed once more. All consultations and interviews were recorded for transcription and qualitative analysis. Preliminary analysis of the data reveals the following categories as significant for life style changes: existing trust between the doctor and the patient, knowing the patient's history, the professional authority of the physician, time and focus on the patient's life world. An analysis of "physician authority" in light of Habermas' theory will be presented.

**Keywords:** Preventive medicine, decision making, physician patient relation.

### OP05.4 SELF-REPORTED COGNITIVE AND EMOTIONAL EFFECTS AND LIFESTYLE CHANGES SHORTLY AFTER PREVENTIVE CARDIOVASCULAR CONSULTATIONS IN GENERAL PRACTICE

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**Objective:** To describe patients' evaluation of the contents of preventive cardiovascular consultations and to analyse whether their evaluation is shaped by self-reported cognitive and emotional effects and lifestyle changes 2 to 6 weeks after the consultations. Design Questionnaire developed by means of qualitative studies. Setting Two counties in Denmark. Subjects 2,450 subjects who had participated in a preventive cardiovascular consultation with their GP received a questionnaire; 1,714 responded (70%); 1,226 fulfilled the inclusion criteria: viz. to be at increased risk of cardiovascular disease (CVD) but without having CVD. Main outcome measures Cognitive and emotional effects and lifestyle changes. Odds ratios (ORs) were calculated between self-reported issues raised during the consultations and self-reported lifestyle changes, cognitive and emotional effects.

**Results:** 58 -79% reported cognitive effects (knowledge about risk and disease), 22-57% life-style changes (diet, exercise and smoking), 80-97% emotional effects related to relief and satisfaction and 23% worries. Those who reported that a dialogue had taken place (e.g. information about risk of disease, life habits, life circumstances / daily living, perception of risk, knowledge about disease and own possibilities for prevention) had ORs between 1.7 and 4.3 for reporting three or more cognitive effects and one or more lifestyle changes ( $p < 0.05$ ). These issues were also significantly related to emotional effects such as feeling relieved and satisfied.

**Conclusions:** Patients report cognitive and emotional effects and healthy lifestyle changes following a cardiovascular preventive consultation and the magnitude of the effect is associated with the nature of the issues raised.

**Keywords:** Preventive consultation, general practice.

## DOES THE HEALTH CARE SYSTEM INDUCE HARM? REFLECTIONS FROM GENERAL PRACTICE

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First, not to harm' (Primum non nocere) – so runs one of the precepts in the Hippocratic Oath. However, any medical intervention risks doing harm, and the examination of healthy persons with a view to prevention is no exception. Explaining risks and risk reductions in easily comprehensible ways – to doctors and patients – remains a considerable challenge. Harmful effects of prevention and medicalisation are rarely discussed among medical specialists and even less so in public. When evidence is found that a preventive measure is effective, the harmful effects tend to be downplayed for the sake of the 'good cause'. Even though medical science saves lives and postpones suffering and death for many people, there is nevertheless good reason to stop and ask: in what direction are we moving towards? Straight talk about disease prevention is needed to foster shared decision making and patient empowerment. Furthermore, there is a need for reflection on medical practice and for a critical scrutiny of the theories behind what we do. At this symposium, general practitioners from the Nordic Risk Group will present and discuss risk and resource-thinking, medicalisation and medical colonisation and how these phenomena have an impact on doctors, individuals and society. The Nordic Risk Group is launching a Swedish book in May 2009 titled 'Skapar vården ohälsa? Allmänmedicinska reflektioner' (literally translated: Does the health care system produce illness? Reflections from the perspective of general practice). The present symposium will encompass a short presentation from each author based on different chapters from the book.

**Keywords:** Prevention, risk and harm.

**S05 IMPROVING THE HEALTH IN PERSONS WITH TYPE 2 DIABETES – RESULTS FROM INTERVENTION STUDIES TARGETING PATIENTS, PRACTICE STAFF AND GPs WITH FOCUS ON IMPLEMENTATION CHALLENGES**

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**Aim:** In an attempt to raise discussion concerning optimal planning and implementation of research projects, the aim of this symposium is to present and discuss challenges in the evaluation of interventions targeting behavior of patients, practice staff and GPs in the field of improving diabetes care. Content:

1. Translation of results from research projects into daily life. (AS)
2. Reach, process evaluation and effects of the 'Ready to Act' intervention targeted people with screen-detected prediabetes and T2-diabetes in primary care. (HT) The study is finished and the presentation will focus at reach of intervention, process evaluation, and 1-year effects on motivation, perceived competence and activation
3. A patient addressed electronic facility for optimizing the treatment of type 2 diabetes. (MJ) The implementation process in the research project will provide new knowledge on structural and IT technological possibilities and barriers and patients' will and ability to use electronic access to treatment results and decision support.
4. A pr OPctive nurse-intervention in persons with type 2 diabetes. (LJ) The project will develop and evaluate a pr OPctive nurse-led intervention in people with type 2 diabetes in general practice. Implementation of tools, and effect of the intervention on patient outcomes will be assessed.
5. Development and evaluation of electronic feedback – for optimizing the treatment of type 2 diabetes in general practice. (TG) The results presented here concerns understanding the impact of electronic feedback on type 2 diabetes to general practitioners and are obtained from a qualitative study.

**S06 HJEM TIL BABEL – BABEL REVISITED. DO WE NEED OUR NORDIC PROFESSIONAL LANGUAGES?**

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In academia there has been a rapid decline in the use of national languages in favour of English. We want to address the normative centripetal forces of English as opposed to the centrifugal particularity of the national languages. The scholar George Steiner describes a language as "the clef of a civilisation". Each different language gives its fluent speakers access to different arenas and different subtleties of human experience. Seamus Heaney writes: "The world is different after it has been read by a Shakespeare or an Emily Dickinson or a Samuel Beckett because it has been augmented by their reading of it." The world is also different after it has been read by a Tomas Tranströmer or a Tarjei Vesaas in a way that is unreachable in English. The care of patients encompasses the whole of human experience and necessarily explores the limits of language. If we are to understand the content and transactions of clinical practice, we will need the resources offered by every language available to us. If the world is only to be described in English, it becomes a smaller place. Language policies in the Nordic countries have been heavily debated since major domains of research and education have undergone "anglification" during recent decades. The consequences and dangers of this development are reflected on, as well as a brief orientation of the Nordic Language Declaration adopted by the Nordic governments 2006.

**Keywords:** Language, knowledge.



**S07 HOW TO INCREASE KNOWLEDGE OF REASON FOR ENCOUNTER AND ACTIVITIES IN GENERAL PRACTICE**

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General practice plays an important role in the delivery and coordination of care and as gatekeeper to specialized care. Patients suffering from chronic diseases make up half of the patients in the GP's waiting room. The remaining half is equally split between patients with acute physical disease and patients with medically unexplained symptoms. However, little is known about symptoms leading to medical help-seeking in primary care, the complexity of patient complaints, consultation burden, and how GPs respond to patient needs. We need a thorough insight into the activities in general practice to be able to educate, dimension and support general practice and to continue improvements in patient care. The aim of this symposium is to discuss prerequisites and methods of registration of reason for encounter, symptoms, diagnoses and activities in primary care as well as the implications and possibilities of such a registration.

1) An overview – international experiences on general practice databases, Peter Vedsted, MD, PhD, Senior Researcher, 2) International Classification of Primary Care – the ICPC-2, Marianne Rosendal, MD, PhD, Senior Researcher, 3) Classification of medically unexplained symptoms in general practice, Mette Rask, MHSc, 4) The Danish primary care contact registration project, Grete Moth, MHSc, PhD, Senior Researcher.

**Keywords:** Database, classification, quality of health care.

**W06 A DANISH “MODEL” FOR QUALITY IMPROVEMENT IN GENERAL PRACTICE – KEEPING THE BALANCE?**

**Tina Eriksson** (1), S Friborg (1), L Grosen (1)

(1) Danish Quality Unit of General Practice – DAK-E, Copenhagen, Denmark

**Objective:** The aim of this workshop is to explore and discuss the necessary elements and their balance in a Danish “Model” for Quality Improvement (QI) in General Practice. This type of development is complex in many ways. For example, different views on quality originating from biomedical, patient centred, preventive medicine/public health and business angles on family medicine must be balanced. The aims of developing a “Model” may include: Reducing the gap between knowledge and medical practice, accreditation, transparency, quality based fees, ensuring QI and learning, shared care between sectors – and for the practices – marketing.

**Methods:** The workshop will be using a blended learning appr OPch, incorporating a Power-Point presentation, followed by group work and open floor discussion. The Quality “Model” suggested is based on quality measurement in participating practices on three main areas: Clinical and organisational quality and patient satisfaction. ITC based feedback, facilitated g OPI setting and audit, planned CME of GPs and staff, time management, and external evaluation are important elements. The process will organised in 3 year circles and piloted in 50 practices.

**Results:** The learning objectives of the workshop are that by the end of this workshop, people should be acquainted with the possible elements of a quality/accreditation “Model”. Participant’s views are taken into account in the further development of the “Model”. Conclusion: The development of a flexible, meaningful and adjustable Quality “Model” for General Practice based on learning rather than external control continues to be our goal.

**Keywords:** Quality Indicators Accreditation.

## **W07 DO YOU VOTE FOR PENICILLIN? WORKSHOP ON RESPIRATORY TRACT INFECTIONS.**

**Ulf Eriksson** (1), A Munck (2), D Gilså Hansen (2), EL Strandberg (3), L Bjerrum (4), S Mölsted (5)

(1) Blekinge County Council, Centre of Competence, Sweden

(2) Research Unit for General Practice, University of Southern Denmark, Denmark

(3) Lund University, Dept of Clinical Sciences, Malmö/Family Medicine, Sweden

(4) Institute of Public Health, General Practice, Odense, Denmark

(5) Linköping University, Family Medicine, Sweden

An interactive workshop on Respiratory Tract Infections, based on "Happy Audit". Happy Audit is an EU-supported multicenter study on management of respiratory tract infections (RTI), using the APO-method. APO is a clinical audit instrument where the participants register their own clinical performance. Its been in use for more than 20 years with a wide range of topics. Happy Audit focuses on diagnoses and treatment of Respiratory Tract Infections. Within this study we have published a set of evidence-based recommendations compiled in guidelines to the participating countries. In the workshop we aim to elucidate difficult situations regarding patients with signs of RTI, using interactive case-discussions where the participants take part using voting devices. Their suggested management of patients with suspected RTI will be compared with the results of the Happy Audit and recommendations from the guidelines. Who should attend? If you have an interest in and would like to know more about:

- The APO-method
- The Happy Audit Study
- Diagnosis and treatment of RTI Aims
- Describe the APO-method
- Present the preliminary results of the Happy Audit Study
- Discuss and disseminate evidence-based guidelines on RTI Object We will present patient-cases with typical signs of RTI and relate them to the Happy Audit results and guidelines. Method
- Case presentations of frequent RTIs.
- Multiple Choice Questions regarding diagnosis and treatment of patients with symptoms and/or signs of RTI.
- Wireless, electronic Audience Response System (Clicker) with instant presentation of voting results.

**Keywords:** APO-audit, Respiratory Tract Infections.

## **W08 GP TRAINEE: FUTURE GATEKEEPER OR ADVISOR? WHAT IS YOUR IDENTITY?**

**Thomas Hansen** (1), KK Larsen (1), HI Kise (1), M Rimmen (1)

(1) National Association of GP Trainees in Denmark = Forum for Yngre Almenmedicinere (FYAM), Denmark.

General Medicine is a relatively new specialty in Denmark and worldwide. But do we share a common identity? The breadth and comprehensiveness of general practice make it a challenge. Can we agree on a joint definition? Where are we in this ever expanding world of specialisation, whilst working in the front line of our healthcare system? Continuing education is a must for GPs to ensure a working knowledge of the entire medical spectrum. We highlight supervision as an educational tool. What to do: Come and spend some time with your future international GP colleagues doing a SWOT analysis. SWOT means S: strengths, W: weaknesses, O: opportunities, T: threats. After a quick introduction to the method, you will have the opportunity to work in smaller groups on the following: 1: SWOT analysis on the comprehensiveness of General Practice: Acute Treatment, Chronic Illness Care, Medically Unexplained Symptoms, where does it leave our identity? 2: SWOT analysis on supervision as an educational tool during your GP training.

**Keywords:** GP Trainee, SWOT analysis, supervision.

# ABSTRACTS

THURSDAY

14 MAY 2009

15.30 – 17.00



## OP06.1 NURSE PRACTITIONERS SUBSTITUTING FOR GENERAL PRACTITIONERS IN THE CARE FOR PATIENTS WITH COMMON COMPLAINTS; A RANDOMISED CONTROLLED TRIAL

Angelique Dierick – van Daele (1), J Metsemakers (2), L Steuten (3), E Derckx (4), C Spreeuwenberg (5), B Vrijhoef (6)

- (1) Department of Integrated Care, Maastricht University Medical Centre, Maastricht, The Netherlands
- (2) Department of general practice, CAPHRI, Department of general practice, Maastricht University Medical Centre, Maastricht, The Netherlands
- (3) CAPHRI, Maastricht University Medical Centre, Maastricht, The Netherlands
- (4) Foundation for Development of Quality Care in General Practice, Eindhoven, The Netherlands
- (5) CAPHRI, Maastricht University Medical Centre, Maastricht, The Netherlands
- (6) CAPHRI, Department of Integrated Care, Maastricht University Medical Centre, Maastricht, The Netherlands

**Background:** General practitioners (GPs) are faced with a rising and changing demand of care. The nurse practitioner (NP) was introduced to increase service capacity within limited financial budgets. Studies revealed that substituting GPs for NPs results in higher patient satisfaction and higher quality of care. Evidence on the cost-effectiveness of such substitution remains scarce.

**Objective:** To evaluate effects on the process and outcomes of care as provided by GPs or specially trained NPs for patients at first point of contact.

**Methods:** In a RCT 1501 patients were randomized for a consultation by a GP or a NP, working in 15 general practices. Data were collected over a 6-month period in 2006 by means of questionnaires, extracting medical records from the practice computer systems, and recording length of consultations. Cost calculations were based on medical consumption, productivity costs and salary costs.

**Results:** Patients from both groups highly appreciated the quality of care. No significant differences were found in health status, medical consumption, and compliance with practical guidelines. Patients in the intervention group had more follow-up consultations and their consultations took significantly more time. Costs of NP consultations were significant lower than GP consultations.

**Conclusions:** NPs provide equivalent quality of care and are likely to generate less costs than GPs. These findings support an increased involvement of specially trained NPs in the Dutch general practices. Their contribution to the accessibility and availability of primary care could also lead to GPs having more time for patients with chronic diseases or multi morbidity.

## OP06.2 ARCTIC NURSES IN GREENLAND: TRIAGE AND TREATMENT

**Dorte Gilså Hansen** (1,4), JO Veje (2), E Skifte (2), AB Kjeldsen (3), A Munck (4)

(1) Research Unit of General Practice, University of Southern Denmark, Odense, Denmark

(2) Kystledelsen, Nuuk, Grønland

(3) Center for Sundhedsuddannelser, Nuuk, Grønland

(4) Audit Project, Research Unit for General Practice, Odense, University of Southern Denmark, Odense, Denmark

**Objectives:** Due to coming organizational changes of the primary health care sector in Greenland the aim of this study was to describe the daily tasks among nurses working in the districts and to analyse associations between competences and educational, organizational and structural factors.

**Methods:** All nurses were invited and 44 from 14 of 16 districts participated in a questionnaire survey and 10 days' registration of all consultations. Registration of activities was completed by ticking off items on a simple APO registration chart comprising reason for encounter, clinical procedures, time consumption, perceived competence and involvement of other healthcare providers. The questionnaire included education, personal competences as well as structural factors.

**Results:** A total of 1861 contacts were registered comprising all reasons for encounter. Most frequently were ear, nose and thr OPt complaints (16%). A physician was involved directly or by phone in 28% of all cases. Overall, the nurses felt insufficiently competent during every fifth consultation. Educational, organizational and structural factors were not markedly associated with the perceived competence. Some nurses possess known competences which are not utilized.

**Conclusions:** Nurses working in the districts in Greenland see a br OPd spectrum of patients whom they to a large extent diagnose and treat themselves. Access to medical advice from doctors should, however, not be reduced and continuous medical education is needed.

**Keywords:** Physician-nurse realtions, organisation and administration, arctic regions, quality improvement.

### OP06.3 PATIENTS' USE OF AND PREFERENCES FOR A PRACTICE HOMEPAGE – HOW TO IMPROVE SERVICE AND ACCESS?

**Cathrine Dyrskov** (1), P Vedsted (2), P Kallestrup (1), R Maagaard (1), TE Jakobsen (3), J-K Poulsen (3)

(1) Skødstrup General Practice, Denmark

(2) Research Unit for General Practice, Aarhus University, Denmark

(3) iTechCare Aps, Aarhus, Denmark

**Objectives:** General practices have to support patients' access to information, online services and communication with the practice. We performed a quality development project (DUOWAP) concerning improvement of web-based services in general practice examining the present use of the practice homepage and the patients' needs and wishes for such a homepage.

**Methods:** Data was collected via a questionnaire filled in by 300 consecutive patients in the waiting room of a GP with 11500 patients combined with two focus group interviews with selected patients.

**Results:** The questionnaire data showed that 65% of the respondents had visited the practice homepage, primarily for the use of basic functions (online schedule, e-mail consultation) but not for health information, which was found elsewhere on the internet. Many (88%) were interested in filling in forms as part of preparation before consultation and equally many (87%) could see themselves use a private archive through the homepage, a "Personal Health Record" (PHR). The focus group interviews revealed a positive feedback on the idea of a PHR with data provided by the patient and data from the record as well. They wanted flexible, flawless basic functions and a "personalized" and profiled homepage.

**Conclusions:** At the moment the patients use the homepage for basic functions but recognize a greater potential. A PHR could perhaps improve the patient's self-care, improve the communication between doctor and patient and make the preparation to a consultation more thorough yet flexible for both doctor and patient.

**Keywords:** Medical informatics, medical records, appointments and schedules.

### OP06.4 DEVELOPMENT OF A HOMEPAGE IN GENERAL PRACTICE BASED ON PATIENT FEEDBACK

**Jens-Kristian Poulsen** (1), TE Jakobsen (1), P Vedsted (2), P Kallestrup (3), R Maagaard (3), C Dyrskov(3)

(1) iTechCare, Aarhus, Denmark

(2) Research Unit for General Practice, Aarhus University, Denmark

(3) Skødstrup Lægepraksis, Denmark

**Objectives:** Homepages in Danish general practices generally follow the same simple model. The idea was to challenge this template and expand the possible functionality of this kind of homepage with the aid of patient feedback.

**Methods:** Data were collected via a questionnaire filled in by 300 consecutive patients in the waiting room of a practice with 11500 patients listed combined with two focus group interviews with selected patients. A software model with interactive screenshots of how a homepage for the practice could function was developed. The model was modified again after feedback from patients in a third focus group interview.

**Results:** Screenshots showing possible expansions for a general practitioner's homepage were developed. The site was divided in a general part with access to more common functionalities like email consultation, online ordering of medicine and information for both doctors and patients. The other part was the personal part with the possibility of a personal health record with i.e. registration of symptoms and interactions with the doctor.

**Conclusions:** There is considerable potential for developing general practice homepages in Denmark and patients welcome these developments and are eager to contribute.

## OP07.1 INCREASING SALES OF SELECTIVE SEROTONIN REUPTAKE INHIBITORS IS CLOSELY RELATED TO INCREASING NUMBER OF PRODUCTS ON THE MARKET

**Margrethe Nielsen** (1), PC Gøtzsche (1)

(1) The Nordic Cochrane Center, Copenhagen, Denmark

**Background:** During the last 20 years, usage of selective serotonin reuptake inhibitors (SSRIs) has increased dramatically. Objective: Our primary aim was to compare usage of benzodiazepines and SSRIs within the primary care sector in Denmark, and to relate changes in usage to number of indications and number of products.

**Methods:** We used data from a number of sources to get an overview of usage of psych OPctive drugs in the period 1970 to 2007. The data were based on the anatomic therapeutic classification (ATC) system and defined daily doses (DDD).

**Results:** The sales and usage of psych OPctive drugs fluctuated over time in a way that cannot be explained by disease prevalence. The fluctuations were mainly caused by changes in usage of benzodiazepines and SSRIs. We found a decline in the usage of benzodiazepines after a peak in 1986, likely because of the recognition that they cause serious dependency. From a low level of usage in 1992, we found that the usage of SSRIs increased almost linearly, and by a factor of 18, up to 44 DDD per 1000 inhabitants, closely related to a similar increase in the number of products on the market (a factor of 16 in the same period). In 2007, the sales of psychoactive drugs were so large that almost a fifth of the population could be treated continuously.

**Conclusions:** Sales of antidepressant drug are mainly determined by marketing pressures. The current level of use may not be evidence based.

**Keywords:** Drug utilization, psychotropic drugs, serotonin uptake inhibitors.

## OP07.2 BENZODIAZEPINE REDUCTION IN GENERAL PRACTICE – IT'S EASY!

**Viggo Kragh Jørgensen** (1)

(1) Medicine Team, Primary care Unit, Region Midtjylland, Denmark

**Objectives:** The global consumption of benzodiazepines (BD) and cyclopyrrolones (CP) is generally excessive. The hypnotic and anxiolytic effects of these agents typically diminish after a period of weeks or months. Although considerable resources have been expended on reducing this consumption, no effective method to reduce use has yet been identified.

**Methods:** Two general practice clinics in Thyborøn, Denmark attempted to reduce the consumption of BD and CP. The intervention, which complied with recently introduced legislation, subsequently involved 10 medical practices with a patient base of approximately 18.500 patients. The practitioners' intervention consisted of:

- The elimination of telephone prescriptions for BD and CP drugs.
- The issue of single prescriptions only, following consultation.
- The issue of medicine sufficient for a single months use only.
- A discussion at each consultation regarding future treatment requirements as well as a possible phased reduction of treatments.

**Results:** In Thyborøn the result of this initiative was a reduction in the use of CP by 90 % and BD by 75 %, within a period of 2½ years. Fifteen months after the introduction of the intervention in 10 medical practices, the use of CP was reduced by 50,3 %. BD-hypnotics were reduced by 46,5 % and BD-anxiolytics were reduced by 41,7 %.

**Conclusions:** The project was a major success, demonstrating that this simple, effective intervention can be implemented in all medical practices with a minimum of supplementary training. The described intervention was subsequently introduced as the official regional policy in this area.

