

DEMENTIA IN EUROPE

THE ALZHEIMER EUROPE MAGAZINE



Issue 28
October 2018



Special Supplement
Models Of Patient
Engagement for
Alzheimer's Disease

Contents

- 3 Introduction
- 4 The MOPEAD Vision
- 6 Dementia research and the Innovative Medicines Initiative
- 7 The added value of MOPEAD: patients, gender and policy
- 8 The MOPEAD Work Packages
- 10 Comparing four models of patient engagement
- 12 Ethical considerations in the MOPEAD project
- 13 Meet the first MOPEAD study participants
- 14 Communication and engagement



Contact

Alzheimer Europe
14, rue Dicks
L-1417 Luxembourg
☎ +352 29 79 70
📠 +352 29 79 72
🌐 www.alzheimer-europe.org
✉ info@alzheimer-europe.org
🐦 @AlzheimerEurope
f alzheimer.europe



Alzheimer Europe Board

Chairperson: Iva Holmerová (Czech Republic)

Vice-Chairperson: Charles Scerri (Malta)

Honorary Secretary: James Pearson (UK – Scotland)

Honorary Treasurer: Maria do Rosário Zincke dos Reis (Portugal)

Members

Stefanie Becker (Switzerland)

Marie-Odile Desana (France)

Sabine Henry (Belgium)

Sabine Jansen (Germany)

Sirpa Pietikäinen (Finland)

Helen Rochford-Brennan (Ireland), European Working Group of People with Dementia (EWGPWD)

Jesús Rodrigo (Spain)

Štefanija Lukič Zlobec (Slovenia)

Staff

Jean Georges, Executive Director

Christophe Bintener, Project Officer

Cindy Birck, Project Officer

Kate Boor Ellis, Communications Officer

Ana Diaz, Project Officer

Dianne Gove, Director for Projects

Gwladys Guillory, Event and Conference Coordinator

Owen Miller, Policy Officer

Stefanie Peulen, Finance Officer

Grazia Tomasini, Administrative Assistant

Layout: The Publishing Bureau



Introduction



Jean Georges

I am very happy to welcome our readers to this special supplement about the Models Of Patient Engagement for Alzheimer's Disease (MOPEAD), which is a three-year project (2016–2018) funded by the Innovative Medicines Initiative, a Joint Undertaking between the European Union and the European Federation of Pharmaceutical Industries and Associations.

I am particularly pleased that Alzheimer Europe was responsible for producing the project's ethical guidance document and is contributing to the communication activities of this exciting project.

Currently, many people remain undiagnosed until late in the disease course. This comes with a range of challenges regarding access to care and post-diagnostic support. At the same time, research focuses more and more on the earlier phases of Alzheimer's disease (AD) in its endeavour to find a cure.

The MOPEAD project aims at promoting the shift from late-stage towards earlier diagnosis. In the pursuit of this, MOPEAD is testing four "patient engagement" models in five countries (Germany, the Netherlands, Slovenia, Spain and Sweden). These different approaches will provide people access to cognitive screenings and, where required, medical follow-up. The strategies include

assessments using an online platform, open house days at memory clinics and involvement of primary care physicians as well as diabetologists. At the end of the project, the team will evaluate which approach(es) worked best at a European level, but also for each country.

Since the first meeting in Barcelona at the end of December 2016, this great collaboration of 14 partners from academia and industry has been busy and this special supplement will give you a comprehensive insight into the rationale behind the project and the progress to date.

The supplement starts with an introduction on the motivation behind the launch of the project as well as an overview of the expected outcomes. I would like to especially thank Project Leader Laura Campo and Project Coordinator Mercè Boada for providing their insights on this.

Elisabetta Vaudano, Principal Scientific Officer at the Innovative Medicines Initiative (IMI) showcases some of the challenges in finding a cure for AD and how collaboration at IMI level helps to tackle them.

Next, three of our colleagues from the communication and dissemination team introduce you to the added value of MOPEAD.

“ Our thanks go to all research participants who freely give of their time to help us advance our scientific understanding”

This is followed by an overview of the project's work streams and the different models the project has implemented.

Alzheimer Europe led the report on the management of ethical issues and I am very proud that Dianne Gove from our team in Luxembourg provides you with an overview of some of the ethical considerations.

After that, you will get a high-level overview of the interesting communication work the group has been doing. You will also meet the first participants who took part in this study. Our thanks go to them as well as all other research participants who freely give of their time to help us advance our scientific understanding.

Lastly, if you are reading this during our 28th Alzheimer Europe Conference (#28AEC) in Barcelona, I would like to invite you to join Mercè Boada, Project Coordinator of MOPEAD, who will speak about improving the diagnosis of AD through EU research collaborations, during the plenary session "Dementia as a research priority" on Wednesday 31 October from 4.00 to 5.30 pm.

I look forward to seeing you there!

Jean Georges
Executive Director, Alzheimer Europe

The MOPEAD vision

Project Coordinator Mercè Boada and Project Leader Laura Campo provide an overview of the rationale behind the launch of this project as well as the expected deliverables and results.

Why was MOPEAD conceived?

Mercè Boada: When we created MOPEAD, the aims were clear: to identify efficient approaches for timely diagnosis of people in the early stages of Alzheimer’s disease (AD), by comparing different models of patient engagement.

Laura Campo: It is imperative to find some intervention to halt AD. This is a fact. The prevalence of dementia is rapidly increasing in developed countries due to social and demographic changes. This trend is expected to worsen in the coming decades, with the number of cases possibly even tripling in the next 25 years. The associated economic and social costs of this progression may be difficult to cope with for our countries, posing a challenge to public health.

