



NAPAD

National Action Plan for
Alzheimer's Disease and
Other Similar Diseases

2020-2030

National Action Plan for Alzheimer's Disease and Other Similar Diseases 2020-2030



NAPAD

National Action Plan for
Alzheimer's Disease and
Other Similar Diseases



MINISTRY OF HEALTH OF THE
CZECH REPUBLIC



Preamble

The age structure of our society is changing - society is aging. As the number of the elderly increases, so does the number of people living with dementia, as well as the number of family members who care for them. The Ministry of Health and the Ministry of Labour and Social Affairs, together with representatives of professional societies and organizations operating in the field of dementia, responded to this fact by creating a National Action Plan for Alzheimer's Disease and Similar Diseases for the years 2020-2030. Based on a deeper understanding of the functioning of the care system and public policy in the field of dementia, this document provides a set of specific measures, the implementation of which will raise awareness of dementia in society and support people living with dementia, as well as family carers. The database will allow the implemented changes to target current and future needs and evaluate their effectiveness. I want to thank not only all those who participated in the creation of this plan, but also those who will work together to transform the defined measures into positive impacts on the lives of people suffering from dementia and their loved ones. A good plan is a basis for change, but it will only gain purpose through implementation, and I believe that it will be successful.

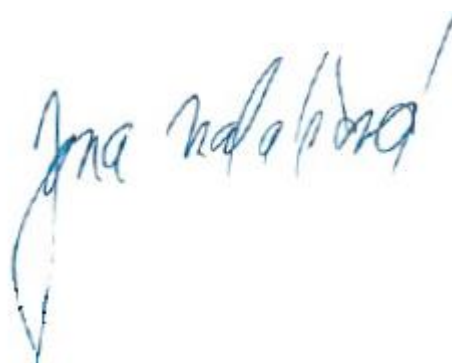


Doc. MUDr. Jan Blatný, Ph.D.
Minister of Health of the Czech Republic



MINISTRY OF HEALTH OF THE
CZECH REPUBLIC

Mutual cooperation between the Ministry of Labour and Social Affairs and the Ministry of Health resulted in the creation of a National Action Plan for Alzheimer's Disease and Similar Diseases for the years 2020-2030. Systemic and integrated help and support for people with dementia, their families and other carers is a crucial step in creating the conditions for a good quality and dignified life. The proposed plan is based on a detailed analysis, which became the starting point for the creation of specific measures. It is certainly positive that the emphasis is on developing a multi-level network of services, training staff, supporting carers and allowing people with dementia to stay in their natural social environment for as long as possible. Furthermore, I consider it very good that one of the goals of the prepared NAPAD 2020-2030 is to increase awareness of dementia in society. I am convinced that during the next ten years, the planned goals will be achieved and optimized conditions for the lives of people with dementia and their loved ones will be established.



Dipl.-Pol. Jana Maláčová, MSc.
Minister of Labour and Social Affairs



Table of Contents

Introduction	11
Vision	13
A vision for the functioning of public policy in the field of dementia in 2030.....	13
The NAPAD 2020-2030 preparation process and vision for implementation	15
Situation analysis	19
0 Strategic Objective: Ensuring the implementation of NAPAD 2020-2030.....	23
Proposal Section	23
0.1. Specific Objective: Coordination of the development of services and activities in the field of dementia.....	28
0.1.1. Measure: Establishment of a permanent position of National Coordinator for Dementia	28
0.1.2. Measure: Appointment of an advisory group composed of representatives of key organizations and institutions.....	29
0.1.3. Measure: Creation of an implementation plan	29
0.1.4. Measure: Ongoing evaluation through the NAPAD 2020-2030 conference	30
0.1.5. Measure: Creation and use of a unified visualization of NAPAD 2020-2030 for implemented measures	30
1 Strategic Objective: Recommended procedures and the service network.....	32
1.1. Specific objective: Development of a uniform recommended procedure with interdisciplinary validity for the diagnosis, treatment and care for people living with dementia	32
1.1.1. Measure: Creating an overview of best practices from other European countries, their harmonization and adaptation to conditions in the Czech Republic.....	33
1.1.2. Measure: Define the role, competencies and availability of a geriatrician, neurologist, psychiatrist, clinical psychologist and psychologist, health and social worker, general nurse and activation worker in the care for patients with dementia, including the adjustment of the reimbursement system	34
1.1.3. Measure: Determination of indications for individual types of examinations, including a neuropsychological examination, treatment and care	34
1.1.4. Measure: Define the role of a general practitioner in the care for patients with cognitive impairment, including the adjustment of the reimbursement system and the possibility of prescribing cognitive enhancers.....	35
1.1.5. Measure: Creation of a methodology for memory screening in general practitioners' offices, or in specialist offices in the case of long-term medical care.....	35
1.1.6. Measure: Define a care plan for patients with cognitive impairment and comorbidities ..	36

1.1.7.	Measure: Define a care plan for patients with moderate to severe dementia-causing diseases	37
1.1.8.	Measure: Define the role, competencies and availability of specialized centres for the diagnosis and treatment of cognitive disorders	38
1.1.9.	Measure: Define the role, put into practice and evaluate the activities of multidisciplinary field teams with a focus on people with cognitive impairment.....	38
1.1.10.	Measure: Define the passage of a positively tested person through the system.....	41
1.1.11.	Measure: Define the role of informal carers	41
1.1.12.	Measure: Redefine the rules for restricting or revoking a driver's license or a firearms license	41
1.2.	Specific Objective: Completion of a multi-level care network	43
1.2.1.	Measure: Ensure the availability of expertise and services as defined in interdisciplinary best practices	43
1.2.2.	Measure: Mapping of available social services and increasing the availability of counseling workplaces	44
1.3.	Specific objective: The creation of conditions for dementia patients to remain in their own social environment for as long as possible	47
1.3.1.	Measure: Support for the use of technology and the creation of a network of monitoring centres for monitoring escapes from home, reminders of medication use, fluid and dietary intake, emergency calls	48
1.3.2.	Measure: Promoting natural sources of support for informal carers, families and people with dementia	49
1.4.	Specific Objective: Ensuring the financial sustainability of the network of services... 51	
1.4.1.	Measure: The categorization of a patient with a cognitive deficit as a basis for the individualization and optimization of care and its reimbursement.....	51
1.4.2.	Measure: Creation of a code for the reimbursement of cognitive function screenings from health insurance.....	52
1.4.3.	Measure: Inventory and updating of codes for the reimbursement of cognitive function examinations from health insurance	52
2	Strategic Objective: Education.....	54
2.1.	Specific Objective: Mapping, support and development of education for medical and non-medical professions and professional carers in social services	54
2.1.1.	Measure: Evaluation of the current offer of undergraduate and postgraduate education for medical and non-medical professions and professional caregivers in social services	55
2.1.2.	Measure: Initiate changes in undergraduate and postgraduate education for medical and non-medical professions and professional caregivers in social services on the basis of the outputs of measure 2.1.1.	56

2.1.3.	Measure: Stimulate an offer of lifelong learning that includes the issue of dementia for workers in health and social services and for informal caregivers.	56
2.1.4.	Measure: Education of general practitioners in connection with the new procedure of cognitive function examination.....	57
2.2.	Specific Objective: Ensuring the availability of education and support for informal carers and strengthening their role in the process of caring for people with dementia and the cooperation of professionals and informal carers	58
2.2.1.	Measure: Establish informal carers as a target group of social services and professional social counseling for carers and their education as a service act in Act No. 108/2006 Coll., on Social Services, as amended	58
2.2.2.	Measure: Based on the assessment of the educational needs of informal carers, support forms of education that correspond to their possibilities and needs. Strengthen the role of carers as partners of professional providers of social and health services (so-called care sharing).....	60
2.2.3.	Measure: Establishment of a web information portal	64
2.2.4.	Measure: Stimulate the creation and activities of support self-help groups for family carers in local conditions	65
3	Strategic Objective: Epidemiology and research	66
3.1.	Specific Objective: Systematic evaluation of dementia data	66
3.1.1.	Measure: Reporting indicators of care for individuals with dementia	66
3.1.2.	Measure: Preparation of data packages focusing on the situation in the regions	67
3.1.3.	Measure: Linking NRPHS data with data on social services.....	68
3.2.	Specific Objective: Development of dementia research.....	68
3.2.1.	Measure: The monitoring and coordination of information on dementia research funding	70
3.2.2.	Measure: Ensuring the creation of a population longitudinal study	71
3.2.3.	Measure: Ensuring the creation of a multicenter study of patients with mild cognitive impairment or dementia.....	71
3.2.4.	Measure: Ensuring the use of routinely collected data for dementia research.....	72
4	Strategic Objective: Awareness of dementia and prevention	74
4.1.	Specific objective: Raising general public awareness of dementia	74
4.1.1.	Measure: Creation of an information package for media communication with basic information or case studies	74
4.1.2.	Measure: Campaign to raise awareness.....	75
4.1.3.	Measure: Addressing companies with an offer to include dementia in their social responsibility programmes.....	75

4.1.4.	Measure: Extension of the offer of programmes in the field of aging and dementia (e.g. We Age Successfully or virtual reality projects) for inclusion in education at primary/secondary schools	76
4.2.	Specific Objective: Prevention of the onset and development of dementia	77
4.2.1.	Measure: Adaptation of recommended procedures to reduce the risk of cognitive decline and dementia to the context of the Czech Republic	78
4.2.2.	Measure: Implementation of a strategy to reduce the risk of cognitive decline and dementia	79
4.2.3.	Measure: Monitoring of risk factors for cognitive decline and the development of dementia	80
5	Strategic Objective: Protecting the rights of people living with dementia	81
5.1.	Specific Objective: Protection of the elderly, issues regarding the validity of signed contracts, assessment of legal capacity	81
5.1.1.	Measure: The concept of a previously expressed wish (PEW)	81
5.1.2.	Measure: Raise awareness of public guardianship and of already-existing information materials on this topic for public and private guardians, for people living with dementia, for informal carers and for the general public	82
5.1.3.	Measure: Ensuring the systemic availability of public guardianship in municipalities	83
	Abbreviations	85
	References	87

Introduction

The National Action Plan for Alzheimer's Disease and Similar Diseases for 2020-2030 (hereinafter referred to as the NAPAD) was created in response to the increasing prevalence of dementia in the Czech Republic and the need to actively support education and prevention, and increase the availability of early diagnosis and follow-up health and social support for people living with dementia and their carers. The Czech Republic thus joins the call of the World Health Organization, which in 2012 declared dementia a public health priority [1]. This document thematically follows the *National Action Plan for Alzheimer's Disease and Similar Diseases 2016-2019*, the main contribution of which was the initial definition of problematic areas of awareness and care [2].

The main problem of NAPAD 2016-2019 was an insufficient or completely lacking initial situation analysis regarding the number of patients living with Alzheimer's disease or other dementia, including their passage through the healthcare system, services, direct and indirect costs, the number of carers and informal carers, etc. It was thus impossible to define specific goals and measures. These remained vague, without measurable indicators, and often without a logical interconnection. Ultimately, the outputs and indicators were merged into one whole. These shortcomings, together with the absence of the allocation of financial resources for individual areas of performance, led to only minimal implementation of the measures set out in the plan.

Due to the fact that the goals set by the NAPAD 2016-2019 were not met in the years 2016-2019, it is necessary to ensure the update and continuation of the described activities, especially with regard to the increasing prevalence and social impacts of this disease.

In a broader context, NAPAD deals with the issue of Alzheimer's disease and other types of dementia (frontotemporal dementia, progressive supranuclear palsy, other atypical Parkinson's syndromes, partly also cerebellar syndromes, etc.).

The document you now have in your hands is based on a deeper understanding of the functioning of the system and public policy in the field of dementia. It brings a set of specific measures, the implementation of which will lead to raising awareness and empathy for both people living **with dementia and family carers, and their adequate support from public institutions**. NAPAD is clearly divided into three sections: the vision, the situation analysis and the proposal section. This introductory section presents a vision for the functioning of public policy in the field of dementia in 2030. At the same time, it briefly describes the preparation process and implementation plan of this document in cooperation with key organizations and institutions operating in the field of dementia. The situation analysis provides a description of the current functioning of the system in the field of dementia using a set of indicators that will allow the monitoring of the system's development over time and its international comparison.

The third part of the document proposes a set of specific measures, the implementation of which will lead to the fulfillment of the NAPAD vision.

It is assumed that the implementation of the National Action Plan for Alzheimer's Disease and Similar Diseases 2020-2030 will take place according to currently valid standards.

Because care for people living with dementia is a combination of healthcare, social care and informal carers at different stages of the disease, some measures are based on the assumption of multi-source funding.

Many thanks to the representatives of key organizations - experts who actively participated in the creation of the NAPAD. These organizations, with the support of public institutions, are the bearers of the fulfillment of the vision. We very much appreciate your work and thank you for it.

Vision

A vision for the functioning of public policy in the field of dementia in 2030

NAPAD 2020-2030 proposes forty-nine measures grouped into twelve thematically specific objectives, which together lead to the fulfillment of the following five Strategic Objectives:

I. The creation of best practices with interdisciplinary validity and completion of a functioning network of services

Interdisciplinary best practices ensure the effective passage of people with dementia through service networks. In a multi-level network of services, each provider knows its role and there is sufficient capacity and interconnection between health and social services. The diagnosis and therapy of dementia are available at an early stage of the disease. From the very beginning, people living with dementia and their family carers are offered continuous support, information and services adequate to the stage of the disease.

II. Inclusion of the topic of dementia in the curriculum of relevant undergraduate and postgraduate programmes, the offer of courses and other educational sources for professional and informal caregivers

All those who in their profession encounter dementia to varying degrees have an education that meets the demands of the profession and the specific needs of people with dementia and caring families. Education deepens knowledge (information about dementia), skills (especially in the field of communication, peculiarities in behaviour, cognitive activation and meaningful activities), and attitudes are also changing (accepting a person with dementia as a unique and full-fledged human being, focusing on a person with his/her specific needs, equality and the right of people with dementia to live in society and enjoy life). Education covers the following professions: healthcare professionals (physicians, general nurses, occupational therapists and physiotherapists, pharmacists, clinical psychologists, health and social workers), psychologists, social workers and workers in social services (direct care workers, activation workers, catering staff, managers), public administration and self-government employees, social workers in municipalities and at branches of the Employment Office of the Czech Republic (hereinafter EO CZ), public transport workers, police, teachers, church workers and cultural institutions, employers of people living with dementia, etc. Carers also have the right to available education in order to acquire the competencies needed to provide care and maintain their own condition. The education of caregivers takes many forms in order to correspond to their needs and possibilities.

III. Continuous epidemiological monitoring and research in the field of dementia is underway

Research in the field of dementia is conducted in accordance with established priorities, is multidisciplinary, coordinated and has secured funding. Sufficient funding is allocated for the sustainability of studies aimed at long-term population monitoring. A rich database is available to conduct quality research, which consists of population studies, clinical cohorts and routinely collected data. The most important indicators of the healthcare provided to individuals with dementia are regularly reported and clearly presented. Qualitative studies evaluating the effectiveness of non-pharmacological interventions are also valuable. The social area must be an integral part of monitoring, analysis and research.

IV. There is an awareness in society about dementia, its prevention, the symptoms and needs of people living with dementia and caring family members

A society in which the proportion of elderly people is increasing must be aware of the issue of Alzheimer's disease, as this is the only way to accommodate the sick, carers and family members in their difficult situation. A healthy lifestyle is supported, the benefits of which include a reduced risk of developing dementia.

V. The rights of people living with dementia are respected and protected

People living with dementia are a particularly vulnerable population group and are therefore protected against the abuse of deteriorating health. The concept of a previously expressed wish exists and is respected. The diagnosis of dementia is not automatically linked to a restriction of rights.

The NAPAD 2020-2030 preparation process and vision for implementation

The preparation of the NAPAD 2020-2030 took place from January 2019 in cooperation with the Ministry of Health (MoH), the National Institute of Mental Health (NIMH) and the World Health Organization (WHO). Following the declaration of dementia as a public health priority, the WHO has developed a set of tools to help states prepare and implement public policies to mitigate the negative effects of the increasing prevalence of dementia. The preparation of NAPAD 2020-2030 was guided by the process recommendations published in *Towards a dementia plan: a WHO guide* [3]. The purpose of this document is to create a clear plan to achieve the set goals through the effective cooperation of key organizations and institutions. The first step in the preparation of NAPAD 2020-2030 was to establish the position of project coordinator.

In January and February, key organizations and institutions operating in the field of dementia were identified, and a questionnaire of preferences and needs was distributed to them. The purpose of this questionnaire was to map the current situation of providing care for people with Alzheimer's disease in the Czech Republic, as well as the needs and preferences that the addressees perceived as essential within their area of operation. In March, an expert platform met for the first time to discuss the results of the questionnaire and five thematically focused working groups were set up: (1) best practices and the service network, (2) education, (3) awareness of dementia and prevention, (4) epidemiology and research, and (5) legislation. A workshop for members of the expert platform with a WHO foreign expert took place in April with the goal of defining the next course of work on the basis of a developed situation analysis, and to identify experiences and strategies of other countries facing similar system shortcomings. Meetings in May in a narrower circle of thematic working groups enabled the completion of the situation analysis according to the WHO *Global Dementia Observatory* methodology [4] and the definition of priority issues in the field of the group's activities. Priorities for 2030 were identified at the second meeting of the expert platform in June. The NAPAD 2020-2030 timetable has been selected in such a way as to provide a longer-term vision and sufficient time for implementation by gradually fulfilling often follow-up tasks, and has been deliberately aligned with the horizon of the *National Mental Health Action Plan*, which in many respects addresses similar tasks, especially in the field of cooperation on the social-health border [5]. The state of development of NAPAD 2020-2030 was presented at the meeting of the Government Council for the Elderly and Aging Population and on the occasion of the International Meeting of Governmental Experts on Dementia organized by Alzheimer Europe. The proposal section of this document was created in July and August.

Its purpose is to define a set of very specific measures, including possible administrators, the economic impact and sources of funding, the gradual implementation of which during the period of validity of NAPAD 2020-2030 will ensure the fulfillment of its vision. Measures were discussed by members of the expert platform in September at a second workshop with a WHO foreign expert. Representatives of the Ministry of Health presented the state of development at the WHO International Conference *Dementia 2019*. NAPAD 2020-2030 was presented to the Czech professional and general public in September on the occasion of World Alzheimer's Day by means of a press release and a panel discussion by members of the expert platform at the *Prague Gerontology Days* conference.