### OP07.3 CLINICAL TRIALS SPONSORED BY THE PHARMACEUTICAL INDUSTRY IN NORWEGIAN GENERAL PRACTICE

Kaspar Buus Jensen (1), J Straand (1)

(1) University of Oslo, General Practice Research Unit, Section of General Practice, Oslo, Norway

**Background:** General practitioners are frequently involved in clinical trials sponsored by pharmaceutical companies but systematic knowledge about this research is lacking. Objective: To describe and analyse pharmaceutical industry initiated /-driven studies in Norwegian general practice for the past 10 years.

**Methods:** All protocols submitted to The Norwegian Medicines Agency during 1998 to 2007 were manually searched to identify studies undertaken in general practice. For studies involving general practice, we recorded data regarding study objectives, design, medication(s) used, drug company involvement, and participating doctors.

**Results:** For the 10-year period, 2027 protocols were received, 195 (9.6%) of the studies involved general practice and 189 (96.9%) of them were pharmaceutical industry trials involving 29 different companies. Five companies had each more than ten studies. All sponsored trials were multi-centre and/or multi-national with an average of 13 participating centers. Trials involving drugs in ATC-classes A (alimentary tract and metabolism), and C (cardiovascular system) made up 96 (50.8%) of all studies. Only 18% of the sponsored studies were limited only to a general practice setting, the remaining also involved private specialists, or hospitals. On an average, 10 GPs (from 2 to 331, none affiliated to academic general practice) participated in each study. The studies varied in clinical relevance and several were judged to be obvious 'seeding trials'.

**Conclusions:** Almost 20 new drug trials are launched annually involving Norwegian GPs. Almost all are run by pharmaceutical companies and include no collaboration with academic general practice. The clinical relevance of the trials is variable.

**Keywords:** General Practice, pharmaceutical industry, clinical trials.

### OP08.1 HEALTH CARE AND OTHER THREATS AGAINST SUBJECTIVE HEALTH

Eivind Meland (1), H-J Breidablik (1), S Lydersen (1)

(1) University of Bergen, Norway

The suspicion that health care might jeopardise subjective health was first worded in the late 80-ies by Arthur Barsky. Self-rated health (SRH) is an important single-item subjective health variable. It is a predictor for later mortality, morbidity and health service attendance. Analyses were based on 4-year longitudinal data from the Young-HUNT studies in Norway among adolescents aged 13–19 years. A total of 2800 students (81%) participated in the follow-up study, and 2399 of these were eligible for data analysis. Cross-tables for SRH at the start of the study (between 1995 and 1997) and 4 years later were used to estimate the stability over the period. Ordinal logistic regression analyses of SRH during 2000–01 were carried out, controlling for initial SRH, independent variables at the start of the study and changes in the same independent variables over 4 years as covariates. In 59% of the respondents, SRH remained unchanged through the 4-year observation period during adolescence. The self-assessed general well-being, health behaviour variables, being disabled in any way, and body dissatisfaction at the start of the study and the change of these predictors influenced SRH significantly during the 4-year observation. Adolescents with more health service contacts at the start of the study, or who increase their attendance rate during the 4 years, report deterioration of SRH. SRH is a relatively stable construct, and deteriorates consistently with a lack of general well-being, disability, healthcare attendance and health-compromising behaviour. Barsky's health paradox hypothesis has empirical support.

**Keywords:** Adolescence, self-rated health.



## OP08.2 “COULDN'T YOU HAVE DONE JUST AS WELL WITHOUT THE SCREENING?” QUALITATIVE STUDY OF BENEFITS FROM A HEALTH-SCREENING

**Karen-Dorthe Bach Nielsen** (1,2)

(1) Division for General Practice, University of Bergen, Norway

(2) Ebeltoft General Practice, Ebeltoft, Denmark

**Objective:** To explore how individuals with a low cardiovascular risk score interpret and respond to score results.

**Design:** Qualitative semi-structured interviews with interviewees selected among participants with a low cardiovascular risk score in a Danish health-screening project (the Ebeltoft project). Seven men and 15 women aged 36-50 years.

**Results:** Before the screening, the participants had considered themselves healthy. The screening confirmed their own judgement that nothing was wrong. Nevertheless, they appeared almost hurt when asked whether they could not have done just as well without the screening. Their reactions were prompt and sharp. Participants used the results to eliminate worries and to confirm their lifestyle up to now, but were aware that the results gave no guarantee that there was nothing the matter elsewhere. The participants described how it “sinks in more when an expert gives his opinion”.

**Conclusions:** Confirmation of the participant's own sense of being healthy can be considered a positive screening outcome. However, when relatively young people who consider themselves healthy dare not rely on their own judgement and choose to participate in a health screening, the possibility of having a screening may, in itself, add an element of insecurity. Thus a health screening requires adequate follow-up, in which lay knowledge and illness experiences are included and the participant's perception of the screening results as well as his or her worries and self-assessed health resources should be considered.

**Conflicts of interest:** No conflicts of interest.

**Keywords:** Qualitative research, family practice, mass screening, lifestyle.

## OP08.3 BODY SIZE PERCEPTION AMONG INUIT WOMEN IN GREENLAND: DO OBESE WOMEN CONSIDER THEMSELVES OBESE?

**Anni BS Nielsen** (1), NK Larsen (1), P Bjerregaard (1)

(1) Centre for Health Research in Greenland, National Institute of Public Health, University of Southern Denmark, Denmark

**Background:** A recent survey revealed 57% of Inuit women in Greenland to be overweight. In Greenland overweight is common also among the well-educated population. The ideal body image in affluent populations is generally slim, while corpulence is more well-regarded in populations where food can be, or has been, scarce. Obesity problems should therefore also been addressed in a cultural context. This paper examines body-size perception among women and its relation to socio-demographic factors.

**Methods:** Involving 1,248 Inuit women, age  $\geq 18$  years, from West Greenland, this is a cross-sectional study which consists of para-clinical examinations, interviews including socio-demographic conditions, and a questionnaire containing 9 drawings on female figures ranging from very thin to very obese (0-10). The participants were asked to identify their actual and ideal body figure, and state their subjective perception of own body size. We examined the bivariate relation between BMI and body-size perception, and investigated whether or not the relation depended on age, education and place of residence.

**Results:** The bivariate analyses showed that the identified body figure rose with increasing BMI levels: normal-weight, pre-obese ( $25 \leq \text{BMI} < 30$ ), and obese ( $\text{BMI} \geq 30$ ) chose figures 3.5, 4.9, and 5.9 respectively. A similar association was found for ideal body figure and BMI. The multivariate analyses revealed that socio-demographic factors were not associated with the ideal body image; only BMI was crucial. Many pre-obese (37%) and obese (20%) women appreciated their body-size.

**Conclusion:** Women's preference for an ideal body figure that reflects their BMI may indicate that obesity is not seen as unattractive.

#### OP08.4 PAIN AS PREDICTOR FOR OSTEOARTHRITIS IN HAND, HIP AND KNEE. A 10-YEAR PROSPECTIVE POPULATION STUDY

**Bård Natvig** (1,2), N Østerås (2), D Bruusgaard (1)

(1) University of Oslo, Institute of General Practice and Community Medicine, Oslo, Norway

(2) NRRK, Diakonhjemmet Hospital, Oslo, Norway

Osteoarthritis (OP) is a common and important disease in general practice. Pain in a joint region might be an early symptom of OP in that joint. However, even among the elderly in a population most pain in a joint region is not related to the presence of OP. Little is known about pain as predictor for different types of OP. In this study we investigated pain as predictor of OP in hand, hip and knee in a 10-year follow-up population study. All persons in Ullensaker, Norway belonging to six birth cohorts were sent postal questionnaires in 1994 and 2004. 1854 persons participated in both surveys. 122 persons with OP in 1994 were excluded, leaving a final study group of 1732 free of OP at baseline. In an age and gender adjusted analysis people with hip pain in 1994 had Odds Ratio (OR) 3.5 (95% CI 2.2-5.5) for hip OP in 2004. Corresponding figures for knee pain and knee OP was 3.1 (2.1-4.5) and for hand pain and hand OP 2.2 (1.4-3.6). Results from multivariate models based on data splitting procedures confirmed these results. High BMI and reduced sleep quality in 1994 were additional predictors for knee OP in 2004. Poor sleep also predicted future hip OP, while physical leisure activity and physical fitness did not predict any of the three types of OP. Possible mechanisms for pain predicting OP and consequences for prevention of OP will be discussed.

**Keywords:** Osteoarthritis, risk factors.

#### S08 EPIDEMIOLOGY IN GENERAL PRACTICE – THE NORDIC PARADISE

**Mogens Vestergaard** (1), H Schroll (2), M Andersen (3), C Obel (1)

(1) Institute of Public Health, Dep of General Practice, Aarhus University, Denmark

(2) Danish Quality Unit of General Practice, University of Southern Denmark, Denmark

(3) Research Unit for General Practice, Institute of Public Health, University of Southern Denmark, Denmark

**Background:** The Nordic countries are the lands of milk and honey for epidemiologists. By using the unique personal identification number, we can link numerous national registries and databases and establish large population-based cohorts that can be followed for decades with virtually no loss to follow-up. These registries have been used successfully by Nordic researchers during the past years with several important publications in high ranking journals. However, only a few studies have used this treasure chest to study the risk and prognosis of conditions treated by the general practitioner. The aim of this symposium is to present the opportunities and discuss the challenges of using pre-existing registries and databases to conduct epidemiological studies within the field of general practice by using Danish data as an example.

**Participants and content nationwide registries:** Mogens Vestergaard, GP, PhD

**The danish general practice database:** Henrik Schroll, GP, PhD

**Drugs and registers:** Morten Andersen, Clinical Pharmacologist, PhD

**Population-based cohorts:** Carsten Obel, GP, PhD.

**THE DIFFERENT FACES OF TYPE 2 DIABETES. SHIFTING ATTENTION IN DIAGNOSIS AND TREATMENT**

- Niels de Fine Olivarius** (1), AK Jenum (2), A Thi Tran (2), K Winell (3), PE Wändell (4), S Jansson (5), PE Heldgaard (6), LJ Hansen (1), H Lohmann (7), T Drivsholm (1), V Siersma (1)
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  - (2) Oslo Diabetes Research Centre, Aker University Hospital, University of Oslo, Oslo, Norway
  - (3) Finnish Diabetes Association, Espoo, Finland
  - (4) Family Medicine Stockholm, Karolinska Institutet, Stockholm, Sweden
  - (5) Family Research Centre, Örebro University, Sweden
  - (6) General practice in Ørum, Tjele, Denmark
  - (7) General practice, Korsør, Denmark

**Background:** In the natural history of type 2 diabetes (T2DM) subjects start out with normal glucose tolerance, move through a period of increasing glucose intolerance to reach glucose levels diagnostic of T2DM, but remaining undiagnosed for some years. After diagnosis, glucose intolerance and other indicators of disease severity may continue to deteriorate dependant upon lifestyle changes and pharmacological treatment. During the last 20 years screening for T2DM has increased markedly, and guidelines with ever stricter treatment targets for risk factors for complications in patients with known T2DM have been endorsed.

**Objective:** To present results from primary care in the Nordic countries to support two hypotheses concerning the last 20 years of development: 1) patients with T2DM are diagnosed ever earlier in the natural history of T2DM and, therefore, present with fewer symptoms and complications; 2) the quality of the treatment of patients with known diabetes has improved considerably.

**Methods:** Data are from population-based 1) screening studies and 2) intervention or observational studies including patients with T2DM. Results will include data from these populations and 1) an outline of the diagnostic procedure and 2) a summary of interventions and how the population of patients with known T2DM was identified.

**Perspectives:** The results can evidence-base a discussion of how to improve the quality of screening for and treatment of T2DM in primary care. Patients' treatment probably should be tailored to where they are in the natural history of T2DM.

**Keywords:** Diabetes mellitus, type 2, diagnosis, treatment.

## S10 ORGANIZATION AND CHANGE IN GENERAL PRACTICE

**Thorkil Thorsen** (1), M Kousgaard (1), AD Guassora (1), L Borgquist (2), R Dalsted (1), JS Andersen (1), D Gannik (1)

(1) Dep. of General Practice and Research Unit for General Practice, University of Copenhagen, Denmark

(2) Department of Health and Society, Linköping University, Sweden

General practice is under pressure to assume new tasks, adopt technologies and engage in new organizational structures. In a field of multiple actors and concerns such visions are rarely straightforward to realize. This symposium explores the significance of various organizational, cultural and regulative features of general practice in relation to proposals for changes.

**Presentations:** Thorkil Thorsen, Marius Kousgaard. Introducing new technologies for quality improvement in general practice – a case study. This presentation explores an attempt to standardize, monitor, and improve the quality of diabetes care in general practice. The presentation focus on how the GPs' have perceived and received the new model. Rikke Dalsted, Ann Dorrit Guassora. Providing coherent care: Case-managers and other modes of coordination. A case-manager is often understood as a person coordinating health care services. It has been suggested that GPs should carry out this function for several types of diseases. The question addressed is whether the challenge of ensuring coherent cancer treatment can be handled by a case manager or if other modes should also be considered. Lars Borgquist. A new model for General Practice in Sweden- consequences for quality of care and economics. Many Swedish county councils will introduce new models for organizing primary care. One purpose is to give more freedom to the patients to choose care-givers. Another is to create a more competitive health care system. These reforms will be evaluated in a research project to be presented. Chairman: John Sahl Andersen.

**Keywords:** Health care reform, family practice.

## S11 HOW STORIES CAN DEVELOP GENERAL PRACTICE

**Lise Dyhr** (1,2), C Tulinius (1), B Hølge-Hazelton (1), A Sonne Nielsen (2)

(1) Research Unit for General Practice and Department of General Medicine, Copenhagen, Denmark

(2) KvEAP, Center for Quality Development and Education in General Practice, Copenhagen, Denmark

**Aim of the symposium:** To explore the many meanings of stories in doctors lives and in the development of general practice.

**Background:** We all use stories in our perception of the world. All doctors are depending on a story to be told, no matter if they work clinically as GPs with their patients, educationally with their trainees or trainers, or as researchers with their questions about general practice and GPs. Without stories we could not share and develop our experiences with colleagues and students, we could not understand the life worlds of our patients or even our own role in the contemporary society. Our work suggests that stories can be healing for patients as well as for doctors; that telling a story can describe and at the same time redefine practice being a starting point for change.

**Methods:** Inspired by narrative theories, illustrated by empirical research and quality assurance projects about stories and narratives, this symposium will present examples of how stories can contribute to the understanding of and development of general practice.

**Keywords:** Narratives, professional development.

**W09 OUCH, MY BACK HURTS – THIS IS HOW YOU CAN MANAGE IT!**

**Peter Silbye** (1), P Holck (1), A Gravesen (1)

(1) The Danish Society of Musculoskeletal Medicine, Denmark

In general practice, several patients complains about pain in the muscles, tendons, joints etc. On average, 30 to 50 percent of all patient cases involve problems related, directly or indirectly, to the musculoskeletal system. Everyone knows acute low back pain, pain due to overuse in the shoulder and arm, and also the facet joint syndrome in the thoracal columna, that might look like a heart attack. Furthermore sympaticus related symptoms, like colon irritabile, might be caused by dysfunctions in the columna. How do you differentiate in your clinic? Is there a cure? How do you treat the patient? The Danish Society of Musculoskeletal Medicine (DSMM) is a scientific society of specialists with approximately 700 members, mostly General Practitioners with special interests and competences in musculoskeletal medicine. Rheumatologists and Orthopaedic surgeons are also among the members. As a scientific society DSMM is, also involved in education of colleagues in various manual medical techniques – examinations, diagnose and treatments. At the Nordic Congress in Common Medicine, we offer hosting a workshop entitled: Ouch, my back hurts – This is how you can manage it! We will present examination techniques, diagnoses and treatment modalities in connection with the patients story We will make a clinical demonstration from a neurophysiologic perspective. In addition, we will discuss the most recent version of the MTV report on the musculoskeletal system.

**W10 QUALITY IMPROVEMENT OF MANAGING COPD IN GENERAL PRACTICE  
– HOW TO MAKE YOUR OWN QUALITY IMPROVEMENT PROGRAMME  
– HOW TO IMPLEMENT GUIDELINES**

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According to International guidelines on COPD, managing the disease implies regular monitoring. Data capture programmes may support the standardised disease management, but even without fancy IT systems general practice can provide qualified and structured integrated care for the COPD patients. The Danish Quality Unit (DAK-E) has defined a set of COPD quality indicators, by which the content of the annual COPD control in general practice has been defined. One of the indicators is assessing the severity of dyspnoea by the Medical Research Council scale and using this as a guide for referral to rehabilitation. In this workshop we will discuss:

- the content of the annual COPD control and the background for the chosen indicators
- the tools we need to diagnose and monitor the disease.
- the skills of the well prepared practice team and the organisation in general practice. Presenting our partners in the multidisciplinary integrated care system, we will guide you to stratify the COPD patient to the optimal treatment for the actual level of the disease.

Participants will be encouraged to discuss other models of integrated care including examples the other Nordic countries – how do we implement guidelines?

**Keywords:** COPD, management, GP.

## W11 SHARING DECISIONS AND EXPLAINING RISK REDUCTIONS; SHOULD GPs USE NUMBERS?

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**Objectives:** Managing risk conditions, e.g. hypertension, is an everyday task of general practice. For shared decision-making (SDM) between patient and doctor, patients need to have an understanding of the benefits and harms of potential interventions. We aim to provide insight into how doctors can provide patients with risk information and where this fits into SDM.

**Method:** We present theories of decision making under uncertainty, research from the Odense Risk Group and studies into SDM. The place of risk communication within SDM will be discussed, sharing experience from the Cardiff University 'decision laboratory' (<http://www.decisionlaboratory.com/>). Using a clinical vignette as our starting point, we invite participants to share experiences and opinions.

**Results:** Benefits of risk reducing drug therapies may be presented in terms relative risk reduction (RRR), absolute risk reduction (ARR), number needed to treat (NNT) or prolongation of life (POL). Evidence suggests that when interpreting these effect measures, lay people are prone to biases or rely on heuristics; i.e. mental short cuts, to simplify complex decisions. An intriguing finding is that when risk reductions are explained in terms of NNT or RRR, lay people are insensitive to effect size in their decisions. GPs may be sensitive to the magnitude of NNT, but the majority avoid using numerical terms when explaining risk reductions to patients.

**Conclusions:** When informing patients about risk reductions, no single effect measure is clearly superior. Many patients have difficulties with understanding numerical information. NNT should be used with caution, especially for long term interventions.

**Keywords:** Decision making, risk.

# ABSTRACTS

POSTER  
EXHIBITION  
THURSDAY  
14 MAY 2009



## PPM02 BY WHAT CRITERIA DO GENERAL PRACTITIONERS (GPs) ASSESS NEWLY DEVELOPED DECISION AIDS?

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**Objective:** Decision aids for primary care have been developed during the last two decades, primarily in the English speaking countries. Before implementing decision aids in general practice, it is important to investigate how GPs in specific countries practice decision making with patients facing treatment options, and to identify their specific needs for aid adjustments. The objective of this study is to identify the criteria by which GPs in Denmark assess newly developed decision aids.

**Methods:** 12 GPs from Kolding, Denmark, were interviewed in three groups, each interview lasting 2 hours. They were presented with new tools, developed from literature studies: 1) a booklet about a specific condition (CVD), 2) a one-page decision aid, and 3) a visual aid with three different risk formats. The interviews were transcribed, discussed, categorized and analyzed together with interview notes taken by two of the authors.

**Results:** 1) The decision aids should support and enhance the trusting relationship with the patient which is felt more important than information about risk numbers. 2) Decision aids should be low tech to be compatible with the personal and supportive interaction of the consultation, whereas web-based tools would disrupt this and were felt more appropriate for use outside a consultation.

**Conclusions:** Decision aids need to be adjusted when introduced to a new context. In this case, the Danish GPs showed reluctance to use web-based/high tech tools, which goes against most current developments in decision aids that tend to be orientated to create extremely sensitive individualized profiles.

**Keywords:** Decision aids, decision making, interpersonal relations.



### PPM03 RISK COMMUNICATION BETWEEN GENERAL PRACTITIONERS AND PATIENTS WITH HYPERCHOLESTEROLEMIA

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**Purpose:** It is important that the general practitioners (GPs) are able to intervene to reduce risk of disease. One of the key points in doing so is effective risk communication that decreases uncertainty about choice of treatment and give the patients a greater understanding of benefits and risks of different options. The aim of this PhD-study is to make a model for training GPs in risk communication and to evaluate in a randomised intervention, how training GPs, using the model, affects the patients level of adherence to chosen treatment, level of cholesterol, psychological well-being and if it is cost-effective.

**Methods:** 40 GPs receive training in risk communication (intervention group). Each GP selects 7 patients with elevated cholesterol. These patients are informed about the opportunity to receive preventive pharmacological treatment. Another 280 patients receive the same opportunity from 40 GPs without training in risk communication (control group). The patients and GPs will answer questionnaires before and after the intervention. There will be a follow up for a year.

**Discussion:** We expect the patients in the intervention group to increase their adherence to chosen treatment, lower their cholesterol level without worsening their psychological well-being. This randomised intervention will produce new knowledge about the effect of training GPs in risk communication.

**Keywords:** Risk, cholesterol, communication.

### PPM04 MAY ATTENTION TO UNCOVERED BASIC NEEDS FACILITATE PREVENTIVE WORK? HEALTH RELATED GOALS IN PREVENTIVE CONSULTATIONS

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**Objective:** To explore which topics to change are chosen in preventive health consultations by people with many problems in daily life.

**Method:** In a randomised controlled trial 27 general practitioners screened 2073 patients (20-45 years old) with short screening questionnaire about resources, lifestyle and family situation. The 30 percent with most problems were included and randomisation to intervention or control. The intervention was two preventive consultations with their general practitioner. By motivational interviewing one or two health related goals were chosen, resources and barriers for reaching these were discussed.

**Results:** At screening the participants had difficulty in finding solutions to problems in their lives, had bad self-rated health, lack of security, lack of confidence in the family and had extreme stress. Their health related goals were: Weight loss (34%), psychological wellbeing (31%), change in partner relationship (25%) or working situation (22%), smoking cessation (20%), more exercise (15%), less alcohol (8%). Resources were mainly own prior experience or support from others. After one year a significant weight reduction is found among the subgroup, that had planned weight loss within 30 days from inclusion (7.0 kg compared to the rest of 2 kg (95% CI -9.3 to -0.6)). The health consultation had a significant positive effect on SF-12 psychological component was found ( $p=0.002$ )

**Conclusions:** Disadvantaged young patients have besides weight loss mainly psychosocial goals. When respecting the patients agenda for goal and priorities important results can be achieved and the psychological basis for further life style changes supported.