Our knowledge of the pathophysiological process leading to AD dementia has increased significantly in the last decade. Today we are aware that the natural history of AD begins several years before the onset of the clinical symptoms and that this is probably the best moment to intervene and modify the disease progression.

We also have evidence that timely diagnosis leads to significant benefits. However, it is clear that in most, if not all health systems, dementia is underdiagnosed, and when diagnosis occurs, it is typically at a relatively late stage in the disease process. The causes of this phenomenon are probably multiple and

complex, including cultural factors such as social beliefs about dementia, the primary care physician’s attitude about dementia and the organisation of the health systems.

Mercè Boada: I agree, one of the main causes of delayed AD diagnosis is also influenced by the lack of awareness of cognitive decline in the general population and sometimes even among the primary care physicians. We need to clarify the meaning of cognitive decline and raise awareness of the signs to look out for, so that we can start to diagnose AD earlier. However, we do not only need to raise awareness about what the disease is and how it develops but also about the benefits of timely diagnosis.

Laura Campo: Exactly, the field must shift to greater public awareness on the importance of a timely diagnosis and improved medical efficiency in identifying AD as soon as clinical symptoms emerge. These efforts will potentially improve clinical access to treatment and support resources as well as patient engagement earlier in the stages of the disease. They will also help widen the outreach for clinical trial recruitment and earlier treatment development.

Mercè Boada: This is especially important since there is no cure for AD yet and this will help to find new treatments.

Apart from clinical trials and medical research, people can also participate in social research, which I think is a really good opportunity.

“The field must shift to greater public awareness on the importance of a timely diagnosis and improved medical efficiency in identifying Alzheimer’s disease as soon as clinical symptoms emerge”

Laura Campo



Laura Campo

Timely diagnosis also helps patients and families settle their doubts about the cause of the cognitive troubles. It avoids the uncertainty and associated burden of living with someone with dementia without an explanation for the behavioural changes. Further, it stops people having to go from doctor to doctor, seeking diagnosis.

Something else worth mentioning is that, when patients are diagnosed in the first stages of the disease, we can offer care advice that may help in maintaining autonomy for a while.

Evidence suggests that the sooner patients are informed, the more time they have to make decisions about their future, while they are still in a position to do so. These decisions will affect not only their health but also the economic and legal issues that have an impact on their families as the disease progresses. These are truly complex situations, which may otherwise become a huge source of problems if not dealt with in time.

Laura Campo: To deal with this we need a global effort involving the population, patients and their representatives, health-care professionals, governments, industry, and scientific institutions.

Mercè Boada: We know this from experience, because in AD, as in other conditions, involving patients and wider collaboration are good ways to improve diagnosis and care.



Mercè Boada

What role does the Innovative Medicines Initiative play in addressing this collaborative endeavour?

Laura Campo: The Innovative Medicines Initiative (IMI) – which funds the project – offers the best platform to give a collective contribution to achieve our goals, and this is how MOPEAD came about.

MOPEAD is the reflection of IMI’s call to action on “Evolving models of patient engagement

and access for earlier identification of AD”. The evolution of the current AD environment can be achieved in a variety of ways that will require customisation for different types of memory clinics, trial centres, localities and regulatory environments. This cannot be achieved in isolation but does require a strong collaborative approach involving clinical experts, patient organisations, regulatory agencies and pharmaceutical companies. IMI is enabling this “radical collaboration”.

What does the project aim to achieve in the long-term?

Mercè Boada: The cultural and socioeconomic differences between countries imply that the best patient engagement strategy could be different for each country.

There is therefore a need to test different approaches in each specific environment to find the most effective patient engagement strategy, keeping in mind that it is possible that one or two or a combination of more methods could be the best way for patient engagement.

Therefore, we will combine the use of conventional methods and big data, so that MOPEAD can identify the most suitable patient engagement strategies depending

“ We will combine the use of conventional methods and big data, so that MOPEAD can identify the most suitable patient engagement strategies depending on a set of contextual variables”

Mercè Boada

on a set of contextual variables (e.g. socio-economic, demographic, gender, ethnicity) for different countries.

Laura Campo: By setting up these models of patient engagement and access throughout Europe and using a variety of tactics and metrics of success, we can develop options for efficient resource utilisation that can be implemented broadly and provide larger numbers of AD patients with appropriate care resources.

MOPEAD will ultimately establish an enhanced portal for bringing volunteers into clinical trials to speed up research and development and will offer elements to build on the policy surrounding AD diagnosis and early treatment.

Why is timely diagnosis of Alzheimer's disease so important?
A timely diagnosis offers benefits to patients and families, healthcare providers, and society as a whole

- The benefits of a timely diagnosis for patients and families**
 - Avoids missed or misdiagnosis and delays in treatments.
 - Enables lifestyle changes that may help slow down disease progression.
 - Provides timely information to reduce anxiety about the disease.
 - Helps patients and families prepare and make decisions for the future.
- The role of healthcare providers in timely diagnosis**
 - Gives patients access to non-medical support and evidence-based treatment as the disease progresses.
 - Triggers a coordinated multi-disciplinary support to patients and families.
 - Enables the inclusion of patients in clinical trials investigating new medications.
 - Provides support to patients and families to adapt to the new condition.
- The value of timely diagnosis for society**
 - Increases awareness and empowers people to recognize early symptoms.
 - Preserves patients and carers inclusion and active participation in society.
 - Offers patients and carers the opportunity to shape a dementia-friendly environment.
 - Helps reduce the social stigma associated with Alzheimer's disease.

