

YOUNG50

YOUNG50 #Stay Healthy – Cardiovascular Risk Prevention

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Policy guidelines

Beneficiaries

Country	Name	Acronym
Italy	Azienda ULSS 6 Euganea	ULSS6 Euganea
Italy	Azienda ULSS 4 Veneto Orientale	ULSS4 V. Orient - ProMIS
Luxembourg	Ministère de la Santé	MOHLUX
Luxembourg	Luxembourg Institute of Health	LIH
Lithuania	Viesojilstaiga Centro Poliklinika	Centro poliklinika
Romania	Asociata Aer Pur Romania	AER PUR ROMANIA
Spain	Asociacion Instituto de Investigacion en Servicios de Salud Kronikgune	KRONIKGUNE



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Policy integration and sustainability- Contribution of Italy in follow-up and results

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1. Introduction

1.1. Background of the report

The European Commission, within the framework of the Third Health program (2014-2020), launched the Call "Implementation of best practices to promote health and prevent non-communicable diseases and to reduce health inequalities" in 2018.

Ulss6 Euganea or Padova, Italy, in collaboration with ProMIS and in partnership with organizations and institutions of four other EU Member States (Lithuania, Luxembourg, Romania and Spain), developed a project proposal called Young50.

The implementation of YOUNG50 was divided into three phases:

- Provide a needs assessment and situation analysis to adapt the Cardio50 best practice to the local context and define implementation action plans.
- Roll out and piloting of the screening and prevention intervention in selected Member States.
- Impact evaluation of the pilot and follow-up study in order to institutionalize the project.

1.2. Objectives of the project evaluation

The activity for which Synergia was responsible concerned the evaluation of the long-term sustainability of the YOUNG50 project, to provide indications and policy guidelines for the implementation of the CARDIO50 screening program.

The final goal is to gain a better understanding of the ways to integrate screening and prevention intervention into regional and national policy and planning of EU member states involved in the project.

The expected outcomes are the development of recommendations and Policy Guidelines to foster the inclusion of the cardiovascular disease prevention CARDIO 50 model in Regional or National Health Plans. As a result, Synergia has drafted the policy guidelines envisaged by the project as part of Work Package 7.

Objectives of the Work Package 7 were:

- Short-term impact analysis of YOUNG50.
- Mid-term impact analysis of YOUNG50.
- Policy integration and sustainability.

1.3. List of project partners

Azienda Ulss 6 Euganea (Italy)

ULSS 6 Euganea, an Italian Local Health Authority, serves as the coordinating partner for YOUNG50 and provides health and social services to a population of approximately 945,000 inhabitants in the province of Padua. The institution includes seven hospitals and various departments, such as the Department of Prevention, Department of Addiction, Department of Mental Health, and Department of Rehabilitation, employing around 7,800 individuals.

ProMIS (Italy)

ProMIS is an Italian Network led by the Veneto Region and involving 20 Italian Regions, the Ministry of Health, and various other national ministries and agencies. ProMIS has activated working groups on critical issues

and works in the management of European projects, with a particular focus on communication and dissemination activities.

Ministry of Health in Luxembourg (Luxembourg)

The Ministry of Health in Luxembourg, under the direction of the Minister, oversees actions to protect and promote health in Luxembourg. The Directorate of Health, a public administration, collects and monitors health data, develops preventive programs, assesses healthcare services, and writes national plans on strategic issues, among other missions.

Centro poliklinika (Lithuania)

Centro Poliklinika, a public institution in Lithuania, is one of the most significant outpatient health care institutions in the country, offering various medical services, including the latest information technology and computer-based patient registration, medical work system, a laboratory that meets European standards, department of day-care therapy and surgery, branch of clinic of nursing, palliative medicine, and social services.

Asociata AER PUR ROMÂNIA (Romania)

Aer Pur Romania, an NGO with over 25 years of experience in Public Health, Health Research, and Advocacy, works at the national and international levels for tobacco and air quality control. With a multidisciplinary team, it became a partner for different Romanian and European entities in Public Health and Health Research.

Asociacion Instituto de InvestigacionenServicios de Salud [Kronikgune]

Kronikgune, an Institute for Health Services Research, conducts research on health and socio-health services' management and organization. Its scientific research program is aligned with the policies of the Ministry of Health of the Basque Government, focusing on continuous adaptation and transformation of the health system by addressing challenges related to aging, chronicity, and dependency.

Campania Region (affiliated to ProMIS)

Regione Campania and the Department of Health Protection, affiliated to ProMIS, is involved in YOUNG50 through their respective roles in the planning and organization of the regional health systems, managing regional hospitals network and territorial services, coordinating and planning digital health interventions, and integrating activities with research and innovation organizations focusing on prevention programs.



2. Section A: Country evaluation report

2.1. The work process

2.1.1. Evaluation design and methodological approach

The work process delineated by Synergia encompasses two primary lines of intervention, each characterized by distinct objectives, methodologies, and anticipated outcomes. The methodological approach adopted for this evaluation entailed both vertical and horizontal/transversal evaluations.