**Keywords:** Primary care, prevention, quality of life.

## PPM05 THE COMPARISON OF CHOLESTEROL LEVEL AND RISK FACTORS AMONG PATIENTS OF TWO PRIMARY HEALTH CENTERS

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**Objective:** To compare the level of cholesterol and risk factors among patients living in rural area and the center of the town

**Method:** Patients living in rural area and in the center of the town aged 35-60 were taken under investigation. All patients were chosen by random sample from two primary health centers. The level of cholesterol was defined and all patients were asked about the possible risk factors of raised level of cholesterol.

**Results:** We revealed that there are the differences between level of cholesterol among patients from rural area and the center of the town. Level of cholesterol was 15% higher among rural inhabitants. We haven't found the connection between risk factors such as smoking, low physical activity, overweight and raised level of cholesterol.

**Conclusions:** The levels of cholesterol were different among patients living in rural area and the center of town but these differences were not connected with risk factors in our investigation.

**Keywords:** Cholesterol, risk factors.

## PPM06 VITAMIN D DEFICIENCY IN GENERAL PRACTICE

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Some research point out that S-25(OH)D vitamin levels are insufficient in people living north of the 50.degree latitude. There is still an ongoing discussion concerning the need for vitamin D supplement. In my clinic in Brøndby Strand, there are about 1800 group 1 patients, and 15% of these are immigrants from the Middle and Far East. In the period between 2005 and the fall of 2007 we checked mostly elderly and immigrants for vitamin D. Quite a lot showed severe deficiency. From december 2007 till march 2008 we decided to control vitamin D levels in all patients who came for a follow-up on their diabetes, hypertension, depression and other long-lasting health problems. Of 280 examined patients we found: 4%(40) with S-25(OH)D < 12nmol/l. 38%(107) with S-25(OH)D < 25nmol/l. 80%(223) with S-25(OH)D < 50nmol/l. Only 8%(23) of these patients were immigrants. We were surprised by the amounts of Danish decent with severe vitamin D deficiency. We also found 4 pregnant women with S-25(OH)D < 25nmol/l. We implemented a high-dosis vitamin D strategy – daily intake of vitamin D3 between 60-150µg. And now a year later most patients have values above 70nmol/l. When will it in Denmark be standard procedure to include S-25(OH)D as an essential parameter in oncological and epidemiological studies? When will the National Health Service (NHS) change the existing recommendations of daily intake of vitamin D? Why did the NHS in 2005 disapprove a food fortification with vitamin D?

**Keywords:** Vitamin D deficiency.

**PPM07 WHY DO PEOPLE CHOOSE CARDIOVASCULAR PREVENTION THERAPY  
– AND WHY DO THEY NOT?**

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**Background:** Prevention guidelines indicate that large numbers of middle aged and older people should use statins. In practice, many fewer are prescribed such drugs, and considerable proportions discontinue their treatment.

**Objectives:** To identify factors that may influence people's decisions regarding taking cardiovascular prevention drugs.

**Methods:** A representative sample of individuals aged 40-69 in Odense, Denmark (n=1,491) were interviewed and offered a hypothetical cardiovascular drug. Respondents were randomised to different levels of treatment effectiveness, presented in absolute risk format, and subsequently asked if they would accept therapy. Finally, they were asked about the reasons for their decision.

**Results:** For absolute risk reductions of 2%, 4%, 5% and 10%, the proportion of subjects accepting treatment were 57%, 68%, 68% and 73%, respectively. Among those who consented to therapy, 45% said it was because of their health, 32% because of family considerations, and 17% because of confidence in the doctor. Among those who rejected therapy, preference for life-style changes (56%), fear of side-effects (19%), and low effectiveness (13%) were the most frequently stated reasons. Reasons were independent of socio-demographic characteristics and presentation of effectiveness information.

**Interpretation:** The level of health benefit seems to have a moderate influence on people's decisions about preventive drugs while important personal and inter-personal aspects, e.g. family situation, availability of non-medical alternatives, and trust in the doctor were reported as influencing decisions. GPs may do well to discuss these reasons for treatment decisions with their patients to make optimal decisions.

**Keywords:** Risk communication, risk perception, prevention.

## PPM08 USING AN SMS BASED AUTOMATED PATIENT RECALL SYSTEM IN FAMILY PRACTICE

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**Background:** The provision of preventive care services is one of the major roles of family doctors. The establishment of an efficient recall and communication system between doctors and patients offers major challenges. Conventional recall systems have a number of limitations and can add significant burden to the practice administration. The ubiquitous availability of personal mobile phones and popularity of text messages offers a unique channel for the delivery of recalls from doctors' practice to patients.

**Method:** We have launched a SMS-based recall system which sends out regular reminders to subscribers based on the recommendations by their family physician. Each message is personalized and based on standard templates. Patients receive messages as agreed between patient and doctor and types of messages are determined by the age and gender of the patient. SMS4Health messages are sent for the purpose of primary prevention ranging from childhood and adult vaccinations to reminders for well-person checks. They are also a useful tool in chronic disease management such are reminders for review to persons suffering from hypertension or diabetes as well as repeat testing (e.g. lipids or thyroid function). The interval and sequence between various messages is completely automated allowing the doctor to concentrate on clinical work. SMS4Health can also be used as a health promotion tool whereby one can send health promotion messages to selected target age-groups.

**Conclusions:** SMS4Health has increased the uptake of preventive checks in our practice and a higher level of satisfaction was experienced by our patients.

**Keywords:** Physician-patient relation, communication, patient recalls.

## PC09 CHILDHOOD MALIGNANCIES. SYMPTOMS AND DELAY IN DIAGNOSIS AND TREATMENT

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**Background:** Timely diagnosis of childhood cancer is difficult because of the rarity of the disease and because of the nonspecific nature of its symptoms which mimick much more common conditions. Misinterpretation of ambiguous cancer symptoms by patients, parents and physicians may delay diagnosis and treatment.

**Methods:** As a first step in a larger study of delay in childhood cancer a review of the literature was performed.

### Results:

- Doctor delay is generally longer than patient delay.
- Mean delay times varied by cancer type from 2.5 weeks (Wilms tumors) to 29 weeks (brain tumor).
- The type of presenting symptom may account for some of the delay.
- Most studies report longer delay for older than for younger children.
- The influence of cancer type on delay still remains even after covariates like age have been taken into account.
- Socio-economic status has been reported to affect the distribution of delay.
- There are no previous Danish studies on the overall diagnostic delay in childhood cancer.

**Conclusions:** Delay in childhood cancer seems to represent a particular problem in cancer delay. The symptom presentation in general practice remains uninvestigated. Research is needed to describe associations between the delay and symptoms, cancer type and patient characteristics and the newly introduced "fast track" for children. We propose a research design using the Danish Registry of Childhood Cancer and data obtained via questionnaires sent to parents and general practitioners.

**Keywords:** Malignancies, pediatric, symptoms.

## PC10 BARRIERS CHALLENGING THE GP WHEN INTERVENING WITH HIGH RISK OFF-SPRINGS

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**Objectives:** An estimated 50-80.000 number of children in Denmark live with one or two parents with mental illness. Part of these children can be defined as high-risk off-spring. General practitioners have a broad interface with the public and see most of these children i.e. at routine checkups. Which barriers do the GP experience when interference is considered needed?

**Method:** A pilot study including 3 qualitative interviews with GP's from the local community.

**Results:** All 3 GP agreed to have barriers to overcome before acting on suspicion of neglect. This causes delay or obstruction of the aid needed. Furthermore, 2 out of 3 GP do not differentiate between aid given in an emergency situation or the more permanent need for help from the child or its parents. Suspicion of a possible case of neglect of a child has to be concrete and serious before information is passed on to authorities. Involving a third party is considered an inconvenient interference with the parent's right to raise the child.

**Discussion:** All 3 interviewed show common barriers. Informing authorities is considered a serious act and therefore a last step solution. However, it is by law mandatory for GP's to report any suspicion of child neglect. The difference between the idealized and experienced conditions when having to act leaves the GP in a schism. Differentiating the image of the high-risk infant in the GP's perspective could be facilitated by a closer cooperation with authorities including knowledge of different means of aid and support.

## PC11 RELATIONS BETWEEN WORRY, ATTACHMENT STYLES AND PERCEIVED PARENTAL REARING IN PRIMARY SCHOOL CHILDREN OF KOREA.

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**Background:** Worry, a core feature of anxiety disorder, is shown in not only children with anxiety disorder but also normal children. This study was conducted to determine the relationship between worry and family environment factors, especially, perceived parental rearing and attachment styles among children.

**Methods:** Five hundred and nine children participated in this study among 549 children in third, fourth, fifth and sixth grades in two primary schools located in Seoul and Seongnam from October 2007 to December 2007. Forty children did not agree with participation (rejection rate: 7.3%). Their degrees of worry, attachment styles and perceived parental rearing were investigated with questionnaires.

**Results:** The reliability of a questionnaire asking children's worry, PSWQ-C (Penn State Worry Questionnaire for Children) and a questionnaire asking perceived parental rearing, modified EMBU-C (My memories of upbringing) was appropriate with internal consistency (Cronbach's  $\alpha$  of PSWQ-C: 0.92, Cronbach's  $\alpha$  of modified EMBU-C: 0.68 0.89). Around 22.4% of children had insecure attachment (avoidant or ambivalent attachment) and scores of worry were high in both girls and boys. When children perceived their parental rearing behavior as anxious rearing, they were classified to have ambivalent attachment in many cases by themselves. And when they perceived the rearing as rejection many of them were classified to have avoidant or ambivalent attachment by themselves. Worry showed a significantly negative correlation in the cases where children answered their perceived parental rearing as emotional warmth and showed a significantly positive correlation with rejective and anxious rearing.

**Conclusions:** This study found that children's worry was closely related with their perceived parental rearing and attachment styles. If the children's attachment, which has been developed while they have grown up, was insecure and they did not perceive parental rearing as emotional warmth, the intensity of worry, a core symptom of anxiety disorder, increased.

**Keywords:** Worry, PSWQ-C, EMBU-C

## PX1.12 HEALTH SEEKING BEHAVIOUR AMONG PEOPLE WITH EARLY ALARM SYMPTOMS OF CANCER

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**Background:** Cancer is the most frequent cause of death in Denmark, and the 5-year survival rate is lower than in other European countries. Delay in the diagnosis of cancer may be important for the prognosis of the disease. Large individual variations in the duration of delay have been observed. The aim of this study is to examine: 1) Prevalence of symptoms that might be early alarm symptoms of breast, lung, colorectal or bladder cancer, 2) Whether socioeconomic characteristics and co-morbidity predict health-seeking behaviour among people who have experienced these symptoms.

**Methods:** Danish population-based, cross-sectional and register study. A total of 20000 randomly selected persons aged 20+, living in the former County of Funen, Denmark, received in April 2007 a questionnaire asking if they had experienced specific symptoms within the last year (e.g. blood in the stool, a lump in their breast, unexplained cough or blood in the urine) and if and when they consulted their GP. We extracted socioeconomic characteristics and co-morbidity indexes from Statistics Denmark (e.g. age, sex, marital status, education, occupation, household income, former cancer diagnosis, discharge diagnoses from hospitals, services provided by GPs) by civil registration number. Non-responders' characteristics were also extracted to compare them with those of the responders.

**Results:** A total of 13777 persons returned the questionnaire corresponding to a response rate of 69.5%. Some 7390 people (54%) had experienced at least one alarm symptom. Analysis of data is still ongoing.

**Conclusions:** Apparently early alarm symptoms is frequent in the Danish population.

**Keywords:** Early detection of cancer, health care seeking behavior, socioeconomic factors.

## PX1.13 THE USAGE OF ANTIBIOTICS FOR RESPIRATORY TRACT INFECTIONS IN PRIMARY CARE. AN APO-AUDIT IN ARCHANGELSK REGION, RUSSIA

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**Objectives:** To evaluate the usage of antibiotics for respiratory tract infections by general practitioners in Archangelsk region.

**Methods:** An APO-audit had been conducted in Archangelsk region for three weeks in January-February 2009. 13 general practitioners completed the special audit form. Diagnose, duration of illness's days, clinical findings, investigations, prescribed antibiotics, and further actions were included in this form. 387 patients aged 0-84 years (177 males and 210 females) with respiratory tract infections were recorded.

**Results:** Cough and/or rhinorrhoea, fever and painful swallowing were reported by the 77.5%, 51.4% and 35.9% patients respectively. 2/3 infections were caused by viruses. The prevailing diagnoses were common cold, influenza, acute pharyngitis and acute bronchitis. Rapid test CRP (C-reactive Protein) was used in 3.1%. Antibiotics were prescribed for the patients both for viral and bacterial infections (3.8% and 96.7% respectively), totally in 33.6% all cases. Patients demanded antibiotics in 1.3% all cases. Amoxicillin and Amoxicillin with Clavulanic acid were the most prescribed antibiotics. The participating doctors did not prescribe Tetracycline at all.

**Conclusions:** In whole antibiotics usage was reasonable in primary care. In order to distinguish viral from bacterial infections it is useful to apply special tests such as Streptococcal A and C-reactive protein test.

**Keywords:** Clinical audit, respiratory tract infections, antibiotics.

**PX1.14 HAPPY AUDIT – AN EU PROJECT FOR IMPROVEMENT OF DIAGNOSIS AND TREATMENT OF RESPIRATORY TRACT INFECTIONS. RESULTS FROM THE FIRST REGISTRATION**

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**Objective:** The increased prevalence of resistant bacteria in many countries is due to an increasing and sometimes inappropriate antibiotics consumption. Almost 90% of all antibiotics are prescribed in general practice, of these 60% are prescribed for respiratory tract infections (RTIs). The aim of the present study was to improve the quality of diagnosis and treatment of these disorders.

**Methods:** APO audit has proved to be effective in the quality development of general practitioners' antibiotic prescribing. The EU has given financial support to an audit project about RTIs with participation of GPs from Denmark, Sweden, Lithuania, Russia, Spain and Argentina. The audit has involved a first registration during 3 weeks in the winter 2008, implementation activities and a second registration in the winter 2009.

**Results:** Some 618 doctors in the first registration included 33 273 cases of respiratory tract infections. Approximately 1/3 was treated with antibiotics. The treatment rate was highest in Argentina and Lithuania, lowest in Spain. Denmark and Sweden most frequently treated with penicillin V, the other countries most frequently used amoxicillin and amoxicillin with clavulanic acid. In all countries one or more follow-up courses have taken place and intervention initiated with national guidelines, patient leaflets and posters for the waiting room.

**Conclusions:** The implementation of the first part of audit has succeeded. The considerable methodological problems of comparing results from the various countries will be discussed. The conclusive result of the audit will be whether improvement from first till second registration can be proved.

**Keywords:** RTI, family practice, antibiotics.

**PX1.15 THE HEALTHCARE NEED AMONG UNDOCUMENTED MIGRANTS. EXPERIENCES FROM THE RED CROSS PROJECT: HEALTH CARE FOR IRREGULAR MIGRANTS IN STOCKHOLM 2008**

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**Objective:** To measure healthcare need among undocumented migrants seeking help from the Red Cross Project: Health Care for Irregular migrants in Stockholm.

**Methods:** Empirical with statistical data. 83 undocumented migrants seeking medical assistance from the Red Cross for the first time were included. Demographic data, self assessment of health and current health problems according to the International Primary Care Classification ICPC-2 were registered. Health care need was measured as optimal initial level of care (GP, MD with other specialty, other healthcare professional, in-patient hospital care) and for the patients primarily seeing a General Practitioner measures needed for initial care were registered with ICPC-2 process codes.

**Results:** The study population consisted of 69 % female and 31 % male patients. 77 % were 18-44 years old. They originated from 32 countries, 43 % were from Latin America. This does not reflect the official immigration statistics of Sweden. The most common health problems were Pregnancy and Family planning, Musculoskeletal and Psychological problems. 46 % of the diagnosis should have received medical attention earlier to avoid risk of medical complications. 77 % of the diagnosis required a doctor's appointment. 83 % of these could be referred to a General Practitioner. Most measures needed for diagnosis and treatment could be provided by a Primary Care Unit.

**Conclusions:** Undocumented migrants seeking care from the Red Cross Project: Health Care for Irregular Migrants mainly have need for maternal and primary care.

**Keywords:** Illegal migrants, health services needs.

## PGP16 MINOR AILMENTS IN AFTER-HOURS CARE -AN OBSERVATIONAL STUDY

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**Objectives:** To investigate minor ailments in consultations in after-hours care by prevalence, variety and time spent.

**Methods:** An observational study of consultations at six out-of-hours primary care centres. The observation was carried out during evenings and weekends of November and December 2008. 'Minor ailments' was defined as health complaints which patients by simple actions could handle themselves. We registered minor ailments by a list of conditions filling the definition. Conditions which, by certain criteria, still indicated a need for doctor, was reclassified.

**Results:** A total of 230 consultations were included. After excluding 20 consultations, 210 consultations were observed. The patients mean age was 28 years (range 0-94). The age groups 0-10 years, and 21-40 years contributed with 33 % and 30 % of the consultations respectively. A total of 211 minor ailments were registered. Cough, fever, sore thr OPt, upper respiratory tract infection and earache made up 76 %. After reclassification, 58 (28%) of the 210 consultations were concluded to be for minor ailments. These took up 17 % of the doctors total consultation time in the 230 consultations.

**Conclusions:** Minor ailments contributed to more than a quarter of the observed consultations. This shows a potential for health education and preventive medicine in the purpose of empowering patients to rely on self care for minor ailments. Reliance on self care may contribute to a more adequate use of after-hours care as an emergency service.

**Keywords:** Self care, after-hours care, observation.

## PGP17 7 PATIENTS A DAY AVOID HOSPITALISATION

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The cooperation between pharmacies and doctors secures that very few errors take place, when pharmaceuticals are dispensed and supplied in Denmark. A prospective analysis of prescription adjustments in Danish pharmacies in November 2007 showed that 7 patients a day avoid hospitalisation because errors in the prescriptions are found and corrected. The results are based on data from 62 pharmacies. In November 2007 2,305 adjustments were registered and 47 of these – equivalent to 0.007 % of the supplied prescriptions – would have had consequences for the patients if not adjusted. All prescription adjustments have been reviewed by two pharmacists and a medical risk manager with experience within general practise. The largest potential risk is prescriptions, in which the medicine has been prescribed in incorrect dose/strength or prescriptions with a pharmaceutical, of which the patient is intolerant. A number of fields are detected, in which a relatively small effort could reduce the risk of errors. This applies to fields such as problems with balances of orders, lack of reimbursement attestation, listing of the pharmaceutical names in the IT-systems and problems with prescriptions via the prescription server. The report makes it possible to locate fields, where both doctors and pharmacy staff shall have special attention, e.g. allergy to the pharmaceutical, prescription of the wrong kind of pharmaceutical, double prescriptions and prescription of wrong dose or strength. Finally the report shows the lack of possibility for extracting general learning of the errors made.

**Keywords:** Patient safety, prescriptions.



## PGP18 THE USE AND RESULTS OF PROSTATE-SPECIFIC ANTIGEN TESTING IN GENERAL PRACTICE IN THE FORMER AARHUS COUNTY

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(3) Department of Urology, Aarhus University Hospital Skejby, Denmark

**Background:** Prostate Cancer (PC) is the most common type of cancer among Danish men, and the incidence is increasing. PC is often asymptomatic, making it difficult to establish a clinical diagnosis. The general practitioner can use prostate-specific antigen (PSA) testing as a tool for diagnosing PC.

**Objective:** Our objective was to study the use and results of PSA testing in general practice in the former Aarhus County during the period 1995-2006.

**Methods:** We extracted data from the laboratory database, LABKA, and The National Patient Registry (NPR) during the period 1995-2006. From LABKA, 86,077 samples were collected from 39,019 men resident in the former Aarhus County. The physician who ordered the test was identified as either a general practitioner or a medical specialist. Nationwide, 148,210 records of ambulatory treatment or hospital admission were collected from The NPR. Data were merged using the patient's civil registration number.

**Results:** The test frequency increased 43 times during this period, and the proportion of tests requested by general practice increased from 38.6 % (36.4-40.8 %) in 1998 to 66.1 % (65.4-66.8 %) in 2006. The number of incident tests requested by a medical specialist decreased from 2001. The proportion of incident tests requested by general practice and with results below 4 mmol/L increased by almost 300 % during this period.

**Conclusions:** General practice requests more and more PSA tests. This can be explained by: 1) watchful waiting 2) more check-ups after treatment for PC 3) opportunistic screening.

**Keywords:** Family practice, prostate-specific antigen.

## PGP19 ORGANISATION OF PRIMARY CARE AND THE AGENCY RELATIONSHIP – A PLANNED PROJECT ON PREFERENCE ELICITATION EMPHASISING THE DISCRETE CHOICE EXPERIMENT

**Line Bjørnskov Pedersen** (1)

(1) University of Southern Denmark, Institute of Public Health, Research Unit of Health Economics, Research Unit for General Practice, Odense, Denmark

The project contributes to the research of agency theory within a behavioural framework by investigating preferences of doctors and patients in order to enlighten differences and similarities in the experienced importance of different characteristics for the organisation of primary care. The methodological approach OPch is the discrete choice experiment and focus is on the empirical investigation and on the development of methodological issues. The project consists of two primary parts. In the first part, it is investigated whether GPs' preferences for the organisation of primary care are consistent with the proposals for solving problems with shortage of GPs, and it is examined if these preferences are in line with the preferences of the patients regarding the same issue. Chronically ill patients might emphasise other things concerning the organisation of primary care than ordinary patients do, because they are more frequently in contact with the primary care sector. Therefore, the second part of the project is to investigate how a cohesive continuity of care for the chronically ill patients should be organised and whether the preferences of the chronically ill are in accordance with the doctors' perceptions regarding the same subject. Two types of chronic patients are included in the investigation. These are diabetes patients and patients with chronic obstructive pulmonary disease (COPD), because these patient groups are fairly large and that primary care is expected to play a progressively considerable part for these types of patients in the near future.

