

EUROPEAN GENERAL PRACTICE



RESEARCH NETWORK

*EGPRN is a network organisation within  
WONCA Region Europe - ESGP/FM*

in partnership with:

**redIAPP**

**semFYC**

**Idiap Jordi Gol**

EGPRN Co-ordination Centre: Mrs. Hanny Prick  
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Website: [www.egprn.org](http://www.egprn.org)*

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## **European General Practice Research Network**

**Barcelona – Spain**

**8<sup>th</sup> – 11<sup>st</sup> May, 2014**

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### **SCIENTIFIC and SOCIAL PROGRAMME**

***THEME: “Preventive Activities in Primary Care; an approach from  
clinical and health services research”***

**Pre-Conference Workshops  
Theme Papers  
Freestanding Papers  
One slide/Five minutes Presentations  
Posters**

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### **CONFERENCE VENUE**

**Hospital de Santa Creu I Sant Pau  
Sant Quintí, 89 – Barcelona  
by Metro  
Line 4: Guinardó/ Hospital de Sant Pau Station**

**This EGPRN Meeting has been made possible thanks to the unconditional support of the following sponsors:**



**Institut Català de la Salut  
Àmbit d'Atenció Primària  
Barcelona Ciutat**

The meetings of the European General Practice Research Network (EGPRN) have earned accreditation as official postgraduate medical education activities by the Norwegian, Slovenian, Irish and Dutch College of General Practitioners.

Those participants who need a certificate can contact Mrs. Hanny Prick at the EGPRN-Coordinating Office in Maastricht, The Netherlands.

## **“Preventive Activities in Primary Care; an approach from clinical and health services research”.**

Dear doctors, researchers, and colleagues,

Prevention activities are one of the main and more specific tasks for primary care professionals. In 1988, developed the PAPPS (Program of Preventive activities in Primary Care) which is a network oriented towards the systematic implementation of preventive activities in general practice. In 2003 the redIAPP network was established to consolidate a network to do research in this field, including more than 60 groups in all Spanish territory. Since then, GP in Spain have consistently been working in this model, but the research made in preventive activities, not only in Spain but in all Europe, still needs to answer many unsolved questions. This uncertainty is the reason why we have considered that research in preventive activities in primary care could be an interesting topic to develop in a meeting of EGPRN.

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Topics:

- ▶ Preventive activities in Primary Care; an approach from clinical and health services research.
  - Physical Activity
  - Smoking
  - Prevention of road traffic injuries
  - Participative research strategies in multicultural population groups with socio-economic difficulties
  - Health Education Community Intervention Programmes on Nutrition and other Lifestyles
  - Variability
  - Health Inequalities
- ▶ Multimorbidity
- ▶ Diabetes:
  - Education, prevention and treatment
  - Metabolic Syndrome
- ▶ Cardiovascular prevention:
  - Lifestyles : physical activity, smoking
  - Mathematical models of risk
  - Epidemiology
  - Prevention and treatment
- ▶ Mental health/Depression in Primary:
  - Prevention and treatment

Reasons for choosing this topic at EGPRN in Barcelona-Spain: Since Spain has one of the most aged populations in the world, the main health problems and concerns in our country are preventable health problems like cardiovascular, mental, metabolic and other chronic diseases.

The Spanish Ministry of health has promoted several plans to tackle with these conditions.

In order to provide with accurate responses to these problems, the Spanish Society of family medicine and the Primary University Health Care research Institute IDIAP-Jordi Gol, have been working for several years building research groups dealing with clinical and health services research.

Xavier Cos, Miguel Angel Muñoz, Concepción Violán, Josep Basora  
on behalf of EGPRN Barcelona Host Organization Committee

**MEETING EXECUTIVE BOARD  
GENERAL COUNCIL MEETING**

***Executive Boardmeeting***  
***Thursday 8<sup>th</sup> May, 2014***

**09.30 – 12.30: Executive Board Meeting**  
**Executive Board members**

**Location: Idiap Jordi Gol**  
**Gran Via de les Corts Catalanes 591 àtic,**  
**08007 Barcelona**  
**in: room Sala Jordi Gol**

***General Council meeting with the National Representatives***  
***Thursday 8<sup>th</sup> May, 2014***

**14.00 - 17.00 : Council Meeting**  
**Executive Board members and National Representatives**

**17.00 - 17.45 : Meeting of the Special Committees and Working Groups:**  
**-Research Strategy Committee**  
**-PR and Communication Committee**  
**-Educational Committee**  
**-Blue Dot Committee**

**Location: Idiap Jordi Gol**  
**Gran Via de les Corts Catalanes 591 àtic,**  
**08007 Barcelona**  
**in: room Sala d'Actes**

## REGISTRATION

### ► Thursday 8 May 2014

#### REGISTRATION FOR PARTICIPANTS OF PRE-CONFERENCE WORKSHOPS ONLY

**Location:** SEMFYC offices; C/ Diputació 320, 08009 Barcelona (Spain)

**On arrival, every participant, who has not paid and/or registered online, pays €50,= (or €25,= if an EGPRN-member) per person for each pre-conference workshop.**

### ► Friday 9 May 2014

#### REGISTRATION FOR ALL PARTICIPANTS

**Time:** 08.00 – 08.30 h.

**Location:** Hospitals de Santa Creu I Sant Pau, Sant Quintí, 89 – Barcelona.

**On arrival, every participant, who has not yet paid/registered online, will pay €300,= (or €150,= if an EGPRN-member) per person.  
+ on site payment +€50 extra administration costs.**

#### FOR ALL EGPRN PARTICIPANTS

**Social night on Saturday 10<sup>th</sup> May 2014 – 19.30 hrs.**

**Dinner, speeches and party.**

**Location:** Can Cortada

Avinguda de l'Estatut de Catalunya s/n; 08035 Barcelona-Spain.

<http://gruptravi.com/en/can-cortada/>

**Entrance Fee: €40,= per person.**

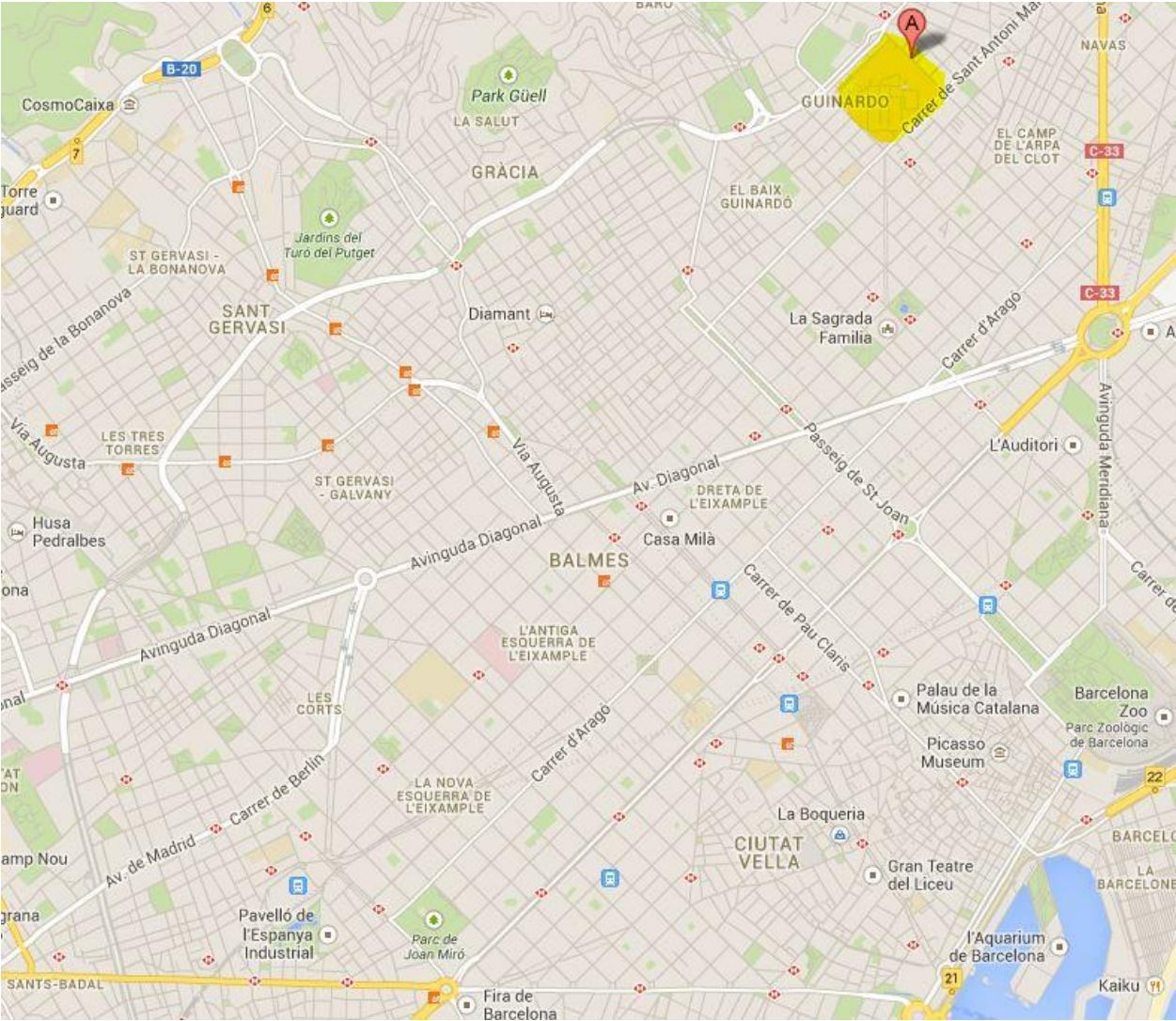
**Please address to EGPRN Registration Desk.**

**Unfortunately, we have NO facility for electronic payments (credit card, Maestro) on the spot. We only accept CASH EUROS.**

**We do NOT prefer pay cheques, given the extra costs. If you have no other option we will charge €25 extra.**

**On site payment +€50 extra administration costs.**

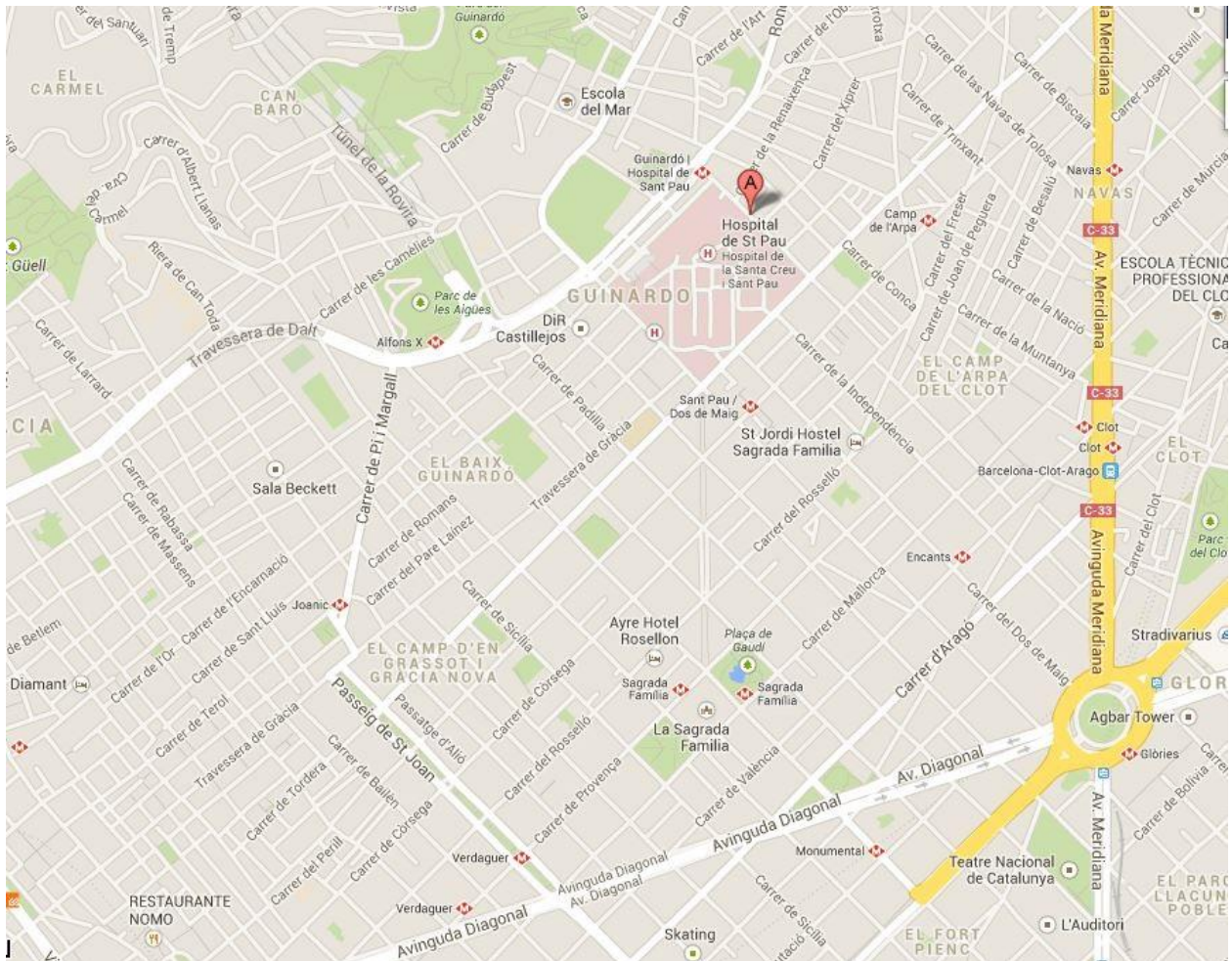
# Map of the Barcelona City Centre





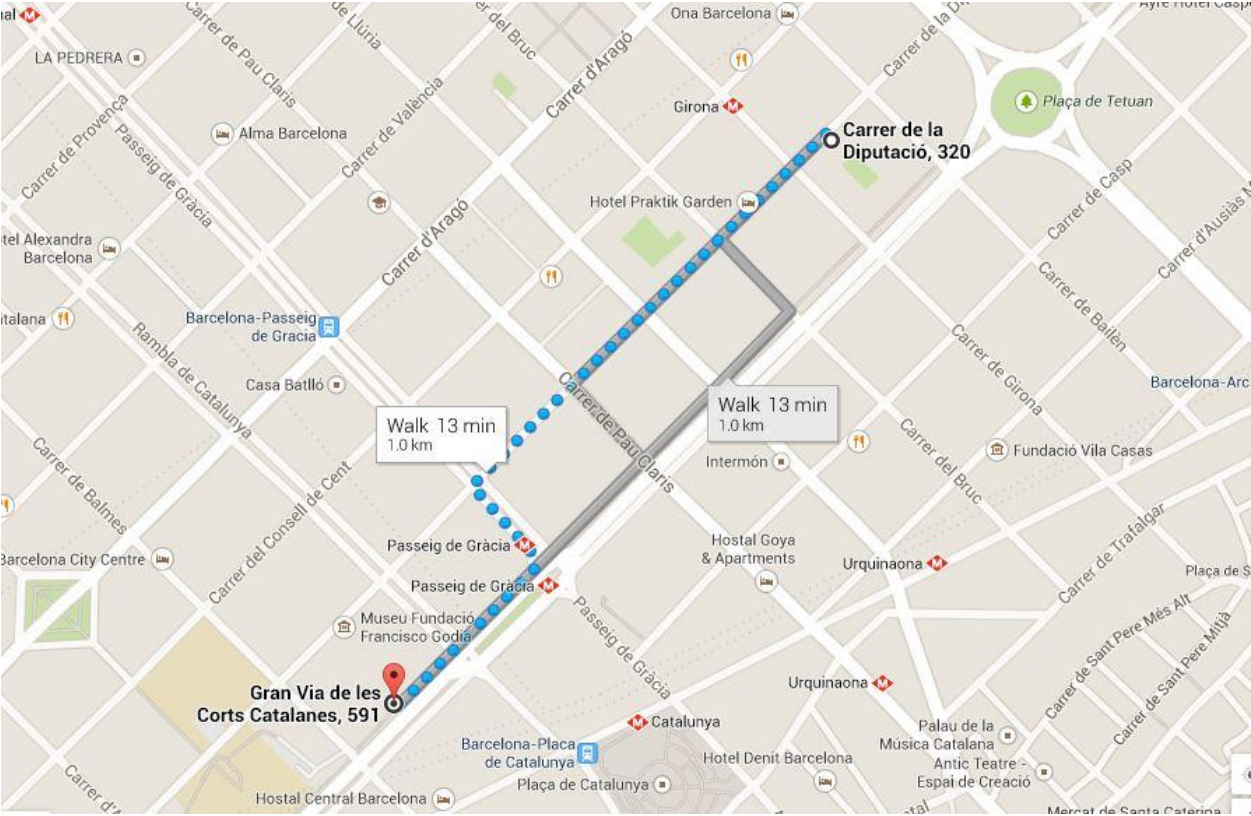


is important to point out that the Meeting is in the New Hospital de Sant Pau





# From Idiap to Semfyc.....



E G P R N      8<sup>th</sup> - 11<sup>th</sup> MAY, 2014

**PROGRAMME OF THE EUROPEAN GENERAL PRACTICE  
RESEARCH NETWORK IN BARCELONA-SPAIN**

**WEDNESDAY 7th MAY, 2014**

**Location :**    **IDIAP JORDI GOL; Gran Via de les Corts Catalanes 591 àtic,  
08007 Barcelona**

**14.00 - 18.00 :**      **Collaborative Study Group**  
**“WomanPower”**  
**in: Sala Jordi Gol**

**14.00 - 18.00 :**      **Collaborative Study Group**  
**“Cogita” (10-12 persons)**  
**in: Sala Formació**

**14.30 - 18.30 :**      **Collaborative Study Group**  
**Working group “Research into early cancer diagnosis in  
primary care” (12 persons)**  
**in: Sala 2**

**THURSDAY 8<sup>th</sup> MAY, 2014:**

**Location :**    **SEMFYC offices; C/ Diputació 320, 08009 Barcelona**  
**or**  
**IDIAP JORDI GOL; Gran Via de les Corts Catalanes 591 àtic,  
08007 Barcelona**

**08.30 - 11.30 :**      **Collaborative Study Group**  
**Working group “Research into early cancer diagnosis in  
primary care” (8 persons)**  
**at: IDIAP JORDI GOL – room: Sala 2**

**09.00 - 12.30 :**      **Collaborative Study Group**  
**“Cogita” (10-12 persons)**  
**at: IDIAP JORDI GOL – room: Sala Formació**

**09.00 - 17.00 :**      **Collaborative Study Group**  
**“WomanPower”**  
**at: SemFYC – room: Aula Semfyc**

09.00 - 18.00 : Collaborative Study Group  
“FPDM-Study”  
at: SemFYC – room: Sala Juntas

09.30 - 12.30: Business Meeting  
**EGPRN Executive Board Meeting**  
(only for Executive Board Members)  
at: IDIAP JORDI GOL – room: Sala Jordi Gol

**10.00 - 12.30: 2 EGPRN Pre-Conference Morning Workshops;**  
€0 (€25 for EGPRN members) each per person.  
Parallel workshops:  
in: SemFYC

*a. Workshop “Implementation Research on Complex Interventions for changing clinical practice”*

Chairs: Gonzalo Grandes Odriozola, Haizea Pombo  
in room: Auditorio 2

*b. Workshop “Use of electronical data bases for research in primary care”*

Chairs: Daniel Prieto, Rafel Ramos  
in room: Auditorio 1

12.30 - 13.30: Lunch (price not included in fee conference workshops)

**13.30 - 16.00: 2 EGPRN Pre-Conference Afternoon Workshops;**  
€0 (€25 for EGPRN members) each p.p.  
Parallel workshops:  
in: SemFYC

*c. Workshop “Multimorbidity: conceptual and ethodological issues”*

Chair: Jose M<sup>a</sup> Valderas  
in room: Auditorio 1

*d. Workshop “Risk functions for preventing depression in primary care”*

Chairs: Juan Bellón, Juan José Mendive  
in room: Auditorio 2

14.00 - 17.00 : Business Meeting  
**EGPRN General Council Meeting.**  
Meeting of the Executive Board Members with National Representatives (only for Council Members).  
in: IDIAP JORDI GOL – room: Sala d’Actes

During the last part of this Council meeting, the EGPRN Committees will take place as well: ► Educational Committee, ► Research Strategy Committee, ► PR & Communication Committee, ► Bleu Dot Committee.

