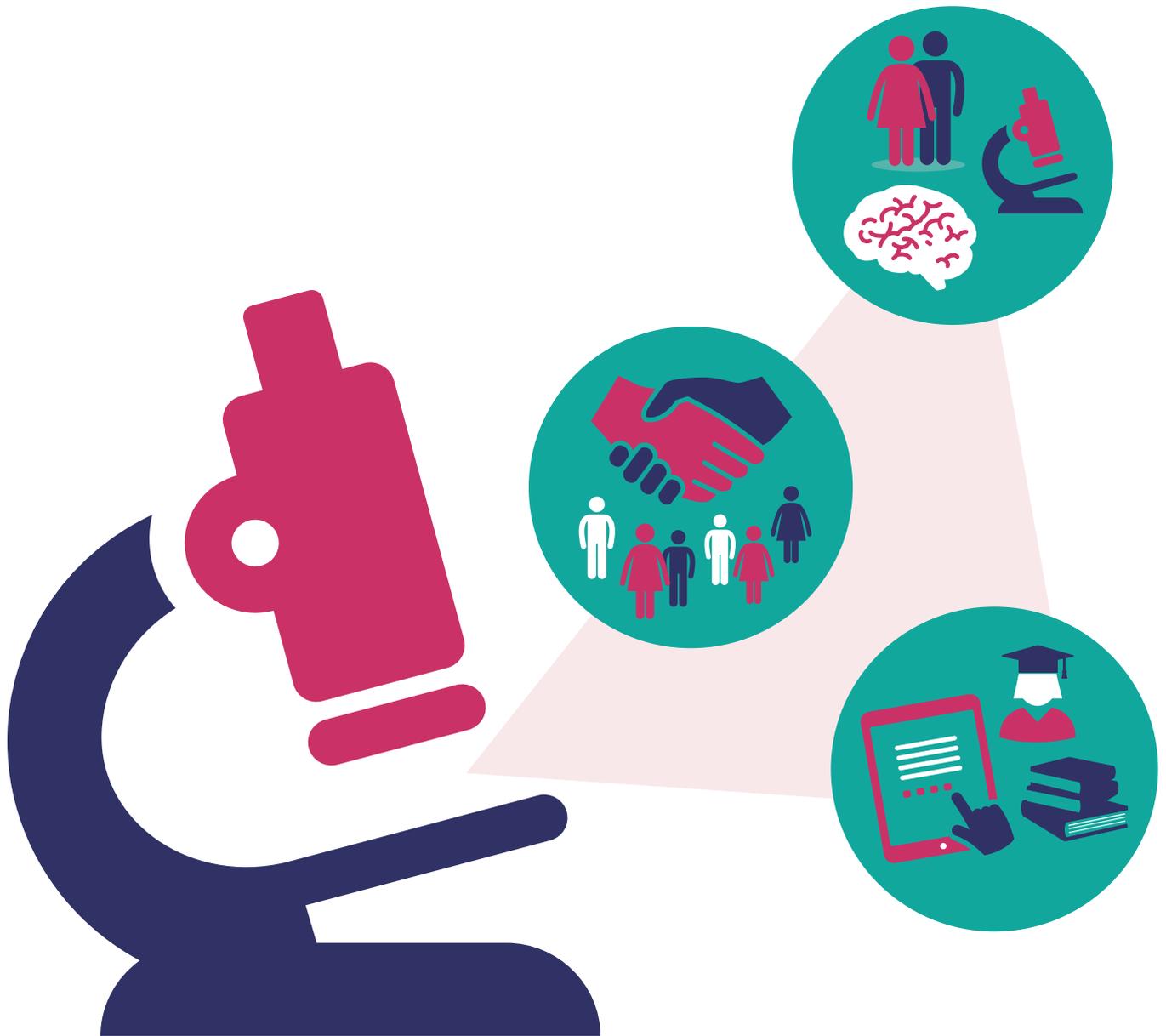




# EFNA

EUROPEAN FEDERATION OF NEUROLOGICAL ASSOCIATIONS

# Optimising patient involvement in neuroscience research



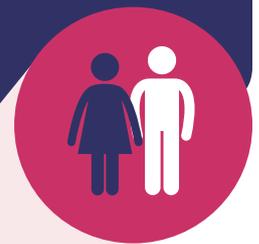
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All across the world, hundreds of millions of people of all ages struggle with neurological disorders daily. These conditions can include Alzheimer's and Parkinson's disease, strokes, multiple sclerosis and epilepsy to migraines, brain injuries, brain tumours and neuro-infections. These are in addition to a wide range of rare and neglected neurological disorders. In Europe alone, the death and disease burden due to neurological disorders is staggering and ranks number three among all disease groups, according to recent studies.<sup>1</sup>