When I was given the diagnosis, confirming the beginning of dementia, my life changed a lot. For the better! I became more attentive, proactive, with improved self-discipline. And my quality of life is better. I am really more committed, because I know what is ahead of me. But my present is quite OK. Let it last.
Lincez, Slovenia

MOPEAD works to achieve a timely diagnosis. This means having a chance to deal with the disease, adapt your life and enjoy every moment. Timely diagnosis will give people the chance to make crucial decisions. This can range from enrolling in a clinical trial to spending more time with their loved ones.
Mercè Boada, Neurologist and Medical Director, Fundació ACE

Alzheimer's disease impacts patients, their families, caregivers and society as a whole. Increased awareness and early diagnosis is vital to reduce the toll of the disease and empower those affected by it.
Foggy McGuire, Director General, European Institute of Women's Health

Dementia research and the Innovative Medicines Initiative

MOPEAD is one of a number of projects focusing on Alzheimer’s disease and dementia that are funded by the Innovative Medicines Initiative (IMI). In this article, Elisabetta Vaudano, IMI Principal Scientific Officer, outlines some of the challenges in finding a cure for Alzheimer’s disease and how collaboration helps tackle them.



Elisabetta Vaudano

Dementia and Alzheimer’s disease (AD) still lack efficacious treatments. Sadly, we witness one trial failure after the other in this field, while the burden of disease continues to rise. We simply still know too little, and lack sufficient understanding of all complex facets of dementia/AD to move from incremental progress to the breakthrough everybody is waiting for.

The last 10 to 15 years have seen a boost in investment in Europe and worldwide in this area of research (albeit still at levels not comparable to other areas, e.g. cancer) which is a positive evolution. A major problem remaining is still that of fragmentation, with precious resources lost by duplication of efforts and insufficient sharing of results and lessons learnt across the whole ecosystem and all stakeholders. In addition, it is necessary to look at this research area in a holistic and programmatic manner.

IMI is a good example on how these principles are put into practice. IMI has a strategic advisory group (the Strategic Governing Group Neurodegeneration) providing a programmatic framework for its activities on dementia research. IMI has consequently delivered a rich portfolio of projects along the value chain: from understanding of disease biology, to discovery of new targets and definition of a better taxonomy of disease, to the development of new tools and methods for research and development of new treatments and for patient engagement and use of real world data.

Academics, clinicians, industry (large and small-and-medium size enterprises, from the pharmaceutical space and beyond), regulators, and most importantly patients throughout Europe work side by side in each project in a spirit of open collaborative innovation, and this model works! IMI projects are delivering valuable assets for clinical dementia research that may have a rapid impact on the latest phases of development of treatments, where the costs and the attrition are highest. These include a Europe-wide registry of people at risk of, or with dementia, a European readiness cohort for clinical trials, a highly trained clinical trial network, new biomarkers and clinical endpoints.

“The Innovative Medicines Initiative has delivered a rich portfolio of projects along the value chain”

Elisabetta Vaudano

The MOPEAD project adds an important element to the IMI dementia portfolio, that of the challenge of detection of the “hidden”

dementia in different European countries, with all its important connotations as a public health problem on one side and psychological and cultural aspects on the other. MOPEAD extends the IMI partnership to an important stakeholder group, that of general practitioners and will provide important learnings on how to best engage with them and related challenges. We are now in an important phase for the design of the next European research framework programme. In the following months, Horizon Europe will involve citizens more closely in the development of the programme, notably by incorporating them in the design and implementation of a limited number of highly visible missions.

Will our society consider the fight against dementia a bold, inspirational goal worth to be singled out as one of these relevant missions? If so, IMI projects are delivering some very relevant results, which may foster and provide valuable learnings for the shaping of such an ambitious and exciting initiative.



innovative medicines initiative

The added value of MOPEAD: patients, gender and policy

In this article, Annette Dumas (ASDM Consulting), David Krivec (Spominčica – Alzheimer Slovenia) and Peggy Maguire (European Institute of Women's Health) reflect on how MOPEAD takes patients, gender and policy into account.

In current practice, the diagnosis of Alzheimer's disease (AD) occurs too late, often when symptoms become severe enough that they interfere with daily tasks. These symptoms affect the autonomy of the individual and become increasingly difficult to manage.

The real-life benefit of MOPEAD is the engagement of people with AD themselves throughout the project. To encourage involvement and engagement, individuals and society should be aware of the differences between normal age-related cognitive decline and a pathological process such as AD.

Through the project's Call to action "Mind your memory, mind yourself" we are encouraging a cultural shift towards a timely diagnosis of AD during the very early symptomatic stages of the illness.

From a patient perspective, not only will a shift to timely diagnosis allow patients and their families to prepare and organise their life for the future, it will also support the inclusion of patients in clinical trials that investigate new medicines.

From a societal perspective, increased awareness of AD and timely diagnosis offers

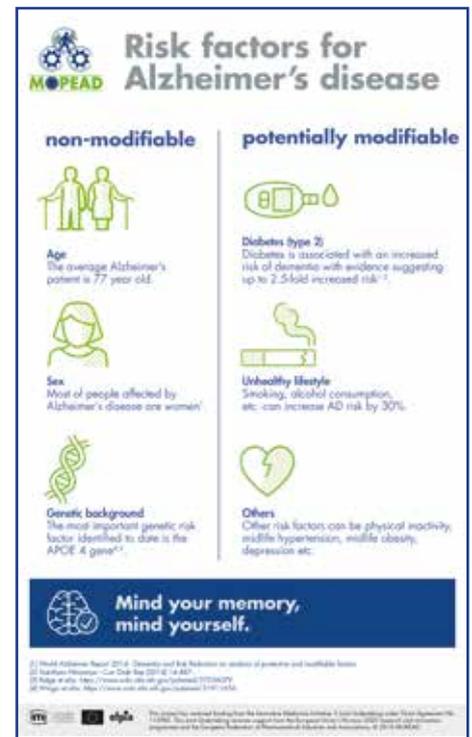
patients an opportunity to co-create inclusive dementia friendly societies.