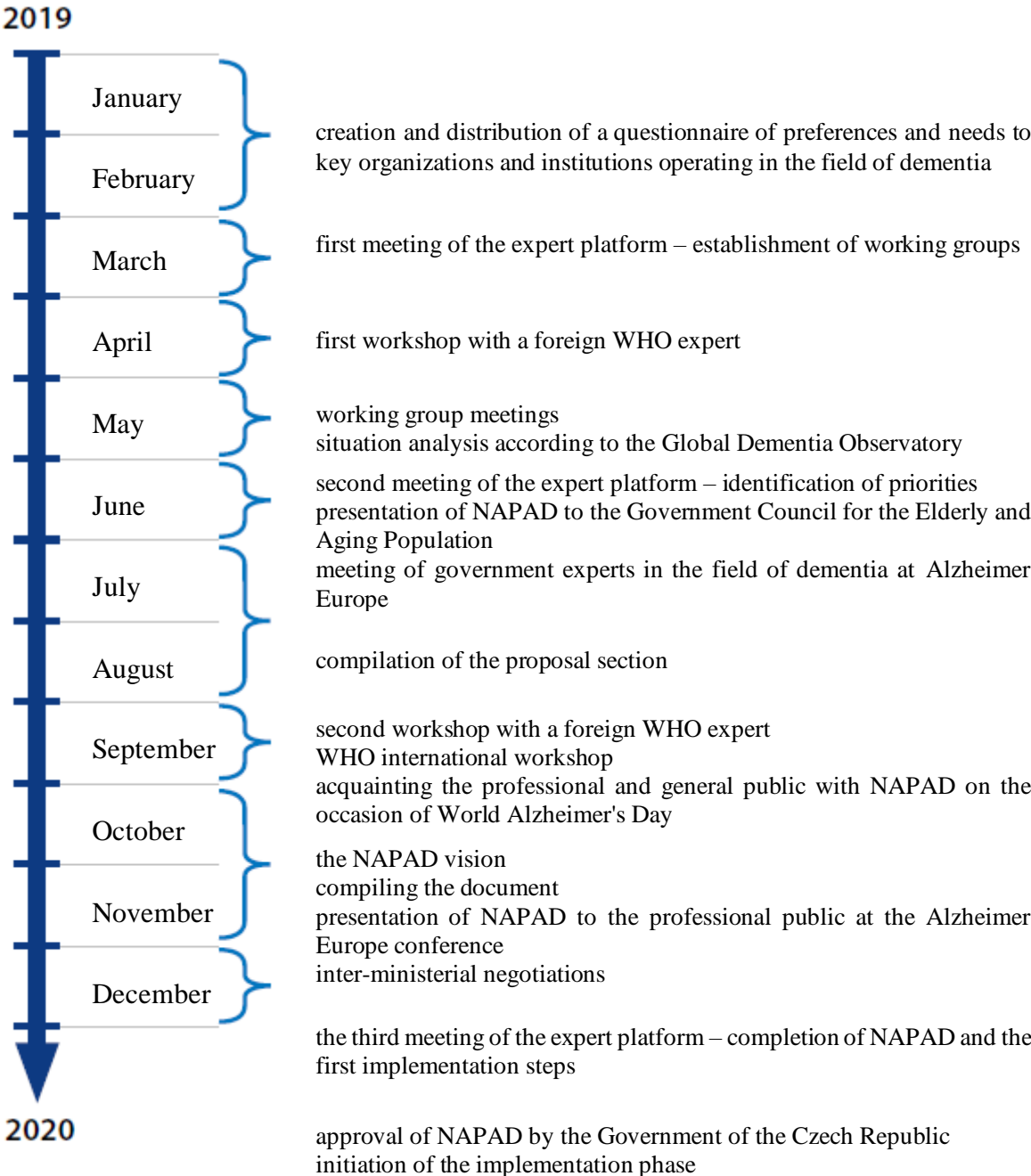


Figure no. 1: Preparation schedule for NAPAD 2020-2030

In October and November, the vision of NAPAD 2020-2030 was drafted, the document was compiled, and concrete measures were discussed with other ministries, the contribution of which is crucial for implementation. NAPAD 2020-2030 was presented to an international audience at the *Alzheimer Europe expert conference*. The third meeting of the expert platform took place in December in order to finalize the document before submitting it to the Government of the Czech Republic and determining the first steps for initiating the implementation phase in 2020. The NAPAD 2020-2030 preparation schedule is illustrated in Figure no. 1. The list of members of the expert platform and thematic working groups, including the organizational structure of the project, is shown in Figure no. 2.

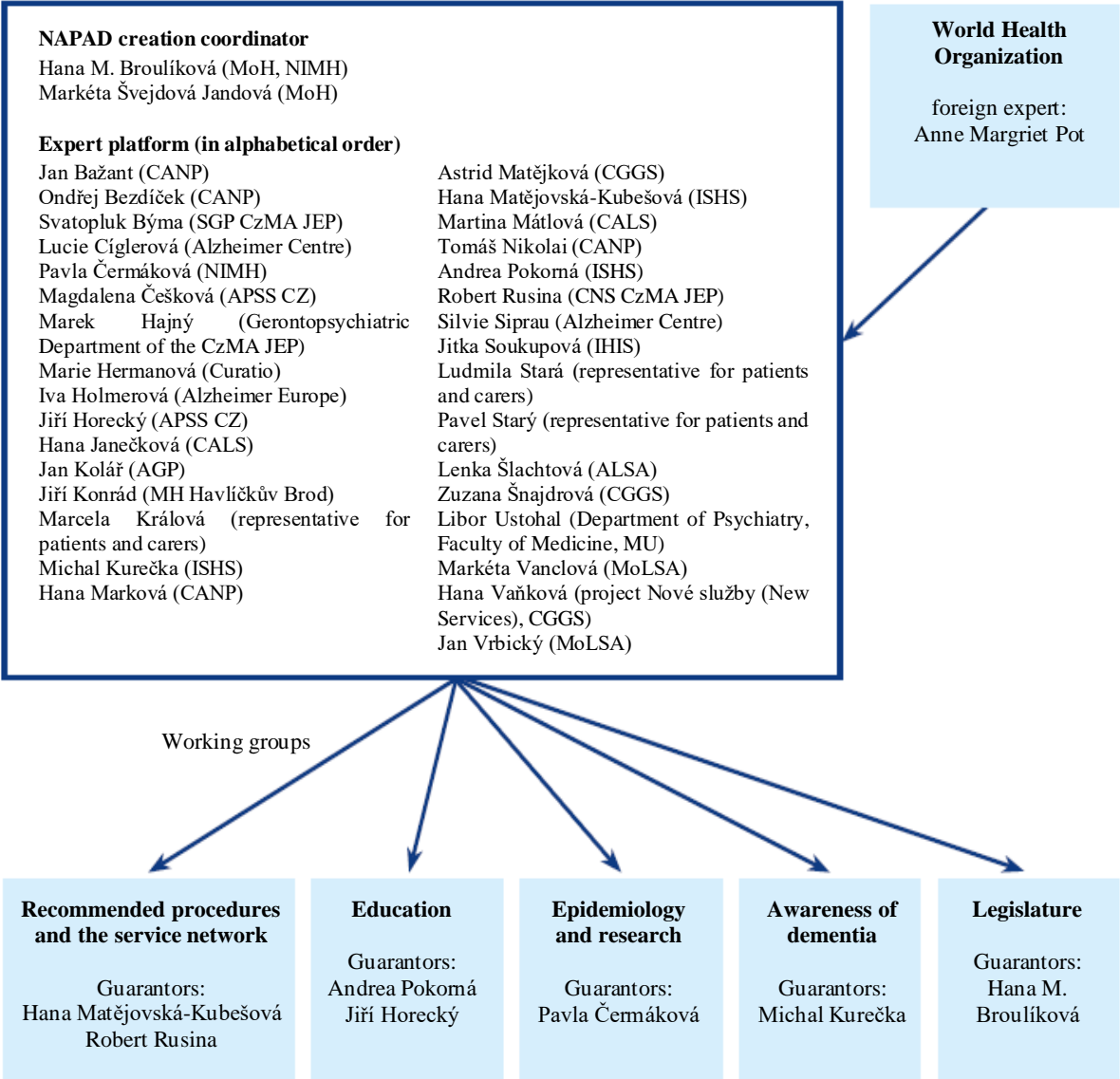


Figure no. 2: Structure of the preparation of and contributors to the NAPAD 2020-2030

In addition to the five strategic objectives aimed at improving the functioning of public policy in the field of dementia, the proposal section of NAPAD 2020-2030 also includes one procedural strategic objective, which aims to support the implementation of the NAPAD 2020-2030 measures:

NULLAE Implementation of NAPAD 2020-2030 is ensured

The NAPAD 2020-2030 measures are continuously implemented on the basis of an implementation plan drawn up by the Coordinator for Dementia in cooperation with the advisory group. The Coordinator and advisory group look for examples of good practice, attempting to anchor them in the dementia care and prevention system and to respond to current needs that arise during implementation.

Situation analysis

The NAPAD 2020-2030 proposal is created in accordance with the Strategic Framework for the Development of Healthcare in the Czech Republic until 2030 (hereinafter the "Strategic Framework Health 2030") and its implementation plan 2.1., which identifies the aging of the Czech population as one of the most important factors influencing the state of health of the Czech population and determining the future development of the Czech healthcare system, as well as the expected needs of health and social services. The average age of the population of Czech men is 40.8 years, in the case of women it is 43.6 years. The proportion of people over the age of sixty is approximately 25%. Demographic predictions show that in the next thirty years, there will be a significant increase in the share of the population over 60 and over 65. Higher morbidity, typical of the elderly population, will inevitably be associated with this development. In connection with this, population models show an expected increase in the number of the elderly suffering from neurodegenerative diseases (Alzheimer's disease, other types of dementia, etc.). This substantial part of the population will need long-term and almost all-day health and social care. The future demographic development of the Czech population will thus be a challenge for the palliative medicine segment and generally for the segment of health and social services at the end of life.

The situation analysis was the first step in the preparation of NAPAD 2020-2030. Its purpose was to comprehensively assess the basic features of public policy and the system of care for people with dementia. This analysis was performed using the *Global Dementia Observatory* (GDO). The GDO is a platform for the systematic collection of data and the sharing of knowledge and examples of good practice in each country, established and administered by the WHO [4]. This platform offers key data on dementia, grouped into seven strategic areas in three domains:

- 1) public policy
 - dementia as a public health priority
- 2) care delivery system
 - awareness and a friendly environment for people living with dementia
 - diagnosis, treatment, care and support
 - support for informal carers of people living with dementia
- 3) information and research
 - reducing the risk of developing dementia
 - information systems for dementia data
 - research and innovation

Systematic data collection using the GDO makes it possible to measure progress at both national and international levels in terms of convergence with the goals set by the WHO in the *Global Dementia Action Plan on the Public Health Response to Dementia 2017-2025* [6]. In addition to the GDO data section, there is also a knowledge section aimed at disseminating examples of good practice from abroad and helping to strengthen public policies, and the planning and development of health and social services for people with dementia and informal carers.

The situation analysis of the Czech Republic is shown in Figure no. 3. According to IHIS data, 102,000 people with a diagnosis of dementia lived in the Czech Republic in 2017, and 60% of these were diagnosed with Alzheimer's disease. Epidemiological estimates suggest that 142,000 people over the age of 60 were living with dementia in the Czech Republic in 2017 [7]. By combining the epidemiological estimate of the number of people living with dementia and the number of people treated, we find that 72% of cases are diagnosed. This share seems relatively high in the context of previous estimates, which spoke of only 9% of patients treated in 2004 and 24% in 2015 [8, 9]. A closer look at the estimation methodology, however, shows that the increase in the proportion of patients treated may be largely due to improved input data for the estimate, because it was only IHIS data for 2017 that captured patients diagnosed in all segments of healthcare.

Insufficient continuous epidemiological surveillance is one of the areas identified by the situation analysis as key to remediation using NAPAD 2020-2030 (the Number of people with dementia indicator is routinely monitored). Epidemiological surveillance is addressed by the specific objective of the proposal section 3.1. Systematic evaluation of dementia data. The absence of a research plan for dementia is closely related to the topic of epidemiological surveillance and dementia data (the Existence of a standalone or integrated research agenda for dementia indicator), to which Specific Objective 3.2. Development of dementia research responds.

Although the share of 72% of persons diagnosed out of the total estimated number of people with dementia is an indication that diagnostics works in the Czech Republic (the Diagnostic rate of dementia indicator), it is necessary to draw attention to possible difficulties in interpreting this data. Two dimensions are important for dementia: in addition to simply determining whether a diagnosis has been attributed, it is also important at what stage of the disease this has occurred. The ability to correctly diagnose in the early stages of the disease in combination with post-diagnostic support is a key factor in improving the quality of life of people living with dementia. It is the late diagnosis, often in a stage of severe cognitive deficit [10], insufficient post-diagnostic support (partly the Availability of community-based services for dementia indicator) and the coordination of care on the health-social border (the Available mechanisms for dementia care coordination across sectors indicator) that emerged from the questionnaire of preferences and needs as serious shortcomings of the care system for people living with dementia.

When interpreting the indicator of post-diagnostic support and the network of community/outpatient services (the Availability of community-based services for dementia indicator), it is necessary to draw attention to the methodology of the GDO indicator, which determined the existence of services, not their coverage, in relation to the required capacity. For this indicator, there are examples of good practice in the Czech Republic, some of which we present in the proposal section. However, these are not services that sufficiently cover the needs of people living with dementia and their carers. Early diagnosis, coordination and coverage of services are addressed by the measures of Specific Objective 1.1. Development of a uniform recommended procedure for the diagnosis and treatment of dementias with interdisciplinary validity, and 1.2. Completion of a multi-level care network.







The main shortcoming is the low level of awareness in the general population, as well as the low availability of educational programmes focused on dementia for non-medical professions, but especially for informal carers (the Existence of public awareness raising campaign and Existence of dementia education training for non-healthcare population groups indicators). Specific Objective 4.1. *Raising awareness of the general public about the issue of dementia* deals with the issue of education. At the same time, a logo has already been created to promote the issue of dementia and to cover ongoing activities (in the footer). The forget-me-not symbol is used in many countries, and the Czech Republic thus joins the global movement to be helpful to people living with dementia. The Czech forget-me-not logo was designed by the illustrator Pavel Starý, who lives with a diagnosis of mild cognitive impairment and, together with his wife, is a member of the NAPAD 2020-2030 preparation expert platform. Specific Objective 2.2 is devoted to the issue of the education of informal carers. Ensuring the availability of education and support for informal carers and strengthening their role in the process of caring for people with dementia and the cooperation of professionals and non-formal carers. In the proposal section, we also bring examples of good practice in education, such as the WHO tool *iSupport* [11].

An important part and condition for the successful implementation of NAPAD 2020-2030 is the provision of funding for the proposed measures. At the time of its creation, there was no dedicated budget associated with NAPAD 2020-2030. Funding will initially be dealt with on a project basis: for example, most measures of Specific Objectives 1.1. and 1.2. will be dealt with in the framework of one project, the funding of which will be applied for from the funds of the European Economic Area. Within this source of funding, applications for the support of some other NAPAD 2020-2030 measures focused on education and training will be submitted.





Czech Republic			
Population	10,618,303	Estimated prevalence of dementia in the GBD region	4.0%
% of the population over the age of 60	26%		
WHO region	European region	Lost years of life due to illness (DALY)	update in May 2020
Income group according to the World Bank	high income	Deaths due to Alzheimer's and other dementia	update in May 2020
Ministry responsible for the area of dementia	Health		
Neurologists (per 100 thousand inhabitants)	not available	Long-term care facilities (per 100 thousand inhabitants)	10.16
Psycho-/Geriatricians (per 100 thousand inhabitants)	4.14	Day centres for adults (per 100 thousand inhabitants)	not available
Availability of a non-profit organization focused on dementia	yes	Outpatient social care centres (per 100 thousand inhabitants)	not available

Implementation of dementia activities: current state





Area of activities: Dementia as a public health priority

	Existence of a person responsible for dementia within the ministry	yes	
	Existence of a separate or integrated plan for dementia*	yes	
	Budget dedicated to the implementation of the dementia plan	no	
	Existence of legislation that includes the rights of people living with dementia	yes	
	Existence of approved best practices and standards for the care and support of people living with dementia	yes	







Area of activities: Awareness and a dementia-friendly environment

	Existence of an awareness campaign on dementia for the general public (destigmatization and reduction of risk factors)*	no	
	Existence of a friendly social and physical environment for people living with dementia*	yes	
	Existence of dementia education for non-healthcare population groups*	no	





Area of activities: Reducing the risk of the onset of dementia

	Reducing the risk of dementia is mentioned in public policies (specifically related to dementia or non-communicable diseases in general)	yes	
	Existence of recommendations for managing the risks of developing dementia for workers in health and social services	no	
	Voluntary time-bound targets set in the Non-communicable Diseases Action Plan (#)*	partially	




Area of activities: Diagnosis, treatment, care and support

	Proportion of diagnosed cases of dementia (in %)*	72	
	Availability of community services for people living with dementia	yes	
	Total availability of community services for people living with dementia	capital, cities, municipalities	
	Availability of mechanisms for the coordination of care for people living with dementia among sectors	no	
	Basic competencies in caring for people living with dementia are included in the educational curriculum of workers in healthcare and social services (§)	in some	







Area of activities: Support for the carers of people with dementia

	Existence of support services for the carers of people with dementia*	yes	
	Availability of recommendations for the identification and reduction of stress in workers in healthcare and social services	no	
	Existence of financial benefits and social protection for the carers of people living with dementia	yes	

Area of activities: Health information systems

	The number of people living with dementia is monitored on an ongoing basis	no	
	Availability and scope of dementia reporting	some data are available as part of general health statistics	

Area of activities: Research and innovation in dementia

	Existence of a research plan for dementia	no	
	Government investments in dementia research per year (in millions of CZK)	not available	
	Output of dementia research (% of publications in the PubMed database in 2017)*	0.6%	
	Involvement of people living with dementia in the research process^	none at all	
	Availability of pharmacological clinical studies focused on dementia	yes	

Key: * : Indicator measuring the country's contribution to meeting the global goals specified in the Global Action Plan on the Public Health Response to Dementia 2017-2025;
 #: Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-2020;
 §: included for no one / someone / most / all;
 ^: not at all / rarely / sometimes / often.

Department of Mental Health and Substance Dependence, World Health Organization 2019, email: whodementia@who.int
 Global Action Plan on the Public Health Response to Dementia 2017-2025

Figure no. 3: Situation analysis according to the GDO

0 Strategic Objective: Ensuring the implementation of NAPAD 2020-2030

Vision: The NAPAD 2020-2030 measures are continuously implemented on the basis of an implementation plan drawn up by the Coordinator for Dementia in cooperation with the advisory group. The Coordinator and advisory group look for examples of good practice, attempting to anchor them in the dementia care and prevention system and to respond to current needs that arise during implementation.