The vertical evaluation focused on assessing the sustainability and integrability of the CARDIO 50 model within the policy systems of the partner countries' individual territorial levels of government, while the horizontal/transversal evaluation aimed to examine the potential transferability of the model across European member countries.

This paragraph will delve into the specifics of the first line of intervention, providing a comprehensive overview of the evaluation design and methodological approach employed.

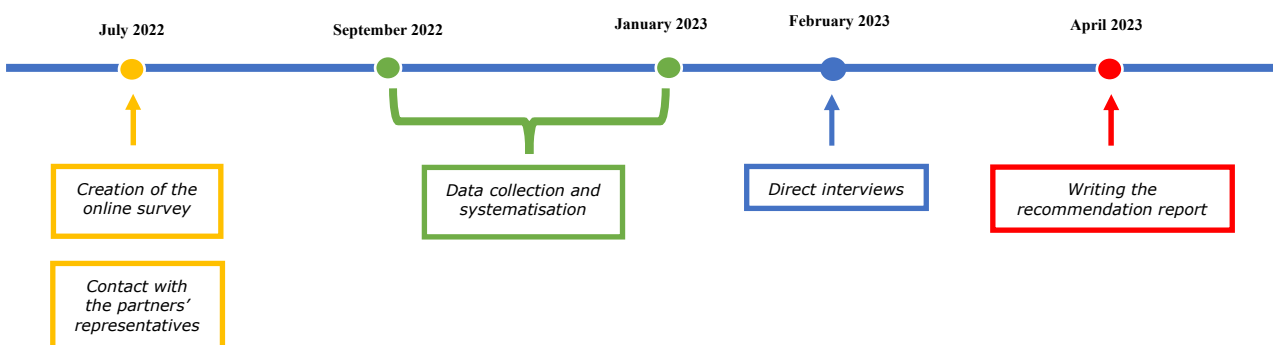
The vertical analysis, which serves as the focal point of this evaluation report, centres on the vertical evaluation of the sustainability and integrability of the CARDIO50 model within the policy systems of the partner countries' individual territorial levels of government. This action directly involves project partners in Italy, Luxembourg, Lithuania, and Romania. The primary objective of this intervention is to obtain the necessary normative and programmatic documentation from the project partners.

To gather the requisite information for each action, Synergia employed various data collection methods (section 2.3.), including online surveys, direct interviews, and comparative analysis. These approaches facilitated the acquisition of comprehensive insights and enabled the formulation of tailored recommendations and guidelines for each Member State represented by the project partners.

As the final objective of this phase of evaluation, Synergia proceeded to develop specific recommendations and policy guidelines customized for each Member State represented by the project partners (section 4.) to integrate screening and prevention intervention into regional and national policy.

2.1.2. Timetable

The evaluation process for the Young50 project spanned a period of 10 months, commencing in July 2022 and concluding in May 2023. This process encompassed five distinct phases that were carefully structured to ensure comprehensive assessment and generate valuable recommendations.



2.1.3. Tools

Online survey

The online questionnaire designed for project partners aimed to gather information pertaining to the different dimensions of the implementation process of the Young50 program in their respective countries or regions.

Furthermore, a specific set of questions was posed to collect information on the legislative framework in each project partner country.

For partners who implemented the program at a regional level, these questions covered aspects such as the planned adoption of the Young50 prevention protocol into regional policy and planning, the existence of a legal framework guiding CVD prevention in the region, and the availability of guidelines for implementing CVD prevention across the region. Similarly, for partners who implemented the program at a national level, a separate set of questions was included. These questions addressed the adoption of the Young50 prevention protocol into national policy and planning, the presence of a legal framework guiding CVD prevention in the country, and the availability of guidelines for implementing CVD prevention across the country.

For each legal document and guideline mentioned, partners were requested to provide specific information, including the title, date of release, date of the last update, name of the institution that issued the regulation, and the nature of the document. Finally, partners were asked to provide a brief description in English, summarizing the aforementioned information.

Direct interviews

The conducted interviews were designed to gather methodological insights into various dimensions of the Young50 program. The investigation commenced by exploring the contextual implementation of the program, encompassing an examination of the presence of comparable cardiovascular disease (CVD) prevention programs or analogous health interventions. Furthermore, the extent of collaboration and integration with existing initiatives was probed, including the establishment of partnerships with public or private entities. In cases where partnerships were established, the involvement of public institutions at different strategic levels (national, regional, local) was scrutinized.

The interviews also encompassed an assessment of the program's sustainability, encompassing an evaluation of its long-term financial, institutional, and technical viability. This entailed an analysis of the allocation of funds, including access to external financial resources, to support the program's operations. Additionally, the potential for the program to extend beyond its project life was explored.

The transferability of the Young50 program constituted a significant focal point of the interviews. This entailed an examination of whether the program had been integrated into regional or national initiatives, or if future plans for integration were in place. If such plans were absent, the underlying reasons were elucidated. Furthermore, the interviews sought to identify aspects of the Young50 prevention program that could potentially serve as a replicable model in diverse regions or contexts within the country. The limitations and available resources pertaining to the program's transferability were also investigated.