AD affects a whole family, not just the individual. The vast majority of carers for people with dementia are women both in formal and informal caregiving capacities. Women with unsupportive caregiving environments report significantly poorer mental health and quality of life.

Biological, health and socio-economic experiences throughout the life-course, educational opportunities in early life and employment influence dementia risk differently for men and women.

There are female-specific risk factors — such as pregnancy-induced hypertension, and pre-eclampsia — that are associated with higher risk for cardiovascular disease and cognitive impairment development later in life. Hysterectomy and oestrogen loss after menopause may also increase the risk in women.

MOPEAD findings will inform policymakers about the value of tackling dementia at an early stage and support EU and national dementia actions in the areas of prevention and timely diagnosis. It also aims to improve



Risk factors for Alzheimer's disease

non-modifiable	potentially modifiable
<p>Age The average Alzheimer's patient is 77 year old.</p>	<p>Diabetes type 2 Diabetes is associated with an increased risk of dementia with evidence suggesting up to 2.5-fold increased risk¹.</p>
<p>Sex Most of people affected by Alzheimer's disease are women².</p>	<p>Unhealthy lifestyle Smoking, alcohol consumption, etc. can increase AD risk by 30%.</p>
<p>Genetic background The most important genetic risk factor identified to date is the APOE 4 gene³.</p>	<p>Others Other risk factors can be physical inactivity, midlife hypertension, midlife obesity, depression etc.</p>

Mind your memory, mind yourself.

1) World Alzheimer Report 2014. Dementia and Risk Reduction: an analysis of protective and modifiable factors.
2) Institute of Medicine. Care of the Elderly. 2002. p. 14-15.
3) Koga M et al. 1987. J Neurosci 7: 3441-3447.
4) Page SM et al. 2003. Neurosci Lett 349: 141-144.

the lives of those living with the disease and their carers. By looking at AD through a sex and gender lens, it will also be possible to generate targeted recommendations for the development of early intervention strategies, participation in research and access to care.

National and EU policy makers must embrace the cultural shift towards timely diagnosis and consequently re-organise healthcare services to align adequate resources to accompany this shift. This goal is fully in line with the EU2020 strategy goals, the EU Health for Growth Programme and Horizon 2020 that strive to make healthcare services more sustainable, encourage innovation in health and improve public health. The time to act is now!



Annette Dumas



David Krivec



Peggy Maguire

The MOPEAD Work Packages

Work Package 1: Consortium management and governance

The objectives of Work Package 1 are to ensure effective administration, progress monitoring, reporting and support for the scientific research activities. This includes financial and administrative tasks, handling of legal and ethical issues as well as proactive risk management. Work Package 1 will also establish a communication infrastructure which enables all partners to communicate efficiently.

Objectives:

- Ensure effective communications administration
- Progress monitoring
- Report and support scientific research activities
- Management of MOPEAD's ethical issues.

Work Package 2: Patient engagement strategies

Work Package 2 will pre-screen 2,000 individuals to identify hidden cases of prodromal Alzheimer's disease (AD) and mild AD dementia in the community (400 per country and 500 per strategy) using four different and complementary patient engagement models in a five-country, multi-centre setting (Germany, the Netherlands, Slovenia, Spain and Sweden).

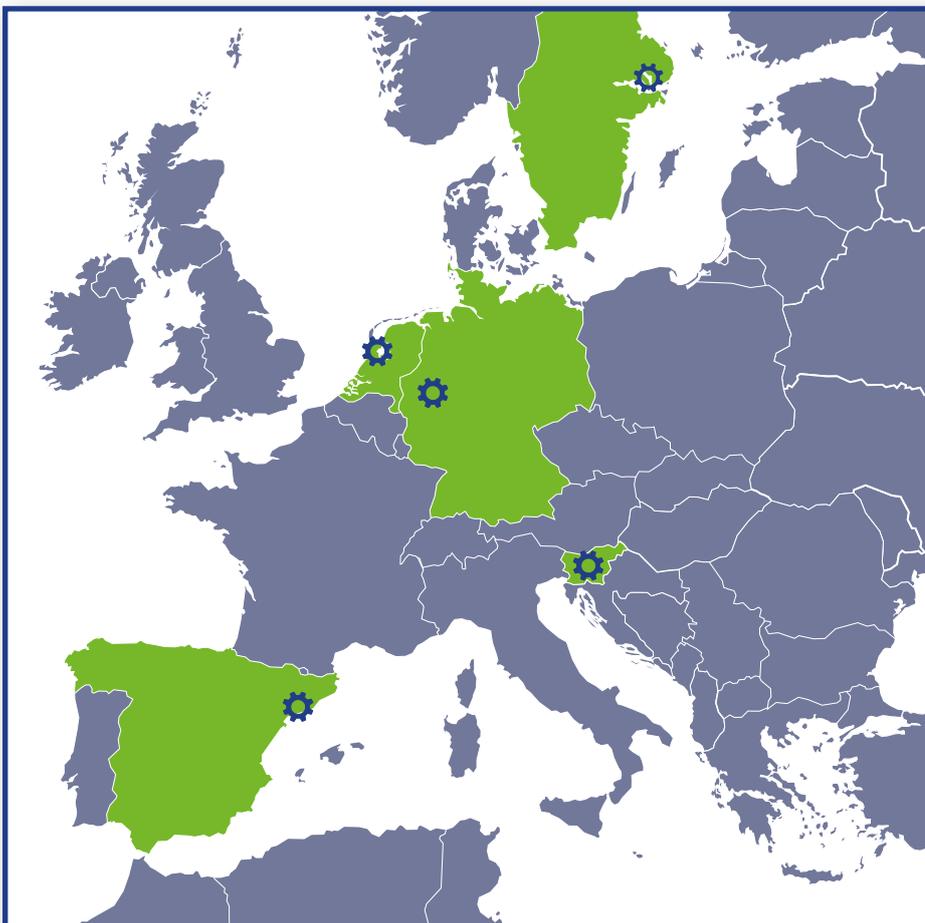
Each centre will use the pre-screening protocol adapted to the real world clinical practice of each setting. A set of socio-demographic variables and screening tools will be common in order to make protocols as harmonised and comparable as possible.