**Keywords:** Health care economics and organization, delivery of health care, consumer participation.

## PGP20 TELE-HOME-CARE AND WEB-BASED COMMUNICATION IN PALLIATIVE CARE

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(1) Aarhus University, The Research Unit for General Practice, Denmark

(2) Aarhus University Hospital, Denmark

**Objectives:** Previous research has shown that good communication between professionals involved in palliative care, e.g. GPs, community nurses and specialist palliative teams, is a prerequisite for good palliative home-care. Professionals from both primary and secondary sectors and their patients have benefited from tele-home-care, but we lack knowledge to decide if tele-home-care and web-based communication are useful in facilitating palliative care communication where distance to patients and a lack of specialist professionals are some of the challenges. Aim of this study is to:

1. Analyse needs of patients, relatives and primary care professionals in relation to tele-home-care and web-based communication
2. Develop a 'tele-home-care and web-based communication model' to suit specific needs in palliative care
3. Describe patients who are likely to benefit from this model
4. Evaluate the model in a clinical survey using register and questionnaire data

**Methods:** The model is developed on the basis of interviews with patients, relatives and professionals providing qualitative data on the need for tele-home-care and web-based communication. Furthermore, the model will be based on previous experiences with tele-home-care from diabetic patients. Register data on hospitalisation, GP home visits, place of death, etc. as well as questionnaire data on patients' and relatives' quality of life, symptom control, satisfaction, etc. will form the basis for evaluating the model.

**Results:** The project is scheduled to begin in 2009. Conclusion: The study will offer new insight for deciding whether tele-home-care and web-based communication between professionals are useful in palliative care.

**Keywords:** Telecommunications, palliative care.

## PGP21 OUTSOURCED OUT OF HOUR SERVICES IN PRIMARY HEALTH CARE IN FINLAND

Jarmo Kantonen (1)

(1) Attendo Medone Ab, Helsinki, Finland

**Background:** Out of hour services are in a big change right now in Finland. Municipalities try to have better services, enough competent staff and save money by outsourcing emergency rooms.

**Objectives:** City of Vantaa outsourced primary care ER at the beginning of year 2008. Basic aims were to ensure services and staff in ER and also if possible to have some cost savings for taxpayers. The quality was in important role in Vantaa's and MedOne's contract: there were 3 indicators to measure the wanted quality: amount of referrals to specialized care should be under 10 percentage of all visits, all patients should have their first registration to ER room in 10 minutes and all emergency patients (Groups ABC) should obtain an audience to doctor under 2 hours.

**Results:** In year 2008 ER in Vantaa had very functioning 24 hour service and professional staff. City of Vantaa saved 600 000 euros. The amount of referrals to hospital was 8,4 percentage of all visits. All patients got their first registration under 10 minutes. All ABC – patients meet doctor under 2 hours.

**Conclusions:** City of Vantaa is satisfied to the quality of outsourced ER. City of Vantaa saved 12 % money compared to year 2007. Attendo Medone reached also all its objectives.

**Keywords:** Out of hour services, primary health care, outsourcing.

## **PGP22 CARE FOR CHRONICALLY ILL – FLOWS, ACTORS, AND SYSTEMS**

**Klaes Rohde Ladeby** (1,2), K Edwards (1), J Kragstrup (2)

(1) Technical University of Denmark, Department of Management Engineering, Kgs. Lyngby, Denmark

(2) University of Southern Denmark, Research Unit for General Practice, Odense, Denmark

The contact between chronically ill and general practice is usually understood as a series of discrete events, where either the patient or GP initiates an event. To understand how the care for chronically ill can be strengthened in general practice it is essential to understand how these events unfold over time. Our aim is to map processes and information flows in general practice associated with care for chronically ill (COPD and diabetes). This will allow us to analyze the general practice as a care delivery system with its own set of flows, actors and support systems (e.g. IT-systems, nurse etc.). The study employs methods previously used for analysis of industrial processes. The study outcome is to be recommendations for how to improve chronic care in general practice. The project has a patient-oriented approach OPch and maps business processes from the patient's perspective. The project is arranged in three segments each lasting one year. First, a qualitative study of processes related to the care of chronically ill is performed with the purpose of identifying areas for improvement. Secondly, based on the qualitative study a catalogue that suggests initiatives for improvement is developed. Thirdly, a quantitative study is carried out to test a few select improvements. This poster reports on theoretical concepts, modelling principles, methodological considerations and initial findings of the first phase of the project.

## **PGP23 PRACTISE NURSE POSTEDUCATION**

**Michala Merete Eich** (1)

(1) Danish Medical Association, Denmark

The Educational Secretariat of the Danish Medical Association – from courses aimed at the individual practice staff members to the whole practice-team. During the last couple of years the Educational Secretariat of the Medical Association has planned and implemented courses for practice staff. The need for education has increased and in the same period the total number of practice staff has also increased considerably. Education is primarily taught by general practitioners and practice nurses. It has been decided on a National level that General Practice should be the coordinator for managing patients with chronic illnesses. These tasks are in practice solved through a cooperation between the doctors and practice nurses. On the basis of this the Educational Secretariat has started to develop courses where doctors and nurses from different clinics receive joint education in order to secure the implementation of knowledge and skills in the individual practices. The content of the education and the pedagogical model for the new courses will be described.



# ABSTRACTS

FRIDAY  
15 MAY 2009  
10.45 – 12.15



## OP09.1 GENERAL PRACTICE AS A VIABLE MODEL FOR HEALTHCARE DIRECTED AT SEVERELY MARGINALISED SUBSTANCE-USING HOMELESS

**Henrik Thiesen** (1, 2, 3, 4, 5)

(1) Copenhagen Community

(2) Copenhagen University

(3) Freedom House (In-patient drug treatment center)

(4) FEANTSA, Health and Homelessness workgroup

(5) Street Medicine Institute (USA), Board member

HealthTeam Copenhagen Community has, since 2005, delivered healthcare to people who are for different reasons, not able to receive systematic treatment for chronic diseases in mainstream health service. The team is organised as a general practice with a GP and 4 nurses but with the significant difference that clinical work is always done where the patient can be met and if possible in close cooperation with the patients network. The team is committed to deliver its service as any other general practice which means that the team is functioning as gate-keeper in relation to the secondary health-system and social care system but also committed to long-term patient relations until the mainstream service can accommodate treatment to the patient. HealthTeam has served as general practice for more than 400 patients until now. The team has created a detailed overview of the general health- and social status of Copenhagen homeless in connection with biomedical data as well as data on housing, access to health service and substance use. HealthTeam addresses several problematic issues in mainstream health-service regarding patients with complex problems covering more than one domain (e.g. somatic and psychiatric health, substance use and social problems) and at the same time it demonstrates the strength that lies within the general practice model in controlling complex interactions between different health- and social domains, if the model is allowed to fulfil its potential.

## OP09.2 COUNSELLING YOUNG IMMIGRANT WOMEN WORRIED ABOUT PROBLEMS RELATED TO THE "PROTECTION OF FAMILY HONOUR" – THE PERSPECTIVE OF SCHOOL NURSES / COUNSELLORS

**Venus Alizadeh** (1), L Törnkvist (1), I Hylander (1)

(1) Karolinska Institutet, Center for family medicine (CeFAM), Stockholm, Sweden

About 1500 young immigrant women living in Sweden sought help from the different public organizations during the year 2004 as a result of problems related to Protection of Family Honour (PFH). The young immigrant women often apply for help from school nurses and counsellors. The knowledge about how the school nurses and counsellors handle this complex phenomenon of honour related problems is limited in Sweden.

**Aim:** This article is the first to describe the experiences of the counsellors handling young immigrant women worry about problems related to family honour.

**Methods:** Data were collected by individual interviews of the school care personnel. The study population included the school care personnel of six high schools consisting, 4 nurses and 6 counsellors.

**Data Analysis:** Grounded Theory (GTM) method was used to generate new knowledge as this is a new field of research and phenomenon.

**Results:** Providing the best support and help for the young women was of great importance for the personnel. They wanted to be able to work as usual and in the same line with their ethical and professional roles and values which they were trained for and had the required experiences. It was difficult because some girls used different strategies to prevent for the personnel to notify the Family or the social services. The personnel were frustrated in many ways and some times they felt restraint and limited in the process of offering the help because they couldn't offer the best help they believed in.

**Keywords:** Nurses, counsellors, honour.

### OP09.3 NUMBER OF MUSCULOSKELETAL PAIN SITES IS AN IMPORTANT DIMENSION. RESULTS FROM THE ULLENSAKER STUDY I

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(1) University of Oslo, Norway

(2) University of Environment and Biology, Norway

(3) SINTEF Health Research, Norway

**Background:** Population studies indicate that pain is a frequent phenomenon, and seldom localized. "The question is not "have you got it" but how much of it have you got" according to an editorial in Pain. In the end of a continuum 'some people have it all', that is widespread pain together with a lot of other symptoms, often named complex health problems or unexplained physical symptoms; conditions often seen in general practice.

**Objectives:** To study number of pain sites (NPS) reported in a population, prevalence, association with demographic and lifestyle factors and stability over a 14 year period.

**Methods:** In 1990, 1994 and 2004 we sent postal questionnaires about musculoskeletal pain to inhabitants in Ullensaker, Norway, belonging to 6 birth cohorts. We have used data from 2004 (n=3325), and the panel of those participating in 1990 and 2004 (n=1644). Pain was registered by the Standardised Nordic Questionnaire (SNQ) and NPS was calculated by simple addition of pain sites (0-10) with self-reported pain.

**Results:** Musculoskeletal pain is frequent in the population, and 39% reported at least 5 pain sites, women reporting higher NPS than men. Pain reporting patterns are quite stable over a 14 year period, even in the youngest age group. An almost linear relationship was found between NPS and reduction in overall health, sleep quality and psychological health.

**Conclusions:** Counting NPS is a simple method of assessing musculoskeletal pain in epidemiological studies, and might even be an interesting dimension in clinical work.

**Keywords:** Musculoskeletal disease, epidemiology.

### OP09.4 FUNCTIONAL ABILITY DECREASES WITH INCREASING NUMBER OF MUSCULOSKELETAL PAIN SITES. RESULTS FROM THE ULLENSAKER STUDY II

Dag Bruusgaard (1), B Natvig (1), C Ihlebæk (2), Y Kamaleri (3)

(1) University of Oslo, Norway

(2) University of Environment and Biology, Norway

(3) SINTEF Health Reserch, Norway

**Background:** Population studies indicate that pain is a frequent phenomenon, and seldom localized. "The question is not "have you got it" but how much of it have you got" according to an editorial in Pain commenting our last article. In the end of a continuum 'some people have it all', that is widespread pain together with a lot of other symptoms, often named complex health problems or unexplained physical symptoms; conditions often seen in general practice.

**Objectives:** To study number of pain sites (NPS) reported in a population, and its association with functional ability.

**Methods:** In 1990, 1994 and 2004 we sent postal questionnaires about musculoskeletal pain to all inhabitants in Ullensaker, Norway, belonging to the following birth cohorts: 1918-20, 1928-30, 1938-40, 1948-50, 1958-60 and 1968-70. Pain was registered by the Standardised Nordic Questionnaire (SNQ) and NPS was calculated by simple addition of pain sites (0-10) with self-reported pain. Functional ability was measured with COOP WONCA charts, and NPS in 1990 was analyzed as a possible predictor of disability pension 14 years later.

**Results:** Localized pain had little impact on function (physical fitness, feelings, and daily and social activities), but the functional ability decreased rapidly and linearly with increasing number of pain sites. NPS was a strong predictor of future disability pension even after controlling for a number of possible confounders.

**Conclusions:** NPS is strongly associated with reduced functional ability, and a strong predictor of future disability pension.

**Keywords:** Musculoskeletal disease, epidemiology, ADL.

## OP09.5 THE MULTISYMPTOM PATIENT AND THE 'ONE SYNDROME HYPOTHESIS'. RESULTS FROM THE ULLENSAKER STUDY III

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(1) University of Oslo, Norway

(2) University of Environment and Biology, Norway

(3) SINTEF Health Research, Norway

**Background:** Population studies indicate that in the end of a continuum 'some people have it all', that is widespread pain together with a lot of other symptoms, often named complex health problems or unexplained physical symptoms.

**Objectives:** To study number of pain sites (NPS) reported in a population, and its association with other subjective health symptoms, and function.

**Methods:** In 1990, 1994 and 2004 we sent postal questionnaires about musculoskeletal pain to inhabitants in Ullensaker, Norway, belonging to 6 birth cohorts. Pain was registered by the Standardised Nordic Questionnaire (SNQ) and NPS was calculated by simple addition of pain sites (0-10). Functional ability was measured with COOP WONCA charts. Subjective health complaints other than musculoskeletal were measured with a short version of the SHC questionnaire.

**Results:** There was a strong association between number of pain sites and number of other subjective health complaints. NPS and number of subjective health complaints explained a substantial part of the variance in functional ability. Adding them increased the explanatory power further.

**Conclusion:** A substantial part of the population reports a high number of symptoms, and the burden of symptoms has functional consequences. The multisymptom persons are frequently met in general practice, and have been given a number of more or less controversial diagnoses. Recently a "one syndrome hypothesis" has been introduced trying to understand the group as a whole, as suffering from a "central sensitivity syndrome".

**Keywords:** Musculoskeletal disease, epidemiology.

## S12 QUALITATIVE METHODS IN THEORY AND PRACTICE

Anette H Graungaard (3), K Malterud (1), A Davidsen (2), AD Guassora (2)

(1) Research Unit for General Practice Bergen, Norway

(2) Research Unit for General Practice, Copenhagen, Denmark

(3) Department of General Practice, University of Copenhagen, Denmark

This symposium is presenting principles of qualitative research in general practice as well as examples of methods in current qualitative research in general practice. Qualitative research has proven valuable in general practice research as it opens new fields for investigation both as a supplement to quantitative research and as research in its own right. Qualitative research makes e.g. interaction with patients and patients' perspectives accessible to research but also opens to research concerning organization and change in general practice. The symposium opens with a lecture by Kirsti Malterud: Qualitative methods in theory and practice. Kirsti Malterud has worked with qualitative research in many different shapes and has developed guidelines for qualitative inquiry (Lancet 2001). She is also the author of "Kvalitative metoder i medisinsk forskning: en innføring" (2003) widely used in qualitative studies in general practice.

After the lecture other researchers will present recent examples of qualitative methods used in their own ph.d.-work: Annette Davidsen: Interpretative Phenomenological Analysis as a structural analytic method. The method will be illustrated by its use in a study that explored GPs' processes of understanding patients when offering psychological interventions. Anette Graungaard: Grounded theory. The presentation will draw on a study investigating coping and resources in parents of severely handicapped children. Ann Dorrit Guassora: Giorgis phenomenological method. This method was modified for use in a study investigating the consultation in general practice as a frame for smoking cessation advice.



## S13 THE FUTURE ROLE OF GENERAL PRACTICE IN PALLIATIVE CARE AND BEREAVEMENT

**Peter Vedsted** (1), B Aabom (2), BA Jespersen (3), T Brogaard (1), M-B Guldin (1), MA Neergaard (1)

(1) Aarhus University, The Research Unit for General Practice, Denmark

(2) University of Southern Denmark, Odense, Denmark

(3) Aarhus University Hospital, Denmark

**Background:** It is a tradition that the general practitioner (GP) cares for end-stage cancer patients at home as well as their bereaved families. In the Nordic Countries, however, the last decade has shown an increased focus on specialist palliative care. Hospices and specialist palliative care team have been established in major cities and have challenged the GP's role. Has the role of the GP in palliative care and bereavement changed? The aim of the symposium is to question and discuss the future role of the GP in palliative cancer care and bereavement.

- 1) GPs and Palliative care: The role of the GP in palliative care. Introduction and results from a mixed method study Mette Asbjørn Neergaard, MD, GP, PhD student.
- 2) Does the GP make a difference in palliative care? Birgit Aabom, MD, GP, PhD, Senior Researcher.
- 3) How does the specialist in palliative medicine see the role of the GP? Bodil Abild Jespersen, MD, Consultant, Specialist in Palliative Medicine Palliative home care.
- 4) Can we improve quality by implementing shared care? Trine Brogaard, MD, PhD student.
- 5) GPs and bereavement: The role of the GP in bereavement. Introduction and results from a mixed method study Mette Asbjørn Neergaard, MD, GP, PhD student.
- 6) How can we organize bereavement care? – An intervention study Mai-Britt Guldin, MSc (psych), Clinical Psychologist, PhD student.

**Keywords:** Palliative care, terminally ill, family practice.

## S14 HOW CAN WE CONTRIBUTE TO FIGHT THE OVERWEIGHT EPIDEMIC IN GENERAL PRACTICE?

**Carsten Obel** (1), TIA Sørensen (2), T Skovgaard (3), M Koch Aabel (4), C-E Flodmark (5)

(1) Department of General Medicine, Aarhus University

(2) Institute of Preventive Medicine, Copenhagen University Hospital, Denmark

(3) Rambø Management, Denmark

(4) The National Board of Health, Denmark

(5) Childhood Obesity Unit, Malmö University Hospital, Sweden

Overweight is associated with a number of negative health outcomes including metabolic syndrome and cardiovascular disease. The prevalence of overweight has been increasing for the last decades and this development is among the largest challenges to public health. We only know part of the explanation and what to do about it. Adults with extreme overweight may benefit from surgery, but doubt has been raised about the positive effect of losing weight in overweight and obese adults in the general population. In children previous intervention programs have mainly been directed against school children and have unfortunately shown little effect. If we can prevent obesity at all interventions probably have to be as early in life as possible. The Nordic General Practitioner has a close contact with the preschool child and its family and may therefore have the potential to influence the lifestyle of the child at risk for overweight before the child is beginning to suffer from the adverse health effects. The aim of the symposium is to provide GP's with an overview of what we know about the causes and potential ways of preventing overweight. Is overweight only a matter of too little physical activity and high-energy food? Should we advise our adult patient to lose weight? Do we have any effective way to prevent overweight-what has been tried out? Can we identify preschool children in risk of overweight before they get fat? What kind of family interventions do we believe will work?

## S15 EVIDENCE-BASED INFORMATION AT INVITATION TO BREAST CANCER SCREENING

**John Brodersen** (1), P Gøtzsche (2), O Hartling (3), K Jørgensen (2)

(1) University of Copenhagen, Department and Research Unit of General Practice, Copenhagen, Denmark

(2) Copenhagen University Hospital, Nordic Cochrane Centre, Copenhagen, Denmark

(3) The Region of Southern Denmark, Vejle Hospital, Vejle, Denmark

The information given to women invited for breast screening with mammography is, slanted towards the positive, promotes participation, presents misleading information and does not inform the women adequately – or at all – about the major harms, which are overdiagnosis and subsequent overtreatment, and false-positive results and its associated negative psychosocial consequences. We present an evidence-based information leaflet on screening mammography which will be compared with national leaflets provided with invitations to breast screening in the Nordic countries, and to the leaflet used in the UK. At the conference, the leaflet will be available in following languages mentioned alphabetically: Danish, English, Finnish, Icelandic, Norwegian and Swedish. It can be downloaded from [www.screening.dk](http://www.screening.dk) and [www.cochrane.dk](http://www.cochrane.dk). Requests from other countries may result in various other languages versions of the leaflet. The ethical dilemmas, the legislative framework for informed consent and the psychosocial consequences of false-positive results will also be presented.

**Keywords:** Mass screening, informed consent, evidence-based medicine.

## S16 PRESCRIBING IN GENERAL PRACTICE – HOW CAN WE IMPROVE THE QUALITY OF DRUG USE?

**Jens Søndergaard** (1), M Andersen (1), B Christensen (2), A Halling (3), J Straand (4)

(1) Research Unit for General Practice, University of Southern Denmark, Denmark

(2) Department of General Practice, University of Aarhus, Denmark

(3) Lund University, Department of Clinical Sciences in Malmö, Sweden

(4) Research Unit for General Practice, University of Oslo, Norway

Prescribing a drug is the most frequent intervention in general practice. However, many challenges have to be met. Patient do not often adhere to our recommendations for drug use, we lack tools for improving our prescribing patterns, we are being accused of not adhering to recommendations for prescribing or for pursuing marginal effects while to a large extent ignoring risks of side-effects and costs, and we have difficulties in discontinuing drug treatment. Furthermore, we are often accused of being too susceptible to the marketing efforts of the pharmaceutical companies. The speakers will be giving a short overview of the literature on selected pharmacotherapeutic areas as well as giving advice on how to improve drug use. Associate professor, PhD Anders Halling will discuss challenges in discontinuing pharmacotherapy. Senior researcher, PhD Morten Andersen will present knowledge about patients' non-compliance with special emphasis on frail groups of patients with chronic diseases. Professor, PhD Bo Christensen will present new evidence on the importance of effective treatment with cardiovascular drugs with emphasis on marginal effects and side-effects of drug treatment. Further, he will address challenges in drug therapy associated with patients shifting between healthcare sectors. Professor, PhD Jørund Straand will present a multifaceted tailored educational intervention towards general practitioners (GPs) aimed at supporting the implementation of a safer drug prescribing practice for elderly patients > 70 years. Finally, professor, PhD Jens Søndergaard will discuss how different sources influence GPs' prescribing patterns.

**Keywords:** General Practice, drug utilization, drug therapy, health care.

**W12 DATA CAPTURE OF DIABETES DATA IN DANISH GENERAL PRACTICE – RESULTS AFTER ONE YEAR’S EXPERIENCE WITH AUTOMATIC DATA COLLECTION AND FEED BACK**

**Henrik Schroll** (1), S Friborg(1), L Grosen (1)

(1) DAK-E, Danish Quality Unit of General Practice, Copenhagen, Denmark

**Objective:** Time is a critical resource in general practice and therefore data collection for quality purposes is a challenge. It was to solve this problem, that the ICT – section of the Danish Quality Unit of General Practice (DAK-E) designed the data capture module. The data capture module is a piece of software that works with all the 12 existing EHR systems, which are in use in Danish general practices. It collects data automatically from the GPs’ ICT systems. Structured data are automatically sent to a national database called DAMD (Database for General Practice). Additional data are collected through pop-up screens. The aim of the workshop is to present the results of the first year’s experience of the system. The focus will be on the possibilities, the barriers, and the problems. The audience will be involved in group works and open floor discussions.

**Methods:** The workshop will use various learning approaches; incorporate a PowerPoint presentation, followed by group work and an open floor discussion.

**Results:** The system has now been used for more than one year by 10% of the GPs in Denmark. From December 2007 to December 2008 103 general practices have registered a cohort of 8,737 diabetes patients in the database. The registration is equivalent to a prevalence of 2.9% of all patients.