Considering the profound impact of the Covid-19 pandemic, the interviews addressed the adaptive measures employed by the Young50 project in response to the widespread contagion. The challenges encountered as a result of the Covid-19 emergency were explored, including an estimation of any anticipated delays in project activities. Furthermore, the interviews sought to ascertain whether the pandemic had facilitated the development of operational protocols for use in emergency situations.

Lastly, the interviews aimed to identify and analyze the principal strengths and weaknesses of the Young50 project. This evaluation was intended to provide a comprehensive understanding of the program's commendable attributes as well as areas necessitating improvement.



2.2. Data analysis

2.2.1. Technical analysis of legislation in each Member State of the project partners

As mentioned in the previous section, Synergia created an online survey/systematization scheme that was used by the partners to indicate the reference legislation at national or regional level, according to the territorial competence of the partner, with a brief description in English. The questionnaire responses and the documentation attached formed the basis for the desk analysis of the specific national context of each partner.

Table 1: Results of the Online Survey (refer to Appendix 4.1.1)

Respondent	National guidelines for prevention	National legal framework	Regional legal framework
Azienda Ulss 6 Euganea (Italy)	National Prevention Plan (PNP) 2020-2025: approved by the Conference of State and Regions and Autonomous Provinces. It focuses on prevention and health promotion.		Conference of State and Regions and Autonomous Provinces; Regional Prevention Plan 2020-2025; Deliberation of the Director General of LHA Ulss6 Euganea: implements the Regional Prevention Plan, including the uniform implementation of the screening program "CARDIO50"; Deliberation of the Veneto Regional Council: Regional Social Health Plan 2019-2023;
Ministry of Health in Luxembourg (Luxembourg)	National Plan for Cardio-Neuro-Vascular Diseases: it aims to reduce morbidity and mortality from cardio-neurovascular diseases, with cross-cutting objectives related to innovation, evidence-based medicine, and fighting health inequalities.	Law on the organization of the Directorate of Health; Social Security Code, Book 1: health-maternity-insurance; Law relating to the rights and obligations of the patients.	
Centro poliklinika (Lithuania):	Lithuanian Health Strategy 2014-2025.	Decision on the adoption of the Lithuanian Health Strategy for 2014-2025; Order on the approval of a program for the financing	

		of measures for the selection and prevention of persons at high risk of cardiovascular diseases; Order on the approval of the description of the procedure for the organization of a health promotion program for the prevention of cardiovascular diseases and diabetes mellitus.	
Asociata AER PUR ROMÂNIA (Romania)			Law regarding the health reform.

Overall, the regional and national legislation analysed in the four partner countries of the Young50 project demonstrates a commitment to prevention and health promotion. The plans and programs aim to address coordination issues, strengthen healthcare services, and reduce the incidence of chronic diseases. Equity objectives and patient rights are also emphasized in the legal framework.

Nonetheless, upon scrutinizing the existing regulatory framework in the realm of health, notable variations become apparent. Specifically, Italy, Luxembourg, and Lithuania have already established comprehensive national guidelines and prevention plans, with Italy and Luxembourg even having specific national guidelines for cardiovascular prevention. On the contrary, Romania only reports the existence of a regional law pertaining to an ongoing reform. This legislation does not specifically address cardiovascular diseases; rather, it aims to ensure diverse principles concerning public health and healthcare in Romania. Consequently, there is a lack of specific laws or guidelines in place for cardiovascular disease prevention in Romania.

These disparities highlight the divergence among the partner countries in terms of their regulatory approaches. Nevertheless, despite these dissimilarities, all countries were able to effectively implement the activities of the Young50 project.

2.2.2. Results from the survey and interviews: outputs and sustainability of Young50 project

In order to comprehensively assess the transferability potential of the CARDIO 50 program, Synergia adopted a methodology that involved conducting direct interviews with key local and national actors. These interviews were conducted with the aim of acquiring in-depth insights into transferability aspects of the program. To facilitate the gathering and organization of relevant information, Synergia established communication channels with representatives from each project partner. By engaging directly with stakeholders, Synergia sought to enhance its understanding of the program's transferability and conduct a thorough evaluation of its impact. This section presents the findings obtained from these interviews, which showcase the perspectives and experiences shared by representatives from diverse countries. The resulting insights shed light on contextual nuances and contribute to the evaluation of the program's suitability for implementation in various settings.

List of interviewees



Country	Name	Affiliation
Lithuania	Marius Ciurlionis	Public Institution Centro Poliklinika
Luxembourg	Fabrice Mouche, Catherine de Muysen, Anne-Marie Reuter, Maria Ruiz	Directorate of Health Luxembourg Institute of Health
Italy	Federica Michieletto	Department of Prevention- Veneto Region
Romania	Mira Florea	Iuliu Hatieganu University of Medicine and Pharmacy

2.2.2.1. Regione Veneto (Italy)

The interview with the Italian project leader provided valuable insights into the Young50 project and its relationship with other cardiovascular disease (CVD) prevention programs. Although Italy was not a site for the Young50 pilot, it is still included in the comparison as a useful context for better understanding the implementation of the project.