Objectives:

- Identify subjects with prodromal AD and mild AD dementia
- Implement and evaluate the feasibility of the project patient engagement campaigns in Europe
- Promote cognitive well-being in the European community
- Develop common pre-screening methodologies for practitioners.

Work Package 3: Common protocol for evaluation

Work Package 3 will provide follow-up of the individuals identified with positive results in Work Package 2 pre-screenings. They will receive support and advice including early interventions, follow-up, health and social recommendations and access to clinical



Trial Delivery Centres involved in MOPEAD

-  Amsterdam, Netherlands
-  Barcelona, Spain
-  Cologne, Germany
-  Ljubljana, Slovenia
-  Stockholm, Sweden



trials. People whose results do not indicate impairments will be offered follow-up and recommendations for cognitive wellbeing.

Objectives:

- Obtain a reliable clinical diagnosis for the subjects participating in the project, according to internationally accepted criteria
- Estimate as accurately as possible the risk of progression of each individual, based on clinical phenotypes and biomarkers
- Offer each individual the most adequate treatment according to quality standards
- Assess the eligibility of individuals for clinical trials according to their preferences, social situation and medical history
- Generate clinical and biomarker variables to be used as endpoints to compare the efficiency of each model of patient engagement in Work Package 4.

Work Package 4: Evaluation of patient engagement strategies and enrichment

Work Package 4 will integrate the most advanced methods of data analysis and algorithms as well as a big data architecture that will facilitate the management and mining of data collected during the screening procedures in an optimal and efficient way. This should help define the most promising strategies of patient engagement for different ethnic and socioeconomic backgrounds and thereby identify the most effective screening procedures recommended to be implemented in each country.

Objectives:

- Offer a unified platform for data exploitation coming from multiple data sources
- Define statistical models
- Establish best practices to identify prodromal AD and mild AD dementia

- Define high risk phenotypes in order to offer these individuals the possibility to undertake biomarkers analysis.

Work Package 5: Dissemination

Work Package 5 will bring together the Consortium’s work, maximising exposure by communicating regularly with a large audience, linking up with existing projects, producing educational materials and developing policy recommendations. The results will be made available to a variety of audiences including the public, policymakers, industry and like-minded stakeholders.

Objectives:

- Identify and promote patient engagement strategies for cognitive well-being in the general population
- Engage policy makers and regulators to implement supportive environments that become sustainable elements of health-care infrastructure.

The MOPEAD Partners



Comparing four models of patient engagement

MOPEAD will assess and compare different models of patient engagement. We asked four of the lead MOPEAD researchers to present their patient engagement strategy.

MOPEAD assesses key tools, mechanisms and processes for community engagement, patient identification and resource utilisation. Multiple regional project sites have been established to identify and test models of efficient early identification of prodromal Alzheimer's disease (AD) and mild AD dementia in people between 65 and 85 years. The models are implemented in five European countries: Germany, the Netherlands, Slovenia, Spain and Sweden.

This process is step-wise: each model is a pre-screening procedure that will potentially lead to further inclusion of the participant into a full diagnostic evaluation. Based on information on these processes and participant flow, the patient models will be compared and contrasted to understand how they contribute to improved detection, diagnosis, and clinical research in these communities.

Inmaculada Pérez Garro from GMV presents model 1: Citizen Science

The concept of Citizen Science can be described as public participation in research using the Internet. MOPEAD Citizen Science is designed to reach a large number of citizens through online marketing campaigns adapted to each of the five MOPEAD countries. This approach will be used to help people to find out if they might have cognitive impairment, giving around 100 citizens per participating country the opportunity to check their memory.

People will easily find the portal website from their browsers when searching for issues related to memory care, healthy life-style or AD. It provides a series of educational content related to the importance of prevention, social awareness and early assessment as well as MOPEAD.

At the same time, visitors are invited to access a set of online cognitive tests through which their risk level is evaluated. Those, whose performance is lower than expected, will be advised to visit a MOPEAD memory clinic in order to get a full evaluation.



Inmaculada Pérez Garro

Apart from anonymously collecting the results for evaluating each participant's risk, the tool gathers other data, allowing to compare the platform functioning in every country involved. By doing so, it will be possible to evaluate the online campaign's efficacy, platform usability, level of conversion or citizen's participation in each step.

Mercè Boada from Fundació ACE presents model 2: The Open House Initiative

In the context of MOPEAD, Open House days take place in the form of a memory check directed at the general population, carried out in memory clinics where people are being offered an assessment of their memory, language and other cognitive functions.



