



EUROPEAN GENERAL PRACTICE  
RESEARCH NETWORK

Empowering the next generation of  
family physicians in a changing healthcare landscape.

- Programme Book -



[www.egprn.org](http://www.egprn.org)

# COLOPHON

Programme Book of the 101st European General Practice Research Network Meeting  
Plovdiv, Bulgaria, 16-19 October 2025

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"EGPRN and Local Organizing Committee would like to especially thank the local volunteers and sponsors for their contribution to this conference"

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## Foreword

# Empowering the next generation of family physicians in a changing healthcare landscape

*Every generation imagines itself to be more intelligent than the one that went before it, and wiser than the one that comes after it.*

*- George Orwell*

It is with great honor and pleasure that we welcome you to the **101st EGPRN Meeting**, taking place from **16–19 October 2025** in the ancient, multicultural, and modern city of **Plovdiv, Bulgaria**. This gathering is especially meaningful as it coincides with two significant milestones: the **80th anniversary of the Medical University of Plovdiv** and the **10th anniversary of the Bulgarian General Practice Society for Research and Education**.

The theme of this meeting, “**Empowering the next generation of family physicians in a changing healthcare landscape**,” invites us to reflect on how we equip, support, and inspire early-career general practitioners to become active contributors to research and innovation. As health systems across Europe evolve, family medicine stands at a crossroads - facing new demands, technological transformation, and the imperative to deliver care that is both person-centered and responsive to community needs.

This evolving landscape brings new opportunities. It calls for more **interprofessional collaboration**, with a focus on how to structure it effectively, and for deeper engagement with **multicultural realities**, including research into ethnic diversity, differential responses to treatment, and culturally sensitive care approaches.

The meeting is **hosted by the Bulgarian General Practice Society for Research and Education, on behalf of the Medical University of Plovdiv**, and is supported by **the Bulgarian Medical Association – Plovdiv region**. We are proud to bring together the European general practice research community to connect past experience with future vision - supporting research that is relevant, inclusive, and responsive to the evolving realities of family medicine.

## Scientific scope of the conference

This meeting highlights the complexities and potential of research focused on empowering the next generation of family physicians. General practitioners work in close partnership with patients, colleagues, and communities, and are uniquely positioned to generate practice-based research that reflects the realities of daily care. Navigating uncertainty, embracing diversity, and responding to systemic changes are central to our discipline - and also fertile ground for inquiry.

The scientific program will explore key topics such as:

- **Interprofessional collaboration**, with emphasis on effective team dynamics across local and international settings
- **Healthcare in multicultural societies**, including communication, treatment decisions, and equity in research
- **The impact of digital transformation on research**, education, and practice in primary care

By sharing evidence and lived experience, we aim to strengthen the research foundations of family medicine and inspire new perspectives for a changing world.

*As usual, we also welcome research submissions on other topics relevant to family medicine.*



## Host Organising Committee

- Prof. Radost Asenova – EGPRN Coordinator
- Dr. Gergana Foreva, PhD – BGPSRE Coordinator
- Dr. Zornitsa Ambareva, PhD – Chair of BGPSRE
- Dr. Georgi Tsigarovski, PhD – Chair of Bulgarian Medical Association, Plovdiv region
- Dr. Daniela Mileva, PhD – Department of General Practice, Medical University Plovdiv
- Prof. Arman Postadjian – Department of General Practice, Medical University Sofia
- Assoc. Prof. Lubomir Kirov – Department of General Practice, Sofia University St. Kliment Ohridski, Chairman of National association of general practitioners in Bulgaria
- Assoc. Prof. Jeni Ruseva – Department of General Practice, Medical University Varna
- Prof. Valentina Madjova – Department of General Practice, Medical University Varna
- Prof. Tsvetelina Valentinova – Department of General Practice, Medical University Pleven
- Prof. Kiril Slavejkov – Department of General Practice, Trakia University – Stara Zagora
- Prof. Gospodinka Prakova – Department of General Practice, Trakia University – Stara Zagora

**THURSDAY, 16 OCTOBER 2025**

Time	Hotel Antique	Auditorium II (Ground Floor)	Room 312 (3rd Floor, Bulding 2)	Room 308 (3rd Floor, Building 2)	Room 316 (3rd Floor, Building 2)	Auditorium I (Ground Floor)	Auditorium III (Ground Floor)
9:00					Workshop 4 Fundamentals of Qualitative Research: Concepts & Methods 09:00 - 12:00		
9:30	Executive Board Meeting 09:30 - 13:00						
11:00							
12:00							
13:00			Workshop 1 Research on quality improvement in practice 13:00 - 17:00	Workshop 2 Quality related concepts and reporting of Qualitative Research 13:00 - 17:00	Workshop 3 Creating Digital Health Interventions: A Hands-On Workshop with the Computerized Intervention Authoring System (CIAS) 13:00 - 17:00		
14:00	Council Meeting 14:00 - 17:00						
15:00							
16:00							
17:00	Guided City Walk 17:00 - 19:00	Educational Committee 17:00 - 18:00				Research Strategy Committee 17:00 - 18:00	PR & Comm. Committee 17:00 -18:00
18:00							
19:00	<div><b>Welcome Reception and Opening Cocktail</b></div> <div>Venue: The Bishop’s Basilica of Philippopolis &amp; Atlas House Restaurant</div> <div>Address: TsentarPlovdiv Center, boulevard "Knyaginya Maria Luiza" 2, 4000 Plovdiv</div> <div>The evening will begin at the Bishop’s Basilica of Philippopolis and continue at Atlas House Restaurant, just a short 6-minute walk away. This seamless transition will take you from a unique cultural experience to a lively social gathering. Due to limited capacity, registration will be on a first-come, first-served basis. Guests attending the official programme at the Basilica will receive a pass granting access to the cocktail, wine tasting, and live music at Atlas House.</div>						
23:00							

FRIDAY, 17 OCTOBER 2025				
08:00-08:30	Registration - Foyer (Ground Floor)			
08:30-08:45	Auditorium I (Ground Floor)			
	Opening of the Meeting by EGPRN Chairperson Prof. Dr. Lieve Peremans			
	08:45-09:00			Welcome by Local Host Prof. Dr. Radost Asenova
	09:00-09:40			International Keynote Lecture Prof. Dr. Paul van Royen
09:40-11:10	Plenary Session - Theme Papers			
11:10-11:40	Blue Dot Coffee Break - For the first time attendees - 1st Floor Foyer			
11:10-11:40	Coffee Break - For the regular attendees - Foyer (Ground Floor)			
11:40-13:10	Auditorium I (Ground Floor)	Auditorium II (Ground Floor)	Auditorium III (Ground Floor)	
	Parallel Session A - Theme Papers: A Collaboration in Practice	Parallel Session B - Freestanding Papers: Freestanding Papers	Parallel Session C - Freestanding Papers: Freestanding Papers	
13:10-14:10	Lunch - Foyer (Ground Floor)			
14:10-15:40	Auditorium I (Ground Floor)	Auditorium II (Ground Floor)	Auditorium III (Ground Floor)	
	Parallel Session D - Theme Papers: COVID-19	Parallel Session E: Freestanding Papers: Diagnosis – Predictive Values	Parallel Session F: Theme Papers: Mental Health and Well-Being	
15:40-16:00	Coffee Break - Foyer (Ground Floor)			
	Auditorium I (Ground Floor)	Auditorium II (Ground Floor)	Auditorium III (Ground Floor)	
16:00-17:30		Parallel Session G: One Slide Five Minute Presentations	Parallel Session H - Freestanding Papers: Vaccination	
17:30-17:40	Summary of the day by the International Keynote Speaker Prof. Dr. Paul van Royen			
17:40	End of the conference day			
18:00	Practice Visits in Plovdiv			
	The groups will leave from the conference venue.			
19:30-20:30	Practice Visit 1: Dr. Elenski	Practice Visit 2: Dr. Kasabov	Practice Visit 3: Dr. K Clinic	
	EGPRN Collaborative Study Group Meeting: Sustainability	EGPRN Collaborative Study Group Meeting: Eurodata	EGPRN Collaborative Study Group Meeting: Örenas	

<b>SATURDAY, 18 OCTOBER 2025</b>			
	<b>Auditorium I (Ground Floor)</b>	<b>Auditorium II (Ground Floor)</b>	<b>Auditorium III (Ground Floor)</b>
<b>08:30-09:10</b>	National Keynote Lecture Assoc. Prof. Dr. Gergana Foreva		
<b>09:10-10:40</b>	Parallel Session I - Theme Papers	Parallel Session J - Interesting Methodology Session	Parallel Session K: Freestanding Papers
<b>10:40-11:00</b>	Coffee Break - Foyer (Ground Floor)		
<b>11:00-12:30</b>	<b>Poster Sessions - Foyer (Ground, 1st &amp; 2nd Floors)</b>		
	Poster Session 1: Miscellaneous	Poster Session 2: Practice Organisation	Poster Session 3: Chronic Care
	Poster Session 4: Screening and Prevention	Poster Session 5: Education	Poster Session 6: Patient-Centered Care
	Poster Session 7: Needs of Special Patient Groups	Poster Session 8: Miscellaneous	
<b>12:30-13:30</b>	<b>Auditorium V (1st Floor)</b>		
	EGPRN Mentor/Mentee Meeting		
<b>12:30-13:30</b>	Lunch - Foyer (Ground Floor)		
	<b>Auditorium I (Ground Floor)</b>	<b>Auditorium II (Ground Floor)</b>	<b>Auditorium III (Ground Floor)</b>
<b>13:30-15:30</b>	Parallel Session L - Theme Papers	Parallel Session M: Web Based Research Course Presentations	Parallel Session N - Freestanding Papers
<b>15:30-15:50</b>	Coffee Break - Foyer (Ground Floor)		
	<b>Auditorium I (Ground Floor)</b>	<b>Auditorium II (Ground Floor)</b>	<b>Auditorium III (Ground Floor)</b>
<b>15:50-17:20</b>		Parallel Session O - Theme Papers	Parallel Session P - One Slide Five Minutes Presentations
<b>17:20-17:30</b>	Summary of the day by the National Keynote Speaker Assoc. Prof. Dr. Gergana Foreva		
<b>17:30-17:50</b>	Chairperson's Report by EGPRN Chair, Prof. Dr. Lieve Peremans		
<b>17:50-18:00</b>	Presentation of the Poster-Prize for the best poster presented		
<b>18:00-18:10</b>	Introduction to the next EGPRN meeting		
<b>18:01</b>	Closing		
<b>20:00-00:00</b>	<b>Social Night with Dinner, Dance and Music! - Online registration required.</b> Venue: DoubleTree by Hilton Restaurant Address: Tsentar Plovdiv Center, pl. "Sveta Petka" 1, 4000 Plovdiv		

# Programme

## Thursday, 16 October 2025

09:00 - 12:00	<b>Workshop 4: Basics of qualitative research: Concepts &amp; methods</b> Location: Room 316 (3rd Floor, Building 2)  <a href="#">Registration is required. Click here to learn more.</a>
09:30 - 13:00	<b>EGPRN Executive Board Meeting</b> Location: Hotel Antique  Only for Members of the Executive Board
13:00 - 17:00	<b>Workshop 1: Research on quality improvement in practice</b> Location: Room 312 (3rd Floor, Building 2)  <a href="#">Registration is required. Click here to learn more.</a>
13:00 - 17:00	<b>Workshop 2: Quality related concepts and reporting of Qualitative Research</b> Location: Room 308 (3rd Floor, Building 2)  <a href="#">Registration is required. Click here to learn more.</a>
13:00 - 17:00	<b>Workshop 3: Creating Digital Health Interventions: A Hands-On Workshop with the Computerized Intervention Authoring System (CIAS)</b> Location: Room 316 (3rd Floor, Building 2)  <a href="#">Registration is required. Click here to learn more.</a>
14:00 - 17:00	<b>EGPRN Council Meeting</b> Location: Auditorium II (Ground Floor)  Only for EGPRN Executive Board and EGPRN Council members.
17:00 - 18:00	<b>EGPRN Committee Meetings and Working Groups</b> <ul style="list-style-type: none"> <li>• Research Strategy Committee - Auditorium I (Ground Floor)</li> <li>• Educational Committee - Auditorium II (Ground Floor)</li> <li>• PR &amp; Communication Committee- Auditorium III (Ground Floor)</li> </ul>
17:00 - 19:00	<b>Guided City Walk</b>  We are delighted to invite you on a two-hour walk in the Old Town of Plovdiv, the oldest city in Europe. Our walk will be starting at the Eastern Gate of Philippopolis at 5:00 p.m. and ending at 7:00 p.m. at the Episcopal Basilica of Philippopolis.

[Registration required.](#)

19:00 - 23:00

### Welcome Reception and Opening Cocktail

Venue: [The Bishop's Basilica of Philippopolis](#) & [Atlas House Restaurant](#)

Address: [TsentrPlovdiv Center, boulevard "Knyaginya Maria Luiza" 2, 4000 Plovdiv](#)

The evening will begin at the Bishop's Basilica of Philippopolis and continue at Atlas House Restaurant, just a short 6-minute walk away. This seamless transition will take you from a unique cultural experience to a lively social gathering.

Due to limited capacity, registration will be on a **first-come, first-served basis**. Guests attending the official programme at the Basilica will receive a pass granting access to the cocktail, wine tasting, and live music at Atlas House.



## Friday, 17 October 2025

08:00 - 08:30	<b>Registration</b> Location: Foyer (Ground Floor)
08:30 - 09:00	<b>Opening Session</b> Location: Auditorium I (Ground Floor) <ul style="list-style-type: none"> <li>• Opening of the Meeting by EGPRN Chairperson - Lieve Peremans</li> <li>• Welcome by Local Host - Radost Assenova</li> </ul>
09:00 - 09:40	<b>International Keynote Lecture</b> Location: Auditorium I (Ground Floor) <p><a href="#">More info about the international keynote speaker here.</a></p> <ul style="list-style-type: none"> <li>• Lieve Peremans (Chair)</li> <li>• Paul Van Royen (International Keynote Speaker)</li> </ul>
09:40 - 11:10	<b>Plenary Session - Theme Papers</b> Location: Auditorium I (Ground Floor) <ul style="list-style-type: none"> <li>• Lieve Peremans (Chair)</li> <li>• Fostering scholarship in GP Training in Ireland; a national initiative to build and enhance research engagement - Aileen Barrett</li> <li>• Intentions and Objectives of Trainers in the “Fighting Stigma in Healthcare Programme”: A qualitative Study - Ando Rajaonah</li> <li>• Personal Experiences of Social Isolation Among U.S. Family Medicine Providers and Their Impact on Clinical Practice - Frank Mueller</li> </ul>
11:10 - 11:40	<b>Blue Dot Coffee Break</b> Location: 1st Floor Foyer <p>For the first time attendees.</p>
11:10 - 11:40	<b>Coffee Break</b> Location: Foyer (Ground Floor) <p>For the regular attendees.</p>
11:40 - 13:10	<b>Parallel Session A - Theme Papers: A Collaboration in Practice</b> Location: Auditorium I (Ground Floor) <ul style="list-style-type: none"> <li>• Radost Assenova (Chair)</li> <li>• Improving Collaboration Between GPs and Urologists Through Population-Based Screenings of Men’s Health During Movember - Petar Antonov</li> <li>• Inter-professional learning from the experience of patient-mentors - Alain Mercier</li> <li>• Nursing Students’ Perceptions of Family Medicine Nursing: A Qualitative Study - Duygu Ayhan Başer</li> </ul>
11:40 - 13:10	<b>Parallel Session B - Freestanding Papers</b> Location: Auditorium II (Ground Floor) <ul style="list-style-type: none"> <li>• Michael Harris (Chair)</li> <li>• Morbidity and survival profile of adults diagnosed with ASD compared with the general</li> </ul>

- population – matched cohort study. - Itamar Getzler
- Sex differences in the economic impact of chronic kidney disease in primary care: the retrospective cohort REDIC study - Oriol Cunillera Puértolas
- Tracking Risk Factor Trends in a Structured Chronic Disease Management Programme: Real-World Evidence from Irish General Practice - Fintan Stanley

11:40 - 13:10

**Parallel Session C: Freestanding Papers**

Location: Auditorium III (Ground Floor)

- Pemra C. Unalan (Chair)
- Evidence-Based Practice in Primary Care: A Cross-Sectional Study of Family Physicians in Türkiye - Ezgi Agadayi
- From Tutor to Trusted Colleague: Exploration of the Expanding Role of CME Tutors in Irish General Practice - Ivana Keenan
- How Old Do You Feel: Questioning Subjective Age in Primary Care: General Practitioners Reflect on Its Role in Clinical Practice - Robert Hoffman

13:10 - 14:10

**Lunch**

Location: Foyer (Ground Floor)

14:10 - 15:40

**Parallel Session D - Theme Papers: COVID-19**

Location: Auditorium I (Ground Floor)

- Jako Burgers (Chair)
- Feasibility and preliminary findings of a 7-Day caloric restriction protocol in Long COVID: A pilot study - Sandra León-Herrera
- Identifying Terminological Biomarkers of Long COVID Through Narrative Medicine and Ontology Mapping - Marc Jamoulle
- "It's all a struggle and an effort" – Experiences of people with Post-COVID-Syndrome dealing with their symptoms - Uta Sekanina

14:10 - 15:40

**Parallel Session E: Freestanding Papers: Diagnosis – Predictive Values**

Location: Auditorium II (Ground Floor)

- Andrej Pangerc (Chair)
- Mortality predictors in hospitalized patients with Covid-19 - Vesela Blagoeva
- Point-of-Care Ultrasonography in Turkish Primary Care: A Qualitative Exploration of Practice and Experience - Öznur Kübra Odabaş
- Predictive Role of Systemic Immune-Inflammation Index in Hypertension: First Outcomes - Sena Akyar

14:10 - 15:40

**Parallel Session F: Theme Papers: Mental Health and Well-Being**

Location: Auditorium III (Ground Floor)

- Limor Adler (Chair)
- Cis-Heteronormativity and Discrimination in Primary Care: A Qualitative Study on LGBTQI+ Healthcare - Stavroula Kostaki
- Digital Health Literacy Interventions for Mental Health Improvement in Primary Care: Evidence from a Systematic Review and Meta-Analysis - Alejandra Aguilar-Latorre
- Mental Health in Physicians: Perspectives and Challenges from surveys in Barcelona - Brenda Biaani León-Gómez

15:40 - 16:00

**Coffee Break**

Location: Foyer (Ground Floor)

16:00 - 17:30

**Parallel Session G: One Slide Five Minute Presentations**

Location: Auditorium II (Ground Floor)

- Ferdinando Petrazzuoli (Chair)
- Shlomo Vinker (Chair)
- Mehmet Ungan (Chair)
- Development and Validation of the Family Involvement Levels of Practice Scale-Turkish (FILOPS-T): A Multilevel Factor Analysis - Mehmet Göktuğ Kılıncarslan
- Digital Health Literacy Among Young Family Physicians: Are We Ready for the Next Generation of Technologies? - Fatma Göksin Cihan
- Empowering Future GPs: A European AI Innovation Network for Primary Care - Odi Stummer
- Feasibility and applicability of integrating wearable devices into primary cardiovascular risk prevention in general practice - Georgi Petrov
- Lifestyle Counseling in Family Medicine: A Case-based Educational Intervention Focused on Nutrition and Physical Activity in Patients with Type 2 Diabetes Mellitus - Fatih Özcan
- Mental health among Farmers in rural Germany: A research idea for a Mixed-Methods Study to assess Prevalence and Risk Factors - Linda Hoffmeister
- The GP personality and its relationship with burn-out, coping mechanisms, patient centred care and empathy towards patients. Future projects of the GP personality collaborative group. - Ileana Gefaell
- Transforming obesity management in Primary Care: A European roadmap from policy to practice - Raquel Gomez Bravo

16:00 - 17:30

### Parallel Session H - Freestanding Papers: Vaccination

Location: Auditorium III (Ground Floor)

- Philippe-Richard Domeyer (Chair)
- Communication, confidence, and commitment: psychosocial dimensions of HPV vaccine advocacy among Bulgarian GPs - Gergana Apostolova
- Learning from the Field: A Qualitative SWOT Analysis of the COVID-19 Home Vaccination Programme in Greece - Smyrnakis Emmanouil
- Unveiling the time-varying impact of COVID-19 vaccination on post-COVID-19 sequelae: a target trial emulation - Tatjana Meister

17:30 - 17:40

### Summary of the day

Location: Auditorium I (Ground Floor)

- Paul Van Royen (International Keynote Speaker)

18:00 - 20:00

### Practice Visits in Plovdiv

Online registration is required. The groups will leave from the conference venue. [Click here to learn more.](#)

19:30 - 20:30

### EGPRN Collaborative Study Group Meeting: Eurodata

Location: Practice Visit 2: Dr. Zahari Patrikov

19:30 - 20:30

### EGPRN Collaborative Study Group Meeting: Sustainability

Location: Practice Visit 1: Dr. Elenski

19:30 - 20:30

### EGPRN Collaborative Study Group Meeting: Örenas

Location: Practice Visit 3: Dr. K Clinic

## Saturday, 18 October 2025

08:30 - 09:10

### National Keynote Lecture

Location: Auditorium I (Ground Floor)

[More info about the national keynote speaker here.](#)

- Radost Assenova (Chair)
- Gergana Foreva (National Keynote Speaker)

09:10 - 10:40

### Parallel Session I - Theme Papers

Location: Auditorium I (Ground Floor)

- Negar Pourbordbari (Chair)
- Assessing Family Medicine Residency Training: Evaluation of Resident Perspectives - Ana Maria Alexandra Stanescu
- Empowering the next generation of healthcare workers: The role of intrinsic and extrinsic motivation - Heather L Rogers
- The Future of Family Medicine from Family Physicians' Perspective - Michal Shani

09:10 - 10:40

### Parallel Session J - Interesting Methodology Session

Location: Auditorium II (Ground Floor)

- Paul Van Royen (Chair)
- Evaluation of the Relationship between Polypharmacy and Glycaemic Control Levels in Patients Aged 65 and Over Diagnosed with Type 2 Diabetes Mellitus: A Retrospective Study - Hüseyin Nejat Küçükdağ
- Exploring European General Practitioners' Perspectives on Digital Health Solutions in Home-Based Care: A research protocol from the EGPRN Fellows - Mafalda Proença-Portugal
- Sensitivity comparison of a code-based and a questionnaire-based system for influenza-like illness cases in Belgian general practices - Mélanie Nahimana

09:10 - 10:40

### Parallel Session K: Freestanding Papers

Location: Auditorium III (Ground Floor)

- Gökçe İşcan (Chair)
- Evaluation of the Relationship Between Frailty, Geriatric Depression, and Family Functionality in Individuals Over the Age of 65 - Yasemin Cayir
- The Effect of Telemedicine on Preventive Medicine- A Case from Israel - Ilan Yehoshua
- What Are the Lessons of the Hypertension Delphi Study? - Ábel Perjés

10:40 - 11:00

### Coffee Break

Location: Foyer (Ground Floor)

11:00 - 12:30

### Poster Session 1: Miscellaneous

Location: Foyer (Ground, 1st & 2nd Floors)

- Sophia Eilat-Tsanani (Chair)
- Alcohol misuse in women a challenge in primary care - Daniela Krasimirova
- Changes in the levels of marker molecules salivary alpha-amylase and cortisol as a stress response to everyday activities of general practitioners in rural areas of the Republic of Bulgaria - Adolf Alakidi
- Factors influencing the psychological state of internally displaced Ukrainians and Ukrainian refugees in other countries? Qualitative analysis of an open-ended question - Oksana Ilkov
- Overuse of Benzodiazepines and Z-Drugs in Croatian Family Medicine - A Growing Concern - Mislav Omerbasic
- Validation of P-Risk, a Tool to Identify Individuals at Risk of Developing Psychosis Through Electronic Health Records in Primary Care: A Study Protocol - Maria Miñana Castellanos

11:00 - 12:30

## Poster Session 2: Practice Organisation

Location: Foyer (Ground, 1st &amp; 2nd Floors)

- Ábel Perjés (Chair)
- Assessment of Social Determinants of Health in Primary Care Settings in Europe - Dúnia Bel Verge
- Establishing a New Unit in Family Health Centers: A Qualitative Exploration of Processes and Experiences - Gizem Limnili
- Improving Continuity of Care During Primary Care Workforce Turnover: A Mixed-Methods Study on the Role of Structured Handover Protocols - Danilo Davi
- Patient perspectives on access to emergency medical care in primary healthcare settings - Daniela Mileva
- Survey on Sustainability in Primary Healthcare Practice- A Collaborative Study - Paul Van Royen
- United by borders, divided by care: The Future We Leave Behind - Emina Bajrić Čusto

11:00 - 12:30

## Poster Session 3: Chronic Care

Location: Foyer (Ground, 1st &amp; 2nd Floors)

- Giulio Rigon (Chair)
- Fractures, Frailty, and Forgotten Diagnoses: A Comparative Analysis of Death Certificates and Medical Records in Rural Swedish Primary Care - Filip Molinder
- Implementation of obesity interventions in primary care: a scoping review of barriers and facilitators - Sıdıka Ece Yokuş
- Low-density lipoprotein cholesterol dynamics after successful revascularization – main results of Real World Evidence of Arterial Hypertension and Lipids Evaluation Dynamics (REVEALED) observational study. - Arman Postadzhiyan
- Management of Atrial Fibrillation in Emergency and Primary Care Settings: A Retrospective and Comparative Analysis Involving Simulated Decisions by an Artificial Intelligence Model - Rosa Magallon Botaya
- Polypharmacy and selected parameters associated with quality of life - Marta Tundzeva
- Validation of an Innovative Communication Tool for Improving Compliance in Rehabilitation Medicine - Dmytro Hryhorenko

11:00 - 12:30

## Poster Session 4: Screening and Prevention

Location: Foyer (Ground, 1st &amp; 2nd Floors)

- Yochai Schonmann (Chair)
- Cardiovascular risk assessment in individuals with T2D in Croatia - Zvonimir Bosnić
- Cardiovascular risk management in General Practice using the SCORE System - Plamen Latev
- Effects of Patient Education on the Attitudes and Behaviors of Patients With Diabetes - Bengi Tör
- Factors Influencing HPV vaccination behavior among Bulgarian GPs based on a Pro-VC-Be Survey - Teodora Dimcheva
- Integrating Virtual Reality in Patient Education for the General Practice: Pilot Study - Georgi Boshev
- Parental awareness and screening of congenital urinary tract anomalies in general practice - Ivelina Hristova-Nikolova

11:00 - 12:30

## Poster Session 5: Education

Location: Foyer (Ground, 1st &amp; 2nd Floors)

- Ivana Keenan (Chair)
- Confidence, practices and training needs of Bulgarian GPs in managing menopausal symptoms: A Cross-Sectional Survey - Zornitsa Ambareva
- Empowering Implementation: Development and Validation of a Universal Tool for Family Physicians' Needs Assessment. - Pavlo Kolesnyk
- Family Doctors' Perspectives on the Applicability of Social Prescribing in Türkiye: A Qualitative Study - Şeyma Handan Akyön
- Mapping Family Medicine residency programmes in Europe: The path to Standardization -

Sara Ares Blanco

- Mapping Medical Schools in the European Higher Education Area: A First Step to FaME-EP (Family Medicine Education – European Project) - Guillermo Viguera Alonso
- Presenteeism in (Primary) Healthcare: A Narrative Review of Causes, Consequences, and Prevention Strategies with a Focus on General Practitioners - Lavinia Costas

11:00 - 12:30

### **Poster Session 6: Patient-Centered Care**

Location: Foyer (Ground, 1st & 2nd Floors)

- Tiny Van Merode (Chair)
- Artificial Intelligence and Health Equity in Primary Care: A Scoping Review - Magda Gavara
- Does Patient Satisfaction with Primary and Emergency Care Influence Non-urgent Emergency Department Utilization? A Path Analysis - Melike Mercan Başpınar
- Measuring menopausal symptoms in Bulgarian women using the Menopause rating scale: A Patient-Centered Quantitative Study - Georgi Tsigarovski
- Quality under scrutiny: reviewing primary healthcare indicators in Ukraine during the war - Yurii Sich
- Would Patients Choose In-Person Visits Again? A Cross-Sectional Study of Retrospective Preferences in Primary Care - Joseph Azuri

11:00 - 12:30

### **Poster Session 7: Needs of Special Patient Groups**

Location: Foyer (Ground, 1st & 2nd Floors)

- Kiril Slaveykov (Chair)
- Appropriate choice of antibiotic therapy for patients in nursing homes: how relevant are diagnostic possibilities? - Sonia Zenari
- Aspirin for Prevention: Who Uses It, Why, and at What Cost? - Gökçe İçsan
- Effectiveness of a Randomized Complex Intervention with Adolescents and Their Environment to Reduce Problematic Video Game Use/Addiction by Promoting Shared Active Leisure and Personal Development - Ana Claveria
- Measuring quality of life in patients after total thyroidectomy using a validated questionnaire: The QOL-CS Thyroid Version - Rositsa Dimova
- Phenotyping Long COVID in Children in Primary Care: A Case-Based Study Using the Human Phenotype Ontology - Serhan Soylu

11:00 - 12:30

### **Poster Session 8: Miscellaneous**

Location: Foyer (Ground, 1st & 2nd Floors)

- Nilgün Özçakar (Chair)
- Do GPs' Personalities Shape Their Patient Populations? A Cross-Sectional Study from Greek Primary Health Care - Eleni Jelastopulu
- Exploring physicians' opinions and attitudes toward the role of artificial intelligence in primary care - a qualitative study - Nurver Sipahioğlu
- Improving detection of terminal illness in nursing home residents: the first step towards a greater awareness in patients, caregivers and healthcare professionals for a better quality of care. - Manuela Monchelato
- Integrating GPs into multidisciplinary oncology care: a feasibility reflection from Bulgaria - Ekaterina Zheleva
- Methodological innovations of a comprehensive strategy to improve cancer health literacy for cancer patients, carers and citizens - Noemí López Rey
- Young doctor, old stereotype – the concept of (dis)trust in a family medicine practice - Danijel Gajić

12:30 - 13:30

### **EGPRN Mentor/Mentee Meeting**

Location: Auditorium V (1st Floor)

12:30 - 13:30

### **Lunch**

Location: Foyer (Ground Floor)



13:30 - 15:30	<b>Parallel Session L - Theme Papers</b> Location: Auditorium I (Ground Floor) <ul style="list-style-type: none"> <li>Ana Claveria (Chair)</li> <li>Analysis of early diagnostic of prostate cancer patients in family medicine in Slovenia - Mateja Kokalj Kokot</li> <li>Assessing AI-Generated Smoking Cessation Advice for Patient Education in Primary Care - Canan Tuz</li> <li>Is it possible to conduct multinational clinical trials in primary care? Experience from a rural health centre. - Jesús González-Lama</li> <li>The role of GPs in vision protection of children: a seven-year longitudinal cohort study in Bulgaria - Kiril Slaveykov</li> </ul>
13:30 - 15:30	<b>Parallel Session M: Web Based Research Course Presentations</b> Location: Auditorium II (Ground Floor) <ul style="list-style-type: none"> <li>Mehmet Ungan (Chair)</li> <li>Ferdinando Petrazzuoli (Chair)</li> <li>Contracting care, undermining commitment? How National Framework Agreements shape GP motivation and primary care sustainability in Bulgaria - Yanko Madzharov</li> <li>Inside Young Minds: Lifestyle and Cognition in Primary Care - Kübra Efe</li> <li>Protocol for evaluating factors related to coding of diagnoses by general practitioners in electronic medical records to improve data quality in Belgium - Floriane Rouvez</li> <li>The Effect of Pedometer Use on Physical Activity in Healthy Individuals Aged 18–35 Through a Physician-Supported Peer Motivation Intervention - Yagmur Kilicdere</li> <li>The importance of measuring lipoprotein(a) during adolescents' annual check-ups: a research proposal. - Petar Haytov</li> <li>Trends and Determinants of Preventive Health Service Utilization in Türkiye: A Longitudinal Trend Analysis of Health Surveys (2008-2022) - İkbâl Hümay Arman</li> </ul>
13:30 - 15:30	<b>Parallel Session N - Freestanding Papers</b> Location: Auditorium III (Ground Floor) <ul style="list-style-type: none"> <li>Sara Ares Blanco (Chair)</li> <li>Cancer screening programmes in Europe: a 32-country survey by the Örenäs EGPRN Collaborative Study Group. - Dimitra Iosifina Papageorgiou</li> <li>Empowering Primary Care with AI: Leumit Advanced Predictive Health Analytics (LAPHA) Model Improves Colorectal Cancer Detection in a National Healthcare Setting - Shlomo Vinker</li> <li>Factors Affecting the Compliance and Participation of Women in Breast and Cervical Cancer Screening in a Primary Care Center - Pemra C. Unalan</li> <li>Sexual function preservation after CyberKnife SBRT in prostate cancer diagnosed early through PSA screening by GPs - Stefan Pavlov</li> </ul>
15:30 - 15:50	<b>Coffee Break</b> Location: Foyer (Ground Floor)
15:50 - 17:20	<b>Parallel Session O - Theme Papers</b> Location: Auditorium II (Ground Floor) <ul style="list-style-type: none"> <li>Georgi Tsigarovski (Chair)</li> <li>Comparing Ageism Among Physicians in Primary Care, Internal Medicine, and Geriatrics: A Cross-Sectional Study - Limor Adler</li> <li>Digital Health Literacy in Primary Care: A Social Determinants Approach - Fátima Méndez López</li> <li>Relationship Between Compassion Fatigue Level and Quality of Working Life of Family Physicians - Hilal Özkaya</li> </ul>

15:50 - 17:20	<b>Parallel Session P - One Slide Five Minutes Presentations</b> Location: Auditorium III (Ground Floor) <ul style="list-style-type: none"> <li>• Shlomo Vinker (Chair)</li> <li>• Mehmet Urgan (Chair)</li> <li>• Ferdinando Petrazzuoli (Chair)</li> <li>• Beyond the Thesis: Why Don't Family Medicine Trainees Engage in Real Research? - Ekin Dikmen</li> <li>• Evaluation of Clinicians' Attitudes Towards the Safe Use of Herbal Products: A Cross-Sectional Study Proposal - Didem Kafadar</li> <li>• Family Medicine as a Career Choice: Motivations and Barriers Among Future Doctors in Ukraine - Kostiantyn Bobyk</li> <li>• Participative sciences in health: an active research project for improving women's healthcare pathway - Manon Reinbolt</li> <li>• Rethinking Vitamin D Support in Pregnancy: A Preliminary Study on the Need for Preconceptional Education and Lifestyle Interventions - Şeyda Özcan Maden</li> <li>• Survey of Cannabis Usage amongst adults visiting Primary Care Clinics in Israel - Yochai Schonmann</li> <li>• What do European patients and healthcare professionals think are the main causes of delayed cancer diagnosis? An Örenäs Research Group qualitative study. - Michael Harris</li> </ul>
17:20 - 17:30	<b>Summary of the day</b> Location: Auditorium I (Ground Floor) <ul style="list-style-type: none"> <li>• Gergana Foreva (Speaker)</li> </ul>
17:30 - 18:10	<b>Closing Session</b> Location: Auditorium I (Ground Floor) <ul style="list-style-type: none"> <li>• Chairperson's Report by EGPRN Chair - Lieve Peremans</li> <li>• Presentation of the Poster Prize for the best poster presented - Radost Assenova</li> <li>• Introduction to the next EGPRN meeting - Giulio Rigon</li> </ul>
20:00 - 00:00	<b>Social Night with Dinner, Dance and Music!</b>  Online registration is required. DoubleTree by Hilton Restaurant Address: <a href="#">TsentarPlovdiv Center, pl. "Sveta Petka" 1, 4000 Plovdiv</a>

## **Sunday, 19 October 2025**

09:30 - 12:30

### **EGPRN Executive Board Meeting**

Only for members of the Executive Board.  
Location: Hotel Antique

## **International Keynote Lecture**

### **Primary Care at a Crossroads: Advancing Research on Interprofessional Collaboration and on Integrated, Equitable and Complex Care**

**Prof. Dr. Paul van Royen**

Emeritus Full Professor, Department of Family Medicine and Population Health, Faculty of Medicine and Health Sciences, University of Antwerp, Belgium

Primary care is undergoing a fundamental transformation, driven by increasing care complexity and technological innovation, persistent health inequities, the need for integrated, interprofessional models and for more cultural competence. This keynote explores with current projects how future-ready primary care research must evolve to support and guide this shift. It advocates for more novel research methodologies, including longitudinal mixed-method studies, implementation science, complexity science, pragmatic trials, realist evaluation, and network analysis. These approaches are essential to better understand and support task shifting, mental-physical health integration, and equitable care for vulnerable and multicultural populations in a changing healthcare landscape.