Young50 interventions encompassed a screening program, information campaigns raising awareness on CVD prevention, and the development of an app to facilitate participant follow-ups. Additionally, the project involved other regions/organizations in its interventions, further enhancing its impact.

The project introduced **innovations** in the context of implementation, notably the development of an app that streamlined participant follow-up. It also established connections with existing screening and health prevention programs. Young50 screening interventions synergized with the Department of Prevention at the local, regional, and European levels. Leveraging the Department of Prevention's strategic resources, including databases, screening templates, and human resources for the vaccination program, enhanced the effectiveness of the project. Furthermore, the project was connected to the EUPAP project on physical activities on prescription implemented at the European level. The **partnerships** established with other organizations, such as EUPAP, the University of Padua, other local health authorities, the European Society of Cardiology (ESC), and locally endorsed voluntary organizations, further strengthened the project's collaborative network.

During the interview, it was revealed that while Italy has other **initiatives at the national level** for chronic disease management and lifestyle modifications, these efforts are not fully integrated or systematized. To avoid overlapping target populations, efforts were made to integrate the Cardio50 and Young50 experiences. The evaluation of the project's financial, institutional, and technical sustainability underscored the importance of personnel redistribution, training, and acquiring new resources. While no external **funds** were allocated, the project utilized internal resources and it is expected to be integrated into the prevention programs of Italian regions without requiring additional resources.

The Young50 program shows promise **for growth beyond its project lifespan**, aiming to incorporate its activities into the system of all healthcare organizations within five years. Although the program has not been fully implemented or integrated into regional or national programs, its transferability is anticipated through integration with primary care policies and the establishment of health centres in each region. Proactive outreach and the use of informatics tools within the Young50 prevention program serve as models for other regions, particularly those lacking similar resources. However, limitations in transferability arise from resource constraints and the organizational model, which rely on effective screening and care management practices.

In terms of **strengths**, the interview highlighted the Young50 project's ability to mobilize diverse individuals around the issue of chronic conditions and effectively reach individuals at risk. The project also raised awareness among primary care professionals regarding lifestyle factors. However, **weaknesses** were identified, including the challenge of ensuring consistent participation and the need for extensive network support to provide specialized services and coordinated care.

The project faced significant challenges during the **COVID-19 pandemic**. For a period of three years, all resources were directed towards managing the pandemic, including contact tracing, vaccinations, and recovering healthcare services. Unfortunately, this resulted in limited availability to focus on the project's goals, such as the development of Cardio50 and engaging the target group of vulnerable 50-year-olds.

2.2.2.2. Ministry of Health in Luxembourg (Luxembourg)

The interview with the Luxembourg partner, the Ministry of Health in Luxembourg (MOHLUX), provided valuable insights into the Young50 project.

Regarding the presence of other **CVD prevention programs** or health interventions similar to Young50, it was stated that while there are other prevention programs targeting cancer, there is currently no specific program connected to CVD. However, MOHLUX emphasized the importance of synergy and integration among national programs and other organizations to consider the broader healthcare landscape.

Collaboration and integration with existing programs have been developed within the Young50 project. General practitioners (GPs) play a crucial role in referring patients to other programs, such as smoking prevention programs, showcasing a network of collaboration. GPs receive training not only in Young50 but also in other preventive initiatives. Although partnerships with the Luxembourg Institute of Health (LIH), the Cardiology society, and the GP associations are unofficial, their support has been significant. Identifying the appropriate partners can be challenging, particularly when dealing with multiple GP associations, but discussions are ongoing. It is worth noting that Luxembourg has a national-based study on CVD, providing substantial data in this area.

The project successfully implemented an **information campaign** to inform the local community. The campaign utilized various channels, including a dedicated website, distribution of informational materials, an e-mail campaign, and engagement with academic associations of GPs and cardiology. Internal staff training was also conducted to ensure widespread knowledge of the project.

Regarding the evaluation of the project's **financial, institutional, and technical sustainability** in the long run, MOHLUX emphasized the importance of political willpower to invest in the project. With political support, both financial and technical aspects can be addressed. Part of the state budget has been allocated for

financing Young50, and additional funds may be added in 2024 and 2025 depending on the implementation of the program and political support. The presence and engagement of GPs are also deemed fundamental for the sustainability of the project.

As regards the potential **transferability** of the project and the possibility for Young50 to become a national screening program, the results of the Young50 project in Luxembourg are expected to be presented to the Executive Committee, which will make a decision regarding the continuation or extension of the program in collaboration with the Luxembourg Institute of Health (LIH). If the decision is to continue or extend the program, two main actions will be undertaken: increasing the number of participating general practitioners (GPs) and participants, as well as refining the statistical analysis of the results. Based on the outcomes, two possible directions for the project can be considered. The first option involves the conversion of the program into a national screening initiative, potentially establishing a coordination centre for organized cancer screenings. This decision would require further deliberation and involvement of the Executive Committee. Alternatively, the project may explore the development of screenings for risk factors and Cardio-Neuro-Vascular (CNV) diseases using different actors and tools compared to those utilized in the Young50 project. This alternative direction suggests a potential expansion of the project's scope to address a broader range of health concerns beyond the specific focus on CNV.