Mercè Boada

This is provided by professional staff who pose a set of questions and conduct simple neuropsychological tests. Participants, that show possible impaired cognition and/or are at high risk of developing cognitive problems, are then invited to undergo the complete diagnostic evaluation. This pre-screening, which is the first appointment of the person at the memory clinic where the neuropsychological tests are performed, is the Open House Initiative.

Being able to test the Open House model in 5 key memory clinics around Europe is an opportunity for both citizens and healthcare professionals. Tests that are sometimes out of reach for citizens will be easier accessible through this approach.

This strategy is unique because we are going to be able to develop a model that is both cost-effective and that gives something back to people immediately in return for their time. We will be able to see the cultural or social differences that challenge science and clinicians to find a way to citizens, so that we can improve our knowledge of the first stages of AD.

Anders Wimo from the Karolinska Institutet presents model 3: Primary Care

The vast majority of elderly people frequently visit primary care physicians. However, there is evidence that dementia and cognitive impairment are underdiagnosed in most health systems. This low rate of dementia diagnosis depends on multiple factors, such as lack of

time or lack of economic incentives. Based on previous experiences, some of these difficulties could be overcome through specific training programmes and through improvement of communication channels between specialists in dementia and primary care physicians. MOPEAD will therefore implement cognitive pre-screening campaigns at general practitioner level to tackle this challenge.

Being able to test primary care based patient engagement in different countries gives opportunities to share experiences and highlights the different working conditions and challenges in primary care in different parts of Europe, but also possibilities to improve early diagnosis of AD in primary care.



Anders Wimo

It also provides opportunities to improve collaboration between primary care physicians and specialists. The results of MOPEAD will also provide feedback to primary care regarding its role in identifying the most effective and cost effective way to diagnose early AD. In general, because of the lack of time in primary care, it is crucial to avoid ineffective methods and to focus on the most effective diagnostic approaches.

Rafael Simó from the Vall d'Hebron Research Institute presents model 4: Diabetes Care

Patients with type 2 diabetes (T2D) have a higher risk of developing dementia, including AD. There is evidence that T2D accelerates the progression of mild cognitive impairment to dementia. Therefore, this tertiary care based patient engagement strategy is planning to identify those T2D patients with early stages of cognitive impairment and to pinpoint the main associated risk factors. T2D patients will be screened using a mini mental status examination (MMSE) and specific questionnaires in a tertiary care unit. T2D patients with, or at risk of, cognitive impairment will then be referred to a memory clinic for further evaluation.

The co-morbidities of ageing patients with T2D have been associated with an increased risk to develop dementia. In addition, the number and severity of hypoglycemia is a

significant risk factor to accelerate the cognitive decline. Therefore, a personalised medicine aimed at avoiding the frequency of hypoglycemia seems to be necessary in those patients with mild cognitive impairment. However, clinical trials are needed in order to confirm this hypothesis.

For this purpose, the engagement throughout different countries in order to reach a sufficient sample size and to assess the reproducibility of the results on different health-care systems, as well as an appropriate cost-benefit analysis, seems warranted.



Rafael Simó



MOPEAD kick-off meeting (Barcelona, 14 December 2016)

Ethical considerations in the MOPEAD project

The MOPEAD project raises several interesting ethical issues. In this article, Dianne Gove from Alzheimer Europe presents some of the considerations of the ethics guidance document she contributed to.

MOPEAD seeks to increase the early detection/diagnosis of prodromal Alzheimer's disease (AD) and mild AD dementia. What are important aspects that need to be considered and how will these be addressed?

With regard to diagnosis, it could be argued that participants simply need to be informed about the aims of the study, possible harms and benefits, that some will be diagnosed with or informed that they are at increased risk of developing AD dementia and that they have the right not to be informed of the results of their evaluation. This would respect their autonomy.

“In recent years, medical research has led to a new conceptualisation of Alzheimer's disease. It may be some time before these changes are fully understood by the general public.”

Dianne Gove

However, the distinction between medical care and research is not always clear. As many medical researchers are also healthcare professionals, the boundaries between research and clinical practice are sometimes slightly

blurred. This may result in people taking part in research because they think it is necessary for their health. In two of the models (involving diabetologists and primary care physicians), for example, participants will be approached by healthcare professionals and offered pre-screening, followed in some cases by a medical/diagnostic evaluation for AD dementia. Some may assume, based on an existing relationship of trust, that they would not have been offered such an evaluation had the doctor not considered it necessary. There may also be issues linked to a desire to please the doctor or the belief that this study represents the only opportunity to have such an evaluation.

To avoid confusion about what is being proposed and why, MOPEAD researchers will try to ensure that potential participants understand the difference between medical care and medical research, emphasise that the primary aim of research is not to benefit individual participants, and ensure that people understand that they do not have to take part in the study in order to gain clarification about their cognitive health (e.g. if they already have some concerns).

Confusion about what is being disclosed following the full diagnostic evaluation is a potential source of harm. In recent years, medical research has led to a new



Dianne Gove

conceptualisation of AD, new terminology and existing terms taking on a different meaning. It may be some time before these changes are fully understood by the general public. The term “prodromal”, for example, is not an everyday term. Few people are likely to be familiar with it. If people understand AD to mean dementia, then being informed that they have prodromal AD or “early AD” (which MOPEAD uses to refer to both prodromal AD and mild AD dementia), may result in unnecessary distress (i.e. being upset about having a condition which they do not actually have).