Proposal Section

This section presents a set of 49 measures, the implementation of which will lead to the fulfillment of the vision of NAPAD 2020-2030. The measures are aimed at fulfilling five strategic objectives, within which they are further grouped into twelve more thematically defined strategic objectives. An overview of the structure of the proposal section is shown in Figure no. 4. For each of the measures, the following data are specified: description, method of performance, administrator, cooperating organizations, deadline for fulfillment, funding and an indicator of fulfillment of the measure. At this point, it is important to emphasize that the ambition of this part of NAPAD 2020-2030 is to pave the way for the fulfillment of the vision, and yet remain a living document even during its eleven-year implementation. The implementation of NAPAD 2020-2030 is divided into a preparatory phase (the second half of 2020), three implementation waves (2021-2023, 2024-2026, 2027-2029) and an evaluation phase (2030). This division provides sufficient time for the implementation of large-scale projects while maintaining the necessary flexibility to respond to changes in society, to the way health and social care is provided, and to the results of research in the field of dementia. This principle is also reflected in the fact that the measures planned for implementation in the first implementation wave are typically described in more detail than the measures planned for implementation in later waves. These often follow up on the outputs of earlier measures. An example is measure 1.2.1. Ensure the availability of expertise and services defined in interdisciplinary best practices, which will be implemented in the second implementation wave on the basis of the outputs of interdisciplinary best practices (Specific Objective 1.1.), the creation of which is scheduled in the first implementation wave.

The implementation of NAPAD 2020-2030 is the responsibility of the Coordinator for Dementia in cooperation with the expert advisory group. The basic document for implementation is the implementation plan, which is always specified in detail for the upcoming implementation phase. The implementation of NAPAD 2020-2030 is continuously evaluated by means of a professional conference. Figure no. 5 shows the Gantt chart of the expected course of implementation according to the individual phases.

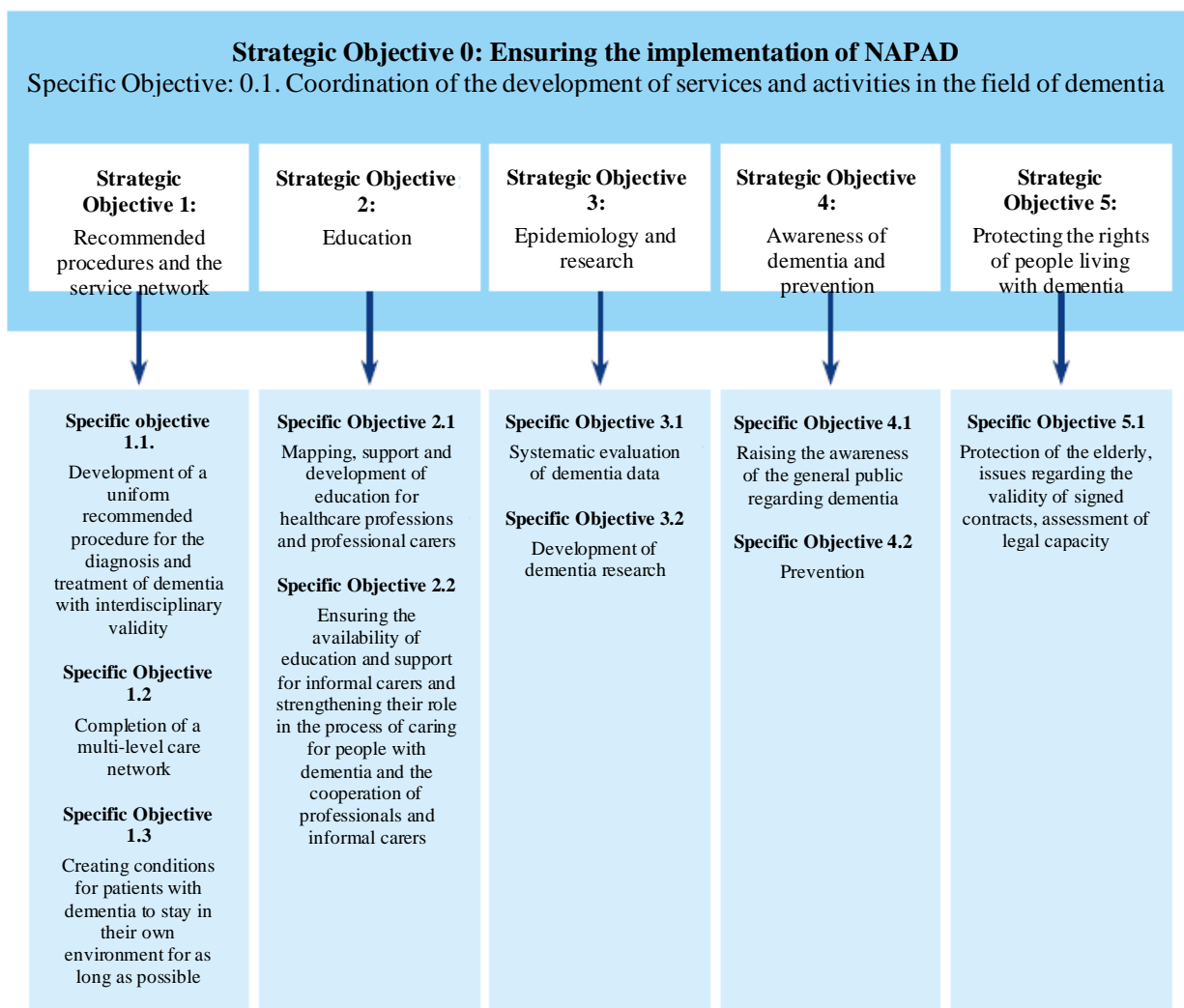


Figure no. 4: Structure of the proposal section

		Preparation	First implementation wave				Second implementation wave			Third implementation wave			Evaluation
		2/2 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
0.0.	Ensuring implementation												
0.1.1.	Establishment of a permanent position of National Coordinator for Dementia	Establishment	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	
0.1.2.	Appointment of an advisory group composed of representatives of key organizations and institutions		Appointment	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	
0.1.3.	Creation of an implementation plan		Creation	Performance	Update	Performance	Performance	Update	Performance	Performance	Performance	Evaluation	
0.1.4.	Ongoing evaluation through the NAPAD 2020-2030 conference	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	Implementati on	
0.1.5.	Creation and use of a unified visualization of NAPAD 2020-2030 for implemented measures	Created	Utilization	Utilization	Utilization	Utilization	Utilization	Utilization	Utilization	Utilization	Utilization	Evaluation	
1.1.	Recommended procedures and the service network												
1.1.1.	Creating an overview of recommended practices from other European countries, their harmonization and adaptation to conditions in the Czech Republic	Planning	Implementati on	Implementati on	Implementati on								
1.1.2.	Define the role, competencies and availability of a geriatrician, neurologist, psychiatrist, clinical psychologist and psychologist, health and social worker, general nurse and activation worker in the care for patients with dementia, including the adjustment of the reimbursement system	Planning	Implementati on	Implementati on	Implementati on								
1.1.3.	Determination of indications for individual types of examinations, including neuropsychologic al examination, treatment and care	Planning	Implementati on	Implementati on	Implementati on								
1.1.4.	Define the role of a general practitioner in the care for patients with cognitive impairment, including the adjustment of the reimbursement system and the possibility of prescribing cognitive enhancers	Planning	Implementati on	Implementati on	Implementati on								
1.1.5.	Creation of a methodology for memory screening in general practitioners' offices, or in specialist offices in the case of long-term medical care	Planning	Implementati on	Implementati on	Implementati on								
1.1.6.	Define a care plan for those with cognitive impairment and comorbidities	Planning	Implementati on	Implementati on	Implementati on								
1.1.7.	Define a care plan for patients with moderate to severe dementia-causing diseases	Planning	Implementati on	Implementati on	Implementati on								
1.1.8.	Define the role, competencies and availability of	Planning	Implementati on	Implementati on	Implementati on								

	specialized centres for the diagnosis and treatment of cognitive disorders											
1.1.9.	Define the role, put into practice and evaluate the activities of multidisciplinary field teams with a focus on people with cognitive impairment	Planning	Implementation	Implementation	Implementation							
1.1.10.	Define the passage of a positively tested person through the system	Planning	Implementation	Implementation	Implementation							
1.1.11.	Define the role of informal carers	Planning	Implementation	Implementation	Implementation							
1.1.12.	Redefine the rules for restricting or revoking a driver's license and a firearms license	Planning	Implementation	Implementation	Implementation							
1.2. Service availability												
1.2.1.	Ensure the availability of expertise and services as defined in interdisciplinary best practices					Planning	Availability	Availability	Availability	Availability	Availability	Evaluation
1.2.2.	Mapping of available social services and increasing the availability of counseling workplaces	Mapping	Availability	Availability	Availability	Availability	Availability	Availability	Availability	Availability	Availability	Evaluation
1.3. Staying in the home environment												
1.3.1.	Support for the use of technology and the creation of a network of monitoring centres for monitoring escapes from home, reminders of medication use, fluid and dietary intake, emergency calls		Mapping	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Evaluation
1.3.2.	Promoting natural sources of support for informal carers, families and people with dementia	Preparation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Evaluation
1.4. Sustainable financing												
1.4.1.	The categorization of a patient with a cognitive deficit as a basis for the individualization and optimization of care and its reimbursement					Creation						
1.4.2.	Creation of a code for the reimbursement of cognitive function screenings from health insurance	Created				Evaluation	Adjustments					
1.4.3.	Inventory and updating of codes for the reimbursement of cognitive function examinations from health insurance					Mapping	Implementation	Implementation	Implementation	Evaluation		

Figure no. 5 Gantt chart of the NAPAD implementation



		Preparation	First implementation wave			Second implementation wave			Third implementation wave			Evaluation
		2/2 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2.1.	The education of physicians and professional carers											
2.1.1.	Evaluation of the current offer of undergraduate and postgraduate education for medical and non-medical professions and professional caregivers in social services		Assessment	Assessment								
2.1.2.	Initiate changes in undergraduate and postgraduate education for medical and non-medical professions and professional caregivers in social services on the basis of the outputs of measure 2.1.1.			Supplementation	Supplementation							
2.1.3.	Stimulate an offer of lifelong learning that includes the issue of dementia for workers in health and social services and for informal caregivers.		Analysis	Analysis	Planning	Support	Support	Support				
2.1.4.	Training of general practitioners in connection with the new procedure of cognitive function examination		Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
2.2.	Training and support of informal carers											
2.2.1.	Establish informal carers as a target group of social services and professional social counseling for carers and their education as a service act in Act No. 108/2006 Coll., on Social Services, as amended	Established										
2.2.2.	Based on the assessment of the educational needs of informal carers, support forms of education that correspond to their possibilities and needs. Strengthen the role of carers as partners of professional providers of social and health services (known as care sharing)	Preparation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
2.2.3.	Establishment of a web information portal		Establishment	Update	Update	Update	Update	Update	Update	Update	Update	Evaluation
2.2.4.	Stimulate the creation and activities of support self-help groups for family carers in local conditions		Creation	Support	Support	Support	Support	Support	Support	Support	Support	Evaluation
3.1.	Epidemiological surveillance											
3.1.1.	Reporting indicators of care for individuals with dementia		Creation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Evaluation
3.1.2.	Preparation of data packages focusing on the situation in the regions					Preparation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
3.1.3.	Linking NRPHS data to data on social services								Preparation	Implementation	Implementation	Evaluation
3.2.	Research											
3.2.1.	Monitoring and coordination of information on dementia research funding		Methodology	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
3.2.2.	Ensuring the creation of a population longitudinal study		Pilot	Pilot	Pilot	Study	Study	Study				
3.2.3.	Ensuring the creation of a multicenter study of patients with mild cognitive impairment or dementia					Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
3.2.4.	Ensuring the use of routinely collected data for dementia research		Preparation	Implementation	Implementation							
4.1.	Education											
4.1.1.	Creation of an information package for media communication with basic information or case studies	Planning	Planning	Implementation	Implementation							
4.1.2.	Campaign to raise awareness		Preparation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
4.1.3.	Addressing companies with an offer to include dementia in their social responsibility programmes		Preparation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
4.1.4.	Extension of the offer of programmes in the field of aging and dementia (e.g. We Age Successfully or virtual reality projects) for inclusion in education at primary/secondary schools	Planning	Planning	Implementation	Implementation							
4.2.	Prevention											
4.2.1.	Adaptation of recommended procedures to reduce the risk of cognitive decline and dementia to the context of the Czech Republic		Analysis	Implementation	Implementation	Implementation						
4.2.2.	Implementation of a strategy to reduce the risk of cognitive decline and dementia				Analysis	Strategies	Strategies	Pilot	Evaluation	Change proposal	Implementation	Implementation
4.2.3.	Monitoring of risk factors for cognitive decline and the development of dementia	Methodology	Methodology	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring	Monitoring
5.1.	Protection of rights											
5.1.1.	The concept of a previously expressed wish (PEW)				Preparation	Implementation	Implementation	Implementation				
5.1.2.	Raise awareness of public guardianship and of already-existing information materials on this topic for public and private guardians, for people living with dementia, for informal carers and for the general public		Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
5.1.3.	Ensuring the systemic availability of public guardianship in municipalities		Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation

0.1. Specific Objective: Coordination of the development of services and activities in the field of dementia

Rationale: The way care and prevention activities in the field of dementia are organized is suboptimal. Inefficient situations occur due to the imperfect continuity of services and fragmentation of information between different providers of care and services, but especially between the health and social care sectors. Coordinating the development of dementia services and activities at the national level aims to address these shortcomings.

0.1.1. Measure: Establishment of a permanent position of National Coordinator for Dementia

Description: The Coordinator creates the implementation plan of NAPAD 2020-2030, supervises its implementation, evaluates its fulfilment in a set periodicity and updates upcoming tasks. The Coordinator regularly consults with the dementia advisory group on the implementation and update of NAPAD 2020-2030. The Coordinator acts as a contact point of the Czech Republic for the field of dementia, communicates with representatives of key organizations and institutions, as well as with international partners. He/she also facilitates the transfer of good practice within the Czech Republic and from abroad and facilitates its dissemination at the level of the service system. The Coordinator for Dementia is responsible for the following measures of this plan:

- measure: Creation of an implementation plan;
- measure: Ongoing evaluation through the NAPAD 2020-2030 conference;
- measure: Creation and use of a unified visualization of NAPAD 2020-2030 for implemented measures;
- measure: Monitoring and coordination of information on dementia research funding.

Method of performance: Creation of a job position of coordinator at the Ministry of Health.

Administrator: MoH.

Fulfilment deadline: Preparatory phase 2020.

Budget: CZK 3 mil. (300 thousand/year), source: budget chapter of the Ministry of Health (the position has already been established).

Indicator: Coordinator for Dementia position - half-time employment.

0.1.2. Measure: Appointment of an advisory group composed of representatives of key organizations and institutions

Description: The advisory group regularly monitors and consults with the Coordinator for Dementia regarding the implementation and update of NAPAD 2020-2030. The task of the advisory group is also to discuss the current issues and needs of people with dementia or formal and informal carers and to suggest examples of good practice from home and abroad.

Method of performance: Appointment of the advisory group by the Minister of Health.

Administrator: MoH.

Cooperating entity: Key organizations and institutions involved in the preparation and implementation of NAPAD 2020-2030.

Fulfilment deadline: Preparatory phase 2020.

Budget: NR - Membership in the advisory group is without the right to remuneration.

Indicator: Appointment and activities of an advisory group composed of representatives of key organizations and institutions.

0.1.3. Measure: Creation of an implementation plan

Description: The detailed implementation plan aims to help fulfill the other measures of NAPAD 2020-2030. The implementation plan is based on the implementation phase described in the Towards a dementia plan: a WHO guide (World Health Organization, 2018). The fulfillment of the implementation plan is evaluated according to the set periodicity. The implementation plan forms the framework of implementation activities for the entire period of validity of NAPAD 2020-2030 and is continuously completed and updated according to the progress of work on measures according to their continuity.

Method of performance: Creation of the NAPAD 2020-2030 implementation plan and its regular update.

Administrator: MoH.

Cooperating entity: An advisory group composed of representatives of key organizations.

Fulfilment deadline: Preparatory phase 2020 for first wave measures, followed by a continuous update.

Budget: NR.

Indicator: The NAPAD 2020-2030 implementation plan.

0.1.4. Measure: Ongoing evaluation through the NAPAD 2020-2030 conference

Description: Progress in the implementation of NAPAD 2020-2030 is continuously monitored by the Coordinator for Dementia. He/she also presents it every year at a conference, where the progress and planned activities for the upcoming period are commented on by members of the advisory group and representatives of the wider professional community, people living with dementia and their carers. Within the framework of this conference, the administrators of the NAPAD 2020-2030 activities also present the progress in individual activities, or examples of good practice, the further support of which is being considered as part of NAPAD 2020-2030.

Method of performance: A conference is held once a year.

Administrator: MoH.

Cooperating entity: Key organizations and institutions involved in the preparation and implementation of NAPAD 2020-2030, representatives of the professional community, people living with dementia and their carers.

Fulfilment deadline: Continuously every implementation year starting from 2020.

Budget: CZK 3 mil., possible source: state budget - chapter of the MoH (approx. CZK 2.1 mil.), EEA funds.

Indicator: A conference connected with the evaluation of NAPAD 2020-2030 every year.

0.1.5. Measure: Creation and use of a unified visualization of NAPAD 2020-2030 for implemented measures

Description: A NAPAD 2020-2030 logo is created, which shall be used by the administrators of the implemented measures (next to their own logo). The purpose of this measure is to create a unifying element for activities taking place within or in accordance with NAPAD 2020-2030 and thus to strengthen national awareness of dementia. The use of the NAPAD 2020-2030 logo is mandatory for the recipients of grants from the Ministry of Health and other cooperating ministries, which specify this in their conditions for the awarding of grant support. In addition, anyone whose activities are in compliance with any of the above or later defined measures can apply for permission to use the NAPAD 2020-2030 logo. The possibility of using the the NAPAD 2020-2030 logo is decided on by the Coordinator for Dementia. In ambiguous cases after consultation with the ministerial advisory group, which has the possibility to veto permission to use the logo.

Method of performance: Creation of the NAPAD 2020-2030 logo, provision of the logo for use by administrators of activities fulfilling the measures and vision of NAPAD 2020-2030.

Administrator: MoH.

Cooperating entity: An advisory group composed of representatives of key organizations, other ministries cooperating on NAPAD 2020-2030.

Fulfilment deadline: The design of the logo in the preparatory phase 2020, its use on an ongoing basis.

Budget: NR.

Indicator: The NAPAD 2020-2030 logo.