Overall, the interview highlighted the need for integration with existing programs, collaboration with relevant organizations, and the significance of political willpower and GP involvement for the long-term success and sustainability of the Young50 project in Luxembourg.

2.2.2.3. Centro poliklinika (Lithuania)

The interview with the Lithuanian partner, Centro Poliklinika, revealed important findings regarding the Young50 project.

The project did not introduce innovations in **implementation** and is not connected to existing screening or health prevention programs. Although Centro Poliklinika has not established **partnerships** with other organizations, involvement from other regions and organizations has been observed in the provision of Young50 interventions, such as the screening program and information campaigns to disseminate knowledge of the project internal staff training.

The evaluation of the project's **long-term financial, institutional, and technical sustainability** revealed human resources as a major concern. The COVID-19 pandemic further complicated resource management, with limited financial support and challenges in maintaining salaries. Despite these difficulties, the project continued its activities during the pandemic, albeit with disruptions and content delivery challenges.

Funds for the project were allocated through the project itself and self-contribution. However, the salary increases over the years created challenges in attracting professionals to work at the projected salary levels. Evidence suggests that the initiative has the potential to extend beyond the project's lifespan. The screening questionnaire used in the project could be implemented or incorporated into the national program, and plans are underway to run similar projects in small municipalities.

Regarding **integration into regional or national programs**, some parts of the Young50 program have already been included in the national program, while others are still under consideration. The project's preventive aspects and screening questionnaire have been proposed as good practices for implementation in other regions or contexts within the country. However, **limitations in transferability** were identified, such as the unexpectedly low rate of people coming for screening and the need for better dissemination and commercial strategies to attract a larger audience.

The **COVID-19 emergency** had a significant impact on the project, causing disruptions during the project's launches and implementation of pilots. The coordination among partners played a crucial role during this period, but financial support and the lockdown measures posed challenges. Fear and reluctance to participate in screenings persisted even after the pandemic, particularly among 50-year-olds with pre-existing chronic diseases.

The main **strengths** of the Young50 project identified in the interview included strong collaboration between partners and the support provided by the Italian partner. The flexibility in implementation was also highlighted, given the diverse national contexts involved. However, the existence of pre-existing screening programs at the national level created confusion for individuals already participating in those programs.

As a **suggestion** for future implementation of Young50 or similar projects, the interviewee recommended providing professionals involved in screening with the opportunity to visit Italy for a day to observe screening procedures first-hand, which would enhance their understanding and knowledge.

2.2.2.4. Asociata AER PUR ROMÂNIA (Romania)

During the interview with the Romanian partner, Asociata AER PUR ROMÂNIA, several insights were gained regarding the context and the project implementation.

In particular, as regards the presence of other **cardiovascular disease (CVD) prevention programs and health interventions similar to the Young50 project** in Romania, two notable initiatives were identified: "Everything for your heart" and the information campaign about arterial hypertension initiated by the Romanian Society of Cardiology. These programs demonstrate collaboration and integration with existing preventive activities, involving family doctors and various public and private organizations.

Regarding the **financial, institutional, and technical sustainability** of the Young50 project, it was assessed that institutional and technical aspects are well-established, although financial support could be improved. At present, no funds have been allocated, including access to external financial resources, to support the project. However, there is evidence suggesting the potential for the initiative to grow beyond the project's lifespan by leveraging existing instruments, educational materials, and established networks. The main challenge lies in securing adequate funding for such activities.

Integration of the Young50 program into regional or national programs has not yet been achieved. However, there are plans for **future implementation and integration**, such as incorporating it into the Health Ministry Prevention Strategy, particularly focusing on assessing and managing risk factors in asymptomatic adults. The involvement of general practitioners, academic institutions, and experienced non-governmental organizations is seen as crucial in this process, although the influence of the coordinating non-governmental organization in Romania may be limited.

The Young50 prevention program presents aspects that can serve as a model for other regions or contexts within the country. It is considered a best practice model for raising awareness and preventing cardiovascular diseases, particularly in rural areas with unhealthy dietary patterns, other risk factors, and limited access to family doctors. Replicating the results of the Young50 project through the involvement of community nurses is seen as a potential approach.

Transferability of the Young50 program has both limits and resources. Challenges include the time-consuming nature of motivating participation, administering questionnaires, and providing financial incentives to family doctors. The project has adapted to the COVID-19 pandemic by implementing remote application of questionnaires and counselling, while the screening of biological factors had to be postponed until specific days could be organized by family doctors to ensure separation from consultations with sick patients.

Difficulties experienced due to the **COVID-19** emergency include a low response rate to participation invitations and concerns about infection. An estimated delay of 6 months to 1 year in project activities was reported. Despite these challenges, the advent of the pandemic has led to the development of operational protocols for emergency response, albeit with significant difficulties.

The main **strengths** of the Young50 project identified during the interview include raising awareness about cardiovascular disease risks in asymptomatic individuals, conducting information activities, providing education and counselling for promoting a healthy lifestyle. Additionally, the utilization of information and communication technology for data collection and health promotion was recognized as an advantage.