**17.00 - 17.45 :** Business Meeting

**Meeting of the EGPRN Working Groups (last part of the Council meeting)**

**in: IDIAP JORDI GOL**

- |                                  |                        |
|----------------------------------|------------------------|
| - Research Strategy Committee    | - room: Sala Formació  |
| - Educational Committee          | - room: Sala Jordi Gol |
| - Communication and PR Committee | - room: Sala d'Actes   |
| - Blue Dot Committee             | - room: Sala d'Actes   |

**Social Program:** **For ALL EGPRN-participants of this meeting who are present in Barcelona at this time.**

**18.30 – 20.00 :**

**Welcome Reception and Opening Cocktail for all participants. (Entrance Free)**

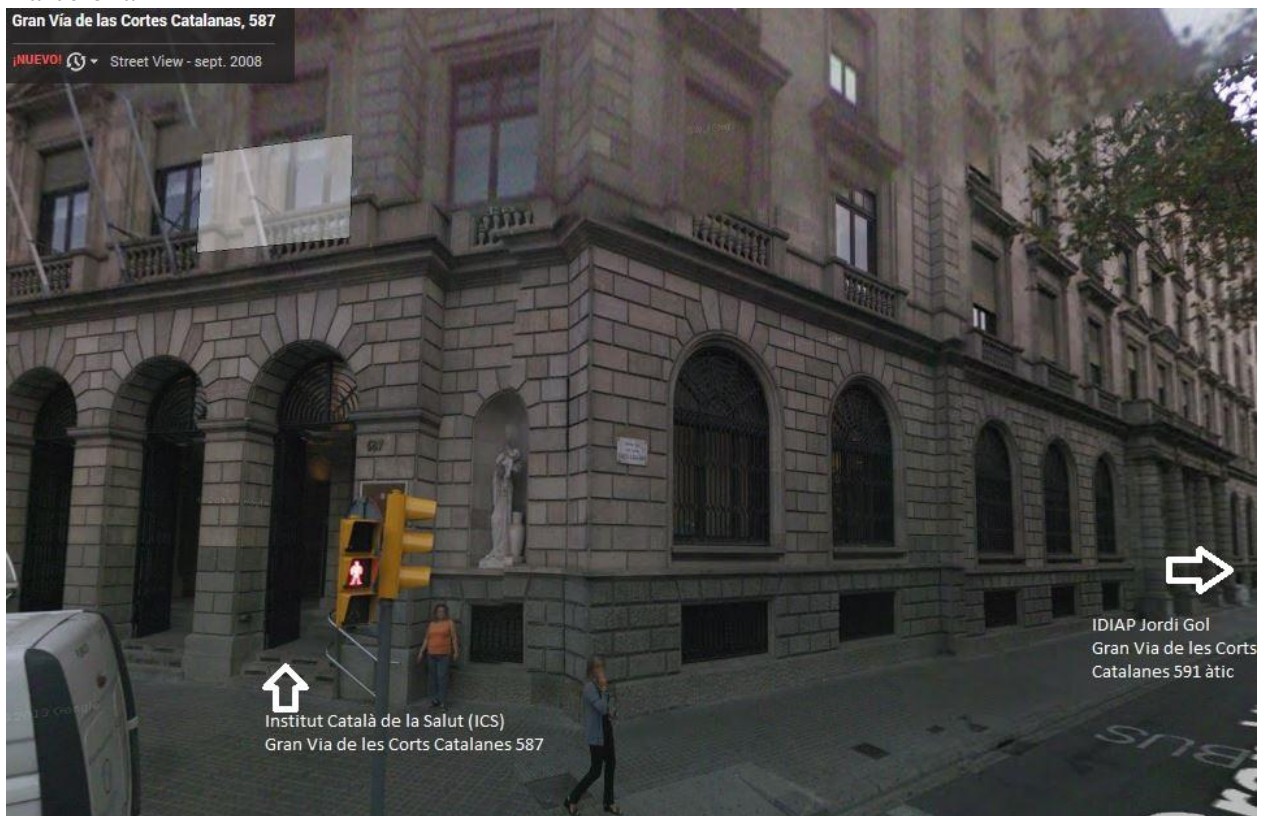
**Location: INSTITUT CATALÀ DE LA SALUT (ICS)**

The easiest way to go into the building for those who only come for the reception is:

**INSTITUT CATALÀ DE LA SALUT (ICS)**

Gran Via de les Corts Catalanes 587

Barcelona



## **FRIDAY 9<sup>th</sup> MAY, 2014**

**Location:** Hospital Sant Pau; Sant Quintí, 89 – Barcelona  
by Metro: Line 4: Guinardó/ Hospital de Sant Pau Station  
**in room: Auditori**

**08.00 - 08.30 :** Registration at EGPRN Registration Desk.

**08.30 - 08.45 :** Welcome.  
**Opening of the EGPRN-meeting by the Chairperson of the EGPRN,  
Dr. Jean Karl Soler**

**08.45 - 09.30:** **1st Keynote Speaker: Dr. José M<sup>a</sup> Valderas, MD, PhD, MPH;** (Professor of Health Services and Policy Research, University of Exeter Medical School, Exeter, United Kingdom).  
**Theme: “Multimorbidity: hype and hope for preventive activities in patient centred general practice ”.**

**09.30 – 11.00 :** **3 Theme Papers (plenary) – “Preventive Activities for Elderly Patients”  
in: Auditori**

- 1. Kate Walters (United Kingdom)**  
Promoting health and well-being for older people in general practice: the feasibility of a new system for primary care.
- 2. Suzanne Ligthart (The Netherlands)**  
Attitudes of elderly people towards preventive consultations in primary care.
- 3. Doris Dolezil (Germany)**  
Motives and attitudes of elderlies towards cancer screening - An explorative mixed-methods-study.

**11.00 - 11.30:** **Coffee break  
in: entrance hall Auditori/Polivalent**

**11.30 - 13.00 :** **Parallel session A - 3 Theme Papers – “Physical Activity”  
in: Auditori**

- 4. Liam Glynn (Ireland)**  
Effectiveness of a smartphone application to promote physical activity in primary care: randomised controlled trial.
- 5. Carme Martín-Borràs (Spain)**  
The effect of a physical activity program on the total number of primary care visits in inactive patients: a 15-month randomized controlled trial.

**6. Slawomir Chlabicz (Poland)**

Physical activity of patients with type 2 Diabetes mellitus measured with IPAQ questionnaire, pedometer and accelerometer.

**11.30 - 13.00 : Parallel session B - 3 Freestanding Papers – “Chronic Disease”  
in: Polivalent**

**7. Máire McGarry (Ireland)**

Chronic Disease Management - the Patients' Perspective.

**8. Sonia García-Pérez (Spain)**

Quality in prime care: development of composite indicators and comparison between European countries.

**9. Jeanet Blom (The Netherlands)**

Effectiveness and cost-effectiveness of a proactive, goal-oriented, integrated care model in general practice for older people. A cluster randomized controlled trial: Integrated Systematic Care for older People – the ISCOPE study.

**13.00 -14.00: Lunch  
in: entrance hall Auditori/Polivalent**

**13.00 -14.00: Working Group on ‘Common Colds’  
in: Polivalent**

Chair: Birgitta Weltermann.

**14.00 - 16.00 : Parallel session C - 4 Theme Papers – “Health Promotion”  
in: Auditori**

**10. Isabel Plaza (Spain)**

Difficulties providing Primary Health Care to patients from culturally diverse communities. Perceptions of healthcare professionals and basis for improvement strategies.

**11. Atanasio Garcia-Pineda (Spain)**

Systematic review about health-promoting community activities in primary health care.

**12. Sebastià March (Spain)**

Who hits the street? Factors related to the development of health-promoting community activities in Spanish primary health care.

**13. Brendan O Shea (Ireland)**

Is it acceptable to check the weight of children in General Practice?



**14.00 - 16.00 : Parallel session D - 3 Freestanding Papers – “Organization of Care”  
in: Polivalent**

**14. Alain Mercier (France)**

GPs, psychiatrists and their patients: The challenge of communication.

**15. Stefan Bösner (Germany)**

The general practice and family medicine rotation — level of student involvement and occurrence of feedback.

**16. Concepció Violán (Spain)**

Impact of multimorbidity: acute morbidity, area of residency and use of health services across the life span in a region of south Europe.

**16.00 - 16.30: Coffee break  
in: entrance hall Auditori/Polivalent**

**16.30 -17.30: Parallel session E - 4 One Slide Five Minutes Presentations  
in: Auditori**

**17. Sandra Gintere (Latvia)**

Thyroid volume changes in the patients with type 2 diabetes mellitus in relation to the patient's weight and treatment tactics.

**18. Ana Clavería (Spain)**

Prognostic evaluation of patients with COPD using multicomponent scales (PROCOPD Study).

**19. Claire Collins (Ireland)**

The lessons GPs learn from their patients: a narrative and concordance-based study of GP trainers in three European countries.

**20. Xavier Cos (Spain)**

Complex Chronic Disease (CCD) assessment in 2 urban Primary Health Care Centres.

**16.30 - 17.30: Parallel session F- ‘Special Methodology Workshop’  
in: Polivalent  
chair: J.K. Soler**

**21. Catherine Laporte (France)**

CANABIC.

**22. Janis Barloti (Latvia)**

An investigation of patient’s motivation in preventive activities from a family physician’s, resident’s, and medical student’s perspective in Latvia.

**23. Ana Ferreira (Portugal)**

Z chapters ICPC-2 classification - What changed with Portuguese Financial Assistance Programme? - A cross sectional study in primary health care.

**17.30 – 17.50: Plenary Session  
in: Auditori**

**Closing of the day by Dr. José M<sup>a</sup> Valderas**, keynote speaker, who will summarize on today's theme papers.

**18.00 – 20.00: Collaborative Study Group  
Joining teams!  
Collaborative European General Practice Study 'Family Practice  
Depression and Multimorbidity' + 'WoManPower'.  
in: Polivalent  
Chair: Jean Yves Le Reste.**

**Social Programme :**

**18.00 – 19.30 : Practice Visits to local Health Centres in the city of Barcelona.**

## **SATURDAY 10<sup>th</sup> MAY 2014**

**Location: Hospital Sant Pau; Sant Quintí, 89 – Barcelona**  
by Metro: Line 4: Guinardó/ Hospital de Sant Pau Station  
**in room: Auditori**

### **08.30 - 09.10: Joint Keynote by two keynote speakers:**

- **Dr. Domingo Orozco-Beltran** (Cathedra of Family Medicine - University Miguel Hernandez-Spain)  
**Theme: “Understanding Family Medicine model (approach) into the Spanish Health Care System”.**  
and
- **Dr. Bonaventura Bolibar** (Scientific director of the IDIAP Jordi Gol - Director of the redIAPP network-Spain)  
**Theme: “Organization of Primary Care Research in Spain: Strengths and weaknesses”.**

### **09.10 -10.40: Parallel session G - 3 Theme Papers “Miscellaneous” in: Auditori**

#### **24. Bernard Le Floch (France)**

Which positive factors determine the attractiveness of Family Practice and retention in Clinical Practice: a systematic literature review.

#### **25. Isabelle Auger-Aubin (France)**

Efficacy of communication skills training on colorectal cancer screening by GPs: A cluster- randomized controlled trial.

#### **26. Tiphonie Boucher (France)**

Interventions on factors associated with asthma control: a systematic review of the literature.

### **09.10 -10.40: Parallel session H - 3 Freestanding Papers “Daily Care” in: Polivalent**

#### **27. Caterina Vicens Caldentey (Spain)**

Comparative efficacy of two interventions to discontinue long-term benzodiazepine use: a cluster randomised controlled trial in primary care. The BENZORED study.

#### **28. Giulia Gaiani (France)**

General practitioners' knowledge about emergency contraception: construction and validation of a pilote survey.

#### **29. Peter Torzsa (Hungary)**

Levels and Risks of Depression and Anxiety Symptomatology among Diabetic Adults. Association between diabetes and affective temperaments.

**10.40 - 11.00: Coffee break**  
**in: entrance hall Auditori/Polivalent**

**11.00 - 12.30: Parallel session I - 3 Theme Papers “Risk Factors”**  
**in: Auditori**

**30. Elisa Puigdomenech (Spain)**

Risk of road traffic collisions in Barcelona: baseline results from the LESIONAT Cohort study.

**31. Christophe Berkhout (France)**

Harmful alcohol consumption and use of tranquilizers: screening and brief intervention at primary health care settings.

**32. Guillem Pera (Spain)**

Ankle-brachial index and the incidence of cardiovascular events in the Mediterranean low cardiovascular risk population ARTPER cohort.

**11.00 - 12.30: Parallel session J - 3 Freestanding Papers “Cancer and Multimorbidity”**  
**in: Polivalent**

**33. Sophia Eilat-Tsanani (Israel)**

The care for terminally ill cancer patients – is there an advantage for home hospice care?

**34. Daniela Mileva (Bulgaria)**

Multimorbidity management in general practice.

**35. Jacob Reinholdt Jensen (Denmark)**

Investigations for cancer in Danish General Practice.

**12.30 - 13.45: Lunch**  
**in: entrance hall Auditori/Polivalent**

**13.45 - 14.05: Chairperson’s report by Dr. Jean Karl Soler.**  
**Report of Executive Board and Council Meeting.**  
**in: Auditori**

**The meeting continues with 6 parallel Poster sessions till 15.35 h.**

**14.05 – 15.35 : Posters**  
**In six parallel sessions (6 groups)**

**14.05-15.35: Parallel group 1: Posters: “Lifestyle, risks and diagnosis“  
in: Foyer**

**36. Lourdes Camos (Spain)**

Intermediate risk population: Lifestyles and arterial stiffness.

**37. Lars Bruun Larsen (Denmark)**

Systematic collection of lifestyle risk-factors and detection of high risk patients in Danish GP practices.

**38. Ilse Badenbroek (The Netherlands)**

The effectiveness and cost-effectiveness of an integrated cardiometabolic risk assessment and treatment program in primary care (the INTEGRATE study): a stepped-wedge randomized controlled trial protocol.

**39. Salvador Pita-Fernandez (Spain)**

Peripheral arterial disease, renal failure and cardiovascular risk in type ii diabetic patients.

**40. Carol Sinnott (Ireland)**

Informing intervention design in multimorbidity: An exploration of difficult decision making using chart stimulated recall.

**41. Susanne Heim (Germany)**

Review dialogues – a chance to arrive at a patient-related ‘overall diagnosis’ for patients with chronic illness [BILANZ].

**14.05-15.35: Parallel group 2: Posters: “Cancer and youth“  
in: Foyer**

**42. Jette Møller Ahrensberg (Denmark)**

Primary care use before cancer diagnosis among adolescents and young adults.

**43. Magdalena Esteva (Spain)**

General practitioners (GP) performance in front of ‘alarm symptoms’ in patients with colorectal cancer.

**44. Rositsa Dimova (Bulgaria)**

Colorectal carcinoma screening using iFOB Test – experience in Bulgaria.

**45. Cédric Rat (France)**

Patients at elevated risk of melanoma: individual predictors of non- compliance to a targeted screening proposal.

**46. Elisabeth Hermouet (France)**

Prevention of unplanned pregnancies to 14-25 years old. Accessibility in the screening in general practice of potentials risk factors of exposure in the arisen of an unplanned pregnancy to 14-25 years old. Systematic review of the literature and Delphi procedure.

**47. Zoi Tsimtsiou (Greece)**

Involving Primary Health Care Professionals in school-based preventative activities: the experience of safe internet use intervention in North Greece.

**14.05-15.35: Parallel group 3: Posters: “Information and analysis“  
in: Foyer**

**48. Helena Sheeran (Scotland-U.K.)**

Audit of Adequacy of Information Contained in Immediate Discharge Documents.

**49. Jean Yves Le Reste (France)**

Bosnian, Bulgarian, Croatian, French, German, Greek, Italian and Polish GPs do recognize the EGPRN definition of Multimorbidity.

**50. Gemma Falguera Puig (Spain)**

Web evolution: [www.sexejoves.gencat.cat](http://www.sexejoves.gencat.cat).

**51. Patrick Hayes (Ireland)**

Wireless Insole for Independent and Safe Elderly Living: the development and testing of a prototype.

**52. Carolina Guiriguat (Spain)**

Effectiveness of an alert in the primary care electronic medical record to promote participation in a population-based colorectal cancer screening programme.

**14.05-15.35: Parallel group 4: Posters: “Clinical questions“  
in: Foyer**

**53. Camilla Antonneau (Belgium)**

HIV as a chronic disease: development of a first line care pathway.

**54. Adriana James (Spain)**

Chronic hepatitis B and C in an urban health setting: Prevalence, impact of the sociocultural environment, and relationship with diabetes mellitus type 2.

**55. Anika Thielmann (Germany)**

Vaccination management in primary care: A representative web based survey among general practitioners.

**56. Jolanta Sawicka-Powierza (Poland)**

Serum levels of Vitamin D in patients treated with acenocumarol.

**57. Renata Slavinskaitė (Lithuania)**

Seasonality of the vitamin D deficiency and rickets prophylaxis for children under 2 years old.

**58. Tevfik Tanju Yilmazer (Turkey)**

Assessment of the diversity of premenstrual syndrome symptoms at women of childbearing age.



**14.05-15.35: Parallel group 5: Posters: “Smoking and eating / hospitalisation“  
in: Foyer**

**59. Joana Ripoll (Spain)**

Clinical trial on the efficacy of exhaled carbon monoxide measurement in smoking cessation in primary health care.

**60. Dragan Soldo (Croatia)**

Beliefs and attitudes to smoking, nutrition, alcohol and physical activity among Croatian adult population – cross sectional study.

**61. Milena Kovač Blaž (Slovenia)**

Multidisciplinary approach to treatment obesity in a community health centre.

**62. Josef Woebkenberg (Germany)**

Differs the hospitalisation rate and the duration of the hospital treatment of an ambulatory health center compared to "classical" GP-Offices?

**63. Krzysztof Buczkowski (Poland)**

Association Between Genetic Factors and Nicotine Dependence Traits in Polish population: a case-control study.

**64. Jean sebastien Cadwallader (France)**

Detecting eating disorder patients in a general practice setting: a systematic review of clinical outcomes and care trajectories.

**14.05-15.35: Parallel group 6: Posters: “Physical activity and the elderly“  
in: Foyer**

**65. Maria Isabel Fernandez-San-Martin (Spain)**

Effectiveness of a physical activity and diet program to modify cardiovascular risk factors in patients with severe mental disorders.

**66. Maria João Macedo (Portugal)**

Physical Activity in older adults: move for your health.

**67. Mihai Sorin Iacob (Romania)**

Management of moderate and severe knee osteoarthritis, to obese patients over 60 years, with local steroid infiltration and association with low power laser therapy (L.L.L.T) versus physical therapy.

**68. Jennifer Hoeck (Germany)**

Reducing polypharmacy among older patients with chronic diseases by using an improved communication concept between pharmacist, patient and general practitioner (GP) – the POLITE-2 pilot study.

**69. Francesc Orfila (Spain)**

Frailty and the risk of confinement, institutionalization or death in an elderly cohort.

**15.35 - 15.50: Coffee break**  
**in: entrance hall Auditori/Polivalent**

**15.50 – 17.20: 3 Theme Papers “Essential Requirements” (Plenary)**  
**in: Auditori**

**70. Kalpa Kharicha (United Kingdom)**

How do you change the habits of a lifetime? A qualitative study of healthy ageing and health promotion for older people..

**71. Jean-Francois Chenot (Germany)**

Can old cholesterol values be used for cardiovascular risk assessment in primary prevention?

**72. Julien Le Breton (France)**

The essential requirements to preventive action in general practice.

**The meeting continues with a Plenary Session till 18.05 hrs.**

**in: Auditori**

**17.20 – 17.40 :** Closing of the day by *Dr. Bonaventura Bolibar*, keynote speaker, who will summarize on today’s theme papers.

**17.40 – 17.50 :** Presentation of the EGPRN Poster Prize by *Dr. Tiny van Merode*.

**17.50 – 18.00 :** Introduction on the next EGPRN-meeting in Heraklion-Crete (Greece) by the Greek national representative.

**18.00 – 18.05 :** Closing of the conference by *Dr. Jean Karl Soler*, EGPRN Chairperson.

**Collaborative Study meeting.**

**18.00 - 20.00 :** Joining teams! Collaborative European General Practice Study “Family Practice Depression and Multimorbidity + “WoManPower”.  
Chair: Jean Yves Le Reste.  
**in: Polivalent**

**Social Programme :**

**19.30 - :** Social Night – Gala Dinner, Speeches and Party

**Location: Can Cortada**

Avinguda de l’Estatut de Catalunya s/n; 08035 Barcelona-Spain.

<http://gruptravi.com/en/can-cortada/>

**Entrance Fee: €40,= per person.**

**SUNDAY 11<sup>th</sup> MAY 2014**

**Location : SEMFYC offices; C/ Diputació 320, 08009 Barcelona**  
**In: Sala Junta Semfyc**

**09.30 – 12.00: 2<sup>nd</sup> Meeting of the EGPRN Excecutive Board**

**FRIDAY 9<sup>th</sup> MAY, 2014:**

**Location : Hospital Sant Pau; Sant Quintí, 89 – Barcelona**

**08.45 - 09.30: 1st Keynote Speaker: *Dr. José M<sup>a</sup> Valderas, MD, PhD, MPH; Exeter-United Kingdom.***  
**Theme: “*Multimorbidity: hype and hope for preventive activities in patient centred general practice*”.**

The last few years have seen the emergence of a huge interest in multi-morbidity. This is in part surprising, given that this is the bread and butter of General Practice and Primary Care. But at the same time it is an extraordinarily under-researched area. The pioneering work of Alvan Feinstein in the early seventies and subsequent work by Mary Charlson and others in the late eighties, the foundations of research in this area were laid. More recently, the late Barbara Starfield inspired advancement of research in this area by underscoring the tensions between an increasing focus on the single disease model in General Practice, perhaps best exemplified by the recognition of figure of General Practitioners with a special interest (GPwSI) by the Royal College of General Practitioners in the United Kingdom and the introduction of the disease management oriented incentives schemes in General Practice and Primary Care elsewhere (with a strong focus on primary and secondary prevention), and the core values of the discipline, in particular that of providing whole person and patient centred care.

Multimorbidity provides in this respect both a useful concept and a valid approach for clinical practice and research in General Practice in general and prevention in particular. It is highly prevalent, both amongst the elderly, but also in much younger and deprived populations. It has a significant impact on health and health care, but we still know little about effective interventions in General Practice. There is a need for research in this area that specifically targets groups of patients with multimorbidity, but we also need to develop in parallel methods that allow us to make best of currently available evidence based on research with a single disease focus, while advancing our knowledge of how best to support patients in prioritising and making decisions in the face of competing and changing needs.

The problems posed by multimorbidity in daily practice are a powerful reminders that General Practice cannot be reduced to the routine and standardized application of clinical models that are perfectly well suited to other settings with very different aims, but that fundamentally fail to serve the key functions of General Practice.

**Dr. José M<sup>a</sup> Valderas,  
Professor of Health Services and Policy Research, University of Exeter Medical School,  
Exeter-United Kingdom.**

**SATURDAY 10<sup>th</sup> MAY, 2014:**

**Location : Hospital Sant Pau; Sant Quintí, 89 – Barcelona**

**08.30 - 09.10: Joint Keynote by two keynote speakers:**

- **Dr. Domingo Orozco-Beltran, Barcelona-Spain**

**Theme: “Understanding Family Medicine model (approach) into the Spanish Health Care System”.**

and

- **Dr. Bonaventura Bolívar, Barcelona-Spain**

**Theme: “Organization Primary Care Research in Spain: Strengths and weaknesses”.**

**Keynote-Abstract of Dr. Domingo Orozco-Beltran:**

The Spanish National Health Service (SNHS) is the agglomeration of public health services in Spain and it was established in 1986. The main characteristics of the SNHS are: a) Extension of services to the entire population; b) Adequate organization to provide comprehensive health care, including promotion of health, prevention of disease, treatment and rehabilitation, c) Coordination and, as needed, integration of all public health resources into a single system, d) Financing of the obligations derived from this law will be met by resources of public administration, contributions and fees for the provision of certain services and e) The provision of a comprehensive health care, seeking high standards, properly evaluated and controlled. Management of health services has been transferred to the different Spanish regions. Every region has his own health service and his own ministry of health. All of them are included in the Interterritorial Council of the SNHS in order to give cohesion to the system.

The system is organized administratively in Health Areas (Areas de Salud) who attend around 250000 inhabitants and have 10 health centers and one hospital. Every Health Center attends around 25000 inhabitants in a Basic Health Zone. So every Health Area has 10 Basic Health Zones. Depending of the characteristics of the population the Health Zone could vary from 5000 to 25000 habitants. Primary and Secondary (outpatient, hospital) care are accessible free of charge for all population.

Primary Care is the basic level of patient care. Primary care includes health promotion, health education, and prevention of illness, health care, maintenance and recuperation of health, as well as physical rehabilitation and social work. Primary health care includes service provided either on-demand, scheduled, or urgently, both in the clinic as well as in the patient's home. Secondary Care is provided at the request of primary care physicians as the patient cannot go directly to the specialists without a previous inform from PCPs. The PC team is formed by different health professionals: A typical health center attends 25000 inhabitants and have 10 family physicians, 10 nurses, 4 pediatricians, 2 pediatric nurses, 1 social worker and administrative personnel. Some of them have additional services as physiotherapy, mental health, gynecologist and family planning.

Citizens' access to health services is facilitated by use of an individual health card, as the administrative document that accredits its holder and provides certain basic data. All the records from PC and SC are electronic and the information generated in the system for each patient is linked to a unique number. This is very important for research as there are electronic records for both primary and secondary care and it is possible to have all information from the health process: diagnosis, prescription, visits, from primary care, emergency room, or hospital care.