**Conclusions:** To develop a simple model for capturing data in the GP’s system and to give feedback on these data to the GPs in a way to show that the system improves the treatments of the patients.

**W13 GENERAL PRACTICE UNIT, QUALITY ORGANIZATION AS A DYNAMO TO CREATE REGIONAL DEVELOPMENT AND IMPROVEMENT OF QUALITY IN GENERAL PRACTICE**

**Jens Rubak** (1), F Bro (1), P Ehlers (1)

(1) General Practice Unit, Central Denmark Unit, Denmark

The Region of Middle Jutland has developed three General Practice Unit’s with the purpose to create connexion amongst the different ideas and resources working with development of quality in general practice.

In the General Practice Units, the staff consists of medical and not-medical consultants and administrative personal. This creates a unique possibility to promote a joint enterprise about implementation of new procedures and a structure of co-operation. The purpose is to create a connexion with the remaining health services, hospital and municipality, as an example by united contribution concerning patients with chronic diseases, patients with cancer and concerning medication. There is further a close collaboration with research- and educational activities.

In the General Practice Units, the members form a quality-team contributing the regional quality-team. The members represent the different types of consultants, research workers, and administrative staff. These quality-teams are financed by the Region of Middle Jutland.

The regional quality-team decides which themes is relevant to distribution in general practice, and thereafter outline plans for the strategy of implementation in the individual practice, as well as implementation in the forum for collaboration with hospital and municipality.

The symposium will present material of this quality assurance model, focusing on the GP Unit, the quality teams, showing examples concerning the effort to unite the diagnostic procedures, treatment and rehabilitation including medication of patient with chronic- and cancer diseases, also demonstrating how the internet has been used as a connecting tool.

**Keywords:** Quality assurance organisation, collaboration, cooperation in the health care system, general practice.

#### W14 THE DYNAMIC GP TRAINING: CRITICAL APPRAISAL TRAINING 'IN ACTION'

**Charlotte Tulinius** (1,2), C Hermann (1), LJ Hansen (1), ABS Nielsen (1)

(1) Copenhagen University, Denmark

(2) University of Cambridge, United Kingdom

**Aim:** The aim of this workshop is to illustrate and discuss how critical appraisal training (CAT) takes place as part of the GP specialty training in Denmark. Introduction: CAT has been a part of the Danish GP specialist education since 2004. The CAT guidelines were described by The Danish National Board of Health, leaving it to the three regional postgraduate medical educational councils to interpret the guidelines and to be responsible for the delivering of the CAT modules. The practical delivery of the CAT has involved, among others, the general practice research units and institutions in Aarhus, Odense and Copenhagen. In all three educational regions the aim of the CAT is the same; The GP-trainees should design and undertake a literature search in relevant databases, should do critical appraisal of the literature, and present their work. The practical set-up has similarities but also differences.

**Methods:** Inspired by the educational framework of 'participatory action research' used as the frame of reference in the Eastern region for the CAT and described by Lawrence Stenhouse and John Elliot, this workshop will be run by the teachers and trainees in series of simultaneous fishbowls, where you can participate or observe the methods used in the CAT. The work at this workshop will be introduced and facilitated by the steering group of the CAT, and you will have the possibility to discuss with trainees and teachers directly involved in the everyday CAT.

**Keywords:** Education, action research, methods.

#### W15 THEORETICAL EDUCATION OF SPECIALIST TRAINING IN GENERAL PRACTICE

**Paula Vainiomäki** (1), M Thastum Vedsted (2), J Schramm (3)

(1) University of Turku, General Practice, Finland

(2) Aarhus University, Institute of Public Health, Denmark

(3) University of Southern Denmark, Institute of Public Health, Denmark

Specialist training in general practice is performed differently in the Nordic countries. Anyhow, the general frame is the same, including supervised and assessed in-service training in primary health care units and hospitals. Descriptions and evaluations of the quality of training are relatively sparse and legislative certification processes are different. Specialist training in general practice also includes specialty-specific theoretical courses and specific education. Because we know very little about differences in the theoretical courses of specialist training in Nordic general practice concerning its content, methodology and pedagogy, we now want to exchange knowledge about it. Methods for evaluation of the courses must be discussed and developed. It is also important to know how well current theoretical education is responding to the needs in general practice. The aim of this workshop is to share experiences and distribute information about valuable and useful issues concerning theoretical education in general practice training. Participants, teachers, trainers, and trainees, are actively involved in discussion and challenged to create a joint opinion concerning this important topic inside our specialist training. The participants will have new ideas and experiences to share and take back to their home countries. The final aim is to improve the theoretical education within the specialist training programmes in general practice.

**Keywords:** Education, specialist training, theoretical education.

**W16 OUT-OF-HOURS PRIMARY HEALTH CARE SERVICES IN THE NORDIC COUNTRIES  
– VISION 2015**

**Janecke Thesen** (1), J Blinkenberg (1), GT Bondevik (1), J Kantonen (2), JL Reventlow (3), S Engström (1), OR Mortensen (1), TG Olafsson (1)

(1) National Centre for Emergency Primary Health Care, Bergen, Norway

(2) Director, Emergency Services, Attendo MedOne Ab, Helsinki, Finland

(3) General Practice, Slagelse, Denmark

**Objectives:** In this workshop we will present and discuss the current situation regarding out-of-hours (OOH) services in the Nordic countries. National Centre for Emergency Primary Health Care (Nklm) has made an extensive plan of action to improve the quality of OOH services in Norway, called VISION 2015. The plan will be presented. There is a wide range of models for organising the OOH services in the Nordic countries. OOH services is defined as a part of the primary health care services, and thus is served by general practitioners (GPs). The variation is partly due to the GPs role as gatekeeper, but also the different geographical conditions in the Nordic countries. In Norway, challenges such as recruiting GPs, insufficient research and focus on quality improvement, increasing expectations from the public, from hospitals and from politicians, calls for action. There is a need for strengthening of the OOH services, and improving collaboration with ambulance services and specialist emergency services. In Finland many primary care emergency services have been outsourced. The quality of these units should be secured by carefully designed contracts. Results and conclusions: Hopefully, a good discussion that will bring the issue forward will be achieved. Key message:

- Out-of-hours services is a central part of the primary health care services
- There is a wide range of organisation models for out-of-hours services
- There is a need for strengthening and quality improvement of the out-of-hours services

**Keywords:** Emergency medicine, organisation and administration, after-hours care.



# ABSTRACTS

FRIDAY

15 MAY 2009

13.30 – 15.00



## NM01 PARTNERS IN PRACTICE – ESTABLISHING AN INTERNATIONAL DEVELOPMENT PROGRAMME OF THE DANISH COLLEGE OF GENERAL PRACTICE

**Per Kallestrup (1)**

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WHO and other health-related international organizations increasingly advocate that the best health care system consists of an efficient, free and accessible Primary Care level sustained by integrated and mutually supportive referral systems to a highly specialised Secondary Care level securing cost-effective comprehensive care. Recently the importance of the primary care was emphasized by the WHO Health Report 2008: "Primary Health Care: Now More than Ever". This organization of comprehensive health care is self-evident in our Nordic setting. That is, however, not the case in the majority of other areas of the world. Despite immense accomplishments in global health over the last 30 years, differences in health parameters have increased. Progress has enlarged the gap between the rich and healthy and the poor and ill. Nordic general practice has an obligation to contribute to improvements in global health and the Nordic Colleges have a special interest and position to lead in this aspect through the extensive traditions of international collaboration in research, education and quality development. It is proposed to establish an organisation within the Danish College of General Practice – Partners in Practice – which will facilitate international projects of development support. A programme dedicated to improve global Primary Health Care by engaging in committed partnerships with General Practice partners and institutions in need. During this workshop a schematic model will be presented and participants will be invited to discuss ways to realize this important task.

**Keywords:** Primary health care, international development, global health.

## S17 DEVELOPING AND EVALUATING COMPLEX INTERVENTIONS. WHAT TO CAUTION? SYMPOSIUM

**Anelli Sandbæk (1), F Bro (2), Y de Boer (3), H Terkildsen (1), M Rosendal (1)**

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(2) Research Unit of General Practice, University of Aarhus, Denmark

(3) KvEAP, Region Hovedstaden, Denmark

**Introduction:** Gaps between evidence based medicine incorporated into clinical guidelines and real world exist. How to construct interventions that works has been a crucial topic for all partners interested in developing patient care. Lots of different strategies have been tried out, but often initiators are sitting back with limited knowledge of what worked, why it worked and how much did it work. Traditionally RCT has been the method of first choice for getting the evidence of the effect of the intervention. This kind of design can be very hard to carry through and other designs might be reasonable to use instead. Strategies in how to develop complex interventions and how to evaluate and translate interventions have to be focused on. In UK MRC has been into this discussion for years and has presently published new guidelines

**Aim:** To discuss the challenges in developing interventions for use at patient or GP/practice staff level aiming a better health of patients. Furthermore to discuss how to evaluate complex interventions and how to translate the results into real life. Content: A short presentation of the MRC frame of developing complex interventions will open the workshop. We will work with participants own projects. The questions for further discussion in smaller groups and plenum will among others be:

1. Do you know your intervention?
2. Do you know your target group?
3. How to evaluate the intervention?
4. Which outcomes correlate to the intervention?
5. How to translate the results into the real world?



## HOW CAN WE PREPARE THE FUTURE GP TO COPE WITH THE COMPLEXITY AND UNCERTAINTY OF A CHANGING HEALTH CARE SYSTEM?

Helena Galina Nielsen (4), M Torppa (1), K Fjeldsted (2), J Salinsky (3), AS Davidsen (4), D Kjeldmand (5), M Schie (6), J Nessa (7), H Kamps (8)

- (1) University of Helsinki, Faculty of Medicine, Department of General Practice and Primary Health Care, Finland
- (2) University of Reykjavik, Iceland
- (3) GP education at Whittington Hospital, University of London, United Kingdom
- (4) Copenhagen University, Research Unit for General Practice, Denmark
- (5) University of Uppsala, Department of Health and Caring Services, Section of Health Services Research, and Eksjö primary Health care centre, Sweden
- (6) General Practitioner, Leiden, The Netherlands
- (7) University of Bergen, Norway
- (8) General Practitioner, Berlin, Germany

**Aim:** The aim of the symposium is to discuss how Balint groups in the Nordic countries and internationally may contribute in different ways to continuing medical education and the wellbeing of the professional starting up in medical school. But it is also an opportunity to discuss strength and limits of this sort of group work. Torppa from Finland will present a research study on student Balint groups and how they touch on professional growth and future professional identity as doctors. From long experience with Balint groups in vocational training Fjeldsted from Iceland and Salinsky from UK will talk about how the groups promote better understanding of the doctor patient relationship and promote lasting career satisfaction and better adaptation to change. Based on her PhD thesis about mentalisation in GPs' psychological interventions Davidsen will focus on training of mentalisation and empathic skills in supervision groups. Kjeldmand shows based on her PhD thesis how participation in Balint groups enhances dealing with complex encounters and gives the GP a higher job satisfaction. Schie from Holland will focus on how the groups may contribute to the prevention of burnout. Kamps and Nessa will perform a dialogue about Balint groups as reflecting teams and discuss strengths and limits of this sort of group work.

**Keywords:** Continuing medical education, professional burnout, job satisfaction.

## S19 REHABILITATION OF CANCER PATIENTS AND SURVIVORS: IS GENERAL PRACTICE IN OR OUT?

Dorte Gilså Hansen (1), L Holm (1), M Thygesen (1), SH Bergholdt (1), AD Guassora (2), R Dalsted (2), C Wulff (3), P Vedsted (3)

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- (2) Research Unit for General Practice, University of Copenhagen, Copenhagen, Denmark
- (3) Research Unit for General Practice, Aarhus University, Aarhus, Denmark

**Background:** Many patients live with a cancer disease for several years and many others get healthy after treatment and live for years as survivors. Patients, politicians and clinicians have increasing focus on the needs for physical, mental and social rehabilitation during and after cancer treatment. Rehabilitation is, however, not an integrated part of the services provided by the healthcare systems. The general practitioner could play a central role bringing up the subject during consultations and thus facilitate both the beginning and the progression of rehabilitation. Different models are to be tested and discussed.

**Objective:** Based on a presentation of knowledge from the literature and several projects carried out by the authors we are going to discuss when, how and to what degree the GP is going to play a central role in rehabilitation of cancer patients in future primary care.

**Content:** This symposium presents an overview of the evidence of case management and patients' needs and expectations to supportive rehabilitation and cooperation between therapists. Focus will be on the role of general practice. Knowledge about obstacles and facilitating conditions for a successful rehabilitation process is to be presented including some simple but useful techniques. Bearing in mind the busy working days in the daily clinic we may, however, put into question whether every patient need the general practitioner for his or her rehabilitation and whether the general practitioners have the resources?

**Keywords:** Cancer, cancer care facilities, rehabilitation, shared care.

## S20 EDUCATING GPs THE DANISH WAY, FIVE YEARS OF EXPERIENCE

Niels Kristian Kjær (1), R Maagaard (2), E Mouritsen (3), J Isaksen (4), M Munk (5), S Wied (6), Anni Nielsen (7)

(1) University of Southern Denmark, General Practice V Sottrup, Denmark

(2) University of Aarhus, General Practice, Skødstrup, Denmark

(3) University of Aarhus, General Practice, Skjern, Denmark

(4) University of Southern Denmark, General Practice, Svendborg, Denmark

(5) General Practice Otterup, Denmark

(6) Danish Association of Junior Hospital Doctors, Denmark

(7) Research unit for General Practice, Copenhagen, Denmark

A new education in family medicine started in Denmark in 2003. In this process we have explored why young doctors chooses family medicine, examined the benefits of structural interviews in the selection of future family physicians, evaluated the benefits of family medicine in basic medical training, evaluated the use of training in reflective groups, tested the usability of an online portfolio and constructed the model for appraisal of trainer practices. We have also analyzed the impact of training in research. The implementation of new elements in the family medicine education, have yielded experience in how education can be improved, insight in why future GP chooses our specialty and why use of structural interviews may optimize the selection and recruitment of coming colleagues. In this symposium we will present: 1) Why do trainees choose family medicine? Wied S 2) The use of structured interviews in the selection of future family physicians. Isaksen J, Kjær NK, Schødt A, Rossen R 3) The role of family medicine in basic medical training. Kjær NK, Kodal T, Mouritsen E 4) Training in Critical Appraisal as a Mandatory Element of GP Specialist Training. Nielsen A, Tulinius C, Hermann C, Hansen LJ 5) The use of reflective groups in specialist training. Munk M 6) The use of an online portfolio – 5 years of experience. Kjær NK, Maagaard R, Wied S. 7) Appraisal of trainer practices. Worth implementing?

**Keywords:** Education, general practice, specialist training.

## S21 EQUITY IN PRIMARY CARE? CHALLENGES, DIFFERENCES AND SIMILARITIES IN THE NORDIC COUNTRY

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(1) Research Unit for General Practice/KvEAP Center for Quality Development, Copenhagen, Denmark

(2) Center for Clinical Research, Dalarna Falun, Sweden

(3) National Institute for Health and Welfare, Kupio, Finland

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(6) Research Unit for General Practice, Aarhus, Denmark

There is a trend towards an extended role of primary care in most Nordic countries for example concerning care of patients with chronic diseases. There is a lack of GP's too. The ability of general practice to provide equal and easy 'close to the patient' access to care might be threatened in different ways. In Sweden and Denmark a risk to equity in care might be the reimbursement system, that may disadvantage a good quality of health care in socio-economic deprived areas. In Sweden, the 'free choice' systems differ countrywide but poor people use less care from economical, educational and cultural reasons. In Norway the state sponsored 'privatization' is worrying although the Norwegian system has relatively good provisions to hinder socially deprived areas to get inferior primary health care. The threat to the system is more a lack of recruitment to primary health care in certain areas and an inferior gatekeeper function. In Finland, the first line of services consist of municipal health centers but also workplace health and private direct-access specialist services, which both usually operate on a profit basis. A relatively new phenomenon shaking the fields is the strong emergence of workforce rental companies which have already got a strong grip of the young medical students' and doctors' soul. In this symposium we will outline some similarities and differences between the Nordic Countries related to the aspect of equity in care and present some possible solutions.

**Keywords:** Equity in primary care, social deprivation, primary care.

## S22 CHALLENGES WHEN COMMUNICATING WITH CHILDREN AND THEIR PARENTS IN GENERAL PRACTICE

**Anette Hauskov Graungaard** (1), R Ertman (1), K Lykke (1), M Hafting (2)

(1) University of Copenhagen, Department of General Practice, Denmark

(2) University of Bergen, Norway

Communicating with parents' in general practice is an important task when the child is sick and in routine health checks as well. The physician-parent-child triad is a unique situation compared to all other doctor-patient encounters. Getting the right information, knowing when to get extra alert about the child's well-being and informing parents about their child's condition are all crucial in securing the child's health and well-being and in preventing future diseases and unhealthy life circumstances for the child. Addressing parents' serious concerns and fears regarding their child's health and future is a difficult task and relating to older children's and adolescents' health problems may course new and unforeseen problems. The symposium will present results from different studies that elucidate this challenge in different clinical situations. Presentations: Communicating with parents of chronically ill children. Parents' experience with their sick child and us – the doctors' The Child Consultation in General Practice: – getting insights into the child's well-being. 'You may wade through them without seeing them.' Children and adolescents with mental health problems and their general practitioner.

**Keywords:** Parents, communication, children.

## W17 PATIENT SAFETY AND ADVERSE EVENTS IN GENERAL PRACTICE

**Torben Hellebek** (1,2), P Simonsen (1,3), L Gehlert (1,4), J Rubak (1),

(1) Danish College of General Practitioners, Copenhagen, Denmark

(2) Quality Unit for general practice in Capital Region Denmark

(3) Quality Unit for general practice in North Denmark Region

(4) Quality and Education unit for general practice in Region of Southern Denmark

Patient safety and risk management have become familiar terms in Denmark. Since the Act on Patient Safety was adopted in January 2004, it has been compulsory to report adverse events on private and public hospitals. 10. March this year the law was extended to general practice. The law extension will take effect when the planned web-based reporting system is functioning; this is expected to be the case in mid-2010. The intention of the law is to draw learning from the mistakes that inevitably occur in every workplace – including health care. For the same reason there is no sanction of law, but only incentive for learning. Several projects have over the years tried different options for reporting of adverse events from general practice. The symposium provides an insight into the background and intent of the legislation. Some of the pilot projects which contributed to the decision on the extension of the law are reviewed, and there will be examples of reported adverse events. We shall be analyzing them and presenting the resulting action plans. Working with the patient safety angle is not very much / not at all used in the primary sector in the other Nordic countries. It is envisaged that the symposium will be the beginning of a joint Nordic cooperation on patient safety in general practice.

**Keywords:** Patient safety, adverse events.

**W18 WORKING IN GENERAL PRACTICE IN THE NORDIC COUNTRIES  
– EXHIBITING AND DISCUSSING WHAT IT MEANS TO WORK IN GENERAL PRACTICE  
IN THE NORDIC COUNTRIES**

**Charlotte Tulinius** (1,2), P Stensland (3), CE Rudebeck (3,4), A Hibble (5,2)

- (1) Copenhagen University, Denmark
- (2) University of Cambridge, United Kingdom
- (3) University of Tromsø, Norway
- (4) Västervik, Sweden
- (5) East of England Deanery, United Kingdom

**Aim:** Through photographs, paintings, drawings, videos, poems, short essays or other kinds of narratives to discuss and develop the understanding of what it means to work in general practice in the Nordic Countries today.

**Background:** What does it mean to work in general practice today? We are gaining still more scientific descriptions of the work in general practice, but the formats of journal articles and short presentations often restrict language and other expressions present in our everyday lives working in general practice.

**Methods:** We are therefore inviting GPs, GP trainees, and general practice staff to submit all kinds of narratives to visualize what it means to work in general practice today. The exhibition of photographs, videos, poems or other creative ways of describing the work in general practice will be linked to a workshop where we will explore the themes of the exhibition. Some of the contributors will be invited to present their submissions in depth at this workshop, leaving time to discuss and develop the understanding of what it means to work in general practice today. Before the conference the planning group will go through all submissions, analyze and work out the themes of the contributions, from which we will lead and facilitate the linked workshop. If sufficient contributions, the plan is to publish a book about working lives in general practice in the Nordic Countries. For further information, please see the conference website.

**Keywords:** Narratives, professional development.

**W19 A FRAMEWORK OF UNCERTAINTY IN MEDICAL DECISION MAKING**

**Laurel Austin** (1,2), J Brodersen (3), S Reventlow (2), P Sandøe (3)

- (1) Copenhagen Business School, Copenhagen, Denmark
- (2) Department and Research Unit of General Practice, Institute of Public Health, University of Copenhagen, Denmark
- (3) University of Copenhagen, Copenhagen, Denmark

Seemingly healthy people can, in a growing variety of ways, find themselves diagnosed as “unhealthy” or “at risk” of becoming unhealthy. They may find themselves considering medical treatment for asymptomatic conditions, or treatment to reduce the risk of future conditions, or termination of pregnancy to avoid genetic conditions in children. There is growing concern related to treatment of asymptomatic conditions and risk factors and to the practice of population-based medicine. We argue that at the heart of this concern is the fact that there are more potential sources of uncertainty in primary and secondary preventive medicine than in tertiary preventive medicine. Assessing this uncertainty is important, because the likelihood that treatment offers benefits depends on how certain we are about a person’s current and future health states. Further, people can vary greatly in how they want to handle uncertainties related to their own lives; such differences should be taken seriously by health professionals. The objective of this workshop is to present and discuss a conceptual framework of uncertainty in five distinct types of medical decision making situations. These are: 1) diagnosing the symptomatic condition; 2) diagnosing asymptomatic conditions; 3) diagnosing a risk of a future condition; 4) simultaneously testing for multiple risks factors; and 5) diagnosis of a population. Using the framework we show how potential sources of uncertainty vary systematically in the five situations. Workshop participants will be asked to discuss the framework and reflect on its potential implications for their own work.

**Keywords:** Uncertainty, preventive medicine, risk factors.

**W20 'JUNKIE' IN THE EMERGENCY ROOM – EXPLORATIONS WITH FORUM THEATRE**

**Janecke Thesen** (1), MB Lyngstad (2)

(1) Unifob Helse, University of Bergen, Norway

(2) Drama, Faculty of Education, Bergen University College, Norway

**Objectives:** This workshop will convey and explore user experiences with out-of-hours (OOH) primary care services, from the perspective of people who have substance abuse problems. The majority of the stories tell about intimidations, humiliations and disempowerment to a degree that prevents people from using the services.