The main **weaknesses** identified were the large number of questionnaire items, the extended duration required for application, and explaining the relevance of the questions to participants who lost interest due to time investment. The project's limited budget also hindered the payment of participating family doctors.



2.3. Conclusion

2.3.1. Summary of findings

Although the duration of the project was limited, some significant results can be observed thanks to the interviewees and the online questionnaire with respect to the target population, different implementation and partnerships created within countries and plans for the future growth of the project.

- The original CARDIO50 best practice was targeted at the 45-59 year-old population. However, due to high adesion rates but insufficient human resources to manage the flow of attendees and organize appropriate follow up, it was agreed to limit the target population in Italy to persons aged 50 years. Hence the name given to the project to transfer the best practice: “Young50”. In Luxembourg, Romania, and Lithuania, the screening program is primarily targeted at individuals aged 50. Initially, there was a consideration to broaden the age range to include individuals aged 50-59 years. However, after careful deliberation, it was determined that maintaining the specific age of 50 would be more effective. The range includes both male and female recipients. In all the countries, recipients were classified into risk groups based on the screening results.
- An **information campaign** about the project was planned and fully implemented in all countries, with the local community informed via distribution of informational materials and websites. Internal staff training to disseminate knowledge of the project was carried out in Luxembourg and Lithuania. Romania and Italy involve other regions/organizations in their interventions. Italy developed an app to facilitate follow-ups.
- The four countries involved in the Young50 project have similarities and differences in terms of **project implementation and partnerships**. Lithuania's project did not introduce any innovations as there is a national screening program, but it allowed to activate synergies with another project under the coordination of the Ministry of Health (the European project Physical Activity and Young50). In particular, patients with CVD risks were offered a big variety of services for the physical activity. Luxembourg's project does not introduce innovations either but connects with existing national screening and health prevention programs and establishes a partnership with the Luxembourg Institute of Health (LIH). Besides, Luxembourg activates synergies with other prevention programs that are not specifically connected with CVD. Italy's project introduces innovations with the development of an app and connects with existing screening and health prevention programs, as well as establishes partnerships with various organizations. In Romania YOUNG50 introduced innovations too by evaluating behavioural and biological risk factors for cardiovascular diseases, providing educational paths, and screening cardiovascular risk factors among age groups not usually targeted. It is not connected to existing screening and health prevention programs but establishes partnerships with the Iuliu Hatieganu University of Medicine and Pharmacy, the Public Health Directorate of Cluj county, and general practitioners from Cluj.
- In the four countries, the Young50 has also different **potential for growth and sustainability**. In Romania and Lithuania, there is no evidence to suggest that the project will continue beyond its project life, and currently, there is no funding program in place to ensure its sustainability. However, in Lithuania it is likely that parts of the project will be implemented in the National Program for heart risk prevention and they are also planning our finances to run similar projects in small municipalities.



In contrast, in Luxembourg, the Ministry/Directorate of Health part of the state budget was allocated to fund YOUNG50 and other funds are likely to be added, depending on the political willpower. If this element is present, both the financial and the technical sides will follow. Therefore, the program probably will be converted to national screening or at least there will be developed screening for risk factors and Cardio-Neuro-Vascular diseases with actors and tools different from those of Young50. Similarly, in Italy, the Veneto Region has allocated funds to ensure future sustainability of a project that is deemed reproducible at both regional and national levels. However, to ensure its long-term sustainability, the project requires additional funding.

- In conclusion, the four countries have different **future development plans** for their respective projects. Lithuania has not made any official decisions yet but has had active discussions with the Ministry of Health on incorporating the project's good practices into an existing national CVD prevention program. Luxembourg's project has already transitioned from a pilot program to a nationwide systematic screening program. In Italy, the Young50 project will extend its interventions to all local health authorities in all districts of the Veneto Region. Finally, Romania plans to develop its platform for data registration and risk classification, improve tools and protocols for data collection, and proliferate educational materials for healthy lifestyle promotion sessions and CVD prevention.
- As regards the projects' main **strengths**, there has been a common acknowledgment that YOUNG50 has increased the awareness of the risk of cardiovascular disease, through information activities, education and counselling to promote a healthy lifestyle.

All the countries have highlighted that the good collaboration between partners has been a fundamental aspect, as well as the flexibility in the implementation, considering the presence of different national contexts. Italy and Luxembourg have also mentioned that working with other organizations and building a network has been an added value that allowed them to give specific assistance to patients (e.g., smoking support programs).

With respect to the **weaknesses** of YOUNG50, in all the countries the number of human resources, especially general practitioners, was lower than the real need.

In general, the spread of Covid-19 has been a common challenge too: the lockdown slowed down project activities and even after the emergency period it was difficult to intercept patients for screening, who feared contagion.

2.3.2. Sustainability Implications and recommendations for the project partners' countries

By implementing these strategies, project partner countries can make significant progress in reducing the burden of cardiovascular diseases and improving the cardiovascular health of their populations. These efforts require a multi-sectoral approach, strong collaborations, and sustained commitment from governments, healthcare providers, and communities.