1 Strategic Objective: Recommended procedures and the service network

1.1. Specific objective: Development of a uniform recommended procedure with interdisciplinary validity for the diagnosis, treatment and care for people living with dementia

Rationale: In the Czech Republic, there is currently no uniform recommended procedure for the diagnosis and treatment of dementia with interdisciplinary validity, and the recommendations of individual professional societies are not always in accordance. Creating a uniform recommended procedure will improve the efficiency of the patient's passage through the system and the continuity of the services drawn. The recommended procedure sets out the interdisciplinary methodology for the diagnosis of dementia, the indication of specific types of examinations and the method of treatment of individual types of dementia. It also determines the methods of care for patients with dementia and their optimal passage through a multi-level system of care. This system will range from a network of general practitioners that is widely available at the lowest cost, through specialist outpatient clinics and residential health facilities to highly specialized centres targeting a specific and costly group of patients. The parallel and continuous support of patients and their caring families in the form of professional social counseling using multidisciplinary teams, supportive field services and a sufficient network of outpatient and residential social services will be provided, including respite and home hospice care. An emphasis will be placed on the link to social care services and the role of the informal caregiver - the principle known as care sharing.

The implementation of this Specific Objective consists of measures 1.1.1.-1.1.12., the outputs of which are necessary to create a uniform recommended procedure. These measures, as well as the compilation of a recommended procedure, will be addressed within the Best Practices project by a working group composed of representatives of professional societies and representatives of other key organizations. This will ensure an interdisciplinary perspective and consensus. This project will be implemented in the first implementation wave of NAPAD 2020-2030 and will commence in 2021.

Administrator: MoH.

Collaborating entities of the Best Practices project: The MoLSA, IHIS, health insurance companies, NGOs, NIMH (National Institute of Mental Health), Gerontology Division of the PS CzMA JEP, the Psychiatric Society of the CzMA JEP, the Czech Psychiatric Society, CGGS of the CzMA JEP (Czech Gerontological and Geriatric Society), CNS Department of Cognitive Neurology of the CzMA JEP (Czech Neurological Society), SGP of the CzMA JEP (Society of General Medicine), AGP CZ (Association of General Practitioners of the Czech Republic), CSPM of the CzMA JEP (Czech Society of Palliative Medicine), CALS (Czech Alzheimer Society), CANP (Czech Association for Neuropsychology) , ACP CZ (Association of Clinical Psychologists), CMPS (Czech Moravian Psychological Society), CCP (Czech Chamber of Pharmacists) and other professional societies.

Budget: CZK 50 mil., possible sources: The programme Health from EEA (European Economic Area) funds 2014-2021, EU funds, state budget - budget chapters of the MoH, MoLSA (approx. CZK 30 mil.).

1.1.1. Measure: Creating an overview of best practices from other European countries, their harmonization and adaptation to conditions in the Czech Republic

Description: The recommended procedures used and well-proven in other European countries are a valuable source for the creation of a recommended procedure for the diagnosis and treatment of dementia with interdisciplinary validity, which will take into account the structured care of patients with dementia specifically for the Czech Republic.

Method of performance: Collection of available best practices of socio-culturally close countries, selection of relevant passages, translation. An expert commission composed of representatives of key specializations will create a proposal for the adaptation of European recommendations for the Czech Republic and a proposal for updating the current recommended procedure. Consultation of the new version with the relevant professional companies and with experts involved in the creation of best practices abroad. The expert commission will include expertise in neurology, geriatrics, psychiatry, general practice, and optimally other specializations as well. For consultation or opponency, all of the societies in point 1.1. of NAPAD 2020-2030 will be addressed and comments will be handled.

Indicator: Existence of a consensus of professional societies on recommended practices for the Czech Republic. An overview or systematic review of available European best practices on the topic with translated key passages as basic material for consensus. Adaptation of European best practices to the Czech Republic discussed by professional societies.

1.1.2. Measure: Define the role, competencies and availability of a geriatrician, neurologist, psychiatrist, clinical psychologist and psychologist, health and social worker, general nurse and activation worker in the care for patients with dementia, including the adjustment of the reimbursement system

Description: In order for the newly developed system to function effectively enough, the facilities of the relevant specializations must be available to patients who have been tested positive by a GP (or other specialist) with excluded secondary cognitive impairment. If a specialist of the relevant qualification is not sufficiently available to a positively tested patient with a cognitive disorder, the effort to detect cognitive disorders early would lead to harm to the patient and his loved ones as well as to the demotivation of general practitioners and other specialists.

Method of performance: Creation of a proposal for the roles, competencies and availability of a network of geriatricians, neurologists, psychiatrists and gerontopsychiatrists, clinical psychologists, psychologists and non-medical health professionals in terms of time and local availability, consultation with relevant professional societies and health insurance companies. Indicator: Existence of a competence scheme. Analysis of the quantification of the necessary availability of care for this target group. Methodology for planning the provision of resources in cooperation with the Ministry of Health and the Ministry of Labour and Social Affairs.

1.1.3. Measure: Determination of indications for individual types of examinations, including a neuropsychological examination, treatment and care

Description: Properly defined indications for each type of diagnostic examination, treatment and care make it possible to achieve optimization in terms of cost-effectiveness. In addition to Alzheimer's disease, the diagnosis of other types of dementia (frontotemporal dementia, progressive supranuclear palsy, other atypical Parkinson's syndromes, partly also cerebellar syndromes, etc.) and the interconnection with the European Reference Network for Rare Neurodegenerative Diseases (ERN-RND) are also important.

Method of performance: Development of a proposal of indications for diagnosis, treatment and other measures, consultation with relevant professional societies, health insurance companies, creation of a consensus document as part of the recommended procedure.

Indicator: List of indications for diagnostic examinations, treatment and other measures included in the recommended procedure.

1.1.4. Measure: Define the role of a general practitioner in the care for patients with cognitive impairment, including the adjustment of the reimbursement system and the possibility of prescribing cognitive enhancers

Description: Due to its availability, the general practitioner's office is an optimal place for the detection of emerging cognitive impairment. Due to the expected growing number of patients with already-diagnosed and treated cognitive impairment, a general practitioner's office is an optimal place for caring for uncomplicated patients with dementia, a counseling point for families and a contact point for the local government and health and social care system in long-term care for patients with dementia.

Method of performance: Creation of a proposal of general practitioners' competencies in the diagnosis, treatment and other measures in the care for patients with dementia, consultations with health insurance companies, the SIDC (State Institute for Drug Control), creation of a consensual proposal.

Indicator: Analysis and proposal of the competencies of a general practitioner in the care for patients with dementia incorporated into the recommended procedure.

1.1.5. Measure: Creation of a methodology for memory screening in general practitioners' offices, or in specialist offices in the case of long-term medical care

Description: The screening test tool should be sufficiently sensitive and specific for the detection of cognitive impairment, but, at the same time, it should not pose a significant time burden for the general practitioner's office or outpatient clinic of a long-term specialist (e.g., internal medicine, cardiology, diabetology, neurology, nephrology). The screening will also be utilizable within the branch network of the Czech Alzheimer Society.

Method of performance: Collection, assessment and selection of an appropriate test tool, its translation and validation.

Indicator: Methodology of the screening test tool.

Note: Diagnosis can only be performed by a specialist.

1.1.6. Measure: Define a care plan for patients with cognitive impairment and comorbidities

Description: Patients with Alzheimer's disease tend to have a higher incidence of comorbidities compared to the contemporaneous population without Alzheimer's disease. Alzheimer's disease and other dementia have the potential to have a major impact on the course of other comorbidities. In cognitive impairment, people gradually lose sight of their own needs, may refuse treatment, or avoid meeting a doctor. Even if they do see a doctor, they very often deviate from the treatment regimen: they do not understand what is recommended to them to support their health, or they simply forget this information. Cognitive impairment leads, through deviations from treatment, to more frequent hospitalizations and rehospitalizations for decompensation of the medical condition, which, however, can be prevented. There is also a need to actively support this target group during discharge from the hospital by ensuring the timely planning of the discharge in cooperation with the health and social worker and the family, ensuring its education and support in decision-making on aftercare, and providing health and social community services. It is appropriate to allow informal carers, personal assistants or family members to support the patient during medical examinations and also during hospitalization in a medical facility.

Method of performance: Definition of an appropriate model of care for patients with polymorbidity and cognitive impairment. A plan to strengthen community care for this group. A field that integrates expertise on polymorbidity and cognitive impairment, as well as practical case management, is geriatrics. One specialist will provide all the care. This type of care appears to be cost-effective and, at the same time, is focused on the individual (person-centred). Increasing the number of geriatric outpatient clinics so that there is a geriatrician in each district. Availability is a prerequisite for further strengthening GP cooperation with geriatric outpatient clinics, which works very well around existing outpatient clinics. It is also appropriate to set up a model of intensified field services, i.e., a combination of personal assistance and/or care services with educated family care, home care, respite care, and the availability of a specialized outpatient clinic, including the counseling and coordination of these services. It would be optimal to expand multidisciplinary mental health teams for the elderly throughout the regions and to increase the number of dementia management centres.

Indicator: A methodology of care planning for patients with polymorbidity and cognitive impairment. An analysis of quantification of the necessary availability of integrated care for this target group and methodology for planning the securing of sources in cooperation with the MoH and the MoLSA.

1.1.7. Measure: Define a care plan for patients with moderate to severe dementia-causing diseases

Description: Patients with severe and sometimes moderate dementia syndrome need nursing and social care during periods when they are in a stable condition. In this target group, the deterioration of physical and mental health may occur at any time. Care may be provided in the community if the caring family directly collaborates with the attending physician; community care services are available for caring families. The residential social service for this target group should be such as to be able to respond to the client's health needs, including terminal conditions, and minimize the need for relocation and repeated acute hospitalizations. Of the existing services, the home with a special regime (HSR) is closest to the optimal type of residential care. However, with the permanent presence of general nurses and a stable nursing team with knowledge of the health condition and ability to recognize changes in a particular client. It is necessary to provide qualified medical care on site and the availability of a psychiatrist and geriatrician. In indicated cases, also qualified palliative care, including non-pharmacological psychosocial interventions (basal stimulation, Namasté care).

Statistics for 2019 show that approximately 700 beds have been in long-term use in psychiatric hospitals by patients with dementia and Alzheimer's disease. As of 30 September 2020, 1,882 patients were registered as gerontopsychiatric, and approximately 60% of these are patients with cognitive disorders (F0, G30).

Under measure 1.1.7. and in connection with the process of transforming the psychiatric care system, the possibility of temporarily transforming some psychiatric aftercare beds in long-term hospitalized patients (until capacity is built for these patients elsewhere) into nursing beds will also be considered, strictly provided that their needs are met, i.e. qualified social care, including appropriate psychosocial interventions and sensory activation, and the provision of healthcare - psychiatric or gerontopsychiatric, as well as geriatric and other, if indicated.

Method of performance: Definition of a suitable model of care for patients with severe dementia syndrome. Capacity building involves setting the quality of care in HSR to meet the health and psychosocial needs of the target group. Part of capacity building must be ensuring the availability of a psychiatrist (optimally a gerontopsychiatrist), a geriatrician and a neurologist. In the case of the decompensation of the condition, also the availability of an acute bed according to the current indication.

At the same time, the capacity building of support services means support for the establishment of specialized community social services, such as day hospitals, social activation services for the elderly or respite care in the form of outpatient and field services.

Indicator: Methodology for care planning for patients with moderate to severe dementia syndrome requiring increased nursing care, including defining the availability of professional health and social care in relevant services that provide services according to individual specific needs and taking into account the real needs of the target group across the entire range. This includes palliative care for people in the terminal stages of the disease. A transformation plan for psychiatric hospitals and definition of mechanisms to ensure funding for necessary services outside psychiatric hospitals in accordance with the NMHAP (measure 4.2.2.).

1.1.8. Measure: Define the role, competencies and availability of specialized centres for the diagnosis and treatment of cognitive disorders

Description: At present, there is no network of highly specialized centres according to Act No. 372/2011 Coll., on Health Services and Conditions of their Provision, for patients with cognitive deficits, Alzheimer's disease and other types of dementia, but it is an absolutely necessary and absolutely essential part of the entire concept. Currently, the diagnostic possibilities of these diseases are being refined using biomarkers (cerebrospinal fluid, MRI volumetry, ligand PET) even in the very early stages of the disease, and the registration of new therapeutic options can be expected. This treatment will be specific not only economically, but also, for example, in terms of follow-up in the determination of biomarkers and application (for example, the need for infusions in the centre).

Method of performance: Create the status of a network of highly specialized care centres, define personnel and equipment, plan adequate coverage of the entire territory of the Czech Republic (i.e. at least one centre in each region).

Indicator: A standard for specialized centres for the diagnosis and treatment of cognitive disorders.

1.1.9. Measure: Define the role, put into practice and evaluate the activities of multidisciplinary field teams with a focus on people with cognitive impairment

Description: Community care in the form of case management for people with cognitive impairment has the potential to fundamentally contribute to their stay in their own environment, to the prevention of hospitalizations (or shortening thereof) and to reducing depression in caregivers [13]. Informal carers often do not have enough time to rest and take care of their own health due to the complexity of home care for people living with dementia. In uncomplicated cases without comorbidities and in a situation of well-accessible formal and informal care, the coordinating role of the general practitioner should be emphasized. However, the systemic challenge is the needs of people whose cognitive impairment is part of their polymorbidity, which multiplies the risks.

Multidisciplinary mental health teams for the elderly, which are being set up as part of the ongoing mental health care reform, should be part of the response to their needs. Ideal team composition: gerontopsychiatrist/psychiatrist, geriatrician, psychologist, nurses for psychiatric care, general nurse, occupational therapist, social worker, worker in social services. Many people with cognitive impairment are both polymorbid and elderly. These people need comprehensive health and social care, including the necessity to provide safe pharmacotherapy. The team's geriatrician is competent not only in the diagnosis and treatment of diseases causing dementia, but also in the management of care for patients with multimorbidity, polypragmasia intervention. The basic principles of the work of multidisciplinary field teams are: early contact, help in a crisis, assertive searching, continuity, case management, therapeutic relationship, cooperation with the family and social network. The care provided by MTMH for the elderly is transit care, intensive support through the MTMH for the elderly is aimed at stabilizing the patient's condition, increasing the competence of caring relatives and setting up community services available at the patient's place of residence. After stabilizing the situation, it aims to provide client support through other existing services and to terminate the service. The MTMH team provides health and social care and, at the same time, serves as a coordination element in the network of services.

Method of performance: In cooperation with professional societies and in accordance with measure 4.1.3. in the NMHAP, to create a proposal for the role, competencies and availability of a network of multidisciplinary field teams with a focus on people with cognitive impairment. Describe the composition of the multidisciplinary team and its activities, including a description of the role of the geriatrician. Describe optimal temporal and local availability. Pilot project proposal. After the pilot verification of the activity, handle the adjustments of services for the reimbursement of the care of mobile teams working in the form of case management. Creating a code for reimbursing the care of mobile teams working in the form of case management.

Indicator: Multidisciplinary team standard. Evaluation report from the pilot project.
Note: Preparations for piloting MTMH (multidisciplinary teams for mental health) are already underway, they will be funded under the project *Nové služby: expertní skupina KA2: MTDZ pro seniory (New services: expert group KA2: MTMH for the elderly)*. Its inclusion in the project *Doporučené postupy (Best Practices)* is to ensure the transfer of knowledge into uniform best practices.

1.1.10. Measure: Define the passage of a positively tested person through the system

Description: The properly defined passage of the patient through the care system in terms of time, quality and quantity will make it possible to effectively achieve the optimal result of the diagnosis, treatment and care.

Method of performance: Defining different types of clinical situations, from the emergence of suspected cognitive impairment, diagnostic processes and treatment options, to the patient's subsequent journey through the health and social care system, with the participation and support of the caring family.

Indicator: Analysis and methodology of defined possibilities of the passage of a patient with cognitive impairment through the health and social system.

1.1.11. Measure: Define the role of informal carers

Description: The importance of carers in the provision of formal care is crucial; they know the difficulties and needs of a loved one and, at the same time, the resources they can realistically offer with regard to their own health and time possibilities. The development of the partnership communication of professionals with caregivers, creating a space for expressing and sharing their experiences and inviting them into care planning is important for the effective establishment and sustainability of care. A partnership approach and mutual cooperation are a prerequisite for the successful sharing of care between caregivers and providers of social and health services, whether in field, outpatient or residential form. It is appropriate to promote the sharing of care between more informal carers within the extended family.

Method of performance: Defining the role of the informal carer and establishing the manner of promoting the principle of care sharing.

Indicator: Competence scheme for the sharing of care between informal carers and social and healthcare providers incorporated into the methodology of best practices.

Note: Compliance with the *Strategic Document for the Support of Carers (2019)*, which was created as the result of a multi-year project called the *Further Education Fund of the MoLSA* and is the result of a broad discussion, research activities and systematic analyses. The document is available at:

<https://drive.google.com/file/d/16Vg9KleDne5A7LxfV7GTbF9WLk0ioDeT/view>

1.1.12. Measure: Redefine the rules for restricting or revoking a driver's license or a firearms license

Description: At present, the rules for restricting or withdrawing the driving licenses of patients with cognitive deficits are not clearly defined.

Therefore, there are situations where the patient is not assigned a diagnosis because the physician is concerned that its allocation would lead to the revocation of a driver's license. Together with the support of an early diagnosis, it is appropriate to clearly set out these rules so that a patient whose medical condition does not require it is not in danger of having his/her driving license revoked, and his/her social roles are thus not reduced. The same applies to the firearms license and medical fitness for other activities (for example, the performance of a highly responsible profession: doctors, lawyers, forensic experts, operators of large machinery). At the same time, many people with cognitive deficits and dementia continue to drive a motor vehicle, own a firearm, or perform a demanding profession, even if it is no longer safe for them and their surroundings.

Method of performance:

1. Setting up a working group not only from the ranks of physicians; coordination with the ongoing reform of psychiatric care; establishing cooperation with other experts and professional organizations (for example, the Association of Transport Psychologists, the Centre for Transport Research, experts in the field of transport, driving schools, the Police of the Czech Republic, BESIP - a department at the Ministry of Transport of the Czech Republic).
2. Cooperation with the Ministry of Transport of the Czech Republic and with the Ministry of the Interior of the Czech Republic, probably also with the Ministry of Justice of the Czech Republic.
3. Elaboration of rules for the evaluation of medical and mental fitness for individual activities, including the definition of an indication for a (compulsory) traffic psychological examination and/or a fitness check at a driving school. Periodicity of evaluation.
4. Simultaneously defining the roles, competencies and availability of a clinical psychologist with a focus on neuropsychology and an accredited traffic psychologist.
5. Amendment to Decree 277/2004 Coll., on Determining Medical Fitness for Driving Motor Vehicles, in Annex 3, paragraph VII (for diving licenses), and Decree 493/2002 Coll., On Medical Fitness for the Issue or Validity of a Firearms License, and other related legislation.
6. Defining the possibilities of further education and training of elderly drivers (for example, fitness checks, cognitive training, the education of healthy elderly people, as well, in new traffic regulations).
7. Use of already existing examples of good practice.