#### **About the speaker**

He is emeritus full Professor of Family Medicine at the University of Antwerp. He has more than 40 years academic expertise in clinical practice, teaching and research. He was chair of EGPRN from 2004-2010 and dean of his Faculty from 2012-2018. Paul has contributed to numerous research projects, including several EU-funded and collaborative projects, within primary care, on respiratory infections, integrated care, medical decision making, medical education, health care organization and data handling. He has a strong expertise in qualitative research and is author of more than 250 articles in peer-reviewed journals. He is also the co-ordinator of the Clinical Guidelines project for primary care in Belgium.

## Local Keynote Lecture

### **Empowering the next generation of family physicians in an everchanging healthcare landscape in Bulgaria. A take on the topic.**

**Gergana Foreva, MD, PhD**

General Practitioner

*Every generation imagines itself to be more intelligent than the one that went before it, and wiser than the one that comes after it.*

*- George Orwell*

We are at the end of the third decade of the reform of the healthcare system in our country, which introduced general medical practice, performed by a general medicine specialist. Despite the difficulties in transforming the healthcare system, general practitioners found their place. And if in the first decades the focus was entirely on changes and transition, structuring and the relationship with the National health insurance fund, gradually space opened up for new priorities.

In our country, the academic representation of the specialty took place in conjunction with the change in the health sector. This allowed scientific research to be done at the same time, reflecting the development of the specialty and its practical dimensions. When reviewing the dissertations and publications on general medicine in the Bulgarian scientific medical periodicals, the topics cover a wide spectrum - health service, clinical issues, education, etc. Since the establishment of the departments, the members have been regular participants in the EGPRN meetings. A major step was the accreditation of training practices in which general medicine residents work on an employment contract. With the newly adopted program, research training became part of the residents' curriculum.

Every generation has its own view of the world. And the landscape of the healthcare system has changed radically in recent decades. We work within the framework of a developing national health information system. It includes patients' data concerning their health status. On the other hand, artificial intelligence is both at our and at the patients' disposal if a question arises. Even more so in the hands of a generation native to technology. New realities facilitate and complicate daily work. Doctor-patient communication has always been an essential defining feature of the specialty, and the advent of new technologies is significantly changing its perspective. Generational diversity has its advantages, because different perspectives can be an important strength in defining our new health care system.

# Pre-conference Workshop 1

## Research on quality improvement in practice

Thursday, 16 October, 13:00 - 17:00

- Dr. Heather L Rogers  
[Ikerbasque](#) Associate Professor, [Biobizkaia Health Research Institute](#)

What is quality improvement (QI)? To what extent are we doing quality improvement in my practice? How do we know if our quality improvement strategies are effective? In what ways can my practice increase the effectiveness of our quality improvement strategies? How can we increase engagement in quality improvement in my practice? What makes quality improvement work publishable as research?

If you are curious about the answers to these questions, or have others related to quality improvement implementation and research, then this workshop is for you!

In this 3-hour hands-on workshop, we will learn about quality improvement in primary healthcare practices from a practical perspective and draw on implementation science concepts, frameworks, and study designs to gain an applied understanding of how to conduct research in this area. You can expect at least 30 minutes of lecture / slide presentation, 1 hour of large group discussion, and 1 hour of small group work during the workshop.

The quality improvement implementation perspectives used in this workshop are based on practical guidance by the [World Health Organization \(2004\)](#) and the [U.S. Agency for Healthcare Research and Quality \(2015\)](#). The quality improvement research aspects that will be covered are discussed in more detail in [Chapter 10 of WONCA'S How to Do Primary Care Research book \(2018\)](#), as well as recent scoping reviews from [2023](#) and [2024](#).

Whether you have prior experience in quality improvement research and/or practice, or are just starting out in this area, this workshop will provide new insights to improve your quality improvement strategies and implementation outcomes.



## Pre-conference Workshop 2

### Quality related concepts and reporting of Qualitative Research

Thursday, 16 October, 13:00 - 17:00

- **Paul van Royen**, University of Antwerp, Faculty of Medicine Department of Primary and Interdisciplinary Care, Belgium.
- **Prof. Alain Mercier**, University Paris 13, Bobigny Department of General Practice, France  
*Both are GPs and have been performing and teaching qualitative research for many years..*

Qualitative research is essential in healthcare, offering deep insights into patient experiences, behaviors, and interactions within the healthcare system. But how can you ensure that your research is reported in a way that highlights its quality and trustworthiness?

This workshop will introduce you to key concepts that enhance the rigor of qualitative research. We will explore essential quality criteria—**credibility, transferability, dependability, confirmability, and reflexivity**—and discuss how these can be applied when conducting and reporting your research.

Through the critical appraisal of a published qualitative study, we will examine how to recognize and communicate these quality aspects effectively in your own work.

By the end of the session, you will have a clearer understanding of these core concepts and how to integrate them into your reporting, helping your research to stand up to scrutiny and make a stronger impact.

This workshop is designed for researchers with some prior experience in qualitative research and offers both conceptual insights and practical guidance.

## Pre-conference Workshop 3

### Creating Digital Health Interventions: A Hands-On Workshop with the Computerized Intervention Authoring System (CIAS)

Thursday, 16 October, 13:00 - 17:00

- **Frank Muller**, Researcher in Digital Health, University Medical Center Göttingen, Germany
- **Eva Maria Noack**, Researcher, University Medical Center Göttingen, Germany
- **Steven J. Ondersma**, Clinical Psychologist and Professor, Michigan State University, USA

The Computerized Intervention Authoring System (CIAS) is an open-source, non-commercial platform designed to easily create and manage digital behavioral health interventions. Without programming expertise, healthcare professionals and researchers can design, customize, and deploy digital health interventions. These may include interactive content, randomization of participants, animated narrators that speak aloud in over 40 languages, instant translation and sending tailored SMS to participants.

CIAS was originally developed at Michigan State University. (<https://www.cias.app>) The new CIAS-EU version was recently deployed to comply with the European Union's security and privacy regulations. (<http://www.cias-app.eu>)

This hands-on workshop will guide participants through the fundamentals of using CIAS. Workshop participants can instantly begin to develop their own interventions ready for use in medical research or other healthcare settings. **Participants should therefore bring their own laptop (not tablets, as the CIAS platform for intervention design is optimized for laptops).**

This interactive session is ideal for clinicians, researchers, and public health professionals seeking innovative ways to integrate technology into healthcare interventions.

## Pre-conference Workshop 4

### Basics of qualitative research: Concepts & Method

Thursday, 16 October, 09:00 - 12:00

- **Hans Thulesius** – GP, MD, PhD Professor of general practice at Linnaeus University and Associate Professor at Lund University (Sweden). Grounded-theory specialist with extensive experience in primary-care research, cancer diagnostics, palliative care, and telemedicine.
- **Alain Mercier** – Université Sorbonne Paris Nord (France). GP, MD, PhD, Professor and Head of the Department of General Practice. Co-author of leading textbooks on qualitative health research, with a special focus on mental-health care and chronic-condition management.

In this compact three-hour session participants will explore the essential steps of a qualitative study, considering the constraints imposed by the short timeframe. After a quick refresher on the philosophical underpinnings of qualitative research, attendees will learn how to craft a clear research question and select an appropriate sampling strategy. They will then design a concise interview guide and conduct a brief self-interview in pairs.

Because three hours cannot accommodate a full-scale analysis, the coding segment is intentionally streamlined: We'll only run a lecture on the basics of coding, and illustrate them with a few concrete examples.

#### Role of Participants

- Actively engage in discussions, group work, and role plays.
- Keep a logbook throughout the session for reflexivity and notes.
- Share personal experiences, assumptions, and reflections.
- Present group work outputs in plenary.
- Write down any questions to be answered (Keep track to answer remaining questions at the end)

Joining this workshop, you will acquire a solid foundation in qualitative methods, gain practical experience in question formulation and interview design, and obtain a concise, hands-on glimpse of coding that you can expand upon in your own projects.

**Theme Paper / Finished study****Fostering scholarship in GP Training in Ireland; a national initiative to build and enhance research engagement**

Aileen Barrett, Darach Brennan, Stephanie Dowling, Stephen Brennan, Ciaran Foley, Ruth Barrett

Irish College of GPs, D02 DK23 Dublin, Ireland. E-mail: aileen.barrett@icgp.ie

**Keywords:** GP training, scholarship, academic careers, quality improvement

**Background:**

Scholarship, encompassing clinical audit, quality improvement (QI) and research, is a cornerstone of GP training, yet trainee engagement remains limited. Our recent work has indicated the need for additional career opportunities and skills to support varied and enhanced careers, including those related to academic general practice.

**Research questions:**

What range of trainee and supervisor resources and organisational support are required to build research capacity on a national scale in general practice training in Ireland?

**Method:**

The project adopted a quality improvement approach, engaging stakeholders through interviews, presenting findings and generating faculty development supports in the first PDSA cycle. The second cycle generated national standards for the conduct and reporting of trainee clinical audits, QI projects, and research studies, emphasising structured methodologies and ethical rigour. This cycle culminated in recommendations for 'structures' (e.g., protected time, regional research days), 'processes' (e.g., standardised modules, proposal timelines), and resources' on a national level.

**Results:**

Supervisor frustration with research ethics processes dominated supervisors' perceptions of the challenges around trainee engagement in research; this outcome resulted in a new webinar for trainees and discussions with the REC around approval for non-interventional studies. In PDSA II, all proposed project standards achieved consensus (>60%) for inclusion and included the use of clearly defined features for each project type (e.g., complete audit cycles, SMART objectives for research). Engagement in faculty development initiatives, designed in Phase I, was limited, prompting a shift to e-learning. Trainee resources, such as blended learning modules and REC application webinars, were implemented.

**Conclusions:**

This project has provided a structured blueprint to address barriers such as supervisor confidence and time constraints. The resources needed include expanding e-learning, fostering cross-scheme collaboration and supervisor skills development.

**Points for discussion:**

1. Importance of identifying and managing key stakeholder perceptions of barriers early in the process of capacity building and fostering buy-in
2. How to build a collaborative project over time through the model of quality improvement
3. The role of academic career opportunities for a sustainable careers in general practice

**Theme Paper / Almost finished study****Intentions and Objectives of Trainers in the “Fighting Stigma in Healthcare Programme”: A qualitative Study**

Ando Rajaonah, Muriel Londres, Yannick Ruelle, Olivia Gross, Alain Mercier

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**Keywords:** Stigma, Family medicine, Medical education, Experiential learning, Health equity, Qualitative research

**Background:**

Empowering future family physicians includes addressing structural stigma in healthcare. In 2023–2024, general practice trainees at our university attended anti-stigma workshops. Trainers were selected via a public call guided by UNAIDS (2009) quality criteria, and focused on obesity, LGBTQIA+ identity, and mental health. Each trainer designed their intervention freely within this framework. Understanding the way trainers approached this task can shed light on how experiential knowledge is mobilised in teaching to promote inclusive care.

**Research questions:**

How do trainers conceptualise their role and intentions when delivering anti-stigma education to general practice trainees?

**Method:**

A qualitative study inspired by grounded theory was conducted. All trainers were interviewed post-intervention. Transcripts were analysed thematically using open, axial, and integrative coding.

**Results:**

Trainers used videos, testimonies, and role plays grounded in lived experience to raise awareness of stigma's impact. They promoted mutual engagement in care, encouraged reflection on physicians' influence over patients' lives, and highlighted the ethical and legal risks of discriminatory behaviour. They reframed themselves not only as care recipients, but as experts by experience, challenging the usual caregiver–patient hierarchy.

**Conclusions:**

Understanding trainers' intentions reveals how experiential anti-stigma education can support ethical, inclusive practice. A mirror study with trainees is underway.

**Points for discussion:**

To what extent can anti-stigma training during vocational education impact long-term clinical behaviours and decision-making in primary care?

How can general practice curricula better integrate reflective and experiential approaches to address structural stigma in healthcare?

What evaluation strategies are appropriate to assess the transformative impact of anti-stigma interventions in medical training?

**Theme Paper / Finished study**

## **Personal Experiences of Social Isolation Among U.S. Family Medicine Providers and Their Impact on Clinical Practice**

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**Keywords:** Loneliness, Social Isolation, Healthcare Workforce, Medical Education, Provider Wellbeing

### **Background:**

Social isolation and loneliness (SIL) are increasingly recognized as significant health risks affecting patient outcomes. While primary care providers are uniquely positioned to address SIL in patients, little is known about providers' own experiences with loneliness and how these personal experiences influence their clinical practice and teaching behaviors.

### **Research questions:**

How frequent is SIL among family medicine providers?

Do personal experiences with SIL influence providers' clinical engagement with loneliness as a health issue?

Are there demographic disparities in provider loneliness experiences?

### **Method:**

A cross-sectional survey was conducted through the Council of Academic Family Medicine Educational Research Alliance (CERA) among members of four major U.S. academic family medicine organizations (October-November 2024). We used the validated UCLA-3 item loneliness scale and assessed clinical practices, teaching behaviors, and available resources. Statistical analyses included descriptive and bivariate statistics.

### **Results:**

Among 1,004 respondents (response rate 20.7%), 27.8% scored  $\geq 6$  on the UCLA scale, indicating considerable loneliness. Loneliness prevalence was elevated among female providers (31.1%), providers being underrepresented in medicine (36.1%), and particularly Black/African American respondents (40.3%). Providers experiencing SIL reported less frequent patient discussions about loneliness (23.7% vs. 32.0%,  $p=0.023$ ), fewer community partnerships, and less frequent teaching about SIL. Most respondents (71.0%) reported inadequate clinical resources to address patient loneliness.

### **Conclusions:**

Family medicine educators experience substantial loneliness rates, particularly among minority groups — significantly higher than general population estimates ( $<20\%$ ). Personal SIL experiences appear to inhibit rather than enhance clinical engagement with loneliness. Before implementing widespread patient screening initiatives, the profession must address providers' own social connectedness needs and develop practical clinical resources.

### **Points for discussion:**

How do these U.S. findings compare to European healthcare provider experiences?

What are current and future strategies that medical institutions can implement to simultaneously support provider wellbeing and develop effective patient loneliness screening and intervention programs?

Is SIL in family medicine providers a risk factor for provider burnout?



**Theme Paper / Finished study****Improving Collaboration Between GPs and Urologists Through Population-Based Screenings of Men's Health During Movember**

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**Keywords:** prostate cancer; male health; movember**Background:**

Diseases of the prostate and male reproductive system affect men across all age groups, with implications for quality of life and longevity. Despite this, men often delay preventive check-ups and specialist consultations, even when symptomatic.

**Research questions:**

Can preventive campaigns like Movember strengthen collaboration between GPs and urologists? Do such initiatives increase early detection and improve men's health outcomes?

**Method:**

This multicenter prospective observational study was conducted in five Bulgarian cities using two different implementation models.

In one city, a community-based outreach model was applied, with a month-long screening campaign supported by extensive media promotion, allowing men of all ages to self-refer.

In four other cities, a GP-led referral model was used, where access to screening was provided through GP recommendation, primarily targeting men over 50 or those with symptoms.

Participant data included age, symptom status, and newly diagnosed conditions. Quantitative data were analyzed descriptively and comparatively between models using standard statistical methods.

**Results:**

In the community-based outreach model, an average of 432 men (range 360–570) participated over one month. Mean age was 62 (range 26–93). Symptomatic participants accounted for 75%, of whom 51% presented with new complaints, 23% had stable conditions, and 26% had disease progression. Oncological pathology was identified in 36%.

In the GP-led referral model, an average of 23 men participated per screening day (range 14–38), with a mean age of 74 (range 58–94). Symptomatic cases were 91%, including 32% with new complaints, 63% with worsening symptoms, and 5% asymptomatic.

**Conclusions:**

Both models improved collaboration between GPs and urologists and enhanced early detection. Community-based outreach resulted in higher participation and earlier-stage detection, while GP-led referral identified more severe or progressed cases. Regional infrastructure and system support determine the most suitable approach.

**Points for discussion:**

Can collaboration between GPs and urologists be strengthened through community-based men's health screening campaigns?

**Theme Paper / Finished study****Inter-professional learning from the experience of patient-mentors**

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**Keywords:** interprofessional education, epistemic injustices, incorporated knowledge, transformational learning

**Background:**

Informal and hidden curricula as well as the positivist paradigm partly explain the decline in empathy observed among health students. They also generate epistemic inequities that are exerted on patients but also between health professionals. An interprofessional program involving patient-mentors was set up as part of the initial training of health students to improve this situation

**Research questions:**

How does the programme contribute to achieving its intended objective, and what are the underlying mechanisms that help identify its active components?

**Method:**

Forty-five health students from six different training courses were brought together in small groups on four occasions with a patient-mentor. The qualitative study combined individual and group interviews as well as written responses to a questionnaire.

**Results:**

These meetings acted as a trigger for transformational learning. The students became aware of some of their prejudices and limitations, which should foster more horizontal relationships with patients and other health professionals. The self-management of the groups, the fact that the number of participants in these groups was relatively small, the multiple encounters with a patient outside of care, and the suggested themes for discussion, enabled the updating of learning mechanisms. The latter refer to decentration, humility, nonjudgment and closeness which were actualized in these groups. The development of autonomous thinking and the consideration of their own feelings can be seen as intermediate effects. The final effects are the development of embodied knowledge of the patient-centered approach and an increased sense of responsibility. Both dimensions are manifested in new resolutions and new professional practices.

**Conclusions:**

The study explains the learning processes of the students in teaching of this order. But it also shows that transformational learning is still possible at this stage of their studies

**Points for discussion:**

What strategies are needed to support the sustainability of transformational learning beyond the initial programme setting?

To what extent does this programme challenge dominant paradigms in health education, and how can these shifts be institutionally supported?

**Theme Paper / Finished study****Nursing Students' Perceptions of Family Medicine Nursing: A Qualitative Study**

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**Keywords:** Family Medicine , Nursing, Qualitative study, Nursing student

**Background:**

This qualitative study aimed to explore the opinions of nursing students regarding the role of family medicine nurses in Turkey.

Understanding the perceptions and attitudes of nursing students regarding the role of family medicine nurses is crucial for shaping future healthcare practices and educational strategies in Turkey.

**Research questions:**

How do nursing students perceive the role of family medicine nurses in the Turkish primary healthcare system?

**Method:**

Semi-structured interviews were conducted with 25 nursing students enrolled in Çankırı Karatekin University nursing Faculty in Turkey. Participants were selected through purposive sampling to ensure diverse perspectives. Thematic analysis was employed to identify recurring themes and patterns in the data.

**Results:**

Key themes emerged from the analysis of nursing students' opinions;

Perceptions of the Family Medicine Nurse Role: Participants described family medicine nurses as pivotal members of the healthcare team, emphasizing their roles in preventive care, patient education, and community outreach.

Challenges and Opportunities: Students highlighted various challenges faced by family medicine nurses, such as heavy workload, limited resources, and lack of recognition.

Educational Preparedness: Participants expressed the need for comprehensive training programs that equip nurses with the skills.

**Conclusions:**

This study provides valuable insights into the importance of addressing challenges, enhancing educational preparedness, and promoting patient-centered care to optimize the contribution of nurses in primary healthcare settings.

**Points for discussion:**

Ideal number of number of participants?

Is there any idea or concept for semistructured questions?

**Freestanding Paper / Finished study****Morbidity and survival profile of adults diagnosed with ASD compared with the general population – matched cohort study.**

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**Keywords:** ASD; Autism; Morbidity; Epidemiology

**Background:**

Autism Spectrum Disorder (ASD) is an early-onset and lifelong neurodevelopmental condition requiring continuous resources and support throughout life. Although there is substantial research concerning pediatric populations with ASD, the adult population remains underexplored.

**Research questions:**

What are the differences in morbidity characteristics between adults with ASD compared with the general population, and how can these inform preventive care strategies?

**Method:**

This is a retrospective cohort study, with a timeframe encompassing up to 26 years of follow-up. Included adults patients (>18 years) with an ASD diagnosis. A random control group was matched in a 3:1 ratio to the ASD group based on age, sex and socioeconomic status. Patient records were scanned to identify diagnoses of multiple diseases and their dates of diagnosis. Statistical analysis was performed to compare incidence and timing of diagnosis between the groups, and interaction between the variables.

**Results:**

The study cohort comprised of 5326 men and 1639 women diagnosed with ASD with a mean age of 28 years. The hazard of developing Diabetes Mellitus type 2 (DM2), High Blood pressure (HBP) and Inflammatory Bowel Disease (IBD) diagnosis increased by 47%, 24%, and 60% respectively, by belonging to the ASD group versus the control group, and with a lower age of diagnosis. The likelihood of being overweight was higher by 49% in the ASD group compared to the control group at any point during the study's follow-up period and was correlated with psychiatric diagnosis. The risk of Schizophrenia increased twofold. Incidence of COPD, Cardiovascular diseases and Bipolar disorder were not significantly different between groups.

**Conclusions:**

Our study highlights the distinct characteristics of adults with ASD compared to the general population, notably a significantly higher prevalence and younger age of diagnosis of various chronic conditions. These findings emphasize the need for targeted interventions for ASD adults, with a focus on preventive measures.

**Points for discussion:**

Morbidity Patterns

Primary care for various populations

**Freestanding Paper / Almost finished study****Sex differences in the economic impact of chronic kidney disease in primary care: the retrospective cohort REDIC study**

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**Keywords:** "Chronic Kidney Disease" "Sex" "Costs" "Economic evaluation"

**Background:**

Chronic kidney disease (CKD) is a growing global health problem, especially in aging populations. Sex influences various aspects of CKD aetiology, diagnosis, and management, but its impact on healthcare resource use and costs remains unclear.

**Research questions:**

This study aims to explore sex-based differences in healthcare costs related to incident CKD in primary care, according to KDIGO risk and cardio-renal-metabolic comorbidities (CRMC).

**Method:**

We conducted a retrospective cohort study using electronic health records from the SIDIAP database (2012–2021), covering ~75% of the Catalan population. Adults with incident CKD were included based on diagnostic codes or persistent renal parameters (eGFR <60 ml/min/1.73m<sup>2</sup> or ACR ≥30 mg/g for ≥90 days). Costs (hospitalizations, visits, drugs, tests, referrals, sick leave and kidney replacement therapy -KRT-) were calculated per person-years from CKD onset until end of follow-up and stratified per KDIGO risk and CRMC (T2D and/or HF). Cost ratios (CR) were estimated dividing costs for men by costs for women.

**Results:**

Among 428,434 incident CKD patients (54.03% women), hospitalizations accounted for 61.2% of costs. Men incurred higher economic burden in hospitalization costs (CR ranging from 1.18 in T2D, HF and very high KDIGO risk patients to 1.40 in patients with very high risk and no CRMC), sick leave (from 1.61 to -in T2D, HF and very high KDIGO risk-18.95), KRT (1.09 - 4.68), drugs (1.12–2.00), tests (1.08-1.37), and referrals (1.01-1.48). Visit-related costs varied from 0.93 in patients with T2D and moderate KDIGO risk, to 1.07 in patients with HF and very high risk.

**Conclusions:**

Sex differences exist in the economic impact of CKD follow-up, with men generally generating higher costs. Despite concerns about underdiagnosis and undermanagement in women, this did not translate into greater resource use within comorbidity- and risk-matched groups. The observed differences may relate to underlying renal disease differences and prognosis in women and men.

**Points for discussion:**

Should CKD follow-up strategies in primary care be sex-specific?

Could current CKD risk stratification tools be sex-biased?

How do biological and sociocultural gender factors influence CKD management?

**Freestanding Paper / Almost finished study**

## **Tracking Risk Factor Trends in a Structured Chronic Disease Management Programme: Real-World Evidence from Irish General Practice**

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**Keywords:** Chronic Disease , Longitudinal Study, Cardiometabolic Health, Real-World Evidence

### **Background:**

The chronic disease management (CDM) programme in general practice, introduced in 2020, aims improve long-term clinical outcomes through structured, protocol-driven care. While widely implemented, there is limited published evidence on real-world patient trajectories under CDM in Irish primary care. This study evaluates clinical trends in a single practice over the initial years of CDM implementation.

### **Research questions:**

We aimed to examine:

- (1) participation rates and delivery under CDM,
- (2) within-patient trends in clinical parameters across visits

### **Method:**

We are conducting a longitudinal observational study using routinely collected health records from a single practice participating in the programme. All eligible patients with  $\geq 4$  independent CDM visit between June 2020 and May 2023 were invited. Metrics were grouped by visit rank (1–4) to assess trends in blood pressure, cholesterol, HbA1c, BMI, and eGFR. Values were averaged per visit; targets and change scores were calculated per patient. The initial 3 years of data have been collected and analysed; 2024 and 2025 data are being collected now.

### **Results:**

Based on initial data, 956 patients enrolled in CDM (95% uptake), 43% were aged 70–79 and the average number of chronic disease diagnoses was 1.7 per patient. In patients with  $\geq 4$  CDM visits, mean systolic blood pressure declined from 142 mmHg at baseline, to 132 mmHg at visit 4, and with an increasing proportion achieving target control. LDL cholesterol and HbA1c (T2DM patients) showed modest improvements, while BMI remained stable. Prescribing patterns suggest appropriate use of statins and diabetes medications but require further analysis.

### **Conclusions:**

Structured CDM participation was associated with modest improvements in blood pressure, lipids, and glycaemic control. Findings support the value of sustained engagement, with further follow-up needed to assess long-term benefit and prescribing impact.

### **Points for discussion:**

Why do some risk factors (like blood pressure) improve, while others (like weight or smoking) don't?

What's the best way to use GP prescribing data to understand how treatments are working in the real world?

We often focus on people who improve — but how should we track and support those who start within target but slowly worsen?

**Freestanding Paper / Almost finished study****Evidence-Based Practice in Primary Care: A Cross-Sectional Study of Family Physicians in Türkiye**

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**Keywords:** Evidence-Based Practice; Primary Care Physicians; Physicians, Family

**Background:**

Evidence-based practice (EBP) is a key component of high-quality primary care. However, the integration of research findings and clinical guidelines into everyday medical practice can be challenging, especially in settings with limited resources. Identifying the specific barriers faced by clinicians is crucial to designing strategies that can promote and facilitate EBP adoption.

**Research questions:**

What are the perceived barriers to implementing evidence-based practice among family physicians working in primary care settings in Türkiye?

**Method:**

A descriptive cross-sectional study was conducted between March and December 2024 using an online survey targeting family physicians across Türkiye. The questionnaire included three sections: (1) sociodemographic and professional characteristics; (2) a 13-item list of potential barriers to EBP, rated on a 3-point Likert scale (not affecting, partially, strongly affecting); and (3) the 15-item Evidence-Based Practice Attitude Scale (EBPAS), with items rated from 0 to 4.

**Results:**

A total of 245 family physicians participated. The most commonly reported barriers were limited access to full-text articles (59.6%), lack of time to read current literature (40.8%), and lack of reimbursement for guideline-based care (37.1%). The mean total EBPAS score was  $35.0 \pm 7.4$ , indicating moderately positive attitudes. Subscale scores were highest in Divergence (12.0), followed by Appeal (10.4), Openness (8.3), and Requirements (4.4). EBPAS scores showed no significant differences by gender, region, title, or patient load. However, age correlated negatively with total score ( $p = -0.24$ ,  $p < 0.001$ ). Physicians who “always” used guidelines had the highest average score (43.0). Open-ended responses frequently mentioned use of TEMD (Turkish Endocrinology Association) guidelines and National Public Health protocols on vaccination and maternal-child care.

**Conclusions:**

While attitudes toward EBP are generally positive, structural and practical barriers persist. System-level interventions are needed to improve access to evidence, encourage guideline use, and support younger clinicians in maintaining evidence-informed care.

**Points for discussion:**

How Can Access Barriers Be Overcome?

How Can Younger Physicians' Positive Attitudes Be Sustained?

How Can Guideline Use Be Promoted in Daily Practice?

**Freestanding Paper / Almost finished study****From Tutor to Trusted Colleague: Exploration of the Expanding Role of CME Tutors in Irish General Practice**

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**Keywords:** CME Tutor, Qualitative research, Career sustainability, Role navigation

**Background:**

Continuing Medical Education small group learning (CME-SGL) plays a vital role in supporting general practitioners (GPs) through ongoing professional development. While previous research has demonstrated CME-SGL's positive impacts for individual group members, including those related to prescribing, reduced burnout, and enhanced competence, we know little of the personal experiences, motivations, and unique challenges faced by the CME tutors who deliver this vital education.

**Research questions:**

This study examined the experiences of CME tutors in Ireland, asking 'what are CME tutors' reflections on the value of their role and its impact on their careers?'. Approaching the study through a constructivist lens, we also explored whether and how this role has influenced their formation of professional identity.

**Method:**

Thirteen CME tutors across Ireland participated in semi-structured interviews, conducted via Zoom. The anonymised transcripts were analysed thematically.

**Results:**

Participants primarily identified as GPs, but their enthusiasm for peer learning and education led them to become CME tutors. As CME tutors, they felt that being a facilitator rather than an expert allowed them to learn equally from GP peers. CME tutors embraced the role of 'go-to' person: being perceived as someone approachable, reliable and consistently supportive. However, they did describe some tensions to be navigated, including some personal ones related to managing their own and others' expectations. Tutors also described the regular conflict between participants' professional and personal roles, particularly given that the majority of small group CME events took place after work hours. Despite these challenges, CME tutors viewed their role as deeply rewarding and enriching their clinical practice, reflective skills, and identity as both doctors and educators.

**Conclusions:**

The career of CME tutors in Ireland was highly valued among participants; yet, additional support is needed to address role-related challenges and ensure the long-term attractiveness and sustainability of this vital professional path.



**Freestanding Paper / Finished study****How Old Do You Feel: Questioning Subjective Age in Primary Care: General Practitioners Reflect on Its Role in Clinical Practice**

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**Keywords:** Subjective age; chronological age; Functional Health; Perceived Age

**Background:**

Subjective age has been linked to health outcomes, including functional decline and increased mortality risk. However, its utility in primary care settings remains underexplored. This study aimed to evaluate whether the question "How old do you feel?" could enhance physician-patient communication and improve patient care in primary care consultations.

**Research questions:**

1. Do GPs find this question useful in clinical encounters?
2. Do GPs find the question leads to useful information and discussion?
3. Do GPs feel the question beneficial to understanding the patient better?

**Method:**

In this observational study, thirteen primary care physicians (PCPs) asked 194 patients aged 50 and older the question "How old do you feel?" during clinical encounters. Following each encounter, PCPs completed a questionnaire to assess the impact of the question on the consultation. Data were analyzed using descriptive statistics and multivariate logistic regression to identify factors influencing physicians' perceptions of the question's utility. We also evaluated their free text responses to understand their perceptions of this question.