Active patient involvement (PI) in neuroscience research, especially in clinical trials, helps ensure that relevant clinical questions and patient-centred health outcomes are addressed optimally. With patient-centricity being increasingly recognised as a pillar of neuroscience research, all stakeholders should push for more systematic and meaningful patient involvement.

This document captures the insights from an EFNA workshop held in Brussels in December 2019. Attended by over 50 representatives of patient and health professional organisations, carers, research and industry partners, and other experts, the workshop served to inform EFNA's strategic plan for 2020-2025, particularly in its focus area of: *Promoting patient empowerment for more meaningful involvement and engagement.*

Patient involvement is much more than participation in clinical trials. Patient involvement also encompasses governance and research priority setting, the design of clinical trials and selection of endpoints, involving patients and carers as evaluators and reviewers of research proposals, membership of research consortia and participation in basic research initiatives, etc.



## Why does patient involvement in neuroscience research matter?

Patient involvement is a key element of patient-centred healthcare. As both a prerequisite for, and an outcome of, patient-centred healthcare, it constitutes a goal as well as a process.

Patient involvement – such as working with the clinical research community as co-creators of clinical trials – can help make research outcomes and endpoints more meaningful to patients and carers. This will help ensure that research is focused and acceptable to people with neurological disorders. This starts with asking the right research questions and creating appropriately-designed clinical trials, and goes right through to regulatory approval and health technology assessments (HTA). In more basic research initiatives, it starts with developing a shared research agenda and ends at better evaluations of research projects and their impact on patients.

**“ In ataxia research, the ability to walk a certain distance is usually taken as an endpoint, whereas the perspective of patients as to which outcome matters most is different. Clear speech is often cited by most ataxia patients, whereas the ability to walk is not necessarily seen as the most important outcome. ”**

*Cathalijne van Doorne, President, Euro-ataxia*

Patient involvement doesn't only have the potential to reduce the considerable amount of time research takes – it can also improve the efficiency of research, but also ensure better enrolment in clinical trials and better adherence to therapies. Patient involvement can also be an important driver of innovation by supporting

researchers in asking the right questions about what matters most to those affected by a specific condition. In order to achieve this, we need renewed – and better – relationships between patients, academia and industry.

This is particularly important in the neurology sphere where patients are often living with chronic, long-term and fluctuating conditions where quality of life and overall functionality can be more important than meeting defined clinical endpoints which are easier to measure and assess. Additionally, patients are also faced with multiple morbidities, polypharmacy issues and conditions where secondary or invisible symptoms, and side effects of treatment, can be more burdensome than the primary symptoms of their disease – which may often not be considered in a research setting.

These challenges highlight the need for all clinical studies to include patient reported outcomes (PROs) and patient reported experiences (PREs) which shine a strong light on what really matters to patients while coping with their disease.

However, this also raises the point that unless regulators and payors are also open to accepting patient reported/relevant outcome measures, abandoning outdated clinical scales and welcoming the opportunities provided by the digital transformation of healthcare (e.g. collection of real-world evidence), industry will not be incentivised to involve patients and integrate their preferences in the most meaningful way. Therefore, patient organisations and their partners need to collaborate to ensure that the regulatory and reimbursement processes for new drugs and devices are designed to ensure more meaningful patient involvement.

## Where can patient involvement in neuroscience research be improved?



Unfortunately, the specificities of neurological disorders mean that the numbers of patients willing and able to participate in research, including in clinical trials, are very limited. Many neurological disorders are rare, and it is difficult to accrue sufficient numbers for enrolment in clinical trials because patient populations are dispersed and sometimes low in numbers. It is vital that there is real world representation of the target populations that are supposed to be helped by research and not just a majority population or gender.