Indicator: An analysis of regulations for the restriction and withdrawal of a driving and firearms license of persons living with dementia, methodology of the implementation of proposed changes.

1.2. Specific Objective: Completion of a multi-level care network

Rationale: Completion of a multi-level care system according to the severity of the cognitive impairment will increase the efficiency of the whole system. Within this specific objective, the availability of individual segments of care defined in Specific Objective 1.1. will be ensured. An important building block of a functioning care system is the availability of social services, especially counseling centres, residential social services with low capacity, taking into account the specifics and needs of the target group and the necessary relevant network of services in the natural community (in line with the transformation of social housing services), outpatient social services, such as day care centres, relief services and field social services, such as personal assistance or care services. An essential part is the systemic support of ensuring adequate transport to outpatient health and social services responding to the specific needs of the target group.

1.2.1. Measure: Ensure the availability of expertise and services as defined in interdisciplinary best practices

Description: Examples of such measures include the listing of residencies (proposed, for example, to increase the availability of geriatricians), the establishment of multidisciplinary teams and specialized centres for the diagnosis and treatment of cognitive impairment, and related dementia management centres (DAC), which include long-term counseling, coordination and support.

Method of performance: To be defined on the basis of project outputs *Best practices*.

Administrator: MoH.

Cooperating entity: MoLSA, regions, NGOs.

Fulfilment deadline: From the completion of the *Best Practices* project to the end of the implementation, starting at the latest in the second implementation wave.

Budget: CZK 400 mil., possible sources: EU funds, health insurance companies, state budget - chapters of the MoH and the MoLSA, regional budgets (approx. CZK 100 mil.).

Indicator: Analysis of the real coverage of individual types of services in relation to the standards set out in the best practices. Implementation of the creation of services in accordance with the methodology of the best practices.

1.2.2. Measure: Mapping of available social services and increasing the availability of counseling workplaces

Description: The availability and quality of the network of field, outpatient and residential social services are among the decisive factors in providing care for people with dementia. Currently, the network of services is ensured by regions, according to Act No. 108/2006 Coll., on Social Services, as amended, and services are relatively available in large urban agglomerations, but in rural areas there are places where the availability of the service is limited by commuting. It is necessary to strengthen the role and availability of counseling services that accompany people living with dementia and their family carers during the illness - DMC (dementia management centres). The current offer of counseling for families, education and training of carers consists mainly of the non-profit sector on a project basis (for example, the project Pečuj doma of the Diaconate of the Evangelical Church of Czech Brethren or the network of contact points of the Czech Alzheimer Society). In some regions, there are examples of good practice that have been operating for a long time within the regional network of services, the expansion of which is desirable in the Czech Republic. It is necessary to motivate MEPs (municipalities with extended powers) to include professional social counseling services for the field of dementia in community plans.

Method of performance: Creating a model of the optimal network of services for people with dementia and analyzing the current situation, especially identifying places where the network of services is not sufficient. Then creating a draft solution with a schedule and impact on public budgets. Development of personnel standards for social services providing care for people living with dementia.

Indicator: A nationwide map of the network of all types of social services that is understandable for the general public. Number of counseling centres accompanying people with dementia and their carers according to the recommended methodology. Standards of social services providing care for people living with dementia.

Administrator: MoLSA.

Cooperating entity: MoH, MEPs, regions, Union of Carers, CALS.

Fulfilment deadline: The first implementation wave of NAPAD 2020-2030; mapping the 2020 preparatory phase; subsequently the expansion of counseling centres (DMC) into the network of social services continuously from the first implementation wave.

Budget: CZK 5 mil., possible sources: EU funds, state budget (approx. CZK 2 mil.).

Note: Establish cooperation with the *Best Practices* project and consult on the availability and interconnection of services on the health and social border. Re-evaluation at the end of the first implementation wave based on the outputs of the *Best practices* project. The purpose of this measure is to build an available support network that will accompany and support caring families in a timely and continuous manner from diagnosis (detection of the first symptoms) until the death of a person with dementia, and connect them with the professional help of the (field, geriatric) team and field, outpatient and residential services.

Examples of good practice are the projects of the Institute of Dignified Aging of the Diaconate CCE or the functioning of the Alzheimer Counseling Centre Vysočina, which verifies the functionality and effectiveness of care coordinators in selected municipalities.

Good practice: CALS contact points

<http://www.alzheimer.cz/cals/kontaktni-mista/>

As an example of good practice, we can mention the activities of the Czech Alzheimer Society (CALS), which is based in the Gerontology Centre in Prague 8. The CALS has been supporting people living with dementia and their families since 1997. Thanks to cooperation between CALS and the Gerontology Centre, families diagnosed with dementia can receive not only counseling and psychologist services (personal, telephone consultations and self-help groups) or CALS relief field services, both under registered social services, but also a geriatric diagnosis and treatment or home care (Gerontology Centre). The consultation of a psychologist and a social worker in the home environment of a person with dementia precedes the very beginning of respite (relief) service. Other options for supporting people with dementia may include sharing care for CALS clients with the day care centre service or the personal assistance of the Gerontology Centre. The CALS currently has twenty-five contact points in all regions of the Czech Republic. The contact points are state and non-state facilities, medical and social facilities. What they have in common is that they provide quality services for people living with dementia and also help their families.

Good practice: Alzheimer Counseling Centre Vysočina

The provider Home Ždírec, a state-funded organization, provides professional social counseling through the Alzheimer Counseling Centre Vysočina service in accordance with Act No. 108/2006 Coll., on Social Services, as amended, and Decree No. 505/2006 Coll., which implements certain provisions of Act No. 108/2006, on Social Services, as amended. The service provider meets the conditions for the registration of professional social counseling services pursuant to Section 78 of Act No. 108/2006, on Social Services, as amended, and is authorized to provide the service from 1 September 2014. The mission of the Alzheimer Counseling Centre in Vysočina is to provide professional counseling and support activities to patients with Alzheimer's disease and other types of dementia, their families, carers and the general public. The priority is to support the dignified and quality life of these people in the natural environment. We believe that the quality of life of a person with dementia is directly proportional to the quality of life of the caregiver.

The target group of the service are people with chronic mental illness (people with cognitive deficits, Alzheimer's disease and other types of dementia from the age of 26, primarily from the Vysočina region), people in crisis, informal and professional caregivers of people with cognitive deficits, patients with Alzheimer's disease and other types of dementia from the age of 18, and the elderly in general, as the group most at risk of dementia syndrome (prevention and education options).

The service of professional social counseling increases the awareness of the issue and the possible prevention of cognitive deficits. Through its activities, it helps to detect cognitive deficits in a timely manner. It provides users of the service with information on the possibilities of supporting the care of the patient in the home environment. It educates formal and informal caregivers in a high-quality and targeted manner, thus contributing to improving the quality of life of the people diagnosed with cognitive impairment and those who care for them. The priority is to support the independence and skills of users needed to solve their own situation so that they can remain part of a natural network of relationships. Facilitate users' orientation in the network of social services, mediate support or assistance of other institutions and social services (depending on the individual needs of the user). The Alzheimer Counseling Centre Vysočina has become a centre of professional social counseling for the target group in the Vysočina region.

The scope of activities of the Alzheimer Counseling Centre Vysočina is stipulated by Act No. 108/2006 Coll., on Social Services, as amended, and Decree No. 505/2006 Coll.:

Mediating contacts with the community

- *Providing information about a suitable service reflecting the needs of the user, the transfer of contacts or the mediation of the service.*
- *Assistance with filling in forms and writing applications, counseling in the field of communication with the patient, the use of compensatory aids, etc.*

Social therapeutic activities

- *Advice on navigating the network of social services, legal issues, human rights, psychohygiene, drawing financial support ...*
- *Sociotherapeutic and educational activities, the provision of which leads to prevention, overcoming a crisis situation and initiating the subsequent therapeutic process.*
- *Activities that lead to the maintenance of cognitive abilities and social skills.*
- *Psychosocial support in the form of listening and sharing experiences, activation activities.*

Assistance in exercising rights, legitimate interests and procuring personal matters

- Support in dealing with routine matters.
- Assistance in restoring or consolidating contact with the natural social environment.
- Therapy of family or interpersonal relationships, support and assistance in strengthening contact with the family.

The service is provided free of charge in outpatient and field form. The meeting place is always based on the needs of the user. The counseling centre has 11 contact points in the Vysočina region, which meet the requirements for a quiet and barrier-free environment and will allow users to use the services of the counseling centre without unnecessary travel. Counseling places are in the premises of homes for the elderly, Senior Points, libraries or offices - Home Ždírec, Třebíč Senior Point, Senior Point Žďár nad Sázavou, Senior Point Havlíčkův Brod, Library Humpolec, Home for the Elderly Mitrov, Senior Point Jihlava, Municipal Office Přebyslav, Senior Point Pelhřimov, Home for the Elderly Světlá nad Sázavou, Nursing Home Moravské Budějovice.

Due to the considerable time-consuming care of the specific group of patients with dementia, part of the counseling takes place by telephone or e-mail. The counseling centre performed 1,200 contacts in 2019. Specific Objective: Creating conditions for patients with dementia to stay in their own social environment for as long as possible

1.3. Specific objective: The creation of conditions for dementia patients to remain in their own social environment for as long as possible

Rationale: A patient with a cognitive disorder has difficulty adapting to any change in the environment, while in their own environment they work on the basis of ancient memory, long-term stereotypes, and care is therefore much less demanding. Staying in one's own environment can also be less financially demanding overall. Enabling the longest possible stay in the home environment is the principle that governs the proposal for an optimal care system created within Specific Objectives 1.1., 1.2. and 2.2. Within the framework of this Specific Objective, other measures are defined that can help fulfill the principle.

1.3.1. Measure: Support for the use of technology and the creation of a network of monitoring centres for monitoring escapes from home, reminders of medication use, fluid and dietary intake, emergency calls

Description: Progressive dementia means a gradual loss of self-sufficiency and behavioural disorders in most patients. The usual manifestations mean the occurrence of mistakes in the use of medication, failure to eat or drink, or overestimation of one's own strength and the emergence of urgent situations. By utilizing current technological possibilities, it is possible to significantly increase the safety of an elderly person with dementia and extend the ability to stay in his/her own environment while reducing the burden on formal and informal carers.

Method of performance: Mapping of the most risky areas of life of an elderly person with dementia, proposal/search for suitable types of sensors, pilot verification of sensor function, proposal/search for software for collecting and analyzing sensor signals, development of a model of cooperation of the surveillance system with the existing emergency medical service (EMS) system, and others.

Administrator: MoH.

Cooperating entity: NEUROSMART Endowment Fund, or other project developers with this focus.

Fulfilment deadline: From the first implementation wave.

Budget: CZK 30 mil., possible sources: Health Promotion, Increasing the Efficiency and Quality of Healthcare, TA CZ (Technology Agency of the Czech Republic), companies (social responsibility).

Indicator: Analysis of risk areas in the life of people living with dementia. At least 10 new technologies used to increase the safety of elderly people with dementia, the methodology of their indication and conditions of use; at least 1,000 people who use the technology.

Example of good practice

A pilot project of the implementation of electronic devices increasing the safety of the elderly and facilitating the cooperation of informal caregivers in the University Hospital Brno. Currently in the form of a wristwatch enabling the monitoring of an elderly person's movement, communication with the caregiver, the signaling of defined situations towards the caregiver, medical facility or rescue service. The aim of the project is to determine the effectiveness of the device in terms of a safe extension of the elderly person's ability to stay in their own environment without the need for 24-hour personal supervision of the caregiver (e.g. caring family at work). Another planned possibility of using electronic equipment is to increase the safety of the elderly in residential services - movement monitoring, detection of falls and other threats.

1.3.2. Measure: Promoting natural sources of support for informal carers, families and people with dementia

Description: This measure aims to support a range of examples of good practice, information campaigns and other community social capital development projects, disseminating the idea of a caring and dementia-friendly community. Examples of natural sources of support for informal carers include volunteering, creating self-help groups of carers based on mutual assistance, exchanging services, sharing care or time banks, creating conditions for good neighbourly relations, joint leisure activities, visits, church work, intergenerational projects, etc. The aim is to prevent the social isolation of caring families, to express solidarity and social appreciation. All these informal sources of support can contribute to care burden sharing, psychological support and overall relief for key carers.

Method of performance: Project, grant, organizational, promotional support for community events, volunteer activities, neighborhood projects or initiating the creation of self-help groups.

Administrator: MoLSA.

Cooperating entity: MoH, UTM (Union of Towns and Municipalities of the Czech Republic), National Network of Healthy Cities, patient organizations, NGOs.

Fulfilment deadline: From the first implementation wave.

Budget: CZK 5 mil., possible sources: EU Funds, the programme Health from EEA Funds 2014-2021, the budget chapter of the MoLSA (approx. CZK 3 mil.).

Indicator: Existence of 4 support groups for people living with dementia (in Prague, Brno, Pilsen and Ostrava). Existence of at least 20 self-help support groups for informal carers (at least 1 in each region). Existence of at least 30 places where families with people with dementia can meet and share care so that some family members can supervise and others can deal with other matters. An information document on YouTube for the general public with information on what can be done for people with dementia.

Note: Support for carers in the field of caring for people with dementia under the NAPAD 2020-2030 should be based on the *Strategic Document for the Support of Carers* (2019), which was created as a result of a multi-year project of the MoLSA Further Education Fund and is the result of a broad discussion, research activities and systematic analyses. The document is available at <https://drive.google.com/file/d/16Vg9KleDne5A7LxfV7GTbF9WLk0ioDeT/view>.

Good practice: Sousedé plus (Neighbours Plus) and Mezi námi (Between Us)

A good example is the Intergenerational and Volunteer Centre TOTEM in Pilsen and especially its Sousedé plus programme, which is based on organized volunteer neighbourhood assistance. It is inspired by the Austrian project ZeitBank 55+. Another example of good practice for supporting intergenerational cooperation and volunteering is the activities of the non-governmental organization Mezi námi, o.p.s. More information is available at <https://www.mezi-nami.cz/>.

Good practice: The "Podpůrné centrum se sdílenou péčí neformálně pečujících na Berounsko-Hořovicku (Support centre with care sharing by informal carers in the Beroun-Hořovice region)" project

An Alzheimer's-friendly Café called Včera (Yesterday) was opened in Hořovice (<https://kavarnavcera.cz/>), which offers help and support to caring families whose lives have been affected by Alzheimer's disease, especially a space for meeting and sharing experiences, qualified counseling and education, and which gives people with dementia the opportunity to participate in a daily programme in the café and meaningful active leisure time, so caregivers have the opportunity to devote themselves to work or rest. Implemented by the non-profit organization Dementia I.O.V., z.ú. (www.dementia.cz).

1.4. Specific Objective: Ensuring the financial sustainability of the network of services

Rationale: It is necessary to create and set up functioning tools to ensure the financial sustainability of the network of services for people with dementia.

1.4.1. Measure: The categorization of a patient with a cognitive deficit as a basis for the individualization and optimization of care and its reimbursement

Description: During the illness, a patient with dementia undergoes gradual changes in mental and physical areas that require different approaches in treatment and care. The current system does not sufficiently reflect these changes and this can lead to shortcomings in terms of an excessive or insufficient level of treatment and care provided.

Method of performance: Creation of a standard for evaluating the development of a patient with dementia for the provision of medical and social services according to the current characteristics of the patient, linking of reimbursement to the patient's condition, pilot verification of the system. Preferably, the use and optimization of existing systems: for example, linking the system of supplementary dg within the DRG (Diagnosis-related Group) restart (U50 and U51) with the existing categorization of patients in inpatient facilities. The categorization can be supported by standardized ranges of functional status assessment (comprehensive geriatric assessment, CGA). Once introduced into wider practice, then the use of the International Classification of Functioning, Disability and Health.

Administrator: MoH.

Cooperating entity: HIC (health insurance companies), IHIS, professional societies, MoLSA.

Fulfilment deadline: Second implementation wave.

Budget: Cannot be quantified in advance, possible sources: budget chapter of the MoH, health insurance system.

Indicator: A standard that is easy to use in the common practice of administrable evaluation of the development of the condition of a patient with dementia. Description of the range of the reimbursement system for care for patients with dementia in various stages of the disease in health and social services.

Note: The purpose of the measure is to adapt reimbursement systems in healthcare and social services in terms of reflecting the severity of the patient's/client's condition and the complexity of care (severity of cognitive impairment and comorbidities - indexation). The Minister of Health has appointed the IHIS with the implementation of the communication of the CSO (Czech Statistical Office) on the introduction and use of the *International Classification of Functioning, Disabilities and Health* as of 1 February 2020.

1.4.2. Measure: Creation of a code for the reimbursement of cognitive function screenings from health insurance

Description: The early diagnosis of cognitive disorders brings the possibility of revealing the risk of errors in the use of medication, provides a chance for a more effective use of cognitive therapy in terms of slowing the development of dementia, and allows the detection and treatment of secondary causes of cognitive deficit. As with screening for diabetes, hyperlipidemia or cancer, screening for cognitive impairment should become part of regular preventive medical examinations from the age of 65. A screening examination of cognitive functions should also be authorized to be performed by an outpatient specialist in the event of a suspicion of the presence of a cognitive disorder, for example, with regard to ensuring the safety of treatment or patient cooperation in diagnostic procedures. Due to the time-consuming nature of testing and subsequent steps according to the currently valid recommended procedure, it is necessary to include this activity among the actions reimbursed by health insurance companies.

Method of performance: Code for the reimbursement of a screening examination of cognitive functions with the definition of the point evaluation, frequency of execution, time burden and specialization of the performing physician. Subsequent evaluation.

Administrator: MoH.

Cooperating entity: HIC, SGP, AGP, other professional societies.

Fulfilment deadline: Preparatory phase 2020, evaluation at the beginning of the second implementation wave.

Budget: CZK 0.3 mil. (evaluation), possible source: EU funds, health insurance system, state budget (estimate CZK 0.2 mil.).

Indicator: Cognitive screening procedure included in the list of services covered by health insurance companies.

Note: Partial fulfilment of this measure was already achieved as of 1 January 2020.

1.4.3. Measure: Inventory and updating of codes for the reimbursement of cognitive function examinations from health insurance

Description: The examination of cognitive functions is still performed in the offices of outpatient specialists in geriatrics, neurology and psychiatry, while the scope and focus of this procedure differs for individual specialists. An inventory of these codes should be carried out and, if necessary, updated in the light of interdisciplinary best practices.