**Conclusions:**

PCPs reported positive experiences, with 74% of consultations leading to further discussions, and 80% of PCPs felt the question improved their understanding of the patient. Sixty-two percent believed the question benefited the patient. Factors such as physician age, experience, and patient multimorbidity were significantly associated with positive perceptions of the question's utility.

**Points for discussion:**

How can we further the understanding of this tool?

How can we increase GPs awareness of this tool?

Should further research examine patient's perception of this question?

Presentation on 17/10/2025 11:40 in "Parallel Session C: Freestanding Papers" by Robert Hoffman.

## Theme Paper / Finished study

## Feasibility and preliminary findings of a 7-Day caloric restriction protocol in Long COVID: A pilot study

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**Keywords:** Long COVID, Caloric restriction, Post-COVID-19 condition, Ambulatory intervention, Therapeutic fasting;

### Background:

Long COVID (LC), or post-COVID-19 condition, affects approximately 10–20% of individuals following acute SARS-CoV-2 infection, often leading to fatigue, cognitive dysfunction, and reduced quality of life. Effective treatment strategies remain scarce. Fasting and caloric restriction have shown potential benefits in chronic conditions, yet their application in LC, particularly within ambulatory care, remains underexplored. This pilot study aimed to evaluate the feasibility and preliminary effects of a 7-day structured caloric restriction protocol in individuals with LC.

### Research questions:

Can a structured, ambulatory 7-day caloric restriction protocol (Buchinger-Wilhelmi method) be feasibly implemented in individuals with LC?

What are the preliminary effects on clinical, psychological, and biological outcomes?

### Method:

Twenty individuals with LC were enrolled in a 7-day supervised fasting program ( $\leq 350$  kcal/day) based on the Buchinger-Wilhelmi method. Assessments were conducted at baseline, daily during the intervention (via phone and online monitoring), post-intervention, and at one- and three-week follow-ups. Biological samples (blood, stool, urine) and validated psychometric instruments (FAS, PHQ-9, GAD-7, WHOQOL, WHODAS 2.0) were collected. The primary endpoint was feasibility, assessed by adherence, safety, tolerability, and data completeness. Secondary exploratory outcomes included changes in clinical, psychological, and biological parameters.

### Results:

Nineteen of 20 participants completed the intervention (95% adherence), with only one dropout. At the time of reporting, two participants had reached day 6 of the intervention. The ambulatory caloric restriction model proved logistically feasible, well tolerated, and showed early indications of symptomatic improvement. Biological samples were successfully collected for future analyses, including cytokine profiling, microbiome assessment, immune and dementia biomarkers, mitochondrial dysfunction, and DNA methylation.

### Conclusions:

This pilot study supports the feasibility of implementing structured caloric restriction protocols in ambulatory LC care. Such integrative, non-pharmacological interventions may expand the role of primary care and family physicians in managing complex chronic conditions. Larger controlled trials are necessary to evaluate clinical efficacy.

### Points for discussion:

Can ambulatory fasting be a potential intervention to improve symptoms in LC patients?

What training or support do clinicians need to deliver such interventions safely and effectively?

Can this ambulatory model inform broader approaches to managing chronic illness in primary healthcare and outpatient settings?

**Theme Paper / Almost finished study**

## **Identifying Terminological Biomarkers of Long COVID Through Narrative Medicine and Ontology Mapping**

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**Keywords:** Post-Acute COVID-19 Syndrome; ; Human Phenotype Ontology; Narrative Medicine; Natural Language Processing; Large Language Models; General Practice; Observational Studies as Topic; Controlled Vocabulary; Belgium; Terminological Biomarker

### **Background:**

Long COVID presents with complex and multisystemic symptoms that are difficult to recognize and document using traditional diagnostic classifications in primary care.

### **Research questions:**

To explore how Human Phenotype Ontology (HPO) can be used to index and analyze patient narratives in general practice and to propose the concept of a "terminological biomarker" to describe the syndrome

### **Method:**

A four-year observational study (2021--2025) conducted in a Belgian general practice, combining narrative interviews, ontology mapping, and a large language models (ChatGPT). Patient narratives were transcribed and indexed using ChatGPT-assisted prompts. HPO terms were extracted and validated using semantic similarity methods, and combined with clinical metadata and functional outcome scores. In parallel, peripheral blood samples were collected from each patient and analyzed transcriptomically to identify potential molecular signatures associated with viral persistence.

### **Results:**

In a cohort of 307 patients, 1320 distinct HPO terms were identified. Fatigue, memory impairment, and exertional intolerance were most frequent. Manual verification confirmed the reliability of the LLM-HPO matching. A subset of 50 patients showed transcriptomic evidence of viral persistence.

### **Conclusions:**

HPO enables structured representation of complex symptoms in Long COVID and supports narrative-informed documentation. The proposed "terminological biomarker" bridges lived experience and clinical semantics, providing a reproducible signal for emerging syndromes. Future studies will examine the correspondence between biological findings, particularly transcriptomic data, and the terminological patterns derived from patient narratives.

### **Points for discussion:**

Narrative medicine can be transformed into a terminological biomarker, especially in the context of complex or poorly defined conditions like Long COVID

By integrating patient expressions into structured medical vocabularies, previously dismissed or "medically unexplained" symptoms gain visibility and legitimacy.

Narrative medicine becomes a source of terminological biomarkers when patient language is extracted, normalized, and reintegrated into structured clinical terminologies.

**Theme Paper / Almost finished study****“It's all a struggle and an effort” – Experiences of people with Post-COVID-Syndrome dealing with their symptoms**

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**Keywords:** Post-Covid Syndrome, general practitioner, coping strategies, healthcare system experiences, qualitativ resesarch

**Background:**

Following a COVID-19 infection, some people develop long-term symptoms such as fatigue or shortness of breath - symptoms of Post-COVID Syndrome (PCS). These PCS patients face considerable challenges in everyday life, at work, and within the healthcare system. General practitioners (GP) play a pivotal role in providing care to PCS patients as they are often the first point of contact.

**Research questions:**

This study aims to examine how patients with PCS cope in everyday life and their experiences within the healthcare system, with a particular focus on the care provided by GPs.

**Method:**

This qualitative study is part of a larger mixed-methods research project on PCS. Participants were recruited via a random sample of people diagnosed with PCS and insured by a German sickness fund. The research team conducted 26 semi-structured interviews. The audio-taped and transcribed interviews were analyzed using qualitative content analysis according to Kuckartz and Rädiker (2022) in MAXQDA 2024.

**Results:**

PCS patients reported that they felt severely impaired by their symptoms in everyday life. Many were unable to work. Their mental health was negatively affected. They developed individual and social coping strategies, e.g. searching for information on PCS or re-distributing family tasks. Within the healthcare system, PCS patients often felt ignored or even stigmatized due to a lack of understanding and recognition of their persistent symptoms. However, some healthcare professionals, particularly GPs, displayed empathy and offered active support. This validation was highly beneficial for PCS patients' illness adjustment.

**Conclusions:**

PCS patients struggle to manage their condition in everyday life and perceive support from the healthcare system as insufficient. GPs can lighten the observed emotional burden by taking PCS patients' symptoms seriously and working with a symptom-oriented, biopsychosocial treatment concept. The study demonstrates methodological robustness due to random sampling, an appropriate sample size for qualitative research, and systematic qualitative analysis.

**Points for discussion:**

1. Are there specific care structures or best practice examples for managing PCS in your country?
2. How is PCS perceived by the general public in your country?
3. Do you know about any political supportive actions for PCS patients in your country and if so, how do they work?

**Freestanding Paper / Finished study****Mortality predictors in hospitalized patients with Covid-19**

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**Keywords:** mortality Covid-19

**Background:**

In Bulgaria, statistical data documented a mortality rate of 369 per 100 000 of the population, ranking second worldwide and first in Europe.

**Research questions:**

The objective was to outline the specifics of the Bulgarian patients with Covid-19, alongside with the most important mortality predictors.

**Method:**

The study was retrospective, observational and included 306 hospitalized patients, with a positive PCR test. They were assigned into three severity groups: moderate, severe and critical. Demographic, clinical, laboratory and imaging parameters were assessed. Parametrical and non – parametrical analysis was used for statistics.

**Results:**

Results showed that unlike data from most European countries, in Bulgaria, demographic factors did not impact mortality. – patients aged < 65 had a lower mortality rate compared to those > 65 but the difference was not statistically significant ( $p=0.125$ ). Patients' sex, place of residence, smoking status and living in a nursing care facility did not affect mortality rates significantly ( $p=0.457$ ,  $p=0.680$ ,  $p=0.234$ ,  $p=0.259$  resp.). Patients with cough and breathlessness had worse outcomes compared to those without –  $p=0.029$  and  $p=0.002$  resp.). Laboratory parameters indicating high risk of lethal outcome were: elevated serum d- dimers, creatinine and ferritin:  $p=0.0015$ ,  $p=0.038$  and  $p=0.009$  resp.). Hypoxemia on ABG also had a negative impact on survival –  $p=0.006$  and  $p=0.021$  resp. Moreover, patient with normal chest X rays on admission had a good disease outcome, compared with those with signs of pneumonia, the difference being statistically significant –  $p=0.031$ . In terms of comorbidities, patients without pre-existing disorders had better survival rates compared to those with comorbidities –  $p=0.031$ ). Among comorbidities – chronic cardiovascular and pulmonary disorders as well as diabetes adversely affected the outcome of Covid-19 –  $p=0.003$ ,  $p=0.003$  and  $p=0.017$  resp. ).

**Conclusions:**

Knowledge of and early stratification of patients will positively influence the outcome.

**Points for discussion:**

lack of age difference in the mortalit rates in Bulgaria

lack of male predominance

**Freestanding Paper / Finished study****Point-of-Care Ultrasonography in Turkish Primary Care: A Qualitative Exploration of Practice and Experience**

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**Keywords:** : Family physicians, ultrasonography, Turkey, qualitative study, primary care, point-of-care ultrasound (POCUS)

**Background:**

Ultrasonography (USG) use by family physicians (FPs) is growing worldwide but remains limited in Turkey. There is little research on how FPs incorporate USG into their practice without formal training or institutional support. Understanding their experiences can help guide policy, training, and technology integration in primary care. This study explores the motivations, training, practical use, and challenges of Turkish family physicians who use USG in daily clinical work.

**Research questions:**

What are the experiences, motivations, and challenges of family physicians using ultrasonography in Turkey?

**Method:**

This qualitative study used a phenomenological approach and COREQ guidelines. Ten family physicians from various regions of Turkey were selected through purposive and snowball sampling. Inclusion criteria included at least six months of USG use in primary care and having received some form of training. Semi-structured interviews were conducted via video conferencing and transcribed verbatim. Data were analyzed thematically using MAXQDA 2020. Themes were developed from the data, revised and adjusted throughout the coding process. Thirteen main themes were identified and supported with participant quotations.

**Results:**

Physicians were motivated by clinical needs, personal interest, and gaps in diagnostic access. Education sources varied, with most attending short courses or gaining informal training through clinical experience. Applications included abdominal pain evaluation, pregnancy screening, and chronic disease management. Physicians used basic or secondhand equipment. They found USG beneficial for patient care and decision-making. However, some noted that it could increase workload and time pressure, especially in busy primary care settings. Despite challenges, many believed that using USG in family medicine is inevitable in today's technology-driven healthcare environment.

**Conclusions:**

Ultrasonography is seen a valuable tool by Turkish FPs, especially in underserved areas. Their experiences show both strong motivation but limited support. With better training, policy support, and equipment, USG can become a routine part of primary care, improving efficiency, physician confidence, and patient satisfaction.

**Points for discussion:**

Should Family Physicians use Ultrasonography in their daily clinical practice?

Should medical students receive training in ultrasonography during their undergraduate education? Why or why not?

"How can the use of ultrasonography be expanded in family medicine? What policy-level support would make this possible?"

**Freestanding Paper / Finished study****Predictive Role of Systemic Immune-Inflammation Index in Hypertension: First Outcomes**

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**Background:**

Hypertension is a major global health issue and key cardiovascular risk factor. Beyond classic mechanisms like renin-angiotensin-aldosterone system activation and vascular remodeling, chronic inflammation is increasingly recognized in its pathophysiology. The Systemic Immune-Inflammation Index, calculated from routine blood counts, has gained attention as a potential early indicator of systemic inflammation, especially in primary care.

**Research questions:**

Can Systemic Immune-Inflammation Index serve as a potential indicator of inflammation in hypertensive individuals in primary care?

Is there a significant difference in Systemic Immune-Inflammation levels between hypertensive patients and healthy individuals?

Does Systemic Immune-Inflammation Index vary by gender or presence of comorbidities in hypertensive patients?

**Method:**

This retrospective case-control study included 655 hypertensive patients and 669 healthy controls. Systemic immune-inflammation index was calculated from complete blood count parameters. Normality was assessed using histogram, probability plot and analytical (Kolmogorov-Smirnov/Shapiro-Wilk) tests. Mann-Whitney U test was used for group comparisons. Binary logistic regression identified independent predictors. Model fit was tested with Hosmer-Lemeshow. Receiver Operating Characteristic analysis determined diagnostic value; sensitivity, specificity, positive predictive and negative predictive values were calculated.

**Results:**

Median Systemic Immune-Inflammation Index levels were significantly higher in the hypertensive group (536.9) than in controls (381.3) ( $p < 0.0001$ ). Newly diagnosed hypertensive patients had even higher index levels than previously diagnosed patients (median: 731.8 vs. 532.5;  $p < 0.0001$ ). No significant difference was found between patients with or without comorbidities. However, index levels were significantly higher in females than males ( $p = 0.003$ ). Systemic immune-inflammation index  $\geq 520.45$  predicted hypertension with sensitivity 52.4%, and specificity 83.6%.

**Conclusions:**

Systemic immune-inflammation index is significantly elevated in hypertensive patients and may serve as a practical, low-cost inflammatory marker in primary care. Its elevation, particularly in newly diagnosed cases, suggests potential utility in early detection. These findings highlight the importance of integrating inflammation monitoring into hypertension management, possibly paving the way for anti-inflammatory treatment strategies in the future.

**Points for discussion:**

Could systemic immune-inflammation index be integrated into routine primary care practice as a low-cost tool for assessing inflammatory burden in hypertensive patients?

How might anti-inflammatory strategies be incorporated into hypertension management if inflammation plays a causal role?

Can systemic immune-inflammation index be used to predict hypertension risk in individuals without a current diagnosis?

## Theme Paper / Finished study

## Cis-Heteronormativity and Discrimination in Primary Care: A Qualitative Study on LGBTQI+ Healthcare

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**Keywords:** LGBTQI+ health, Cis-heteronormativity, Inclusive primary healthcare

### Background:

LGBTQI+ individuals face well-documented disparities in access to healthcare, contributing to increased vulnerability to a range of diseases. Primary care, as the first point of contact for most patients, has the potential to either mitigate or reinforce these disparities. This study investigates how cis-heteronormative assumptions, that patients are cisgender and heterosexual, embedded in biomedical discourse and clinical practice result in discrimination against LGBTQI+ individuals.

### Research questions:

How does cis-heteronormativity manifest in healthcare practices, and how does it affect LGBTQI+ patients' access to and quality of primary care?

### Method:

A qualitative study was conducted using 42 semi-structured interviews across three groups (n=14 each): LGBTQI+ patients, LGBTQI+ healthcare professionals, and non-LGBTQI+ providers. Supplementary field observations were carried out in three outpatient clinics of public hospitals in Thessaloniki. Data were analyzed using critical discourse analysis, informed by queer theory and the social determinants of health framework.

### Results:

Non-cisgender and non-heterosexual identities are often pathologized or rendered invisible in the discourse and practices of psychiatry, gynecology, endocrinology, and infectiology. Lesbian and gay patients frequently receive reproduction-focused sexual health advice irrelevant to their needs. Trans individuals often avoid Pap tests due to non-inclusive procedures and must undergo psychiatric evaluation to access hormone therapy, reinforcing binary gender norms. LGBTQI+ individuals may be referred to exploratory or corrective mental health interventions. Such practices either pathologize or dismiss LGBTQI+ health needs in core areas of primary care, such as sexual and reproductive health, mental health, and hormone-related treatment (initiation, follow-up, or referral).

### Conclusions:

Cis-heteronormativity acts as a structural barrier to equitable care within healthcare settings, reinforcing discrimination against LGBTQI+ patients. Inclusive sexual histories, gender-neutral forms, organ-based screening, accessible gender-affirming care, and welcoming environments are essential changes. With its holistic and patient-centered approach, primary care can play a critical role in promoting inclusivity and reducing health disparities.

### Points for discussion:

What everyday clinical practices in primary care reflect cis-heteronormative assumptions, and how do they limit access to care for LGBTQI+ patients?

How can inclusive practices of care in sexual and reproductive health, mental health, and hormone treatment be integrated into PHC to address LGBTQI+ health needs?

Beyond individual clinician attitudes, what changes in healthcare training, organizational structures, and clinical protocols (e.g., intake forms, pronoun use) are needed to create inclusive and affirming primary care environments?



**Theme Paper / Finished study****Digital Health Literacy Interventions for Mental Health Improvement in Primary Care: Evidence from a Systematic Review and Meta-Analysis**

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**Keywords:** digital health literacy, primary health care, mental health, affective disorders,

**Background:**

Depression and anxiety are highly prevalent in primary care and often go underdiagnosed or undertreated. Digital health interventions—including apps, telehealth, and online platforms—offer promising tools to support emotional wellbeing and improve health literacy. However, evidence on their real-world effectiveness in primary care remains limited and heterogeneous.

**Research questions:**

What is the effectiveness of digital health literacy interventions in reducing symptoms of depression and/or anxiety in adult patients in primary care settings?

**Method:**

This systematic review and meta-analysis included randomized controlled trials (RCTs) evaluating digital health literacy interventions in adults ( $\geq 18$  years) within primary care. Digital formats included mobile apps, telemonitoring systems, web-based platforms, and structured phone-based support. Outcomes were changes in validated depression and anxiety scores. A random-effects meta-analysis using standardized mean differences (SMD) with 95% confidence intervals (CI) was conducted. Subgroup analyses examined intervention type and patient characteristics.

**Results:**

Overall, digital strategies showed a moderate-to-large reduction in affective symptoms (SMD =  $-1.756$ ; 95% CI:  $-2.55$  to  $-0.96$ ). Telephone-based interventions had the strongest effect (SMD =  $-2.226$ ), followed by mobile apps and online platforms. In patients with chronic diseases, digital interventions had a greater impact (SMD =  $-5.115$ ; 95% CI:  $-6.95$  to  $-3.28$ ). Studies reporting significant post-intervention health literacy improvement also showed greater symptom reduction (SMD =  $-2.233$ ; 95% CI:  $-3.04$  to  $-1.42$ ). However, heterogeneity was high ( $I^2 > 98\%$ ).

**Conclusions:**

Digital health literacy interventions appear effective in reducing depression and anxiety symptoms, particularly in chronically ill patients. Despite promising results, heterogeneity and methodological variation limit generalizability. Further standardized trials are needed. These tools may offer accessible, scalable options to enhance mental health care in primary settings.

**Points for discussion:**

1. How can culturally adapted digital tools be better integrated into routine primary care?
2. What standardized outcomes should be used to assess digital mental health literacy interventions?
3. What are the key drivers behind the high heterogeneity among studies?

**Theme Paper / Almost finished study****Mental Health in Physicians: Perspectives and Challenges from surveys in Barcelona**

Brenda Biaani León-Gómez, Candela Sancho Vallvé, Anna Mitjans, Gemma Seda Gombau, Adrià Prior Rovira, Juan Jose Montero, Antonio Calvo, Pere Toran Monserrat

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**Keywords:** Mental health; Physicians; Primary Care; Gender disparities; Work conditions

**Background:**

Physicians' mental health is essential for both their well-being and the quality of care they provide. In recent years, technological advancements, the COVID-19 pandemic, and population ageing have increased workload and the complexity of clinical consultations, exacerbating stress and pressure on healthcare professionals. Understanding these patterns is critical for designing policies that support the next generation of physicians in increasingly demanding healthcare systems.

**Research questions:**

How are working conditions, and work setting associated with physicians' mental health?

Do mental health outcomes differ by gender, age, or country of origin among physicians in Barcelona?

Has the proportion of physicians holding multiple job positions increased during the study period, and what is its relationship to mental well-being?

**Method:**

Cross-sectional study was conducted using data from 2 annual surveys. Mental health was measured through the General Health Questionnaire -GHQ-12. Information on age, sex, country of origin, number of jobs, work sector, and main work setting was collected. Statistical analyses included chi-square tests and logistic regression were deployed.

**Results:**

From 1,368 physicians (928 women) in Barcelona, 55% were over 50 years old and 16.5% were foreign-born. Approximately 32.8% held multiple jobs -with an increase from 32.3% in 2021 to 34.7% in 2022, reaching 46.6% among men- and 80.5% worked in the public sector, with 41.7% in hospital settings (hospital work decreased from 46.0% to 43.5%,  $P:0.001$ ). Women reported higher distress (2022 tension scores of 1.86 vs 1.60 in men) and sleep difficulties -1.47 versus 1.28 ( $P:0.0012$ ).

**Conclusions:**

Findings highlight persistent gender disparities. Holding multiple jobs was associated with better mental well-being. A shift away from hospital-based roles suggests a search for less stressful environments, while public sector employment emerged as a risk factor for poor mental health. Foreign-born women showed greater vulnerability to depression.

**Points for discussion:**

How can medical institutions address persistent gender inequalities in mental health outcomes in physicians?

Should mental health monitoring become a structural part of workforce management in the healthcare sector?

How do working conditions, such as holding multiple jobs or working in the public sector, affect mental health outcomes among physicians?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Development and Validation of the Family Involvement Levels of Practice Scale-Turkish (FILOPS-T): A Multilevel Factor Analysis**

Mehmet Göktuğ Kılınçarslan, Aygen Eğilmez İnan, Oktay Sarı, Erkan Melih Şahin

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**Keywords:** Family Practice; Factor Analysis, Statistical; Professional Family Relationship

**Background:**

Family-centered care (FOC) is a cornerstone of family medicine, with robust evidence from meta-analyses demonstrating its effectiveness in improving clinical outcomes, such as glycemic and lipid control, and the overall physical and psychological well-being of patients and their families. Despite its proven value, assessing FOC in practice remains a challenge. Globally, measurement has predominantly relied on physician self-report instruments or third-party observation forms designed for educational settings. These methods are limited by significant self-assessment bias and the logistical difficulties of direct observation. Critically, a validated patient-reported outcome measure to evaluate FOC in the primary care setting is currently unavailable.

**Research questions:**

Is it feasible to achieve a valid and reliable measurement of family-oriented care based on patient perception?

**Method:**

This scale development study is grounded in Doherty and Baird's Levels of Family Involvement model, specifically targeting levels 2-4. Following item generation, content validity will be established by an expert panel, with further refinement through cognitive interviews. A cross-sectional survey will recruit 2,000 patients from 100 family physicians using clustered random sampling. Given the nested data structure (patients within physicians), which violates the assumption of independence, a multilevel modeling approach is essential. Psychometric properties will be evaluated using Multilevel Exploratory (MEFA) and Confirmatory (MCFA) Factor Analyses on split-half samples. All analyses will be conducted using Mplus version 8.11.

**Results:**

N/A

**Conclusions:**

N/A

**Points for discussion:**

Recommendations for Convergent Validity Instruments

Suggestions for Item Generation

Call for Collaboration

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Digital Health Literacy Among Young Family Physicians: Are We Ready for the Next Generation of Technologies?**

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**Keywords:** Family Medicine, health literacy, digital health, training

**Background:**

As healthcare systems undergo digital transformation, primary care professionals are expected to incorporate new technologies into their daily clinical practice. However, it is unclear to what extent young family physicians are digitally literate and confident in using such tools. Digital health literacy encompasses not only technical skills, but also the ability to think critically when navigating, interpreting and applying digital health information in real-world practice.

**Research questions:**

What is the level of digital health literacy among young family physicians, and how prepared do they feel to use emerging digital technologies in their clinical practice?

**Method:**

Study design: Cross-sectional descriptive study  
Participants: Family medicine residents and physicians within 5 years of graduation.

Data collection:

Structured online questionnaire

**Conclusions:**

Implications for Practice

Digital health education should be integrated into family medicine residency training

Policymakers should ensure equitable access to technology and support tools

Empowering digitally literate physicians is essential for equitable, efficient, and future-ready primary care

Presentation on 17/10/2025 16:00 in "Parallel Session G: One Slide Five Minute Presentations" by Fatma Göksin Cihan.

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Empowering Future GPs: A European AI Innovation Network for Primary Care**

Odi Stummer

Institute for General Medicine, Martin-Luther-University, 06112 Halle, Germany. E-mail: [florian.stummer@uk-halle.de](mailto:florian.stummer@uk-halle.de)**Keywords:** Future GPs, AI for Health, EU Health Tech, Smart Primary Care, GP-Led AI**Background:**

The evolving healthcare landscape burdens family physicians (GPs) with increasing workloads and burnout, deterring the next generation. Simultaneously, Artificial Intelligence (AI) offers transformative potential for efficiency and clinical support. The European Health Data Space (EHDS) is establishing a crucial framework for secure, interoperable health data, foundational for ethical AI deployment and empowering GPs in a changing environment.

**Research questions:**

How can a European network, co-creating EHDS-conform AI tools with GPs and start-ups, effectively empower future family physicians and improve patient outcomes?

**Method:**

A participatory design approach will guide this network. It involves in-depth GP needs assessments and start-up engagement. Iterative co-creation workshops will develop EHDS-compliant AI tool MVPs. These will undergo pilot implementation in GP practices, evaluating impact on workload, decision-making, and patient satisfaction, followed by strategies for broader European scaling.

**Results:**

The network is anticipated to yield GP-centric, EHDS-conform AI tools, significantly reducing administrative burden and enhancing clinical decision support. This will empower family physicians, improve job satisfaction, and lead to better patient outcomes through more personalized and efficient care. It will also accelerate European health tech innovation.

**Conclusions:**

Establishing this European AI Innovation Network is crucial for empowering the next generation of family physicians. By fostering co-creation of EHDS-conform AI tools, it will alleviate GP pressures, enhance patient care, and position Europe as a leader in responsible digital health. This ensures a resilient and future-proof primary healthcare system.

**Points for discussion:**

How do we ensure these tools are not just technologically advanced but also genuinely intuitive, clinically relevant, and reduce, rather than increase, GP burden?

How can the network specifically address challenges like data heterogeneity across EU member states, differing national interpretations of regulations, and ensuring algorithmic fairness across diverse patient populations?

Successful pilots are a start, but how do we transition from individual projects to a sustainable, self-perpetuating ecosystem for AI innovation in primary care?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Feasibility and applicability of integrating wearable devices into primary cardiovascular risk prevention in general practice**

Georgi Petrov, Mariya Tokmakova, R Raycheva, Radost Assenova

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**Keywords:** Cardiovascular Disease Prevention, Primary Care, Wearable Devices, Smartwatch, Feasibility Study, Hypertension, General Practice

**Background:**

CVD are the leading cause of death in Bulgaria. National protocols require GPs to perform annual check-ups with cardiovascular risk assessment using the SCORE system. However, traditional assessments rely on self-reported data and offer limited insight into patients' daily behaviors. Wearable devices may support more accurate and personalized prevention by providing real-time objective data.

**Research questions:**

To explore the feasibility of integrating smartwatch-generated data into routine preventive visits in general practice by enhancing the quality of GP-patient discussions, motivating patients and supporting personalized advice and behavior change alongside standard SCORE-based assessment.

**Method:**

This is a mixed-method prospective observational study conducted in general practices. Healthy adults aged 45–55 without CVD will be recruited during their annual check-up. GPs will calculate SCORE and patients will complete a structured questionnaire covering lifestyle factors, motivation and attitudes toward wearables. A standardized protocol will be provided to participating GPs, including a data collection tool and guidance for delivering brief lifestyle counselling. The GP will give a brief educational intervention using materials to reinforce key messages on cardiovascular risk and healthy living. Participants will be offered the use of a validated smartwatch for 7 to 14 days to track variables such as steps, heart rate, sleep etc. Data will be reviewed at a follow-up consultation. Quantitative data will be analyzed using descriptive and comparative statistics. Semi-structured interviews with a sample of GPs and patients will explore usability, motivation and perceived impact. Baseline data will be compared to follow-up assessments at two time points: two weeks and one year after the intervention.

**Results:**

Baseline data will be compared to follow-up assessments at two time points: two weeks and one year after the intervention.

**Conclusions:**

Primary: feasibility from both patient and provider perspectives.

Secondary: change in motivation and behavior, GP evaluation of usefulness, and potential for data integration

**Points for discussion:**

How can wearable data support primary prevention of CVD?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Lifestyle Counseling in Family Medicine: A Case-based Educational Intervention Focused on Nutrition and Physical Activity in Patients with Type 2 Diabetes Mellitus**

Hüseyin Elbi, Sıdıka Ece Yokuş, Fatih Özcan

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**Keywords:** case vignette, diabetes mellitus, lifestyle counselling

**Background:**

Type 2 Diabetes Mellitus (T2DM) is a prevalent chronic disease that can be managed through lifestyle modifications such as nutrition and physical activity. However, there are deficiencies in the effective and systematic implementation of such counseling in family medicine practice. It is believed that structured educational interventions aimed at improving residents' knowledge, attitudes, and skills could enhance the quality of lifestyle counseling.

**Research questions:**

Can a case vignette-based structured educational program be effective in improving family medicine residents' skills in providing nutrition and physical activity counseling to patients with T2DM?

**Method:**

This four-month mixed-methods intervention study will be conducted with volunteer residents with at least 6 months of experience working in a university family medicine clinic. The intervention group (n=30) will receive structured education consisting of three modules (3 hours each) based on case vignettes. Counseling sessions conducted by participants with their own patients will be video-recorded and evaluated in structured observation and feedback sessions. Knowledge-attitude-practice questionnaires, 5A model observation forms, and Patient Assessment Chronic Disease Care Questionnaire will be used. Control group (n=10) sessions will also be analyzed using similar methods. Quantitative data will be evaluated with SPSS, and qualitative data through thematic analysis.

**Results:**

This study is still in the draft phase. However, as a result of the study, increases in the frequency and quality of counselling in the clinical practice of the residents in the intervention group, as well as improvements in patient satisfaction, are expected.

**Conclusions:**

This intervention may improve family medicine residents' lifestyle counseling skills. It has the potential to create a scalable, sustainable model for educational programs.

**Points for discussion:**

To what extent is the case vignette-based interactive learning approach applicable and relevant to clinical reality by resident physicians?

What is the contribution of this method to the development of essential primary care skills such as patient-centered communication and clinical decision-making?

How can such educational interventions be made sustainable for the systematic establishment of lifestyle counseling in family medicine practice?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Mental health among Farmers in rural Germany: A research idea for a Mixed-Methods Study to assess Prevalence and Risk Factors**

Linda Hoffmeister, Eva Maria Noack, Dominik Schröder

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**Background:**

Various studies indicated elevated rates of depression, anxiety, and suicide among farmers compared to the general population, with occupational stressors including financial uncertainty, social isolation, and regulatory pressures contributing to poor mental health outcomes. Despite Germany's significant agricultural sector (255,000 farms), farmers' mental health has been a neglected research topic. By identifying key stressors and understanding the barriers to mental health services, this proposed project can help improve the delivery of care and inform primary care and prevention strategies.

**Research questions:**

What is the prevalence of depression, anxiety, and suicide ideation among farmers in rural Germany? How are occupational sociodemographic, farm-structural, and occupation-specific factors associated with mental health?

**Method:**

Sequential explanatory mixed-methods study in Lower Saxony, Germany. Quantitative phase: Population-based cross-sectional survey of all commercial farm operators ( $n \approx 16,100$ ) using validated instruments (PHQ-9, GAD-7, PSS-10, SBQ-R) plus newly developed agriculture-specific stressor questionnaire. Recruitment via Agricultural Social Insurance (SVLFG) database. Qualitative phase: 20-25 semi-structured interviews with purposively sampled farmers based on quantitative findings. Analysis includes descriptive statistics, multivariate logistic regression for risk factor identification, and thematic analysis of interview data with systematic integration of findings.

**Results:**

We anticipate identifying elevated prevalence rates of depression and anxiety symptoms compared to general population, with specific risk patterns related to farm type (particularly livestock operations), age groups (45-64 years), and gender differences. Qualitative findings will illuminate coping mechanisms, help-seeking behaviors, and healthcare access barriers, providing contextual understanding of quantitative patterns.

**Conclusions:**

This proposed study will provide first insights on German farmers' mental health, establish validated assessment tools, and inform evidence-based prevention strategies for this vulnerable occupational group.

**Points for discussion:**

What are your experiences with managing mental health among this population in your country? What specific challenges have you observed?

What is the GP's role in providing (mental health) care for the needs of farming populations?

What clinical interventions would come to your mind to better serve this population?



**One-Slide/Five Minutes Presentation / Study Proposal / Idea****The GP personality and its relationship with burn-out, coping mechanisms, patient centred care and empathy towards patients. Future projects of the GP personality collaborative group.**

Ileana Gefaell, Maria Bakola, Zoltán Lako-Futó, Anna Kamienska, Limor Adler, Carla Gouveia, Özden Gökdemir, Eleni Jelastopulu, Aleksander Stepanović, Marija Zafirovska, Aleksandar Zafirovski, Marina Guisado Clavero, Marta Castelo Jurado, Marta Pérez Álvarez, Ana Peñalver Andrada, Joana Sousa, Sara Ares Blanco, Janis Blumfelds

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**Keywords:** Personality Inventory, Primary Care, Burn out, Patient-Centered Care, Empathy, Resilience

**Background:**

The GP personality traits - extraversion, openness, agreeableness, conscientiousness and neuroticism- may influence on burn-out, resilience, continuity of care, patient centred care and empathy towards patients.