Furthermore, some people with neurological disorders experience rapid cognitive decline or may not have long survival rates, for example in the case of brain tumour patients. Therefore, developing relationships with people with these conditions and their carers can be challenging and needs careful management. For example, people living with ongoing cognitive issues such as cognitive fog require more time to process concepts, so materials could be distributed in advance.

The neurological patient community is determined and willing to be involved in research. The pool of engaged and empowered patients and carers is growing and is eager to get involved in a meaningful manner. Finding a cure for most neurological disorders is unfortunately proving elusive and current treatments are often sub-optimal. However, this means that our community has an added incentive to become involved in research which might lead to treatment breakthroughs and better patient outcomes. As we advocate for brain research, we need to be ready to get involved and to meet the opportunities that arise.

But still, patients, carers and their representatives are often faced with closed doors. There needs to be an attitude shift, a culture change – amongst researchers and healthcare professionals (whose work can benefit from patient involvement) but also amongst the ‘expert patients’ who are already embedded in the system. All stakeholders should know that patient involvement is meaningful and valuable, and that patients are ready, willing and able to get involved. This trust and relationship-building between all stakeholders is a prerequisite to effective patient involvement.

While considerable progress has been made in recent years, at the EFNA workshop in December 2019, three areas in particular were suggested as warranting further attention if we want to see more meaningful patient involvement:



See below for more specific details on what was discussed as potential action points in these three areas.

## Area for action Priority setting

### Ensuring that research is informed by what matters to patients and addresses unmet need



While recent research suggests that patients and carers are generally becoming more engaged in healthcare priority setting and research, involvement usually takes place at the research preparation stage and only involves the identification of ‘high-level’ research priorities such as decision-making about health systems’ agendas.<sup>2</sup> Not only does patient involvement in priority setting ensure the credibility of the priority setting process, it can also help direct healthcare resources towards areas with most unmet need.<sup>3</sup>

Priority-setting partnerships (PSPs) are about ensuring the research community understand what is important to people with health conditions, including neurological disorders. Research priorities, whether they are part of academic studies or pharmaceutical industry research and development, should be informed by patients’ priorities in order to deliver meaningful results, starting from the formulation of the research question to the evaluation of research. Addressing research questions that matter to those affected by neurological disorders, in a way that satisfies the practical and ethical demands of patients and their families, is central to the success of health research.<sup>4</sup>

However, this is currently not always the case, and must change at all stages of the continuum to make research more relevant to patients. Patients and their advocates are working to change this in order to make research more relevant to them. Not only is this more beneficial for patients and carers, it also benefits researchers as mutual learning will ensure innovation in research.

It is imperative that all relevant stakeholders, including patients, are involved in identifying common societal patient-reported outcome measures (PROMs), such as quality of life (which is not often taken into account) and economic indicators that also look at indirect cost e.g. absenteeism, cost of care, etc. At present there is still a lack of standardised PROMs: defining meaningful PROMs for neurological disorders is a critical step. There is scope for generalised PROMs, but there is also a need to see more disease specific and culturally/geographically appropriate measures used.

In order for priority-setting partnerships to bring the desired results, opportunities for collaboration must be established. This requires the elimination of existing barriers to such collaboration, including physical, linguistic and socio-cultural ones, which need to be addressed through sufficiently sensitive methodologies and processes. The creation of platforms for dialogue are essential.

## MULTIPLE SCLEROSIS

### Multiple sclerosis priority setting partnership

In the UK, the MS Society has partnered with the James Lind Alliance as well as people living with multiple sclerosis and healthcare professionals to identify the research priorities that are most important to those living with the disease and their families. The process involved multi-stakeholder input on question gathering, sorting and prioritisation before settling on the top 10 research priorities, which include MS prevention and condition self-management. The priorities now complement the MS Society's research strategy (2018-2022).<sup>5</sup>

While many examples can be found within the UK, it is important to ensure that such models are not just replicated in other countries, but that culturally appropriate models are built in each country which are tailored to local circumstances.