Method of performance: Implementation of this measure will include, inter alia:

- finding paths to a motivational increase of the reimbursement of work to gerontopsychiatrists;

- revision of codes in neurology and geriatrics with regard to additional tasks and the related necessary time allocation and frequency of examinations;
- revision of the codes of other procedures related to care for patients with dementia;
- adjustment of cognitive enhancer reimbursement criteria for patients with cognitive impairments;
- preparation of proposals for new medical procedures aimed at patients with cognitive impairment.

Administrator: MoH.

Cooperating entity: HIC, CGGS (Czech Gerontological and Geriatric Society), CANP (Czech Association for Neuropsychology), CNS (Department of Cognitive Neurology of the Czech Medical Association of JEP), ACP CZ (Association of Clinical Psychologists of the Czech Republic), Gerontopsychiatric Division of the Psychiatric Society of the Czech Medical Association of JEP, AGP.

Fulfilment deadline: Second implementation wave.

Budget: NR.

Indicator: Updated codes corresponding to the performed examinations. Note on neuropsychological examination: This is not a new cost for the healthcare system; the code of a comprehensive and targeted psychological examination is currently used, but it is defined differently in terms of purpose, form and content. This is a redefinition and specification of the form, in current practice a neuropsychological examination exceeds the requirements for a typical clinical-psychological examination.

2 Strategic Objective: Education

Vision: All those who encounter dementia to varying degrees in their profession will have training that corresponding to the demands of this profession and the specific needs of people with dementia and caring families or other informal carers. The education will cover knowledge (information on memory impairment and other cognitive functions), skills (especially in communication, behavioural peculiarities, cognitive activation and meaningful activities) and attitudes (accepting a person with dementia as a unique and full-fledged human being, focusing on the person with his or her specific needs, equality and the right of people with dementia to live in the company of others and to enjoy life). These professions will include health professionals (physicians, general nurses, paramedics, occupational therapists and physiotherapists, pharmacists, health and social workers), clinical psychologists, psychologists and social care professionals (social workers, health workers, direct care workers, activation staff, catering staff, managers), public administration and self-government staff, social workers in municipalities and the Ministry of Interior of the Czech Republic, public transport staff, police, teachers, workers of the church and cultural institutions, employers, etc. Informal carers are also entitled to accessible education in order to acquire the competencies needed to provide care and maintain their own fitness. Carer education takes a variety of forms to suit their needs and capabilities.

2.1. Specific Objective: Mapping, support and development of education for medical and non-medical professions and professional carers in social services

Rationale: There are no generally binding school education or study programmes that set specific goals for education, the length, content and time schedule of education, nor the course and completion of education. Thus, there is no national overview of the scope of education in the field of caring for people with cognitive impairment or dementia, which would reflect the demographic transition and the increasing number of elderly people in the population. Mapping the current state of education will make it possible to identify shortcomings, plan appropriate procedures for undergraduate and postgraduate education, and the possible subsequent adjustment of education to ensure continuity of care.

Adequate education determines the provision of adequate care and assistance to both patients and their informal carers. An educated health worker, social worker or worker in social services should guarantee the early identification of cognitive impairment (dementia), and should provide adequate care according to the patient/client's current condition, in order to maximize his/her quality of life. He/she should be able to communicate with patients/clients with dementia and work with their families. In the case of palliative care for advanced forms of dementia, to then provide adequate care to alleviate the suffering of the patient and his/her loved ones and strengthen the quality of his/her life through specific methods of basal stimulation, Namasté care, etc. Healthcare professionals and social workers should be able to support and accompany the family of a person with dementia in connection with end-of-life care.

2.1.1. Measure: Evaluation of the current offer of undergraduate and postgraduate education for medical and non-medical professions and professional caregivers in social services

Description: The MoH, MoLSA and MEYS, with the participation of cooperating entities, will gather information on the current state of training programmes in geriatric care with special regard to degenerative diseases and cognitive impairments.

Method of performance: Evaluation of the content of framework training programmes, qualification standards of preparation for the performance of the medical profession, or available educational programmes of schools, and the evaluation of the structure of the current offer of undergraduate and postgraduate forms of education.

Administrator: MoH, MoLSA.

Cooperating entity: NPI CR (National Pedagogical Institute), IPME, NCN NHF (National Centre for Nursing and Non-Medical Healthcare Fields), higher vocational schools, medical faculties, philosophical faculties, pedagogical faculties and faculties of healthcare studies and health and social faculties, or other faculties implementing study programmes for the preparation of healthcare professions or professional caregivers in social services and other educational agencies providing lifelong learning in the form of accredited courses, MEYS.

Fulfilment deadline: First implementation wave.

Budget: CZK 0.2 mil., possible sources: EU funds.

Indicator: Description of current training and identification of deficiencies.

2.1.2. Measure: Initiate changes in undergraduate and postgraduate education for medical and non-medical professions and professional caregivers in social services on the basis of the outputs of measure 2.1.1.

Description: With reference to the significant increase in the number of people living with dementia in the system of health or health and social services and following a comprehensive description (see measure 2.1.1), it is necessary to supplement training programmes for educating health workers and formal carers on the specifics of caring for people living with dementia and the specifics of communicating with these people.

Method of performance: MEYS supplementation of framework training programmes, MoH supplementation of qualification standards, qualification courses, MoLSA supplementation of qualification courses on the issue of Alzheimer's disease or dementia, following a comprehensive description and the identification of shortcomings (measure 2.1.1.).

Administrator: MEYS, MoH, MoLSA.

Cooperating entity: Medical faculties, health and social faculties, faculties of healthcare studies, faculties of social studies, NCN NHF (National Centre for Nursing and Non-Medical Healthcare Fields), NPI CR (National Pedagogical Institute), IPME (Institute of Postgraduate Medical Education), professional associations and professional societies.

Fulfilment deadline: First implementation wave.

Budget: CZK 1 mil., possible sources: EU funds.

Indicator: Training programmes for the education of health professionals and formal carers, supplemented by the specifics of caring for people living with dementia and the specifics of communicating with these people based on the outputs of measure 2.1.1.

2.1.3. Measure: Stimulate an offer of lifelong learning that includes the issue of dementia for workers in health and social services and for informal caregivers.

Description: Within the lifelong education of workers in social services and social workers, only about 3% of all accredited MoLSA programmes are focused fully or partially on the area of caring for people with dementia. The number of these educational programmes is determined by the market environment in the field of education, that is, the demand from social service providers. One possibility of stimulating these educational programmes is targeted support (e.g., by expanding some existing subsidy programmes) for the creation of new educational programmes focused on dementia, as well as financial stimulation of the implementation of educational programmes for informal caregivers.

Method of performance: Analysis of existing lifelong learning programmes in the field of caring for people with dementia. Then elaborating a plan and timetable for further progress according to the findings.

Administrator: MoLSA.

Cooperating entity: APSS CZ, educational agencies.

Fulfilment deadline: First implementation wave.

Budget: 0.5 mil. CZK, possible sources: Health Promotion, Increasing the Efficiency and Quality of Healthcare; EEA funds, budget chapter of the MoLSA (CZK 0.3 mil.).

Indicators: An analysis of existing lifelong learning programmes. A plan for the creation of new training programmes, including observable numbers of participants in training programmes. At least 50 supported programmes fully or partially focused on the area of providing care for people living with dementia.

2.1.4. **Measure: Education of general practitioners in connection with the new procedure of cognitive function examination**

Description: In order to achieve valid testing results, in addition to the self-test methodology, it is necessary to observe certain standard testing conditions both in terms of the environment and the surrounding, for example, noise pollution, and in terms of the state of mind of the elderly person. Cognitive performance can be affected, for example, by worsened sleep the night before, increased blood pressure, changes in the weather, etc. - this could lead to an underestimation of the elderly person's performance. The aim of the training seminars will therefore be to acquaint general practitioners with the pitfalls of screening.

Method of performance: Use of the existing GP education system that includes regional seminars (140 per year), national conferences (3 per year), supra-regional conferences (5 per year), the professional magazine Practicus and other media sent to all GPs, webinars, and websites. Seminars and conferences of the SGP and AGP have over 15,000 contacts with GPs per year.

Administrator: SGP.

Cooperating entity: AGP, ISHS.

Fulfilment deadline: First implementation wave.

Budget: CZK 1 mil., possible sources: SGP CzMA JEP, Health Promotion, Increasing the Efficiency and Quality of Healthcare, the programme Health from EEA Funds 2014-2021.

Indicator: 6 training events/year, a total of 60 training events.

2.2. Specific Objective: Ensuring the availability of education and support for informal carers and strengthening their role in the process of caring for people with dementia and the cooperation of professionals and informal carers

Rationale: Family members and other informal carers enter the life stage as carers and guides of people with dementia completely unprepared. Equipped with their observational skills and a general awareness of dementia, they also become the first diagnosticians. Manifestations of changes in the behaviour of their loved ones lead them as guides to professionals - to doctors' offices, clinical psychologists, psychologists and specialized counseling centres. Diagnosis initiates the process of finding information, sharing, supporting, reconciling with reality, and planning for the future. This whole journey is also a process of learning, education, adaptation, change management, finding a new place in the family, at work and in society. It is a serious social and life situation that threatens the whole family system, partnerships, the carers' health, and can lead to the premature and unnecessary institutionalization of a person with dementia, which is a fundamental ethical dilemma for the family, is contrary to the wishes of most people and is also an unnecessary burden in terms of social spending. Supporting caring families, including creating opportunities for their education and reconciling work and care, and setting up all the mechanisms to keep people with dementia in their natural environment is a key priority of NAPAD 2020-2030.

2.2.1. Measure: Establish informal carers as a target group of social services and professional social counseling for carers and their education as a service act in Act No. 108/2006 Coll., on Social Services, as amended

Description: The support and care coordinator (guide, case manager) for the field of caring for people with dementia who works in the DMC (dementia management centres) is available to caring families in a timely and long-term manner and will provide them with professional social counseling in the form of field, outpatient and telephone consultations, will assist them in planning the course of care and the use of social services, while monitoring the risk of exhaustion. At present, there is no legal basis in the social field for systemic counseling, educational and training support for carers. According to Decree No. 55/2011 Coll., on the Activities of Health Workers and other Professionals, healthcare legislation gives selected healthcare professionals the competence to educate family members and the close persons of patients. It is necessary to develop this tool (counseling, educational and training support for carers) in healthcare and social facilities.

Method of performance: Designating caregivers as target groups of social services. Establishing professional social counseling for caregivers, the education of caregivers and their psychosocial support as a service act in Act No. 108/2006 Coll., on Social Services, as amended.

Administrator: MoLSA.

Cooperating entity: MoH.

Fulfilment deadline: Preparatory phase, first implementation wave.

Budget: NR.

Indicator: Carers are established as a target group for social services.

2.2.2. **Measure: Based on the assessment of the educational needs of informal carers, support forms of education that correspond to their possibilities and needs. Strengthen the role of carers as partners of professional providers of social and health services (so-called care sharing)**

Description: Locating the education of informal carers as close as possible to the place where the care is provided. The purpose of this measure is to use the capacity of general nurses from home care, the capacity of professional social counseling and other programmes for caring families to educate caregivers in nursing skills, coping with and preventing stress, an unbearable care burden and crisis situations. In these projects, caregivers are ideally educated in the presence of their loved ones with dementia, and educational programmes can be combined with leisure time and relaxation. This measure aims to support a wide range of projects that help educate informal carers.

Method of performance: From the diagnosis of dementia to the terminal stage of the disease, members of caring families will have access to information on the importance of education for managing care and preventing caregivers' stress and health problems. Information on the offer of educational programmes for carers should be known and handed over to families in particular by the coordinator of support and care as the person who will be in long-term continuous contact with families, in cooperation with dementia management centres (DMC). These will prepare educational events for carers, but there will be other education providers also. Classic (basic) one-day courses offered commercially (but paid for by another entity, not by the carers, e.g. health insurance companies or municipalities) should be accredited.

Informal carers will be allowed to participate in some educational activities organized for professional carers (e.g. social workers, etc.). Lectures and exercises organized on an ad hoc basis, e.g. for a support group of carers, for the general public, for example in libraries or professional counseling centres, will be equally valuable. Even such lectures can receive financial support. Lectures provided by the carers themselves will be very valuable. All educators will have at their disposal a sufficient amount of didactic materials with basic instruction on the problem of dementia and especially care at home. There will be a sufficient amount of popular science literature, manuals and kits for cognitive training, reminiscence and other stimuli for activating the elderly with dementia. Publishers and other media initiatives will be supported, such as thematic television and radio programmes, art projects (theatre, art workshops, exhibitions, films), media presentations of carers' experiences, public debates with experts, e-learning and the placement of didactic entries on the Internet and YouTube.

Administrator: MoH.

Cooperating entity: MoLSA, patient organizations, NGOs.

Fulfilment deadline: From the first implementation wave.

Budget: CZK 20 mil., possible sources: The programme Health from EEA Funds 2014-2021, Health Promotion, Increasing the Efficiency and Quality of Healthcare, EU Funds, state budget - budget chapter of the MoH and MoLSA (CZK 13 mil.).

Indicator: At least 50 supported educational events per year, 500 participants in supported events per year, 100 published and media-accessible educational materials, an e-learning course for informal carers.

Good practice: A vision for the education of informal carers

Caring families will have the opportunity to be educated, acquire the necessary information and skills in caring for their loved ones with dementia according to their needs and possibilities - in one-day courses, half-day seminars and shorter lectures or discussions and personal or telephone consultations, consultations directly in the home environment of the person with dementia. Education and information will be easily accessible to families, directly in municipalities or in places where carers meet according to their abilities and needs, if possible, together with their loved ones with dementia (in clubs, community centres, churches, day care centres, libraries, etc.). Physicians and general nurses, as well as health and social workers in hospitals, will educate and guide dementia patients and their carers when discharging dementia patients into family care, and home care nurses, who they are obliged to educate their patients and their loved ones. Social workers of the Ministry of the Interior of the Czech Republic will also educate on the occasion of the investigation on care allowance and its payment, and social workers in the role of care and support coordinators in the home environment of people with dementia and their relatives who care for them. Workers in social services, in connection with the performance of their work, especially providers of professional social counseling services, personal assistance, care and relief services and day care centres, will also educate caring relatives - all in the form of consulting or training in specific skills. All of these professionals will also motivate carers to learn and inform them about educational opportunities and the importance of education for sharing care (between professionals and informal carers).

The evaluation of the educational needs of carers for people with dementia was carried out by a team of the FFUK Department of Social Work in cooperation with CALS, Život 90 and Alzheimer Café in 2019. The aim of the survey on a sample of 116 carers was to find out what prevents informal carers from participating in educational programs and what form of programme or intervention they might prefer. A total of 69% of respondents were interested in a training programme, especially the younger ones and those who care for their parents. Those who had already attended some course in the past were especially interested in these courses - especially in the special techniques of activating and training memory. The need to learn to communicate better with the patient was often mentioned. Those who were not interested in organized education received the necessary information from the service they used. In terms of form, caregivers prefer a one-time half-day to full-day course close to home or an individual consultation in a counseling centre, including the possibility of a telephone consultation. One-off lectures by experts within the meeting of the support group of carers are also relatively in demand. The most common barriers to participation in educational programmes, including self-help support groups, are a lack of time, inability to leave the person being cared for and difficult access to the course venue, old age of the caregiver, often associated with caregiver fatigue and health problems, concurrent childcare or the group course format.

An example of good practice is the support and educational programme "Vzpomínejme, když pečujeme" (Let's remember when we care) of the Reminiscence Centre, intended for caregivers and their loved ones with dementia and at the same time for future reminiscence assistants. Experience from the educational activities of the Pečuj doma project of the Diaconate CCE shows that the content of education or training of carers should focus on basic information about dementia and the effects of the disease on human behaviour, communication and self-sufficiency, and especially on special techniques of memory activation and training, as well as the specifics of communicating with a person with dementia. Lectures on legal issues (limitation of capacity and guardianship), lectures on the services provided and care management (care sharing in the family, etc.) and topics of self-care and healthcare support for the person being cared for are also requested.

Good practice: Massive Open Online Course (MOOC)

The Understanding Dementia course (Rozumíme demenci in Czech) is an e-learning module composed of videos and other study materials, including short interviews that illustrate patient stories, pictorial appendices, statistics and graphs.

The authors of the online courses are experts from the Australian Wicking Dementia Research and Education Centre at the University of Tasmania, located in the capital city of Hobart in the Australian state of Tasmania. Masaryk University in Brno is currently working on the Czech version. This type of training is known worldwide as a MOOC, a Massive Open Online Course. This type of individual education is a current global trend. An explanation of the abbreviation MOOC:

Massive - from media jargon "mass", i.e. a course intended for those who are interested in the topic. These include social workers, healthcare professionals, volunteers, patients in the early stages of the disease, family members, social scientists and, for example, experts from the relevant ministries.

Open - anyone with an internet connection has access to the training. Before you can start training, you simply need to register and choose a username and password. This information will allow repeated access.

Online - a course available on the Internet.

Course - training that lasts a shorter period of time, on the order of several weeks. The participant studies according to his/her time possibilities.

Good practice: WHO iSupport: a tool for people caring for individuals with dementia

The World Health Organization has created the iSupport online knowledge and training programme for carers for people with dementia. The aim of this programme is to prevent and reduce the impact of the burden associated with caring for a person with dementia on mental and physical health and to increase the quality of life of carers. iSupport is also available in printed form, but so far none of the versions have been translated into Czech - the creation of the Czech version is the task of NAPAD 2020-2030. The iSupport tool deals with the following topics:

- general information about dementia,*
- general information relating to the role of the carer,*
- self care,*
- providing care for a person with dementia and*
- addressing the symptoms of dementia.*

iSupport is primarily a self-help tool for those caring for people with dementia, including family and friends. The tool can be adapted to reflect local context and needs. Once adapted, carers can choose to go through the lessons gradually, or select the lessons that are most relevant to their current needs and daily lives. All the lessons consist of brief textbooks, descriptions of examples, and several exercises. The caregiver will receive feedback on each exercise as they work through it.

2.2.3. Measure: Establishment of a web information portal

Description: An easily accessible information and education portal will be set up to provide modules covering diagnosis, treatment (pharmacotherapy and non-pharmacological interventions), quality of life and various forms and methods of support and care for people with dementia at various stages of the disease, including health and social services. The portal will be a source of information and e-learning programmes for various target groups - general practitioners, specialists and other health professionals, social workers, occupational therapists, social services workers, carers and their organizations.

Method of performance: A section on dementia will be set up on the NZIP web portal, where content (from the medical and social field) will be regularly delivered and updated for professionals and the lay public, patients and informal carers.