**Methods:** We will use methods from 'Forum theatre'. A web-based research project conducted by The National Centre for Emergency Primary Health Care (Nklm) has resulted in stories told by people with substance abuse problems. The stories have been used to construct a forum play. In this technique, the spectators are invited into the play as actors. The intention is that people by acting in different ways can achieve a better, i.e. a more empowering result of the interaction between the health professional and the user.

**Results:** This workshop will result in a different kind of learning for the conference attendees – using their emotions and bodies as well as their cognitions. Hopefully, these learning experiences will contribute to different and more empowering meetings of higher quality between users and professionals in the future – from both perspectives.

**Conclusions:** Meetings between users with substance abuse problems and health professionals should be improved – from low-quality disempowering meetings to empowering meetings of high professional quality. Forum Theatre is one way of working towards that goal.

**Keywords:** Substance-related disorders, emergency medical services, communication barriers.



# ABSTRACTS

FRIDAY

15 MAY 2009

15.30 – 17.00



## OP10.1 CURRENT EUROPEAN GUIDELINES FOR MANAGEMENT OF ARTERIAL HYPERTENSION: ARE THEY ADEQUATE FOR USE IN PRIMARY CARE?

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(1) University of Iceland, Department of Family Medicine, Hafnarfjordur, Iceland

(2) Norwegian University of Science and Technology (NTNU), Department of Public Health and General Practice, Trondheim, Norway

**Objectives:** Previous studies indicate that clinical guidelines using combined risk evaluation for cardiovascular diseases (CVD) may overestimate risk. The aim of the present study was to model the implications of recent guidelines for the management of hypertension in a general population, estimate the prevalence of individuals with unfavorable CVD risk levels according to the guidelines and estimate the clinical workl OPd associated with reaching recommended treatment g OPIs.

**Methods:** Implications of the current European Guidelines for the Management of Arterial Hypertension were modelled on data from a cross-sectional, representative Norwegian population study (The Nord-Trøndelag Health Study 1995-97), comprising 65,028 adults, aged 20-89, of whom 51,066 (79%) were eligible for modelling.

**Results:** Among individuals with blood pressure >120/80 mmHg, 93% (74% of the total population) would need regular clinical attention and/or drug treatment, based on their total CVD risk profile. This translates into 296,624 consultations /100,000 adults/year. In the Norwegian healthcare environment, at least 99 general practitioner (GP) positions would be required in the study region for this preventive task alone. The number of GPs currently serving the adult population in the study area is 87 per 100,000 adults.

**Conclusions:** The potential workl OPd associated with the European hypertension guidelines could destabilize the healthcare system in Norway, one of the world's most long- and healthy-living nations, by international comparison. Large-scale, preventive medical enterprises can hardly be regarded as scientifically sound and ethically justifiable, unless issues of practical feasibility, sustainability and social determinants of health are considered.

**Keywords:** Hypertension guidelines, combined risk estimate, cardiovascular risk.



## OP10.2 INCREASING INCIDENCE OF STATIN PRESCRIBING FOR THE ELDERLY WITHOUT PREVIOUS CARDIOVASCULAR CONDITIONS. A NATION WIDE REGISTER STUDY

Helle Wallach Kildemoes (1), M Andersen (2)

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(2) Research Unit for General Practice, University of Southern Denmark, Odense, Denmark

Supported by the growing evidence of statins' beneficial effects in a range of conditions, statin utilization has increased considerably in most Western countries over the last decade.

**Objectives:** To estimate to what extent a widening of indication scope for statins accounts for the increasing Danish statin utilization during 1996-2005, applying treatment incidence as a measure of changing prescribing behaviour

**Methods:** From three nationwide registers, we retrieved individual records on demographics, dispensed prescription drugs and hospital discharges. Danish inhabitants were followed with respect to dispensed prescriptions of cardiovascular drugs and antidiabetica during 1996-2005 and with respect to discharge diagnoses and surgical procedures performed during 1977-2005. The disease status for all cohort members during the observation period was assigned by means of disease markers for seven cardiovascular conditions, corresponding to a hierarchy of statin indications. Poisson regression analyses were applied to quantify the incidence growth, according to age and indication.

**Results:** Treatment incidence increased from 4/1000 person years in 2000 to 17/1000 in 2005, the increase being slow until 2000. The relative increase was largest among those with no disease markers and lowest among those with ischemic heart disease. The largest growth was found among the elderly (75+) with no disease markers.

**Conclusions:** Growing statin utilization reflects the broader range of condition for initiating statin treatment, including the "abolition of ageism". The fact that treatment incidence grew most among elderly without disease markers reflects a changing prescribing behaviours among general practitioners, presumably related to an increased use of risk scoring.

## OP10.3 THE EUROPEAN HEART SCORE SYSTEM – A USEFUL TOOL IN PRACTICE?

Henrik Støvring (1), I Kristiansen (1)

(1) Research Unit for General Practice, University of Southern Denmark, Denmark

The European developed SCORE chart provides estimates of ten year risk of fatal cardiovascular disease based on joint information on individual risk factors of patient. The chart is intended to aid general practitioners and their patients when deciding whether or not to initiate treatment with cholesterol lowering statins. It has been incorporated in the official guidelines concerning prevention of cardiovascular disease in Scandinavian countries and is consequently widely used. The model itself has however received less attention. In this presentation we first show that the underlying stochastic model is mathematically flawed. Secondly, we highlight that the SCORE model predicts CVD mortality, not all-cause mortality, even though findings within decision psychology indicate that patients can only meaningfully consider all-cause mortality. We finally discuss the common misunderstanding that the colored chart invites: that changing a risk factor directly moves a patient from one cell of the chart to another.

**Keywords:** Preventive medicine, decision making.

#### OP10.4 GP'S DECISIONS ON STATIN THERAPIES BY NUMBER NEEDED TO TREAT (NNT)

**Peder Andreas Halvorsen** (1), T Wisløff (2,3), IS Kristiansen (2,4)

(1) University of Tromsø, Tromsø, Norway

(2) University of Oslo, Oslo, Norway

(3) Norwegian Knowledge Centre for Health Services, Oslo, Norway

(4) University of Southern Denmark, Odense, Denmark

**Objective:** To explore how the NNT might influence general practitioners (GPs) when considering lipid lowering therapy.

**Methods:** A random sample of GPs (n=450) was mailed a vignette presenting a male patient with an unfavourable cardiovascular risk factor profile and a new drug, "Neostatin". The benefit of "Neostatin" was described in terms of the NNT to observe 1 less patient with cardiovascular disease after 20 years of therapy. Each GP was randomly allocated to 1 of 3 versions of the vignette, in which NNT was set at 10, 19 or 37, respectively. We asked them to evaluate "Neostatin" on a likert type scale anchored at zero (a very bad choice) and ten (a very good choice), whether they would recommend "Neostatin" for the patient, and whether they use qualitative or numeric terms when explaining risk reductions to patients.

**Results:** The response rate was 48%. With NNT set at 10, 19 and 37, 80%, 74% and 66% would recommend "Neostatin", respectively (chi-square for trend 3.9, p=0.05). On the rating scale corresponding mean values were 6.0, 5.6 and 4.7, respectively (one way ANOVA for linear trend: F=8.2, p = 0.005). About 20% of the respondents indicated that they usually explain risk reductions to patients in terms of NNT, whereas 66% stated that they use qualitative, non-numeric terms, only.

**Conclusion:** Although GPs may be sensitive to effect size in terms of NNT when considering lipid lowering drug therapies, the majority do not use NNT or any other number when explaining risk reductions to patients.

**Keywords:** Decision making, risk.

## OP10.5 EVALUATING A PSA DECISION AID (PROSDEX) FOR INFORMED DECISIONS: A WEB-BASED RCT

**Adrian Edwards** (1), R Evans (1), N Joseph (1), R Newcombe (1), R Grol (2), P Wright (3), P Kinnersley (1), J Griffiths (4), M Jones (4), J Williams (4), G Elwyn (1)

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(2) Nijmegen University, Netherlands

(3) School of Psychology, Cardiff University, United Kingdom

(4) School of Mathematics, Cardiff University, United Kingdom

**Background:** “Informed decision making” is promoted in the UK for men considering Prostate Specific Antigen (PSA) testing for prostate cancer.

**Objectives:** We sought to evaluate the effect of a web-based PSA decision-aid, Prosdex, on informed decision making, defined as congruent knowledge, attitudes and intention regarding PSA testing. We also assessed two secondary outcomes: decisional conflict and anxiety.

**Methods:** Four group RCT: two intervention groups, one viewing Prosdex online and the other receiving a paper-version; two control groups, one controlling for Hawthorne effects of the questionnaire. Men aged 50- 75, without previous PSA tests, were recruited from 25 South Wales (UK) General Practices. Outcomes assessed by online questionnaire.

**Results:** were reported with Mann-Whitney U-statistic (U/mn: line of no effect =0.50). Results 514 men participated. Prosdex increased knowledge about PSA test/prostate cancer (0.69 U/mn; 95% CI 0.61-0.76;  $p<0.001$ ), but with less favourable attitude to testing than controls (0.39 U/mn, 95% CI 0.32-0.47;  $p=0.001$ ); intention to be tested was reduced in the Prosdex group (0.39 U/mn, 95% CI 0.32-0.47;  $p=0.02$ ); decisional conflict was reduced (0.31 U/mn, 95% CI 0.24-0.39;  $p<0.001$ ); there was no effect on anxiety (0.506 U/mn, 95% CI 0.425 – 0.586;  $p>0.5$ ). There was no significant difference between online Prosdex and the paper-version with respect to these outcomes.

**Conclusions:** Prosdex appears to promote informed decision making, identified by congruence of knowledge, and attitude and intention for PSA testing. This evidence base now provides justification for designing wider dissemination and implementation strategies.

**Keywords:** PSA, decision aid, randomised trial.

## OP11.1 THE GALKER TEST; A SPEECH RECEPTION IN NOISE TEST FOR 3 TO 6 YEAR-OLD CHILDREN

**Jørgen Lous** (1), E Galker (2)

(1) Institute of Public Health, University of Southern Denmark, Odense, Denmark

(2) Kgs. Lyngby, Denmark

**Background:** We have developed a speech reception in noise test to identify children with problems hearing and understanding verbal communication due to middle ear problems.

**Methods:** The test has 35 test words presented by a speaker under heavy background noise. The child has to point at one of two alternative pictures on the screen. The child uses hearing, lip-reading, knowledge about the used words, interpretation of the drawings illustrating the spoken word. The Galker test has been evaluated on 370 children in a PhD study by Maj-Britt Glen Lauritsen in Hillerød. Now the test is used by several speech and language therapists. The test is available on DVD and takes 5½ minutes.

**Results:** The Galker score is now standardised to children between three and six years. The children find the test interesting and only a few in the youngest group have problems completing the test. Some results from the testing in Århus County will be presented. We have found good correlation between tympanometry, Galker score, the language test Reynell, and the observation of functional hearing in the daycare centre. The test can be seen at the poster session.

**Perspective:** At the moment the test is pilot-tested at the four-year examination in the University Practice in Odense. We hope this testing will show that the test can be used in general practice to identify children with problems understanding the spoken word.

**Keywords:** Preschool children, hearing problems, language problems, otitis media.

## OP11.2 SLEEP HABITS AND SLEEP PROBLEMS IN THE POSTMODERN FAMILY. A STUDY OF CHILDREN ATTENDING CHILD DAY CARE CENTER

Margareta Söderström (1), K Ekelund (2), L Åström (3)

(1) University of Copenhagen and Health Care Center of Linero, Sweden

(2) Health Care Center of Kärråkra, Eslöv, Sweden

(3) Health Care Center of Centrum, Landskrona, Sweden

In the postmodern society, the family life have changed towards more children attending child day care centers (DCC). This may have changed the sleep habits of the children. This study explore sleep habits and problems in preschool children.

**Methods:** A questionnaire to parents of children attending DCC regarding both recalled and current sleeping problems/habits, sleep time in relation to current health, daily life of the child, and family situation. In all, six selected DCC (nine departments) with 129 of 142 eligible children 1-6 years of age in southern Sweden participated.

**Results:** Sleep habits have changed to more parents co-sleeping with their children. 13 (10%) of the children were classified as having sleep problem and this was related to having more infections. Children with <7 hours stay per day at DCC had more sleep problems, longer sleep latency and early awakenings compared to those children with longer stay at DCC.

**Conclusions:** There was a diminished total sleep time (> 1 hour) in pre-school children compared to age matched children studied thirty years ago with a considerable increase of sleep problems/habits towards more habits negative for sleep. Family physicians knowledge of circardiell rythms could be a tool for discussion sleep problems with parents as it could affect childrens health.

**Keywords:** Sleep; sleep habits, child nursery.

## OP11.3 PARACETAMOL FOR FEVERISH CHILDREN: PARENTAL MOTIVES AND EXPERIENCES

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**Objective:** The sale of paracetamol products for children is increasing and more children receive overdoses, despite lack of evidence on the use of paracetamol against fever. This study explores Danish parents' use of paracetamol for fevers in children and their motives for this use.

**Methods:** A cross-sectional survey using structured interviews, conducted in four general practices located in city, suburb and rural area. 100 Danish parents with at least one child under the age of ten years were included. Questions covered if parents administrated paracetamol to feverish children, situations triggering medication of their child, parental views regarding fever and effects of paracetamol, and sources of information on fever treatment.

**Results:** 75 % of parents used paracetamol for feverish children, mainly to reduce temperature, to decrease pain and to help the child fall asleep. Highly educated parents medicated more frequently than less educated. Parents often feared fever but this did not clearly relate to their use of paracetamol. Many parents believed in beneficial effects of paracetamol, such as increased appetite and wellbeing, better sleep and prevention of fever seizures. The expectations of paracetamol influenced parental use of the drug. Parents' main source of information on fever and paracetamol was their general practitioner.

**Conclusions:** Danish parents regularly treat feverish children with paracetamol. Although parents contact their GP for advice on fever treatment, paracetamol is given to children on vague or false indications. More information and clearer guidelines for parents on the use of paracetamol as an antipyretic is needed.

**Keywords:** Parents, fever, paracetamol.

#### OP11.4 GROMMET INSERTION IN PRE-SCHOOL CHILDREN

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**Objective:** To evaluate patients' and families' short-time benefit from insertion of grommets in children with middle ear conditions.

**Background and methods:** In Denmark treatment with grommets for middle ear conditions, (SOM and acute otitis media (AOM)), is still a much debated issue. During 2007 approx. 75 000 grommets have been inserted in Denmark, mostly in children. A total of 24 ENTs in private practice in Region Southern Denmark conducted an audit based on questionnaires to evaluate the benefit of this treatment. Some 423 children aged between 0 - 6 years due to have grommets inserted for the first time were included in the study. Both parents and ENTs completed a questionnaire prior to the treatment and three months after.

**Results:** The study showed that the recommended guidelines for observation time and indications for treatment were complied with. The patients experienced symptom relief and the post-operative quality of life for both the patients and their families highly improved immediately or after a few days.

**Conclusions:** The study demonstrated convincing, short-term effect of grommet treatment in infants, and the ENT specialists to a large extent comply with the guidelines.

#### OP12.1 PEER-BASED LEARNING OF COMMUNICATION AND MEDICAL SKILLS FOR NURSES HANDLING PHONE CALLS IN OUT-OF-HOURS PRIMARY HEALTH CARE SERVICES

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(2) National Centre for Emergency Primary Health Care, University of Bergen, Norway

(3) Skien Casualty Clinic, Skien, Norway

**Objectives:** Registered nurses handle phone calls in out-of-hours primary health care services. They triage medical problems and give medical advice to the callers, frequently without involving a physician. We wanted to assess the quality of this service, to train nurses by using audio logged phone calls and peer-based learning in small groups, and to study possible effects on their communication and medical skills.

**Methods:** We describe a method for peer-based learning in small groups, where nurses listen to their own audio logged phone calls and then reflect on their communication and medical skills. A tool rating ten aspects of these skills was developed and utilized. Phone calls logged before and after two sessions of peer-based learning were assessed.

**Results:** The nurses expressed positive feedback with this method of addressing communication and medical skills. The quality of the handling was generally good; the average scores both for the communication and medical skills were 3.6 on a scale from one to five, where one was very poor and five excellent handling. We found a statistically significant improvement of the communication skills in the phone calls audio logged after the two sessions of peer-based learning, but no significant change in the medical skills.

**Conclusions:** This method of peer-based learning in small groups is useful to train nurses who handle phone calls in out-of-hours primary health care services. The developed tool can be used to assess the communication and medical skills of nurses.

**Keywords:** After hours care, peer group, professional competence.

## OP12.2 THE EPIDEMIOLOGY OF OUT-OF-HOSPITAL EMERGENCIES AND GPs PARTICIPATION IN NORWAY

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(2) Norwegian Air Ambulance Foundation, Norway

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**Background:** In Norway there is a lack of epidemiological data on emergency situations. As a part of a multicenter study on how out-of-hospital emergency patients are administrated, we also collected data on epidemiology. The aim of this substudy was to describe the epidemiology of emergency patients (red responses, highest priority) outside hospitals in Norway and GPs' participation.

**Methods:** In the period October to December 2007 three dispatch centres recorded every emergency patient. We collected ambulance records, air ambulance records and records from the GPs when they had been involved. The dispatch centres are covering 840 000 inhabitants. NACA score was used to define severity of the emergencies.

**Results:** 5 105 cases were included in the study. Rate of red responses were six per 1 000 inhabitants. In 4 607 cases we could define medical cause of emergency and NACA score. Heart problems were 28 % of the cases, trauma 17 %, asthma and COPD 7 %, neurological problems 7 %, psychiatry 3 % and other medical problems 38 %. Life-threatening conditions or deaths (NACA 4-7) were indentified in 29 % of the cases, where deaths represented 4 %. GPs were alarmed in 47 % of all cases. Main response was turn out in 41 % of all cases, and 51 % for life-threatening conditions.

**Conclusions:** GPs take part in clinical judgement and treatment of emergencies. They are an important part of the out-of-hospital emergency system in Norway. GPs should be alarmed more often.

## OP12.3 EXPERIENCES WITH A LOCAL EMERGENCY PLAN

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**Objectives:** All Norwegian local communities (municipalities) have prepared emergency-plans for the local health services. We have investigated how such an emergency plan can be designed as an electronic decision support tool, and thus used actively at the local emergency medical communication centre in emergency situations. We have also investigated the usefulness of the plan in quality improvement of emergency medicine services.

**Methods:** During a period of 20 months all events where the emergency plan was activated were registered and evaluated. We used evaluation meetings or individual follow up of the services and collaborators. We registered and systemized what worked well, less well, mistakes and follow up actions.

**Results:** We registered ten emergency situations in the project period and found 38 single items that worked well, 52 items with potential for improvement and 16 items of mistakes. Examples of issues evaluated are alarming, cooperation and organisation at the site and the practical use of the electronic emergency plan. The evaluations were followed up by feedback to the leaders of the services, changes in routines and procedures, information initiatives or changes in the emergency-plan.

**Conclusions:** An emergency plan for the health services can be a valuable tool in describing and evaluating emergency services. When designed as an electronic decision tool and used in the local emergency medical communication centre it can also be used in regular quality improvement in emergency medicine.

**Keywords:** Emergency medicine, community medicine, health planning.

#### OPI2.4 ARE PSYCHIATRIC EMERGENCY CARE PATIENTS IN TOUCH WITH THEIR GP?

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**Objectives:** To assess whether patients attending emergency primary health care for problems related to psychiatric disease, including substance abuse disorders, are in touch with their regular general practitioner (rGP).

**Methods:** Cross sectional study. Data from the whole of 2006 was extracted from electronic medical records in a rural GP out-of-hours cooperative and the rGP's surgeries in the same catchment area (26336 inhabitants). The variables addressed were gender, age, first diagnosis given and municipality of origin.

**Results:** Throughout 2006, 11976 consultations and home visits were identified at the casualty clinic. The corresponding number for rGP surgeries was 65040. All consultations and home visits at the casualty clinic were generated by 7304 unique patients. Of these, 179 patients were given at least one diagnosis related to mental illness or substance abuse. Due to insufficient information in the electronic medical record, 25 patients could not be traced with their rGP. Of the remaining patients, most (n=118) had been in touch with their rGP during the same period of time, and two thirds of this group had received at least one diagnosis related to mental illness or substance abuse with their rGP. The diagnoses given at the casualty clinic corresponded well with the diagnoses given at the rGP's surgeries.

**Conclusions:** Most patients attending emergency primary health care for problems related to mental illness were also in touch with their rGP. This might imply that casualty clinics represent a complementary health care institution for patients with mental disease.

**Keywords:** After-hours care, emergency medical services, psychiatry.

#### OPI2.5 ACTIVITY IN OUT-OF-HOURS SERVICES IN NORWAY IN 2007

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**Objectives:** To investigate the use of casualty clinics and out-of-hours services and estimate national figures for these services in Norway in 2007, based on a representative sample. **Methods** The National Centre for Emergency Primary Health Care has initiated an enterprise called "The Watchtowers" which consists of a representative sample of seven casualty clinics covering 18 Norwegian municipalities. All contacts to the casualty clinics are registered day and night by the attending nurses.

**Results:** 85 288 contacts were recorded during 2007 (399 per 1000 inhabitants) and 77 % of the contacts were not-urgent. The rate of medical consultations by doctor was 250 per 1 000 inhabitants, and telephone consultations by doctor was 38 per 1000. Home visits and call-outs by doctor made up 13 per 1000 inhabitants, and rate for patient managed by nurse was 96 per 1000. The most common mode of contact was by telephone. When patients attended the casualty clinic directly, 91.2 % of the contacts resulted in consultation by a doctor as opposed to 56.5 % when patient or family called the clinic. Women, young children and elderly had the highest share of contact.

**Conclusions:** Norway has a high rate of contacts to the out-of-hours services compared to other countries. Valid national figures and future research and monitoring of these services are important both for local services and policy makers. No conflicts of interest.

**Keywords:** Out-of hours services, sentinel network, activity rates.

## OP12.6 LOW PREDICTIVE VALUE OF MECILLINAM RESISTANCE IN PIVMECILLINAM THERAPY FOR MOST UROPATHOGENS BUT HIGH SELECTION OF ENTEROCOCCI IN LOWER UTI

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**Objectives:** To analyze the predictive value of mecillinam resistance on both clinical and bacteriological outcome of pivmecillinam (PIV) therapy in lower UTI in women (LUTIW).