The importance of sharing research results must not be forgotten. Industry has a responsibility to share the results of clinical trials with the neurological community or at least give an indication of those who advised and participated. Patient group organisations can also play a role in disseminating research findings and putting them into context for the community.

## Area for action

### Training

### Equipping researchers and patients with a better understanding of the value of patient involvement and how to do it right!



In order for consistent patient involvement in neurological research to become a reality, there is learning to be had and trust to be established by all stakeholders, from researchers, patients and carers to healthcare professionals. First and foremost, patient organisations should continue to train and build a pool of patient representatives to ensure that they, whether a patient group member or not, can respond to opportunities that may arise.

Training researchers is key so that they fully understand the effort and value of people investing their time and knowledge in patient involvement – as well as how to do this right! While it may seem obvious that people living with conditions know the most about them, this is often not taken into account by researchers who are sometimes surprised to find out that patients can help them in their research. In order for patients to become research partners, not only research subjects, researchers must recognise that all patients bring value and real life experiences and knowledge to a research project even if researchers' agendas sometimes differ from those of patients. Too often patient advocates are mistakenly perceived as too emotional, not representative, too influenced by industry, biased or not knowledgeable enough to be real research partners. These

misperceptions, which should be corrected, are not helpful in breaking down barriers to more collaborative research approaches.

Patients and carers need training, too, and clarity on what is expected from them when engaging in research. Patients involved in research should also feel that their input is valued. It can be intimidating for people living with health conditions to speak up in a room full of scientists, clinicians and researchers. Often, patients lack clarity on what is expected from them when engaging in research and don't feel valued. Training on what patient involvement in research entails and how patients can participate through the channels available to them can better equip patients for getting involved and empower them to take an active role as experts in the research that matters to their lives. This should also extend to education on how medicines are developed and regulatory and reimbursement processes when it is decided that medicines and medical devices are approved to enter the market and be made available to patients.

As displayed at the workshop, there is a lot happening in this space already. European funding instruments like ERA-NET NEURON and the Joint Programme on Neurodegenerative Disease [JPND] are already involving patients in their work, and providing guidance to the researchers they fund on how to do this too. Similarly, initiatives like EUPATI, EURORDIS Open Academy and PARADIGM are providing tools, guidance, metrics and training for patients and other stakeholders on how to achieve more meaningful patient involvement. Patient organisations, too, are taking a lead and there are many examples of good practice across Europe. The key, now, is to harness this momentum and to leverage this for the neurology patient community to ensure those we represent can and do get involved.

EUPATI

**EUROPEAN PATIENTS' ACADEMY (EUPATI)**

Training initiatives such as the European Patients' Academy (EUPATI) are important since they upscale knowledge by providing patients with accessible and reliable information on how medicines are developed. EUPATI is a pan-European project implemented as a public-private partnership by a collaborative multi-stakeholder consortium from the pharmaceutical industry, academia, not-for-profit, and patient organisations. It focuses on education and training to increase the capacity and capability of patients to understand and contribute to medicines research and development and also improve the availability of objective, reliable, patient-friendly information for the public.<sup>6</sup>



## Area for action

# Match-making

## Connecting the right patient with the right research partner



Not only is training patients a priority, but then trained patients have to be involved; there is no point in training patients if there are then no opportunities. In order for researchers and patients to work together, the right patient needs to find the right research partner – and vice versa. Match-making patients and researchers is therefore a prerequisite to better patient involvement in research.

**“ Nothing about us without us. Patients need to become research partners, not just research subjects. ”**

*Kathy Oliver, Chair, International Brain Tumour Alliance*

Raising awareness about the critical need for encouraging patient interest and involvement in all stages of clinical trial development is seen by many as a first step towards integrating more patients in the various stages of research.

While patients living with a neurological disorder can participate in research in the hope of finding new treatments for their conditions, patient involvement in various stages of the research pathway also provides researchers with an opportunity to develop better treatments for future patients based on the direct insights and experiences of patients involved in their research – but this needs to go beyond just clinical trial participation. Each patient story has a place within research. It is important to identify specifically what patient input is required within research, to ensure the right person can provide the right input.

