

# ABSTRACTS

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## 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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**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

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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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**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

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**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**

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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**

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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.