To avoid harm and promote wellbeing, researchers will be attentive to how participants make sense of information they receive during the project. Measures will also be taken to help ensure that the early detection of Alzheimer's disease is not experienced as threatening and merely incorporating or leading to a prolonged period of ill-health and a feared state of being but rather as timely, opening the door to relevant support or, alternatively, to guidance on healthy lifestyles to contribute towards people remaining cognitively healthy for longer.

Meet the first MOPEAD study participants

Francisco Javier Larruy Borrel and Ana María Ruiz took part in the Open House initiative where they did a cognitive pre-screening. In this article, they speak about their experiences and how they got involved in the MOPEAD project.

Francisco Javier Larruy Borrel

Tell us a little bit about yourself:

My name is Francisco Javier Larruy Borrel and I was born in Monzón (Aragón). I am 66 years old and I am currently enjoying the best job in the world: I am retired. Before that, I was an engineer. I live in Reus (Spain) and I mainly spend my time making rock music. I used to have a music band but now I only play for fun.

How did you first hear about the MOPEAD project?

The truth is that it was my daughter who found out about what is being done at Fundació ACE, the Open House Initiative to assess memory. She works near the Memory Clinic and was the one who registered us. In order to stay informed, she usually looks for everything related to Alzheimer's disease (AD) and reads about it on a website. My father had AD and maybe that is why we are more sensitive to topics related to dementia.



Francisco Javier Larruy Borrel

“ My father had Alzheimer's disease and maybe that is why we are more sensitive to topics related to dementia”

Francisco Javier Larruy Borrel

Why did you want to take part in research?

I started looking for something or some way to control this a few years ago. I want to know how I am, how my memory is. Having an AD case in the family has made it clear to us that we do not want things to go that far. Here at the Memory Clinic, I have made some more concrete, more specific, tests. We have to encourage these initiatives so that this type of tests reaches more people.

Ana María Ruiz

Tell us a little bit about yourself:

My name is Ana María Ruiz and I am 75 years old. I am married and before I retired, I was a nurse. I am currently taking care of my husband, who has AD. I enjoy going to the theatre and I love reading. I always try to keep learning. I am taking classes at the university in a programme called “For the pleasure to know”.

How did you first hear about the MOPEAD project?

My husband receives treatment at the Diagnostic Unit of Fundació ACE. As I accompany him to every medical visit, I learned about the Open House initiative thanks to the flyers spread all over the centre.

Why have you considered participating?

I decided to take part because I thought my memory was becoming worse. I am 75 years old and this is something you start thinking about. This is why I decided I wanted to know how my memory was. Luckily, the doctor reassured me. She told me that although I need to take some other appointments, I am well and I don't have any memory issues. Anyway, I think it has been very positive to take this test because if in the coming years I start losing my memory or I feel I am doing so, we will have these results to compare.

“ I think it has been very positive to take this test because if I start losing my memory, we will have these results to compare”

Ana María Ruiz



Ana María Ruiz

Communication and engagement

Communication is a vital aspect of every project. In this section, Annette Dumas and Isabel Rodríguez introduce us to the project's communication activities.

The role of our communication and dissemination team is to promote the project, its progress and key findings. Our strategy is to raise awareness about Alzheimer's disease (AD), memory complaints and cognitive decline among professionals, the general population and decision makers while also bringing the project to their attention. Besides, the team provides guidance and tools to the Consortium members on how to inform and stimulate broader debate as well as engagement with specific groups.

The project's educational materials focus on AD's early signs and the importance of timely detection and diagnosis. The aim is to drive behaviour changes for an optimal patient support.

The communication activities aim to prepare the ground for acceptance by the general population, healthcare professionals and providers, academics, interested stakeholders and policy

makers that an innovative approach is needed to design and implement the best early prevention and detection strategies for AD.

The communication strategy includes a series of educational and informative materials for a large public, including "Calls to action" for people to take care about their health.

Four static infographics have been developed:

- The first introduces the project and its innovative approach to timely diagnosis, its objectives, and explains why it has been conceived.
- The second "Why is timely diagnosis of Alzheimer's disease so important?" illustrates the benefits of a timely diagnosis for patients and carers, the role of healthcare providers and the value of a timely diagnosis for society. Each benefit is further explained with a personal quote from a patient, a health professional and a representative of civil society.
- The third "Risk factors for AD" presents both the main non-modifiable and modifiable risk factors associated with the development of AD. The aim is to draw