Some examples of research in primary care using these electronic records are pointed out

making possible to design whole population studies in contrast to randomized clinical trials. Finally a whole perspective from research in primary care is done looking to difficulties to really identify all the research coming from primary care.

**Dr. Domingo Orozco-Beltran**

**Cathedral of Family Medicine - University Miguel Hernandez, Spain**

**Keynote-Abstract of Dr. Bonaventura Bolívar:**

There is a large variety of organisational frameworks of the research in primary care according to the characteristics existing in each country. But there are some key conditions that will affect the organisation and success of primary care research that will be analysed in Spain:

1. *Development of an own area of knowledge:* there is a strong scientific association of GP (semFYC) with an own indexed journal (Atención Primaria) that is leading this area of knowledge in front the inexistent role of the university
2. *Structural conditions regarding the position of the General Practitioner in the health care system:* GPs have a circumscribed population and a role as gatekeeper. Interesting population-based databases from Electronic Health Records.
3. *Conditions regarding the integration of Primary Care in the academic institutions: No integration in Spain.* There are no formal chairs and departments of Primary Care at the Spanish universities. Specialized training of GP integrated to Primary Care but out of the Universities.
4. *Conditions regarding concrete research opportunities for Primary Care (creation of organized structures):* little presence of primary care in the Spanish organisation framework of health research with a bias towards basic research and hospital research; poor support and resources devoted to primary care research; non existence of dual (clinical and research) contracts.

Besides these limitations of the present situation, two successful examples will be described more in depth: A specific research institute on Primary Care (the IDIAP Jordi Gol), and a primary care research network on health promotion and disease prevention (the redIAPP). From these experiences some of their strengths will be highlighted: creation of competitive groups, creation of support platforms and services, coordination with other research organisations to promote a translational research.

Finally, from this short overview some challenges for the Spanish Primary Care research will be pointed out:

- Human resources devoted to PC research and opportunities for part time research work
- How to obtain more financial support
- Participation in the financing bodies designing the characteristics of public calls and participating in the evaluation of proposals
- Electronic clinical records and population based databases
- Participation in European organisations and European projects
- Innovation in PC

**Bonaventura Bolívar, MD, MPH**

**Scientific director of the IDIAP Jordi Gol**

**Director of the redIAPP network**



**Promoting health and well-being for older people in general practice: the feasibility of a new system for primary care.**

Kate Walters, Kalpa Kharicha, Claire Goodman, Melanie Handley, Jill Manthorpe, Mima Cattan, Steve Morris, Steve Iliffe,  
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**Background:** Population approaches to promote health and well-being for older people in primary care are needed.

**Objective:** Assess feasibility, costs and potential impact of the modified 'Multi-dimensional Risk Appraisal in Older people' (MRAO) system in routine primary care.

**Methods:**

Study design: Feasibility study, mixed methods evaluation.

Setting: Five general practices in urban and semi-rural areas in East/South East England.

Participants: Random sample of people aged 65+ years.

**Intervention:** MRAO software analysed responses to health, lifestyle, social and environmental questions, then gave tailored advice for participants about services, behaviour change and local resources. Older people with new/complex problems were followed-up. The value of data about needs was debated by professionals.

**Evaluation:**

1) Quantitative: Feasibility (uptake, attrition, process); well-being (Warwick-Edinburgh Mental Well-being Scale), needs/health risks, lifestyle, quality of life (SF-12), service use and costs at baseline and 6 months follow-up.

2) Qualitative: Thematic analysis of 52 in-depth interviews and 4 focus groups with professionals and older people.

**Results:**

454 (29%) older people responded: median age 73.2 years; 53% female; 271/454 (59.7%) had no post-16 education. Compared to UK Census 2011 data, participants were younger, more were owner-occupiers and fewer were from ethnic minority groups.

Needs/problems identified at baseline included: pain (70.3%), low physical activity levels (46.9%), deteriorating mobility (49.5%), falls (26.7%), urinary incontinence (25.2%), vision (24.2%), hearing (26.8%), depression (15.7%), impaired memory (9.9%), social isolation (10.2%) and loneliness (7.0%). Well-being increased, quality of life and service use did not change over 6 months, and intervention costs were low.

Qualitative analysis suggests the process was feasible to implement and valued for identifying previously unknown needs. Participation encouraged reflection in older people, though with less reported actual behaviour change.

**Conclusion:** The MRAO system is feasible to implement in primary care, however participation rates are low. Impact on changing behaviour needs to be determined.

Points for discussion:

**Points for discussion:**

How can we increase participation and engagement of older people in health promotion interventions in general practice, particularly those who are older (85+), from more deprived backgrounds, or from ethnic minority groups?

**PRESENTATION 2: Friday 9<sup>th</sup> May, 2014  
10.00–10.30 h.**

**THEME PAPER**

**Attitudes of elderly people towards preventive consultations in primary care.**

*Suzanne A. Ligthart, Karin D. M. van den Eerenbeemt, A. Jeanette Pols, Eric P. Moll van Charante  
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**Background:** In the majority of community-dwelling elderly, two or more treatable cardiovascular risk factors can be identified. Many preventive initiatives such as the preDIVA trial (prevention of Dementia by Intensive Vascular care), focus on improvement of the cardiovascular risk profile. To our knowledge, factors influencing participation of elderly people in such preventive initiatives are largely unknown.

**Research aim and question:** To gain insight in the views and experiences of community-dwelling elderly towards cardiovascular prevention consultations. What are the barriers and facilitators for participants to (dis)continue preventive interventions?

**Method:** 15 semi-structured interviews were conducted with a purposive sample of preDIVA (ex-) participants, aged 76-82 years. Interviews were recorded and analysed until saturation achieved. The topic list was continually modified as new themes emerged from the data. Participants were encouraged to address the following domains: motivation for participation, experiences, expectations, barriers and facilitators to participation. Two independent researchers used thematic analysis to categorize data into key themes and subthemes.

**Results:** Participants highlighted the importance of the social function of their practice nurse, next to her medical expertise. The participants preferred a coaching attitude from the nurse and considered general preventive advice unnecessary, as they were well-known. The perception of being checked-up on, being able to talk about personal circumstances and being able to contribute to scientific research (especially on dementia and aging) were facilitators to participation. Frequent change of nurses, a patronizing attitude and/or lack of experience of the nurse were identified as barriers.

**Conclusions:** When organizing preventive consultations for elderly people, the role of the caregiver is crucial. An intervention based solely on general preventive issues is considered useless. Attention for personal circumstances and how to practically fit in changes is as important as medical content.

**Points for discussion:**

1. Not information, but coaching and communication should be leading in preventive consultations: prevention can only be effective if it fits in the personal lives of participants.
2. Altruism can be an important reason for participation in a research project.

**Motives and attitudes of the elderly towards cancer screening - An explorative mixed-methods-study.**

Dolezil Doris<sup>1</sup>, Haase A.<sup>1</sup>, Jahnke K.<sup>1</sup>, Thonack J.<sup>1</sup>, Löffler C.<sup>2</sup>, Schmidt C,<sup>3</sup> Chenot JF.<sup>1</sup>

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**Background:** The benefits of cancer screening in the elderly are uncertain. While the risk of cancer increases with age utilization of screening is decreasing.

**Research question:** The aim of the study was to explore motives and attitudes towards cancer screening among the elderly.

**Method:** This is a population-based explorative mixed-methods-study. We recruited a stratified sample of 120 residents aged 69 to 90 years from Northeast-Germany drawn randomly from the state population registry. Using a short telephone interview, people with cognitive deficits and / or cancer were excluded. We conducted semi-structured face-to-face-interviews exploring previous experiences and motivation related to cancer screening. Additionally, all participants filled in a questionnaire exploring attitudes toward cancer screening based on an American study. Interviews were analyzed using grounded theory. The questionnaire was analyzed with simple-descriptive-statistics.

**Results:** Out of 630 people, 64 men and 56 women, average age 77 years (SD ± 6) agreed to participate (response rate 19 %). The majority would continue screening for colon- (77%), breast- (89%) and prostate cancer (89%) until death. 76 % disagreed that other health problems of the elderly are more important than cancer screening. 7 % agreed that they would not live long enough to benefit from screening. Motives for continuing screening were the belief in efficiency, sense of duty, regularity and fear. Fear was also a motive to discontinue screening, as well as lack of interest and assuming no necessity. Perceived benefits of screening include reassurance and an increased chance of recovery. Elderly who stopped cancer screening did not fear any disadvantages.

**Conclusions:** Older adults have faith in cancer screening. They overestimate the benefits and the risk of dieing of cancer. An informed decision balancing the advantages and disadvantages was exceptional. Older adults should receive accurate information. Personal preferences and life expectancy should be incorporated intothe decision- making-process.

**Points for discussion:**

1. Cancer screening in the elderlies
2. Informed decision making

**Effectiveness of a smartphone application to promote physical activity in primary care: randomised controlled trial.**

Liam G Glynn, Patrick S Hayes, Monica Casey, Fergus Glynn, Alberto Alvarez-Iglesias, John Newell, Gearóid ÓLaighin, David Heaney, Martin O Donnell, Andrew W Murphy  
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**Background:** Physical inactivity is a major, potentially modifiable, risk factor for cardiovascular disease, cancer and other chronic diseases. Effective, simple and generalizable interventions to increase physical activity in populations are needed.

**Research question:** This randomized controlled trial (RCT) aimed to evaluate the effectiveness of a smartphone application to increase physical activity in primary care.

**Method:** SMART MOVE, was an eight week, open-label RCT. Android smartphone users over 16 years of age were recruited in a primary care setting in Ireland. All participants were provided with similar physical activity goals and information on the benefits of exercise. The intervention group was provided with a smartphone application and detailed instructions on using the application to achieve these physical activity goals. The primary outcome was change in physical activity as measured by a daily step count between baseline and follow-up.

**Results:** A total of 139 patients were referred by their primary healthcare professional or self-referred. 37(26%) were screened out; 12(9%) declined to participate. Ninety(65%) patients were randomised and 78 provided baseline data (Intervention =37;Control=41); 77 provided outcome data (Intervention =37;Control=40). After adjusting, there was evidence of a significant treatment effect ( $p=0.009$ ); the difference in mean improvement in daily step count from week 1 to week 8 inclusive was 1029 (95% confidence interval 214 to 1843) steps per day favoring the intervention. Improvements in physical activity in the intervention group were sustained until the end of the trial.

**Conclusions:** A simple smartphone application significantly increased physical activity in a primary care population. Such inexpensive, widely available and user-friendly technologies should be considered as a component of future interventions to promote physical activity.

**Points for discussion:**

1. How do we expand the evidence base in this area while trying to keep pace with rapidly changing technologies
2. What are the best methods and contexts in which to disseminate these findings.
3. Behaviour change... the challenges? and how to motivate?

**The effect of a physical activity program on the total number of primary care visits in inactive patients: a 15-month randomized controlled trial.**

Carme Martín-Borràs, Maria Giné-Garriga, Anna Puig-Ribera, Carlos Martín-Cantera, Mercè Solà, Antonio Cuesta-Vargas, Myriam Guerra-Balic, Jordi Real-Gatus  
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**Background:** Effective promotion of exercise could result in substantial savings in healthcare cost expenses in terms of direct medical costs, such as the number of medical appointments. However, this is hampered by our limited knowledge of how to achieve sustained increases in physical activity.

**Research question:** Can primary care interventions designed to establish adherence to physical activity (PA) have the potential to generate health care savings?

**Method:** Randomized controlled trial. 362 inactive patients suffering from at least one chronic condition were included (n=362). One hundred and eighty-three patients (n=183; mean (SD); 68.3 (8.8) years; 118 women) were randomly allocated to the PA program (IG). One hundred and seventy-nine patients (n=179; 67.2 (9.1) years; 106 women) were allocated to the control group (CG). The IG went through a three-month PA program led by PA specialists and linked to community resources. Total number of medical appointments to the primary health care center (PHC), during twelve months before and after the program, was registered. PA level (IPAQ) and self-reported health status (SF-12 version 2) was assessed at baseline (month 0), at the end of the intervention (month 3), and at 12 months follow-up after the end of the intervention (month 15).

**Results:** The IG had a significantly reduced number of visits during the 12 months after the intervention: 14.8 (8.5). The CG remained about the same: 18.2 (11.1) (p=.002). Compared with usual care, follow-up data for IG showed an increased number of subjects who improved their PA level and self-reported quality of life.

**Points for discussion:**

1. The key to increase PA level and to maintain it long term
2. The role of PA professionals in primary health care centers

**Physical activity of patients with type 2 Diabetes mellitus measured with IPAQ questionnaire, pedometer and accelerometer.**

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**Background:** Physical activity remains an important factor in prevention and management of type 2 Diabetes mellitus (T2DM). Recent recommendations advocate physical activity of at least 10 000 steps per day.

**Research question:** The aim of this study was to provide descriptive data on physical activity of patients with T2DM and to compare 3 different ways of physical activity measurement.

**Method:** We recruited patients with T2DM visiting a general practice centre. Physical activity of each patient over one week was measured with the use of IPAQ questionnaire - the International Physical Activity Questionnaire, and simultaneously with a pedometer – New Lifestyles NL-2000 (New-Lifestyles, Inc. Lee's Summit, MO, USA ) and accelerometer ActiGraph model GT3X (ActiGraph Pensacola, FL 32502,USA).

**Results:** According to IPAQ results only 18.9% of 103 T2DM patients had an inadequate level of physical activity, while 28.2% had an adequate level and 53.4% had a high level of physical activity. When measured with pedometer, the mean number of steps/day was 5623 (799-16891). Overall active (10 000-12 500 steps/day) or highly active (more than 12,500 steps/day ) physical activity could be demonstrated in a small minority of 8.7% patients, while the remaining 91.3% of patients made less than 10000 steps per day .

According to accelerometer measurement, only 2.9% had activity levels higher than sedentary (sedentary activity equal to 1.0-1.5 MET Rate) .

We found good correlation between two objective methods of physical activity measurement (accelerometer and pedometer  $R= 0,762$ ;  $p<0.001$  (R - Spearman's rank correlation coefficient) but low between subjective IPAQ questionnaire and accelerometer  $R=0.192$ ;  $p=0.052$  or between IPAQ questionnaire and pedometer  $R=0.180$ ;  $p=0.069$ .

**Conclusions:** Only a minority of T2DM patients achieved recommended levels of physical activity when measured with objective methods. There was a large discrepancy between results of subjective and objective physical activity measurements.

**Points for discussion:**

What is the optimal way to measure physical activity in patients with diabetes, obesity or metabolic syndrome?



**PRESENTATION 7: Friday 9<sup>th</sup> May, 2014  
11.30–12.00 h.**

**FREESTANDING PAPER**

**Chronic Disease Management - the Patients' Perspective.**

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**Background:** Chronic disease management is a topical issue in healthcare. A National Survey of Chronic Disease Management in Irish General Practice highlighted the lack of information on the patient's perspective of chronic disease management in Ireland.

**Research question:** This study explores where patients feel is the most appropriate setting for their chronic disease to be managed. Potential settings include self-care, their local general practice, their local hospital or a combination of these settings. It explores what they see as advantages and disadvantages of these settings.

It also investigates where patients get information or advice on the management of their chronic disease.

**Method:** This study is qualitative drawing on the principles of grounded theory. Data was analysed by a three stage iterative thematic approach utilising the constant comparison method. The study was conducted across four General Practices. Semi-structured interviews were carried out with 24 patients, following an interview topic guide.

**Results:** Three main themes emerged: Current Care Model, Health Literacy and Treatment Burden. The current care model highlighted patient's care preferences and factors that contribute to this choice. Health literacy demonstrated that a significant number of patients had a poor understanding of their chronic disease. It also found that they primarily rely on their GP for information on their disease. Treatment burden as a theme highlighted a number of psychosocial factors that impact on their chronic disease.

**Conclusions:** Patients believe that the GP-patient relationship plays a pivotal role in the provision of chronic disease management in Ireland. Health literacy and psychosocial burden were found to impact significantly on the daily lives of patients with chronic disease(s).

**Points for discussion:**

1. Health Literacy in Chronic Disease Management
2. Treatment Burden in Chronic Disease Management

**PRESENTATION 8: Friday 9<sup>th</sup> May, 2012  
12.00–12.30 h.**

**FREESTANDING PAPER**

**Quality in primary care: development of composite indicators and comparison between european countries.**

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**Background:** Measuring quality of primary care (PC) is crucial to improve clinical outcomes in patients. Composite indicators (CI) are a useful tool to measure quality, value processes and compare health care systems.

**Research question:** Development, analysis and comparison of three types of CI to measure appropriateness of the frequency of activities regarding management of chronic patients and gynecological cancer detection in PC in Europe.

**Method:** This study was part of the EUprimecare project which measured quality and cost of PC in seven European countries. The source of information is a population survey with data about the frequency of different activities for the management of chronic conditions (diabetes, hypercholesterolemia, asthma, chronic bronchitis and hypertension) and about the frequency of diagnostic tests for gynecological cancer (mammography and Papanicolaou test). Three CI were developed: 1) simple arithmetic means, 2) means weighted using budget allocation by experts and 3) means weighted using principal components analysis (PCA). Then, the CI were standardised and rankings were constructed to compare them.

**Results:** The countries with the best averages are: for the simple mean, in chronic management Finland (70%), in gynecological cancer tests Italy (95%) and in global average (CI constructed combining indicators in chronic conditions and gynecological tests) Finland (75%). For the second type of CI, the results were similar except the global average for which the maximum was Italy (79%). For the PCA, results were also similar.

**Conclusions:** CI can be used to measure quality of PC. They allow us to combine information on several indicators into a single measure and to establish rankings to compare different systems. Rankings obtained in this study are very similar regardless of the type of CI. The frequency of activities for management of chronic conditions and cancer detection seems to be more adequate in Finland than in the other countries.

**PRESENTATION 9: Friday 9<sup>th</sup> May, 2012  
12.30–13.00 h.**

**FREESTANDING PAPER**

**Effectiveness and cost-effectiveness of a proactive, goal-oriented, integrated care model in general practice for older people. A cluster randomized controlled trial: Integrated Systematic Care for older People – the ISCOPE study.**

Jeanet W. Blom, W.P.J. den Elzen & A.H. van Houwelingen, M. Heijmans, T. Stijnen, W.B. van den Hout, J. Gussekloo

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**Background:** Care for older persons with a combination of somatic, functional, mental and/or social problems in general practice needs to shift from vertical disease-oriented care aiming at improvement of outcomes per disease, to horizontal goal-oriented care.

Research question: What is the feasibility and cost-effectiveness of a pro-active and integrated way of working for older people in general practice with regard to functioning of the older people?

**Method:** Cluster randomized trial including all persons aged  $\geq 75$  years in 59 general practices (30 intervention, 29 control), introducing a horizontal care plan for participants with a combination of problems, as identified with a structured postal questionnaire with 21 questions on 4 health domains. For participants with problems on  $\geq 3$  domains general practitioners (GPs) made an integral care plan using a functional geriatric approach. Control practices continued care as usual.

Outcome measures: These were i) competence to perform activities of daily living independently, ii) quality of life (QoL), iii) satisfaction with delivered healthcare and iv) cost-effectiveness of the intervention, at 1-year follow-up.

**Results:** Of the 11,476 registered eligible older persons, 7285 (63%) participated in the screening. 1921 (26%) had problems on  $\geq 3$  domains. For 225 randomly chosen persons a care plan was made. No beneficial effects were found on patients' functioning, QoL or healthcare use/costs. GPs experienced better overview of care needs and stability in the care for individual patients.

**Conclusions:** This study indicates that GPs prefer proactive integrative care in general practice. Horizontal care using care plans for older people with complex problems can be a valuable tool in general practice. However, since no direct beneficial effect was found for older persons, we cannot recommend this intervention to improve patient outcomes in general practice.

**PRESENTATION 10: Friday 9<sup>th</sup> May, 2012  
14.00–14.30 h.**

**THEME PAPER  
Ongoing study with preliminary results**

**Difficulties providing Primary Health Care to patients from culturally diverse communities.  
Perceptions of healthcare professionals and basis for improvement strategies.**

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*Basiq (avaluation, information network and quality unit), Catalanian health institute, Numancia 23,  
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**Background:** Cultural differences can be a barrier between health professionals and patients and worsened outcomes in health care. Patient's culture determines the individual lifestyles, the concept of disease and influencing the health care required.

**Research question:**

To establish the views of healthcare professionals about their difficulties attending patients from culturally diverse communities at Primary health care centers in the city of Barcelona. Through the perceptions, beliefs and values of healthcare professionals we will design improvement strategies.

**Method:** Qualitative study of social constructivism approach. Multicenter study in Primary health care centers in Barcelona city. Primary health care centers were invited to participate in our study according to their percentage of immigrant population and their cultural profile: Pakistani, Filipino, Chinese, Latin American and Maghrebi. We selected a theoretical sampling, reasoned on healthcare professional, profile variables of profession, gender, age and professional seniority. Data was obtained through focus groups. A focus group composed by healthcare professionals was performed at each of the participants centers. Focus groups were video-recorded and transcribed . We undertook a thematic content analysis. Categories were emergent. Narrative text were analyzed with the computer program Atlas-ti version 7.

**Results:**

Healthcare professionals agree that they need training in anthropology and cultural characteristics from the cultures they attend: Pakistani, Filipino, Chinese, Latin American and Maghrebi. In particular, they lack knowledge about the gastronomy and nutrition of these cultures. Professionals also recommend that patients should be informed and trained in health education. The subjects of this training should be: prevention measures, chronic disease approach, basic information about sign alarms as to prevent inadequate utilization of emergency services.

Healthcare professionals also proposed measures about how to improve these difficulties.

**Conclusions:** With the definitive results and through the different categories and their relationships we will elaborate an explanatory framework.

**Points for discussion:**

Health inequalities; Transcultural Medicine; Compliance;

**PRESENTATION 11: Friday 9<sup>th</sup> May, 2012  
14.30–15.00 h.**

**THEME PAPER**

**Systematic review about health-promoting community activities in primary health care.**

Joan Llobera, Sebastià March; Elena Torres; María Ramos; Joana Ripoll; David Medina; Clara Vidal; Elena Cabeza; Oana Bulilete; Micaela Lull; Atanasio García; Edurne Zabaleta; José Manuel Aranda; Silvia Sastre

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**Background:** Promoting population healthy lifestyles and improving the health of chronic patients or older adults is a major challenge for health care systems. The role of primary care is determined by accessibility at the general population, continuity of care, and capacity to mobilize community resources.

**Research question:** What is the evidence about the effectiveness of community interventions for health promotion carried out with participation of primary health care teams?

**Method:** A systematic review of original and review articles was performed in PUBMED, EMBASE, CINAHL, Web of SCIENCE, and Latin databases as IBECS, IME, and PSICODOC with no limit of year of publication or study design. Inclusion criteria: Health-promoting community interventions carried out by primary health care on populations over 40 years, in which the population had a high level of involvement or was a cross-sector activity. A secondary literature review of identified papers was performed.