2.3.2.1. Regione Veneto

1. Strengthen Collaboration and Partnerships: LHA AULSS 6 Euganea should foster stronger partnerships with key organizations such as the University of Padua, other local health authorities, the European Society of Cardiology (ESC), and locally endorsed voluntary organizations. Encourage knowledge sharing, resource pooling, and joint initiatives to enhance the impact of CVD prevention programs.



2. **Align with National Prevention Plans:** Leverage the National Prevention Plan (PNP) 2020-2025 to align the objectives and strategies of the Young50 project with the national policy framework. Collaborate with the Ministry of Health to ensure access to support resources such as online platforms, guidelines, and indicator fact sheets for effective implementation.
3. **Capitalize on Existing Programs:** Integrate the Young50 project with existing screening and health prevention programs at the regional and national levels. Strengthen connections with the Department of Prevention and leverage their strategic resources, including databases, screening templates, and human resources, to enhance the effectiveness of the project. Explore synergies with initiatives like the EUPAP project on physical activities on prescription, implemented at the European level.
4. **Ensure Integration and Systematization:** Address the current lack of full integration and systematization of chronic disease management and lifestyle modification initiatives at the national level. Work towards integrating existing screenings and Young50 experiments to avoid overlapping target populations. Evaluate the financial, institutional, and technical sustainability of the project over time, emphasizing personnel redistribution, training, and acquiring new resources.
5. **Promote Transferability and Scalability:** Plan for the long-term growth and sustainability of the Young50 program beyond its project lifespan. Aim to incorporate its activities into the systems of all healthcare organizations within five years. Focus on integrating the program with primary care policies and establishing health centers in each region. Proactively share knowledge, applications and information tools developed within the Young50 prevention program as models for other regions, especially those lacking similar resources.
6. **Address Challenges and Lessons Learned:** Mitigate the challenges faced during the COVID-19 pandemic by incorporating lessons learned into future planning. Strengthen resilience by ensuring flexibility and adaptability in project implementation. Develop contingency plans for emergencies and explore innovative approaches for engaging vulnerable target groups, considering limited hospital availability and potential difficulties in reaching them.
7. **Integrate prevention initiatives for cardiovascular diseases with the on-going investments of Mission 6 of the Recovery and Resilience Facility, especially for what regards the prevention objectives and strategies foreseen at territorial level by Case della Comunità (Community Centres).**

2.3.2.2. Luxembourg

1. **Integration and Synergy with Existing Programs:** Building upon the insights from the interview, it is recommended that Luxembourg strategically integrate the Young50 project into existing national prevention programs. This can be achieved through collaborative partnerships with relevant organizations, including the Luxembourg Institute of Health (LIH), the Cardiology Society, and GP associations. Leveraging these partnerships, Luxembourg should explore avenues for synergy and collaboration, particularly with programs targeting cancer prevention. By integrating the Young50 project within the broader healthcare landscape, Luxembourg can optimize the impact of preventive initiatives.
2. **Strengthening the Legal Framework:** Luxembourg has a strong legal framework in place, as evidenced by the existing legal documents related to health, preventive medicine, and patient rights. To ensure the effective integration of the Young50 project into regional and national policies, it is recommended that Luxembourg periodically review and update these legal documents. This review process should aim to align the legal framework with evolving healthcare needs, technological



advancements, and best practices in CVD prevention. By ensuring that the legal framework remains robust and relevant, Luxembourg can provide a solid foundation for the long-term sustainability and integration of the Young50 project.

3. **Enhancing Collaboration with General Practitioners (GPs):** GPs play a vital role in healthcare delivery and preventive interventions. Given their significance, it is recommended that Luxembourg further strengthen collaboration with GPs to support the integration of the Young50 project. This can be achieved through ongoing training initiatives that not only focus on the Young50 project but also encompass other relevant preventive initiatives. Luxembourg should explore opportunities to engage GP associations, such as through official partnerships, to facilitate knowledge exchange, promote referral pathways, and enhance the participation of GPs in the Young50 project. By actively involving GPs, Luxembourg can ensure the project's sustainability and effectiveness in reaching the target population.
4. **Ensuring Financial and Institutional Sustainability:** To ensure the long-term financial and institutional sustainability of the Young50 project, it is essential for Luxembourg to maintain political willpower and investment in the program. The allocation of state budget funds for financing the project is commendable. Luxembourg should continue to prioritize the project's financial sustainability, exploring additional funding opportunities from both public and private sources. Additionally, institutional support and governance structures should be strengthened, ensuring clear roles and responsibilities, effective coordination, and accountability among stakeholders involved in the Young50 project. By securing financial and institutional sustainability, Luxembourg can ensure the project's continuity and impact.
5. **Expanding the Project's Scope and Transferability:** Luxembourg should consider the transferability and scalability of the Young50 project beyond its current scope. Based on the interview insights, Luxembourg has the opportunity to leverage the project's success and outcomes to expand screening initiatives for other risk factors and diseases beyond cardio-neuro-vascular (CNV) conditions. This expansion can be pursued through the involvement of different actors and tools while ensuring coordination and collaboration among relevant stakeholders. Luxembourg should explore the potential for establishing a coordination centre for organized screenings and, if deemed suitable, engage the Executive Committee and LIH in further deliberations. By broadening the project's focus and transferability, Luxembourg can make a significant impact on public health beyond CNV prevention. In summary, integrating the screening and prevention intervention of the Young50 project into regional and national policies in Luxembourg requires a comprehensive approach. By aligning with the legislative framework, strengthening collaboration with GPs, enhancing the legal framework, ensuring financial and institutional sustainability, and exploring the project's expansion and transferability, Luxembourg can maximize the impact of the Young50 project and establish a robust framework for CVD prevention at both regional and national levels.