**Methods:** A prospective, multicentre, double-blind, therapy study in northern Sweden including 1143 women with symptoms suggestive of LUTIW (urgency, dysuria, suprapubic or loin pain) registered in 4-graded scores (0-3) at inclusion, during therapy and follow-up visits after 8-10 and 35-49 days. Urine cultures with significant bacteriuria (SBU) defined according to European guidelines. Patients randomized to placebo or PIV therapy with 200 mg tid for 7 days, 200 mg bid for 7 days or 400 mg bid for 3 days.

**Results:** At inclusion 77,9% had SBU with *E. coli* (62,1%), *S. saprophyticus* (6,4%), *Klebsiella* (2,5%) and *Enterococci* (1,9%). Mean values of all symptoms scores were 5,3 points, with no significant differences between negative culture, bacterial counts or species. PIV showed superior clinical efficacy in SBU but similar as placebo in negative culture. Bacteriological outcome of PIV therapy was not influenced by mecillinam resistance in most common uropathogens with exception above all for enterococci, which raised to 10,4 % at first but reduced to 4,4% at last follow-up.

**Conclusions:** Empirical antibiotic therapy should not be given on symptoms suggestive of LUTIW only but first since SBU is confirmed. The predictive value of in vitro resistance in LUTIW was low concerning outcome of PIV therapy in most common uropathogens with exception above all for enterococci, which were highly selected at 8-10 days but mostly eradicated spontaneously within 5-7 weeks.



## S23 TRACING DEPRESSION AMONG ADOLESCENTS

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The proportion of adolescents suffering from depressive disorders is increasingly high. Depressive disorders may be hard to distinguish from adjustment disorders in general practice. How could GPs improve their diagnostic performance in order to improve mental health care among adolescents?

A study group on depression in adolescents has recently been established. A multi-centred study involving the Section for General Practice, University of Oslo, and the Research Unit for General Practice, University of Aarhus is currently in progress. Adolescents aged 14-16 years are invited for depression screening using a self report questionnaire (including the SCL and WHO-5) and three verbally asked key questions. Diagnostic evaluation is performed using the depression module of the CIDI interview. The CIDI diagnoses will be compared with GPs' awareness of any current depressive disorder. Results will be presented and discussed at the symposium.

1. Ole Rikard Haavet: Literature suggests a high prevalence, but poor GP identification of depression in adolescents. Non-recognition may partly be associated with GPs' lack of regular contact with young people, lack of diagnostic skills and instruments, and with families' lack of awareness of depressive symptoms in adolescents. Should general practice adopt new strategies in order to improve recognition rates?

2. Manjit Sirpal: High risk screening for depression is recommended among adults. Which demographic and ethnic characteristics are associated with increased risk of depressive disorders among adolescents? Should high risk screening be recommended among youngsters?

3. Kaj Sparle Christensen: Routine screening for depression seems of little benefit among adults in general practice. Is opportunistic screening for depression in adolescents likely to be more effective than usual GP identification? If so, which questionnaire is the most valid and suitable to be recommended?

4. Wenche Haugen: Three key questions have been found valid in diagnosing depression among adults. Will the same questions be as valid in diagnosing depression among adolescents?

**S24      TEACH THE TEACHER: NORDIC EXPERIENCES IN PEDAGOGICAL DEVELOPMENTS IN A  
PREGRADUATE MEDICAL CURRICULUM IN GENERAL PRACTICE**

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What does it take to be a good teacher of medical students in the art of general practice? And how do we plan and implement a program of teaching the teachers? The problems presented to doctors in general practice are often simple, but may be complicated and ambiguous. Teaching the students the basics of this is a complex task involving clinical skills, consultation skills and interpersonal skills and a solid medical background. Experiences from different scandinavian countries will be presented for discussion. In close collaboration with the Center for Pedagogical Development (CPD) at the Medical School at Copenhagen University, the department of general practice organized a course for teachers. During the fall of 2008 most of the teachers participated in the partly residential nine day course. The themes varied from general principles of teaching and learning to the development of materials for specific courses. From 2003, general practice has been a major teaching topic for medical students in Tromsø. A pedagogical introductory course is offered to the scientific staff, but for the different teaching elements, the Department of general practice has a continuous challenge of teaching the teachers. A new curriculum for undergraduate medical education has been introduced at Karolinska Institute in 2007. An educational collaboration has been build including all health centres, their local teachers, numerous supervisors and organisational staff. The overall subject of teaching the teachers will be discussed in this symposium.

**ADDICTION AND DRUG/ALCOHOL ABUSE AS A COMPLEX BIO-PSYCHO-SOCIAL HEALTH PROBLEM – A CHALLENGE FOR PRIMARY HEALTH CARE**

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Addiction and drug and alcohol abuse is a major global health problem and can be considered as a complex bio-psycho-social syndrome. Drug addicts suffer a substantially increased mortality and morbidity compared to the general population. Substance abuse causes big and complex problems for the single individual, the family and social networks, the local communities and the society. Addiction and the patient with alcohol or drug abuse may be a challenging task for the general practitioner (GP). However, these patients are among those who have the greatest need for health care, both from hospitals and GPs. In this symposium we will shed light on different health problems related to addiction and drug and alcohol abuse. The participants are all GPs with long experience in treating this patient group within the GP setting and they are all engaged in addiction research. Responsible Chair: Ivar Skeie  
Presentations: Dagfinn Haarr: Treatment of opiate-dependent patients in a general practice Bjørg Hjerkin: Birth and developmental outcome among children of substance abusing women attending a Special Child Welfare Clinic in Norway Knut Boe Kielland: Mortality and end-stage liver disease related to hepatitis C in injecting drug users Torgeir Gilje Lid: Brief intervention of alcohol problems in general practice – effects of reduced consumption Ivar Skeie: Does Opioid Maintenance Treatment with methadone or buprenorphine reduce the burden of somatic disease among opioid addicts? Harald Sundby: How might drug dependent patients be our teachers in complex medicine?

**Keywords:** Alcohol-related disorders, substance-related disorders, family practice.

## W21 VALUE BASED MEDICINE IN GENERAL PRACTICE

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**Introduction:** There is a growing need to define the core work of GPs. Value Based Medicine (VBM) is a new and challenging way to regard our daily work in general practice. Just like Evidence Based Medicine (EBM) has been an important step to improve our work we want to draw attention to the qualities of VBM. What is VBM? Why has it become important now? And what will be the pro and cons for using VBM?

**Methods:** For years GPs have trained the patient-centered method in the consultation. What are the values the patients are looking for? What do doctors want to achieve, what are our values? Health authorities want GPs to be more active in the prophylaxis of smoking, drinking, eating and prescribing physical exercise. When seen from a VBM perspective will this be what we as GPs should be devoted to do? And which methods are we expected to use? How will patients perceive this? How can we choose between VBM and EBM when they are in conflict?

**Results:** Using the concepts of VBM we expect during the workshop to illuminate what we really want to do as GPs. Discussion: We want to integrate VBM when assessing medical technologies and clinical methods in family medicine.

**Keywords:** Value based medicine, patient-centeredness, consultation, medical ethics.

## W22 EDUCATIONAL GROUP LEADERSHIP – THE NORDIC WAYS

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**Aim:** The aim of the workshop is to exchange experiences of different concepts of small group work in vocational training in Norway and Denmark, to discuss the role of the group leader and the meaning of different methods of group facilitating and supervision.

**Background:** In Norway, facilitator-led groups have been a mandatory part of specialist training in general practice for more than 20 years. The curriculum of the group programme has been continuously renewed. In Denmark, supervision groups have been introduced lately as part of the last year of specialist training; the first trainees have completed 10 sessions of group supervision in the course of one year. An overall objective is given but a specified curriculum has yet to be developed. Which models are used? What is the advantage of group work? What is the difference between educational groups in vocational training and supervision groups? Which meaning has the concept of supervision in the specialty of general practice? These are some of the questions that will be raised in the discussion.

**Form:** After a short introduction from the group leaders from Norway and Denmark, this workshop will let the participants experience group sessions run by the Norwegian and Danish group leaders. We suggest that Norwegian participants join Danish run groups and vice versa. Participants from the other countries are free to choose. There will be a brief plenary round to summon up the major experiences of both ways of group leadership.

**Keywords:** Educational activities, specialist training, general practice.

## W23 DEVELOPING AND EVALUATING COMPLEX INTERVENTIONS. WHAT TO CAUTION?

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**Introduction:** Gaps between evidence based medicine incorporated into clinical guidelines and real world exist. How to construct interventions that works has been a crucial topic for all partners interested in developing patient care. Lots of different strategies have been tried out, but often initiators are sitting back with limited knowledge of what worked, why it worked and how much did it work. Traditionally RCT has been the method of first choice for getting the evidence of the effect of the intervention. This kind of design can be very hard to carry through and other designs might be reasonable to use instead. Strategies in how to develop complex interventions and how to evaluate and translate interventions have to be focused on. In UK MRC has been into this discussion for years and has presently published new guidelines.

**Aim:** To discuss the challenges in developing interventions for use at patient or GP/practice staff level aiming a better health of patients. Furthermore to discuss how to evaluate complex interventions and how to translate the results into real life.

**Content:** A short presentation of the MRC frame of developing complex interventions will open the workshop. We will work with participants own projects. The questions for further discussion in smaller groups and plenum will among others be:

1. Do you know your intervention?
2. Do you know your target group?
3. How to evaluate the intervention?
4. Which outcomes correlate to the intervention?
5. How to translate the results into the real world?

## W24 COMMUNICATING TEST RESULTS: CONSIDERING DIAGNOSTIC AND SCREENING TESTS

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Medical providers in general practice often discuss test results with patients, who then take those results, and their understanding of them, to other medical professionals. These patients may then be involved in making decisions about additional diagnostic tests and interventions or decisions about treatment options. In making such decisions, patients can be influenced by their understanding of the initial test result and of what it might mean for them personally. The objective of this workshop is to explore how medical providers' think about and communicate with patients about test results. In particular, we will do this by considering a test that might be used in the diagnosis of a symptomatic patient, or, alternatively, for population screening of asymptomatic people. Participants will share their opinions about what must be communicated when discussing test results, and how best to convey this information. Workshop organizers will "set the stage" by having an actor-patient present two test result scenarios. We will present test result data in an intuitive format and discuss whether thinking about results in this way affects participants' beliefs about communication with patients. Participants will be asked to write down some of their thoughts at the start and end of the workshop. The session will be video-recorded to allow for analysis of the discussion as part of an on-going research project.

**Keywords:** Risk, communication, decision making.



# ABSTRACTS

POSTER  
EXHIBITION  
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## PCI24 CHALLENGES IN CLASSIFICATION OF ASTHMA SEVERITY FROM PRESCRIPTION DATA: A PILOT STUDY

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Asthma is a dynamic disease, and over time the degree of asthma severity can change. Based on prescription data, individual yearly use of inhaled beta-2-agonists (IBA) in defined daily doses (DDD) has been used as a proxy for asthma severity. The challenges are how to most appropriately classify the asthmatic patients and how to deal with the time from identifying asthmatics from prescription data till clinical assessment.

**Objective:** To assess if classification of asthma severity based on prescription data changes when using different durations between obtaining prescription data and clinical assessment.

**Methods:** We identified IBA users in 2005 in the Odense Pharmaco-Epidemiological Database (OPED) with age restriction to 18-40 years. We compared the first quarter (Q1) with each of the remaining quarters (Q2-Q4). Index dates were the last day in each quarter. We stratified on cumulative IBA use in DDD one year prior to each index date. Current IBA use was defined as  $\geq 1$  prescription on IBA during Q1.

**Results:** When including all IBA users, there was a remarkable drop-out in the lowest IBA use strata. When limiting the population to Q1 current users, the drop-outs were negligible in the following quarters, but individual IBA users frequently changed from one stratum to another showing decreasing agreement with time.

**Conclusions:** In order to reduce drop-outs among especially low users of IBA, only current users of IBA should be included in the study. Reclassification of asthma severity using more current prescription data is necessary before comparing to the clinical assessment.

**Keyword:** Asthma.

## PCI25 PHYSICIAN USE OF SALINE NASAL WASH FOR UPPER RESPIRATORY CONDITIONS

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**Context and Objective:** Upper respiratory conditions are common and have a significant impact on patient quality of life and medical resource and antibiotic use. Saline nasal irrigation (SNI) is an adjunctive therapy for upper respiratory conditions; a Cochrane review and several clinical studies suggest that use of SNI may be effective for symptoms of upper respiratory conditions, and its popularity is growing. The prescribing patterns of general practitioners regarding SNI have not been studied. We therefore assessed SNI use among family physicians to determine how and for which conditions they recommend SNI and the degree to which they experience clinical success with SNI.

**Method/Study Design:** Electronic questionnaire Participants: 330 practicing family physicians in the Wisconsin Academy of Family Physicians in the upper Midwest of the U.S.A.

**Results:** Analysis showed that 286 of 330 respondents (87%) have used SNI as adjunctive care for a variety of upper respiratory conditions including chronic rhinosinusitis (91%), acute bacterial rhinosinusitis (67%), seasonal allergic rhinitis (66%), viral upper respiratory infection (59%), other allergic rhinitis (48%), irritant based congestion (48%) and rhinitis of pregnancy (17%). Respondents also reported having used SNI prior to antibiotics for acute bacterial rhinosinusitis (77%). Use patterns varied regarding type of SNI administration, dosing frequency, saline concentration and patient education.

**Conclusions:** This questionnaire-based study suggests that SNI is used by family physicians for a variety of upper respiratory conditions though recommendation and patient education styles, dosing schedules, and solution types vary.

**Keywords:** Nasal irrigation, upper respiratory infection, survey study.



**PCI26 A MOBILE DIABETES NURSE IN GENERAL PRACTICE. AN EVALUATION OF AN EXPERIMENT**

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**Objective:** The project aimed at strengthening diabetes treatment and care in general practice. A special focus was on ethnic minority patients diagnosed with type 2 diabetes.

**Methods:** A qualitative evaluation was conducted by an external company. It was based on written documents and 13 qualitative research interviews. A thematic interview guide focused on: organization of treatment and care, problems related to the target group, the cooperation with the project worker (the nurse), and needs for support in the future. Firstly, a thematic content analysis was conducted. Secondly, connections between the themes were found.

**Results:** A group of 'well organized' clinics had a systematic approach to the diabetes treatment and care. They also knew which patients who needed follow up or special attention. A group of 'less organized' clinics did not proceed systematically to the same extent and therefore did not have an overview of the group of patients in question. Problems towards the target group were identified as concerning: 1) language 2) communication connected to socio-cultural factors and 3) compliance.

**Conclusions:** The clinics had expected to gain more knowledge, advice and counselling on systematization and organization of diabetes treatment and care. Generally, the group of 'well organized' clinics gained more from the experiment than the 'less organized'. Interest and focus on change seemed of great importance in the evaluation of whether the project has lead to progress.

**Keywords:** Diabetes nurse, general practice, ethnic minority patients.

**PCI27 LACTASE NON-PERSISTENCE GENOTYPE AND MILK CONSUMPTION AMONG YOUNG NORTHERN RUSSIANS**

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**Objectives:** To evaluate the prevalence of lactase non-persistence genotype (C/C-13910) among Northern Russians in accordance with their ethnicity and to evaluate milk consumption depending on genotype.

**Methods:** Blood samples for genotyping lactase activity defining C/T-13910 variant by polymerase chain reaction and direct sequencing were taken from 231 medical students of Russian origin aged 17-26 years. Ethnic origin and milk product consumption were analyzed by using a questionnaire. Students were considered as Russian if at least three out of four grandparents were of Russian origin.

**Results:** We found that the prevalence of the C/C-13910 genotype among Northern Russian population was 35.6%. The other genotypes nearby C/T-13910 and associated with lactase activity were not present in the study population. Majority of subjects consumed 1-2 or even less glasses of milk per week. Milk consumption among people with the non-persistence genotype tends to be lower than among lactose tolerant subjects but this was not statistically significant.

**Conclusions:** The genotype does not affect milk products consumption in Northern Russian population which could be a result of relatively low milk consumption among the whole study population.

**Keywords:** Lactase persistence/non-persistence, C/C-13910 genotype, milk consumption.

## PCI28 EFFECTS OF AN ACTIVE IMPLEMENTATION OF A CHRONIC DISEASE MANAGEMENT PROGRAMME FOR PATIENTS WITH COPD

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Healthsystems will manage more and more people with chronic diseases as life-expectancy increases and treatment options improve. As the need for resources increases, it will be vital that a targeted strategy for healthcare to this growing group is developed so all are offered professional and efficient treatment and that resources are used equitably. A proactive strategy will secure that not only the acute needs of patients, but the need of the whole population is served. This study concentrates on the process of implementation and effects of Region Midtjylland's programme for COPD-patients. A proactive implementationstrategy for the chronic disease management programme will be designed based on the literature and methods which have proven effective in implementing new ways of working when different stakeholders are involved. It is an intervention study where approximately 4000 COPD-patients will be cluster-randomised after a bloc-randomisation of their GP-practice. 15 GP-practices in Ringkøbing-Skjern-Municipality will be randomised to receive the focused implementation or to an "as usual" group. With data from registers and a questionnaire-survey the effect on COPD-patients selfreported health, evaluation of the healthsystem and changes in the distribution of healthresources will be analysed. How the healthprofessionals in hospital, community-care and in GP-practices perceive the implementation and how it influences their conception, interactions and culture will be illustrated in an interview-survey of stakeholders. We expect to see the active implementation of the coordinated, structured and effective effort induce coherence, better the quality of treatment, make efficient use of healthresources, enhance healthprofessionals' competences and increase patientsatisfaction.

**Keywords:** Implementationstrategy, chronic-disease-management-programmes.

## PCI29 USE OF MIGRAINE MEDICINES IN FINLAND

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**Objectives:** To examine how widely migraine patients in Finland use analgesics, triptans and other specific medicines.

**Methods:** The Health and Social Support Study (HeSSup) population consisted of a stratified random sample drawn from the Finnish Population Register in four age groups: 20–24, 30–34, 40–44 and 50–54. The survey was carried out by postal questionnaire during 1998, response rate 40.0%. A follow-up questionnaire (response rate >80%) was sent in 2003. The subjects were asked whether a doctor had told them that they have or have had migraine. The data comprised 2977 migraine patients, 79.2% of them were women. Use of prescribed medicines during 1.1.1998 – 31.12.2006 was drawn from the registers of the Social Insurance Institution of Finland. The use of specific medicines among migraine patients were compared with age- and sex matched controls.

**Results:** Anti-inflammatory analgesics had been used by 70.6% of migraine patients vs. 52.4% of controls. The specific medicine triptans had been used by 22.2% of patients (24.8% of female and 12.3% of male patients). The combination of analgesics and muscle relaxants had been used by 36.0% of patients vs. 22.8% of controls. Mild opiates had been used by 11.3% of patients vs. 7.7% of controls. The corresponding figures for the use of antidepressants were 18.4% and 11.1%, and for beta blockers 15.7% and 9.0%, respectively.

**Conclusions:** Analgesic use is common among Finnish migraine patients. Use of triptans was twofold among women compared with men.

**Keywords:** Migraine, medicines.

## PCI30 LOCAL GOOD CARE MODEL FOR TYPE 2 DIABETES – FROM A PROBLEM TO A SOLUTION

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Since 1994 the Finnish Quality Network (FQN) has focused on systematic development of treatment in cardiovascular diseases: bench marking, collaboration and evaluation in over 60 health centres covering 2/3 of the Finnish population. Attendo MedOne is responsible for primary health care for 230,000 inhabitants. Participation in FQN is crucial for quality control and development. Karhula is one of MedOne's health centres since 2006. Karhula had severe long-term shortage of GPs. The nurses and doctors lacked teamwork. Care plans were poorly documented. Intervals between controls by GPs for patients with type 2 diabetes (T2DM) could be years, or limited to nurse counselling and prescription renewal.

**Objectives:** The primary g OPI was to enhance the care of T2DM to the median national level. Local process model was planned by a multiprofessional group. The nurses were trained to examine the feet. They also started life style counselling.

**Results:** In 2005, 40% of T2DM patients had LDL-cholesterol  $\mu$ 2.6, statistically significantly lower than the national average ( $p < 0.01$ ). In 2008, the percentage was 67% achieving the national level. In 2005, the feet were examined in 38% (FQN average 60%,  $p < 0.001$ ), respectively, in 2007, 74% vs. 52% ( $p < 0.001$ ), and in 2008, 88% vs. 61%. In 2006, HbA1c was  $< 7\%$  in 58% (FQN 57%), and, in 2007, 72% vs. 63% ( $p < 0.05$ ).

**Conclusions:** The care of T2DM began earlier, was optimized faster and distributed more evenly in the new team model. Controls by GPs happened regularly according to the process model segmentation depending on the patient treatment levels.

**Keywords:** T2DM.

## PCI31 THE EFFECT OF CASE MANAGEMENT IN COMPLEX CANCER PATHWAYS

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**Introduction:** Case management (CM) has been proposed as a method for optimizing the course of treatment for complicated cancer patients. However evidence of the effect of CM is limited and methodologically rigorous research is needed.

**Aim:** To analyze effects of Nurse CM in complicated cancer care.

**Methods:** The study is designed as a two-arm randomized controlled trial (RCT) including approximately 280 colorectal cancer patients. Intervention group patients will be offered usual medical treatment plus supportive intervention from a case manager. Control group patients will receive usual medical and supportive treatment.

**The intervention:** Case managers are registered nurses and possess thorough knowledge of cancer treatment and pathways. Core intervention elements: Planned and ad hoc personal and telephone contacts, surveillance of care pathways, coordination and dissemination of care plan (including transfer of patient-specific information to other departments and general practice).

**Results:** Primary outcomes: Patient evaluations of care pathways and "Quality of Life" (questionnaires). Secondary outcomes: Use of health care services and care process measures (The National Health Insurance Service Registry and The National Patient Registry; and GPs' evaluations of continuity of care (questionnaire). Schedule:

- "Case management used to optimize cancer care pathways: A systematic Review" has been published in BMC Health Services Research.
- The CM manual has been written. Questionnaires are under development and pilot testing.
- Two case managers have been appointed 1. January 2009.
- After training and pilot testing of the intervention the RCT will begin in March 2009. Inclusion period is 12 months.