**Results:** 50 papers were included: 11 reviews and 39 originals (15 randomized clinical trial, 5 Quasi-experimental, 3 natural experiments, 11 pre-post, 3 descriptives and 1 cohort) from 1966 to 2012.

There is some evidence of the effectiveness of community interventions on the reduction of cardiovascular risk factors, promotion of physical exercise to improve quality of life, improvement of functional status in elderly people and reduction of blood pressure in hypertensive patients. Group education interventions with participatory methodology aimed at diabetics or other patients with chronic diseases are effective in improving clinical parameters and patient satisfaction.

**Conclusions:** Community interventions for health promotion are effective in reducing cardiovascular risk factors, promoting physical exercise and improving self-care abilities on patients with chronic conditions. However, more research is needed in order to overcome important design limitations and the scarcity of evidence in some relevant topics.

**Points for discussion:**

1. Difficulties of evaluate health-promoting community interventions.
2. Health-promoting community activities, primary health care and evidence based medicine.
3. Problems on doing research about health-promoting community activities.

**Who hits the street? Factors related to the development of health-promoting community activities in Spanish primary health care.**

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**Background:** Although Spanish health regulations give primary care teams the responsibility of carrying out health-promoting community activities, their implementation is not widespread.

**Research question:** What are the factors related to participation of health care teams or individual professionals in health-promoting community activities?

**Method:** Two case-control studies. Study 1: cases are teams performing community activities; controls are those which do not. Study 2: conducted exclusively on teams performing community activities: cases are professionals who develop them and controls are those who do not. Setting: Primary care in five Spanish regions.

Community activities were identified after checking inclusion criteria. Controls were randomly selected. Information was collected through questionnaires administered to team managers and individual professionals, and from secondary sources.

**Results:** The study included 203 health care teams, of which 103 were cases. Adjusted team factors associated with performing community activities were: percentage of nurses in teams (OR=1.07, CI95=1.01-1.14); community socio-economic status (OR medium-low/low on high/medium-high 2.16, CI95=1.18-3.95) and having undergraduate training at the center (OR=0.44, 0.21-0.93).

569 professionals responded to the questionnaire, of which 241 were cases and 328 were controls in the same health care centers. Adjusted professional factors associated with performing community activities were: profession (physicians do fewer community activities than nurses, social workers do more than nurses); specific training in community activities (OR=1.9, CI95=1.2-3.1); team support (OR=2.9, 1.5-5.7); years at the center (OR=1.06, 1.03-1.09); being nursing tutors (OR=2, 1.1-3.5); having more motivation (OR=3.7, 1.8-7.5); collaboration with NGOs (OR=1.9; 1.2-3.1) and participation in neighborhood activities (OR=3.1, 1.9-5.1).

**Conclusions:** Professional characteristics seem to have greater influence than team/community factors on performing community activities, especially their social sensitivity and motivation. In contrast to the opinion expressed by professionals, workload is not related. Nurses and social workers have a fundamental role in the development of community activities.

**Points for discussion:**

1. How could we impulse the development of health-promoting community activities in primary health care?
2. What is happening in primary health care centres about community health work?
3. Do professionals understand the same about his/her role in community

**PRESENTATION 13: Friday 9<sup>th</sup> May, 2012  
15.30–16.00 h.**

**THEME PAPER  
Ongoing study with preliminary results**

**Is it acceptable to check the weight of children in General Practice ?**

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**Background:** Childhood overweight is important. GPs are reluctant to act systematically, citing fear of upsetting parents and children, and uncertainty regarding intervention. This study examines acceptability of weighing children in general practice.

Research question: Is it acceptable for GPs to check weight of children attending for routine care? We hypothesise GPs are conflicted, because of fear of upsetting parents and children, but that parents and children are not upset when GPs weigh the child.

**Method:** Study in two parts. Firstly, postal survey of 20% sample of Irish GPs on their practices in childhood overweight. Secondly, a practice based study of parents and children (aged 5-12 yrs)(n = 457) serially attending 11 GPs. After presenting problems were addressed, weight / height / BMI of the child were noted by the GP, categorising children as normal, overweight or obese. Parents were subjected to telephone survey at 2 weeks, checking reaction / acceptability.

**Results:** GP survey response rate was 80.2% (393/490). When consulting with an overweight child, only 8.1% of GPs indicated they always raise the issue in consultation. In the second part, among parents (n = 434) of children weighed, 96.3% indicated weighing had no or positive impact on their child. Most parents (98.6%) indicated it would be helpful to have the child weighed in this manner by their GP. Just over 1 in 4 obese children were reported by their parents to have been anxious, angry or upset on weighing.

**Conclusions:** GPs do not consistently check weight of children, and are concerned regarding acceptability. Most parents whose child had their weight checked reported positively on the experience, with 98.5% of parents (n = 434) indicating it is useful for the weight of their child to be checked by their GP when attending for routine care; over 1 in 4 obese children were upset by weighing.

**Points for discussion:**

Do results address GP concerns regarding the acceptability of checking the weight of children ?

Would it now be useful / necessary to attempt to reduce further the level of reported negative reaction to weighing among obese children using a targeted consu

**PRESENTATION 14: Friday 9<sup>th</sup> May, 2012  
14.30–15.00 h.**

**FREESTANDING PAPER**

**GPs, psychiatrists and their patients: The challenge of communication.**

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**Background:** Mental diseases are very commonly encountered in general practice. Collaborative care and communication between professionals are essential to support these patients. The latest recommendations by the French national agency for quality of care (HAS) were launched in 2010. They underlined the importance of organizing communication and exchanging information. Previous data showed that GPs complained they missed information coming from psychiatrists

**Research question:** How do psychiatrists consider communication with GPs for their patients? What circumstances could influence their decisions?

**Method:** Semi-structured interviews were performed among psychiatrists, recruited by purposive sampling. A grounded theory based analysis was carried out with Nvivo®. A matrix analysis based on the physicians' characteristics was also completed

**Results:** The 13 psychiatrists were aware of the importance of communication. They saw themselves mainly as receivers for the information, not as issuers. They complained of being a stigmatized specialty, but claimed to be different from other specialties. They lacked confidence in the GP, and wanted to get communication under control. They were afraid GPs could disclose intimate information on the patient, influenced by their family practice. They pointed out fears about legal issues. They were suspicious about writing, saying they didn't like to clearly label the patient's diagnosis. They also explained it was to prevent him being passive among his medical condition. Some psychiatrists refused to provide information. Communication to the GP was mainly oral, and delegated to the patient. Hospital psychiatrists and those who were previously GPs were willing to evolve, being aware of the respective role of both GPs and psychiatrists.

**Conclusions:** The psychiatrists seemed to distrust GPs' competence and didn't really imagine his role. Further research will have to focus on ways of improvement, such as implementing shared initial training in mental health, and improving collaborative care

**Points for discussion:**

1. Is this kind of problem present or frequent in other European countries?
2. How this challenge of communication managed in other countries?
3. Does anybody have a teaching experience of GPs and psychiatrists?



**The general practice and family medicine rotation — level of student involvement and occurrence of feedback.**

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**Background:** A general practice and family medicine rotation is mandatory as part of undergraduate medical education in Germany. However, so far little is known about student-teacher interaction which takes place in this setting.

**Research question:** 1. To what degree are students involved in patient consultation?  
2. Do students receive feedback and how is this feedback applied?

**Method:** From April to December 2012 two researchers collected structured field notes of 410 individual patient consultations in twelve teaching practices associated with Marburg University, Germany. Informed, written consent was provided by all participants.

Student involvement was categorized with a previously developed multi-step hierarchical scale. In addition we observed whether the students received feedback, and whether this was applied in a positive or negative, or in a specific or non-specific way.

**Results:** Passive student attention was the most common mode of teaching, occurring in 78.3% of all consultations. Allocation of single tasks or demonstration of findings by the GP occurred in 50.7%, and some form of student consultation in 32.2% of observed cases. Student consultation under direct GP supervision occurred in just 5.9% of all observed cases.

Feedback occurred in only 32.2 % of the 410 observed patient consultations. Of these, it was mostly non-specific and positive (68.9 %), and occurred during the consultation with the patient present. In addition, specific negative feedback was frequently used (29.5%). Specific positive and non-specific negative responses were rarely given.

**Conclusions:** Supervised student consultation is rare and leads to the question whether GPs would benefit from further training in this area. In addition, German teaching physicians should be made aware of the effectiveness of feedback as an important teaching tool and also be further instructed in different feedback techniques.

**Points for discussion:**

1. How is the situation in other European countries? Are there similar observations?
2. How can busy GPs be challenged to apply effective teaching methods in their practice setting?
3. How can didactic tools like the 'One minute preceptor' be integrated in the practice setting?

**PRESENTATION 16: Friday 9<sup>th</sup> May, 2012  
15.30–16.00 h.**

**FREESTANDING PAPER**

**Impact of multimorbidity: acute morbidity, area of residency and use of health services across the life span in a region of south Europe.**

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**Background:** Multiple pathologies and multimorbidity patterns are topics of increased interest as the world's population ages. To explore the impact of multimorbidity we designed a study to describe multimorbidity by sex and life-stage and to assess the association with acute morbidity, area of residency and use of health services.

**Research question:** What is the prevalence and incidence of multimorbidity and type of acute disease and impact on health services on multimorbidity patients?

**Methods:** Cross-sectional study conducted in Catalonia. Participants: 1,749,710 patients (19+ years). Primary outcome: Multimorbidity ( $\geq 2$  chronic conditions). Secondary outcome: Number of new events of each acute disease. Other variables: number of acute diseases per patient, sex, age group (19-24, 25-44, 45-64, 65-79, and 80+ years), urban/rural residence, and number of visits (2010).

**Results:** Multimorbidity was present in 46.8% of the sample, increased with age, and was higher in female patients and rural areas. Infections (mainly upper respiratory infection) were the most common acute diagnoses in both sexes and all age groups. Significantly higher risk ratio of multimorbidity vs. non-multimorbidity was observed as follows: acute upper respiratory infection (ages 19-24 and women aged 80+ years), cystitis/urinary infection (women 80+), tooth/gum disease (women aged 19-24 and men aged 65-79), and excessive earwax (women 80+). Multimorbidity was associated positively with visits and negatively with rural residence in both sexes and all age groups. Multimorbidity was also positively associated with acute diseases in women 65+.

**Conclusions:** Multimorbidity is related to greater use of health care services and higher incidence of acute diseases, increasing the burden on primary care services. The differences related to sex and life-stage observed for multimorbidity and acute diseases suggest that further research on multimorbidity should be stratified according to these factors. Understanding these trends across life-stages will allow health systems to adjust their clinical and management models to prioritize interventions.

**Points for discussion:**

1. Multimorbidity and determinants of health
2. Are there different types of diseases in multimorbidity patients ?
3. Stratification of multimorbidity by age groups. Is it really important?

**PRESENTATION 17: Friday 9<sup>th</sup> May, 2012  
16.30–16.40 h.**

**ONE SLIDE/FIVE MINUTES  
Research in Progress, without results**

**Thyroid volume changes in the patients with type 2 diabetes mellitus in relation to the patient's weight and treatment tactics.**

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**Background:** The incidence of Diabetes (DM) in Latvia is 2,6%, with 76000 of inhabitants suffering from DM. Thyroid dysfunction is associated with changes in body weight and composition, body temperature, and total and resting energy expenditure independently of physical activity. Thyroid disease and type 2 diabetes mellitus (DM) are associated, and this has important clinical implications for insulin sensitivity and treatment requirements. Insulin sensitivity, or drugs used to modulate it, will also affect thyroid growth and function. It appears that better definition of the interactions between DM and thyroid hormones is necessary to optimize treatment of patients with diabetes mellitus.

**Research question:** Can metformin decrease thyroid volume in patients with type 2 diabetes mellitus?

**Method:** Thyroid-stimulating hormone (TSH), fT4 and thyroid volume were determined in 76 patients with type 2 diabetes mellitus and obese (BMI>25) and metformin therapy, 38 patients with type 2 diabetes mellitus and obese and insulin therapy and 23 normosthenic patients with normal thyroid volume.

**Results:** research is still going

**Conclusions:** research is still going

**Points for discussion:**

Type 2 Diabetes mellitus and diagnosis of Thyroid Dysfunction.

**PRESENTATION 18: Friday 9<sup>th</sup> May, 2012  
16.40–16.50 h.**

**ONE SLIDE/FIVE MINUTES  
Research in Progress, without results**

**Prognostic evaluation of patients with copd using multicomponent scales (PROCOPD Study).**

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**Background:** The heterogeneous and systemic nature of COPD has an impact in routine management of those patients, beyond lung function. New guidelines (GOLD 2011 and Spanish GesEPOC) are oriented towards individualized and comprehensive patient management. Scales such as ADO (Age, Dysnea, Obstruction) and BODEx (Bodymass index, airflow Obstruction, Dyspnea, Exacerbation), for their simplicity and predictive ability, may facilitate clinical assessment and prognosis, but their validation in the Primary Care setting is still needed.

**Research questions:** What is the prognostic value of ADO and BODEx index in primary care? What is their prognostic value in COPD patients classified by the new combined assessment proposed by the revised GOLD 2011 and GesEPOC (Spanish Guideline)?

**Method:** Validation of scales study, open and prospective in Primary Care. Subjects: Patients diagnosed with COPD. 400 patients will be captured in clinic visit, with follow-up every six months. Participating health centres: Vigo and the Balearics PC Districts (Spain); GPs and teams from other countries are welcome.

**Analysis:** Multivariate logistic regression and Cox regression, with mortality (primary) and exacerbations (secondary) as outcome variables; different prognostic indices, smoking and multimorbidity as independent variables.

Training of GPs, junior doctors and nurses in the new guidelines and spirometry is needed. International Primary Care Respiratory Group and Red de Investigación en Actividades Preventivas (Spanish PC research network) involved. Ethical Committee approval already obtained.

**Expected results:** Calibration and discrimination for each GOLD and GesEPOC subgroup; the recalibration of predictive models will be explored.

The usefulness of these indices will be driven by their application in everyday clinical practice and the ability to customize the treatment. They may allow risk stratification, as it was already made for cardiovascular disease, with clinical and research aims.

**Points for discussion:**

1. Will these index need recalibration in primary care?
2. Will they help clinicians and researches?

**PRESENTATION 19: Friday 9<sup>th</sup> May, 2012  
16.50–17.00 h.**

**ONE SLIDE/FIVE MINUTES  
Study proposal / idea**

**The lessons GPs learn from their patients: a narrative and concordance-based study of GP trainers in three European countries.**

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The lessons GPs learn from their patients: a narrative and concordance based study of GP trainers in three European Countries

Narrative research is an increasingly widely used methodology across a wide range of disciplines, including medicine. Narratives offer an opportunity for researchers to listen to how research participants construct and interpret important life-events. Within medicine, it is recognized that such stories offer extremely powerful and illuminating “parables” (Charon), which can help doctors and medical students reflect on the meaning of things which happen in the workplace.

90 GP Trainers across three European countries (Ireland,UK and one other ) will be asked “Tell me about a patient you’ve learned from”, with a view to hearing stories of individual patients, and the meanings these patients have had for individual doctors. Data will then be analysed in a relatively categorical fashion, with themes identified by the research team. Triangulation will take place using concordancing techniques: concordancing is a methodological approach derived from linguistics, whose function is to identify patterns of language use.It is anticipated that findings from all three countries will be similar, and that the three populations may in effect be sufficiently similar to consider as a single population. However, should this not be so, there is sufficient data to make a single-country analysis possible.

We hope to identify patterns in the kind of experience that GP Trainers learn from, as a way of informing future training materials, and also to contribute to our understanding of how doctors use their experiences to learn.

**Points for discussion:**

Study has not commenced so all comments on proposed study and methodology are welcome.

**PRESENTATION 20: Friday 9<sup>th</sup> May, 2012  
17.00-17.10 h.**

**ONE SLIDE/FIVE MINUTES  
Research in Progress, without results**

**Complex Chronic Disease (CCD) assessment in 2 urban Primary Health Care Centres.**

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**Background:** Present aging of our population implies a higher number of clinical chronic conditions associated with complexity, expenditure and new strategies to cope health care delivery.

**Research question:** - what is the patient's profile of those with complex chronic disease (CCD) visited in Primary Care? - To assess what's the clinical attitude to follow CCD patients, their Emergency visits (number and reasons) and if related with their Chronic conditions

**Method:** Multicentre, retrospective descriptive study based on electronic clinical record review of all visiting patients during 2013 (Jan to Dec) registered as CCD patients in 2 Primary Health Care centres.

Definition CCD patient : CCD patient: Multi-morbidity (Clinical Risk Group > 7 with > 2 hospital admissions or CRG 5-6 with > 3 in the last year). Frailty in any of its dimensions (nutritional, cognitive, motor, emotional or social). Advanced chronic disease. Professional's intuition that patient life expectancy no longer 12 to 18 month. Variables: chronic diseases, medication, multidimensional assessment (cognitive, functional, emotional status, fall risk and carer availability)

Follow up variables: home, telephone and health care centre (PHC) visits. Acute visits (hospital or PHC centre), reason of encounter and follow up.

Percentage analysis and 95 confidence interval (CI) for categorical variables and mean and standard deviation (SD) for the quantitative ones. T test or ANOVA to compare quantitative variables,  $\chi^2$  for categorical data. Non parametric tests will be used if not normal distributed. Statistical significance level of 5%.

**Results:** 155 CCD patients were detected, 25 died before the end of 2013 (we decided not to exclude these patients over 8 months follow up).

**Points for discussion:**

1. Is this study design appropriate for their questions?
2. Are your health care system prioritizing this issue

**PRESENTATION 21: Friday 9<sup>th</sup> May, 2012  
16.30–16.50 h.**

**SPECIAL METHODOLOGY WORKSHOP  
Ongoing study with preliminary results**

**CANABIC.**

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**Background & Research question:** The aim of the CANABIC study is to measure the impact of a Brief Intervention (BI) carried out by a General Practitioner on the consumption of cannabis by adolescents of 15 to 25 years of age.

**Method:** A randomized clustered controlled trial, stratified over 3 areas (Auvergne (A), Languedoc-Roussillon (LR), and Rhône-Alps (RA)), comparing an intervention group, which carries out the BI in consultation, and a control group (routine medical care). The main assessment criterion is the consumption of cannabis by amount of joints per month, at 12 months. 250 patients are necessary to highlight a difference between the 2 groups of 30% consumption at 12 months (50 GPs - 5 patients per GP; risk alpha = 5%; power = 90%; intra-cluster correlation coefficient  $\rho = 0.2$ ; Hawthorne effect = 15%; lost to follow-up rates for GPs = 10% and for patients = 20%).

The secondary criteria for judgment are the associated consumption of tobacco and alcohol, the perception of the consequences of consumption and the driving of a vehicle following consumption.

**Results:** From April 2012 to April 2013, 71 GPs included 262 adolescents. GPs are comparable in GI and GT for gender, age, exercise area and being MSU ( $p > 0.05$ ). Patients included GI and GT groups were comparable for demographic characteristics ( $p > 0.05$ ). The number of smokers over 30 is higher in GI ( $p = 0.05$ ). GI patients consume more bangs ( $p = 0.016$ ), cigarettes ( $p = 0.02$ ) and were more likely to have experimented with cocaine ( $p = 0.05$ ).

**Conclusions:** Recruitment difficulties and inclusion will be offset by a focus on monitoring to limit lost sight. Analysis of the results take into account the difference in the level of consumption between the 2 groups of patients.

**Points for discussion:**

1. Recruitment and inclusion difficulties
2. Difference in level of consumption between 2 groups

**PRESENTATION 22: Friday 9<sup>th</sup> May, 2012  
16.50–17.10 h.**

**SPECIAL METHODOLOGY WORKSHOP  
Research in Progress, without results**

**An investigation of patient's motivation in preventive activities from a family physician's, resident's, and medical student's perspective in Latvia.**

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**Background:** Despite evidence of the effectiveness of preventive activities and the development of national guidelines, actual rates of delivery of preventive health care services in Latvia remain very low, with 26,7% of women having had a Papanicolaou test and only 32,7% of women aged 50 years and older having had a breast examination and mammogram in 2012. Only 7,63% of adults aged 50 years and older have undergone fecal occult blood testing in 2012 at their family physician practices. Ministry of Health data shows that 18,6% of registered patients have not visited their family physician in the past 3 years.

Currently data about family physician's, resident's and medical student's motivation with regard to prevention activities are lacking.

**Research question:** What is respondent's motivation and responsibility level to be physically healthy and perform prevention activities?

What is respondent's attitude and trust towards recommendations of their family physicians and knowledge about available prevention activities in Latvia?

**Method:** In this cross-sectional, descriptive study quantitative analysis will be performed of self-report questionnaires from 200 family physicians, 150 resident physicians and medical students.

**Results:** The expected result will be respondent's self-reported motivation and responsibility to be physically healthy and perform prevention activities, and his/her trust towards recommendations of family physician that will be expressed by 5 statements (not at all characteristic of me, slightly characteristic of me, somewhat characteristic of me, moderately characteristic of me, very characteristic of me). Respondent's knowledge on available prevention activities at family physicians' practice also will be measured.

**Conclusions:** Conclusions on overall situation regarding physician's motivation in prevention activities in Latvia will be performed. Subgroup analysis in terms of age, place of living, self-reported health condition will be included, highlighting the importance of increasing the awareness of prevention activities in these groups.

**Points for discussion:**

1. Do family physicians pay enough attention and time to their patients for preventive activities and lifestyle changes?
2. What are key success factors to persuade a patient to perform preventive activities?
3. Can a family physician who is not perform



**Z chapters ICPC-2 classification - What changed with portuguese Financial Assistance Programme? - A cross sectional study in primary health care.**

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**Background:** Portugal is going through a severe economic crisis, which prompted a request for aid from the International Monetary Fund (IMF) that implemented the Financial Assistance Program (FAP) in 2011. This program involves economic and financial austerity measures from which social problems can arise. Therefore Z chapter of ICPC-2 is especially important as it allows the knowledge of the social conditions that prompts patients to seek medical care, and for whom family doctor physicians, the ones in the most privileged position, need to be aware in order to minimize its consequences.

**Research question:** How did the Z Chapter ICPC-2 classifications prevalence in S, A and P sections vary two years before and two years after the FAP?

**Method:** A descriptive cross-sectional study was performed in November 2013, analyzing data of the volume of the Z Chapters ICPC-2 classification (using the clinical statistical software SAMestat®) in S, A and P sections in the years of 2010, 2011, 2012 and 2013 in two Portuguese primary healthcare units. Results were calculated by the adjusted number of codifications/1000 inhabitants/day for each year in each health unit considering the population at the central point of each period. Then growth dynamics of Z classifications in S, A and P sections were calculated in four different time periods: 2010-2011, 2011-2012, 2012-2013 and 2010-2013.

**Results:** The growth dynamics showed an increase in the total number of classifications in S, A and P in the 2011-2012 period in both units. For the global period of 2010-2013 the growth dynamic was positive for S (+1,54), A (+0,18) and P (+0,28) in one of the units and just for the P section (+0,03) in the other one.