Administrator: IHIS.

Cooperating entity: MoH, NGOs, MoLSA.

Fulfilment deadline: The first implementation wave, then updates according to the progress of implementation.

Budget: CZK 2 mil., possible sources: Health Promotion, Increasing the Efficiency and Quality of Healthcare, budget chapter of the Ministry of Health (approx. CZK 1 mil.).

Indicator: An information and educational section with current and regularly updated information on dementia is available on the web portal www.NZIP.cz.

Note: At present, the availability of the Internet on the one hand, and the digital literacy of the population on the other, makes it the most common and flexible source of information and skills for any area of human life, and this should include education in the field of dementia and caring for people with dementia.

2.2.4. Measure: Stimulate the creation and activities of support self-help groups for family carers in local conditions

Description: Support groups are one of the cornerstones of help, support and care for people with dementia and their loved ones. In practice, however, an optimal environment for their emergence and activity is not created.

Method of performance: Creating conditions for the possibility of the establishment and activities of support groups in terms of increasing accessibility for caregivers (e.g. providing funding to promote a support group, to entertain the meeting participants, invite lecturers and other guests, for supportive psychotherapy, a relaxation programme or elderly-sitting service for loved ones with dementia and their activation).

Administrator: MoLSA.

Cooperating entity: NGO (non-governmental non-profit organization), CALS, patient organizations.

Fulfilment deadline: First implementation wave.

Budget: CZK 5 mil., possible sources: EU funds and the state budget - budget chapter of the Ministry of Labour and Social Affairs (approx. CZK 3 mil.).

Indicator: Support for the activities of at least 20 existing or newly established self-help groups, at least 200 supported events organized by these groups per year, 200 hours of individual psychotherapy for informal carers per year.

Good practice: Čaj o páté (Tea at Five) and Pečuj doma (Care at Home)

An example of good practice is the support group Čaj o páté at CALS Prague, which has been meeting for more than 20 years. Support groups for family carers also meet at many CALS contact points. Groups of caregivers also meet as part of the Pečuj doma project. The purpose of this measure is also to support other organizations that create conditions and stimulate the emergence of support groups for family carers, such as the registered association Unie pečujících (Union of Carers), the Diaconate CCE or Caritas Czech Republic. An appropriate outcome of this measure would be to enable the representation of people with dementia in the international self-help group at Alzheimer Europe.

3 Strategic Objective: Epidemiology and research

Vision: Research in the field of dementia is carried out in accordance with the set priorities, is multidisciplinary, coordinated and has secured funding. Sufficient funding is allocated for the sustainability of studies aimed at long-term population monitoring. There is a rich database for conducting quality research, which consists of population studies, clinical cohorts and routinely collected data. The most important indicators of the healthcare provided to individuals with dementia are regularly reported and clearly presented.

3.1. Specific Objective: Systematic evaluation of dementia data

Rationale: In order to plan and evaluate services for people with dementia, it is necessary to monitor systematically and at regular intervals what health and social services they use and how they are cared for. This can be achieved by creating a new separate register of patients/clients with dementia, or using existing data sources, i.e. registers from routinely collected data. For a comprehensive picture of services for patients with dementia, cooperation between the health and social sectors is necessary. In order to evaluate the effect of various interventions, controlled studies should be carried out and qualitative research should be supported (especially in evaluating the impact of non-pharmacological interventions).

3.1.1. Measure: Reporting indicators of care for individuals with dementia

Description: The annually reported data refer to the number of patients diagnosed with dementia, the number of examinations, the prescription of selected drugs and the provision of healthcare for individual health specializations. The source of data is the National Register of Paid Health Services (NRPHS), diagnoses are kept under the codes of the International Classification of Diseases, Tenth Revision. The data are presented as part of the information system "Mental disorders of people over 65", for which the IHIS is responsible, and are compatible with the rest of this information system.

Method of performance: Creation of an algorithm for the annual presentation of the following data:

- A. Number of people diagnosed with dementia (Alzheimer's disease, vascular dementia, dementia in other diseases classified elsewhere, unspecified dementia, mild cognitive impairment).
- B. Frequency of diagnostic examinations in people diagnosed with dementia (CT, MRI, lumbar puncture, PET, SPECT, comprehensive psychological examination, laboratory examination).
- C. Prescription of selected drugs in people diagnosed with dementia (acetylcholinesterase inhibitors, memantine, antipsychotics, antidepressants, anxiolytics, analgesics, cardiovascular drugs, anticoagulants, urologicals, the total number of prescribed drugs).
- D. Care providers (proportions of people diagnosed with dementia treated by a general practitioner, outpatient neurologist, geriatrician, psychiatrist, clinical psychologist and their combinations).

Administrator: IHIS.

Cooperating entity: NIMH.

Fulfilment deadline: 31.12.2021.

Budget: NR.

Indicator: The above data are presented annually as part of the information system "Mental disorders of people over 65".

Note: The data presentation designed in this way will be evaluated after the first wave of the NAPAD 2020-2030 implementation. If this data reporting system is not sufficient for the planning of care services for individuals with dementia, the possibility of creating a new separate register of patients with dementia will be considered.

3.1.2. Measure: Preparation of data packages focusing on the situation in the regions

Description: Municipalities (regions, cities, villages) are an important player in providing services for people with dementia and creating a friendly environment for them. Increasing citizens' knowledge at the municipal level will help to improve the availability of services, for which demand will increase due to an aging population. It is necessary to acquaint regions, cities and villages with the prediction of the growth of the prevalence of dementia in the given region and its consequences in general, as well as with specific impacts at the regional and local level. The aim of this measure is to help size health and social services as part of community planning.

Method of performance: Preparation of IHIS data packages according to individual districts, which will be distributed at workshops with individual governors, chief magistrates and mayors. During these workshops, students will be acquainted with the National Health Information System (NHIS) and trained in its use.

Administrator: IHIS.

Cooperating entity: UTM, MRD, MoLSA.

Fulfilment deadline: Second implementation wave.

Budget: CZK 2 mil., possible source: EU funds.

Indicator: 90 workshops carried out, 90 data packages created, about 3,000 persons trained.

3.1.3. Measure: Linking NRPHS data with data on social services

Description: Annually reported data from the NRPHS refer only to individuals using health services. However, this is not sufficient for the comprehensive picture needed for service planning. People with dementia need to use social services throughout the entire course of their illness (from professional counseling to inpatient care). Knowledge of social services requested and used by people with dementia and their families is therefore essential for adequate care planning.

Method of performance: The Ministry of Labour and Social Affairs will provide data on requested and drawn social services recorded under the birth number to the IHIS. The IHIS will integrate this new information into the NRPHS.

Administrator: MoH.

Cooperating entity: MoLSA, IHIS.

Fulfilment deadline: Third implementation wave.

Budget: NR.

Indicator: Data on the demand and use of social services are linked to the NRPHS and can be used for research and the evaluation of services.

3.2. Specific Objective: Development of dementia research

Rationale: Research is needed to better understand how to reduce the incidence of dementia and improve the lives of people with dementia; and its results need to be implemented in practice. Research development requires stable funding, an adequate infrastructure to conduct research based on data from population studies, clinical cohorts, and on routinely collected and qualitative data. In publicly funded research, there is also a need to pay attention to the diversity of research teams and the promotion of gender equality. Research is synergistic with the European Research Area, in particular with the Union's Horizon Europe programme, with cohesion policy funds and European instruments to support international collaborative research, mobility and mentoring. Research activities should respond to the following priorities:

Priority 1: Long-term research of the aging population (using a population longitudinal study) to ascertain:

- the prevalence and incidence of Alzheimer's disease and related diseases;
- the risk and protective factors for Alzheimer's disease and related diseases (including cardiovascular, psychosocial and sociodemographic factors);
- the standards for the cognitive functions of the aging population and long-term trends in cognitive aging.

Priority 2: Research on care for patients with Alzheimer's disease and similar diseases in order to determine:

- the availability, coherence, quality and effectiveness of services at different stages of the disease (early detection by a general practitioner, specialized healthcare, community care, relief services, social institutions);
- the burdens, needs and quality of life of informal carers;
- the management of behavioural and psychological symptoms in dementia;
- the effect of non-pharmacological interventions on the health condition and quality of life of people living with dementia (psychosocial model, validation, basal stimulation, art therapy, music therapy, reminiscence, dance therapy, garden therapy, cognitive training, rehabilitation, etc.);
- gender inequalities in patient care (different methods of diagnosing the disease and caring for sick men and women, different needs in approaching women and men in the role of caring for the sick).

Priority 3: Multicenter clinical study of patients with Alzheimer's disease and related diseases in order to:

- initiate the cooperation of several clinical centres;
- standardize diagnostic protocols;
- share clinical data (including neuropsychological test results and biomarkers).

Priority 4: Basic research to expand knowledge of the biological mechanisms of the origin and development of Alzheimer's disease and similar diseases.

3.2.1. Measure: The monitoring and coordination of information on dementia research funding

Description: Activities addressing established priorities in dementia research require significant resources. Every year, public tenders are announced by grant agencies, such as the Czech Health Research Council (CHRC), the Czech Science Foundation (CSF) and the Technology Agency of the Czech Republic (TA CZ), to which it is possible to apply for specific research funding in accordance with the priorities of NAPAD 2020-2030. Regular monitoring of the volume of funds allocated from public resources for research in the field of dementia can be used to identify the causes of insufficient research funding according to the set priorities and to capture changes in the allocated resources over time. In addition, there are several other relevant funding sources for research in the Czech Republic, such as foundations. In order to successfully solve research problems, it is necessary to coordinate information on research funding so that information on funding opportunities is disseminated among the relevant researchers.

Method of performance: The newly established information and education portal for dementia contains regularly-updated information on announced grant calls and other financial resources aimed at supporting research that is in line with the established priorities of NAPAD 2020-2030. The Coordinator for Dementia actively seeks additional financial resources to carry out the necessary research activities and disseminates the information among the relevant researchers via e-mail and other information channels. In cooperation with the CHRC, CSF and TA CZ, and according to the standardised methodology, the Czech Republic monitors and reports the volume of funds approved for dementia research after the evaluation of each public tender.

Administrator: MoH.

Cooperating entity: CHRC, CSF, TA CZ, NIMH.

Fulfilment deadline: Development of methodology - 12/2021, then annual implementation.

Budget: Creation of methodology CZK 20,000, then annual performance CZK 5,000/year (until 2030), a total of CZK 70,000, possible source: EU funds.

Indicator: A methodology is created for monitoring the volume of funds approved for dementia research from public tenders of the CHRC, CSF and TA CZ. A report on the amount of funding for dementia research from grant agencies is published on a regular basis every year. A space for updated information in the field of dementia research is created on the web portal focused on dementia.

3.2.2. Measure: Ensuring the creation of a population longitudinal study

Description: Studies of randomized individuals in the long-term population can provide information on risk factors for dementia, on the characteristics of individuals with dementia, the prevalence and incidence of dementia, the mortality of people with dementia, and changes in these parameters over time. Such a study includes comprehensive data relevant to dementia, such as biomarkers, neuropsychological test results, information on functioning, cardiovascular parameters, depression symptoms, the social network and family situation.

Method of performance: Establishment of a prospective cohort population study aimed at meeting research priority 1. The study can be either new or created on the basis of three existing population studies: „ Health, Alcohol and Psychosocial Factors in Eastern Europe" (HAPIEE), "Survey of Health, Aging and Retirement in Europe" (SHARE) and post-MONICA. The establishment of this study takes place in several phases, the first of which is a pilot.

Administrator: MoH.

Cooperating entity: NIMH, National Institute of Public Health (NIPH), an academic institution, e.g. Charles University in Prague (CU), Masaryk University in Brno (MU), the Czech Academy of Sciences (CAS), etc. - this will emerge from the announced call.

Fulfilment deadline: Pilot phase initiated by 31 December 2023; regular collection follows in the second or third wave.

Budget: CZK 50 mil., possible source: EU funds, grant agencies or other providers of targeted support for research.

Indicator: The pilot phase is completed.

Note: The pilot phase will be followed by the regular implementation of data collection and evaluation.

3.2.3. Measure: Ensuring the creation of a multicenter study of patients with mild cognitive impairment or dementia

Description: In the Czech Republic, clinical research in patients with mild cognitive impairment and dementia is fragmented and limited by the low number of patients monitored in individual health services. A multicenter clinical cohort of patients at high risk of dementia and patients with dementia will be an important source for clinical research, provide information on the role of biomarkers in the onset and progression of dementia, and offer the opportunity to study the burden and needs of carers for people with dementia.

Method of performance: A multicenter study of patients with mild cognitive impairment or dementia is based on linking smaller cohorts of patients in individual health services that have not yet been coordinated. The individual health services thus share data in a common database of imaging, neuropsychological and clinical data, which will stimulate the standardization of diagnostic protocols, thus creating a large group of patients. The study will contain gender-structured data and will focus on the possibilities people living with dementia in various social roles and groups have in managing the disease, that is, on the effectiveness of different therapeutic methods in different social groups (women, men, different age groups, people from different socio-economic classes and cultural groups, etc.). Last but not least, it will be gender-sensitive research on the availability of services with regard to the needs of people with Alzheimer's disease (social care services, public services, mobility opportunities, etc.).

Administrator: MoH.

Cooperating entity: CGGS, CANP, CNS (Department of Cognitive Neurology of the Czech Medical Association of JEP), ACP CZ, the Gerontopsychiatric Division of the Psychiatric Society of the Czech Medical Association of JEP, AGP, hospitals.

Fulfilment deadline: study established by 31 December 2023; gradual addition of patients takes place continuously in the second or third implementation waves.

Budget: CZK 30 mil., possible source: EU funds, grant agencies or other providers of targeted support for research.

Indicator: A multicenter study has been established.

3.2.4. Measure: Ensuring the use of routinely collected data for dementia research

Description: Dementia research requires data sources and the establishment of an adequate and transparent way in which data can be used. A suitable data source is the NRPHS. Its use is associated with several ethical and legislative issues, such as the absence of informed consent of the individual, the impossibility of anonymising data (pseudo-anonymisation only) and the use of personal sensitive data for purposes other than the primary purpose of data collection. The specification of the conditions for the use of individual data from the NRPHS for research purposes, adequate legislation and directives will facilitate and regulate the use of data from the NRPHS and thus contribute to the development of dementia research. The purpose of this measure is to facilitate and support research using these data sources.

Method of performance: A set of transparent measures is published which emphasize the public interest arising from the use of data from the NRPHS: The use of data for research and evaluation is regulated to protect the freedom and privacy of the subject, but at the same time, the principle of freedom of research is also respected. The conditions under which data from registers can be accessed are clearly defined. It is clearly specified who may utilize the data from registers, what organizational, ethical and technical conditions must be met by the data user to reduce risks, what variables can and cannot be requested. A transparent method required to process data is publicly available: how data can be obtained, how results should be disseminated, how and when research or evaluation should be completed.

Administrator: IHIS.

Cooperating entity: MoH.

Fulfilment deadline: First implementation wave.

Budget: NR.

Indicator: A set of transparent measures is published and publicly available. The number of studies on dementia performed on IHIS data and, of which, the number of studies performed on individual NRPHS data.

4 Strategic Objective: Awareness of dementia and prevention

Vision: A society in which the proportion of the elderly is increasing must be aware of the issue of Alzheimer's disease, as this is the only way to accommodate the sick, professional carers and family members in their problematic situation.

4.1. Specific objective: Raising general public awareness of dementia

Rationale: Nowadays, there is very little knowledge of dementia in society. Only people who have experienced dementia more closely in their family circle have knowledge, and the rest of society often perceives the disease as a harmless distraction, where the elderly forget. This ignorance often leads to an underestimation of the first symptoms of the disease, when the patient could already be diagnosed and his treatment initiated.

4.1.1. Measure: Creation of an information package for media communication with basic information or case studies

Description: For communication with the media and the public, a professional platform is needed, which includes accurate information and standards on how to present the issue.

Method of performance: Creation of a repository of information, case studies and contacts to be provided to the media. The creation and continuous updating of a database of media, cooperating journalists to whom data and information on developments in the field of dementia can be sent.

Administrator: MoH.

Cooperating entity: Media partners, patient organizations, NIMH.

Fulfilment deadline: First implementation wave.

Budget: CZK 10 mil., possible source: EU funds.

Indicator: A package for media communication on the issue has been created. The information is regularly updated.

4.1.2. Measure: Campaign to raise awareness

Description: An awareness campaign is one of the key tools for spreading awareness about dementia. Such a campaign is currently missing in the Czech Republic. In addition to society-wide awareness, it is also appropriate to target the area of the personnel of institutions and public administration bodies, so that they are able to deal with people living with dementia and their informal carers appropriately, to understand the problems they face and to be able to provide them with the correct and necessary information.

Method of performance: In the first implementation wave, the proposal and implementation of the campaign using examples of good practice in this field with foreign experts (for example, through the Global Dementia Observatory - GDO) and presentation of the experience of domestic experts in areas of health where the awareness campaign was utilized. In the second and third waves, the implementation of an awareness campaign connected with the development of the activities described in NAPAD 2020-2030.

Administrator: MoH.

Cooperating entity: NIMH, media partners, patient organizations, NGOs.

Fulfilment deadline: First, second and third implementation wave.

Budget: CZK 7 mil., possible sources: EEA funds (pilot phase only), Health Promotion, Increasing the Efficiency and Quality of Healthcare (pilot phase only), EU funds, budget chapters of the MoH and MoLSA (approx. CZK 4 mil.).

Indicator: An awareness campaign has been created.

4.1.3. Measure: Addressing companies with an offer to include dementia in their social responsibility programmes

Description: It is common for major companies operating in the country to be involved in supporting the solution of current and acute problems in the health and social sphere of society. These companies specifically help with the support of individual projects, address the support of patients and caregivers, engage in or promote media campaigns for the public or create favourable conditions for employees who care for a loved one living with dementia. They thus associate their name with a responsible approach to society.

Method of performance: The Coordinator for NAPAD 2020-2030 and members of the expert platform will create a list of suitable opportunities for support in the field of dementia and will continuously actively address important companies with offers of how companies could specifically participate in improving the situation of people living with dementia in the CZ.

Administrator: MoH.

Cooperating entity: Selected companies with a social responsibility programme.

Fulfilment deadline: First implementation wave.

Budget: NR, possible source: companies (social responsibility).

Indicator: At least 5 projects supported by companies within the framework of social responsibility programmes per year, a total of at least 50 projects, 20 companies addressed per year.