**Keywords:** Case management.

### PCI32 PATIENT- AND DOCTOR-RELATED FACTORS ASSOCIATED WITH CONTROL OF HYPERTENSION IN GENERAL PRACTICE IN DENMARK

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**Objectives:** The aim of the present PhD study is to analyze patient- and doctor-related factors associated with the control of hypertension (comorbidity, socioeconomic status, gender, age and compliance).

**Methods:** In an APO audit about hypertension 184 general practices participated and each practice included 40 consecutively recruited patients with already diagnosed hypertension. The study population comprised 5878 patients who answered a questionnaire about their treatment of hypertension, side effects, compliance, social and economic status, knowledge of the disease and knowledge of their actual blood pressure.

**Results:** The questionnaires to patients and the GPs are completed. The temporary results indicate that only 50% of patients treated for hypertension in general practice have controlled hypertension. (BT < 140/90 mmHg, Diabetes <130/80 mmHg) The results will be analysed in subgroups, where patients with hypertension < 2 years, patient with hypertension in 2-5 years, and patient with hypertension >5 years will be presented in relation to controlled/uncontrolled hypertension. Other independent variables like diabetes, tobacco, if patients measure blood pressure at home, will also be analyzed in relation to controlled/uncontrolled hypertension.

**Conclusions:** Only 50% of patients treated for hypertension in general practice achieve controlled hypertension. During the study the cohort will be analysed using different central registers to answer the objectives of the study.

**Keywords:** Uncontrolled hypertension.

### PCI33 SYMPTOM PRESENTATION IN CANCER PATIENTS IN GENERAL PRACTICE

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**Objectives:** For the majority of cancer patients the diagnostic investigations begin in general practice. The aim of the study was to investigate for which symptoms cancer patients consulted their general practitioner (GP).

**Methods:** All newly diagnosed cancer patients and their GPs in the County of Aarhus, Denmark participated in a 1-year questionnaire survey. The GPs answered questions about the patients' first presentation of cancer symptoms and the GPs' interpretation of these symptoms.

**Results:** A total of 2212 (83%) questionnaires were answered. The majority (57.6%) of patients presented only one symptom. Symptoms varied with the type of cancer. Patients with breast cancer and malignant melanoma mainly presented with diagnosis-specific symptoms. Patients with colorectal, lung and prostate cancer presented diagnosis-specific symptoms (change in bowel habits, cough and bladder dysfunction) as well as more non-specific symptoms (pain, weight loss and fatigue). The GPs interpreted the symptoms as alarm symptoms in 49 %, as general symptoms in 24 % and as non-cancer specific symptoms in 27 % of the patients.

**Conclusions:** In general practice, incident cancer patients often present with few and non-cancer specific symptoms. The fact that only half of the patients presented with alarm symptoms complicates the GPs' diagnostic work-up and the use of fast track for suspected cancer. Therefore, there is a need for alternative referral pathways for cancer patients with non-cancer specific symptoms.

**PCI34 QUALITY OF CARE FOR ETHNIC MINORITY PATIENTS WITH TYPE 2 DIABETES MELLITUS IN GENERAL PRACTICE IN OSLO**

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**Background:** A multiethnic patient population is challenging in general practice due to the ethnic variations in risk factors and clinical course for diabetes type 2 (T2DM). Research question: To describe the influence of ethnicity on quality of diabetes care in general practice.

**Methods:** Retrospective cross-sectional study of GPs' electronic patient records. For patients with diabetes, predefined data were captured, e.g. ethnicity, measurements of HbA1c, blood pressure (BP), cholesterol. Ethnicity was categorised according to family origin.

**Results:** In 2005, about 58 000 patient records in 11 practices (49 GPs) were screened. 2 064 patients had a diabetes diagnosis. 1653 had T2DM cared for by their GP and were included in this study. Mean age at time of diagnosis varied across ethnic groups (from 44.9 to 59.7 years), native Norwegians were oldest. In all groups, most patients had their HbA1c (91.4 to 95.2%), blood pressure (85.2 to 92.5%), and cholesterol (92 to 97%) controlled. Immigrants were treated more intensely with oral hypoglycaemic agents (OHAs), or combined OHAs and insulin whereas 18% of all minority patients vs. 28% of Norwegians were non-users. Compared to Norwegians, immigrants in all treatment groups had significantly higher HbA1c (7.4 vs. 7.1% for OHAs only, 8.4 vs. 7.9% for OHAs and insulin combined, and 8.6 vs. 7.7% for insulin). Minority groups had lower BPs and received less anti-hypertensive therapy and statins.

**Conclusions:** Minority patients were averagely younger than corresponding Norwegians. Their glycaemic control was less optimal despite receiving more intensive treatment with glucose-lowering therapies.

**Keywords:** Diabetes, ethnicity.

**PCI35 OCCUPATIONAL THERAPY FOR PALLIATIVE CANCER PATIENTS – A RANDOMIZED CONTROLLED TRIAL**

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**Background:** Patients with advanced cancer often experience serious physical dysfunctions and reduced quality of life. Occupational therapy (OT) is believed to be effective in handling many of the problems experienced by patients with advanced cancer, but the evidence is sparse.

**Research question:** The purpose of this study is to analyse the effects of an OT intervention targeted at palliative cancer patients. Factors of special interest will be the patient's ability to participate in activities of daily living, number of days admitted in hospital and quality of life.

**Methods:** Randomized controlled trial with an OT intervention programme for the intervention group and standard palliative treatment for the controls. OT intervention will include g OPI setting, training performance of activities of daily living, home assessments, adaptive equipments and supervision of patient and relatives. Effects will be measured by using validated questionnaires, including EORTC QLQ-C30, SF-36, and assessment of Motor and Process Skills (AMPS) and registration of number of days admitted to hospital is measured using OPUS (IT patient registration system).

### PCI36 DOES THE ORGANIZATION OF A GENERAL PRACTICE EFFECT THE HOSPITALIZATION OF COPD PATIENTS?

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**Objectives:** COPD is one of the major chronic diseases that continues to grow both worldwide and in Scandinavia. Some 2400 Danish GPs treat the more than 300.000 Danish COPD patients. Several studies have shown that there is a huge difference in the progression of COPD. We propose the following hypothesis: Variation in the progression of COPD is related to the organizational structure of general practice. By organizational structure we refer to processes used, available equipment, type of staff (e.g. specially trained nurse etc.)

**Aim:** To study the organization of general practice and how it influences the hospitalization of COPD patients.

**Methods and material:** The study combines a questionnaire and a prospective cohort study. Data about the organization of the general practices will be collected using a questionnaire sent out to all Danish general practices. There is no international standard questionnaire for this, and, the questionnaire will therefore be developed with focus on determinants relevant for COPD, i.e. use of nurses, size of the practice and use of guidelines. Data the about the hospitalization of all Danish patients admitted with a COPD diagnosis in the period 1999 to 2009 are extracted from the Danish National B OPrd of Health, and background data for socio-economic status are obtained from Statistics Denmark.

**Current status:** The questionnaire is being designed and we are seeking permissions to access relevant databases.

**Keywords:** Family medicine, organisation, COPD.

### PM37 CME IN SMALL GROUPS OF GENERAL PRACTITIONERS IN THE NORDIC COUNTRIES

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Continuing Medical Education (CME) is essential for all practitioners

**Introduction:** Continuing Medical Education (CME) is mandatory for all practitioners. The DGE-concept – Decentralized Groupbased Education for family doctors has proven of great value, not only as simple learning, but also as a safe basis for discussions, exchange of experience and ideas, solving simple problems and as a social and professional network. The aim of this presentation is to show the DGE-activities and habits in the Nordic countries.

**Material:** The Internet and the library of Aalborg Sygehus was searched for “General Practitioners”, CME and “Small Groups”. General practitioners in the Nordic countries (at least 3 per country) are contacted by E-mail, asking about national CME in small groups, frequency, who takes the initiative, and who pays? The authors own experiences as a private member and as CME-facilitator covers the conditions in Denmark.

**Results:** The questioning is still going on, and delayed by language problems (Finnish and Icelandic). It shows so far, that there are considerably inter-national differences. From a very controlled and structured setup in Norway, to no formal setup in Iceland. There is no single conclusion.

**Discussion:** Without doubt, GP’s can learn and be inspired from experiences from colleges in the other Nordic countries. The next step is for the planners of education to take action to arrange the appropriate setups. This poster might be the first step.

### PM38 ULTRASONIC EXAMINATION OR NAEGELE'S METHOD FOR DETERMINATION BIRTH TERM

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**Background:** The routine method for the determination of the expected birth term for pregnant women is a calculation on the basis of an ultrasonic examination. The birth term calculation through this relative high-tech method has overruled Naegele's method – the calculation of the term from the first day in the last menstruations period.

**Objectives:** To contribute to the discussion of the relevance of using ultrasonic evaluation as the routine method for predicting the birth term relative to Naegele's method. The data consists of all births in a single practice during 2008. The data were collected from the women's pregnancy files, the children's birth files, supplemented by direct inquiry to the newborn's parents and to the obstetric department at the local hospital, where most of the births took place.

**Results:** In the practice population containing 2700 adults there were 75 pregnancies resulting in 77 children; there were two pairs of twins. There were no perinatal deaths, but there were two cases of significant malformations: one child with transpositio vasorum and one with palatochisis. 56 of the deliveries occurred after spontaneous initiation of the birth, 19 deliveries took place through planned caesarean sections or medically initiated contractions. Mean prediction error (0.45 vs. 1.88) and its standard deviation (9.5 vs. 9.8) for Naegele's method versus the ultrasound method for the spontaneously initiated births tend, if anything, to favour the former. A more thorough survey of accuracy, variation and the discrepancy between the two methods will be presented.

**Keywords:** Ultrasonography, pregnancy, term birth.

### PM39 SKUP EVALUATIONS FOR CRP, PT-INR, HBA1C AND HAEMOGLOBIN

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SKUP is a co-operation between DAK-E, NOKLUS and EQUALIS. The purpose of SKUP is to improve the quality of the near patient testing in Scandinavia. The goal is achieved by organising SKUP evaluations among the users of the equipment in primary care.

More than 70 evaluations have been performed after standardized protocols where equipment were evaluated both under standardized conditions at a hospital or by users at the doctors office or by patients. To qualify for an overall good assessment in a SKUP-evaluation, the measuring system must show satisfactory analytical quality as well as satisfactory user-friendliness. The number of invalid tests must not exceed 2%.

SKUP use Total Error  $TE \leq \pm [|\text{bias}| + 1,65 \times CV]$  as quality goal for all components while the Danish goals are given as Bias% and imprecision (CV %).

The SKUP goals for CRP, PT-INR, HbA1c and Haemoglobin are Total Error less than 26%, 20%, 10% and 5%, respectively, when compared with a reference or comparison method.

The results of CRP: QuickRead; SKUP/2001/12, ABX Micros CRP: SKUP/2002/23\*, i-CHROMA CRP-test: SKUP/2007/61 and no 70\*. PT-INR: CoaguChek S, Thrombotrack/Thrombotest, ProTime (SKUP/2000/7,8,11), HemoChron Jr. Signature: SKUP/2004/33, CoaguChek XS: SKUP/2007/55 Simple Simon PT\*: SKUP/2007/57\*. HbA1c: DCA 2000: SKUP/1999/4, Afinion HbA1c: SKUP/2008/65. Haemoglobin: Biotest Hb: SKUP/2001/17, ABX Micros CRP: SKUP/2002/23\*, Hemo\_Control: SKUP/2004/29, Chempaq XBC: SKUP/2006/47 are presented.

Most SKUP evaluations fulfil the goals of SKUP. Many instruments are given up before testing if they are unlikely to reach the goals. About 10 evaluations have been stopped due to poor quality of the equipment.

The results from the evaluations are published in [www.skup.dk](http://www.skup.dk).

**Keywords:** Analytical quality, user friendliness.

#### PM40 SCANDINAVIAN EVALUATION OF LABORATORY EQUIPMENT FOR PRIMARY HEALTH CARE (SKUP)

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**Background:** It can be difficult for users in primary health care to get good and objective information about equipment for office laboratories.

**Methods:** Scandinavian evaluation of laboratory equipment for primary health care, SKUP, is a co-operative commitment between Denmark, Norway and Sweden. The purpose of SKUP is to improve the quality of near patient testing instruments by providing objective and supplier-independent information of analytical quality and user-friendliness in primary health care. The evaluations are performed in hospital laboratory by experienced lab technicians and thereafter by the staff in primary health care.

**Results:** Much of the equipment (about 50 %) used in primary care for e.g. measuring Haemoglobin, PT-INR, Glucose, CRP, Streptococci A and hCG has been tested and evaluated by SKUP. Several evaluations have been stopped due to poor quality of the equipment. The evaluations are published at [www.skup.dk](http://www.skup.dk) and [www.skup.nu](http://www.skup.nu) if the instrument is used in Scandinavia.

**Conclusions:** SKUP evaluations or other independent evaluations should ideally be present for all instruments/tests used in Scandinavia. POCT (Point of care test) User friendliness SKUP (Scandinavian evaluation of laboratory equipment for primary health care).

#### PM41 A CENTRE FOR QUALITY REGARDING GP'S – WHAT TO CONSIDER

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**Objective:** The project aims to discuss the dilemmas in a process of establishing a Centre for quality.

**Methods:** The Centre for quality is a construction between political parts representing the GP's and the political/administrative level – Centre for Quality and In-service training in general practice in the Capital Region (KvEAP). There are secretaries, academics and GP's working in the Centre. The purpose of the Centre is to ensure close contact with the GP's and to connect the political/administrative level with the GP's.

**Results:** There will be a discussion about dilemmas in this kind of process. An organizational angle will frame the discussion.

**Conclusions:** It is important if not crucial, that the political parts on both sides feel committed to work for such a centre. The structures around a quality centre highly determine the possibilities for the working conditions. It takes certain skills for employees (GP's, academics and secretaries) working in such a quality centre. To work with and not underestimate the difference in cultures and values between A: groups of employees, B: the political/administrative level and GP's is a challenge.

**Keywords:** Organisation, political difficulties, cultural difference.



#### PM42 QUALITY OF EDUCATION IN HEALTH CENTRES – TRAINEES' VIEW

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**Objectives:** Health centres should provide good facilities for medical education, because a physician can become a good general practitioner only by training and working in primary health care. The purpose of the study was to evaluate the education of physicians in health centres. The aim was also to develop and test a questionnaire for the continuing assessment of learning environments in the health centres providing training for physicians.

**Methods:** There are 50 teaching health centres in the special responsibility area of Tampere University Hospital. The survey was conducted by a Webropol enquiry to the physicians (n=135) participating in specific training for general medical practice or specialist training for general practice in the health centres. The enquiry was responded by 77 physicians (57%) in 27 health centres.

**Results:** A tutor was appointed for 74% of those in training and special time for guidance was available for 60% of respondents. The learning environment was quite satisfactory as far as clinical work and in-service training were concerned. Some shortcomings were noticed in the content of guidance, systematic progress and getting of feedback.

**Conclusions:** The training of physicians has clearly been in focus of development in the health centres. However, the content of guidance and systematic progress need some more consideration. To overcome the shortcomings of guidance, a comprehensive training program was arranged for trainees' tutors. The assessment form can be used for continuing evaluation of training in health centres.

**Keywords:** Postgraduate medical education, learning environment, general practice.

#### PM43 WELL CONSIDERED EXAMINATIONS – WELL CONSIDERED TREATMENTS?

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**Background:** Laboratory tests are essential for relevant medical care, but when over-used they may lead to unnecessary treatments and new tests. Private company AttendoMedOne operates some outsourced primary health care centres, and monitors routinely the use of resources to ensure better care and patient safety.

**Objectives:** The rising trend in the use of laboratory tests should be cut to allocate resources more cost-effectively. Methods The GPs (n=34) and nurses (n=34) were challenged in workshops in five centres to compare the current use of tests with EBM Guidelines. They recognized some tests to be inadequate. The use of tests was analyzed before and after the workshops.

**Results:** Most (38/68) of the participants reported an aim to reduce unnecessary tests in a semi-structured feedback, and 30/68 aimed to improve the counselling and communication with the patient. The amount of inadequate tests diminished: the decline of ESR tests in five centres was 808 (56 %) from april-may 2008 to october-november 2009, and the decline of S-RAST was 107 (281%) respectively.

**Conclusions:** Monitoring the use of resources combined with interactive workshops analysing and solving the problems changed the clinical practices. The reduction in inadequate tests and the aimed increase in counselling of and interaction with the patient may improve the quality and safety of the care.

**Keywords:** Laboratory examinations, cost effectiveness.

#### PM44 EXPERIENCES OF USER BENEFITS FROM TWO E-LEARNING PROGRAMMES

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During the last couple of years, the Education Department and the Danish Medical Association have initiated several E-learning programmes. Some of the programmes are directed towards Junior Doctors and Specialists while others are directed towards GP, e.g. two E-learning programmes: Dementia Guideline and renewal of driving licence. Both E-learning programmes have been followed up by a web-based survey concerning user benefit from the programmes. The conclusions of the two programmes have been quite different. The poster will show how the users react to the two E-learning programmes and the user benefits from using the programmes. The poster will also discuss why the results differ within the two programmes and finally the perspectives of incorporating user experiences in designing E-learning.

**Keywords:** E-learning, user experiences.

#### PM45 LIST OF BASIC DRUGS USED IN GENERAL PRACTICE (BASISLISTEN.DK)

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Basislisten.dk ("The list of basic drugs") is a new Danish web-based tool to promote rational pharmacotherapy in general practice. Basislisten.dk has been developed by regional medicines consultants in the five Danish regions (Danske Regioner) during a national collaboration with the Institute for Rational Pharmacotherapy (IRF). The list consists of drugs of choice for common diseases in general practice, as considered from a point of effect, side effects and price. The assessment of drugs for the list is following the evidence-based conclusions of the National List of Recommendations (Den Nationale Rekommandationsliste) by the Institute for Rational Pharmacotherapy, supplied by the price. Practical issues such as dosage, have also been considered. The aim of Basislisten.dk is to provide physicians with a possibility, direct from their electronic system in the moment of prescription, to know the drug of choice, among many other drugs promoted by the medical industry. Since October 2008 already more than half of the Danish physicians have access to the drugs proposed by their region directly. The conclusion is that it has been possible for medicines consultants in the Danish public health system to collaborate cross-country to establish a common electronic platform providing direct knowledge of drugs of choice for physicians in general practice.

**PX2.46 COMPLAINANTS IN GENERAL PRACTICE.  
WHO ARE THEY AND WHY DO THEY COMPLAIN?**

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(3) The Danish Patient Complaints Board, Denmark

**Objectives:** The Danish Patients' Complaints Board receives 400-500 complaints concerning general practitioners every year. At the moment, we do not have much knowledge about the complainants and their reasons for filing a complaint. The aim of the present study is to study complainant and complaints characteristics in general practice.

**Methods and material:** Original documents of all complaints completed by the complaints board in 2007 will be examined and data collected systematically.

**The data comprise:** Age and sex of the complainant/the patient concerned, the patients' affiliation to the labour market, reasons given for filing a complaint, the involved health issue (-s), and the patients' regional residence. A statistical analysis will be undertaken using STATA. Dependent on needs, the study will be supplemented with a register-based approach.

**Status and results:** The study is ongoing. Permission to examine complaints cases has been granted by the Danish Patient Complaints Board and the Data Protection Agency. The number of complaints cases completed in 2007 was 463, and the gender distribution among patients was 260 females (56%) and 203 males (44%).

**Keywords:** Family practice, malpractice.

**PX2.47 MULTICULTURAL APPEARANCES OF DEPRESSION  
– A CHALLENGE FOR THE GENERAL PRACTITIONER**

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**Background:** Many minority group patients who attend health care are depressed. To identify a depressive state when GPs see patients from other cultures than their own can be difficult because of cultural and gender differences in expressions and problems of communication. The aim of this study was to explore and analyse how GPs think and deliberate when seeing and treating patients from foreign countries who display potential depressive features.

**Methods:** The data were collected in focus groups and through individual interviews with GPs in northern Sweden and analysed by qualitative content analysis. Results. In the analysis three themes, based on various categories, emerged: 'Realizing the background', 'Struggling for clarity' and 'Optimizing management'. Patients' early life events of importance were often unknown which blurred the accuracy. Reactions to trauma, cultural frictions and conflicts between the new and old gender norms made the diagnostic process difficult. The patient-doctor encounter comprised misconceptions, and social roles in the meetings were sometimes confused. GPs based their judgement mainly on clinical intuition and the established classification of depressive disorders was discussed. Tools for management and adequate action were diffuse.

**Conclusions:** There is a need for tools for multicultural general practice care in the depressive spectrum. It is also essential to be aware of GPs own conceptions in order to avoid stereotypes and not to under- or overestimate the occurrence of depressive symptoms.

**Keywords:** Depression, gender, ethnicity.

**PC.48 OBESITY AND THE EFFICIENCY OF SIBUTRAMINE THERAPY IN GENERAL PRACTICE**

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**Objectives:** Obesity has reached epidemic proportions in Serbia. Obesity is a condition in which excess body fat has accumulated to such an extent that health may be negatively affected. It is commonly defined as a body mass index (BMI) of 30 kg/m<sup>2</sup> or higher. Population with high BMI has risk for cardiovascular-disease and cerebrovascular-disease.

**Aims:** The regulation of the high BMI for-women-men (>30 kg/m<sup>2</sup>) by sibutramine therapy in general practice.

**Method:** Our study was research 43 (100%) patients: 31 (72%) women and 12 (28%) men, aged 40-49 years with high-BMI and high-cholesterol. Sibutramine therapy for both group was 10mg daily during five-months with control-examination each month. Sibutramine intervention for all 43-patients was under their own decision.

**Results:** Blood-pressure-value, Glucose-value, Triglyceride-value and Acidum uricum-value were normal for all women and men at the first-examination and after five-month at the last-examination. At the first-examination: average BMI was 33,33 kg/m<sup>2</sup> and average cholesterol was 7,1mmol/l for women; average BMI was 33,95 kg/m<sup>2</sup> and average cholesterol was 7,3 mmol/l for men. At the last-examination, after five-months sibutramine intervention: average BMI was 28,12 kg/m<sup>2</sup> and average cholesterol was 5,8 mmol/l for women; average BMI was 29,30 kg/m<sup>2</sup> and average cholesterol was 6,0 mmol/l for men.

**Conclusions:** The five-month sibutramine therapy gave positive results in regulation of the BMI for all patients: reduction-female was 15,63%, reduction-male was 13,70%. Female-cholesterol-reduction was 18,31%, male-cholesterol-reduction was 17,81%.

**Keywords:** BMI, sibutramine therapy.