**Points for discussion:**

We found a positive growth in the number of classifications in S, A and P, coinciding with the FAP introduction. In the global period of 2010-2013, an increase in P was found in both units, meaning a plan of action for problems that were presented but not

**Which positive factors determine the attractiveness of Family Practice and retention in Clinical Practice: a systematic literature review.**

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**Background:** the low attractiveness of Family Practice (FP) is a recurrent problem throughout Europe. Most of the policies on the subject focused on negative factors. However, most Family Physicians (FPs) seem surprisingly happy in their practice. An EGPRN research team (8 national groups) was created in order to clarify the positive factors involved in attracting and retaining FPs throughout Europe.

**Research question:** Which positive factors determine the attractiveness of FP and retention in Clinical Practice.

**Method:** Systematic literature review according to the PRISMA statement. The databases searched were Pubmed, Embase and Cochrane. All team members searched for additional records in their own country's grey literature. All documents were analyzed for identification, screening and inclusion by four separate researchers according to inclusion/exclusion criteria. The analysis method was based on a phenomenological perspective, using a grounded theory framework.

**Results:** Number of records screened 419, eligible 99, included in the qualitative synthesis 70. The data revealed that there were four major themes for satisfaction in FP. The first reveals the general items of personal satisfaction drawn from private life. The second is indicative of job satisfaction for any profession. The third reveals professional satisfaction for any physician. The fourth is indicative of specific FP satisfaction for FPs.

**Conclusions:** Positive factors for attractiveness and retention in FP exist in the literature. Some of those factors were expected by the team and could be of help to design national or European policies. Some of them were unexpected and could lead the research team to a new path for innovative policy design.

**Points for discussion:**

1. Evidences are of low quality and should be followed by qualitative studies on FPs.

**Efficacy of communication skills training on colorectal cancer screening by GPs: A cluster-randomized controlled trial.**

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**Background:** Colorectal mass screening has been implemented in France since 2008 with a gaitac fecal occult blood test. Participation rates remain too low.

Research question: Could the implementation of a training course focused on communication skills among GPs increase the delivery of gFOBT and CRC screening participation among the target population?

**Method:** A cluster randomized controlled parallel groups study was conducted in the Val d'Oise department in France with GP's practice as a cluster unit. Among all practices in this department (n=585), 50 were randomized per arm. GPs from practices in the control group were asked to continue their usual care. GPs in the intervention group received a four hours educational training, built with previous qualitative data on CRC screening focusing on doctor-patient communication with a follow up of six months for both groups. The effect of the intervention on the primary outcomes (patient participation rate) was analyzed taking into account the design effect due to cluster sampling using generalized linear-mixed effects model with group (intervention vs. control) as fixed effect and practice as random effect.

**Results:** At the end of the study period, 17 GPs (16 practices) in intervention group and 28 GPs (19 practices) in control group participated. The baseline characteristics of participating GPs in both groups were comparable in terms of sex, age, and year of practice setup, certification and location. The primary outcome measure was the patients' participation rate in the target population for each GP of CRC screening in the intervention group 6 months after the educational training (36.7%) versus the patients' participation rate for each GP in the control group (24.5%) (p=0.03).

**Conclusions:** An intervention focused on doctor-patient communication showed efficiency with regard to enhancing patients' participation

**Points for discussion:**

1. Implementation in a broader scale
2. How motivate GPs to participate

**PRESENTATION 26: Saturday 10<sup>th</sup> May, 2014  
10.10–10.40 h.**

**THEME PAPER**

**Interventions on factors associated with asthma control: a systematic review of the literature.**

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**Background:** Global Initiative for Asthma (GINA) guidelines recommend that asthma management should be based on asthma control. Whereas asthma requires a comprehensive approach, many studies evaluated the specific pharmacological management but few investigated non-specific pharmacological interventions.

**Objective:** Identify interventions enhancing asthma control, excluding specific and validated drug therapies.

**Methods:** Systematic review was conducted in June 2013 through Medline and the Cochrane Library. Inclusion criteria were: population of asthmatic patients; intervention, literature review or meta-analysis; asthma control as an outcome.

**Results:** We identified 819 references, 85 were included: 35 RCTs, 23 meta-analyses and 22 literature reviews.

Patient education programs significantly improved asthma control but we couldn't identify the most effective kind of program. Most interventions to reduce dust mites exposure were ineffective. Air purification systems by filtration seemed more effective than those by ionization. The total or partial rehabilitation of housing to reduce allergens exposure and indoor pollutants improved control. No diet adjustment showed effectiveness. Physical activity has shown encouraging but insignificant results. Gastroesophageal reflux treatment and long-term antibiotic prescription failed to improve asthma control. Psychological interventions and physiotherapy did not show effectiveness. Transfer disease management from the physician to a nurse showed no conclusive results. School-based asthma management in children was effective. Complex interventions, which typically include patient education programs and a decrease exposure to indoor allergens and pollutants, significantly improved disease control.

**Conclusion:** A few non-drug interventions have shown an improvement in asthma control as well as unspecific drug interventions. Complex interventions conducted by coordinated primary care professionals and involving patients seemed to be most effective.

**Comparative efficacy of two interventions to discontinue long-term benzodiazepine use: a cluster randomised controlled trial in primary care. The BENZORED study.**

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**Background:** Benzodiazepines are extensively used in primary care, they are relatively safe, however long-term use is associated with adverse health outcomes and dependence.

Research question:

The aim of this study was to analyze the efficacy of two structured interventions in primary care to discontinue long-term benzodiazepine use.

**Method:** A multicentre three-arm cluster randomised controlled trial, with randomisation at general practitioner level. A total of 532 patients taking benzodiazepines for at least 6 months participated. After all patients were included, general practitioners were randomly allocated (1:1:1) to usual care, a Structured Intervention with Follow-up visits (SIF) or a Structured Intervention with Written instructions (SIW).

The primary endpoint was the last month self-declared benzodiazepine discontinuation confirmed by prescription claims at 12 months.

Secondary outcomes included benzodiazepine discontinuation at 6 months, anxiety and depression symptoms, sleep satisfaction, alcohol consumption and reported withdrawal symptoms related to benzodiazepine discontinuation.

**Results:** At 12 months 76/168 (45.2%) patients in the SIW and 86/191 (45%) in the SIF groups had discontinued benzodiazepine use compared with 26/173 (15%) in the control group. After adjusting by cluster, the relative risks for benzodiazepine discontinuation were 3.01 (95% CI: 2.03 to 4.46;  $p < 0.0001$ ) in the SIW and 3.00 (95% CI: 2.04 to 4.40;  $p < 0.0001$ ) in the SIF group. There were no increases in anxiety and depression symptoms, sleep dissatisfaction or alcohol consumption at 6 and 12 months in the intervention groups. The most frequently reported withdrawal symptoms were insomnia, anxiety and irritability.

**Conclusions:** Both interventions led to significant reductions in long-term benzodiazepine use with no increase in anxiety or depressive symptoms, sleep dissatisfaction or alcohol consumption. A structured intervention with a written individualised stepped-dose reduction is less time-consuming and as effective in primary care as a more complex intervention involving follow-up visits.

**Points for discussion:**

1. Prevalence of long-term benzodiazepine use in the different countries
2. Strategies or interventions to withdraw benzodiazepines in Primary Care

**PRESENTATION 28: Saturday 10<sup>th</sup> May, 2014  
09.40–10.10 h.**

**FREESTANDING PAPER**

**General practitioners' knowledge about emergency contraception: construction and validation of a pilot survey.**

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**Background:** The determining factors of effective counseling on emergency contraception (EC) are unknown. The main hypothesis in the literature is that ineffectiveness is due to general practitioners' (GPs) lack of knowledge. This work hypothesizes that knowledge is one of the counseling determinants but not the main one. The aim of this study was to validate a survey exploring GP' knowledge about EC as a first step of a research agenda on counseling on EC.

**Research question:** What are the determining factors of counseling on EC in general practice?

**Method:** The items of the survey were selected by the following validation techniques : literature search, selection done by an expert group, pre-test on a sample of about ten GPs, test on a sample of about a hundred GPs, statistical analysis with SAS® software (descriptive analysis, Pearson's correlation coefficient, non parametric principal component analysis).

**Results:** Literature search identified 47 items, among those 31 were selected by the expert group. Pre-test on a sample of 12 GPs selected 30 items. The final test on a sample of 98 GPs led to a 25 item survey after statistical analysis. This sample showed several trends. GPs with an inter-university French qualification in gynaecology had better mean results in the survey ( $p=0,05$ ). Further research is needed to confirm these trends.

**Conclusions:** This work led to the validation of a survey instrument about GPs' knowledge on EC.

This survey can be used for the next steps of the research agenda on EC, for further studies and as a training instrument in medical studies.

**Points for discussion:**

1. Survey validation techniques
2. Content of twenty-five items definitive survey
3. Research agenda on counseling on emergency contraception in general practice

**Levels and Risks of Depression and Anxiety Symptomatology among Diabetic Adults.**

**Association between diabetes and affective temperaments.**

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**Background:** Anxiety and depression contribute to poor disease outcomes among individuals with diabetes. Affective temperaments are the stable, genetically determined roots of affective disorders and strongly determine the personal reactions to environmental stressors.

**Research question:** Is there any independent association between affective temperaments and glycaemic control in patients with type 2 diabetes? Is there any difference between the prevalence of anxiety and depression among type 2 diabetic patients with different glycaemic control in Hungary? Method: We conducted a cross-sectional, multi-center study in 4 primary care practices. The sample included 260 patients with type 2 diabetes, mean age 63.5 (SD ± 14.03) years and 60% female . Anxiety and depression were measured by using the Hamilton Anxiety Scale (HAMA) and the short version of the Beck Depression Inventory (BDI). The patients completed the TEMPS-A Autoquestionnaire.

**Results:** HAM-A and BDI scores were higher among female patients (median [IQR]:9 [5;16] vs. 6 [2;12]) (p=0.002) and median [IQR]:7 [3;12] vs. 3 [1;9]) (p=0.001) respectively. Overall, 35.9% (95% CI = 32.7%, 38.2%) females and 23.1% (95% CI = 20.4%, 26.6%) males had Beck depression and 27.8% (95% CI = 24.7%, 32.2%) females and 18.2% (95% CI = 15.1%, 21.6%) males had anxiety. Patients with poor glycaemic control (HbA1c ≥7.0) have higher prevalence of depression (23.1% v.s 14.4%) and anxiety (13.4% v.s 11.5%). The prevalence of dominant cyclothymic temperament was significantly higher among patients with poor glycaemic control (6% vs. 4%, p=0.035).

**Conclusions:** Depressive or anxious diabetic patients should be considered for greater scrutiny and psycho-education by the GP and by the diabetes clinic staff. Our preliminary results indicate that dominant cyclothymic affective temperament may be an additional risk factor in poor glycaemic control and it may be worthy to identify patients at risk and to formulate a more individualized treatment approach.

**Points for discussion:**

1. How often we should screen depression and anxiety among diabetic patients?
2. Is it enough if we use only the HbA1c level to form these two groups (better and worse glycaemic control).

**PRESENTATION 30: Saturday 10<sup>th</sup> May, 2014  
11.00–11.30 h.**

**THEME PAPER**

**Risk of road traffic collisions in Barcelona: baseline results from the LESIONAT Cohort study.**

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**Background:** Road traffic collisions (RTC) are associated with increased mortality, morbidity and disability. Factors implicated in RTC and traffic injuries are diverse: vehicle, highway and driver characteristics, infrastructure, and collision environment.

**Research question:** To evaluate the relationship between several risk factors (sociodemographic factors, chronic consumption of psychoactive substances and driving characteristics) and the presence of RTCs amongst drivers.

**Method:** Baseline data from the LESIONAT cohort, a representative sample, recruited in 2009, of drivers  $\geq 16$  years old attended in 25 Primary Health Care Centers of Catalunya, Spain. Data was collected with a structured questionnaire during the recruitment face-to-face interview: socio-demographic characteristics, driving data, alcohol and other psychoactive substance consumption, RTC in the last year, chronic medicine intake, long-term co-morbid conditions. Data was verified through medical records.

**Results:** We included 1940 subjects, mean age: 43,82 (SD:18.66); 437% women. >50% of participants had at least secondary education completed. 10% of the participants declared cannabis consumption and 13% reported to have suffered a RTC the year before. More men, younger individuals and participants that consumed more alcohol, cannabis and other psychoactive substances reported a RTC. Subjects who had not reported a RTC were from more favorable social class and educational level. When comparing the 247 subjects who had suffered a RTC with those who did not (N=1658), male sex (OR=1.90;CI95%:1.41-2.57;p<0.001), younger age (p for linear trend <0.001), less favorable social class (OR=1.50;CI95%: 1.07-2.09;p=0.017), and other drug consumption except cannabis (OR=2.60;CI95%: 1.27-5.33;p=0.009) were associated with RTC.

**Conclusions:** Primary care cohort is a feasible method to collect data on driver's risk factors to have a RTC. Males, young individuals, those with a more disadvantaged socioeconomic position, and those who consume psychoactive substances or are on long-term treatment with any of the drugs studied are at higher risk to have a RTC.



**Harmful alcohol consumption and use of tranquillizers: screening and brief intervention at primary health care settings.**

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**Background:** Hazardous or harmful alcohol consumption may cause anxiety or sleeping trouble. This study was a part of an education project implementing screening and brief alcohol intervention (SBAI) in general practice with GP trainees. SBAI aims to screen for hazardous and harmful non addictive alcohol consumption to promote a preventive and therapeutic intervention.

**Aims:** To evaluate the feasibility of screening and the rate of excessive alcohol consumption in patients consulting in general practice. To confirm social risk factors. To investigate whether excessive alcohol consumption could be linked to the use of tranquillizers.

**Method:** Multicentre cross-sectional study in a population consulting in general practice in Northern France. Data collection was based on the French validated FACE five questions alcohol screening test and looked after the prescription of tranquillizers in the medical record. Multivariate analysis was performed with R software (version 2.15.1).

**Results:** Implementation of SBAI was disturbing for the organization of the trainers' consultation planning. We included 392 patients between November 2011 and May 2012. Among these, 22.00% (95% CI: 18.41-26.90) were screened positive for hazardous and harmful alcohol consumption (FACE score between 4 and 8). Sex ratio: 1.44. The rate reached 25.24% in males (OR: 1.87 [95% CI: 1.05-3.34]). Use of tranquillizers was linked with alcohol consumption in patients scoring >4 (OR: 2.07 [95% CI: 1.12-3.82]). The dwelling and the socio-professional category of the patients were poor predictors of hazardous and harmful alcohol consumption.

**Conclusion:** SBAI with the FACE questionnaire is difficult to implement for mass screening in French general practice. In Northern France, alcohol consumption has mainly to be investigated in males and in patients consuming tranquillizers.

**Points for discussion:**

1. Is mass screening of hazardous alcohol consumption efficient in primary care?
2. Is it more feasible and efficient to screen only males and patients consuming tranquillizers?
3. Is the GP's guffeeling a good predictor of patients's hazardous alcohol consumption?

**Ankle-brachial index and the incidence of cardiovascular events in the Mediterranean low cardiovascular risk population ARTPER cohort.**

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**Background:** Peripheral arterial disease (PAD) of the lower limbs is a cardiovascular disease highly prevalent particularly in the asymptomatic form. Its prevalence starts to be a concern in low coronary risk countries like Spain. Few studies have analyzed the relationship between ankle-brachial index (ABI) and cardiovascular morbi-mortality in low cardiovascular risk countries like Spain where we observe significant low incidence of ischemic heart diseases together with high prevalence of cardiovascular risk factors.

**Research question:** Is there any relationship between pathological ABI and incidence of cardiovascular events (coronary disease, cerebrovascular disease, symptomatic aneurism of abdominal aorta, vascular surgery) and death in the >49 year in a low risk Mediterranean population-based cohort (ARTPER)?

**Method:** Baseline ABI was measured in 3,786 randomly selected patients from 28 Primary Health Centers in Barcelona, distributed as: ABI<0.9 peripheral arterial disease (PAD), ABI≥1.4 arterial calcification (AC), ABI 0.9-1.4 healthy; and followed for 4 years.

**Results:** 3,307 subjects were included after excluding those with previous vascular events. Subjects with abnormal ABI were older with a higher proportion of men, smokers and diabetics. 260 people presented cardiovascular events (incidence 2,117/100,000 person-years) and 124 died from any cause (incidence 978/100,000 person-years). PAD had a two-fold greater risk of coronary disease (adjusted hazard ratio (HR) = 2.0, 95% confidence interval (CI) 1.3-3.2) and increased risk of vascular surgery (HR = 5.6, 95%CI 2.8-11.5) and mortality (HR = 1.8, 95%CI 1.4-2.5). AC doubled the risk of cerebrovascular events (HR = 1.9, 95%CI 1.0-3.5) with no relationship with ischemic heart disease.

**Conclusions:** PAD increases coronary disease risk and AC cerebrovascular disease risk in low cardiovascular risk Mediterranean population. ABI could be a useful tool to detect patients at risk in Primary Health Care.

**Points for discussion:**

1. Which should be the attitude in front a patient with arterial calcification?
2. Why is peripheral arterial disease associated with coronary disease and arterial calcification to stroke?
3. Cost-effectiveness the determination of ankle brachial.

**The care for terminally ill cancer patients – is there an advantage for home hospice care?**

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**Background:** Care for terminally ill patients is designed to alleviate suffering. In the North Region of Clalit Health Services (CHS) hospice care is provided at home.

**The research question:** What is the extent of use of hospice care? Is there a difference between the pattern of care provided to terminally-ill cancer patients by Home Hospice Team (HHT) and other health care providers?

**Methods:** The care provided to the patients was evaluated by data about utilization of 430 deceased cancer patients retrieved from the central database. The quality of care was evaluated by interviews with 193 family caregivers (FCs) using a structured questionnaire.

**Results:** In the last 6 months of their lives, 95% of patients had weekly contact with their GPs, 87% were hospitalized, 25% were cared by HHT.

The FCs estimated the terminal period as an average of 77 days. The FCs reported which health care service was the dominant care provider during the terminal care stage: the primary care team (36%), oncology ambulatory service (20%), hospital (18%), nursing home (16%), and HHT (10%).

Opiates were prescribed to 59% of the patients, more to patients cared by HHT compared to others (95% and 68% respectively).

The evaluation of the quality of palliative care as perceived by FCs presents a consistent difference between those who considered HHT as a dominant care provider, those cared for by HHT but not as the dominant provider and those who were not cared by HHT.

The adequacy of treatment for pain experienced by the patient (87%, 73% and 72% respectively); the treatment for anxiety and depression (88%, 78%, 33% respectively). A similar trend was noted in the rate of dying at home (84%, 38%, 26% respectively).

**Conclusions:** Our data shows that the FCs of terminally ill patients reported better care when treated by the HHT and when HHT perceived as the dominant care provider.

**Points for discussion:**

1. The data presents a situation that there is a gap between the quality of care provided to terminally-ill patients treated by HHT considered as a dominant care provider or not. How can we investigate that gap?

**PRESENTATION 34: Saturday 10<sup>th</sup> May, 2014  
11.30–12.00 h.**

**FREESTANDING PAPER  
Research in Progress, without results**

**Multimorbidity management in general practice.**

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**Background:** The demographic data in Bulgaria show a high prevalence of an ageing population. Multimorbidity is wide spread among geriatric patients, which makes them frequent attendants in general practice.

Current national Regulation doesn't take into account the complexity of health problems which affects their management as well as the quality of life.

**Research question:** To study the management of multimorbidity in order to improve the existing model of monitoring in general practice.

**Method:** A cross-sectional study among GPs in the Plovdiv region, using a validated questionnaire focused on difficulties in the management of multimorbidity, was carried out. A representative sample of general practices randomly selected (from the list of all contractors with the Regional Health Insurance Fund) for detailed investigation, including retrospective analysis of electronic patient records for a one-year period, will be conducted. Inclusion criteria for patients – age over 60, at least two chronic diseases according to ICD X version. Outcome measures - socio-demographic data for patients and GPs; location and type of general practices, number of multimorbid patients, frequency of visits, reasons for and length of consultations, years and combinations of diseases, monitoring of symptoms, complications, tests, referrals, therapies and other GPs activities. Data will be analysed using SPSS 17.0 version, using descriptive statistics, correlation analysis, ANOVA, regression analysis and structural modeling,  $p < 0.05$ .

**Results:** Expected additive value of the study:

This is research in progress at the stage of the design discussion. The study will be conducted as part of a PhD thesis. We expect that data collected would be useful for GPs to better manage their multimorbid patients by implementation of the improved model.

**PRESENTATION 35: Saturday 10<sup>th</sup> May, 2014  
12.00–12.30 h.**

**FREESTANDING PAPER  
Research in Progress, without results**

**Investigations for cancer in Danish General Practice.**

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**Background:** One in three will get cancer before the age of 75, one in four will die from cancer, and in the next 10 years the incidence of cancer will increase by at least 20%. For 85% of cancer patients, the diagnostic process starts in general practice. General practice thus plays an important and crucial role in ensuring an early and expedited cancer diagnosis. Three months prior to diagnosis, cancer patients have twice as many consultations in general practice than a reference population. The diagnostic window, therefore, seems to open several months before the actual diagnosis is made. Thus, we need detailed knowledge about the initial diagnostic pathway for cancer patients in general practice.

**Research question:** How often do GPs suspect cancer after random consultations and why? Which initial investigations are performed by GPs for suspected cancer?

**Method:** A national survey among 400 Danish GPs. An electronic pop-up questionnaire will be developed. Participating GPs will be exposed to the pop-up questionnaire after random consultations with patients aged 50 or older. The study will include a total of 70,000 consultations.

Questions on the questionnaire

Do you consider cancer a possible explanation for the clinical picture seen in this consultation?

Why do you find cancer a probable reason for the clinical picture seen in this consultation?

Which further investigations have you planned for the patient after this consultation?

**Results:** The results will show how often and why GPs suspect cancer, how they perform the initial investigations, and whether this process can be supported and further optimised.

**Conclusions:** Deeper insight into the initial diagnostic process in general practice may support the GPs in the future diagnosis of cancer patients. This may provide earlier treatment and better survival for Danish cancer patients.

**Points for discussion:**

1. An electronic pop-up questionnaire - pro and cons (relative to a paper survey)?
2. How should a pilot study be designed?
3. How should the GPs be motivated for participation?

**Intermediate risk population: Lifestyles and arterial stiffness.**

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**Background:** Cardiovascular diseases are the first cause of death in our society and are related to lifestyles. To prevent it, the more effective interventions appear to be changes in lifestyles (mainly diet and physical activity). It is not clear how the population defined as intermediate coronary risk behaves.

**Research question:** The aim is to describe risk factors and lifestyles of the population of intermediate cardiovascular risk between 35 and 74 years free of atherosclerotic disease. The secondary objective was to study the relationship between lifestyle and arterial stiffness.

**Method:** Cross-sectional study conducted in a population aged 35 to 74 years (a sample of 1230 people) with intermediate cardiovascular risk and with no history of cardiovascular disease. The variables assessed were cardiovascular risk factors (diabetes, hypertension, hypercholesterolemia and obesity), lifestyle (adherence to the Mediterranean diet, physical activity, tobacco and alcohol consumption and insomnia) and arterial stiffness.