One important way to access patients for involvement in research is to do so via the relevant patient advocacy organisations. Often academia and industry (as well as regulators and HTA) approach patient organisations first as they are frequently the gateway to appropriate patient involvement. As mentioned above, the creation of a pool of patients and carers willing to get involved in research would be a first step to ensure that researchers can find patients to get involved in their research. However, this pool needs to be sufficiently large to cater for the increasing demand. It also needs include different profiles of patients. This has already been undertaken by many patient organisations and there are templates to be followed.

At the EFNA workshop, debates took place on the definition and nature of ‘the expert patient’ – are some patients ‘too expert’ at the expense of their personal, lived experiences of disease? How do we find a balance between those who are educated to understand scientific, research and regulatory processes and those who can bring their personal lived expertise? Can these two approaches be successfully combined and if so, how? Additionally, how do we ensure wide representation on a geographic and cultural level? Given that the international language of science is English, how do we overcome language barriers for those patients and advocates for whom English is not a first language? This is where patient advocacy organisations like EFNA and other pan-European umbrella groups can play a role.

An umbrella organisation, with a broad overview, can also help eliminate unnecessary duplication along the research pathway. Does every company need to generate its own patient journey or storyboard for a specific therapeutic area – could these be produced, housed and owned by patient organisations? Does every company need to convene its own separate patient/community advisory board when it wants patient input? Could additional community advisory boards be run by patient organisations and open to industry/researchers? These are questions for EFNA to answer as it explores next steps.

## Digitalisation as an enabler

Digitalisation can be a real source of empowerment for patients by providing access to information; opening new communication channels and new forms of participation. This is important, for instance, for patients whose verbal communication is impeded or who are not able to participate in face-to-face meetings. This is particularly important for people living with neurological disorders, who are often house bound and rely on virtual tools.

As a priority field of action for Europe, citizen empowerment constitutes one of the three priorities of the European Commission.<sup>7</sup> While the digital health revolution could be a real enabler for greater patient involvement in research, there remains the challenge of effectively engaging all citizens in new technologies and ensuring patients understand how they can be used (for example, virtual clinical trials). Many patients still don't have the skills required to use digital platforms, which presents a barrier to their participation. In order to ensure that patients can and do make the best use of digital tools available, they need to be upskilled in their digital capacities. In addition, the hardware and software providers need to consider how best to meet their customer's needs, for example, ease of operation and good design.

## Next steps



EFNA will work with its partners at the European Brain Council on its European Brain Research Area, coordinating support action, to ensure that the patient perspective is gathered in the development of the shared research agenda for Europe, and that the work package on patient involvement is optimised. EFNA strives to establish partnerships with European funding instruments with the aim to involve patients at many stages of the research process.



EFNA will continue to run its Training Initiatives for Neurology Advocates [TINA] workshops. However, it will attempt to co-create these with our research partners, and ensure multi-stakeholder participation with a defined goal e.g. training patients as funding proposal evaluators, training early career researchers in patient involvement, etc. Participants will be asked to join a pool of neurology patient experts who can engage in various research and development activities. This may take the form of an online platform – where good practice, involvement opportunities, etc. could be listed.



EFNA will use its advocacy and policy channels, e.g. the MEP Interest Group on Brain, Mind and Pain, to call on EU policy-makers to better recognise the value of patient involvement in research (and also health policy). EFNA will also follow, influence and leverage EU policy work on, for example, digital transformation of health, health literacy and other topics which may impact on patient empowerment and involvement activities.



EFNA will use its annual partners meeting to advance discussions on this theme, and continue working with other stakeholders, projects and initiatives in this field to bring the neurology patient perspective to discussions on meaningful patient involvement.

# Can we measure the impact of patient involvement in neuroscience research?

As EFNA embarks on pursuing the above actions, it also needs to consider how the impact of patient involvement in neuroscience research can be assessed. At the workshop, implementation and impact were mentioned as key actions in the process of patient involvement.

Even though researchers are already beginning to recognise the value of involving patients in neuroscience research, quantifying the impact of patient involvement for both patients and providers remains difficult. Among other reasons, this is due to the lack of suitable data on the extent and impact of patient involvement.