**Research questions:**

Is there an association between the GP personality traits and burn-out or resilience?

Is there an association between the GP personality traits and patient centred care or empathy towards patients?

**Method:**

Design: Multicentric cross-sectional survey-based study in 9 European countries (Israel, Greece, Hungary, North Macedonia, Poland, Portugal, Spain, Slovenia, and Turkey) in the first semester of January 2026. Population: GPs and Family medicine residents in clinical practice. Primary outcome: Prevalence of burn-out, resilience, patient centred care or empathy towards patients according to their personality test.

**Variables:**

GP characteristics: sociodemographic, time working in the same practice, years of experience, role as a GP (mentor, manager, medical practice), additional roles in practice (research, professor, volunteer, active part in scientific societies).

Characteristics of Health care centre: Location (rural/urban), socioeconomic level of the area.

Measurement scales (Likert): personality test: Big Five Questionnaire (60 item version); Brief resilience coping scale: 4-item; Maslach Burnout Inventory (MBI): 22-item; Patient-centred communication: 6-item; Empathy scale: 13-item.

Recruitment: convenience sampling.

Sample size: 600 GPs in total

Analysis: Descriptive analysis. Regression Model analysis.

**Results:**

This is the continuation of the GP personality study. The hypothesis of this project is an expected association between the certain personality traits in the GPs and burnout, resilience, patient centred care and empathy. More specifically, we expect that GPs with higher scores in neuroticism have a higher score in burnout and lesser coping mechanisms, and GPs with higher scores in agreeableness and conscientiousness will have higher scores in the patient centred and empathy scales.

**Conclusions:**

A better understanding of the role of personality in burnout, patient centred care might help clinicians to deepen their insights into their abilities to pursue a better practice.

**Points for discussion:**

If we knew our personality type, would our approach to patients be different?

How could we measure the influence of practice on our personality?

The GP personality study team is growing; do you want to join our study?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Transforming obesity management in Primary Care: A European roadmap from policy to practice**

Raquel Gomez Bravo, Sandra León-Herrera, Sıdıka Ece Yokuş, Vinicius Anjos De Almeida, Sara Ares Blanco, Nicola Buono, Ileana Gefaell, Özden Gökdemir, Inês Da Silva E Pereira, Leda Nemer, Marina Guisado Clavero, Ferdinando Petrazzuoli, Maria Pilar Astier-Peña, Marta Sánchez Castro

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**Keywords:** Obesity management, Primary care, Family medicine, Capacity building, Health systems, Chronic disease prevention, Person-centered care

**Background:**

Obesity remains one of the most urgent public health challenges in the WHO European Region, affecting nearly 60% of adults and one in three children. While most European countries have obesity-related clinical guidelines and policy frameworks, their implementation in primary care remains inconsistent and often ineffective. This gap undermines early intervention, equity of care, and the prevention of long-term complications.

**Research questions:**

How can obesity management in primary care be improved across Europe? What are the barriers and facilitators to implementation? What tools, strategies, and training do family physicians need to deliver effective, scalable, and person-centered obesity care?

**Method:**

This project will follow a staged, multi-method design across seven interlinked work packages. It begins with a scoping review to synthesize current evidence on implementation barriers and facilitators. This is followed by two Europe-wide surveys—one with key-informants to map national policies and guidelines, and another with frontline providers to assess real-world practices. Identified gaps will inform the co-design of a modular care model, supported by tailored toolkits and a training program for primary care teams. Pilots across diverse health systems will test feasibility, fidelity, and patient outcomes. Mixed-method evaluation and health impact modeling will guide scalability. Dissemination will engage policy and clinical stakeholders.

**Results:**

Initial findings reveal considerable fragmentation between policy and practice, a need for stigma-sensitive approaches, and strong demand for better training and system-level coordination. Model development and pilot preparation are currently underway

**Conclusions:**

This project aims to bridge the gap between clinical guidelines and everyday practice by equipping family physicians with the tools, training, and system-level support needed to deliver effective obesity care in real-world primary care settings. By translating recommendations into practical, scalable solutions, the project has the potential to strengthen obesity management, reduce health disparities, and inform future health policy across Europe.

**Points for discussion:**

What implementation challenges exist in your country?

How can digital tools enhance efficiency and patient engagement?

What strategies reduce stigma and empower patients in primary care?

**Freestanding Paper / Finished study****Communication, confidence, and commitment: psychosocial dimensions of HPV vaccine advocacy among Bulgarian GPs**

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**Keywords:** Vaccination behaviour, psychosocial dimensions, general practitioners, HPV vaccine

**Background:**

Physician recommendation strongly influences HPV vaccine uptake. In Bulgaria, where hesitancy and misinformation persist, understanding GPs' psychosocial drivers is key to improving immunization efforts.

**Research questions:**

To explore the psychosocial characteristics of Bulgarian GPs that shape their HPV vaccination behavior, with a focus on motivation, communication style, and professional commitment.

**Method:**

This study represents the qualitative phase of a PhD project on HPV vaccination behavior among Bulgarian GPs. It followed a cross-sectional survey (n = 364) using the validated Bulgarian version of the Pro-VC-Be questionnaire. The qualitative phase involved six focus groups with a total of 65 GPs, purposively selected to reflect variation in gender, age, practice type, and geographic region. A semi-structured discussion guide explored GPs' communication strategies, perceived barriers, and motivational factors. Sessions were audio-recorded, transcribed verbatim, anonymized, and thematically analyzed using Braun and Clarke's six-phase approach. Coding was performed independently by two researchers to ensure validity and reliability.

**Results:**

Four key themes emerged.

First, professional responsibility vs. system constraints - GPs expressed strong intrinsic motivation to recommend the HPV vaccine, yet felt constrained by short consultations, administrative burdens, and the vaccine's non-mandatory status. Second, patient hesitancy and sociocultural barriers - common challenges included parental fears, misinformation, and discomfort discussing sexuality. Third, communication dilemmas - although most GPs applied patient-centred communication, many struggled with inconsistent messaging among providers and insufficient training in vaccine communication. Fourth, confidence in the HPV vaccine - GPs' trust in the vaccine's safety and efficacy was a key driver of proactive recommendation practices.

**Conclusions:**

GPs are central to HPV vaccine acceptance. Strengthening their communication capacity and institutional backing is vital as Bulgaria expands vaccination to include boys.

**Points for discussion:**

How can national health authorities better equip GPs to advocate for HPV vaccination in the face of persistent hesitancy?

**Freestanding Paper / Finished study**

## **Learning from the Field: A Qualitative SWOT Analysis of the COVID-19 Home Vaccination Programme in Greece**

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**Keywords:** Primary care, COVID-19 home vaccination, SWOT framework, Greece

### **Background:**

During the COVID-19 pandemic, the COVID-19 home vaccination programme was introduced to reach the frail population unable to access the vaccination points. In Greece, primary care professionals (PCPs) played a pivotal role in delivering this service. This kind of service did not exist prior to the COVID-19 pandemic.

### **Research questions:**

What is the experience of PCPs from their participation in COVID-19 home vaccination programme?

### **Method:**

A qualitative study was conducted involving semi-structured interviews with PCPs (general practitioners, registered nurses, and health visitors) from diverse geographic regions in Greece in the spring of 2022. Participants were purposively sampled based on their profession, the working setting (urban/rural/island), and the sector (public/private). Interviews were audio-recorded, transcribed verbatim, and analyzed thematically using the SWOT framework to identify internal and external factors shaping their experiences

### **Results:**

We analysed 23 interviews. Key strengths included a stimulating experience for the PCPs, increasing collaboration between them and empowering patients and caregivers. Opportunities emerged in terms of enhancing primary care outreach and the interest in the community for the development of home-based primary care programmes for the homebound population. Weaknesses involved logistical challenges, burnout and overworked staff, and limited resources. Finally, threats are identified in the lack of coordination between institutions and social distrust regarding the pandemic and the safety of vaccines.

### **Conclusions:**

The participation in the programme highlights how such initiatives, while developed in response to a health crisis, have the potential to be used as a means of strengthening the role of primary care in the community. Addressing barriers emerging either from the healthcare system or the community is essential to implement similar efforts during future health crises. The SWOT analysis proved to be particularly useful, facilitating the drawing of conclusions and the targeted formulation of proposals for future interventions in home health care.

### **Points for discussion:**

1. How could the experiences from a crisis response be effectively integrated into PCPs training to prepare future practitioners for leadership roles during similar emergencies?
2. In which ways could primary care be supported to expand its services beyond the practice setting?
3. How could the coordination between the institutions be improved during public health crises?

**Freestanding Paper / Published**

## **Unveiling the time-varying impact of COVID-19 vaccination on post-COVID-19 sequelae: a target trial emulation**

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**Keywords:** COVID-19, prevention, post-COVID-19 sequelae, mortality, MACE, cardiovascular

### **Background:**

COVID-19 long-term health consequences continue to be an active area of research. While it is well-established that COVID-19 vaccines are effective in preventing severe disease and COVID-19 itself poses a significant risk for cardiovascular complications-, it remains uncertain to what extent COVID-19 vaccines impact long-term cardiovascular complications and mortality among individuals infected with SARS-CoV-2, and how persistent this effect is over time.

### **Research questions:**

How does pre-infection COVID-19 vaccination modify the risk trajectory of major cardiovascular events and all-cause mortality over the year following SARS-CoV-2 infection?

### **Method:**

This target trial emulation study utilized real-world electronic medical records (April 2021 - March 2023) to dissect the time-varying impact of pre-infection COVID-19 vaccination on the incidence of major acute cardiovascular events (MACE) and all-cause mortality in individuals aged 40 to 85 years within 365 days following SARS-CoV-2 infection.

### **Results:**

Among individuals with COVID-19 ( $n = 18,223$  vaccinated,  $n = 15,331$  not vaccinated), pre-infection vaccination conferred significant protection against MACE (weighted incidence rate ratio [wIRR] 0.71, 95% CI 0.58 - 0.84) and all-cause mortality (wIRR 0.32, 95% CI 0.28 - 0.36). This protective benefit waned approximately three months after the acute infection, being more pronounced in females of all age groups and males under 70 years. In contrast, males over 70 years old demonstrated an increased incidence of MACE, peaking around 60 days post-infection.

### **Conclusions:**

These findings reveal the nuanced, time-dependent effects of pre-COVID-19 vaccination on long-term COVID-19 outcomes, identifying vulnerable subgroups that necessitate tailored post-infection preventive strategies to mitigate COVID-19 sequelae. Considering the essential role of family physicians in addressing COVID-19-related health complications, these findings provide additional evidence for enhanced patient monitoring in primary health care.

### **Points for discussion:**

Broader concept of post-infectious mortality

time-varying effect of vaccination on post-COVID-19 sequelae

delayed MACE incidence after infections in vaccinated population

**Theme Paper / Finished study**

## **Assessing Family Medicine Residency Training: Evaluation of Resident Perspectives**

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**Keywords:** residency, training, family medicine

### **Background:**

As the demand for family physicians rises globally, ensuring that these doctors receive comprehensive, high-quality professional training becomes critical. The residency period is particularly important for shaping competent family physicians.

### **Research questions:**

What are the current strengths, challenges, and areas for improvement within family medicine residency training programs from the perspective of medical residents?

### **Method:**

We conducted a nationwide multicentric survey involving 12 university centers in Romania. The questionnaire, consisting of 55 items, explored residents' satisfaction with their current training, identified areas needing improvement, and assessed their preparedness and needs for future practice.

### **Results:**

A total of 332 family medicine residents participated. Among them, 95.2% expressed intentions to practice in their home country, with 66% preferring urban areas. Working conditions influenced the specialty choice significantly. Satisfaction rates varied between 45.8% and 75.9% depending on the medical area. Notably, 87% cited complex legislation and authority-imposed restrictions as significant barriers. The majority indicated a desire for an extended cardiology rotation. Furthermore, 84% preferred hands-on training, whereas only 18.1% were engaged in research activities. Finally, 66.6% expressed interest in participating in international exchange programs.

### **Conclusions:**

We identified both strengths and weaknesses within family medicine residency training. Curricular adjustments and additional extracurricular opportunities are recommended to enhance the quality and effectiveness of residency training.

### **Points for discussion:**

Residency Training Satisfaction

Curriculum Enhancement and Practical Training Needs

Barriers in Clinical Practice

**Theme Paper / Published****Empowering the next generation of healthcare workers: The role of intrinsic and extrinsic motivation**

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**Keywords:** Motivation; Physicians; Nurses; Students, medical;

**Background:**

Motivation is important to attracting, retaining, and effectively training the healthcare workforce. Motivation is an internal process that drives and sustains goal-directed behavior. Many factors are involved - intrinsic ones, arising from within ourselves, and extrinsic ones, coming from external rewards or punishments. An understanding of motivational factors can help leaders and mentors better design environments and strategies aligned with positive motivation and achievement. This, in turn, can help equip, support, and inspire early-career general practitioners to become active contributors to research and innovation (the 101st Meeting theme).

**Research questions:**

What are the intrinsic vs. extrinsic motivational differences between medical students, physicians, and nurses in Poland and Ukraine?

How do profession, gender, and country influence motivational attributes?

**Method:**

An anonymous paper-and-pencil survey was carried out in Poland and Ukraine in 2019. Healthcare professionals from two hospitals and students from one university in each country completed the Motivators for Healthcare Professionals Questionnaire (Korlen et al., 2017). The scale has 20 items rated on a Likert scale from 0 to 5 with 2 sub-scales: intrinsic motivation (IM, 8-item) and extrinsic motivation (EM, 12-item). The Wilcoxon test for paired samples was used to compare participants' scores on the IM vs. EM sub-scales.

**Results:**

142 Polish and 126 Ukrainian physicians (22%), nurses (39%), and medical students (39%) completed the survey. Male physicians from both Ukraine and Poland reported higher EM than IM scores, while female students from both Ukraine and Poland reported more IM than EM scores, as did Polish female doctors ( $p < 0.05$ ).

**Conclusions:**

The results can be interpreted using different theories of motivation, e.g., Maslow's hierarchy of needs or self-determination theory. Similar motivational "pulse taking" surveys within a clinical or healthcare organization, as well as discussions with staff and students, may help mentors, managers, and decision makers personalize their motivational strategies and achieve better impact.

**Points for discussion:**

What motivates you to empower the next generation of family physicians?

How do you know what motivates the students, early career professionals, and colleagues you work with?

What external supports within the clinic and healthcare system are needed to personalize our motivational strategies?

**Theme Paper / Finished study****The Future of Family Medicine from Family Physicians' Perspective**

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**Keywords:** family medicine, family physician, future,

**Background:**

Primary care faces numerous challenges, including an aging population, physician shortages, evolving roles of medical staff, increasing bureaucracy, and the growing impact of telemedicine and artificial intelligence. These changes raise critical questions about the future role of family physicians.

**Research questions:**

To evaluate the perceptions of family physicians about the future of family medicine.

**Method:**

We conducted focus group discussions using a semi-structured interview developed by the TLV-GPRN (Tel Aviv General Practitioner Research Network). Discussions explored key themes related to the future of family medicine. The meetings were transcribed and analyzed using a thematic analysis approach.

**Results:**

Three focus groups were conducted: two with young family physicians and one with senior leaders in family medicine. A total of 18 practicing family medicine specialists participated in the study. The interviews were held via Zoom between October and December 2024. Family physicians expressed confidence in their ability to adapt to future challenges while maintaining comprehensive patient care. They emphasized the importance of adopting new technologies to enhance diagnosis, patient management, and efficiency while minimizing administrative burdens. A key concern was balancing their broad expertise with increasing topic-specific specialization demands. Participants emphasized the importance of structured support in integrating AI and digital tools into daily practice while maintaining the physician-patient relationship.

**Conclusions:**

Family physicians feel prepared to evolve with the healthcare landscape but emphasize the need for strategic technology implementation and role adaptation. Policymakers should incorporate their perspectives when designing future healthcare systems to ensure that changes align with primary care needs and the principles of patient-centered care.

**Points for discussion:**

What do family physicians think about the future of family medicine?

What are the main issues that family physicians consider as the most challenging for the future of family medicine?

How can we better prepare ourselves as family physicians for the future?



**Freestanding Paper / Finished study****Evaluation of the Relationship between Polypharmacy and Glycaemic Control Levels in Patients Aged 65 and Over Diagnosed with Type 2 Diabetes Mellitus: A Retrospective Study**

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**Keywords:** type 2 diabetes mellitus, polypharmacy, elderly person, HbA1c,

**Background:**

A complex and bidirectional relationship exists between polypharmacy and glycaemic control. This study aims to evaluate the relationship between polypharmacy and HbA1c levels in individuals aged 65 years and older diagnosed with type 2 diabetes mellitus (T2DM).

**Research questions:**

Is there a relationship between polypharmacy and HbA1c levels in patients over 65 years of age with type 2 diabetes mellitus?

**Method:**

This retrospective study examined the relationship between HbA1c levels and polypharmacy status in patients aged 65 years and older with T2DM who were examined at the Family Medicine outpatient clinic of Düzce University Hospital in 2024. The data obtained were analysed using the SPSS 23.0 software package, and statistical significance was set at  $p < 0.05$ .

**Results:**

Of the 1,206 patients, 216 who met the inclusion criteria were included in the study. 55.56% ( $n=120$ ) of the patients were female, and 44.44% ( $n=96$ ) were male. The median age of the patients was 71 (min=65, max=89), number of medications they were taking was 7 (min=1, max=22), and HbA1c value was 6.80 mmol/mol (min=4.3, max=13.8). All patients except one had at least one additional chronic disease besides T2DM. It was determined that 73.62% ( $n=159$ ) of patients used only oral antidiabetics, 1.38% ( $n=3$ ) used only insulin, and 25% ( $n=54$ ) used both. In the correlation analysis, a statistically significant positive relationship was found between the number of medications used and HbA1c levels ( $r=0.256$ ;  $p<0.001$ ).

**Conclusions:**

Our study revealed a link between an increase in the number of medications used and an increase in HbA1c levels. This finding suggests that multiple medication use may have adverse effects on glycaemic control and that polypharmacy should be managed with caution. It is important for primary care physicians to regularly monitor medication burden in elderly diabetic patients for metabolic control and patient safety.

**Points for discussion:**

There may be other reasons besides polypharmacy that affect HbA1c levels.

Will reducing the number of medications taken by patients actually lower their HbA1c levels?

In the few studies that have examined this relationship, no significant association has been found between polypharmacy and HbA1c levels. How can this contradiction in the literature be explained?

**Web Based Research Course Presentation / Study Proposal / Idea****Exploring European General Practitioners' Perspectives on Digital Health Solutions in Home-Based Care: A research protocol from the EGPRN Fellows**

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**Keywords:** General Practice, Digital Health Technology, Europe, Homebound Persons

**Background:**

Homebound patients often face complex health needs and limited access to care. General practitioners (GPs) are central in supporting this population, yet providing consistent, coordinated care remains challenging. Digital health technologies (DHTs)—including telemedicine, mobile apps, and electronic health records—offer potential solutions, but their integration into homecare varies widely across Europe. Understanding how GPs perceive and use these tools is essential for improving care delivery and ensuring equitable access.

**Research questions:**

What are the views of European general practitioners on the use of digital health solutions in the care of homebound patients?

**Method:**

This cross-sectional study will use an online survey with open- and closed-ended questions to explore GPs' experiences with DHTs in home care. Participants include licensed GPs working in European countries who provide or coordinate home-based care. Participants will be recruited purposively through national GP networks and snowball sampling. The goal is to collect responses from European countries with different levels of digital development (as indicated by the World Health Organization), with a target of  $\geq 20$  participants per country. Data collection will continue until saturation is achieved. The survey will explore GPs' views on commonly used digital tools and their strengths, weaknesses, opportunities, and threats (SWOT). Responses will be analysed using content analysis, guided by the SWOT framework, and coded with NVivo software.

**Results:**

The study will generate insights into how GPs across Europe perceive and utilise DHTs in home-based care. Anticipated findings include strengths (e.g., improved access), weaknesses (e.g., digital barriers), opportunities (e.g., remote monitoring), and threats (e.g., data privacy concerns).

**Conclusions:**

This study aims to inform the effective integration of digital tools into home care by highlighting the experiences of frontline GPs. Findings will support policy development, GP training and technology design—ultimately aiming to improve care quality and access for homebound patients across diverse European healthcare systems.

**Points for discussion:**

1. How do variations in digital infrastructure and policy across European countries influence GPs' adoption and attitudes toward digital health in home-based care?
2. What are the ethical and practical implications of replacing or supplementing in-person home visits with digital health interventions for home-bound patients?
3. How can the insights from this study be translated into actionable strategies for training, supporting, and empowering GPs to integrate digital health into home care practices?

**Freestanding Paper / Almost finished study****Sensitivity comparison of a code-based and a questionnaire-based system for influenza-like illness cases in Belgian general practices**

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**Keywords:** Sensitivity, evaluation, electronic medical records, influenza, primary healthcare

**Background:**

In Belgium, the semi-automated COVID-19 Barometer in General Practices (cBGP) provided Influenza-Like Illness (ILI) data as an early marker for COVID-19 activity. Formal evaluation of this code-based tool with the established ILI surveillance based on the Sentinel General Practitioners network (SGP) is needed to progress towards real-time data and greater General Practitioners (GPs) participation.

An assessment of the ILI clinical syndrome, reported in the questionnaire-based SGP system, and the related diagnostic code registration in GPs' medical software was not yet carried out in Belgian primary care.

**Research questions:**

To what extent is the capture of ILI cases comparable between cBGP and SGP systems to ensure accurate disease surveillance?

**Method:**

An observational study is conducted on data from 2021 to 2024.

For each week of analysis, practices that reported ILI cases in cBGP and SGP systems are included. A weekly participation of at least 3 days is required for cBGP data, whereas for SGP data, participation is assumed to cover all working days.

The daily diagnostic coding percentage of practices involved in cBGP, is taken into account for quality purposes, with a minimum threshold set at 70%.

A descriptive comparison of case definitions and factors potentially impacting cases capture, is performed. Additionally, a regression analysis is undertaken on the number of ILI cases registered in both systems by the same practices.

**Results:**

The number of practices participating in both systems decreased over the study period: 48 practices (in 2021), 39 practices (in 2022), 29 practices (in 2023) and 16 practices (in 2024). Complete results will be available by the time of the conference.

**Conclusions:**

The results will establish whether there is a correspondence between the number of cases based on diagnostic codes and on clinical case definition of ILI in Belgian general practices, while shedding light on the reason why discrepancies might exist.

**Freestanding Paper / Finished study****Evaluation of the Relationship Between Frailty, Geriatric Depression, and Family Functionality in Individuals Over the Age of 65**

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**Keywords:** elderly, family APGAR scale, frailty, geriatric depression, primary care, aging

**Background:**

As the population in Türkiye and worldwide continues to age, frailty and depression have emerged as significant public health concerns in older adults. Family functionality plays a key role in maintaining well-being during aging. From a primary care perspective, understanding the interplay between these factors can inform more holistic and person-centered care strategies.

**Research questions:**

What is the prevalence of frailty and geriatric depression in individuals aged 65 and older?

Is there an association between family functionality, frailty, and geriatric depression?

**Method:**

This cross-sectional study was conducted in a university-affiliated Family Health Center in Erzurum, Türkiye, between May and December 2024. A total of 203 individuals aged 65 years and older were surveyed. Data were collected using the Family APGAR Scale, the FRAIL Scale, and the Geriatric Depression Scale-Short Form. Descriptive and inferential statistics were used, including t-tests, ANOVA, and correlation analysis (SPSS v27).

**Results:**

Participants had a mean age of  $70.98 \pm 4.82$  years. Among them, 72.4% had high family functionality, 50.7% were pre-frail, and 41.4% showed signs of depression. There was a significant negative correlation between family functionality and both frailty ( $r = -0.25$ ,  $p < 0.01$ ) and depression ( $r = -0.42$ ,  $p < 0.001$ ), while a moderate positive correlation existed between frailty and depression ( $r = 0.37$ ,  $p < 0.001$ ).

**Conclusions:**

High family functionality is associated with lower levels of frailty and geriatric depression. Strengthening family support mechanisms may improve mental and physical health outcomes in older adults.

**Points for discussion:**

How can family physicians assess and enhance family functionality in routine practice?

Should family-based interventions be integrated into frailty and depression management in elderly care?

**Freestanding Paper / Published****The Effect of Telemedicine on Preventive Medicine- A Case from Israel**

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**Keywords:** Bone density scans; Fecal occult blood tests; Mammographies; Preventive medicine; Telemedicine.

**Background:**

Preventive medicine is one of the core elements of primary care physicians' (PCPs) work. This includes screening for cancer (such as Mammography and fecal occult blood test (FOBT) for breast and colon cancer) and also screening for chronic conditions (like bone density scans (DEXA scans) for osteoporosis). In recent years, especially since the COVID-19 pandemic, the use of telemedicine increased dramatically.

**Research questions:**

To identify the rate of preventative medicine referrals and performance in individuals who mostly had face-to-face encounters compared to those who mostly had remote encounters.

**Method:**

This retrospective cohort study is based on the electronic medical records of one healthcare maintenance organization (HMO) in Israel. We followed all individuals eligible for at least one of the screening tests in 2020 and 2021 and evaluated whether they received referrals to screening tests (mammography, FOBT, and DEXA scans) and performed them. Each individual was assigned to the face-to-face group (more than 60% of their encounters were face-to-face), the remote group (more than 60% of their encounters were remote), and the mixed group, which included the rest of the cohort.

**Results:**

For mammographies and FOBT, the referral rates were lower in the face-to-face group compared to remote and mixed groups (mammographies: 27.3% vs. 29.8% and 32.9%, p-value < 0.001; FOBT: 55.6% vs. 60.3% and 58.7%, p-value < 0.001, respectively). However, for all three tests, the performance rates were the lowest in the remote group compared to face-to-face and mixed (for mammographies, 68.2% vs. 76.3% vs. 78.1; for FOBT, 44% vs. 56.8% vs. 54.3%; for DEXA 9.2% vs. 22.9% vs. 20.7%, respectively). A referral from the PCP increased the odds of performing the test for mammographies OR-1.55, 95% CI 1.52-1.58, and for FOBT OR-1.96, 95% CI 1.93-1.99.

**Conclusions:**

Understanding individuals' health behaviors using telemedicine is crucial to maintaining adherence to preventing medicine.

**Points for discussion:**

A high referral rate does not necessarily indicate a high performance rate.

The importance of a referral from a PCP. Ask ChatGPT

Continuity of care

**Freestanding Paper / Finished study**

## What Are the Lessons of the Hypertension Delphi Study?

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**Keywords:** : Hypertension, Delphi, General Practitioner

### Background:

General practitioners play a crucial role in the screening, evaluation, and management of hypertension.

### Research questions:

The aim of the study was to determine the level of consensus general practitioners can reach regarding the management of hypertension:

- Adherence to diagnostic recommendations
- Target blood pressure values
- Adherence to national guidelines
- Preference for fixed-dose combinations
- Consideration of comorbidities, sex, age, and risk factors

### Method:

We developed a questionnaire using the Delphi method. General practitioners were recruited. A 12-month gap was maintained between the two iterations. The first took place between March 2023, and September 2023, and the second between March 2024, and May 2024. 113 GPs participated nationwide in the first iteration; 72 of them completed the second iteration questionnaire.

### Results:

By 2024, consensus (67%) had been reached regarding the use of three consecutive blood pressure measurements in the office, aligning with the new ESH guidelines.

Upon first iteration there was no consensus on the necessity of home blood pressure monitoring in cases where medical therapy is not initiated immediately (61.4% agreement), by the second iteration, agreement level reached consensus threshold (69.44%).

Interestingly, for patients under 65 with uncomplicated, event-free primary hypertension, upon first iteration 75.44% of GPs (men) and 71.93% (women) agreed that initial therapy is usually combination treatment. One year later, this dropped to 69.44% and 65.28%, respectively.

In the second iteration, GPs reported more frequent use of the National eHealth Infrastructure to monitor therapy effectiveness and adherence.

Additionally, 42.1% of GPs plan to pursue board certification in hypertension (hypertensiology license exam).

### Conclusions:

The Delphi study proved useful among general practitioners. It provided rapid and well-founded data on antihypertensive treatment practices.

Following the second iteration, stronger consensus may emerge regarding optimal diagnostic and therapeutic strategies.

Practice-oriented education can support the dissemination and implementation of national guidelines in everyday clinical work.

### Points for discussion:

Optimal ways of knowledge dissemination and guideline implementation

**Poster / Finished study****Alcohol misuse in women a challenge in primary care**

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**Keywords:** Alcohol, women, primary care

**Background:**

Alcohol consumption among women has significantly increased in Bulgaria over the past two decades, posing a serious public health challenge. Female alcohol dependence involves unique physiological, psychological, and social factors that are often underrecognized in primary care. Alcohol misuse is a known risk factor for non-communicable diseases (NCDs), contributing to disease onset and progression. There is a need for updated data on the epidemiology and complications of alcohol abuse among women in general practice.

**Research questions:**

What are the frequency and patterns of alcohol consumption among adult women in general practice, and what are the associated health and social consequences?

**Method:**

A cross-sectional study was conducted from October 2023 to August 2024 in a primary care clinic in Razgrad, Bulgaria, following ethical approval. The study included 318 adult women divided into seven age groups. Data collection involved socio-demographic surveys, alcohol consumption questionnaires, liver enzyme measurements (ASAT, ALAT, GGT), and liver ultrasound. Documentary, sociological, laboratory, instrumental, and statistical methods (descriptive statistics, correlation, and factor analysis) were applied. Methodological reliability was confirmed via Cronbach's alpha.

**Results:**

Risky alcohol consumption was identified in 11.3% of participants, harmful use in 2.2%, and alcohol dependence in 2.5%. Elevated GGT was found in 19.5% of women; hepatic steatosis in 27.4%, and cirrhosis in 0.9%. Frequent alcohol use ( $\geq 4$  times weekly) was reported by 16.7%. A significant correlation was observed between consumption frequency and age group (35–65 years). Higher questionnaire scores were associated with abnormal GGT and pathological ultrasound findings.

**Conclusions:**

This study confirms increasing alcohol consumption among women and highlights the associated risks of physical and psychological harm. Screening for alcohol misuse in primary care is essential for NCD prevention. The findings emphasize the key role of GPs in early detection and intervention.

**Points for discussion:**

The need for screening for alcohol abuse in primary care

Alcohol as a risk factor for socially significant diseases

## Changes in the levels of marker molecules salivary alpha-amylase and cortisol as a stress response to everyday activities of general practitioners in rural areas of the Republic of Bulgaria

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**Keywords:** Bulgaria, daily habits, general practitioners, salivary  $\alpha$ -amylase, salivary cortisol, stress.

### Background:

Stress triggers physiological responses involving the hypothalamic–pituitary–adrenal axis and autonomic nervous system. These can be assessed via salivary biomarkers ( $\alpha$ -amylase, cortisol), heart rate, and blood pressure. This study aims to evaluate stress development in general practitioners (GPs) working in remote rural areas of Bulgaria due to their daily professional routines.

### Method:

Out of 128 general practitioners who completed a questionnaire on health status, habits, priorities, and ethical patient relationships, 40 were selected for this study ( $n = 40$ ; mean age  $55.92 \pm 8.8$  years). Each provided four saliva samples over one week—two on Monday (morning and after work) and two on Friday. Blood pressure and pulse were measured after each sampling using a standard monitor. Salivary biomarkers were quantitatively analyzed using the ELISA method.

### Results:

Salivary  $\alpha$ -amylase levels were significantly higher at the end of the workday, particularly on Friday ( $142.28 \pm 23.34$  U/mL;  $p = 0.018$ ), with no significant difference between the start and end of the week. A typical cortisol awakening response was observed only at the beginning of the week, with a marked disruption by week's end. Morning cortisol levels decreased significantly from Monday ( $30.1 \pm 10.84$  ng/mL) to Friday ( $25.73 \pm 10.51$  ng/mL;  $p = 0.033$ ). Smoking ( $p = 0.002$ ) and alcohol consumption ( $p = 0.036$ ) were associated with elevated  $\alpha$ -amylase levels, but not cortisol. Blood pressure increased significantly by the end of the week ( $p = 0.04$ ), while pulse varied within the day, showing higher values at the end of the workday.

### Conclusions:

The professional lives of the GPs who work in distant and rural places are associated with stress development. Different habits from the daily routine, such as alcohol consumption, smoking and physical activity, could be considered as modulators of stress development.



**Poster / Finished study****Factors influencing the psychological state of internally displaced Ukrainians and Ukrainian refugees in other countries? Qualitative analysis of an open-ended question**

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**Keywords:** General practice; Refugees; Anxiety and depression

**Background:**

Since the beginning of the full-scale invasion of Ukraine, millions of Ukrainians have been forced to leave the country or have been internally displaced. Since this can lead to anxiety and depression, it is important to address which factors influence psychological state.

**Research questions:**

What factors influence the psychological state of internally displaced Ukrainians and Ukrainian refugees in other countries?

**Method:**

Descriptive cross-sectional online survey-based study using an open-ended question. Study population: Ukrainians aged  $\geq 18$  who were internally displaced or refugees in 9 European countries since February 2022. Data collection: convenience and snowball sampling. We analysed data using a thematic framework, with two independent researchers to identify codes, subthemes and themes.

**Results:**

We analysed free text from 458 respondents. identifying six main themes.

- 1) The impact of war, that reflected a deep feeling or an unreal situation that differed between people inside Ukraine (fear induced by air raid alarms, and shelling) and outside (news about the war and deaths).
- 2) Disrupted social networks, expressing a deep concern for the relatives who remained in Ukraine or were directly involved in the war, leading to isolation, worry, and longing for loved ones left behind or affected by the conflict.
- 3) Economic burden, since finding a job in foreign countries is a huge challenge for Ukrainians.
- 4) Health-related problems, especially with access to care and continuity of care.
- 5) Obstacles to local integration, due particularly to language and cultural barriers
- 6) Tools and resources for better adaptation, emphasising personal efforts to focus on positiveness and adapt to their circumstances.