Good practice: The project "Surveillance and assistance sensor - pre-pilot verification phase"

The project, which supports assistance services for patients with neurocognitive deficits or neurological problems and their loved ones, is based on an electronic bracelet that patients receive. The bracelet will be able to evaluate the patient's health and, if necessary, inform family members or possibly even call rescue services. The possible use of a smart bracelet is, for example, for monitoring the patient's location, to remind them of the right time to use medication, or as a source of information about the patient's health for a physician. In addition to the Brno University Hospital and the University Hospital of St. Anna, the companies Microsoft, Soitron and C Systém also participate in this project.

4.1.4. Measure: Extension of the offer of programmes in the field of aging and dementia (e.g. We Age Successfully or virtual reality projects) for inclusion in education at primary/secondary schools

Description: Due to the atomization of the family and other factors, young people are becoming ignorant of the issues of the elderly and are thus unable to empathize, which results in discriminatory behaviour. This behaviour has an even worse impact on the elderly with incipient cognitive impairment. The best way to explain such a disability to children and young people is through personal experience.

Method of performance: Implementation of a full-time educational course for pupils of about 6th to 7th grade with interactive elements, such as handicap aids and virtual reality.

Administrator: MEYS, ISHS, APSS CZ.

Cooperating entity: Primary schools, NGOs, UTM.

Fulfilment deadline: First implementation wave.

Budget: CZK 3 mil., possible source: Health Promotion, Increasing the Efficiency and Quality of Healthcare, the programme Health from EEA Funds, EU funds.

Indicator: 50 courses organized per year, 1,000 trained pupils per year.

Good practice: VR EDIE

The educational programme "Virtual Reality – Dementia" brings participants a unique opportunity to enter the world of a person living with dementia. Using high-quality virtual reality (VR) technology, it allows one to see the world through his/her eyes.

This strengthens the empathy and knowledge of carers for people with dementia while helping to improve the approach to and support for people with dementia. Based on their own experiences, participants will have a better understanding of what a person with dementia is experiencing, will be better able to identify their needs and create a support plan. The Association of Social Service Providers of the Czech Republic (APSS CR) was the first in Europe to present the course at a press conference in Prague on April 30, 2019. The application for inducing dementia through virtual reality was developed in Australia, a similar product has not yet been available elsewhere in Europe. The author of the training is the Australian association Dementia Australia, which collaborated with Deakin University on the development of the application. Based on the requirements of the APSS, the Australian version was adapted into the Czech language, including all accompanying materials - presentations, brochures and leaflets. The courses have been offered since May 2019. The training is intended not only for professional carers working in residential, outpatient and field services, but is also suitable for informal carers (family members, etc.) and schools.

Good practice: STÁRNĚME ÚSPĚŠNĚ (WE AGE SUCCESSFULLY)

This project of the Faculty of Medicine of Masaryk University in Brno is based on increasing the effectiveness of the communicated information through personal experience. It is about atherosclerosis and osteoporosis, the basis for emergence of which is now proven to be by the second decade of life. Preventive measures are effective since this period of life. First, a seminar on "Atherosclerosis and osteoporosis and how to prevent it" is held with 9th grade or high school students, and then participants have the opportunity to try out the consequences of these diseases using simulation sets of old-age handicaps. The second goal is to increase the level of empathy of the young generation towards the elderly generation through the experience of elderly handicaps.

4.2. Specific Objective: Prevention of the onset and development of dementia

Rationale: Although older age is the strongest risk factor for cognitive decline and the development of dementia, dementia syndrome is not a natural, inevitable part of aging. In addition to age, other risk factors that cannot be influenced include genetic predisposition, female gender, race/ethnicity, and family history. On the other hand, many studies have shown a relationship between dementia and the characteristics that can be influenced - the so-called potentially modifiable risk factors. These are largely lifestyle-related, such as physical inactivity, smoking, unhealthy diets and harmful alcohol use. Hypertension, diabetes mellitus, hypercholesterolaemia, obesity and depression are also associated with an increased risk of dementia.

Other potentially modifiable risk factors include social isolation and cognitive inactivity. Scientific evidence suggests that dementia can be prevented by implementing interventions to reduce these risk factors, which can slow or delay cognitive decline and the development of dementia. The WHO issued best practices to reduce the risk of cognitive decline and dementia in 2019.

4.2.1. **Measure: Adaptation of recommended procedures to reduce the risk of cognitive decline and dementia to the context of the Czech Republic**

Description: Evidence of potentially modifiable risk factors for cognitive decline and the development of dementia has increased significantly over the last 20 years. This evidence has led to the formulation of WHO guidelines. As the data sources that led to the guidelines did not come from the Czech Republic or other countries in the CEE region, it is not possible to implement these best practices immediately in the Czech Republic. The WHO encourages each state to adapt best practices to prevent cognitive decline and dementia in their own context with respect to the specific needs of the country.

Method of performance: Creation of a multidisciplinary working group of academic staff (expertise in epidemiology, statistics, neurology, psychiatry, geriatrics, general practice, etc.). Analysis of risk factors for the development of cognitive decline and dementia in the Czech Republic on the basis of available data sources (HAPIEE, SHARE, sample surveys conducted by the NIPH and IHIS) and available literature. Compilation of recommended procedures (selection of relevant passages, translation, consensus among the relevant professional societies and experts involved in the creation of similar best practices abroad), that determine the interdisciplinary methodology for dementia prevention, reflecting the analysis, needs and socio-cultural context of the Czech Republic and existing health services.

Administrator: MoH.

Cooperating entity: NIMH, NIPH, IHIS, SGP, AGP, academic institutions.

Fulfilment deadline: Analysis 6/2022; best practices 12/2024.

Budget: Analysis CZK 0.25 mil., best practices - CZK 0.5 mil., total CZK 0.75 mil., possible source: EEA funds, EU funds, grant agencies.

Indicator: Analysis of risk factors for the development of cognitive decline and dementia in the Czech Republic. A methodology of recommended procedures for the prevention of cognitive decline and dementia in the Czech Republic.

4.2.2. Measure: Implementation of a strategy to reduce the risk of cognitive decline and dementia

Description: The implementation of best practices to reduce the risk of cognitive decline and dementia involves changes in the use of human resources, new capacity building, identification of the roles of individual actors in education and healthcare, and changes in legislation and financial mechanisms.

Method of performance: Establishment of a multidisciplinary and intersectoral working group, which will involve employees of the MoH, MEYS, NPI CR, representatives of general practitioners (SGP, AGP) and professional societies. An analysis of the current state of projects aimed at the prevention of cardiovascular risk factors and mental illness. Analysis of requirements for budgetary and human resources, education and health systems, and changes in legislation. Elaboration of an inter-ministerial strategic document for the linking of the topic of dementia prevention with already ongoing or planned prevention projects. Creating a plan for building human resources capacities (setting up the effective use of human resources, including the use of existing human resources, increasing the competencies of available groups and staff and taking on new roles), including the topic of cognitive decline prevention in current curricula of pupils and students of the relevant fields with possible revisions of the education of individual specializations, a proposal for a communication strategy for the media. Definition of the mechanisms of changes in funding, creation of a proposal of procedures with a defined point evaluation, frequency of execution, time burden, and specialization of the performing physician. Pilot project proposal. Implementation of the pilot project and its evaluation, proposal of changes and the continuation of implementation. Development of a sustainability plan.

Administrator: MoH.

Cooperating entity: MEYS, NPI CZ, AGP, SGP, other professional societies, health insurance companies.

Fulfilment deadline: Creation of an analytical document by 12/2023; creation of a strategic document by 12/2025, commencement of a pilot project by 12/2026, others continuously according to the project plan.

Budget: Analysis and creation of a strategic document CZK 0.5 mil., implementation according to the project plan, possible sources: BCA WHO, EU funds.

Indicator: A strategic document to reduce the risk of cognitive decline and dementia. Evaluation report from the pilot project.

4.2.3. Measure: Monitoring of risk factors for cognitive decline and the development of dementia

Description: Regular monitoring of the prevalence of risk factors for cognitive decline and the development of dementia in the population is necessary for the evaluation of implemented prevention strategies.

Method of performance: Development of a methodology for the regular monitoring of risk factors for cognitive decline and the development of dementia on the basis of already existing sampling infrastructures in the Czech Republic and population longitudinal studies (measure 3.2.2.).

Administrator: MoH.

Cooperating entity: NIPH, IHIS, main researcher of the population longitudinal study.

Fulfilment deadline: Development of the methodology 1/2022, regular monitoring on an ongoing basis.

Budget: NR - reimbursed in the framework of ongoing investigations and measures 3.2.2.

Indicator: Methodology for monitoring changes in risk factors for the development of dementia. Monitoring reports.

5 Strategic Objective: Protecting the rights of people living with dementia

Vision: People living with dementia are a particularly vulnerable population group and are therefore protected against the abuse of the consequences of their deteriorating health by others and against threats to their human dignity. They are protected from their own decisions made at a time when their decision-making capacity begins to be significantly limited.

Protecting the rights of people living with dementia may be entrusted to a public guardian by a court decision. A central state administration body for the area of public guardianship is designated, which ascertains appropriate regulation and supervision over the area of public guardianship. The concept of a previously expressed wish (PEW) exists and is respected. The diagnosis of a cognitive impairment is not automatically linked to a restriction of rights, such as the revocation of a driving license.

5.1. Specific Objective: Protection of the elderly, issues regarding the validity of signed contracts, assessment of legal capacity

Rationale: Due to their illness, people living with dementia can more easily become victims of a crime. They can also make decisions at a time of impaired decision-making (due to illness) and such decisions can cause them various complications. The issue of the validity of signed contracts needs to be adjusted and the procedure for assessing restrictions on legal capacity must be set up appropriately.

5.1.1. Measure: The concept of a previously expressed wish (PEW)

Description: The symptoms of Alzheimer's disease and other similar diseases manifest gradually. In the early stages of the disease, the patient is aware of the prognosis of worsening symptoms and can responsibly make decisions relating to the future, when his/her cognitive abilities may be impaired. This can be done through a special type of preliminary statement, known as a previously expressed wish, in the sense of Section 36 et seq. of Act No. 372/2011 Coll., on Health Services.

It is a concept of health law containing consent or disagreement with the provision of a certain health service in the event that the patient enters a state of health in which he/she will not be able to express such consent or disagreement. It must be made in writing with a verified signature of the patient, all on the basis of the patient's prior written medical instruction on the consequences of such a decision. It is not possible to apply a previously expressed wish in the case of minors or persons with limited capacity. By using a previously expressed wish, a person with dementia can be sure that this confidential information will reach professionals who will treat or care for him/her in the future. Awareness of the PEW is currently very low not only among the general public, but also among professionals.

Method of performance: Clarification of the conditions for recording a previously expressed wish in the e-health system for people with cognitive impairment. Ensuring that people diagnosed with dementia receive comprehensible information about the possibility of a previously expressed wish and how to proceed if they want to utilize the previously expressed wish, and on the possibility to change their PEW at any time. Raising awareness of the PEW.

Administrator: MoH.

Cooperating entity:

Fulfilment deadline: Second implementation wave.

Budget: NR.

Indicator: The concept of the PEW is part of the e-health system. Up-to-date information on the PEW is available to the public, e.g. on the dementia information and education web portal.

5.1.2. **Measure: Raise awareness of public guardianship and of already-existing information materials on this topic for public and private guardians, for people living with dementia, for informal carers and for the general public**

Description: If an adult's ability to act legally is impaired as a result of a mental disorder, the Civil Code regulates support measures in the event of impairment of the adult's ability to act legally. The individual measures are diverse, thus making it possible to ensure an adequate level of protection corresponding to the needs of the particular person. According to experts working with this target group and according to people living with dementia, awareness of all the possibilities defined by the Civil Code in connection with the impairment of the ability to act legally in the case of a person living with dementia is very low, and it is therefore necessary to increase it.

Method of performance: Publishing information on public guardianship, ensuring sufficient information on the topic of public guardianship in the framework of educational programmes for informal carers and for social workers and workers in social services.

Administrator: MoH.

Cooperating entity: MoLSA, Ministry of Justice of the Czech Republic (MoJ), MEYS.

Fulfilment deadline: From the first implementation wave.

Budget: NR.

Indicator: Current information in the field of public guardianship is regularly updated and available on the websites of public administration institutions (e.g., the MoLSA, MoI CZ) and on the NZIP portal for dementia. Information on public guardianship is included in educational topics for informal carers, social workers and workers in social services.

5.1.3. Measure: Ensuring the systemic availability of public guardianship in municipalities

Description: Funds earmarked for the agenda of public guardianship are included in the contribution for the performance of state administration. The annual lump sum per guardian is now CZK 29 thousand regardless of the number of performed acts, visits and consultations of a specific client. Due to the increasing number of the elderly, people living with dementia and people living with other diseases that may impair their decision-making abilities, there is a need to increase the number and availability of public guardians in municipalities. A lack of funding for public guardianship in municipalities is often the cause of the low number of staff who can perform public guardianship here. It is often the case that public guardianship is performed by the social worker of a municipal office, so there is a concurrence of roles and the social workers of municipal authorities do not have sufficient capacity to perform public guardianship.

Method of performance: In the distribution of funds to municipalities, the financial demands for ensuring the quality performance of public guardianship will be taken into account depending on the local needs of specific municipalities. According to the statement of the MF CZ, an increase of the contribution to CZK 30,500/ward/ year is proposed from 2021.

Administrator: MF CZ (Ministry of Finance).

Cooperating entity: MoI CZ, MoLSA, UTM.

Fulfilment deadline: From the first implementation wave.

Budget: Depending on the number of wards.

Indicator: Financial resources intended for the performance of public guardianship in individual municipalities are optimized.

Abbreviations

ACP CZ	Czech Association of Clinical Psychologists
APSS CZ	Association of Social Service Providers
CAS	Czech Academy of Sciences
BESIP	Traffic Safety Department of the Ministry of Transport of the Czech Republic
CANP	Czech Association for Neuropsychology
MHC:	Mental Health Centre
CGA	Complex geriatric assessment
DMC	Dementia management centre
CT	Computed tomography
CALS	Czech Alzheimer Society
CCE	Evangelical Church of Czech Brethren
CGGS	Czech Gerontological and Geriatric Society
CCP	Czech Chamber of Pharmacists
CNS	Czech Neurological Society - Department of Cognitive Neurology of the CzMA JEP
CZ	Czech Republic
DRG	Diagnosis-related Group, clinical case classification system
PEW	Previously expressed wish
HSR	Home with a special regime
EEA	European Economic Area
ERN-RND	European Registry network - Rare Neurodegenerative Diseases
UH	University hospital
CSF	Czech Science Foundation
GDO	Global Dementia Observatory
HAPIEE	Health, Alcohol and Psychosocial factors in Eastern Europe
IFEHP	Institute for the Further Education of Healthcare Professionals
IPME	Institute for Postgraduate Medical Education of the Czech Republic
ISHS	Institute of Social and Health Strategies
RO	Regional Office
MF CZ	Ministry of Finance of the Czech Republic
MoLSA	Ministry of Labour and Social Affairs
MRI	Magnetic Resonance Imaging
MoJ	Ministry of Justice
MEYS	Ministry of Education, Youth, and Sports
MTMH	Multidisciplinary Team for Mental Health

MU	Masaryk University in Brno
MoI	Ministry of the Interior
MoH	Ministry of Health of the Czech Republic
NAPAD	National Action Plan for Alzheimer's Disease and Other Similar Diseases 2020-2030
NMHAP	National Mental Health Action Plan 2020-2030
NCN NHF	National Centre of Nursing and Non-medical Healthcare Fields
NNO	Non-government non-profit organization
NR	Not relevant
NRPHS	National Register of Paid Health Services
NIMH	National Institute of Mental Health
NPI CZ	National Pedagogical Institute of the Czech Republic
NHIS	National Health Information System
NNP	Department of Nursing and Non-Medical Professions (MoH)
MEP	Municipality with extended powers
PET	Positron emission tomography
MH	Mental hospital
GP	General practitioner
FTP	Framework training plans
DL	Driving license
SHARE	The Survey of Health, Ageing and Retirement in Europe
UTM	Union of Towns and Municipalities of the Czech Republic
SPECT	Single photon emission computed tomography
AGP	Association of General Practitioners of the Czech Republic
SB	State budget
SIDC	State Institute for Drug Control
SGP	Society of General Practice of the CzMA JEP
NIPH	National Institute of Public Health
TA CZ	Technology Agency of the Czech Republic
CU	Charles University in Prague
EO CZ	Employment Office of the Czech Republic
IHIS CZ	Institute of Health Information and Statistics of the Czech Republic
SMP	Department of Science and Medical Professions (MoH)
HVS	Higher vocational school
HEI	Higher education institute
HIC	Health insurance company
EMS	Emergency medical services

References

1. WHO and ADI, *Dementia: a public health priority*. 2012: World Health Organization.
2. MZ ČR, *Národní akční plán pro Alzheimerovu nemoc a další obdobná onemocnění na léta 2016-2019*. 2016, Ministry of Health of the Czech Republic.
3. WHO, *Towards a dementia plan: a WHO guide*. 2018, World Health Organization: Geneva.
4. WHO, *The Global Dementia Observatory Reference Guide*. 2018, World Health Organization: Geneva.
5. MZ ČR, *Národní akční plán pro duševní zdraví 2020-2030*. 2020, Ministry of Health of the Czech Republic
6. WHO, *Global action plan on the public health response to dementia 2017-2025*. 2017, World Health Organization Geneva.
7. Global Burden of Disease Collaborative Network, *Global Burden of Disease Study 2016 (GBD 2016) Incidence, Prevalence, and Years Lived with Disability 1990-2016*. 2017: Seattle, United States: Institute for Health Metrics and Evaluation (IHME).
8. Waldemar, G., et al., *Access to diagnostic evaluation and treatment for dementia in Europe*. *International journal of geriatric psychiatry*, 2007. **22**(1): p. 47-54.
9. Mátl, O., M. Mátlová, and I. Holmerová, *Zpráva o stavu demence 2016*. 2016, Prague: Czech Alzheimer Society.
10. Luzny, J., et al., *Dementia Still Diagnosed Too Late—Data from the Czech Republic*. *Iranian journal of public health*, 2014. **43**(10): p. 1436.
11. WHO, *iSupport for Dementia: Training and support manual for carers of people with dementia*. 2019, World Health Organization: Geneva.
12. MZ ČR, *Zdraví 2030: strategický rámec rozvoje péče o zdraví v České republice do roku 2030*. 2020, Ministry of Health of the Czech Republic: Prague
13. Reilly, S., et al., *Case management approaches to home support for people with dementia*. *Cochrane Database of Systematic Reviews*, 2015(1).

**National Action Plan for Alzheimer's Disease and
Other Similar Diseases 2020-2030**

Graphic design and typesetting: Josef Dufek
Published: March 2021



NAPAD

**National Action Plan for
Alzheimer's Disease and
Other Similar Diseases**



MINISTRY OF HEALTH OF THE
CZECH REPUBLIC