**Results:** The intermediate-risk population of this study is characterized by a high prevalence of hypertension (75.2%), diabetes (32.3%) and obesity (38.5%). 25.3% have a high adherence to the Mediterranean diet, insomnia 25.5% (mostly women) and are sedentary 44.6% (especially people younger than 65 and women); have a high percentage of arterial stiffness (51.2%) and this was higher in men and in people older than 65 years. Risk factors that increase the likelihood of having arterial stiffness are diabetes (OR = 1.62) and hypertension (OR = 2.10), in addition to age and sex.

**Conclusions:** Our population has a higher prevalence of classical risk factors, risk consumption of alcohol and sedentary lifestyle than the general population of our environment and smoke less and have less adherence to the Mediterranean diet. They also have a high proportion of arterial stiffness, whose risk factors include hypertension, diabetes, age and sex.

**Points for discussion:**

1. Why is important to describe the intermediate-risk population?
2. Relation between healthy lifestyles and arterial stiffness in this population.

**Systematic collection of lifestyle risk-factors and detection of high risk patients in Danish GP practices.**

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**Background:** Lifestyle risk-factors make up a major fraction of the attributable risk of many diseases and are important in predicting the risk of many diseases. Despite the importance of lifestyle risk-factors they are often not systematically registered in the GPs' electronic patient record (EPR).

**Research question:** Is it feasible to develop a model that systematically collects and uses information on risk-factors and diagnoses to target prevention and early detection of people at high risk of being diagnosed with a lifestyle-related disease?

**Method:** We used a 15-item questionnaire on lifestyle risk-factors, symptoms from smoking and family disposition. Questionnaires were sent to 1138 patients in the age group 39 to 59 from 4 general practices in western Denmark. A total of 706 patients (63%) returned the questionnaire. Data were subsequently transferred to GPs' EPR and the Danish General Practice Database (DAMD) using Sentinel Data Capture, an IT program automatically collecting patient data from the GP's EPR, and combined with patient-specific data already present in the database. The combined data were run through an algorithm made up of risk calculation models, assigning the patient to one of four risk categories: already known risk, high risk, moderate risk and low risk.

**Results:** Collection, transfer and use of questionnaire data in risk calculations were found to be feasible. 35% of respondents were already known in the EPR. Some 19% of the two thirds not at known risk were assigned to the high risk group, 21% to the moderate risk and 60% to the low risk group.

**Conclusions:** It is feasible to develop a model that systematically collects and uses information on risk-factors and EPR information to target prevention and for the early detection of people at high risk of being diagnosed with a lifestyle-related disease by means of questionnaires, current information from the GPs' EPR and risk calculation models.

**Points for discussion:**

1. Is it a model that will work in other settings?
2. Is it a task for GPs to work proactively with prevention and early detection of disease?
3. Will the model target the "right" people?

**The effectiveness and cost-effectiveness of an integrated cardiometabolic risk assessment and treatment program in primary care (the INTEGRATE study): a stepped-wedge randomized controlled trial protocol.**

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**Background:** The increasing burden of cardiometabolic disease (CMD) worldwide calls for an effective structural prevention program, embedded in primary care. Prevention programs for CMD have been proven feasible, however the effectiveness, cost-effectiveness and the optimal implementation strategy needs to be established first to justify broad implementation. In the INTEGRATE study a primary prevention program with an incorporated tailored lifestyle intervention is tested, a “Personalized Prevention Approach for Cardio-Metabolic Risk” (PPA CMR).

**Research question:** 1. What is the effectiveness and cost-effectiveness of PPA CMR on the risk for CMD? 2. What are determinants for participation in different steps of PPA CMR?

**Methods:** In this stepped-wedge randomized controlled trial (starting 2014), all patients aged 45-70 years listed in 40 general practices without CMD will be invited to participate in PPA CMR (n=30,000 eligible patients). After an online risk estimation, patients with a score above threshold visit their GP for additional measurements, followed by tailored treatment with medication and/or lifestyle counseling. After one year of follow-up, differences in risk profile and incidence of CMD will be used to determine the effectiveness and cost-effectiveness of PPA CMR. To obtain participation rate and determinants for non-participation, we will send questionnaires to non-responders in different stages of the study. In addition, we will evaluate different response-enhancing strategies in subgroups.

**Expected results:** We expect PPA CMR to be effective and cost-effective when using the right implementation strategy. Successful implementation of prevention programs strongly depends on willingness to participate, so we expect an important role for factors that increase the participation rate, such as offering a paper version of the risk estimation, tailored lifestyle treatment by offering lifestyle coaching and local programmatic interventions.

**Conclusions:** The INTEGRATE study provides insight into the effectiveness, cost-effectiveness and key factors for successful implementation of primary prevention programs for CMD.

**Points for discussion:**

1. Do we expect screening programs for CMD in primary care to be effective and cost-effective in long-term?
2. What is the role of the GP in prevention programs and lifestyle counseling and who had the responsibility for promoting a healthy lifestyle?



**Peripheral arterial disease, renal failure and cardiovascular risk in type II diabetic patients.**

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**Background:** Cardiovascular complications and renal failure are frequent in type II diabetic patients. Early cardiovascular risk evaluation could reduce morbi-mortality. Detection of subclinical peripheral arterial disease (PAD) and renal insufficiency could lead to more effective primary prevention.

**Research questions:** What is the cardiovascular risk for people with type II diabetes? What is the prevalence of renal insufficiency and PAD? Can the Edinburgh Claudication Questionnaire (ECQ) discriminate between those with and without PAD?

**Methods:** Design: Observational study.

Setting: A Cuña-Mariñamansa health centre, Ourense (Spain).

Period: 2011-2013.

Patients: n=323 type II diabetic patients, with informed consent (Age: 71.8±12.7 years, 50.5% men, Time of evolution: 12.4±10.0 years).

Measurements: Time of diabetes evolution, Charlson's comorbidity score, smoking, cardiovascular risk scores (Framingham-Wilson, SCORE, DORICA and REGICOR), glomerular filtration rate (MDRD and Cockcroft-Gault equations), PAD (ECQ, ankle-brachial index)

Statistics: Kappa index, multiple logistic regression.

Ethics: Research Ethics Committee approval (CEIC-Galicia 2010/278)

**Results:** Cardiovascular risk: Uncontrolled hypertension was found in 58.8%, 9.0% were smokers, prevalence of left ventricular hypertrophy was 4.5%.

The percentage of patients with moderate/high cardiovascular risk was 37.3% (REGICOR), 50.9% (SCORE), 85.7% (Dorica) and 92.2% (Framingham). There was a good level of agreement between REGICOR and SCORE (Kappa=0.531), and DORICA and Framingham (Kappa=0.923).

Renal insufficiency: Prevalence of renal insufficiency was 21.3% (MDRD) and 33.7% (Cockcroft-Gault) (Kappa=0.610). Comorbidity and years of evolution of diabetes were the variables independently associated with renal insufficiency, according to both equations.

Peripheral arterial disease: Prevalence of PAD, using the ECQ, was 26.4%, whilst 37.2% had an ankle-brachial index 0.9-1.1 (Kappa=0.084). Sensitivity was 19.4% and specificity 70.7%. Positive and negative predictive values were 29.2% and 58.6%, respectively.

**Conclusions:** Patients with type-II diabetes have high cardiovascular risk, renal insufficiency and PAD. There is variability among cardiovascular risk scores. ECQ is not a good tool for detection of PAD in these patients.

**Points for discussion:**

1. Which are the practical implications of these findings?
2. In view of the results, could you select some of the instruments for its standard use in cardiovascular risk evaluation?

**Informing intervention design in multimorbidity: An exploration of difficult decision making using chart stimulated recall.**

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**Background:** To date, research on improving the management of multimorbidity in primary care has concentrated on organisational and patient-orientated interventions. Few studies have examined the role of professional-orientated interventions.

**Research question:** To explore how GPs currently deal with challenges in managing multimorbidity, with a view to identifying targets suitable for professional-orientated interventions.

**Method:** Design: In-depth qualitative interviews incorporating chart stimulated recall, a clinical assessment tool that uses a medical chart to stimulate a physician's recall of a case and its management.

Setting: Primary care in the Republic of Ireland.

Participants: GPs purposively sampled from continuing professional development groups, using sampling criteria of: length of time qualified; location (rural/urban); and practice size (single/group practices).

Analysis: Interviews were coded using the grounded theory method of constant comparison and theory was developed iteratively.

**Results:** Twenty interviews were conducted. The data demonstrates how decision making in multimorbidity requires integration of information from multiple sources, including the patient, specialists, evidence based medicine, and the expertise of GP themselves. These factors vary in importance on a case-by-case basis, and their relative contributions are integrated and 'balanced' by the GP to make the most appropriate decision for that patient. Difficulties arise when a factor contributes too much or too little, unbalancing the decision making process. GPs respond to this using strategies such as 'broadening the loop' to include other professionals, 'maintaining the status quo' or acting as a 'final arbitrator'. Imbalances most commonly arose when GPs were isolated from the support of other generalists (GPs/ specialists), or had difficulties in the doctor-patient relationship.

**Conclusions:** This study identified potential weaknesses in decision making in multimorbidity, such as GPs' ability to access professional support and communication with patients. These findings will inform the development of a professional-orientated intervention, to assist the provision of multimorbidity care.

**Points for discussion:**

1. The difficulties for GPs managing complex patients in relatively isolated practices
2. The potential for GPs to use other GPs as a source of professional advice or a 'sounding board' in difficult multimorbid patients. (Potential intervention)

**PRESENTATION 41: Saturday 10<sup>th</sup> May, 2014**  
**14.05–15.35 h.**

**POSTER**  
**Ongoing study with preliminary results**

**Review dialogues – a chance to arrive at a patient-related ‘overall diagnosis’ for patients with chronic illness [BILANZ].**

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**Background:** In long-term care of chronically ill patients, the treatment process is rarely in the focus of GP-patient interactions. Information with preventive impact may get lost; the risk of further chronification may be under-estimated. A specific interaction tool, the Review Dialogue (RD), has been developed for finding an ‘overall diagnosis’ (Balint). RDs help to integrate patients’ health-related problems and risks as well as coping strategies and resources and to agree upon shared treatment objectives. RDs should help GPs to offer individualised support and promotion of patients’ resources. Patient autonomy and GPs’ work satisfaction should increase.

**Research question:** Do regular RDs contribute to a better achievement of treatment objectives and arrival at an overall diagnosis?

**Method:** In an ongoing study with mix-method design, GPs were randomized into either an intervention group (extra training and regular RD with 20 chronically ill patients) or control group (usual care). Videos of a sub-sample of patients (n=5 per practice) were taken at four time points.

This study focuses on a sub-sample of video-recorded GP-patient interactions of the intervention group (currently: n=115), analysed using a semi-standardised procedure (RLI – rating inventory of a solution-oriented therapeutic approach). Additionally, an in-depth analysis of a maximum variation sample of 5 GPs’ videotapes across four time points (n=20) was made to identify professional interaction strategies.

**Results:** First video-analyses show that the implementation of the RD and the creating of an overall diagnosis are both case-specific; GPs differ from each other, but also the same GP can implement the RD differently with different patients. Without being representative, typical patterns can be identified in the individual approach of each GP.

**Conclusions:** Review Dialogues facilitate the GP-patient communication process about diagnostics and therapy helping to make the implied overall diagnosis explicit. Further research is needed to prove which patients will benefit.

**Points for discussion:**

1. What kind of patients will benefit from RDs?
2. Which setting is necessary to conduct successfully RDs in general practice?

**Primary care use before cancer diagnosis among adolescents and young adults.**

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**Background:** Reducing time to diagnosis for cancer patients has recently become a main issue. Yet, the rarity of cancer in adolescents and young adults (AYA) combined with a non-specific clinical picture may lead to repeated consultations in primary care before referral to secondary care. Health-care seeking patterns in primary care prior to diagnosis may provide new clues for cancer detection by extending the 'diagnostic window', which may enhance early diagnosis of cancer in AYA.

Research question: Can we determine the time of the first early cancer symptoms in AYA seen in primary care by using health-care utilization as a proxy for symptoms?

**Methods:** A population-based matched comparative study was conducted using nationwide registry data. Cases: all young persons (15-39 of age) diagnosed with cancer (January 2002 – December 2011) were included (N=12,310). Controls: 10 persons per case matched on gender, GP and year of birth were randomly selected (N=123,100). Data on use of primary health care services (daytime contacts, out-of-hours contacts and diagnostic procedures) during the two years preceding the index date (i.e. date of diagnosis) will be measured for cases and controls while accounting for cancer type, age and gender.

**Results:** Our previous study showed an increase in health care use six months prior to diagnosis of childhood cancer. Children with brain tumours had more consultations than controls during the entire year before diagnosis. These findings indicate that symptoms may develop months or even longer before the diagnosis. In the present study, analyses are ongoing. Increased use of primary care prior to diagnosis is expected, possibly even earlier than observed for young children.

**Conclusions:** Preliminary results indicate that some symptoms of cancers in AYA do not seem to raise suspicion in primary care. This lack of suspicion tends to prolong the diagnostic pathway.

**Points for discussion:**

1. Teenagers and young adults with cancer – possible obstacles for early diagnosis.
2. Vulnerable groups of patients -possible social inequalities in the pattern of doctor-seeking and management in primary care.

**General practitioners (GP) performance in front of ‘alarm symptoms’ in patients with colorectal cancer.**

Magdalena Esteva, Maria Fuster, Ana Costa, Luis Gonzalez-Lujan, Sonia Pertega, M Lluçh Bennassar, Rosa Magallon

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**Background:** In order to increase early detection of symptomatic colorectal cancer, several countries have set up recommendations for GP's urgent referral to outpatient services of patients who present with alarm symptoms.

**Research question:** What was the performance of General practitioners (GP) in front of patients diagnosed with colorectal cancer who presented to GP with alarm symptoms?.

**Method:** Cross sectional study in 140 health centres of 5 Spanish Regions. 538 incident cases of CCR who contacted their GP. Patients were interviewed and their primary care and hospital clinical records reviewed. Patients were grouped depending on ‘alarm symptoms presentation based on NICE criteria. Group 1: ≥40 years old, Rectal bleeding and changes in the stools; Group 2: ≥60 years and rectal bleeding without changes in the stools; Group 3: ≥60 years old with changes in the stools without rectal bleeding; Group 4: anaemia without an obvious cause.

**Results:** Abdominal examination was delivered in 4 of 10 patients in the groups 1,2 and 3 and in 3/10 in the group with anaemia. Rectal examination was performed in 14% of patients with anaemia, and in 30% in the groups 2 and 3, while it was 61% in group 1. Blood test was performed in 50% of patients of group 1-2-3; and in 70% in the patients with anaemia. 40% of patients were referred to gastroenterology and 21-28% to emergency except in group 1 (39%). Diagnosis Orientation was correct in 63% of patients in group 1 and nearly 50% in the other groups. Diagnostic delay was shorter in group 1 (114 days) and longer in group 4 (148 days).

**Conclusions:** In any of the different groups, the level of physical examination and investigations were low but differences between the symptoms groups has been observed. The referral letters lack important information.

**Points for discussion:**

What should be done in order to increase GPs physical examination and investigation in patients with colorectal cancer alarm symptoms?

**Colorectal carcinoma screening using iFOB Test – experience in Bulgaria.**

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**Background:** CRC is one of the most common cancers in industrialized and high economically developed economically countries. Unlike in other countries, where iFOBT is part of population-based screening programs, no systematic screening for CRC is performed in our country. This study is part of Project № HP/2013.011 supported by RSC EGPRN.

**Research question:** Is iFOBT feasible and what is the level of compliance?

**Method:** A cross-sectional study of 600 average-risk persons aged 45 or older. Twenty random patients from 30 random general practices in the second largest district in Bulgaria - Plovdiv, were selected. Fecal samples were analysed for occult blood using an immunochemical fecal occult blood test for home use (cut off: 10ngHb/ml). Patients carried out iFOBT at home and interpreted the results on their own. Tests and questionnaires were administered to participants by their GPs in the practices to provide information about acceptability of the iFOBT for patients. Good compliance was measured by high participation rate (above 50%) in each general practice.

**Results:** The response rate was 78.8%. Good compliance was measured in 90% of the general practices. Patients older than 65 years ( $P<0.001$ ,  $\chi^2=70.8$ ), those with lower education level ( $P<0.001$ ,  $\chi^2=82.1$ ), and patients living in villages ( $P<0.05$   $\chi^2=4.3$ ) encountered difficulties more frequently and they needed help during carrying out of the iFOBT. The study found that 8.7% of patients had positive results from iFOBT. From these 48.7% had hemorrhoids, 20.5% had benign neoplasms, 7.7% had CRC and for 23.1% there was no feedback (did not return answers from their follow-up for further clarification by fibrocolonoscopy).

**Conclusions:** This is the first survey in Bulgaria for iFOBT CRC screening. The survey proves that iFOBT is a feasible option and good compliance is measured by high participation rates.

**Points for discussion:**

1. How is compliance measured in screening programs in other countries?
2. What is the level of compliance in CRC screening programs in other countries?

**Patients at elevated risk of melanoma: individual predictors of non-compliance to a targeted screening proposal.**

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**Background:** Melanoma screening in the general population is not recommended. However, previous studies showed that a TARGETED screening based on GP's involvement might be effective. Before further development, a key issue is the compliance of the eligible patients to the screening proposal, which is unknown.

**Objective:** To assess whether patients at elevated risk of melanoma attended the dermatologist consultation after a GP referral and factors associated with non-compliance.

**Method:** This cross-sectional survey included 1,506 high risk French patients (selected using the Self-Assessment Melanoma Risk Score) who were referred to a dermatologist between April and October 2011.

Compliance was evaluated between January and April 2012, based on attendance to the dermatologist consultation (or at least scheduling an appointment).

Demographic data and factors mapping the Health Belief Model were tested as correlates using a multivariate logistic regression.

**Results:** Compliance with the referral was of 58.4%. Non-compliance was associated with the following factors: the GP did not advise clearly to consult the specialist (OR=13.22;[7.66-23.56], did not know that melanoma was a cancer (OR=1.94;[1.29-2.92]), had no time to make an appointment (OR=2.08;[1.82-2.38], forgot to make an appointment (OR=1.26;[1.08-1.46]), had other concerns (OR=1.14;[0.98-1.32]), reported long delays in accessing an appointment (OR=1.25;[1.12-1.41]), was not afraid of detecting something abnormal (OR=1.54;[1.35-1.78]), reported no concern about the risk of melanoma (OR=1.21;[1.06-1.39]), reported no need to consult the dermatologist to feel secure (OR=1.28;[1.09-1.51]), did not think that consulting earlier might save his/her life (OR=1.21;[1.01-1.46]), younger age (OR=1.02; [1.00-1.03]), lower level of education (OR=1.23; [1.08-1.41]), never had a smear test (OR=5.03;[2.23-11.83], never had a prostate-specific antigen test (OR=2.04[1.06-3.97].

**Conclusions:** Physicians should be aware of factors predicting patient compliance with referral for dermatologist consultation: better GP counseling might enhance compliance in these high-risk populations. They should tailor the counselling to address the specific barriers reported by their patients.

**Points for discussion:**

1. What sort of advice should we provide ?
2. How is it possible that patients report GP advice was unclear while they had signed written informed consent and were provided a letter in order to consult the dermatologist ?

**Prevention of unplanned pregnancies in 14-25 year olds. Accessibility of screening in general practice of potential risk factors for an unplanned pregnancy in 14-25 year olds. Systematic review of the literature and Delphi procedure.**

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**Background:** In France, one out of two pregnancies of 18-24 years and 8 out of 10 minors are declared unplanned in spite of a successful contraceptive practice. The prevention of unplanned pregnancies, reflected by the rate of induced abortions to these women, does not reach the expected levels. The aim of this work is to identify potential risk factors for unplanned pregnancy accessible to screening in general practice consultations of with young women (14-25 years old). Factors significantly associated to unplanned pregnancy will constitute the basis of the development of a screening tool for general practitioners.

**Method:** Selection, by systematic review of the literature, of potential risk factors for exposure in an unplanned pregnancy. Delphi procedure with general practitioners to obtain a consensus from 15 to 20 factors accessible to screening in general practice consultations of with women aged 14 to 25 years..

**Results:** In 102 analyzed articles, 83 potential risk factors were identified among which 40 were selected for the Delphi procedure. 18 questioned experts retained, after 3 rounds of survey, 18 factors accessible to screening in general practice consultations.

**Conclusions:** The qualitative dimension of a systematic review, the heterogeneousness of the analysed studies and the plurality of the selected factors limit the generalization of the results. Their concordance with the data of previous studies and their accessibility established by consensus within the framework of a general practice consultation legitimize their applicability. The prevention of unplanned pregnancies should not have to limit itself to contraceptive practice. It has to widen to include the identification of factors which modulate it because their combinations generate situations giving rise to exposure to an unplanned pregnancy.

**Points for discussion:**

1. Systematic review of the literature realized by one reviewer.
2. Delphi procedure : theme work unknown from the experts.
3. Results applicability.



**Involving Primary Health Care Professionals in school-based preventative activities: the experience of safe internet use intervention in North Greece.**

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**Background:** Pathological internet use is a major concern in adolescence. Primary health care professionals could have an impact in the area they practice, but they have not been previously involved in interventions on safe internet use.

**Research question:** Could primary health care professionals be motivated to participate in a school-based intervention on safe internet use?

**Methods:** The Primary Health Care Centers (PHCC) of the 3rd Health Authority of Macedonia were invited to participate voluntarily in a study about the prevalence of internet addiction in students aged from 12 to 18 years old. Professionals from 13 PHCC from rural, semi-urban and urban areas in North Greece participated in a one-day seminar in September 2013 on pathological internet use. From October to December 2013, the participants visited 59 high schools in their areas, with 7823 students. They were asked to complete anonymously an evaluation questionnaire, data from which were analyzed using thematic content analysis.

**Results:** 46 professionals (87% female) participated (health visitors, general practitioners, social workers, nurses, midwives, psychologists, laboratory assistants, pediatrician, dentist). The participants declared that their involvement was a positive experience and recognized personal benefits from their participation. Specifically: 1) they felt rewarded because they had contributed to informing the students about the potential threats of internet use, 2) they had learned more about pathological internet use, especially after the seminar, and 3) they had gained from the actual interaction with school children. They intended to be involved in future interventions both in children and parents.

**Conclusion:** The involvement of primary health care professionals in a school-based intervention was a rewarding experience in terms of new knowledge, completion of the preventive role of primary care and of "interaction with youth". Primary Health Care Professionals could have an important role in preventative school-based interventions in their communities.

**Points for discussion:**

1. Since the majority of the health care professionals who were involved were female, could gender be a factor influencing the decision to get involved in such interventions, especially when the audience comes from children and adolescents?

**Audit of Adequacy of Information Contained in Immediate Discharge Documents.**

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**Background:** Following hospital discharge nearly half of hospitalised patients experience at least 1 medical error in medication continuity, diagnostic work up, or test follow up . There may be a time delay between patient discharge and completion of discharge summaries by hospital consultants. This can affect patient care and management. A core, or immediate, discharge document is a more brief description of the inpatient stay and contains significant details of the admission. It is available on the day of discharge. It is a fundamental component in bridging the interface between primary and secondary care.