**Conclusions:**

The findings help us to better understand the factors influencing the psychological state of internally displaced persons and refugees, which can help in overcoming possible barriers in communication with healthcare providers and social workers?

**Points for discussion:**

What are the experiences of EGPRN members with mental health problems of refugees that they care for?

**Poster / Ongoing study no results yet****Overuse of Benzodiazepines and Z-Drugs in Croatian Family Medicine - A Growing Concern**

Juraj Jug, Vanja Pintaric Japiec, Tina Zavidic, Jelena Šakić Radetić, Mislav Omerbasic, Anja Gacina, Diana Sabljak Malkoc, Tomislav Kurevija

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**Keywords:** anxiety, benzodiazepines, depression, insomnia, mental health, prescription drug overuse

**Background:**

Benzodiazepines are the most prescribed drugs for treating anxiety and insomnia in the world. Their continuous usage for more than three months is strongly discouraged because of the possible development of addiction, cognitive disorders, and confusion. Real-life data shows serious overuse in many countries.

**Research questions:**

Do family medicine physicians prescribe benzodiazepines beyond three months and for which clinical indications?

**Method:**

This is a cross-sectional study that will be conducted in at least eight family medicine practices across Croatia. Patients who have used one or more of the listed benzodiazepines and Z drugs – diazepam, alprazolam, nitrazepam, oxazepam, lorazepam, bromazepam, zolpidem, zopiclone – in the last five years (1.1.2019 – 31.12.2024) will be identified and included in the research using the search engine of the information system. The diagnosis for which the listed drugs were prescribed, the prescribed dose, the number of re-prescriptions of the drug (duration of therapy) for the same indication, and other comorbidities that the patient has recorded in the available medical documentation in the same period will be recorded. Other data will include the age and gender of the subjects, the date of the first recorded prescription of the sleeping drug, who prescribed the drug (family doctor or doctor of another specialty), whether the patient takes antidepressants, comorbidities, and whether the therapy has changed over time. We used a purposive sampling method, and the estimated sample size for adequate statistical analysis is at least 400 subjects.

**Conclusions:**

The results from this study will determine the indications, rates, duration, and current prescribing patterns of benzodiazepines in family medicine. By checking how big the problem of benzodiazepine overuse is, we could improve adherence to evidence-based clinical guidelines and management of patients with mental health conditions.

**Points for discussion:**

Why are benzodiazepines prescribed more than antidepressants in treating anxious disorders?

Are the guidelines for treating mental diseases just a dead letter?

What are the potential sociological consequences of benzodiazepine overuse?

**Poster / Ongoing study no results yet****Validation of P-Risk, a Tool to Identify Individuals at Risk of Developing Psychosis Through Electronic Health Records in Primary Care: A Study Protocol**

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**Keywords:** Psychotic Disorders, Clinical Decision Support Systems, Electronic Health Records

**Background:**

Psychotic disorders are a major public health concern due to early onset, delayed diagnosis, and significant functional impairment. Although the Clinical High-Risk for Psychosis (CHR-P) framework has advanced early detection, its implementation in primary care remains limited. P-Risk, a digital tool developed in the UK using electronic health records (EHR), offers a scalable method to support general practitioners (GPs) in identifying individuals at risk of developing psychosis.

**Research questions:**

Can the P-Risk algorithm be externally validated and adapted for use in Catalan primary care to predict the onset of psychosis using routine EHR data?

**Method:**

A retrospective cohort study will be conducted using the SIDIAP database, covering over 5.8 million individual EHR in Catalonia. The cohort includes patients aged 17 and older with consultations or prescriptions related to non-psychotic mental health conditions between 2005 and 2025. Psychosis onset will be identified through diagnostic codes or antipsychotic prescriptions over a six-year follow-up. The P-Risk model's performance will be assessed using discrimination and calibration metrics (e.g., Harrell's C-index, sensitivity, specificity).

**Results:**

As this is a study protocol, results remain pending.

**Conclusions:**

If validated, P-Risk could enhance early psychosis detection in primary care, enabling timely interventions and reducing the duration of untreated psychosis. Integration into GP workflows may support clinical decision-making and streamline referrals to mental health services.

**Points for discussion:**

This project exemplifies the application of digital innovation in general practice, supporting precision psychiatry through scalable, EHR-based tools.

It reinforces the role of family medicine in early detection of severe mental illness and highlights the value of cross-country collaboration in mental health research.

## **“The Relationship Between Family Physicians’ Burnout and Patient-Perceived Psychosocial Support: Towards Empowering Primary Care”**

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**Keywords:** burnout, Psychosocial Support

### **Background:**

Burnout among family physicians is a significant issue that can affect both physician well-being and patient care quality. While its association with job dissatisfaction and medical errors is known, its impact on patients’ perception of psychosocial support remains underexplored. In primary care, psychosocial support is central to both patient-centered care and holistic practice. Understanding how physician burnout influences this perception can inform efforts to support both doctors and their patients.

### **Research questions:**

Does a higher level of burnout among family physicians relate to lower levels of psychosocial support perceived by patients in primary care settings?

### **Method:**

We propose a cross-sectional mixed-methods study involving 30 family physicians from three major regions of Istanbul. Burnout levels will be measured using the Maslach Burnout Inventory (MBI). For each physician, 10 patients will complete the Patient-Doctor Relationship Questionnaire (PDRQ-9) to assess perceived psychosocial support. Additionally, each patient will respond to semi-structured open-ended questions. Patients will be systematically selected as those scheduled immediately before the physician’s lunch break. Quantitative data will be analyzed using descriptive statistics and Spearman correlation between MBI subscale scores and average PDRQ-9 scores. Qualitative data will be analyzed thematically.

### **Results:**

A negative correlation is expected between emotional exhaustion and patient-perceived psychosocial support. In particular, higher scores in emotional exhaustion and depersonalization may be associated with lower PDRQ-9 ratings. Thematic analysis is expected to reveal patients’ perceptions regarding emotional connection, communication quality, and overall engagement during consultations, offering complementary insights to the quantitative findings.

### **Conclusions:**

This study aims to reveal how physician burnout affects psychosocial aspects of the doctor-patient relationship. Results may support evidence-based approaches to improving physician well-being and enhancing the quality of primary care.

### **Points for discussion:**

In this study, physician and patient sampling was planned using fixed numbers and time-based selection. What could be a more effective approach to improve representativeness and reduce sampling bias at both the physician and patient levels?

In this study, confounding variables such as age, gender, or education level of both physicians and patients were not controlled. What kind of methodological approach could help reduce or account for the effects of these variables?

In this study, psychosocial support is assessed solely through patients’ perceptions. Do you think excluding the physician perspective may limit a comprehensive understanding of the concept? How could physician-reported data enhance the interpretation of this relationship?

**Poster / Ongoing study no results yet****Assessment of Social Determinants of Health in Primary Care Settings in Europe**

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**Keywords:** Social Determinants of Health; Primary Health Care; Family Practice; General Practitioners; Nurses; Electronic Health Records

**Background:**

There is extensive evidence on the influence of social determinants of health (SDoH) on people's health and well-being. However, SDoH screening and recording are far from being widespread and consolidated in Primary Care (PC). Electronic health records (EHR) offer an opportunity to standardize the collection and integration of data about SDoH.

**Research questions:**

Are there differences in which SDoH are addressed at primary care across different European countries?  
Are there differences between the screening and recording of SDoH during routine clinical practice by PC professionals?

**Method:**

Cross-sectional observational study using an online survey (available in Catalan, Spanish, Portuguese, and English) with open and closed-ended questions. The study period runs from June 2025 to May 2026. PC professionals from European countries (Spain and Portugal), including nurses and medical doctors actively providing healthcare, will be recruited using the Snowball Technique. Collaboration will be offered to researchers via mailing lists and at international congresses (EGPRN). The estimated frequency of the primary objective is 46% according to previous studies. Required sample size is 425 professionals (95% confidence level, 5% margin of error, 10% estimated loss rate). Independent variables include sociodemographic and professional data. Dependent variables include SDoH assessed during clinical practice, such as illiteracy, unemployment, job instability, work schedule-related issues, occupational risk factors, inadequate housing, housing stability, loneliness, language and sociocultural challenges, social discrimination, and barriers to healthcare access. Additional variables include prioritization of SDoH, use of screening tools, systematic recording and standardized coding of SDoH, and identification of barriers to their screening. The study will be conducted in accordance with the applicable legal and ethical regulations of the respective country.

**Results:**

Data collection is currently ongoing and will continue until December 2026. Final results are not yet available. Preliminary findings will be presented at the EGPRN meeting in October, and participation will be offered to other countries.

**Points for discussion:**

What are health professionals' opinions about SDoH influencing health?

Which barriers hinder the screening of SDoH in clinical practice?

## Poster / Finished study

## Establishing a New Unit in Family Health Centers: A Qualitative Exploration of Processes and Experiences

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**Keywords:** Family health centers, qualitative study, unit establishment, primary care, healthcare planning

### Background:

Family medicine is undergoing a shift toward more comprehensive, team-based, and accessible care. In this transformation, family health centers are introducing new service units. Early-career general practitioners play a central role in shaping these changes, yet their experiences remain understudied. This study explores their perspectives on the processes, challenges, and facilitators of implementing new care structures.

### Research questions:

What are the perceived challenges, facilitators, and impacts of establishing a new unit within a family health center from the perspective of Early-career general practitioners?

### Method:

We conducted a qualitative study using semi-structured interviews with ten early-career general practitioners (5 male, 5 female, aged 25–34) involved in establishing a new unit in a family health center. Interviews were conducted face to face. Thematic analysis was employed to identify key themes. Member checking and reflexivity were used to enhance trustworthiness. Ethical approval was obtained. The study setting was an urban family health center undergoing structural expansion.

### Results:

Five major themes emerged:

- (1) Challenges and Adaptation: Participants reported difficulty due to lack of early involvement, delayed logistics, and insufficient training.
- (2) Healthcare Delivery Impact: Positive effects included longer consultations, improved patient satisfaction, and better chronic care.
- (3) Team Collaboration: Strong team dynamics and digital communication tools facilitated transition.
- (4) Patient Engagement: Community outreach, trust-building, and social media presence supported patient recruitment.
- (5) Sustainability: Resource management, innovation, and professional growth were seen as crucial for long-term success.

### Conclusions:

Establishing new units in family health centers requires planning, collaboration, and adaptation. This study highlights the importance of communication, leadership, and flexibility during implementation. Findings may inform future expansions in similar settings by offering practical insights.

### Points for discussion:

1. In what ways can early involvement of staff—particularly early-career GPs—enhance the effectiveness of implementation processes?
2. What organizational and professional strategies are most effective in ensuring the long-term sustainability of newly established units in primary care?
3. To what extent are these findings transferable to other primary care systems with different structural or cultural contexts?

**Poster / Study Proposal / Idea****Improving Continuity of Care During Primary Care Workforce Turnover: A Mixed-Methods Study on the Role of Structured Handover Protocols**

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**Keywords:** Continuity of care, general practice, workforce turnover, handover, primary care, family physicians, healthcare transition

**Background:**

The ongoing restructuring of healthcare systems, aging of the primary care workforce, and increasing professional mobility are leading to higher turnover rates among family physicians. These transitions can disrupt continuity of care — a core value of general practice — and may negatively affect clinical outcomes, patient satisfaction, and care coordination. Despite its relevance, structured handover protocols in general practice remain poorly implemented and under-researched.

**Research questions:**

- What are the current practices and perceived challenges related to patient handovers during physician turnover in general practice?
- Can a structured handover protocol improve perceived continuity and patient safety during transitions between family physicians?
- How do patients experience care continuity during these transitional phases?

**Method:**

We propose a mixed-methods study with three phases:

- 1 - Quantitative Phase: Cross-sectional survey among general practitioners (GPs) and practice managers in multiple European countries to assess handover practices, tools used, and perceived impact on continuity and safety.
- 2 - Qualitative Phase: Semi-structured interviews with patients who recently experienced a change of family physician, exploring emotional, relational, and clinical aspects of continuity.
- 3 - Pilot Intervention: Implementation of a structured handover template in a sample of practices, followed by evaluation using pre-post patient satisfaction surveys and GP feedback.

**Results:**

Preliminary results are expected to identify:

- Gaps in existing handover practices;
- Variability between countries and practice settings;
- Key elements that patients associate with preserved continuity.

Initial feedback from the pilot will inform feasibility and perceived usefulness of the handover tool.

**Conclusions:**

Structured handover protocols represent a promising, low-cost strategy to maintain continuity of care during physician transitions. They can be easily integrated into existing electronic health records and foster a safer, patient-centered primary care environment — especially relevant for younger physicians entering increasingly fluid healthcare systems.

**Points for discussion:**

Should structured handovers become a standard of care in general practice, especially in group practices or residency-based models?

What are the barriers (cultural, organizational, technological) to the implementation of such protocols across Europe?

Could this approach support intergenerational collaboration among family physicians?

**Poster / Finished study****Patient perspectives on access to emergency medical care in primary healthcare settings**

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**Keywords:** emergency medical care

**Background:**

Patients' perceptions of access to emergency and non-emergency services are essential to evaluating the functioning of general practice and emergency systems. In Bulgaria, patients are entitled to 24/7 care. Out-of-hours services are organized by GPs, who may deliver the service themselves or contract another provider, with state funding per registered patient. Contact information must be posted at the GP's office, giving patients access to their GP or the designated out-of-hours unit. Despite this structure, some patients bypass primary care and seek help directly from emergency services.

**Research questions:**

Does the patient's health status and access to care influence their decision to seek emergency services instead of contacting their GP?

**Method:**

A cross-sectional quantitative study was conducted among 168 adult patients who visited general practices in the districts of Pleven, Lovech, and Svishtov. Participants were randomly selected from patient lists and completed an anonymous, structured 29-item questionnaire. The survey included questions on demographics, perceived urgency, access to the GP or out-of-hours services, and use of Emergency Medical Services (EMS) or Emergency Department (ED). Data were collected over three months and analyzed using SPSS v25. Descriptive statistics and non-parametric tests (Chi-square, Mann-Whitney U) explored associations, with significance set at  $\alpha = 0.05$ .

**Results:**

Of all respondents, 55% had either called 112 or experienced difficulty contacting their GP or duty office. Key reasons for bypassing primary care included uncertainty about the urgency of their condition (57.6%), lack of accessible duty offices (17.6%), and expectations of broader diagnostic access at EDs (13.6%).

**Conclusions:**

Limited awareness of appropriate access routes leads to overuse of emergency services. Improved patient education and better coordination between GPs and emergency services may enhance care navigation.

**Points for discussion:**

What strategies have proven effective in other countries to improve patient use of out-of-hours care pathways?



**Poster / Ongoing study with preliminary results****Survey on Sustainability in Primary Healthcare Practice- A Collaborative Study**

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**Keywords:** sustainability, survey, collaborative

**Background:**

In response to the growing urgency for sustainable practices in primary healthcare (PHC), a collaborative initiative among European general practitioners (GPs) has been launched. Climate change is increasingly impacting global health, while healthcare itself contributes 4-6% of global CO<sub>2</sub> emissions, of which general practice is a notable contributor.

To address this issue, a European collaborative study on sustainability in PHC was initiated with support of EGPRN. The study considers various dimensions of sustainability including energy conservation, eco-friendly medical devices, reduction of disposable materials, and the promotion of alternative transportation methods such as cycling for home visits.

**Research questions:**

What are the current opinions and ongoing interventions related to environmental sustainability among European GPs?

**Method:**

This mixed-methods project includes two phases. First a cross-sectional survey is being conducted among GPs among EGPRN member countries, to provide an overview of sustainability practice and attitudes. In the second phase qualitative interviews with GPs in selected countries will explore priorities, relevant experiences and feasible implementation strategies for environmental sustainability.

**Results:**

Surveys are distributed in 15 countries. Preliminary analysis of 155 responses, shows that 63 % strongly agree, and 33% agree to some extent that sustainability in PHC is important. However, only 12% (19 respondents) reported the existence of a national sustainability policy for PHC in their country. The highest rated and most feasible actions include reducing electricity consumption, longer use of medical equipment and reducing waste. In contrast, reducing medical consumables, reducing staff mobility and decreasing reliance on internal/external laboratory analyses are considered less important and more difficult to implement.

**Conclusions:**

Comprehensive results, available in October, will offer a clearer picture of GPs' perspectives on sustainable practices in primary care and how these vary across and within countries. The findings will help identify gaps and define objectives for future research.

**Points for discussion:**

What is your experience on sustainability in primary care?

Which are priorities for future research on this topic ?

**Poster / Finished study****United by borders, divided by care: The Future We Leave Behind**

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**Keywords:** health workforce; primary health care; health inequities

**Background:**

Family medicine forms the cornerstone of primary healthcare in the Federation of Bosnia and Herzegovina (FBiH), delivered through 80 health centers across ten cantons. Despite uniform institutional presence, notable regional disparities exist in the availability of family physicians and specialists, as well as in physicians' salaries. A comprehensive understanding of these variations is essential to support equitable access and optimize workforce planning.

**Research questions:**

What are the regional differences in the distribution of family medicine physicians and specialists across FBiH cantons? How do these differences correlate with population size, trends in family medicine specialization and salary disparities?

**Method:**

This descriptive cross-sectional study utilized 2023 administrative health data from all ten cantons in FBiH. We analyzed the number of family physicians, specialists, and physicians in training for family medicine, calculating physician-to-population ratios to identify geographic disparities. Regional salary differences were assessed using official payroll data. Age distribution of specialists was also examined to assess workforce demographic structure.

**Results:**

The study revealed substantial regional variation in family medicine workforce density. Urban cantons demonstrated higher ratios of specialists per 100,000 inhabitants, ranging from 5.18 to 33.68 per 100,000 across regions. The total number of family medicine specialists in FBiH is 417, with 157 physicians currently in residency training. The age profile is skewed towards older cohorts, with over half of specialists aged 55–64, and relatively few under 35, highlighting upcoming workforce challenges. Significant salary differences exist, with physicians earning up to 30% more in some cantons, potentially affecting workforce distribution and retention.

**Conclusions:**

Marked regional disparities in family medicine workforce distribution and salaries highlight the need for targeted interventions. These findings underscore the need for strategic workforce planning and enhanced support for specialist training in underserved cantons. This study provides a robust evidence base to inform policy and ensure equitable, sustainable delivery of primary care across the Federation.

**Poster / Finished study****Fractures, Frailty, and Forgotten Diagnoses: A Comparative Analysis of Death Certificates and Medical Records in Rural Swedish Primary Care**

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**Keywords:** Primary care, Death certificate, Fragility fractures, Diagnostic discrepancy, Old women

**Background:**

Cause of death certificates (CoDCs) are critical for health statistics, resource allocation, and epidemiological research. In Sweden, as in many countries, most CoDCs for older persons are completed by general practitioners (GPs). However, several diagnoses with significant clinical impact—such as fragility fractures, anemia, and dementia—are often underrepresented in official mortality data.

**Research questions:**

To examine discrepancies between clinical records and CoDCs in deceased women aged 75—103, focusing on conditions commonly associated with frailty and ageing.

**Method:**

Data from a retrospective cohort of 893 deceased women in a southern rural Swedish setting were analyzed. Clinical diagnoses were retrieved from an electronic health care record system, categorized per ICD-10 and then compared with listed causes of death. Fragility fractures were analyzed in relation to time of death. The proportion of GPs writing CoDCs and autopsy rates were also assessed.

**Results:**

GPs completed 78% of all 893 CoDCs. Anemia and dementia were frequently recorded in clinical data but often absent in CoDCs. Among individuals with hip or pelvic fractures, 85% of 34 cases were reported in death certificates when the fracture occurred within 30 days prior to death. In contrast 8% of 77 cases were reported when the fracture occurred between 31 and 365 days before death. Autopsy rates were 2%.

**Conclusions:**

Significant discrepancies existed between clinical diagnoses and reported causes of death, especially for frailty-related conditions. These gaps may compromise the validity of mortality data. Enhancing training and support for GPs in cause of death reporting could improve data quality and public health planning.

**Points for discussion:**

How can we better support GPs in accurately certifying causes of death, especially for frailty-related conditions like fractures, anemia, and dementia?

Should the time interval between clinical events (e.g., fractures) and death influence whether they are included in death certificates?

What are the implications of diagnostic underreporting in primary care-certified death certificates for health policy, resource allocation, and epidemiological research?

**Poster / Ongoing study no results yet****Implementation of obesity interventions in primary care: a scoping review of barriers and facilitators**

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**Keywords:** obesity management, barriers and facilitators, primary care, scoping review, pharmacological treatments, multilingual research

**Background:**

Obesity management in primary care is an urgent research priority due to its increasing global prevalence and associated health risks. Although primary care provides a unique setting for long-term patient engagement, obesity remains significantly undertreated. Despite the availability of effective evidence-based approaches, their implementation in primary care settings remains limited. This scoping review aims to explore barriers, facilitators, and intervention strategies for effective obesity management in both adults and children, focusing on primary care perspectives and diverse sources of literature.

**Research questions:**

What are the barriers and facilitators to implementing obesity management interventions in primary care settings?

**Method:**

A scoping review will be conducted in accordance with PRISMA-ScR guidelines to ensure methodological rigor. Peer-reviewed publications will be identified through comprehensive searches in multiple databases, including: PubMed, Web of Science, Scopus, Science Direct, and the Cochrane Library. Gray literature and non-indexed sources will also be included to enhance comprehensiveness. Multilingual research efforts will be undertaken to ensure inclusivity. Materials published in the last 5 years will be considered. Inclusion and exclusion criteria will follow the PICOS framework (population, intervention, comparison, outcome, study design). The protocol has been registered with the Open Science Framework (OSF).

**Results:**

Preliminary findings are expected to highlight regulatory and financial barriers to pharmacological treatments, the importance of using person-first language, and the central role of primary care providers in managing obesity. Key system-level and provider-level factors influencing implementation will also be identified.

**Conclusions:**

This review will map and synthesise the current evidence on how patient, provider, and system-level factors influence obesity management in primary care. Findings will support the development of practical strategies to improve the approach to obesity in primary care.

**Points for discussion:**

Do you have any grey literature or national guidelines on obesity management in primary care in your country?

**Poster / Finished study****Low-density lipoprotein cholesterol dynamics after successful revascularization – main results of Real World Evidence of Arterial Hypertension and Lipids Evaluation Dynamics (REVEALED) observational study.**

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**Keywords:** LDL-cholesterol, secondary prevention, risk assessment**Background:**

Despite significant progress in the identification of high-risk individuals and their treatment, there are few real-world data focusing on the dynamics of LDL cholesterol levels and the subsequent major coronary events after successful coronary revascularization.

**Research questions:**

How frequently after successful revascularization the actual LDL-C targets are reached in practice

**Method:**

The study provides real-world data for patients with a history of coronary revascularization from 20 heart centers in Bulgaria, selected through the period of 01.04.2021 - 31.03.2022, and followed for dynamics in LDL-C, mortality and major cardiovascular events from 01.04.2020 to 31.03.2023.

**Results:**

A total of 8272 patients with coronary revascularizations were included in Real World Evidence of Arterial Hypertension and Lipids Evaluation Dynamics (REVEALED) observational study. During three – year follow-up there were 2451 (29.6%) repeated revascularizations (n=2 in 1898 and n>2 in 553 patients with a mean number of 2.3 revascularizations per patient). Overall LDL-C levels decrease from 3.2 mmol/l (IQR 2.2-4.06) to 2.3 mmol/l (1.6-2.8) during the second and 2.2 mmol/l (1.5-2.6) during the last revascularization. The results were mainly driven by the reduction of LDL-C in the group of patients with baseline LDL-C > 2.6 mmol/l (65.3%, delta of LDL-C – 37.5%) and to a lesser degree in the group of baseline LDL-C 1.8-2.6 mmol/l (19.9%, delta of LDL-C – 5.8%). In contrast, in the groups with baseline LDL-C < 1.4 mmol/l (6.26%) and 1.4-1.8 mmol/l (8.6%), an increase of subsequent LDL-C was noticed (delta of LDL-C 32.5% and 10.3% respectively) mainly related with therapy discontinuation or de-escalation.

**Conclusions:**

The speed of achievement of LDL-C targets and the success of their sustained long-term maintenance had an impact on prognosis. The main problems arise from the lack of sufficient emphasis on therapy maintenance and adherence monitoring in patients with near-target levels, as well as insufficient intensification in the remaining patients.

**Poster / Ongoing study no results yet**

## **Management of Atrial Fibrillation in Emergency and Primary Care Settings: A Retrospective and Comparative Analysis Involving Simulated Decisions by an Artificial Intelligence Model**

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**Keywords:** Atrial Fibrillation, Emergency Medicine, Primary Health Care, Clinical Decision-Making, Artificial Intelligence

### **Background:**

Atrial fibrillation (AF) is a common arrhythmia encountered in both emergency departments and primary care, associated with significant morbidity and thromboembolic risk. Despite the availability of up-to-date clinical practice guidelines (CPGs), such as the 2024 ESC recommendations, substantial variation in clinical management persists. Concurrently, artificial intelligence (AI) tools are emerging as potential aids in clinical decision-making. However, the degree to which real-world management aligns with guideline recommendations—and how human decisions compare to those suggested by AI models trained specifically for this context—remains unclear.

### **Research questions:**

To what extent do actual clinical decisions and AI-based suggestions align with current clinical practice guidelines in patients with AF treated in Emergency and Primary Care settings?

### **Method:**

This is an ongoing, retrospective observational and descriptive study. Cases of AF managed at the Hospital Clínico Universitario of Zaragoza and affiliated primary care centers will be selected. Clinical, demographic, and therapeutic variables will be collected. Each case will be assessed from three perspectives: actual clinical decisions, current guideline-based recommendations and simulated decisions produced by a clinically trained conversational AI model. The degree of concordance among these sources will be analyzed using descriptive statistics and agreement coefficients.

### **Results:**

The study is currently in progress. It is expected to identify patterns of adherence and deviation from guideline-based management in both actual clinical decisions and AI-generated recommendations. Additionally, the potential of the AI model as an educational or clinical decision-support tool will be evaluated.

### **Conclusions:**

This project aims to assess the appropriateness of real-world AF management and the potential role of AI in enhancing clinical decision-making, with implications for practice in both Emergency and Primary Care settings.

### **Points for discussion:**

Can AI improve real-world adherence to clinical practice guidelines in both Emergency and Primary Care settings for atrial fibrillation management?

What are the ethical and practical implications of integrating AI-based decision support tools into everyday clinical workflows?

Could conversational AI models serve as effective educational tools for healthcare professionals in training or practice?

**Poster / Finished study****Polypharmacy and selected parameters associated with quality of life**

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**Keywords:** polypharmacy, quality of life, predictors of polypharmacy

**Background:**

Polypharmacy is an important public health problem due to its potential negative effects on individual health. It is associated with many risk determinants

**Research questions:**

Do Risk Determinants Affect Polypharmacy and Does Polypharmacy Affect the Variability of Quality of Life and Self-Assessed Health?

**Method:**

It was a multicenter prospective randomized clinical study, conducted over 12 months in 2022/2023 on 174 respondents older than 65 years with multimorbidity and polypharmacy in 8 primary care clinics. A standard questionnaire was analyzed; correlation of polypharmacy and quality of life assessment was conducted.

**Results:**

Sperman's non-parametric correlation did not indicate a significant individual association between polypharmacy with each of the selected parameters such as gender, age groups, education, place of residence and GFR. Multiple regression analysis confirmed 5 parameters (number of chronic diseases, number of risk factors, number of risk habits, OTC and BMI) as independent significant predictors of polypharmacy. These 5 parameters as independent significant predictors together affect the variability of polypharmacy [ $F(5, 337) = 43.202$ ] in 39.1% ( $R^2 = 0.391$ ;  $p = 0.010$ ). Polypharmacy, as an individual predictor, significantly affects the variability of quality of life (EQ-5D-5L) in 8.5% ( $R^2 = 0.085$ ;  $p = 0.0001$ ). Increasing the number of medications (polypharmacy) for one drug on average reduces the quality of life by 0.157. Polypharmacy, as an individual predictor, significantly affects the variability of the health status assessment (EQWAS) by 3.6% ( $R^2 = 0.036$ ;  $p = 0.0001$ ). Increasing the number of medications (polypharmacy) for one medication on average reduces the assessment of the current health status by 0.022.

**Conclusions:**

In our country, there is no accurate data on how much patients' medications affect their quality of life. The research has shown that only five independent significant predictors together affect the variability of polypharmacy, which reduces the quality of life and self-assessed health.

**Poster / Ongoing study with preliminary results****Validation of an Innovative Communication Tool for Improving Compliance in Rehabilitation Medicine**

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**Keywords:** training, family medicine, clinical communication, physical therapy, rehabilitation medicine, patient compliance, empathy, validation, survey, questionnaire.

**Background:**

Effective communication in healthcare enhances patient motivation, engagement, and compliance. In physical and rehabilitation medicine, structured and empathetic interactions improve outcomes. However, Ukraine lacks easy-to-use mnemonic tools tailored to rehabilitation-specific communication. To address this gap, we developed “(KPD)<sup>2</sup> + ENZiM” — a model combining instructional strategies with elements of patient-centered care. It includes:

K-C: Command & Comment

P-P: Plain Phrases & Paraphrase

D-D: Demonstrate & Direct Touch

ENZiM: Empathy, Non-judgment, Zeal (Engagement), Mimics

The model was created within the research project “The correlation of compliance and quality of life in patients with post-traumatic pain syndrome and communication skills of medical staff”, supported by the ShowUp4Health grant.

**Research questions:**

How to evaluate the face and content validity of the “(KPD)<sup>2</sup>+ENZiM” communication model in rehabilitation care.

**Method:**

The tool was presented as a mnemonic combining six core interaction strategies and four empathy-based elements. Twenty-six healthcare professionals (clinical communication trainers, PM&R physicians, therapists, nurses, and family doctors) rated each element using a 5-point Likert scale. Item Impact Scores (IIS) were calculated. Additionally, 10 experts with over 5 years of experience assessed item relevance, purpose alignment, and clarity, allowing calculation of the Content Validity Ratio (CVR) via Lawshe's method.

**Results:**

The results demonstrated high scores for each component in both the Item Impact Score (IIS) and the Content Validity Ratio (CVR), Content Validity Index (CVI). Specifically, IIS scores ranged from 4.77 to 4.92, and CVR values ranged from 0.90 to 1.00, CVI values 0.99, indicating a high level of expert agreement regarding the importance and clarity of the model's elements. The model received high expert ratings: this reflects strong clarity, relevance, and perceived value across all components.

**Conclusions:**

The “(KPD)<sup>2</sup>+ENZiM” demonstrates strong validity and practical relevance in rehabilitation settings. It offers a structured, memorable, and empathetic approach to improving communication, enhancing trust, and promoting patient adherence in clinical practice.

**Points for discussion:**

How can this model be adapted for non-rehabilitation settings (e.g., primary care, emergency medicine)?

What are the training needs and barriers to integrating this tool in routine practice?

Could the model support better communication with patients from vulnerable or low-literacy populations?



**Poster / Ongoing study with preliminary results****Cardiovascular risk assessment in individuals with T2D in Croatia**

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**Keywords:** type 2 diabetes, cardiovascular risk, obesity, coronary artery disease, family medicine

**Background:**

Nowadays comprehensive approach in type 2 diabetes (T2D) treatment considers dual principle of simultaneous HbA1c regulation and cardiovascular (CV) risk control. In the recent decades, novel antidiabetic medications showed remarkable beneficial effects in terms of CV protection.

**Research questions:**

How high is the CV risk of individuals with T2D in Croatia?

**Method:**

This study gathered six GP practices from different Croatian regions. In the first part of the research, a detailed list of parameters needed for adequate CV risk assessment was established. Further, each researcher listed all individuals with T2D in their practice and briefly examined their each health record profile to collect data on CV risk assessment and medication used as well.

**Results:**

Obtained preliminary results consist of 501 individuals with T2D with an average of 8.5% per practice, most of whom were aged 60 to 80 years. Regarding the assessment of their CV risk, average BMI was 30.6 kg/m<sup>2</sup>, WHR 1.0, HbA1c 7.0% and LDL cholesterol 2.7 mmol/l. Arterial hypertension was associated to over 80% of T2D cases, and coronary artery disease to around 30%. Reduced renal function (eGFR < 90 ml/min) was detected in 75% of cases, but only 18.4% with eGFR below 60 ml/min. Still, albuminuria occurred in 63.5%. Although cerebrovascular incident occurred in 5.6% of T2D individuals, 25% had significant carotid or vertebral artery stenosis. In terms of using antidiabetic medications, expectedly, metformin was prescribed in 81.4% of cases, followed with equal prescribing rates of DPP4ins and SGLT2ins of around 27%. GLP-1 RAs were prescribed in 11.8% of T2D individuals, nearly the same as basal insulin (11.4%). Prescribing rate of sulfonylurea medications was 9.9%, and the prandial insulin 5.4%.

**Conclusions:**

It is of utmost importance to evaluate CV risk factors of individuals with T2D and timely indicate adequate therapies with cardioprotective benefits.

**Points for discussion:**

Does CV risk in T2D individuals go under our radar?

Are prescription rates of novel, cardioprotective antidiabetic medications too low?

Which methods for optimization of CV risk assessment and T2D treatment should be implemented?

## Poster / Published

**Cardiovascular risk management in General Practice using the SCORE System**

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**Keywords:** SCORE, Risk factor, Risk management, Risk assessment, Additional risk factors**Background:**

The SCORE system for cardiovascular risk assessment (CVR) has been implemented in the primary care across Europe. However, its use in general practice is often limited by the absence of structured follow-up. Additionally, a number of countries, including Bulgaria use locally adapted versions of the system.