## PARADIGM

### THE PATIENTS ACTIVE IN RESEARCH AND DIALOGUES FOR AN IMPROVED GENERATION OF MEDICINES (PARADIGM)<sup>8</sup>

The Patients Active in Research and Dialogues for an Improved Generation of Medicines (PARADIGM) project is a public-private partnership which aims to participate in the co-creation of a sustainable framework allowing meaningful, systematic and ethical patient engagement in medicines R&D.

PARADIGM is developing a monitoring and evaluating framework to assess the value of patient engagement activities. Within this framework, it will assess patient engagement activities and human, physical and financial resources against the impact on medicines development and stakeholders. This can include, for example, increased mutual respect between regulators and society and more patients willing to be involved in future patient engagement activities.

Although it is difficult to make a direct link between projects which are awarded funding and the inclusion of patient involvement, it is possible to demonstrate how patient involvement enables the dissemination of knowledge and can increase international collaboration. It can also improve the training of early career researchers by providing them with a more holistic approach and supporting them in formulating research questions and methodologies that are meaningful to patients.

**“ It has been shown that a neurology medicine which has gone through a patient-centric clinical trial where patients have had direct input into the design of the trial will have a 20% increased chance of receiving marketing authorisation, speeding up the drug development process.<sup>9</sup> ”**

## MULTI-ACT

### MULTI-ACT<sup>10</sup>

MULTI-ACT is a multi-stakeholder European initiative which seeks to increase the impact of health research on people with brain diseases. The MULTI-ACT project is working with patient organisations, academics and private and public stakeholders to develop brand new tools to assess the value of research. The overall objective is to define new metrics for the evaluation of results.

## Closing remarks

EFNA's slogan 'Empowering Patient Neurology Groups' captures our goals and reflects both our strategic approach and commitment to our work. I was impressed by an article published a few years ago, which states that *"neurology is inherently patient-centered given that clinical uncertainty is common, forcing physicians, patients, and families to partner on treatment approach."* It concludes that an *"increasing emphasis on patient-centered care, patient engagement, and shared decision-making (SDM) in health care provides neurologists with an opportunity to reassess current clinical approaches to decision-making."* Clearly this is not only a theoretical assessment.<sup>11</sup>

This document is based on the proceedings of an EFNA workshop held in Brussels in December 2019, which among other things also served in creating EFNA's strategic plan for 2020-2025, particularly in its focus area of: Promoting patient empowerment for more meaningful involvement and engagement.

EFNA wants patients to be considered as partners. Solutions aimed at patients have to be developed with patients. Patient involvement – such as working with the clinical research community as co-creators of clinical trials – can help make research outcomes and endpoints more meaningful to patients and carers.

Indeed, patients are playing, and will increasingly do so, a critical role in the medicine development lifecycle. In a collaborative spirit, patients and researchers can address the right issues and respond to the right needs. Patients' insights and contributions in a collective effort undertaken with other stakeholders, such as policymakers, regulators, and industry can build a truly patient-centred health system.

EFNA wants to ensure that neurological disorders be treated as a priority at the EU and national level. There is a need for more visibility and general understanding of the complexities of the field, and patients' involvement is crucial to identify treatment gaps, unmet need and fight stigma, as well as to support funding for brain research.

Together, we look forward to co-creating a roadmap for sustainable success, shifting the culture of neurological research and development to a patient-centred approach which focuses on what matters most to patients. This will be very much reflected in our new strategic plan for 2020-2025.

For now, if you are interested in learning more about EFNA and our work in this domain, visit our website: [www.efna.net](http://www.efna.net) or get in touch! We very much appreciate the interest you have already taken in our work by reading this position paper.

**Joke Jaarsma**

President, European Federation of Neurological Associations





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## About EFNA

The European Federation of Neurological Associations (EFNA) is an umbrella group representing pan-European neurology patient groups. Our slogan 'Empowering Patient Neurology Groups' encapsulates our goals as an Association. We strive to add capacity to our members – allowing them to be the most effective advocates possible in their own disease specific areas.

EFNA embraces the concept of Partnership for Progress – working at a high level with relevant stakeholders from different fields, including policy, medical, scientific/research, industry, patient partners and other key opinion leaders.



EFNA's slogan 'Empowering Patient Neurology Groups' captures our goals and reflects both our strategic approach and commitment to our work



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