**Research question:** Is sufficient information included in core discharge documents to allow for the safe discharge of patients and continuity of care in the community?

**Method:** Retrospective audit where sample population used was all patients listed on trauma theatre H at Glasgow Royal Infirmary in June, 2013. The Sign Discharge Document (SIGN publication no. 128) was the standard used. The integrity of a document was assessed by analysing whether the information given in it reflects the information recommended to be included, as per recommended guidelines. Data was collected from immediate discharge documents, medicines reconciliation forms, anaesthetic charts and emergency department cards/letters.

**Results:** Sample population included 93 patients. 11 items of the SIGN guideline template were analysed -primary diagnosis, presenting complaint, mode of admission, significant operation, clinical progress, other information, allergies, medicines stopped, new medicines, medicines continuing, follow up arrangements. 8 were excluded as they are generated automatically; 4 were excluded due to limitations of data collection; 6 others were excluded as they did not contain clinical information. 7 of the items audited were below standard i.e. insufficient information given, 4 items met standard.

**Conclusions:** Immediate discharge documents with insufficient information are being sent to primary care physicians. Some standards are being met better than others.

**Points for discussion:**

1. How can we improve the quality of these documents e.g. is it lack of education, time, that affects quality
2. Is it appropriate to start documents at patient admission so all adverse clinical events or tests can be recorded in a timely manner and not

**Bosnian, Bulgarian, Croatian, French, German, Greek, Italian and Polish GPs do recognize the EGPRN definition of Multimorbidity.**

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**Background:** Multimorbidity is a challenging concept to prevent decompensation for frail patients. An EGPRN working group has published a comprehensive definition of multimorbidity issued from a systematic review. That definition has been translated and is homogeneous into 8 European languages. It needs to be validated in each country.

**Research Question:** Is the EGPRN Multimorbidity definition in Bosnian, Bulgarian, Croatian, French, German, Greek, Italian and Polish validated by practicing GPs?

**Method:** Qualitative surveys using focus groups or semi structured interviews with a purposive sample of practicing GPs for each country. The focus/interview guide was designed and tested by a group of seven researchers and translated into each language. Data collection was audio recorded and transcribed verbatim till saturation in each country. Analysis was undertaken in a phenomenological perspective, using a grounded theory based method with four independent researchers and pooling at each coding step for all national teams.

**Results:** Sample's maximal variation was reached in each country. Saturation was achieved in each country. The 11 themes describing multimorbidity in the EGPRN definition were recognized in each country.

**Conclusion:** The 11 themes defining multimorbidity have been recognized for Bosnian, Bulgarian, Croatian, French, German, Greek, Italian and Polish GPs. This qualitative validation will be confirmed by quantitative surveys in each country.

**Points for discussion:**

1. Is a qualitative validation of a definition sufficient to ensure its validity?

**PRESENTATION 50: Saturday 10<sup>th</sup> May, 2014  
14.05–15.35 h.**

**POSTER**

**Web evolution: [www.sexejoves.gencat.cat](http://www.sexejoves.gencat.cat)**

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**Background:** It's important for young people to have a responsible sexuality and to prevent unwanted pregnancies and sexually transmitted infections. Catalan Health Institute created the YoungSex web as a useful tool for young people aged 14 to 25 years. This site is coordinated by midwives.

**Research question:** Analyze the use of the website.

Analyze the quality of midwives' responses to emails.

Evaluate effectiveness of a training program in relation to knowledge about sexual and reproductive health of midwives.

**Method:** It was commenced as a formal research study in 3 stages corresponding to the objectives. First phase was developed as a descriptive analysis of variables on the website, virtual consultation and satisfaction of youths regarding their use.

Second phase was designed to evaluate the analytical quality of the responses of midwives to emails through a questionnaire administered to a sample of  $n = 548$  e-mails reviewed by 10 professionals.

Third phase was designed as a quasi-experiment pre-post training. From the email responses with incorrect scientific content a training course was developed and implemented aimed at responsible professionals.

**Results:** Number of views to the site in 2010 was 326,163 and  $n = 1,667$  were virtual consultations.

The most visited topics were: "first time", "body awareness", "petting", "affectivity and sexuality", "virtual sex", "contraception" and "abuse". Females ( $n = 1292$ ) used virtual consultations more than men and at younger ages (14 to 16 years) (males = 17-19 years).

Quality of the email responses by midwives was very high (97% correct). Emails with incorrect scientific content (2.7%) also showed other deficits. The training course statistically significantly ( $p < 0,001$ ) increased the quality of email responses issued by midwives.

**Conclusions:** The website has a high rate of youth usability. Quality of responses to the emails of midwives is high and the issues identified as incorrect have been corrected through training courses to date.

**Points for discussion:**

1. Is the web SexeJoves a good tool for young people to resolve their queries about health sex and contraception?
2. Are youngs satisfied with the web?
3. Is it necessary to evaluate the online answers of professionals?

**Wireless Insole for Independent and Safe Elderly Living: the development and testing of a prototype.**

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**Background:** Falls among the elderly are a huge public health, social and economic issue. An integrated system that can assess fall risk on an ongoing basis would make an important contribution to tackling this problem. The WIISEL (Wireless Insole for Independent and Safe Elderly Living) system proposes an insole that delivers an unobtrusive, self-learning and wearable prevention and warning system to monitor gait dynamics in the elderly population. Clinicians and the user can interact enabling preventive interventions to be initiated. This EU funded FP7 project involves 8 clinical, technical and industry partners from 6 different countries.

**Research question:** Will the WIISEL system be able to deliver the following: remote and quantitative assessment of fall risk; measurement of activity and mobility in daily living conditions; comprehensive assessment of gait parameters; early identification of functional mobility decline in performance; fall detection in the ambulatory setting?

**Method:** The WIISEL system is based on an insole that monitors the posture of an individual and evaluates gait dynamics via a matrix of printed pressure sensors. The novel WIISEL architecture communicates at two levels, first with a near element (smartphone), that can interact with the person. The second communication is with a remote management system incorporating an intelligent prediction system that aims to discover patterns and make predictions based on historical and real-time daily behavioural data. In other words, the system is self-learning and user-friendly.

**Results:** The WIISEL project has now passed its midterm review. A full functional prototype has now been manufactured and is currently undergoing functional and clinical trials the results of which will be reported at the meeting.

**Conclusions:** We anticipate that this new technology will facilitate new clinical and research opportunities, ultimately leading to a reduction in the burden of falls with improved health-related quality of life, and associated potential economic benefits.

**Points for discussion:**

1. Potential uses of the system
2. Commercialisation potential
3. Research potential

**Effectiveness of an alert in the primary care electronic medical record to promote participation in a population-based colorectal cancer screening programme.**

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**Background:** Population participation rates in colorectal cancer screening programmes (CRCSP) in Spain remain below recommended European targets, despite being a quality indicator for ensuring their effectiveness. Reminders on electronic medical record (EMR) have been identified as a low-cost and high-reach strategy to increase participation in preventive activities although controversy exists when applied into CRCSP.

**Research question:** Can an alert reminder in primary care EMR increase participation in an immunological faecal occult blood (iFOBT) test population-based CRCSP?

**Method:** Randomised controlled trial comparing electronic alerts to health professionals in EMR to promote CRCSP to usual care. Participants were all men and women aged between 50-69 years invited to participate in the first round of an iFOBT population-based CRCSP (N=41.042), and all their physicians and nurses (N=244), allocated to the eleven primary care centres of the study. The randomisation unit was the physician (N=130). During one year, an alert for health professionals to promote CRCSP during a medical appointment was set up in intervention group patients' EMR. The main outcome was the screening status at the end of the study. An intention-to-treat analysis was performed.

**Results:** 19.423 patients in the control and 21.619 in the intervention group participated. CRCSP uptake was 44.1% in the intervention and 42.2% in the control group ( $p<0,001$ ), these differences were high in men, age-group over 60 years, and patients who attended primary care centres more than thrice. Adjusting for age, sex, socioeconomic deprivation index, centre, smoking, alcohol and body mass index patients with the electronic alert had a higher participation (OR=1,11; IC95%:[1,04-1,18]). Health professional's response rate to alerts was 21%. In the intervention group 57.6% of patients with responded alert participated in the CRCSP compared with 41% of those without it (OR=1,98; IC95%:[1,84-2,12]).

**Conclusions:** An electronic alert improves participation in an iFOBT test population-based CRCSP, specially among patients with lower uptake rates.

**Points for discussion:**

1. How could the impact of an electronic alert (as a form of reminder) be improved?
2. Are the electronic alerts well accepted by primary care health professionals and could they increase compliance with clinical practice recommendations?

**HIV as a chronic disease: development of a first line care pathway.**

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**Background:** Since the introduction of combination antiretroviral therapy (cART), human immunodeficiency virus (HIV) infection can be considered as a chronic disease in the Western world. Several studies show the benefits of first line HIV-care on therapy compliance, - outcome and health. However, clear guidelines for first line HIV-care, knowledge of the general practitioner (GP), and effective communication with the aids reference centre (ARC) are lacking.

**Research question:** To develop a pathway for first line HIV-care. To verify this pathway with GPs and patients.

**Method:** The pathway was developed based on international clinical guidelines for HIV-care. It was presented to GPs and patients, to evaluate the proposed care tasks. Quantitative analysis was done in SPSS 22.

**Results:** 29 HIV-positive patients were interviewed, of which 27 received cART. All patients had a GP, from whom half received their HIV-diagnosis. 22% considered at time of diagnosis that CD4 and viral load determination should be carried out by their GP. They had a significantly higher tendency to also visit the GP during follow-up. In follow-up, 92% of all patients would visit their GP for non-HIV-related health problems.

121 GPs completed the questionnaire. The mean number of HIV-positive patients per GP was 10.80. At the time of diagnosis, 71.1% would be prepared to do CD4 and viral load determination. In follow-up this drops to 62.9%. GPs engaging themselves at the time of diagnosis, had a significantly higher tendency to do these during follow-up.

**Conclusions:** HIV-positive patients have a low tendency to consult the GP regarding their infection. GP (in)capability, ARC reputation and trust might be influencing factors. A high percentage of GPs are prepared to deliver first line HIV-care. This might be influenced by the facilitation of a care pathway.

**Points for discussion:**

1. How to facilitate communication between GP and ARC?
2. Which GPs should be engaged for HIV-care? Depending on personal interest/HIV-prevalence/...?

**Chronic hepatitis B and C in an urban health setting: Prevalence, impact of the sociocultural environment, and relationship with diabetes mellitus type 2.**

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**Background:** Chronic viral hepatitis (CVH) constitutes a health problem due to the potential long-term consequences (cirrhosis and hepatocellular carcinoma). Pakistan has one of the highest prevalence rates globally (type B 2-3% and C 3-5%). Our Primary Healthcare Centre in Raval Sud in Barcelona is located in an urban setting, with a young, predominantly male (63.2%) population of low socioeconomic status, of which 23.3% is of Pakistani origin. Studies show a close relationship between the presence of CVH and diabetes mellitus type 2 (DM2) development.

**Research question:** What is the prevalence of CVH in the Raval Sud population, its socio-demographic profile and its relationship with DM2?

**Method:** Observational study conducted in the Raval Sud area. The medical records of patients with recorded diagnoses of CVH from January 2005 to June 2012 were retrieved from the electronic health record, and epidemiological information obtained. Code diagnoses (CIM10) included were: B18, B18.0, B18.1 and B18.2. The medical records of patients with diagnoses of DM2 were also retrieved for the same period. Prevalence and prevalence ratios were calculated. Statistical analysis was performed using z test comparison of proportions. Data were analyzed using SPSS v.17.0 and Epidat 3.1 computer applications.

**Results:** 693 patients diagnosed with CVH were identified from the database. CVH prevalence was 2.34% (B 18.1%, C 78.4%, both 2.6%, unspecified 0.9%). Males constituted 68% of cases (median age 52.5 years). Prevalence among Pakistanis was 2.7%. DM2 prevalence among the total population was 4.82%, whilst that among those with CVH was 14.57%, giving a ratio of 3.02 (95% CI, 2.52-3.85).

**Conclusions:** The prevalence of DM2 is 3 times higher among patients with CVH. CVH prevalence in Raval Sud is 2.34% and follows the distribution of male predominance in accordance with the total population, although its prevalence among Pakistanis is higher than that of the total.

**Points for discussion:**

1. Comparison of prevalence of chronic viral hepatitis among the different ethnic groups present in the Raval Sud area, and comparison with data from local European populations.
2. Health prevention measures directed towards patients with chronic viral h



**Vaccination management in primary care: A representative web based survey among general practitioners.**

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**Background:** Quality research has demonstrated variations in care in various medical fields. Little is known about variations of vaccination management in primary care.

**Research question:** What is the quality of vaccination management in primary care?

**Method:** This cross sectional, web-based questionnaire survey was performed among two groups of German general practitioners: a 10% random sample of primary care physicians registered in the federal state North Rhine-Westphalia, Germany (576 of 5757), and all primary care teaching physicians from one German university (n=211). The survey instrument used the Lime® software tool. The four quality aspects addressed were: patient-related quality (patient information, patient consent, strategies to increase immunization rates), vaccine-related quality (practice vaccine spectrum, vaccine pre-selection, vaccination documentation), personal-related quality (recommendation of vaccinations, vaccine application, personal qualification) and storage-related quality (storage device, temperature log, vaccine storage control). For each of the four quality aspects, "good quality" was reached if all three items per quality aspect were fulfilled. "Good vaccination management" was defined as fulfilling all twelve items. The influence of various physician and practice characteristics on vaccination management was analysed.

**Results:** Participation rate in the random sample was 13% and 60% among the teaching physicians. In the random sample, good vaccination management was reached by 20% of the practices: patient-related quality was good in 74% of the practices, vaccine-related quality in 75%, personal-related quality in 60% and storage-related quality in 39% of the practices. There were no significant differences between the quality indicators in the random and the teaching physician sample. Predictors for good vaccination management were female physician gender and larger practice size.

**Conclusions:** We identified good results for vaccine- and patient-related quality but there is a need to improve issues around vaccine storage.

**Serum levels of Vitamin D in patients treated with acenocumarol.**

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**Background:** Previous studies have shown an association with Vitamin D deficiency and the risk of venous thromboembolism (VTE). Additionally acenocumarol treatment has been associated with higher risk of osteoporosis.

**Research question:** The aim of this study was to evaluate concentration of 25-hydroxyvitamin D (25(OH)D) in patients on long-term acenocumarol (AC) treatment for VTE, nonvalvular atrial fibrillation (nAF) and mechanical heart valves patients.

**Method:** Fifty-eight Caucasian patients (31 women and 27 men) mean aged 65.5±9.1 on long-term AC treatment for VTE (n=20; 34.5%), nAF (n=18; 31.0%) and mechanical heart valve patients (n=20; 34.5%) were recruited. Thirty-five age-matched healthy people (19 women and 16 men) were accepted as a control group (mean age 63.5±9.9). The 25-(OH)D commercial assay was used to measure vitamin D concentration in serum samples.

**Results:** Among 58 patients on long-term AC therapy the concentration of 25(OH)D was significantly lower compared to the controls ( $p<0.001$ ). Patients with VTE exposed to a long-term AC intake had a significantly decreased level of 25(OH)D ( $18.0\pm3.7$  ng/ml) compared to the controls ( $p<0.001$ ) and to individuals representing other conditions (nAF:  $23.0\pm6.2$ ; NS), and to those with mechanical heart valves ( $25\pm7.0$ ;  $p=0.002$ ). No association was found between 25(OH)D levels and smoking or BMI, however, in both patients and controls, trends to age-related and menopausal age-related decline in 25(OH)D concentrations were observed.

**Conclusions:** The treatment with acenocumarol may be associated with low plasma concentrations of Vitamin D and possibly lead to increased incidence of osteoporosis in these patients. The occurrence of VTE in humans may be associated with a low concentration of Vitamin D in serum.

**Points for discussion:**

1. If the treatment with acenocumarol or risk of VTE is associated with low plasma concentrations of Vitamin D.

**Seasonality of the vitamin D deficiency and rickets prophylaxis for children under 2 years old.**

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**Background:** International organizations recommend prescribing 400 UI/d. of vitamin D as a means of preventing rickets and vitamin D deficiency in healthy infants. Although the research has shown that vitamin D concentration in blood during the colder period of the year is lower, there are no official international recommendations, adjusting the intake due to seasonality.

**Research questions:** Are the doses of vitamin D prescribed to healthy children adjusted taking into account the season of the year? Is the seasonality of rickets registered?

**Methods:** In the period from May to September of 2013, the health record data (of 2 years) of 788 children born in 2010 was chosen randomly and retrospectively analyzed in Vilnius Centre Out-Patient Clinic. The information on how the prescribed dose of vitamin D is adjusted to healthy children during different seasons of the year was analyzed. And it was aimed to determine, when (during which month) is the biggest number of rickets where registered. Statistical analysis was performed using the IBM SPSS.20 statistical program.

**Results:** Out of 788 children, 481 (61.0%) were healthy, 144 (18.3%) had signs of vitamin D deficiency, and 163 (20.7%) were diagnosed with rickets. The dose of vitamin D prescribed to healthy children was usually increased during September – October (14,2% and 14,2%), and reduced during May – June (11,84% and 9,9%). Clinical signs of vitamin D deficiency were most noticeable during March – May (47,29%). The biggest number of rickets cases was registered in September – October (37,36%) ( $p < 0.001$ ).

**Conclusions:** 1. Prophylactic dose of vitamin D is increased to one third of all healthy children before the cold season, and before summer, it is reduced to one fifth of all healthy children. 2. Immediately after the summer season, the largest number of rickets cases is registered.

**Points for discussion:**

1. Should the season of the year be taken into account while prescribing and adjusting the dose of vitamin D, taking into account the seasonality of rickets and seasonal variation of vitamin D concentration in blood?
2. Why the peak of rickets is noticed immediately after the summer season, when it is known in theory that the concentration of vitamin D should be highest after summer?

**Assessment of the diversity of premenstrual syndrome symptoms in women of childbearing age.**

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**Background:** Premenstrual Syndrome is a psychoneuroendocrine condition. Occurring mostly during the late luteal phase of the menstrual cycle, it presents with some certain physical symptoms like swelling and tenderness in breasts, headache, fatigue, weight gain and emotional symptoms and changes in mood and behaviour. The frequency of this syndrome in women varies, according to the assessment scales and the severity of the symptoms, reported averaging between 10-80%.

**Research question:** What is the frequency of premenstrual syndrome and diversity of different symptoms and the conditions that might affect the severity of symptoms.

**Method:** The study is descriptive.. In order to determine the frequency and the diversity of premenstrual syndrome symptoms, 192 women between the ages of 15 to 49 who were registered to a certain primary care center were evaluated. This evaluation was carried out using the "Premenstrual Assessment Form". This form is designed to measure changes in mood, behaviour and physical condition during the premenstrual period. In order to determine the symptoms and frequency of premenstrual syndrome; 192 women registered to a certain primary care center formed the study sample.

**Results:** It was determined that 66,1%, 30,2%, 3,6% of the women who participated in the study experienced mild, intermediate and serious premenstrual syndrome symptoms respectively. It was determined that the number of people living in the household, age, body height and weight, body mass index, marital status, comorbid diseases and smoking cigarettes revealed no statistically significant effect on average Premenstrual Assessment Form scores. Meanwhile waist circumference and alcohol consumption seemed to have an effect on severity of the symptoms of premenstrual syndrome.

**Conclusions:** Since premenstrual syndrome has a high prevalence; primary care health workers should act as consultants on symptoms and appropriate management of this condition.

**Points for discussion:**

1. Clinical premenstrual syndrome appearances and factors affecting it.
2. Implementation of different forms or questionnaires for premenstrual syndrome symptoms.

**Clinical trial on the efficacy of exhaled carbon monoxide measurement in smoking cessation in primary health care.**

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**Background:** Brief advice given by a healthcare professional can achieve between 1-3% smoking cessations. Exhaled carbon monoxide (CO) measurement in smokers could be an indicative test of harm to their health as a consequence of smoking and this could increase their motivation to stop smoking.

**Research question:** Is the exhaled CO measurement plus brief advice for smoking cessation at 12 months in smokers in contemplation or precontemplation stage more effective compared with brief advice alone?

**Method:** Parallel randomized controlled trial with blind evaluation. Setting: Majorca Primary Health Care. Participants: Smokers  $\geq 18$  years in contemplation or precontemplation. Sample: 471 subjects per group to detect a difference  $\geq 5\%$ . Patients were randomly assigned to control (CG) or intervention (IG). Intervention: In CG was brief advice, in IG brief advice plus exhaled CO measure. Interventions were conducted by a general practitioner or a nurse. Outcomes: point smoking cessation confirmed by urine cotinine test and self-reported, sustained smoking cessation (at 6 and 12 months), reducing cigarette consumption, and variation in stage of smoking cessation.

**Results:** 914 subjects, IG: 443 and CG: 471. At 12 months after the intervention no statistically significant differences were found between groups with respect to smoking cessation: 8.6% stopped smoking in IG versus 9.3% in CG. Referring to sustained abstinence; 3.2% in IG and 5% in CG quit smoking at 6 month and remained at 12. There were no differences in cigarette reduction or in the change in motivation to quit smoking (Prochaska and Diclemente transtheoretical model). In addition to analysis by intention to treat we also performed analysis per protocol obtaining very similar results.

**Conclusions:** We could not demonstrate the efficacy of exhaled CO measurement plus brief advice for smoking cessation, cigarettes reduction and change in the motivation to quit smoking.

**Points for discussion:**

1. Influence of the professional who conduct the intervention in the efficacy of the same.
2. Ways to improve the intervention to be more effective.
3. Comparison with similar studies that have shown positive results.

**Beliefs and attitudes to smoking, nutrition, alcohol and physical activity among Croatian adult population – cross sectional study.**

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**Background:** To explore patients beliefs and attitudes about smoking, nutrition, alcohol and physical activity among the Croatian adult population as well as assess their readiness and confidence to make changes and their perceived support from general practitioners.

**Research question:** Is there a discrepancy between patients' attitude and beliefs about smoking, nutrition, alcohol and physical activity as well as their expectations of perceived support from general practitioners.

**Method:** This is the cross-sectional part of the Cardiovascular Risk and Intervention Study in Croatia-family medicine (CRISIC-fm) (ISRCTN 31857696). A multicenter prospective study was performed including 59 randomized practices. Each general practitioner chose a systematic sample of participants aged  $\geq 40$  (up to 55 subjects) who visited the practice from May to September 2008. Data were collected with self-administered structured questionnaire with 127 items. The analysis was based on 2467 participants (61.9% females and 38.1% males). All statistical methods were performed using SPSS for Windows (19.0.0.1, SPSS Inc., Chicago, Illinois, 2011).