**Research questions:**

To compare cardiovascular risk assessment, using three different methodologies: SCORE ESC (2016), SCORE from the National Framework Contract (NFC) in Bulgaria, and SCORE ESC (2019), and to propose an improved model for cardiovascular risk management in general practice for the Bulgarian population.

**Method:**

This was a prospective cohort study with retrospective data collection. We included 4,551 patients from a general practice in Pavlikeni, Bulgaria, over a period of one calendar year. Each patient's CVR was assessed using all three methodologies. Additional risk factors were considered. The analysis included descriptive statistics, non-parametric tests, and a relative risk calculation, using 95% confidence intervals and a significance level of  $\alpha = 0.05$ .

**Results:**

SCORE ESC (2019) showed the highest diagnostic performance, with superior sensitivity, specificity, and predictive validity. These results were supported by the gold standard comparisons and morbidity-to-mortality index analysis. The relative risk of cardiovascular events was calculated, assessed and compared between two groups (exposed and unexposed individuals) based on the three SCORE methodologies. Furthermore, the addition of three risk factors -BMI > 30, blood glucose > 6.1 mmol/L, and treated but poorly controlled hypertension - led to notable patient reclassification, particularly from moderate to higher-risk categories. A modified risk model was developed to enhance the accuracy and clinical relevance of cardiovascular risk assessment in general practice.

**Conclusions:**

SCORE ESC (2019) outperformed other methods in risk prediction. The proposed model, integrating three additional risk factors, improves classification accuracy and supports more effective CVR management in primary care.

**Points for discussion:**

What is the experience with SCORE adaptation and use in other countries?

**Poster / Ongoing study no results yet**

## **Effects of Patient Education on the Attitudes and Behaviors of Patients With Diabetes**

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**Keywords:** Diabetes, Self Management, Patient Education

### **Background:**

Diabetes is a chronic disease with acute and chronic complications. Diabetes mellitus (DM) management requires patient involvement. Management and awareness of diabetes can vary from patient to patient. Patients diagnosed with diabetes are more likely to encounter healthcare professionals working in primary care settings. Each patient's awareness, attitude, and behavior play a role in diabetes management.

### **Research questions:**

What are the attitudes and behaviors of patients with diabetes in our population regarding DM management ?  
Can patient education modify a patient's attitudes and behaviors?  
What is the impact of our education program on DM management skills in our patients ?

### **Method:**

This study was designed as a cross-sectional study. The study will utilize the "Comprehensive Diabetes Self-Management Scale" and a sociodemographic information form. Participants who have applied to the Family Health Center in primary care settings and have provided their consent to participate will be included. This scale includes 14 questions regarding nutrition, physical activity, medication use, blood glucose monitoring, problem-solving skills, reducing diabetes-related risks, and coping with stress.

### **Results:**

The study is in its preliminary stages. The dependent variables are the patient's scale score; HbA1c, and the independent variables are disease duration, age, gender, and educational status of the patients.

### **Conclusions:**

The study will contribute to the literature on the effect of patient education on the management of diabetes in patients in primary care outpatient clinic settings. Patient education programs can be planned concerning the individual needs of the patients. Patients' diabetes management skills and disease awareness may be increased.

### **Points for discussion:**

Do you have any other scale suggestions?

What kind of methods can we use for patient education?

Presentation on 18/10/2025 11:00 in "Poster Session 4: Screening and Prevention" by Bengi Tör.

**Poster / Finished study****Factors Influencing HPV vaccination behavior among Bulgarian GPs based on a Pro-VC-Be Survey**

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**Keywords:** HPV vaccination, General practitioners, Vaccine confidence, Behavioral determinants, Pro-VC-Be survey

**Background:**

Physician recommendation is one of the most influential factors in HPV vaccine uptake. In Bulgaria, where vaccine hesitancy persists, little is known about the psychosocial and behavioral determinants shaping GPs' vaccination behavior. The validated Bulgarian version of the Pro-VC-Be questionnaire enables systematic assessment of these factors.

**Research questions:**

What are the key behavioral drivers influencing HPV vaccination recommendations among Bulgarian GPs, as assessed by the Pro-VC-Be tool?

**Method:**

A national cross-sectional online survey was conducted between February and April 2025 among 364 GPs from all regions of Bulgaria. The Pro-VC-Be tool measured constructs such as vaccine confidence, complacency, perceived constraints, collective responsibility, and commitment. A range of quantitative analyses was applied: descriptive statistics, exploratory factor analysis, t-tests, ANOVA, and multivariate regression to explore associations between Pro-VC-Be scores, vaccination behavior, and demographic variables. Data were processed using SPSS v.21.

**Results:**

GPs reported high levels of proactive vaccine-related behavior (>80%) and strong awareness of vaccination benefits. Moderate-to-high vaccine confidence was observed, along with notable levels of trust in public health authorities. Higher scores in commitment and collective responsibility were associated with routine HPV vaccine recommendation ( $p < 0.01$ ), while perceived constraints (e.g., time pressure, organizational barriers) and complacency negatively affected vaccination behavior. Positive vaccination attitudes also correlated with willingness for future COVID-19 vaccination and higher self-vaccination rates.

**Conclusions:**

This first national study using the Pro-VC-Be framework highlights the importance of behavioral determinants in HPV vaccine advocacy among Bulgarian GPs. Reducing practical barriers and reinforcing professional values could strengthen vaccination efforts in primary care.

**Points for discussion:**

How can behavioral insights guide HPV vaccination strategies in general practice?

What role do trust in public health authorities and professional commitment play in shaping GPs' vaccine recommendation behavior?

How can healthcare systems address perceived constraints (e.g., time pressure, administrative burden) that hinder HPV vaccine advocacy among GPs?

**Poster / Study Proposal / Idea****Integrating Virtual Reality in Patient Education for the General Practice: Pilot Study**

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**Keywords:** Virtual reality, patient education, immersive VR integration

**Background:**

Immersive Virtual Reality (VR) is emerging as a novel tool in patient education within general practice. Traditional methods often fall short in engaging patients, especially in conveying complex, abstract medical concepts. VR offers interactive, 3D visualizations that can enhance understanding and retention. Preliminary studies suggest that VR can improve patient comprehension of chronic conditions and motivate healthier behaviors. However, its feasibility and impact in routine primary care settings remain underexplored.

**Research questions:**

Can immersive VR be feasibly integrated into general practice for patient education, and does it improve patient understanding of health conditions and motivate healthier behaviors in a pilot setting?

**Method:**

This mixed-methods pilot study will be conducted in family medicine clinics in Bulgaria, Germany and Turkey. Adult patients with chronic conditions (e.g., diabetes, cardiovascular disease) will participate in VR education sessions lasting 5 to 10 minutes, integrated into routine consultations. The VR modules will include interactive scenarios such as virtual tours of the body to explain cardiovascular risk and gamified modules to demonstrate the effects of diet and exercise on diabetes control. Data will be collected using pre- and post-intervention quizzes to assess knowledge improvement, self-report measures to gauge motivation for health behavior change, and semi-structured interviews to capture patient experiences. Feasibility metrics, including session setup time and technical issues, will also be recorded.

**Results:**

Preliminary findings indicate that VR education is well-accepted by patients, with many reporting improved understanding of their health conditions and increased motivation to adopt healthier behaviors. Feasibility data suggest that integrating VR into clinic workflows is manageable, with minimal disruption.

**Conclusions:**

Immersive VR can be feasibly integrated into general practice for patient education. It shows promise in enhancing patient understanding and motivating healthier behaviors. These findings support further investigation into VR's role in primary care education.

**Points for discussion:**

Challenges in scaling VR-based patient education to diverse populations.

Strategies for integrating VR into routine clinical workflows.

Evaluating the long-term impact of VR education on health outcomes.([meeting.egprn.org](https://meeting.egprn.org))

**Poster / Almost finished study****Parental awareness and screening of congenital urinary tract anomalies in general practice**

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**Keywords:** congenital urinary tract anomalies, general practice, parental awareness, screening, prevention, chronic kidney disease

**Background:**

Congenital anomalies of the urinary tract (CAUT) are a leading cause of chronic kidney disease (CKD) in early childhood. Early screening and follow-up are essential to prevent complications. In Bulgaria, GPs provide routine pediatric care and are central to implementing national prevention protocols. This study assesses parental awareness of CAUT and the role of GPs in facilitating early detection and monitoring.

**Research questions:**

To explore parental awareness of early signs of urinary tract infections (UTIs), potential complications, and the importance of screening for CAUT in young children.

**Method:**

This cross-sectional observational study was conducted in general practices where GPs provide ongoing pediatric care. Two parallel surveys were administered: one to 170 parents of children aged 0–3 years from GP lists, and another to 42 GPs performing pediatric consultations. Data collection included structured questionnaires assessing socio-demographic characteristics, parental knowledge and attitudes, and GP practices regarding CAUT screening. Statistical analysis was used to examine associations and indicator prevalence.

**Results:**

Only 20.6% of parents were aware of UTI risk factors, and 70.6% did not recognize possible complications. Among their children, 11.8% had diagnosed CAUT and 26.5% had experienced UTIs. Despite national guidelines, 10.6% of children had not seen a pediatric nephrologist by six months of age. Follow-up was required in 25.3% of nephrology visits. GPs reported detecting asymptomatic UTIs during routine check-ups in 75.6% of cases.

**Conclusions:**

Parental awareness of CAUT is insufficient. Strengthening GP-led education and screening within routine care may improve early diagnosis, reduce complications, and lower CKD risk in early childhood.

**Points for discussion:**

The importance of screening programs in general medical practice for the prevention of chronic diseases.

Parental awareness as part of early diagnosis and prevention of complications of chronic diseases.

Congenital anomalies of the urinary tract as a major factor in the development of chronic kidney disease, disability and early mortality.

**Poster / Ongoing study with preliminary results****Confidence, practices and training needs of Bulgarian GPs in managing menopausal symptoms: A Cross-Sectional Survey**

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**Keywords:** menopause, GP

**Background:**

General practitioners (GPs) often serve as first-line care providers for women in menopause, yet confidence in managing menopausal symptoms remains variable. International guidelines recommend integrating menopause care into primary care, but educational gaps persist in Bulgaria.

**Research questions:**

What are the current practices, confidence levels, and educational needs of Bulgarian GPs in managing menopausal symptoms?

**Method:**

A cross-sectional online survey was conducted among 137 Bulgarian GPs. The questionnaire assessed formal training, clinical practices, therapeutic confidence (including hormonal replacement therapy), and educational needs. Descriptive statistics summarized responses. Associations between training history and prescribing practices were analyzed using chi-square tests.

**Results:**

Although most respondents regularly consulted menopausal patients, only 17.5% reported confidence in prescribing hormone therapy. Lifestyle advice (72.3%) and herbal remedies (44.5%) were preferred over evidence-based hormonal treatments (15.3%), even when indicated. Barriers included fear of side effects, lack of national guidelines, and limited training. GPs who had received prior postgraduate education in menopause care were significantly more likely to recommend hormonal therapy ( $p < 0.05$ ). Interest in structured training was high, with 88.3% expressing a desire for further education.

**Conclusions:**

The management of menopausal symptoms in Bulgarian primary care is marked by uncertainty and underutilization of hormonal therapy. Educational programs and national guidelines are needed to bridge the gap between evidence-based recommendations and real-world practice, empowering GPs to provide more confident, comprehensive care.

**Points for discussion:**

- How can menopause care be integrated into GP curricula and CME?
- What policy steps are needed to support guideline development?
- Should multidisciplinary models involving GPs and specialists be piloted?

**Poster / Ongoing study with preliminary results****Empowering Implementation: Development and Validation of a Universal Tool for Family Physicians' Needs Assessment.**

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**Keywords:** needs assessment, implementation, family physicians, questionnaire development, content validity, face validity, primary care, evidence-based methods

**Background:**

Empowerment of evidence-based innovations in healthcare often fails due to poor adaptation to routine settings. Existing tools rarely assess specific needs of providers for adopting particular interventions. A standardized instrument to identify and prioritize such needs could support more effective implementation.

**Research questions:**

How can a standardized questionnaire be developed and validated to assess family physicians' specific needs for implementing evidence-based methods and recommendations in routine practice?

**Method:**

A Needs Assessment Questionnaire was developed using selected determinants from the Determinants of Implementation Behavior Questionnaire (DIBQ). Items were reformulated to reflect explicit implementation-related needs of healthcare professionals. Content validity was assessed in two rounds by 12 and 10 experts. Content Validity Ratio (CVR) and Content Validity Index (CVI) were calculated. Face validity was assessed via a survey of 25 family physicians; Item Impact Scores (IIS) were calculated based on their importance ratings. Qualitative feedback guided item refinement. Only items that met all three validity thresholds were retained.

**Results:**

An initial pool of 31 items (12 closed and 19 open-ended) was developed. Based on assessment by both experts and family physicians, 14 items met thresholds for CVR ( $\geq 0.62$ ), CVI ( $\geq 0.79$ ), and IIS ( $\geq 1.5$ ), reflecting essentiality, relevance, clarity, and importance. These items represent key needs related to clear instructions, practical skills, time, financial motivation, support from organizational leadership, availability of resources, and other additional needs. The final version is structured for clarity and feasibility. One piloting option will explore needs for implementing evidence-based screening tools, such as depression screening and the "CheckMe" web-based tool that generates personalized screening plans.

**Conclusions:**

The developed questionnaire is content- and face-validated for use with family physicians. It supports structured identification of implementation-related needs and may enhance tailored adoption of evidence-based practices.

**Points for discussion:**

1. How can the questionnaire be used among nurses, physiotherapists, and other medical specialists?
2. Is the tool suitable for adaptation across healthcare systems and languages?
3. For which clinical methods and recommendations might this questionnaire be especially useful?



**Poster / Ongoing study no results yet****Family Doctors' Perspectives on the Applicability of Social Prescribing in Türkiye:  
A Qualitative Study**

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**Keywords:** Social prescribing, primary health care, qualitative research

**Background:**

Social prescribing is a person-centered approach that addresses patients' non-medical needs, such as social isolation and depression, by connecting them to community-based services. While widely used in many European countries, this model remains relatively unfamiliar in Türkiye. Investigating the perspectives of family medicine residents may guide future implementation in Turkish primary care.

**Research questions:**

What are family medicine residents' knowledge and perceptions regarding social prescribing in Turkish primary care?

What are family medicine residents' attitudes and perceptions on the applicability of social prescribing in Türkiye?

**Method:**

This is a qualitative phenomenological study conducted through focus group discussions. Eighteen family medicine residents from Sincan Training and Research Hospital were recruited and grouped into three focus sessions. Before the interviews, participants attended a one-hour briefing on the concept and international practices of social prescribing. Data are being collected through semi-structured interviews, which are audio-recorded with consent and transcribed verbatim. Transcripts will be anonymized and analyzed using thematic analysis with NVIVO software. Coding will be conducted independently by two researchers and finalized through consensus meetings. The number of participants may be increased if data saturation is reached.

**Results:**

Data collection and transcription are ongoing. As this is an in-progress study, no definitive results are available yet. The full qualitative analysis will be completed before the EGPRN meeting.

**Conclusions:**

The insights from this research are expected to inform future integration strategies of social prescribing into family medicine education and clinical practice in Türkiye.

**Points for discussion:**

Does your country have a social prescribing program, and if so, what is the structure or systematic approach behind it?

What factors are most critical in implementing social prescribing in Türkiye?

How can training programs effectively integrate social prescribing?

**Poster / Ongoing study no results yet****Mapping Family Medicine residency programmes in Europe: The path to Standardization**

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**Keywords:** Family Practice, Medical Staff, Hospital, Professional Training, Internship and Residency

**Background:**

Family Medicine (FM) plays a central role in healthcare systems across Europe by delivering accessible, patient-centered, and longitudinal care—contributing to improved survival, as well as, reducing hospitalizations, and emergency visits. FM training typically spans 3-6 years and combines theoretical instruction with hands-on practice to ensure the development of core competencies. These include clinical decision-making under uncertainty, effective communication, and working in resource-limited settings. However, significant disparities persist across countries regarding training content, structure, and assessment of training programmes, potentially impacting the quality and consistency of care.

**Research questions:**

What is the current landscape of FM residency programs across Europe, in terms of structure, implementation, and evaluation practices?

**Method:**

A cross-sectional descriptive study is being conducted across 53 European countries. Data are collected through a self-administered online questionnaire designed by a core research team of FM experts. Respondents are national key informants affiliated with EURACT, EGPRN, or WONCA Europe and all actively engaged in FM education or training. The variables collected addresses structure ( residency entry pathways, training duration) , implementation (balance of theory vs. practical components) and evaluation. Data collection takes place from August to September 2025, with validation provided by a second national expert and a FM resident. Quality assurance involves cross-validation and clarification by the core team. Quantitative analysis will be conducted using STATA 16.

**Conclusions:**

This study will provide an updated and comprehensive overview of FM residency training across Europe, highlighting current variations and highlighting the need for standardized harmonized standards. Findings will inform the development of a unified European curriculum and support future steps toward implementing a shared final assessment, ensuring that core competencies are recognized across all countries. This work aims to guide support evidence-based educational policy and promote high-quality, consistent FM training throughout the European region.

**Points for discussion:**

Should Family physicians have the same competences all over Europe?

How can we overcome training gaps within countries?

How can we overcome training gaps?

**Poster / Ongoing study no results yet****Mapping Medical Schools in the European Higher Education Area: A First Step to FaME-EP (Family Medicine Education – European Project)**

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**Keywords:** Medical Education, Family Medicine, General Practice

**Background:**

The presence of family medicine (FM) within undergraduate medical education varies widely across Europe. To study how FM is taught, a necessary first step is to identify the number and distribution of medical faculties in the countries of the European Higher Education Area (EHEA), including their relation to population size and whether they are publicly or privately owned.

**Research questions:**

How many medical faculties exist in each EHEA country? What is the ratio of population per medical faculty, and how does this vary between countries?

**Method:**

We conducted a descriptive study based on secondary data. A list of EHEA countries was obtained, and the number of medical faculties per country was compiled from official governmental and educational sources. Population estimates for July 2024 were taken from United Nations data. We calculated the population per faculty in each country and analyzed variability across the region.

**Results:**

A total of 728 medical faculties were identified across 44 EHEA countries. Countries such as Georgia and Armenia had the highest number of faculties per capita, with up to 6 faculties for million inhabitants, while others like Germany and Turkey had the lowest, with less than one. Significant disparities were observed, ranging from one faculty per fewer than 300,000 people to more than one per 3 million. School ownership also varied, with some countries having only public/state universities and others only private institutions.

**Conclusions:**

This mapping of medical faculties offers a valuable baseline for exploring teaching in medical schools and the integration of FM in undergraduate curricula across Europe. The variation in the number of faculties per population highlights important contextual differences that may influence how general practice and family medicine are represented and taught.

**Points for discussion:**

What contextual factors might explain the wide variation in the number of medical faculties per population across EHEA countries?

What would be a feasible and valid method to assess the actual presence and quality of family medicine teaching in such a diverse educational landscape?

**Poster / Ongoing study with preliminary results**

## **Presenteeism in (Primary) Healthcare: A Narrative Review of Causes, Consequences, and Prevention Strategies with a Focus on General Practitioners**

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### **Background:**

Presenteeism, defined as working while ill, is a growing concern in healthcare, particularly among general practitioners (GPs) and family medicine providers. While presenteeism is known to negatively impact individual health, organizational productivity, and patient care, research specifically addressing its causes, consequences, and prevention in primary healthcare is scarce. This review aims to address this gap by synthesizing existing knowledge and identifying areas for further research.

### **Research questions:**

What are the primary causes and consequences of presenteeism among healthcare providers, particularly in primary healthcare, and what strategies can be implemented to prevent it?

### **Method:**

This narrative review synthesizes literature published after 2010, identified through PubMed, Web of Science, and Google Scholar. The focus is on healthcare professionals, with an emphasis on GPs and primary healthcare providers. Studies were selected based on relevance to personal, organizational, and structural factors contributing to presenteeism, as well as its individual, organizational, and societal consequences. Preventive strategies were also critically evaluated.

### **Results:**

No studies specifically addressing presenteeism among GPs or primary healthcare providers were identified. Findings from general healthcare research indicate:

- **Causes:** Personal traits (e.g., over-commitment), high workloads, negative workplace climates, and financial insecurities.
- **Consequences:** Worsened health, reduced productivity, compromised patient safety, and increased strain on healthcare systems.
- **Prevention Strategies:** Promoting self-care, flexible scheduling, reducing bureaucracy, and expanding workplace health initiatives.

### **Conclusions:**

Presenteeism in primary healthcare is underexplored, with current findings based on general healthcare research. Addressing presenteeism requires targeted interventions at individual, organizational, and societal levels. Further research is essential to understand its specific drivers among GPs across diverse healthcare systems and to develop tailored prevention strategies that improve provider well-being and patient care.

**Poster / Almost finished study****Artificial Intelligence and Health Equity in Primary Care: A Scoping Review**

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**Keywords:** primary health care, artificial intelligence, health equity, health services

**Background:**

Integrated primary healthcare (PHC) ensures that all individuals have access to health services. Artificial Intelligence (AI) has significantly transformed PHC by enhancing the quality, efficiency, and reach of care. However, concerns have emerged regarding AI's potential to either reduce or exacerbate health inequities, one of the most persistent challenges in healthcare systems globally. Understanding AI's role is essential for equipping the next generation of family physicians with the knowledge and insights needed to lead equitable and innovative care.

**Research questions:**

The primary objectives of the research revolve around two main questions: (a) how AI affects health equity in the PHC setting, and (b) what the contribution of AI in PHC to health inequalities is.

**Method:**

A scoping review was conducted with literature research across PubMed, Scopus, IEEE Xplore databases, and grey literature sources such as JSTOR and Google Scholar, covering the period from 2000 to 2025. Article selection adhered to the PRISMA-ScR guidelines, and thematic analysis was used to synthesise findings.

**Results:**

Out of 1,211 identified publications, 25 met the inclusion criteria. The results were categorized into eleven thematic domains, reflecting both positive and negative impacts of AI on health equity: (1) improving access to healthcare and addressing the digital divide, (2) enhancing early disease detection in underserved populations, (3) reducing disparities in clinical decision-making, (4) agency for self-care, (5) algorithmic bias, (6) ethical concerns, (7) patient trust, (8) dehumanisation and biomedicalization, (9) patient-doctor relationship, (10) participatory approaches and community involvement, and (11) provider acceptance, opportunity loss, and equity.

**Conclusions:**

This review summarises the extent to which implementation of AI in PHC promotes health equity or mitigates health inequalities and highlights the urgent need for further research to ensure its equitable implementation in healthcare systems and better prepare and empower future family physicians to navigate and lead in a rapidly transforming healthcare environment.

**Points for discussion:**

AI systems are only as fair as the data and assumptions behind them. Biases in training data or model design can lead to unequal treatment, especially for marginalized populations. What safeguards should be in place to prevent such biases from affecting care decisions?

How can family physicians critically evaluate and challenge algorithmic outputs, especially when they conflict with clinical judgment or patient context?

How can we train and empower future physicians to critically engage with AI tools while preserving the human touch in care?

**Poster / Finished study****Does Patient Satisfaction with Primary and Emergency Care Influence Non-urgent Emergency Department Utilization? A Path Analysis**

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**Keywords:** Emergency department, Primary care, Non-urgent, Patient satisfaction

**Background:**

Non-urgent emergency department (ED) visits during weekday working hours place unnecessary strain on healthcare systems. Although patient satisfaction is a core component of service quality, its role in influencing care-seeking behavior between primary care (PC) and ED services remains unclear.

**Research questions:**

- 1-Does patient satisfaction mediate the relationship between primary care utilization and non-urgent ED use?
- 2- What patterns link frequency of visits and satisfaction levels with either service?

**Method:**

This observational study compared patient satisfaction levels using two validated tools: the EUROPEP (European Patients Evaluate General/Family Practice) scale for PC visits, and the Brief Emergency Department Patient Satisfaction Scale (BEPSS) for ED visits. Data analysis was conducted using Jamovi software (version 2.6.26), employing structural equation modeling and correlation analysis.

**Results:**

A total of 293 patients participated in the study (61.4% female). Examination-only visits accounted for 43.7% of PC and 66.6% of ED encounters. Satisfaction rate was higher in ED (75.0%) compared to PC (66.7%). Frequent users of non-urgent ED services were also more likely to utilize PC services ( $r = 0.394$ ,  $p \leq 0.001$ ). A positive correlation was observed between satisfaction with previous PC and ED experiences ( $r = 0.399$ ,  $p \leq 0.001$ ). However, higher satisfaction with either service was not associated with increased visit frequency ( $p > 0.05$ ). Notably, frequency of PC visits mediated the relationship between older age and increased non-urgent ED use ( $\beta = 0.067$ , 95% CI [0.002, 0.029],  $p = 0.028$ ), suggesting insufficient referrals from PC to ED.

**Conclusions:**

Higher satisfaction with PC or ED does not predict increased utilization. Frequent non-urgent ED use among older adults may reflect inadequate coordination or referral between services rather than dissatisfaction. In addition, improving satisfaction alone is insufficient without addressing overuse, maladaptive health-seeking behavior, and the need for a referral system or standardized family health center enhanced resources.

**Points for discussion:**

- How can PC systems be restructured to reduce avoidable ED visits?
- Should referral mechanisms be mandated to guide non-urgent patient flow?

**Poster / Ongoing study with preliminary results****Measuring menopausal symptoms in Bulgarian women using the Menopause rating scale: A Patient-Centered Quantitative Study**

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**Keywords:** menopause, GP

**Background:**

While qualitative studies show Bulgarian women often lack adequate support during menopause, structured symptom assessment tools are underused in practice. The Menopause Rating Scale (MRS), validated in Bulgarian, allows standardized evaluation of symptom severity and quality-of-life impact.

**Research questions:**

What is the symptom burden among Bulgarian women aged 40–60, as measured by the Menopause Rating Scale, and what are their care expectations from primary care?

**Method:**

A cross-sectional survey using the Bulgarian version of the MRS was conducted among 212 women aged 40–60 attending primary care. The MRS quantified somatic, psychological, and urogenital symptoms. Participants also answered open-ended questions regarding care expectations from their GPs. Quantitative data were analyzed descriptively; symptom severity scores were calculated according to MRS methodology.

**Results:**

Moderate-to-severe menopausal symptoms were reported by 58.4% of participants. The most prevalent complaints were hot flushes (71.2%), sleep disturbances (64.8%), joint pain (59.3%), and mood swings (53.1%). Urogenital symptoms were underreported but present in over 30%. Most women (72.6%) expressed dissatisfaction with available healthcare support. Open responses highlighted a desire for proactive communication, treatment discussions, and acknowledgment of symptoms by their GPs.

**Conclusions:**

The MRS demonstrates significant symptom burden among Bulgarian women in menopause. Despite this, perceived support from primary care remains limited. Incorporating structured symptom assessment and GP training could improve recognition and management of menopausal symptoms in Bulgaria.

**Points for discussion:**

How can symptom tools like the MRS be integrated into GP consultations?

Could standardized assessments improve patient-GP communication?

Should national screening protocols for menopausal symptoms be considered?

Presentation on 18/10/2025 11:00 in "Poster Session 6: Patient-Centered Care" by Georgi Tsigarovski.

**Poster / Ongoing study with preliminary results****Quality under scrutiny: reviewing primary healthcare indicators in Ukraine during the war**

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**Keywords:** Primary health care (PHC); quality indicators; wartime healthcare; Item Impact Score (IIS); Ukraine; performance assessment; indicator relevance

**Background:**

Since the war began, Ukraine's health system—especially primary care—has operated under immense strain. State-recommended quality indicators may not reflect wartime realities. We assessed the external validity of PHC indicators from the perspective of family doctors, based on UMoH and NHSU frameworks.

**Research questions:**

How to assess the external validity of PHCI in Ukraine using the Item Impact Score (IIS) based on physicians' ratings of importance for practice, doctors and patients during wartime?

**Method:**

A pilot survey of 13 family doctors from 4 Ukrainian regions used a structured Google Forms questionnaire. They rated 25 official PHC indicators (UMoH/NHSU) on a 5-point Likert scale across 4 dimensions. Item Impact Scores (IIS) were calculated to assess external validity.

**Results:**

Not all UMoH indicators were equally relevant during wartime. The  $\geq 1$  annual visit indicator was rated low due to population displacement. Physician workload was valued by providers (IIS 2.3–3.8) but underestimated by patients (IIS 1.34). Physician availability (IIS 3.9), child vaccination (IIS 4.3), and developmental monitoring under 1 year (IIS 3.9–3.77) were highly rated. BMI and smoking assessment were important to providers (IIS 2.66–2.71), but not to patients (IIS 0.53). Mental health indicators were highly ranked by doctors (IIS 3.3–3.9), yet perceived as less important by patients (IIS 0.78). Secondary prevention (breast, colorectal cancer, HIV, TB) had support (IIS 2.17–3.49), while prostate cancer screening was questioned (IIS 0.31–1.18). Hypertension management was valued (IIS 3.77 for doctors, 3.37 for facilities, 2.71 during war). Referral rate to specialists scored low (IIS 0.85 for patients, 0.93 during war), possibly due to concerns about undermining family doctors. "Affordable Medicines" coverage was seen as less relevant (IIS 1.27–2.07), likely due to limited access to combination therapies.

**Conclusions:**

Not all official PHC indicators remain relevant during wartime. Primary prevention, physician availability, and mental health were prioritised. Providers noted that patients may undervalue mental health, BMI, and smoking. Prostate cancer screening and referral rates were least supported.

**Points for discussion:**

Can this study guide the quality monitoring systems evaluation in conflict-affected countries?

What other indicators may assess PHC performance evaluation under crisis conditions?



**Poster / Finished study**

## **Would Patients Choose In-Person Visits Again? A Cross-Sectional Study of Retrospective Preferences in Primary Care**

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**Keywords:** Digital visit, frontal visit, primary care

### **Background:**

The integration of digital technologies into healthcare—particularly telemedicine—has accelerated rapidly, especially during the COVID-19 pandemic. Virtual consultations offer improved access, convenience, and reduced hospitalizations. However, concerns persist regarding their potential impact on the doctor–patient relationship and overall healthcare utilization. Understanding patient preferences in hindsight may help tailor future service delivery

### **Research questions:**

To evaluate whether patients who attended in-person primary care visits would retrospectively have chosen a different mode of consultation, and to identify factors associated with their preferences

### **Method:**

In this cross-sectional study, patients attending a primary care clinic completed pre- and post-visit questionnaires assessing visit preferences, technological literacy, and attitudes toward digital health. Physicians rated the suitability of each encounter for various consultation formats (in-person, telephone, or video)

### **Results:**

Ninety patients completed the study (response rate: 90.91%), with a mean age of  $63.5 \pm 16.8$  years; 52.2% were female. Older age groups (70–79 and 80+) significantly preferred in-person visits ( $p < 0.05$ ), while gender was not associated with visit preference. Patient and physician assessments were significantly aligned in favor of in-person visits. Interestingly, technological literacy did not correlate with visit preference. However, patients with high technological literacy were more likely to report high self-efficacy (63% vs. 31%,  $p = 0.021$ ) and perceived digital tools as easier to use (63% vs. 26%,  $p = 0.023$ )

### **Conclusions:**

While older adults continue to favor traditional consultations, many patients with high digital literacy still opt for in-person care. Retrospective insights into patient preferences can inform hybrid care models, enabling personalization of healthcare delivery based on age, digital competency, and patient values

**Poster / Finished study****Appropriate choice of antibiotic therapy for patients in nursing homes: how relevant are diagnostic possibilities?**

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**Keywords:** antibiotic therapy, antibiotic resistance, nursing homes, targeted therapy

**Background:**

In nursing homes (NH), appropriate targeted antibiotic therapy (AT) is essential for the adequate treatment of frail patients with multiple comorbidities and risk infective factors. Often, the choice of the antibiotic must be made promptly based on clinical and epidemiological criteria, keeping the patient in the facility.

**Research questions:**

Quantification of empirical or aetiological criteria used to select AT with subsequent in-depth examination of the diagnostic and organizational possibilities available to support clinical decisions.

**Method:**

Analysis of 240 patients registered to 6 GPs, in 3 NHs of ULSS 9 Scaligera (Veneto Region), selecting those with at least one infectious event in 2022 treated with antibiotics. The availability of diagnostic procedures or organizational pathways for the clinical management of patients was analysed using 39 questionnaires out of 70 sent to facilities in the same area.

**Results:**

Included 86 patients (15% M, 85% F) with 247 infectious events (IE). IE sites: 46.2% urinary tract; 33.6% pulmonary; 10.9% skin; 9.4% others. Main antibiotics used: quinolones 25.4%; amoxicillin+clavulanic acid 17.7%, fosfomycin 17%; cephalosporin 13.3%, sulfonamides 8%, macrolides 7.6%. AT was prescribed empirically in 86% of cases. Availability of diagnostic tests (within 24h / 2x/week /  $\leq$  1x/week): Blood count/CRP 40.5% - 40.5% - 18.9%; Urine cultures 29.7% - 48.6% - 21.6%; Blood cultures: 25% - 22.2% - 8.4%, not available in 44.4%; Skin swabs: 21.6% - 37.8% - 35.1%. Chest X-rays and Abdominal ultrasound were available respectively in 27% - 37.8% - 35.1% and 2.7% - 18.9% - 78.4% with regard to direct access / referral to the emergency department / scheduled examination.

**Conclusions:**

We have found that in nursing homes, the choice of antibiotic therapy is usually based on empirical criteria, given the need to start treatment early to avoid life-threatening complications. However, diagnostic tests to support clinical decisions regarding targeted antibiotic therapy are not sufficiently available.