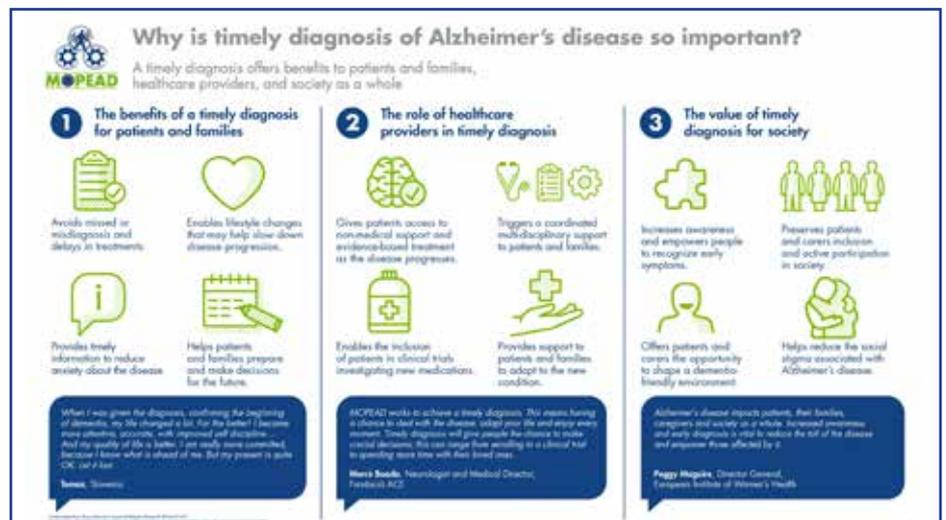
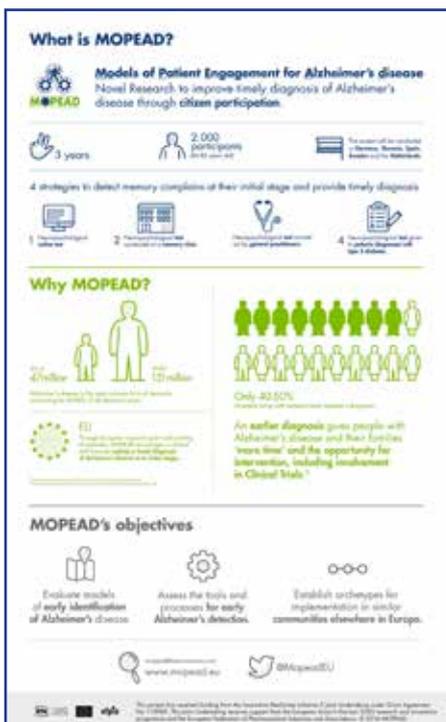


Annette Dumas



Isabel Rodríguez

attention to diabetes and other common risk factors with the ultimate aim of encouraging citizens at risk about the need of checking their memory.



- The fourth “Memory matters” makes a distinction between cognitive deficits in normal ageing and those in dementia to counter the commonly accepted idea that cognitive impairment comes naturally with ageing. As this misperception is a key barrier to timely detection and treatment, the infographic contains a call to action inviting all those in doubt to consult a doctor or visit a memory clinic.

The concepts of the infographics and additional disease specific information have been pulled together in a user-friendly leaflet to be handed out to patients in the different recruitment centres. Its aim is to raise awareness, address some misconceptions and engage the public to take part in the project. It includes the testimony of three patients who explain how their diagnosis has changed their lives, definitions of terminology and a visual that explains the different stages of AD.

The infographics and leaflet have been translated into the language of the countries where the recruitment takes place (Catalan, Dutch, German, Spanish, Slovenian and Swedish).

In order to diversify and strengthen the project’s communication efforts, the team has produced a 3-minute animation that explains the core issues MOPEAD is tackling, how MOPEAD is contributing to a timely detection of AD and encouraging to learn more and take action.

A website (www.mopead.eu) presents general information on the project and its ambitious aims. It also includes information on the differences between normal ageing and cognitive decline and calls on the public to keep an eye on very specific deficits that can be signs of early AD. Some “tips for coping with memory problems” are also available on the website.

MOPEAD is a truly innovative project looking at unexplored diagnostic areas. As such, the partners will publish articles in respected publications to share the hurdles they have encountered in organising patient recruitment, the project’s ethical issues as well as attitudes and barriers of primary care physicians towards early diagnosis.

The other communication streams are the three newsletters that will be produced throughout the project’s duration, the use of social media (Twitter, LinkedIn, YouTube) and presentations at national, European and international conferences by project partners.

The communication and engagement work is led by ASDM Consulting and Eli Lilly alongside the Work Package partners (Alzheimer Europe, European Institute of Women’s Health, Spominčica) as well as Fundació ACE and Modus Research and Innovation.

“An innovative approach is needed to design and implement the best early prevention and detection strategies for Alzheimer’s disease”

Risk factors for Alzheimer's disease

non-modifiable

- Age:** The average Alzheimer's patient is 77 year old.
- Sex:** Most of people affected by Alzheimer's disease are women.
- Genetic background:** The most important genetic risk factor identified to date is the APOE 4 gene*.

potentially modifiable

- Diabetes (type 2):** Diabetes is associated with an increased risk of dementia with evidence suggesting up to 2.5-fold increased risk*.
- Unhealthy lifestyle:** Smoking, alcohol consumption, etc. can increase AD risk by 50%.
- Others:** Other risk factors can be physical inactivity, midlife hypertension, midlife obesity, depression etc.

Mind your memory, mind yourself.

(*) Most Alzheimer's cases (70-80%) are sporadic and do not have a strong genetic component. (**) Alzheimer's disease is a complex disease with many genetic and environmental factors. (***) The APOE 4 gene is a risk factor for Alzheimer's disease, but it is not a guarantee of developing the disease. (****) The APOE 4 gene is also found in people who do not develop Alzheimer's disease.

Memory matters

Normal Ageing	Dementia*
Unable to remember the name of an acquaintance.	Not recognizing or knowing the names of family members.
Occasionally having difficulty finding words.	Frequent pauses and substitutions when finding words.
Able to use common objects (i.e. remote control, microwave oven).	No longer able or unable to operate common devices...
Maintains prior level of interpersonal social skills.	Exhibits a loss of interest in social activities and inappropriate behaviors.

If you are worried, ask your doctor or visit the nearest memory clinic

*Based on general statements. This is not an exhaustive list. For further information visit www.mopead.eu

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

MODELS OF PATIENT ENGAGEMENT

www.mopead.eu @MopeadEU



MOPEAD

For the latest information on the MOPEAD project,
please visit our website: <https://mopead.eu>



Follow us on Twitter!
@MopeadEU

This project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking under Grant Agreement No 115985. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and the European Federation of Pharmaceutical Industries and Associations. www.imi.europa.eu/