**Results:** More than 70% of patients think their lifestyle is important for their health: normal body weight 67,4%, non-smoking 85,6%, eating habits 73,2% and physical activity 67,3%. Almost 60% think their lifestyle needs improvement in terms of physical activity (60.9%), eating behaviour (60,6%), non-smoking (65,3%) and alcohol consumption (41,5%). Among them 51.5% of smokers have plans to change in less than six months and 76.9% are confident to succeed. Although 57.6% of them would like support from their GP just 49.8% of those reported that GPs initiated a discussion about these topics in the last 12 months.

**Conclusions:** There is an evident discrepancy between the expectations of patients and the performance of GPs. About 30% of the patients do not recognize existing problems regarding unhealthy lifestyles and among those who want to change, half did not perceive any support from their GPs.

**Points for discussion:**

1. How about in others EU countries regarding same issues?
2. What will be the better way to change this discrepancy between patients expectations and GP performance?

**Multidisciplinary approach to the treatment obesity in a community health centre.**

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**Background:** Obesity incidence continues to grow. The main problems of treatment are low success rate and poor longterm sustainability of reduced weight after programme completion. The most successful methods include a multidisciplinary approach, but they are often poorly evaluated. In an urban health centre in Ljubljana a long-term programme has been developed by a multidisciplinary team of doctors, nurses and physiotherapists.

**Research question:** The aim is to evaluate short and longterm outcomes of the programme with regard to cardiovascular risk factors and to determine the associations with social and demographic factors, with perseverance in the programme and the maintenance of a lower weight after the programme has been completed.

**Method:** The programme included 6 months weight reduction and another 18 months of weight maintenance. 397 participants were recruited by their GPs and data were collected after 24 months. Multivariant linear regression was used as the method of determining the factors of success. We used SPSS for statistical analysis.

**Results:** 346 participants have completed the introductory part of the programme and 123 have completed the full programme. In the introductory part the average weight loss was 12% of the initial weight. The participants who completed the full programme lost 9,4% of the initial weight. The values of blood sugar, cholesterol, systolic and diastolic blood pressures were significantly reduced. ( $p < 0,05$ ) The factors associated with staying in the programme are age over 50 ( $\beta = -0,6219$ ,  $p = 0,015$ ), lower educational levels ( $\beta = 0,6430$ ,  $p = 0,029$ ), lower initial weight ( $\beta = -0,0089$ ,  $p = 0,10$ ) and higher weight loss ( $\beta = 0,0363$ ,  $p = 0,064$ ) in the introductory part.

**Conclusions:** The multidisciplinary approach to obesity treatment was effective for a selective group of people that had the stamina to finish the programme. The proportion of dropouts was relatively high but still low compared to similar programmes.

**Points for discussion:**

1. What are the characteristics of drop-outs ?

**The difference the hospitalisation rate and the duration of the hospital treatment of an ambulatory health center compared to "classical" GP-Offices?**

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**Background:** The reduction of treatment costs in the health care system is a great challenge for all participated persons and institutions in Germany. In especially we notice an evident increase in the costs of hospitalisation treatment in the last 20 years. The reduction of stationary treatment costs by declining the hospitalisation rate and the duration of stationary treatment managed by cooperation in ambulatory health center of general practitioners and medical specialists could be an important possibility.

**Research question:** Is it possible to decline the hospitalisation rate and the duration of the hospital treatment by cooperating from general practitioners and internal specialists in an ambulatory health center?

**Method:** The hospitalisation rate and the average duration of the stationary treatment of the "Praxisgemeinschaft" (PG) of the "Gesundheitszentrum Damme" (GCD) at the local hospital were analysed for the years 2002 to 2011 and compared with the dates of the remaining general practitioner offices and the dates of the "Deutsche Krankenhausstatistik" (= German Hospital statistic).

**Results:** We found a small increase for the hospitalisation rate 0,012% to 0,019% of the all ambulant treated patient-cases of the PG; but this increase was statistical significantly lower compared with the results of the remaining practitioner offices of the local area and the "Deutsche Krankenhausstatistik". Likewise, the duration of hospital treatment was significantly reduced from 10,80 to 6,49 days.

**Conclusions:** The hospitalisation rate and the duration of hospital treatment can be significantly reduced the by cooperation of general practitioner and internal specialist in an ambulatory health center.

**Points for discussion:**

1. Hospitalisation rate
2. Stationary treatment
3. Ambulatory health center



**Association Between Genetic Factors and Nicotine Dependence Traits in the Polish population: a case-control study.**

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**Background:** Cigarette smoking is considered to be a chronic, addictive disease and is the single main cause of preventable morbidity and mortality in developed countries. It is a very addictive behavior and the main reason for that is that it delivers nicotine which activates nicotinic acetylcholine receptors in the brain especially in reward system. Recent research has confirmed the important role of the nicotinic acetylcholine receptor gene cluster on chromosome 15q 24-25 in nicotine dependence.

**Research question:** Is there an association between smoking initiation, age at onset of daily smoking, heaviness of smoking and single nucleotide polymorphisms within the CHRNA5-CHRNA3-CHRNA4 cluster.

**Method:** A group of 389 adult subjects of European ancestry from the north of Poland, including 212 ever (140 current and 72 former) and 177 never smokers with mean age 49,26 was genotyped for rs16969868, rs1051730, rs588765, rs6495308 and rs578776 polymorphisms.

**Results:** Distributions of genotypes for rs16969868 and rs1051730 were identical so they were analyzed together. Further analysis revealed the association between rs16969868-1051730 (OR=2,66; 95%CI: 1,30-5,42) and number of cigarettes smoked per day and with heaviness of nicotine addiction measured by the Fagerström Test for Nicotine Dependence (OR =2,60;95%CI: 1,24-5,43). No association between these polymorphisms and other phenotypes was found. Similarly, the association between rs588765, rs6495308, rs578776 and analyzed phenotypes was not confirmed.

**Conclusions:** This study provides strong evidence for the role of the CHRNA5-CHRNA3-CHRNA4 cluster in the heaviness of nicotine addiction.

**Points for discussion:**

1. epidemiology of smoking
2. different aspects of smoking behavior: initiation, maintenance, cessation
3. genetics and heaviness of smoking

**Detecting eating disorder patients in a general practice setting: a systematic review of clinical outcomes and care trajectories.**

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**Background:** Patients with Eating Disorders (ED) have an increased morbimortality compared to the general population. Studies in secondary care suggest the general practitioner (GP) has an important role to play in early detection of ED. Incidence and prevalence of eating disorders (ED) are low in the general practice setting.

**Research question:** The aim was to review the literature about the effect (clinical outcomes and care trajectory) of screening ED on patients in a general practice setting.

**Method:** Systematic review conducted on Medline, PsycINFO, CINAHL, Embase and WOS. The studies included had to be carried out in the primary care setting, with screening explicitly carried out in GP practices and with follow-up information. The selection was carried out independently by two researchers and the analysis by three researchers altogether.

**Results:** Ten studies met the inclusion criteria. Four were trials on bulimia nervosa (BN). There was an increase for all types of ED in the frequency of consultations in general practice, referrals in psychiatric settings and drug prescriptions such as antidepressants. Clinical outcomes remained unclear and heterogeneous. Only one study focused on the course and outcome of patients screened in the general practice setting and found recovery for Anorexia Nervosa and BN in more than half of the cases, after 4.8 years of mean follow-up. An early age at detection predicted a better recovery in the same study. Such data were not available in other studies.

**Conclusions:** A meta-analysis was not possible. BN seemed more frequent and had a better prognosis than AN. Numerous opinion articles were found, describing the role of the GP in screening ED, without reliable information and scientific data in general practice. Future research should focus on collaborative cohort studies with better information on clinical outcomes and depression.

**Points for discussion:**

1. With the existing literature, it is impossible to conclude on the role of the GP in the detection of patients with ED.
2. Further cohort studies are needed to describe the clinical outcome of patients with ED.
3. Depression may be a way to detect ED for GPs.

**Effectiveness of a physical activity and diet program to modify cardiovascular risk factors in patients with severe mental disorders.**

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**Background:** Patients with severe mental disorders (SMD) may have a higher prevalence of cardiovascular risk factors (CVR) and poorer perceived quality of life. Lifestyle interventions have not yet been proved.

**Research question:** To determine the effectiveness of a group intervention program of physical activity (PA) and diet in patients with SMD to modify lifestyles and cardiovascular risk factors, at three months follow-up.

**Method:** Randomized controlled clinical trial of three months follow-up, with outpatients of six Mental Health Teams of Barcelona, between 18 and 65 years of age diagnosed with schizophrenia, a schizoaffective disorder or bipolar disorder, in treatment with antipsychotic medication. Intervention: PA and diet group educational program of 24 sessions over 12 weeks carried out by nurses. Main outcome measures: level of PA (MET minute-week units with IPAQ questionnaire); body mass index, waist circumference, blood pressure; cardiovascular risk; tobacco consumption; dietary habit (PREDIMED questionnaire); quality of life (SF-36 questionnaire) and laboratory parameters (cholesterol, triglycerides, glucose).

**Results:** 209 patients have been included, 106 assigned to the intervention group and 103 to the control group. The groups were similar in socio-demographic characteristics at baseline. 53% are male. The average age is 45 years. 71% had schizophrenia. Only 2% are working and most live with their family or in a group home (70%). 55% are daily smokers. Framingham mean score was 8.9. Participation at 3 months was 86%. The amount of consumed MET measured with the IPAQ questionnaire at three months was greater in the intervention group (462.14 MET difference between the two groups;  $p = 0.02$ ). The physical health dimension (SF-36) improved significantly in the intervention group (5.2 points difference,  $p = 0.008$ ). In the other variables there were no significant differences.

**Conclusions:** Intervention increases the level of PA and physical health dimension, but does not improve physical or laboratory parameters,

**Points for discussion:**

1. Is important primary health level to approach physical health in severe mental disorders?
2. How could collaborate primary care teams (PCT) and Mental Health Centres (MHC)?
3. Is necessary longer educational group intervention?

**Physical Activity in older adults: move for your health.**

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**Background:** Physical inactivity has been identified as the fourth leading risk factor for global mortality. Regular physical activity decreases total mortality rates as well as the incidence and mortality of cardiovascular disease, diabetes, and some cancers. It also improves mental health and control of hypertension, and lipid levels; prevents osteoporosis; and, especially in older patients, sustains mobility, reduces disability, and decreases the risk of falls.

With this study, researchers sought international recommendations on prescribing physical activity in the elderly.

**Research question:** What are the recommendations on the types and amounts of physical activity needed to improve and maintain health in older adults?

**Method:** International data sources were searched for the most recent published guidelines, with the MeSH words: “exercise” and “aged”.

Based on this body of evidence, narrative descriptions were prepared summarizing the evidence available for the relevant health outcomes.

**Results:** The recommendations for minimum activity for achieving important health benefits are: 150 minutes of moderate-intensity aerobic activity a week, plus muscle-strengthening activities on at least two days of the week, or 75 minutes of vigorous-intensity aerobic activity a week, plus muscle-strengthening activities on at least two days of the week. There are special considerations on initiation of physical activity, such as inactivity, functional limitations, or resuming activity after an illness or injury. Strong evidence demonstrates that, compared to less active men and women, older adults who are physically active have lower rates of coronary heart disease, hypertension, stroke, diabetes, depression, colon and breast cancer; a higher level of cardiorespiratory and muscular fitness; and higher levels of functional health, a lower risk of falling, and better cognitive function.

**conclusions:** Conclusive scientific evidence based on a wide range of well-conducted studies shows that when prescribing physical exercise to older adults, several conditions and goals for each patient must be considered

**Points for discussion:**

1. How can we put into practice these recommendations for physical activity for health in adults aged  $\geq 65$  in daily clinic practice?
2. How can an elderly be motivated for the initiation of physical activity?

**Management of moderate and severe knee osteoarthritis, to obese patients over 60 years, with local steroid infiltration and association with low power laser therapy (L.L.L.T) versus physical therapy.**

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**Background:** Knee osteoarthritis is a degenerative arthropathy, progressive, disabling, affecting elders, characterized by degradation of joint cartilage, bone remodeling and inflammatory changes in the synovial membrane. This study aims to present the results of LLLT, with red and infrared emission with 1800mW in comparison with classic therapy.

Research question: What is the contribution of laser therapy?

**Method:** We conducted a prospective controlled study for a period of five years, on 450 patients, using two laser devices. Imaging (CT, MRI, x-ray), along with biomarkers were performed to make an accurate and fast diagnosis. Inclusion criteria were: obese patients older than 60 years, with moderate and severe knee osteoarthritis, documented on X-Ray in II-III grade of Kellgren-Lawrence Scale.

Exclusion criteria were: other comorbidities with organ failure, diabetes, malignancies, fracture history, treatment with systemic corticosteroids, anticoagulants.

Cases studied were divided randomly into three groups: first includes patients treated with local steroid infiltration, second includes patients treated with local steroid infiltration associated with classic physiotherapy, and third includes patients treated with local steroid infiltration associated with laser therapy. The therapeutic protocol that we followed were : LLLT radiation density among 4 - 10 J/cm<sup>2</sup>, pulsed emission 9 Hz, IR spectrum radiation 870 nm and in joint infiltration we used Dexamethasone with five exposures in total.

**Results:** Elements evaluated in each patient before and after treatment were: pain on a Visual Analogue Scale (VAS), functional state, joint mobility, the quality of personal life scale, radiological changes. Our cure rates were: 60% in the first, 70% in the second and 90% in the third group of patients, with appreciation of personal satisfaction between 7 and 10 and significant reduction of pain  $p < 0,001$ .

Conclusions: The combination of LLLT with steroid infiltration significantly improved outcome by 30% compared to those treated conventional. Laser therapy treatment is non-invasive, repetitive, painless and shows excellent tolerance.

**Points for discussion:**

1. Do you think it is necessary intra articular corticosteroids therapy in severe knee OA?
2. What is the role of LLLT in rheumatic diseases?
3. What side-effects occur after treatment of OA with laser therapy?

**Reducing polypharmacy among older patients with chronic diseases by using an improved communication concept between pharmacist, patient and general practitioner (GP) – the POLITE-2 pilot study.**

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**Background:** Polypharmacy can cause side effects, interactions, reduced adherence, avoidable costs and is associated with morbidity and mortality. Previous studies have shown that both, consideration of patient preferences and active involvement of pharmacists within the medication regime reduce the number of prescribed long-term drugs.

**Research question:** Is an innovative communication concept between patient, pharmacist and GP feasible to reduce the number of prescribed long-term drugs for patients with multimorbidity?

**Methods:** 12 pharmacists were trained to perform narrative medication reviews with 5 patients taking ≤5 prescribed long-term drugs. Potentially relevant information was reported to the patient's GP using a standardised procedure. Primary patient-related outcome: number of prescribed long-term drugs between T0 (briefly after review), T1 and T2 (3/6 months after review). Secondary outcomes: further medication use, health-related quality of life (HRQOL). Furthermore assessment of socio-demographic data, medical/ pharmaceutical care and patient's satisfaction with pharmacist services. Within the process evaluation, all participating pharmacists were interviewed on feasibility aspects.

**Results:** Preliminary results show an average drug reduction of 0.4 pharmaceutical agents per patient while HRQOL remained the same (n=40). Patients perceived their medication use to be significantly lower than the actual number of drugs revealed in the review. Final results will be presented at the congress. Commitment and interest on the pharmacist-side as well as high acceptance by patients were reported. The intensified conversation contributed to mutual appreciation and trust. The pharmacists especially appreciated the structured approach, as the number of drugs differed between drug plan and the medication brought along by the patients. The GPs reactions varied: Consulted GPs reported a benefit from the information received, whereas in other cases concerns about the interference in one's matters seemed to prohibit an exchange of information.

**Conclusion:** Existing fears, prejudices and uncertainties complicate the professional exchange and cooperation between pharmacists and GPs and need to be reduced.

**Points for discussion:**

1. How can a standardised communication concept between pharmacists and GPs be further improved?
2. How can „bad communicators“ be motivated and convinced of the use and mutual benefit of a standardised professional exchange?

**Frailty and the risk of confinement, institutionalization or death in an elderly cohort.**

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**Background:** Frailty is a geriatric syndrome whose definition has not reached consensus yet, and puts individuals at risk of losing independence to live in the community.

Research question: To evaluate the characteristics associated with risk for inclusion in home care, institutionalization or death in a cohort of frail elderly with a follow up of seven years.

**Method:** A prospective multicenter study with a follow-up of seven years of a cohort of 691 individuals who were 70 years or more in 2005. Individuals were recruited at the general practitioner's office. Baseline measures included an ad hoc screening tool for assessing the following frailty dimensions: vision, hearing, incontinence, falls, functional capacity, mobility, cognitive and emotional status, social risk, polypharmacy, nutrition, comorbidity and perceived health, as well as the following geriatric tests: Barthel Index, Lawton and Brody scale, Yesavage test, Folstein MMSE and Gijon social test. Follow up evaluated inclusion in home care, institutionalization and mortality. Survival analysis with Cox regression was performed.

**Results:** 56% of women. Baseline age 76.7 years. 55% had three or more dimensions of frailty affected. Overall event rate of 36.6% at 7 years. Died 23.6%, were in home care 9.4%, and 3.6% in institutions. Survival analysis adjusted for age and sex showed that events in the follow-up were mainly explained by functional capacity (HR= 2.1;CI95%1.6-2.9), mobility (HR=1.4;CI95%1.01-1.9) and polypharmacy (HR=1.7;CI95%1.3-2.2). Analyzing each event separately, the risk of homecare was explained mainly by mobility (HR=2.89;CI95%1.3-6.7), institutionalization by social risk (HR=10.5; CI95%2.5-27.2), and death by functional capacity (HR=4.5; CI95%2.5-8.0) and polypharmacy (HR=1.9; CI95%1.1-3.1).

**Conclusions:** Actions aimed at improving the screening and intervention in mobility problems, functional capacity and social risk would help the elderly maintain their autonomy and independence in the community, this being a priority in caring for this group.

**Points for discussion:**

1. The use of screening tools for frailty while it is not a welldefined syndrome.

**How do you change the habits of a lifetime? A qualitative study of healthy ageing and health promotion for older people.**

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**Background:** There is limited evidence on the best approaches to health and well-being in later life. Qualitative studies are important to understand older people's engagement with health promotion activities.

**Research questions:** To explore older people's perspectives of healthy ageing. To identify barriers and facilitators to health promotion in later life.

**Method:** Design: Qualitative study

Setting: Five general practices in urban and semi-rural areas in East/South East England.

Participants: Purposive sample of 30 community dwelling older people aged 65+

Data collection: Semi-structured interviews, audio recorded and transcribed.

Analysis: Framework approach was used. A coding framework of higher and lower level themes was developed from the data. Data were organised into matrices, enabling case-based and thematic analysis. Key concepts were defined, considering both the dominant and alternative views.

**Results:** Older people's engagement in health promoting activities was highly variable. Individuals' responses to health promotion advice were influenced by the extent and complexity of their health needs, information and support already available, and their expectations for their future. Maintaining independence and avoiding cognitive impairment were considered important for future healthy ageing. Personality, life events, energy levels and health professional involvement were both facilitators and barriers to behaviour change. Additional facilitators/barriers included confidence using public transport, and motivation to change. Knowledge of local services for health promotion was good but experiences of using these services were mixed. Trigger factors for change included personal health 'scares' such as receiving a new medical diagnosis.

**Conclusions:** Uptake of health promotion activities in later life appears to be determined by the interaction between biographical factors (personality, life events), contextual factors (information and support available), priorities (fear of dementia and dependence) and health status (complexity, energy, new threatening diagnosis). A complex understanding of such interactions is needed to change habits developed over a lifetime.

**Points for discussion:**

1. What are the implications of this pattern of themes for commissioning?
2. Should we concentrate on triggers as an opportunity for change?



**Can old cholesterol values be used for cardiovascular risk assessment in primary prevention?**

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**Background:** Total cholesterol (TC) is essential to assess cardiovascular disease (CVD) risk in primary prevention. The optimal TC screening interval is unclear and actual TC is not readily available in the consultation. However previous TC measurements are often available and could be used to estimate CVD risk.

**Research question:** Can CVD risk in primary prevention be correctly assessed using old TC measurements?

**Method:** We analysed data of the population based cohort Study of Health in Pomerania covering a 10-year period. TC was calculated for all subjects without prior history of myocardial infarction or stroke and complete data on TC for those who attended baseline and follow-up examinations. 10-year-CVD risk was estimated using ESC SCORE Germany at 5- and 10-year follow-up using current and baseline TC for subjects aged 40 to 69 years. Descriptive statistics were calculated for TC. Agreement between the CVD risk estimated with current versus previously measured TC was assessed using Cohen's Kappa coefficient.

**Results:** A total of 1916 subjects (mean age 46.8 years, SD 13.4 years) were included at baseline. Mean TC decreased from 5.77 mmol/l (SD  $\pm$  1.24) at baseline to 5.59 (SD  $\pm$  1.14) and 5.51 (SD  $\pm$  1.12) after 5 and 10 years of follow-up. 10.37% and 11.10% of subjects were estimated to be at a fatal 10-year-CVD risk of > 5% using current TC values. When 5- and 10- year old TC values were used, 11.07% and 12.85% of subjects were predicted to be at high CVD risk. Cohen's kappa was 0.87 (95%-CI 0.83-0.92) and 0.84 (95%-CI 0.80-0.89) for CVD risk at 5- and 10-year follow-up. The estimated coefficients were consistent with a very good agreement.

**Conclusions:** Available older TC measurements can be used to estimate CVD risk in primary prevention. This allows prompt identification of high risk patients and can reduce medical resource use and costs.

**Points for discussion:**

1. What level of misclassification of CVD risk is acceptable to clinical practice?
2. In which situations TC levels should be repeated?

**The essential requirements of preventive action in general practice.**

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**Background:** Many studies have highlighted the need to make progress on preventive practices of general practitioners (GPs), regardless of the subject (addictions, cancer screening, vaccinations). However, few studies have attempted to observe GPs in real conditions, during their actions in this area and draw conclusions on their performance. Uncertainties about their involvement and the reality of preventive practices persist.

**Research question:** What are the required skills for GPs to practice preventive medicine?

**Method:** An action research was conducted with GPs facing barriers when proposing a screening test for colorectal cancer. To achieve our goal, we have adapted and modified the critical incident technique proposed by John Flanagan. We have added reflection during or after the action in the data collection (new epistemology of Donald Schön). 27 GPs conducted 77 self-observations with the support of a reflection notebook created for the study. A qualitative data matrix analysis allowed the saturation, description and interpretation.

**Results:** We identified seven requirements for GPs when screening for colorectal cancer:

- 1 . Be proactive
- 2 . Be partners in care
- 3 . Take into consideration the patient's family and friends
- 4 . Position themselves as the expert
- 5 . Manage time efficiently
- 6 . Explain the test procedure
- 7 . Help carry out the test

We were able to identify techniques used for each requirement.

**Conclusions:** This study highlights the essential requirements for GPs when screening for colorectal cancer. It allows us to offer recommendations and training based on data from real practice.

**Points for discussion:**

1. We used an original method which allowed to investigate medical practice and identify professional requirements.
2. These results from colorectal cancer screening can be generalized to other preventive practices.
3. These results support to review training.