**Points for discussion:**

How can we maintain appropriateness when patient frailty or the severity of infections require empirical antibiotic therapy? (Antibiotic stewardships projects specific to this care setting?)

Targeted antibiotic therapy is more effective in combating antimicrobial resistance (AMR): however frail patients usually need to be treated early and locally, where diagnostic tools are not readily available to reach an aetiological agent. How can we improve the critical issues relating to the organization of diagnostic pathways and the lack of availability of diagnostic tools? (Preferential pathways for nursing home residents? POCT tools? POCUS?)

**Poster / Finished study****Aspirin for Prevention: Who Uses It, Why, and at What Cost?**

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**Keywords:** Cardiovascular Diseases, Adverse Drug Reaction Reporting Systems, Primary Prevention

**Background:**

Acetylsalicylic acid (aspirin) is commonly prescribed for the prevention of cardiovascular and cerebrovascular events. Despite its benefits, aspirin use carries risks such as gastrointestinal bleeding and ulcers. Inappropriate or unsupervised long-term use may increase morbidity. This study aimed to examine the demographic and clinical characteristics of aspirin users and to explore the frequency and predictors of aspirin-related side effects in adults.

**Research questions:**

What are the characteristics of aspirin use and the associated side effects among adults aged 40 and older in a primary care population?

**Method:**

A cross-sectional study was conducted with 617 individuals aged 34 to 84 years (mean age:  $71.5 \pm 5.6$ ), using a structured questionnaire. Data on sociodemographic factors, chronic diseases, BMI, smoking, alcohol consumption, and detailed aspirin use (dosage, indication, prescriber, duration, adverse effects) were collected. Participants were categorized based on aspirin use: current, previous, or never. Statistical analyses were performed using Chi-square and Fisher's Exact tests (significance:  $p < 0.05$ ).

**Results:**

Among participants, 28.2% were current aspirin users, 21.9% were previous users, and 49.9% had never used aspirin. Aspirin was most often recommended by cardiologists (63.4%), primarily for secondary prevention (62.4%). The most common daily dose was 100 mg (85.2%). Only 34.1% of current users reported regular use. Aspirin use was significantly higher among those with hypertension ( $p < 0.001$ ), diabetes, dyslipidemia, or heart disease. Reported side effects included gastrointestinal bleeding (2.3%), ulcer (1.8%), and allergic reactions (1%). Side effects were more frequent in former users and those using  $\geq 150$  mg doses ( $p = 0.048$ ). Gastroprotective drug use was more prevalent among aspirin users ( $p = 0.008$ ).

**Conclusions:**

Aspirin use is widespread, especially for secondary prevention and under physician supervision. However, side effects—particularly gastrointestinal—remain noteworthy. Risk-benefit assessment and appropriate gastroprotection are essential in long-term aspirin therapy.

**Points for discussion:**

What are the clinical implications of aspirin use for primary prevention in individuals without a clear cardiovascular risk profile?

How should healthcare providers balance the cardiovascular benefits of aspirin with the risk of gastrointestinal complications in routine practice?

What role can family physicians and primary care providers play in reviewing inappropriate or unsupervised aspirin use in the community?

**Poster / Ongoing study no results yet****Effectiveness of a Randomized Complex Intervention with Adolescents and Their Environment to Reduce Problematic Video Game Use/Addiction by Promoting Shared Active Leisure and Personal Development**

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**Keywords:** adolescent, video games, community-based participatory research, technology addiction, mindfulness

**Background:**

Videogames are one of the most powerful learning and personal development tools for young people. However, the intensive and problematic use of video games can have negative consequences in terms of health and coexistence. In one out of six Galician adolescents, the use of videogames could already be a problem.

**Research questions:**

Will the problematic use and possible addiction to videogames in adolescents decrease through a) a co-designed community action in which alternatives to the use of videogames are promoted and b) the improvement of personal resources of adolescents and surrounding adults?

**Method:**

Design: Pragmatic community trial to evaluate a complex intervention with adolescents and their environment, including: (a) community activities promoting games, physical activity and/or volunteering, (b) group sessions on emotional development for adolescents, and (c) online sessions for surrounding adults (family, teachers, health professionals).

Instruments: Main outcome includes Game Addiction Scale for Adolescents (GASA) and Internet Gaming Disorder Test (IGDT-10). Secondary variables include Problem Gambling Severity Index (PGSI), Child and Adolescent Mindfulness Measure (CAMM), Ryff Psychological Well-Being Scales for Children and Adolescents, and Patient Health Questionnaire (PHQ-9), among others.

Groups: Intervention: first-year secondary classrooms in six centers in the health area of participating primary care centers in Galicia (Spain). Control: classrooms from nearby areas with similar socio-demographics. Randomized selection. Expected participation: 85% adolescents, 50% invited adults.

Analysis: Multilevel mixed models adjusted for clustering.

**Results:**

Baseline results (disaggregated by gender) will be presented at the conference. They will be recorded after the start of the project, scheduled for the second half of September.

**Conclusions:**

N/A

**Points for discussion:**

Could you share with us your experience in co-design with adolescents?

Empowerment of families as agents of change and sustainability of effects beyond the intervention period.

**Poster / Finished study****Measuring quality of life in patients after total thyroidectomy using a validated questionnaire: The QOL-CS Thyroid Version**

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**Keywords:** quality of life, thyroidectomy, questionnaire QOL-CS Thyroid version, well-being, thyroid cancer

**Background:**

Health-related quality of life (HRQoL) reflects an individual's perception of their physical, psychological, and social well-being. While thyroid disorders significantly affect HRQoL, more evidence is needed on changes after total thyroidectomy, especially in primary care settings.

**Research questions:**

How does total thyroidectomy affect the subjective physical, psychological, and social well-being of patients, as measured by the QOL-CS Thyroid Version?

**Method:**

We conducted a before-and-after interventional study with 62 patients (47 women, 15 men; mean age  $51 \pm 9.6$  years) undergoing total thyroidectomy. Participants completed a validated Bulgarian version of the QOL-CS Thyroid questionnaire before surgery and 6 months afterward. The tool was adapted into two variants—Version 1 (preoperative) and Version 2 (postoperative)—including items on symptoms and treatment. Statistical analysis used paired comparisons with significance at  $p < 0.05$ . GPs were involved in patient recruitment and follow-up, reflecting the real-life care pathway and enhancing relevance to primary care.

**Results:**

Neck complaints improved significantly after surgery. The greatest improvement was in physical well-being ( $p < 0.001$ ). Psychological and spiritual domains showed modest, non-significant gains, while the social domain showed significant improvement. Initiating levothyroxine therapy also influenced patients' perceived QoL.

**Conclusions:**

Total thyroidectomy resulted in improved patient-reported QoL, particularly in physical and social domains. The validated QOL-CS Thyroid Version effectively captured these changes. Continuous monitoring and support from both general practitioners and specialists are essential for reducing complications and enhancing recovery.

**Points for discussion:**

How can GPs be more actively involved in post-thyroidectomy follow-up?

Could this questionnaire be routinely used in primary care?

**Poster / Almost finished study**

## **Phenotyping Long COVID in Children in Primary Care: A Case-Based Study Using the Human Phenotype Ontology**

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**Keywords:** Post-Acute COVID-19 Syndrome; Child; Primary Health Care; Family Practice; Fatigue; Cognitive Dysfunction; Quality of Life; Phenotype; Narration; Human Phenotype Ontology; Medical Informatics Applications

### **Background:**

Pediatric Long COVID is an emerging but still under-recognized condition in general practice. Children affected by post-COVID symptoms often present with fatigue, cognitive disturbances, post-exertional intolerance, and significant functional decline, yet remain clinically invisible.

### **Research questions:**

This study aims to characterize pediatric Long COVID through a case-based approach, using semantic standardization via the Human Phenotype Ontology (HPO).

### **Method:**

Out of a cohort of 307 patients followed in general practice for Long COVID between 2021 and 2025, ten children aged 6 to 15 were selected as the youngest subgroup. Each case was assessed using a multimodal protocol combining standardized questionnaires (ComPaRe and COOP/WONCA), recorded clinical interviews, and HPO-based semantic symptom extraction. The approach emphasized lived experience, narrative analysis, and functional assessment.

### **Results:**

All ten children displayed a complex, multisystem symptomatology—most commonly fatigue and post-exertional intolerance (10/10), cognitive complaints (8/10), sleep disturbances, various types of pain, and signs of dysautonomia. Functional impairment was marked, with significant limitations across physical, cognitive, and social domains. HPO indexing enabled the transformation of narrative symptoms into reproducible phenotypic profiles, supporting both clinical decision-making and patient-family communication.

### **Conclusions:**

This study highlights the potential of general practice to detect and document pediatric Long COVID using a narrative and phenotypic approach. By integrating patient stories with digital semantic tools like HPO, clinicians can give structure and legitimacy to subjective complaints, facilitating earlier recognition and better care for affected children.

### **Points for discussion:**

This work highlights the importance of the added value of technologies that enable faithful, shareable, and reusable documentation during consultation.

This approach aims to reaffirm the central role of primary care in identifying, validating, and supporting pediatric forms of Long COVID, through an alliance between clinical practice, language, and technology.

By combining clinical listening, computerized structuring of symptoms, and the active involvement of the patient and their family, it becomes possible to give shape to experiences that are often fragmented

**Poster / Finished study****Do GPs' Personalities Shape Their Patient Populations? A Cross-Sectional Study from Greek Primary Health Care**

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**Keywords:** Primary Health Care; General Practitioners; personality traits; Big Five model; patient profile; Greece

**Background:**

The personality traits (PTs) of Primary Health Care (PHC) professionals may influence communication, decision-making, and potentially the patient profiles they manage. The General Practitioners (GPs) personality study examined PTs of GPs in nine European countries (Israel, Greece, Hungary, North Macedonia, Poland, Portugal, Spain, Slovenia, and Turkey). While the Big Five PTs have been studied concerning clinical behavior, their association with patient case-mix in chronic disease remains unclear. This study presents findings from Greece.

**Research questions:**

Does a GP's personality, based on the Big Five model, predict the distribution of chronic disease categories in their patient population in Greek PHC?

**Method:**

This cross-sectional study involved 82 GPs from PHC units across Greece who answered an online questionnaire. The data included demographics, estimated patient numbers per chronic disease category, and PTs using the validated IPIP-50 inventory (measuring Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness to Experience). Descriptive statistics profiled GPs and their patient populations. Associations were tested using Spearman's rho, and multiple linear regressions assessed the predictive role of PTs across seven chronic conditions.

**Results:**

Extraversion was positively associated with the number of diabetic patients managed ( $\rho=0.30$ ;  $p=0.005$ ), possibly reflecting the value of interpersonal engagement in chronic care. No significant associations were found between PTs and other chronic conditions. Regression models showed poor predictive validity ( $R^2$  near zero or negative). No correlations emerged between personality and GP demographics (age, experience, chronic illness history). Notable gender differences emerged: male GPs scored higher in Emotional Stability and Openness to Experience.

**Conclusions:**

The personality traits of GPs, particularly extraversion, may have a modest influence on the patient profile in diabetes care, but appear to have limited predictive power overall. These results suggest that systemic and epidemiological factors have a stronger influence on case composition. Future mixed-method studies may clarify how personality influences trust, engagement, and clinical decisions in PHC.

**Points for discussion:**

To what extent should personality traits be considered in GP workforce development and training?

Could matching GP traits with patient needs improve chronic disease care?

**Poster / Study Proposal / Idea****Exploring physicians' opinions and attitudes toward the role of artificial intelligence in primary care - a qualitative study**

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**Keywords:** primary care, artificial intelligence

**Background:**

Artificial intelligence (AI) refers to systems that enable computers to perform tasks such as thinking and problem-solving in ways that resemble human cognition. AI is increasingly being integrated into various aspects of daily life, including healthcare. This study aims to explore the perspectives of family physicians regarding the use of AI in primary care and to assess the potential contributions and limitations of these technologies in everyday clinical practice.

**Research questions:**

How can AI be implemented in primary care?

**Method:**

This is a qualitative study using purposive sampling to recruit physicians. Following informed consent, participants will take part in face-to-face semi-structured interviews using an interview guide developed by the researchers. Interviews will be audio-recorded, transcribed verbatim, and analysed using qualitative data analysis software. Coding will be conducted based on the transcripts, with themes and sub-themes generated through an inductive approach.

**Results:**

The study is currently in the preparatory phase. Once data collection is completed, sociodemographic characteristics of the participants and thematic findings related to AI in primary care will be presented.

**Conclusions:**

The integration of artificial intelligence into family medicine is an emerging area, with a relatively scarce body of literature currently available. This study is expected to provide insights into the current and future role of AI in primary care from the perspective of physicians. The findings will contribute to guiding the development and implementation of AI technologies in ways that are beneficial and relevant to the practice of family medicine.



**Poster / Almost finished study****Improving detection of terminal illness in nursing home residents: the first step towards a greater awareness in patients, caregivers and healthcare professionals for a better quality of care.**

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**Keywords:** palliative care, nursing homes, frailty condition, shared care plan

**Background:**

Only a small number of elderly residents in nursing homes (NHs) currently receive early palliative care (PC) raising the issue of increasing awareness about terminality and the PC options in patients, caregivers and healthcare professionals.

**Research questions:**

Identify patients who may require palliative care in the next 12 months and assess recognition of this need among GPs, patients and caregivers.

**Method:**

The NECPAL questionnaire was applied to 198 patients of 10 GPs in Ulss 9 Scaligera (Veneto Region) over 2 months. Patients resulted NECPAL POSITIVE or NEGATIVE based respectively on their NO or YES response to the surprise question. The perception of the need for PC by patients, family members and GPs was analysed. The characteristics of frailty and clinical progression of the patients' disease were collected.

**Results:**

28.8% patients resulted NECPAL positive, 67.2% NECPAL negative and 4% uncertain. The request/need for PC from the patient or caregivers occurred in 7.6%. The request for limitation of therapeutic effort/refusal of treatment in 14.8%. The need for a palliative approach was confirmed by GPs in 11.1%. The patients (32.8% M, 67.2% F) were aged over 75 in 89.9%. General Clinical Indicators of Severity and Progression: nutritional markers (31%); functional markers (44.4%); frailty/gravity markers (62%); emotive stress/psychological symptoms (42.4%); clinical complexity 33.8%); comorbidity (97.5%). Prevalence of Disease Specific Clinical Indicators: Dementia (47.5%), Chronic heart disease (26.8%), Neurodegenerative diseases (23.7%), Cerebrovascular diseases (10.6%), Chronic pulmonary disease (10.1%), Cancer (6.6%), Renal failure (5.6%), Liver disease (2%).

**Conclusions:**

In approximately one third of cases, a terminal condition was detected, only partially corresponding to the awareness of this need of PC among GPs, patients or family members. The population assisted at NHs is characterized by advanced age, high clinical complexity and frailty, confirming a high probability of necessity of palliative care/approach, likely major than what detected.

**Points for discussion:**

Identifying terminality is the first step towards addressing the need for a palliative approach and a shared care planning (SCP): how to build those pathways?

How can healthcare professionals in nursing homes incorporate the use of the questionnaire into their organization?

The whole population should have access to palliative care, how to tackle this necessity?

**Poster / Ongoing study no results yet****Integrating GPs into multidisciplinary oncology care: a feasibility reflection from Bulgaria**

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**Background:**

Although multidisciplinary teams (MDTs) are essential for high-quality cancer care, the role of GPs remains undervalued in many countries, including Bulgaria. Their involvement typically ends after the initial referral, resulting in fragmented care and missed opportunities for continuous, patient-centered support throughout the cancer pathway.

**Research questions:**

Is it feasible to involve GPs in the management of prostate cancer across all stages of care in Bulgaria, and how is their collaborative role perceived outside formal oncology commissions?

**Method:**

A descriptive, qualitative feasibility study was conducted in one Bulgarian region. The research team initiated a series of informal multidisciplinary meetings involving oncology specialists and GPs. Real prostate cancer cases were reviewed collaboratively to explore the GPs' potential roles in ongoing care. The lead author served as both facilitator and observer, systematically documenting observations through structured field notes, focusing on GP contributions, communication dynamics, and practical barriers. No formal interviews or recordings were used, preserving the informal nature of the intervention. Reflective thematic analysis and content mapping of observation notes were used to identify emerging themes regarding feasibility, perceived value, and challenges of GP involvement in MDTs.

**Results:**

Field notes indicated that GPs contributed critical patient information, including comorbidities, social context, and outpatient management possibilities. Their inclusion facilitated improved mutual understanding and coordination of care. Both GPs and specialists expressed openness to ongoing collaboration. However, structural barriers (lack of protocols, administrative workload) and cultural norms around professional boundaries were identified as obstacles to formalizing such collaboration.

**Conclusions:**

Integrating GPs into oncology MDTs is feasible and beneficial for coordinated cancer care. Structured frameworks and policy adjustments are required to formalize their role beyond the initial referral stage in Bulgaria.

**Points for discussion:**

How can informal collaboration evolve into structured practice?

What protocols can support GP involvement in oncology MDTs?

How to measure patient outcome benefits of GP-specialist collaboration?

**Poster / Ongoing study no results yet****Methodological innovations of a comprehensive strategy to improve cancer health literacy for cancer patients, carers and citizens**

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**Keywords:** Health literacy; cancer treatment and care; primary care; Health Literacy Index, Artificial Intelligence.

**Background:**

Poor health literacy is linked with worse health outcomes, and low health literacy for cancer prevention and care contributes to significant inequalities. Despite diverse existing efforts to promote health education, there remains a need for validated, accessible methodologies that enhance health literacy among citizens, patients, carers, and healthcare professionals.

**Research questions:**

Is health literacy improved through a structured educational intervention in cancer care, based on the Health Literacy Pathway Model, among patients, carers and/or citizens?

**Method:**

The study comprises the following steps: a) a systematic review will assess the role of health literacy in cancer prevention and care following PRISMA guidelines; b) a scoping review will map existing health literacy education programs developed within healthcare systems and in the community; c) evidence-based online resources will be systematically identified and evaluated using empirical criteria; d) a Massive Online Open Course will be implemented to use high quality online resources. The Consortium comprises eight partners from six EU Member States; two work-package leaders are EGPRN members. The project is funded under Call EU4H-2024-PJ-02 (Grant Agreement No. 101219203).

**Results:**

The project will officially start on September 1st. The protocols for steps a), b) and c) will be presented at EGPRN meeting, once approved by the Consortium workshop on October 8th.

**Conclusions:**

The project is expected to improve cancer-related health literacy and communication within Primary Care, between health professionals and patients and citizens, thus reducing inequalities in cancer prevention and care.

**Points for discussion:**

In what ways can we empower patients to use the information available online appropriately?

How can we incorporate AI into primary care research?

What are the characteristics of the information that our cancer patients use?

**Poster / Finished study****Young doctor, old stereotype – the concept of (dis)trust in a family medicine practice**

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**Keywords:** stereotypes, trust, family medicine

**Background:**

Trust is a cornerstone of the doctor–patient relationship, especially in family medicine where long-term care is key. Although younger physicians are often seen as less experienced, few studies examine both patient and physician perspectives on trust. This study seeks to fill that gap by exploring mutual perceptions of (dis)trust.

**Research questions:**

What are the reasons behind patient (dis)trust toward young family medicine doctors, and how do young physicians perceive and cope with this?

**Method:**

Two anonymous Google Forms surveys were conducted. The questionnaire was developed for this study and validated through a pilot, including analysis of factor structure and internal reliability (Cronbach's alpha). The first survey involved 50 family medicine doctors aged 25–35, and the second included 100 randomly selected citizens aged 18–75, recruited online. Data were analyzed using descriptive statistics and thematic analysis of open responses.

**Results:**

Among respondents, age was significantly associated with visit frequency ( $p=0.011$ ), and female patients demonstrated higher trust in young physicians compared to males ( $p=0.016$ ). The majority of respondents (71%) expressed trust in young doctors, with 15.8% indicating full confidence, while 6.6% reported distrust, primarily due to concerns about lack of experience and insecure communication. Among physicians, 71% experienced some level of distrust, primarily occasional (44%), though 68% reported it did not affect their clinical decision-making. Most participants agreed that continuous patient interaction and mentorship from experienced colleagues would enhance trust. Gender was significantly linked to distrust frequency ( $p=0.019$ ), with female physicians reporting it more often.

**Conclusions:**

Young doctors sometimes face age-related distrust, but it rarely affects their clinical decisions. Most patients, especially women, trust young physicians, while female doctors report distrust more often. Mentorship, communication, and continuity of care are key to building trust and supporting young professionals in family medicine.

**Theme Paper / Published****Analysis of early diagnostic of prostate cancer patients in family medicine in Slovenia**

Mateja Kokalj Kokot

University of Ljubljana Medical faculty, 1000 Ljubljana, Slovenia. E-mail: [mateja@kokalj-kokot.si](mailto:mateja@kokalj-kokot.si)**Keywords:** prostate cancer, primary care interval, care pathway**Background:**

Prostate cancer is a common malignant tumour and the most frequent non-cutaneous cancer in men worldwide. It was the fifth leading cause of cancer death in men in 2020. Timely recognition and referral in primary care are crucial.

**Research questions:**

The study aimed to assess early management of prostate cancer in Slovenian primary care, focusing on the primary care interval and its associations with disease presentation, patient characteristics, regional variation, and healthcare organization. We also examined its association with observed five-year survival.

**Method:**

The retrospective cohort study included 1,431 patients from the Slovenian Cancer Registry diagnosed with prostate cancer in 2014. Personal physicians extracted data on initial symptoms, diagnostic procedures, referrals, and access to diagnostic services (lab tests, abdominal ultrasound). The primary care interval was calculated from the first presentation (initial contact with relevant symptoms) to referral to a urologist.

**Results:**

The median duration of the primary care interval was 4 days (IQR: 0–33 days), with an average of 43.9 days (SD: 94.2), range 0–365 days, which is due to the extreme values. Longer intervals were associated with the presence of symptoms at first presentation, but no other statistically significant associations were found. There were no differences between different regions in Slovenia. Primary level interval duration was not associated with shorter observed 5-year survival, but we found an association between shorter observed 5-year survival and lack of direct access to laboratory tests in the primary health centre.

**Conclusions:**

The study highlights the complex range of factors influencing the management of suspected prostate cancer, including not only the competencies of individual physicians but also the availability of tests and services. Direct access to basic laboratory tests is associated with longer observed 5-year survival and is the only factor among those analysed that we can directly influence, thereby potentially reducing the risk of death.

**Points for discussion:**

Variation and influencing factors in the primary care interval

Role of diagnostic access in patient outcomes

Limitations of primary care interval as a prognostic indicator

## Theme Paper / Finished study

## Assessing AI-Generated Smoking Cessation Advice for Patient Education in Primary Care

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**Keywords:** smoking cessation, patient education, primary care, digital health

### Background:

Artificial intelligence (AI) has emerged as a promising tool to support smoking cessation in primary care, particularly for populations underserved by traditional interventions. However, the quality of AI-generated smoking cessation advice remains understudied, especially in low-resource settings and among vulnerable groups such as adolescents.

### Research questions:

This study aims to evaluate AI-generated responses to smoking cessation questions for patient education in primary care, comparing different AI programs in terms of knowledge, readability, and quality.

### Method:

Ten publicly accessible AI programs were prompted in Turkish with 24 standardized, open-ended smoking cessation questions framed as a patient consultation. Two family medicine specialists independently assessed each response's readability using Ateşman's Readability Index, reliability using the DISCERN instrument, and accuracy and motivational interviewing quality using a bespoke rubric and OARS (Open questions, Affirmations, Reflections, Summaries) framework. Inter-rater agreement was evaluated via intraclass correlation. Descriptive statistics were computed for readability scores, DISCERN ratings, and accuracy grades.

### Results:

All AI programs provided at least partially correct answers to all questions. The average readability score was 54.90 (medium difficulty) according to Atesman's Index. The mean DISCERN score was  $66 \pm 5.2$ , indicating excellent quality. Three AI programs incorporated core motivational interviewing skills. The most accurately answered question concerned e-cigarettes' harm compared to traditional cigarettes, while medication advice was least evidence-based.

### Conclusions:

Free AI chatbots deliver reliably accurate and moderately readable smoking cessation advice, supporting their potential role as patient education adjuncts in primary care—particularly for individuals with at least a high school education. Further research should compare AI-assisted versus clinician-led interventions on smoking cessation outcomes.

**Theme Paper / Finished study****Is it possible to conduct multinational clinical trials in primary care? Experience from a rural health centre.**

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**Keywords:** clinical trial; drug development; primary health care

**Background:**

Most clinical trials (CTs) are conducted in hospitals, although 90% of clinical consultations take place in primary care (PC). Research in PC is essential to ensuring safe and efficient patient care. Unfortunately, most of the knowledge on which we base our practice comes from studies carried out in other settings, with patients who bear little resemblance to those treated in PC.

**Research questions:**

Is it feasible and efficient to conduct CTs in PC sites?

**Method:**

After receiving an offer to participate in a multinational observational study, a multidisciplinary research team was founded, consisting of 1 family medicine resident, 2 nurses and 2 primary care pharmacists, led by a senior family physician. All members underwent formal training in Good Clinical Practices (GCP) and other skills necessary to conduct CTs with medicines. In addition, the site was registered on several “shared investigator platforms” to make sponsors aware of its availability and interest in participating in industry-sponsored CTs.

**Results:**

To date, the team has participated in five international studies that have already completed recruitment, three phase III trials (infectious diseases and cardiovascular diseases) and two observational studies (cardiovascular). We are currently involved in four other CTs, one phase IIb trial (infectious diseases) and three phase III trials (respiratory, cardiovascular and endocrine). As for completed studies, at the national level, our site was the one that recruited the highest number of participants in three of them and the second in the other two.

**Conclusions:**

Involving GPs in registration CTs would favor a more early and efficient translation of the CTs results to the care practice. A multidisciplinary team is key to success. Currently, several initiatives are ongoing to promote Spanish national networks and open collaboration between the Government and Pharma-Industry to promote the involving of GPs in clinical research (strategy “win/win”).

**Points for discussion:**

National/International strategies to promote the participation of primary care professionals in clinical trials. Role of EGPRN.

What minimum requirements do you think a site must meet in order to participate in clinical trials?

**Theme Paper / Finished study****The role of GPs in vision protection of children: a seven-year longitudinal cohort study in Bulgaria**

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**Keywords:** vision screening, children, myopia

**Background:**

Childhood refractive disorders are increasingly prevalent yet underdetected in primary care. GPs, as first-line providers, are well positioned to contribute to early detection and prevention of vision problems. However, their role in pediatric vision protection remains undefined in many healthcare systems.

**Research questions:**

What is the current role of GPs in early detection and prevention of refractive disorders in children, based on longitudinal cohort outcomes and GP screening practices?

**Method:**

A prospective longitudinal study was conducted from 2017 to 2023 in multiple municipalities of Stara Zagora, Bulgaria. A cohort of 588 children aged 7–14 years at baseline was examined annually. Examinations were conducted by two ophthalmologists using the Plusoptix S12c Mobile autorefractor. Three consecutive non-mydratic refraction readings were averaged for each eye. Spherical equivalent (SE) and cylindrical power were measured and categorized (myopia, hyperopia, astigmatism) using standard definitions. Participants completed structured questionnaires annually, reporting on visual complaints and behavioral factors. Inclusion criteria ensured exclusion of pre-existing ocular pathology.

Parallel to child follow-up, 78 GPs completed structured questionnaires assessing current vision care practices, referral patterns, and familiarity with preventive guidelines.

Data were analyzed using independent t-tests, ANOVA with Bonferroni correction, chi-squared tests, and prevalence calculations with 95% confidence intervals. Attrition and maturation variability were recognized as study limitations.

**Results:**

Over seven years, a statistically significant myopic shift (mean SE change  $-0.20D$ ,  $p < 0.05$ ) was observed. Nearly half of participants reported visual complaints by study end. Despite all surveyed GPs performing basic vision checks, only 17% referred children for specialist evaluation. Familiarity with structured guidelines was inconsistent, and standardized screening protocols were absent.

**Conclusions:**

This longitudinal cohort study highlights the critical but underutilized role of GPs in vision protection. Structured vision screening and early referral protocols, embedded within primary care, are urgently needed to empower GPs in safeguarding children's visual health.

**Points for discussion:**

The gap between screening and referral?

Lack of Standardized Guidelines?

Knowledge, Attitudes, and Barriers Among GPs?



**Web Based Research Course Presentation / Study Proposal / Idea****Contracting care, undermining commitment? How National Framework Agreements shape GP motivation and primary care sustainability in Bulgaria**

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**Background:**

Bulgaria faces a critical shortage of GPs, with over 50% aged 55+ and underserved rural areas. The National Framework Contract (NFC) regulates financing, service scope, and administrative workload in general practice, yet its influence on GP motivation and workforce retention remains underexplored. Understanding how contractual conditions shape both extrinsic and intrinsic motivation is essential for strengthening primary care systems.

**Research questions:**

What are the demographic and motivational characteristics of Bulgarian GPs, and how does the NFC influence their willingness to work and remain in general practice?

**Method:**

This four-phase mixed-methods study will integrate policy, workforce, and psychosocial analyses:

**Results:**

Results are expected to provide actionable insights on how contractual conditions affect GP motivation and retention.

**Conclusions:**

The study will generate practical recommendations for strengthening GP retention and primary care sustainability in Bulgaria, with potential relevance for other European systems.

Presentation on 18/10/2025 13:30 in "Parallel Session M: Web Based Research Course Presentations" by Yancho Madzharov.

**Web Based Research Course Presentation / Ongoing study with preliminary results****Inside Young Minds: Lifestyle and Cognition in Primary Care**

Kübra Efe

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**Keywords:** Vitamin B12 Deficiency, Iron Deficiency, Cognitive Function, Physical Activity, Young Adults**Background:**

Vitamin B12 and iron deficiencies are known to negatively impact cognitive function and remain widespread in developing countries. Early adulthood is a critical stage of cognitive development, making it essential to investigate the effects of modifiable lifestyle factors such as diet and physical activity on mental performance.

**Research questions:**

This study aimed to explore:

Whether dietary and physical activity habits are associated with serum vitamin B12 and ferritin levels;

Whether these biomarkers and habits affect cognitive performance;

Which specific eating behaviors predict cognitive outcomes.

**Method:**

A cross-sectional and prospective descriptive study was conducted at a primary care center in Ankara. Forty-one university students aged 18–24 with recent lab data were included. Participants completed the Healthy Eating Attitude Scale, International Physical Activity Questionnaire (IPAQ), and Montreal Cognitive Assessment (MoCA). Retrospective lab values (B12, ferritin, hemogram) were analyzed using R software.

**Results:**

A weak positive correlation was observed between vitamin B12 and MoCA scores ( $r = 0.19$ ), and a moderate positive correlation between ferritin and physical activity ( $r = 0.31$ ). Obsessive eating behavior negatively correlated with cognitive performance ( $r = -0.31$ ), whereas mindful eating significantly predicted cognitive behavior scores ( $p = 0.001$ ). Due to the small sample size and low statistical power (5.5%), these results are considered preliminary and non-conclusive.

**Conclusions:**

Eating behavior, particularly mindfulness in eating, may influence cognitive functioning in young adults. However, trends in vitamin levels require cautious interpretation in the absence of statistical significance.

**Points for discussion:**

The study's limitations include a small sample, gender imbalance, and cross-sectional design. Future longitudinal studies with broader confounder control (e.g., sleep, stress) are needed. The findings raise possibilities for lifestyle-based cognitive screening in primary care.

**Web Based Research Course Presentation / Ongoing study no results yet****Protocol for evaluating factors related to coding of diagnoses by general practitioners in electronic medical records to improve data quality in Belgium**

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**Keywords:** coding, electronic medical records, surveillance, general practitioners, classification of diseases

**Background:**

The Infection Barometer surveillance system for general practices in Belgium, successor to the Covid-19 Barometer, automatically extracts infection-related data from Electronic Medical Records (EMR) on a daily basis and in real time. To optimise its functioning, General Practitioners (GPs) must encode diagnoses adequately to ensure the quality of extracted data. Currently, we observe that coding is not always systematic and accurate, though causes behind coding discrepancy remain relatively unexplored in the literature. The aim of this project is therefore to map the factors influencing GPs' coding behaviour and understand how they can be levers to increase data quality.

**Research questions:**

What intrinsic and extrinsic factors do GPs believe influence the coding of diagnoses in the EMR?

**Method:**

In the first phase, a questionnaire was sent to GPs of the Sentinel GP Network and the Covid-19 Barometer to explore their coding behaviour. In the second phase, a questionnaire will be sent to GPs' software vendors to gain a better understanding of how coding is integrated into their system. In the third phase, semi-structured interview guides will be drafted based on the results of phase 1 and 2. Interviews will be conducted to gain in-depth understanding of GPs' coding behaviour. In the fourth phase, focus groups will be set up with GPs, software developers, medical classification specialists and other stakeholders to cross-check the expectations, needs and recommendations.

**Results:**

The questionnaire was sent to GPs in May-June 2024. The software questionnaire will be sent in September 2025. The interviews and focus groups are planned for Spring 2026.

**Conclusions:**

This study will explore the intrinsic and extrinsic factors influencing GPs' coding and will enable relevant levers for action to improve and optimize the data extraction system in the GP Infection Barometer surveillance system.

## The Effect of Pedometer Use on Physical Activity in Healthy Individuals Aged 18–35 Through a Physician-Supported Peer Motivation Intervention

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### Background:

In primary care, physicians are uniquely positioned to influence lifestyle behaviours through brief counselling. Becoming physically active can be encouraged by behavioural change which is difficult to achieve without ongoing support and personal motivation. Individuals tend to be more active and consistent when they can observe and compare their behaviour to that of peers, especially within a supportive group. Recent technological advancements have made mobile pedometer applications widely accessible. However, studies have shown that these tools alone often fail to maintain long-term engagement without social or professional reinforcement. By targeting a young, healthy population at a stage where habits can be formed and sustained long-term, this project aligns with the goals of preventive medicine in primary care.

### Research questions:

Do active follow-up with digital self-monitoring (via pedometer app) make a difference in physical activity levels and habits in primary care patients?

### Method:

This is a single-blind, prospective, two-arm intervention study to be conducted in a primary care outpatient clinic. Seventy healthy adults volunteers aged 18–35 who present to the clinic for any reason will be randomly assigned to either the intervention or control group using simple randomization. All participants will complete the IPAQ-SF at baseline, Week 4, and Week 10. To maintain blinding, data collection will be conducted by an independent researcher. A priori power analysis (G\*Power,  $d = 0.7$ ,  $\alpha = 0.05$ , power = 80%) indicated a sample size of 66; 70 will be recruited to allow for dropouts. The intervention group will download a pedometer app ("Step-Up"), join a shared virtual group, and receive weekly motivational messages from a physician. The control group will receive standard walking advice. Descriptive statistics and chi-square tests will be used for categorical variables. Between-group differences will be analyzed using the Wilcoxon test. A p-value  $<0.05$  will be considered statistically significant.

### Points for discussion:

Could AI-supported mobile applications enhance the effectiveness of physical activity interventions by delivering personalised feedback and adaptive motivation strategies?

What strategies can be employed to sustain increased physical activity after the initial intervention ends?

What are the main barriers to maintaining user engagement beyond the active intervention period in mobile health solutions?

**Web Based Research Course Presentation / Study Proposal / Idea****The importance of measuring lipoprotein(a) during adolescents' annual check-ups: a research proposal.**

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**Keywords:** Lipoprotein(a); adolescents; prevention; research proposal

**Background:**

Lipoprotein(a) [Lp(a)] is a genetically determined lipid particle associated with increased risk of atherosclerotic cardiovascular disease (CVD), including premature myocardial infarction and stroke. Lp(a) levels are stable throughout life and unaffected by lifestyle or standard lipid-lowering therapy. Despite its clinical relevance, Lp(a) is not routinely measured in annual check-ups, especially among adolescents without known CVD or family history, leading to missed opportunities for early prevention.

**Research questions:**

Could routine measurement of Lp(a) during young adults' annual check-ups improve early identification of high cardiovascular risk and support more effective prevention in general practice?

**Method:**

This study will follow a pragmatic, three-phase design adapted for general practice settings:

A systematic literature review will summarize current evidence on Lp(a) as a risk factor, its clinical utility, and existing guidelines for testing in primary care.

A cross-sectional observational study will be conducted among adults aged 14–18 attending routine check-ups. The required sample size will be calculated based on expected Lp(a) prevalence in this age group to ensure statistical power. Data will include demographics, family history, lifestyle factors, and fasting blood samples for Lp(a) and standard lipid profiles. All procedures will be embedded in routine workflows to ensure feasibility.

A pilot follow-up study will involve participants with elevated Lp(a), who will receive GP-delivered lifestyle counseling. Feasibility outcomes will include recruitment rates, test acceptability, consultation duration, and patient-reported understanding. Quantitative data will be analyzed using SPSS; optional interviews may explore barriers and facilitators of implementation.

**Conclusions:**

Routine Lp(a) screening may improve early risk stratification and personalized prevention in general practice, particularly for patients not identified through traditional models.

**Points for discussion:**

How can Lp(a) testing be implemented in general practice without increasing system burden or patient anxiety?

**Web Based Research Course Presentation / Study Proposal / Idea****Trends and Determinants of Preventive Health Service Utilization in Türkiye: A Longitudinal Trend Analysis of Health Surveys (2008-2022)**

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**Keywords:** preventive medicine, primary care, screening, healthcare services

**Background:**

Preventive health services are central to reducing morbidity and mortality through early diagnosis and timely intervention. Their utilization is shaped by self-rated health, socio-economic factors, and behavioural determinants. While previous studies in Türkiye have drawn on Turkish Health Survey (TSA) data, few have explored temporal trends in preventive service use from a primary care-oriented perspective or compared these with European benchmarks.

**Research questions:**

What are the trends in preventive health service utilization among Turkish adults over a 14-year period, and how have health status and its determinants influenced this utilization? How do these patterns compare to those in the EU?

**Method:**

This retrospective repeated cross-sectional study will analyse microdata from seven TSA waves (2008–2022). Adults within national screening age ranges (e.g. 30–65 for cervical cancer) will be included. Dependent variables include the self-reported use of nine preventive services (e.g. influenza vaccination, cancer screenings). Independent variables comprise self-rated health, socio-demographics, and behavioural determinants. Analyses will involve descriptive statistics, univariate tests and multivariate logistic regression to identify predictors of service use.

**Results:**

We expect to observe increasing but uneven uptake across services and subgroups, influenced by socio-economic gradients and self-rated health. Initial trends suggest lower utilization among adults with poor perceived health and limited education. These findings will be compared with EUROSTAT data to highlight gaps and opportunities for alignment with EU standards.

**Conclusions:**

The study aims to generate policy-relevant evidence on inequalities in preventive care use. By identifying underutilized services and vulnerable subgroups, it will support the development of more targeted interventions and help strengthen primary care delivery in Türkiye and comparable European contexts.

**Points for discussion:**

How can cross-sectional survey data be effectively used to monitor population-level trends and inform more targeted prevention policies over time?

What analytical strategies can be used to explore the dual role of poor self-rated health as both a motivator and a barrier?

**Freestanding Paper / Finished study****Cancer screening programmes in Europe: a 32-country survey by the Örenäs EGPRN Collaborative Study Group.**

Dimitra Iosifina Papageorgiou, Smyrnakis Emmanouil, Michael Harris, Ilze Skuja, Zlata Ožvačić Adžić, Gergana Apostolova, Mette Brekke, Krzysztof Buczkowski, Nicola Buono, Jelena Danilenko, Didem Kafadar, Norbert Král, Mercè Marzo-Castillejo, Anina Pless, Patrick Redmond, Kristi Särgava, Marija Petek Šter, Peter Vedsted, Marija Zafirovska, Ricardo Zaidan, Robert Hoffman

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**Keywords:** Population-based screening, Breast cancer, Colorectal cancer, Cervix cancer, Prostate cancer, Europe

**Background:**

Early cancer detection through population-based screening is the cornerstone of cancer prevention and control. While European guidelines support organised screening for breast, cervical, and colorectal cancers, the implementation of such programmes varies across countries, while for some cancers like prostate, gastric and lung cancer recommendations vary.

**Research questions:**

What cancer screening programmes exist across European countries, and how do their characteristics compare?

**Method:**

We conducted an online survey, combining close- and open-ended questions, in 32 countries. With the help of a 'national lead' participant in each country, we collected data from general practitioners, academics and members of government or Health Care Organisations involved in cancer screening. The questionnaire collected information on the population-based screening programmes for breast, cervical, colorectal, and prostate cancer, including the screening method used and the target age groups. National Leads also provided links to official documents and websites describing the organisation of screening in their countries. Data were analysed descriptively to identify patterns and gaps.

**Results:**

Population-based screening programmes were most commonly established for breast (in 29 countries), cervical (26 countries), and colorectal cancer (26 countries), while organised screening for prostate cancer remains limited (present in 6 countries). Mammography is the standard for breast cancer, while HPV testing or Pap smears are used for cervical cancer. Colorectal screening includes fecal occult blood testing (FOBT), FIT, or colonoscopy, with variation in age ranges and intervals. Prostate screening, where implemented, generally uses PSA testing. Notable differences exist in age criteria.

**Conclusions:**

Despite the widespread adoption of population-based cancer screening across Europe, significant variations exist in programme design and implementation. Greater harmonisation and improved accessibility could enhance participation rates and facilitate earlier cancer diagnoses.

**Points for discussion:**

1. What factors could contribute to the variation in implementation of breast, cervical, and colorectal cancer screening programmes across the countries despite common guidelines?
2. What other population-based cancer screening programmes are being developed?

**Freestanding Paper / Finished study**

## **Empowering Primary Care with AI: Leumit Advanced Predictive Health Analytics (LAPHA) Model Improves Colorectal Cancer Detection in a National Healthcare Setting**

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**Keywords:** AI, colorectal cancer, early detection, Empowerment of family doctors

### **Background:**

Colorectal cancer (CRC) is a leading cause of cancer-related deaths worldwide. Despite the proven benefits of screening, participation remains low, especially among asymptomatic people. New tools are needed to help identify at-risk individuals proactively. Artificial intelligence (AI) provides promising opportunities for personalized screening strategies in primary care.

### **Research questions:**

Can an AI-driven model using electronic health records (EHRs) enhance early detection of CRC by prioritizing patients for colonoscopy referrals within a primary care-based national health system?

### **Method:**

We developed the LAPHA model using de-identified EHR data from Leumit Health Services in Israel. The model analyzes demographic data, diagnoses, and longitudinal laboratory test trajectories to estimate CRC risk within 2.5 years. High-risk individuals are proactively referred to colonoscopy through a nurse-led navigation center. We evaluated CRC detection and polyp yield among individuals undergoing colonoscopy, comparing these rates to the age-matched national incidence.

### **Results:**

By July 2025, 685 patients were identified as high risk and contacted. Of these, 322 underwent colonoscopy, revealing 25 cases of CRC (7.8%). In comparison, the CRC incidence in the general age-matched population was 0.08%, resulting in an odds ratio of 108 (95% CI: 40–366). Among the 137 colonoscopy reports retrieved, polyps were found in 76% of cases, and polypectomy was performed in 44% of these cases. These are promising preliminary results from an ongoing implementation.

### **Conclusions:**

The LAPHA model significantly boosted the detection rate of CRC and the removal of polyps in a real-world primary care setting. These findings support the incorporation of AI tools into family medicine workflows, providing clinicians with data-driven decision support for preventive care. The approach is scalable, appears resource-efficient, and aligns with the evolving role of primary care in population health management.

### **Points for discussion:**

Proposals for other outcome measures to evaluate the model

Obstacles of the model and its implementation



**Freestanding Paper / Finished study****Factors Affecting the Compliance and Participation of Women in Breast and Cervical Cancer Screening in a Primary Care Center**

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**Keywords:** cancer, screening, coordinated care, primary care

**Background:**

Breast and cervical cancer are among the leading preventable diseases in the world. In our country screening programs for these cancers are implemented in primary care within the coordination of family physicians.

**Research questions:**

Which factors affect the compliance of women who are registered to a Family Health Center and invited and facilitated for breast and cervical cancer screenings via phone and SMS?

**Method:**

All women between the ages of 30-69 registered to a Family Health Center (FHC) were included in this cross-sectional analytical study. The status of the participants having/not having breast and cervical cancer screenings was questioned. Two reminder SMSs were sent to the women at one-month intervals. 248 women participated in the study. Women with missing cancer screening tests were invited to FHC. Champion Health Belief Model (subdimensions; sensitivity, importance/seriousness, health motivation, mammography benefits, mammography barriers) and the Attitude Scale Regarding Early Diagnosis of Cervical Cancer were applied through face-to-face. The smear test was taken and women were directed to KETEM for mammography. Using the Gail Model, women's 5-year and lifetime breast cancer risk levels were calculated. The descriptive statistics were given with percentage, mean $\pm$ SD, minimum and maximum. Chi-square test for categorical data and T-test in paired groups used for the comparative statistics.  $p < 0.05$  was considered statistically significant.

**Results:**

The mean age was 44,1 $\pm$ 8,7. The 25.4% had mammography, 30.2% smear test in FHC. After the invitation, these were 41.5% and 66.5% respectively. The age, educational level, income level and menopausal status were the factors which were significantly different among the women who had mammography in FHC. The total and perceived sensitivity sub-dimension scores of Attitude Scale were higher who had smears in FHC than who didn't.

**Conclusions:**

The systematic invitation and coordination of family physicians improve the women's behaviour towards participation in breast and cervical cancer screening and increases the screening rates.

**Points for discussion:**

Do you have cancer screening in primary care your country?

Is there any facilitative factor that motivates the physicians or the population to apply for cancer screening tests?

What is your experience about the problems that make it difficult to use evidence based screening and coordinated care of cancer in primary care in your country?

**Freestanding Paper / Almost finished study****Sexual function preservation after CyberKnife SBRT in prostate cancer diagnosed early through PSA screening by GPs**

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**Keywords:** Prostate cancer, PSA screening, General practitioner, CyberKnife, EPIC-26 questionnaire;**Background:**

Early detection of prostate cancer through PSA screening in primary care expands treatment options and supports timely, patient-centered decisions. CyberKnife-based stereotactic body radiotherapy (SBRT) offers a precise, minimally invasive option for localized prostate cancer. As sexual function preservation is a key patient concern, this study examines whether early diagnosis via PSA screening by GPs contributes to preserving sexual function after CyberKnife SBRT.

**Research questions:**

Does CyberKnife SBRT preserve sexual function in men with localized prostate cancer diagnosed early through PSA screening in general practice, as measured by the EPIC-26 questionnaire over one year?

**Method:**

This prospective cohort study was conducted at the Clinic of Radiation Oncology, University Hospital "Sv. George," Plovdiv, Bulgaria. Thirty men aged 50–75 years with localized prostate cancer diagnosed via PSA testing in primary care were enrolled. All received CyberKnife SBRT (five fractions of 7.25 Gy). The primary outcome was change in the sexual function domain of the EPIC-26 questionnaire, completed at baseline and at 1, 3, 6, and 12 months post-treatment. Descriptive and comparative analyses assessed changes over time.

**Results:**

Patient-reported outcomes showed stable sexual function over the 12-month follow-up. Mean EPIC-26 sexual domain score declined slightly from  $52.84 \pm 11.70$  at baseline to  $50.57 \pm 9.09$  at 12 months. Most patients retained pre-treatment erectile function. No severe sexual dysfunction or grade  $\geq 3$  toxicities were reported.

**Conclusions:**

Early diagnosis of prostate cancer through PSA screening in general practice enables selection of effective, less invasive treatment options like CyberKnife SBRT. Preliminary results suggest that this approach not only offers oncologic control but also preserves sexual function with minimal toxicity. These findings support the value of early screening and may guide shared decision-making between patients, GPs, and specialists.

**Points for discussion:**

Role of GPs in early detection and functional outcome preservation

**Theme Paper / Finished study**

## **Comparing Ageism Among Physicians in Primary Care, Internal Medicine, and Geriatrics: A Cross-Sectional Study**

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**Keywords:** Ageism; elderly.

### **Background:**

Ageism in healthcare may negatively impact the care provided to older adults.

### **Research questions:**

This study aimed to examine whether ageist attitudes exist among family physicians, internists, and geriatricians using the Kogan's Attitudes Toward Older People questionnaire.

### **Method:**

This cross-sectional survey was conducted between July and December 2024. The Kogan questionnaire includes 34 items scored on a continuous scale, with higher scores indicating more positive attitudes toward older individuals. A total of 121 physicians (family medicine, internal medicine, and geriatrics) participated. Data were analyzed using ANOVA, Kruskal-Wallis, and Chi-square tests. Internal consistency of the questionnaire was assessed using Cronbach's alpha. Correlations between self-perceived ageism and questionnaire scores were evaluated using Pearson's correlation coefficient.

### **Results:**

There were no statistically significant differences in overall ageism scores between family physicians, internists, and geriatricians (mean scores: 93.3, 94.1, and 91.7 respectively;  $p = 0.867$ ). Importantly, the scores of all physician groups were below the questionnaire's theoretical median, indicating a generally more negative attitude toward older individuals. A weak to moderate correlation was found between self-perceived ageism and the total score of the questionnaire ( $r = 0.246$ ,  $p < 0.01$ ). A stronger correlation was noted between self-perception and the Prejudice Index ( $r = 0.328$ ,  $p < 0.001$ ). Among geriatricians specifically, a strong correlation was observed between self-perception and the total score ( $r = 0.622$ ,  $p < 0.01$ ). However, in most cases, self-perception did not align with the attitudes objectively measured.

### **Conclusions:**

This study found no significant differences in ageist attitudes among physician specialties. Overall scores were below the theoretical median, suggesting generally negative attitudes toward older adults. The discrepancy between self-perceived and measured attitudes highlights the need for targeted education and reflective training. Raising awareness of ageism in clinical practice is essential to fostering respectful, equitable care for the aging population.

### **Points for discussion:**

How can we recognize ageism in our daily clinical behavior?

What practical steps can we take to reduce ageism in clinical practice?

How does ageism affect our patients?

## Theme Paper / Finished study

**Digital Health Literacy in Primary Care: A Social Determinants Approach**

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**Keywords:** Digital health literacy; Primary care; Health equity; Digital inclusion; Patient activation; Social determinants of health

**Background:**

Digital health literacy (dHL) is essential for patient empowerment and equitable access to digital health tools in primary care. Despite increasing digitalization, disparities persist based on age, education, and place of residence. This study aims to integrate dHL as a core social determinant of health, alongside psychological constructs such as self-efficacy, activation, and resilience.

**Research questions:**

Which social and psychological determinants are associated with low digital health literacy in adults attending primary care, and how does this affect their self-management capacities?

**Method:**

We designed a prospective observational cohort study involving 395 adults aged 35–74 years, recruited from urban and rural primary care centers in Aragón, Spain. Data collection includes validated scales: HLS-EUQ16 (health literacy), PAM-13 (patient activation), GSES-12 (self-efficacy), CD-RISC-10 (resilience), and relevant sociodemographic and lifestyle variables. Logistic regression will identify predictors of low dHL, and moderation/mediation analysis (Hayes' PROCESS) will explore interactions between psychological constructs and social determinants.

**Results:**

Low dHL (score <13) was significantly associated with age >65 (OR 2.3, 95% CI: 1.4–3.8), low educational attainment (OR 3.1, 95% CI: 2.0–5.0), and rural residence (OR 1.8, 95% CI: 1.1–2.9). High self-efficacy and patient activation were protective, reducing the odds of low dHL by approximately 20% (95% CI: 10–35%). These preliminary results suggest an interaction between social vulnerability and personal empowerment in determining digital health access and engagement.

**Conclusions:**

Low digital health literacy is strongly influenced by social and psychological factors. Integrating dHL screening and tailored support into primary care could improve digital inclusion and health outcomes. Results highlight the need for personalized, context-sensitive strategies in digital health interventions.

**Points for discussion:**

1. How can primary care integrate digital literacy support without increasing workload?
2. What strategies effectively reduce digital gaps in older or rural populations?
3. How can digital health literacy be routinely assessed in clinical settings?

**Theme Paper / Finished study****Relationship Between Compassion Fatigue Level and Quality of Working Life of Family Physicians**

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**Keywords:** Family medicine, compassion fatigue, quality of working life**Background:**

Family physicians provide comprehensive, patient-centered care that demands significant emotional and physical investment. To sustain their professional commitment, supportive working conditions are essential. In the absence of such support, compassion fatigue may develop, leading to reduced motivation and performance. This study aimed to investigate the association between compassion fatigue and quality of working life among family physicians in Istanbul.

**Research questions:**

Is there any relationship between compassion fatigue and working conditions, quality of working life among family physicians?

**Method:**

This cross-sectional study included 355 family physicians practicing in Istanbul. Data were collected using a demographic questionnaire, the Compassion Fatigue Short Scale (CFS), and the Quality of Life Scale for Employees (QOLS). Statistical analyses were conducted, with significance set at  $p < 0.05$ .

**Results:**

The mean age of participants was  $32.73 \pm 6.57$  years; 57.75% were female, 22.6% were family medicine specialists, and 84.51% had 1–10 years of professional experience. In 69.01% of practices, the registered patient population ranged from 2,500 to 4,000. Physicians serving high numbers of elderly patients ( $>500$ ), pregnant women ( $>50$ ), and children ( $>600$ ), and those reporting poor sleep, nutrition, and limited social engagement, exhibited significantly higher CFS scores ( $p < 0.05$ ). A moderate negative correlation was observed between CFS scores and QOLS Professional Satisfaction scores ( $r = -0.289$ ,  $p < 0.001$ ). Conversely, CFS scores showed strong positive correlations with QOLS Burnout ( $r = 0.622$ ,  $p < 0.001$ ) and Compassion Fatigue related to spousal interaction ( $r = 0.618$ ,  $p < 0.001$ ).

**Conclusions:**

High workload, patient complexity, and lifestyle-related stressors contribute to compassion fatigue among family physicians. Systematic assessment of work-related factors and their impact on physicians' well-being is crucial for informing interventions aimed at reducing burnout and enhancing job satisfaction.

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Beyond the Thesis: Why Don't Family Medicine Trainees Engage in Real Research?**

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**Keywords:** Family Practice, Primary Health Care, Publications, Medical Education, Mentors

**Background:**

Despite the widespread requirement for a research thesis in family medicine residency programs, most of these works do not result in peer-reviewed publications. This represents a significant loss of potential knowledge, local data insights, and academic growth. Previous studies have suggested that barriers such as lack of mentorship, time constraints, limited funding, and insufficient research training may contribute to this gap. However, this issue remains underexplored in a comparative, international context.

**Research questions:**

1. What are the main barriers preventing family medicine trainees from publishing their theses?
2. Do these barriers differ by country, institutional structure, or cultural-academic expectations?
3. What interventions (e.g., mentoring, funding, writing workshops) could improve publication rates?
4. Are there any problems regarding to lack of interest on academic career in Family Medicine?

**Method:**

We propose a mixed-method, multi-country exploratory study combining online surveys and semi-structured interviews with recent family medicine graduates. The survey will assess perceived barriers, prior publication experience, and institutional support. Interviews will provide in-depth perspectives. Potential collaborators will be invited to help adapt instruments for local relevance. Target study population would focus on family medicine resident doctors and family medicine specialist who are in their first 5 years like the definition of young doctors by European Young Family Doctors Movement (EYFDM).

**Results:**

As this is a proposed project, no data have been collected yet. Preliminary anecdotal reports from several countries confirm the existence of this issue and underline the need for structured investigation. We aim to identify recurring patterns and region-specific barriers through collaborative data collection.

**Conclusions:**

This project seeks to initiate a broader European dialogue on academic output in family medicine training. By identifying the systemic and individual-level barriers, we hope to lay the foundation for practical interventions that promote academic publication culture among early-career family physicians.

**Points for discussion:**

Would you be interested in joining a European collaborative study?

How can we design a study that captures both institutional and personal factors?

What methods (surveys, interviews, mentorship programs) would you recommend?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Evaluation of Clinicians' Attitudes Towards the Safe Use of Herbal Products: A Cross-Sectional Study Proposal**

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**Background:**

Herbal products are increasingly used by patients, often without informing their physicians, raising safety concerns related to herb-drug interactions. Despite this growing trend, limited data exist on clinicians' awareness and attitudes regarding the safe use of these products. This study aims to address this knowledge gap and contribute evidence that may guide future training and policy development.

**Research questions:**

What are clinicians' attitudes towards the safe use of herbal products? Which clinician characteristics (e.g., age, specialty, years of experience, phytotherapy training) are associated with more positive attitudes or greater awareness?

**Method:**

This planned cross-sectional analytical study will use a structured questionnaire consisting of three parts: sociodemographic information, personal and professional use of herbal products, and the "Attitude Scale on the Safe Use of Herbal Products." The survey will be administered face-to-face to clinicians from different specialties and healthcare settings across Turkey. Both descriptive and inferential statistical analyses (e.g., t-tests, ANOVA, regression) will be applied to assess associations between attitude scores and variables such as gender, experience, and phytotherapy training.

**Results:**

We expect to identify knowledge gaps and variability in clinicians' attitudes based on background characteristics. Results are anticipated to inform the need for structured education and contribute to safer clinical practices involving herbal product use. The study could serve as a basis for developing targeted interventions and policy recommendations.

**Conclusions:**

This planned study aims to generate new insights into clinician attitudes towards herbal products, supporting safer integration of such therapies into patient care. It has the potential to inform continuing medical education and promote more informed, evidence-based discussions between patients and providers.

**Points for discussion:**

What are effective ways to assess and improve clinicians' knowledge about herbal product safety?

What barriers exist to clinician-patient communication about herbal product use?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Family Medicine as a Career Choice: Motivations and Barriers Among Future Doctors in Ukraine**

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**Keywords:** Family medicine, education, health services organization

**Background:**

Family medicine plays a pivotal role in delivering primary care, yet many countries report a declining interest in this specialty among medical students. Understanding students' perceptions and identifying the factors that influence their career choices is essential to support and strengthen the future workforce in family medicine. In Ukraine, similar trends are observed. The ongoing war, economic instability, and social challenges contribute to a growing preference among students for other medical specialties or for seeking opportunities abroad.

**Research questions:**

1. What is the level of interest in family medicine among medical students, and how does it vary by year of study?
2. What are the key motivating and discouraging factors influencing their career decisions?

**Method:**

A cross-sectional survey is being conducted among 1st- to 6th-year medical students at Uzhhorod National University (Uzhhorod, Ukraine). The anonymous questionnaire includes both closed- and open-ended items addressing career preferences, perceived prestige of family medicine, expected income, work-life balance, and exposure to the specialty during medical education. Both quantitative and qualitative data will be analyzed.

**Results:**

We will present the study protocol along with preliminary findings at the conference.

**Conclusions:**

Understanding medical students' motivations and concerns regarding family medicine is crucial for designing effective interventions. Strategies such as early exposure to family medicine, mentorship programs, and transparent career pathways may help increase its appeal and reverse the current decline in interest.

**Points for discussion:**

1. How can medical curricula be adapted to enhance student interest in family medicine?
2. Are negative stereotypes about family medicine discouraging students from choosing this path?
3. Would any EGPRN colleagues like to collaborate with us in this research?



**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Participative sciences in health: an active research project for improving women's healthcare pathway**

Manon Reinbolt

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**Keywords:** Women, healthcare system, citizen sciences, gender biases, sexism**Background:**

The French healthcare system, built on the principle of universal equality, still faces entrenched socio-cultural constructions and gender stereotypes. Medical knowledge is historically Eurocentric and male-centred, reflecting the dominant perspective of those who produced it. These biases significantly affect women's health pathways, widen inequalities and undermine their trust in healthcare settings.

**Research questions:**

How do sexist and medical violence (SMV) manifest along women's healthcare pathways, what is their prevalence in France, and how can women trust be restored?

**Method:**

Citizen and collaborative science : Conceptualise and quantify the sexist and medical violence (SMV) phenomenon by developing a precise definition of SMV in collaboration with multidisciplinary researchers (medicine, law, social sciences, geographic and geopolitical) and citizen co-researchers, integrating their knowledge and experiential insights.

Types of data collected :

- Qualitative: in-depth interviews, focus groups, peer groups and observational studies.
- Quantitative: questionnaires and statistical data on SMV.

**Results:**

Ongoing

**Conclusions:**

Desired social impacts

For citizens and victims :

- The opportunity to express their experiences and feel less isolated.
- Greater recognition of their story and suffering, and the prospect of redress.
- Better awareness of their healthcare rights.
- Clearer identification of appropriate resources and support.

For victim-support services

- A sharper understanding of the specific nature of this violence.
- Development of better-suited tools and care protocols.
- Improved training for practitioners on these issues.

For healthcare professionals

- Broader public awareness of these still-taboo issues.
- A questioning of medical norms and practices.
- Progress towards a more respectful and compassionate healthcare system through the engagement of public institutions and rights advocacy organizations

**Points for discussion:**

How can participative sciences in health promote knowledge and engagement in primary care system ?

How can participative sciences in health help to build a network with citizens, civic society and the local healthcare system ?

How can citizen science projects can be used to tackle a wide range of societal challenges, such as public health, by engaging citizens in finding solutions ?

Presentation on 18/10/2025 15:50 in "Parallel Session P - One Slide Five Minutes Presentations" by Manon Reinbolt.

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Rethinking Vitamin D Support in Pregnancy: A Preliminary Study on the Need for Preconceptional Education and Lifestyle Interventions**

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**Keywords:** Pregnancy, Vitamin D, Health Education

**Background:**

Vitamin D has effects on bone health, immune, musculoskeletal, and neurological systems. Maternal vitamin D status is critical for both maternal and fetal health. Deficiency has been associated with preeclampsia, preterm birth, and low birth weight. In Turkey, a national supplementation program recommends 1200 IU of vitamin D daily from 12th gestational week until 6 months postpartum.

**Research questions:**

Rather than relying solely on vitamin D supplementation during pregnancy, could it be more effective to inform women of reproductive age about nutrition, sun exposure, and the use of sun barriers—considering that not all pregnancies are planned?

**Method:**

This is a cross-sectional, descriptive, preliminary analysis of an ongoing cohort study including 199 pregnant women at a university outpatient clinic in Ankara. A simple random sample of 40 participants was selected for this preliminary analysis. Serum 25(OH)D levels were measured in the first trimester before any supplementation. The second measurement is planned for the third trimester. A structured questionnaire collected data on sociodemographic characteristics, skin type, sun exposure, sunscreen use, multivitamin intake, and dietary habits (milk and fish consumption). Descriptive statistics were used.

**Results:**

Participants' ages ranged from 21–40 years (mean = 28.7, SD = 4.7). In the first trimester, 65% had serum 25(OH)D levels between 5–9.9 ng/ml, and 95% were below 20 ng/ml. About 45% reported less than 20 minutes of daily sun exposure. Most consumed  $\leq 2$  cups of dairy daily; 30% consumed fish less than once per month. Only 27.5% used multivitamin supplements.

**Conclusions:**

Most participants begin pregnancy with inadequate vitamin D levels. This raises the need to shift from a reactive model toward proactive strategies, including preconceptional education on sun exposure, diet, and sunscreen use. Since prenatal care in Turkey is delivered within primary care, such preventive efforts could be integrated effectively.

This project is supported by Ankara University Scientific Research Projects Coordination Unit (BAP).

**Points for discussion:**

Should vitamin D education start even before pregnancy is planned?

How can family physicians better address lifestyle factors affecting vitamin D status?

What is the role of dietitians in routine prenatal care for vitamin D optimization?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****Survey of Cannabis Usage amongst adults visiting Primary Care Clinics in Israel**

Robert Hoffman, Yochai Schonmann

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**Keywords:** Cannabis Usage, Medical Cannabis, recreational cannabis, self perceived indications for cannabis intake

**Background:**

Cannabis usage is widespread and increasing world-wide. Many countries have legalized "medicinal" in recent years, and some have legalized recreational use. The actual usage of cannabis is unknown, and is often based on dated studies, and data from other countries. It is important Family Physicians know the status and patterns of their patients usage. Even if reported Family Physicians may not list this in computerized files, to protect the patients (in patients reporting non licensed use).

**Research questions:**

1. What percent of adult patients use Cannabis?
2. What are the self-perceived reasons reported for Cannabis use?
3. What is the frequency for cannabis use?
4. How does this compare with previous studies.

**Method:**

- Cross sectional, anonymous survey
- Participants – all consenting adults (over age 18) attending primary care clinics of participating Family Physicians
- Sampling – convenience sampling of all adult visitors over a two week period.
- Target collection – 50 patients offered participation. 5 GPs per HMO. All 4 HMOs (Kupat Holim) in Israel. (1000 potential respondents)
- Data collection – self administered questionnaires including minimal demographics (age and gender) and questions on cannabis usage.
- Ethics – ethics approval in each HMO, confidential, anonymous, voluntary participation.

**Results:**

Proposed Methodology to be discussed.

**Conclusions:**

As this is a complex issue dealing with issues of possible illegal behavior, the survey methodology must be perfected.

**Points for discussion:**

How to best conduct this survey?

Should the GPs also participate (regarding their practices of taking drug use in patient interview) and if they record responses.?

How to maximize participation rates?

**One-Slide/Five Minutes Presentation / Study Proposal / Idea****What do European patients and healthcare professionals think are the main causes of delayed cancer diagnosis? An Örenäs Research Group qualitative study.**

Michael Harris, Magda Gavana, Bernardino Oliva-Fanlo

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**Keywords:** Cancer, Primary Care, Europe, Qualitative Research, Delayed Diagnosis

**Background:**

Timely diagnosis of cancer is a key part of health policy throughout Europe. However, it is uncertain whether late diagnosis is due to patients with cancer presenting later, not being referred quickly enough from primary care, or whether they are inefficiently managed in secondary care. There is a gap in the evidence on the views of patients and clinicians on the causes of delayed diagnosis and how the views of these groups compare.

**Research questions:**

What, from their experience, do European patients, primary and secondary healthcare professionals think are the main causes of delayed cancer diagnosis?

What between-group differences are there in their views?

**Method:**

A multicentre, qualitative survey of (1) patients, their loved ones and caregivers, (2) primary and (3) secondary care clinicians from across Europe.

We will use an anonymous online survey, with demographic questions and a single open-ended question asking 'What, from your own experience, do you think are the main causes of delayed cancer diagnosis?'

National Leads will arrange for translations of the questionnaire into their local languages where these are not English. Translation and validation will be done in a standardised way for each country.

We will examine the data using thematic analysis.

**Results:**

We will conduct the study in a stratified sample of at least ten ÖRG European countries, with the aim of recruiting at least ten participants from each group (patients/loved ones/carers, primary care clinicians, secondary care clinicians) per country, from countries in the each of the Northern, Southern, Eastern, Western and Central European geographical areas.

**Conclusions:**

We expect our evidence to be useful to guide better patient public health campaigns on when and how to seek medical advice for potential cancer symptoms, examine less-studied factors contributing to delays (such as psychological barriers, misdiagnosis and healthcare inequalities), and inform policy and healthcare improvements.

**Points for discussion:**

Should participating clinicians be allowed to recruit their own patients to complete the questionnaire?

What is the best way to compare the differences in the qualitative answers from patients, primary and secondary healthcare professionals?

We expect that many respondents will be clinicians who have also had cancer, or been a loved one of someone who has had cancer. How should we take this into account in our comparisons?

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