2.3.2.3. Lithuania

1. **Enhancing Public Awareness and Education:** To ensure the successful implementation of the Young50 project in Lithuania, it is crucial to prioritize public awareness and education. Centro Poliklinika should develop comprehensive awareness campaigns targeting both the general population and high-risk groups, emphasizing the importance of early detection and prevention of CVDs. These campaigns can utilize various channels, including traditional media, social media platforms, and community engagement programs. Additionally, educational initiatives should be implemented to



enhance public knowledge about lifestyle modifications, risk factors, and the significance of regular check-ups. By empowering individuals with knowledge, Lithuania can foster a proactive approach towards cardiovascular health.

2. **Collaboration with Primary Healthcare Providers:** Centro Poliklinika should establish strong collaborations with primary healthcare providers, such as family doctors and general practitioners, to facilitate the integration of the Young50 project into routine healthcare practices. Regular communication channels should be established to ensure the efficient referral of high-risk individuals identified through the screening program. Training programs for healthcare professionals can be organized to enhance their knowledge and skills in CVD prevention, risk assessment, and lifestyle counselling. By actively engaging primary healthcare providers, Lithuania can ensure a coordinated and effective approach to cardiovascular health.
3. **Strengthening Data Collection and Analysis:** A robust data collection and analysis system should be developed and implemented to monitor the outcomes and impact of the Young50 project in Lithuania. Centro Poliklinika should collaborate with relevant institutions to establish a centralized database that captures essential information, including screening results, risk assessments, interventions, and follow-up data. Data analysis should be conducted regularly to identify trends, evaluate the effectiveness of interventions, and inform evidence-based decision-making. By collecting and analyzing comprehensive data, Lithuania can continuously improve the Young50 project and tailor interventions to address specific needs.
4. **Leveraging Technology and Digital Solutions:** Lithuania should leverage technology and digital solutions to enhance the reach and efficiency of the Young50 project. Centro Poliklinika should explore the development of a user-friendly digital platform that allows individuals to assess their cardiovascular risk, access educational materials, and receive personalized recommendations for lifestyle modifications. Additionally, telemedicine services can be incorporated to provide remote consultations, monitor progress, and offer ongoing support to individuals participating in the project. By embracing digital solutions, Lithuania can overcome geographical barriers and maximize the project's impact.
5. **Building Partnerships and Securing Funding:** Centro Poliklinika should actively seek partnerships with relevant stakeholders, including government agencies, non-governmental organizations, and private sector entities, to ensure the sustainable implementation of the Young50 project. Collaborative efforts can be made to secure funding from multiple sources, including public funds, private donations, and corporate sponsorships. These partnerships can also facilitate knowledge exchange, resource sharing, and the dissemination of best practices in cardiovascular health. By fostering strong partnerships and securing adequate funding, Lithuania can establish a solid foundation for the long-term success of the Young50 project.

2.3.2.4. Romania

1. **Strengthening Policy Integration:** The National Institute of Public Health in Romania should prioritize the integration of the Young50 project into existing national health policies and strategies. This can be achieved through collaboration with the Ministry of Health, the National Health Insurance House, and other relevant institutions. By aligning the project with the national health agenda, Romania can ensure its long-term sustainability and integration into routine healthcare practices. Additionally, periodic reviews of existing policies should be conducted to adapt to emerging scientific evidence and evolving healthcare needs.



2. **Engaging Primary Healthcare Providers:** The active engagement of primary healthcare providers, such as family doctors and general practitioners, is crucial for the successful implementation of the Young50 project in Romania. The National Institute of Public Health should collaborate with these healthcare professionals to incorporate the project into their daily practice. Training programs and workshops can be organized to enhance their knowledge and skills in cardiovascular risk assessment, lifestyle counseling, and the management of CVDs. By equipping primary healthcare providers with the necessary tools and resources, Romania can ensure a comprehensive and coordinated approach to cardiovascular health promotion.
3. **Implementing School-Based Interventions:** The National Institute of Public Health should focus on implementing school-based interventions as part of the Young50 project in Romania. Schools serve as an ideal setting for promoting healthy lifestyles and raising awareness about CVD risk factors among young individuals. The institute should collaborate with the Ministry of Education and local educational authorities to integrate cardiovascular health education into the school curriculum. This can include interactive workshops, physical activity programs, and healthy eating initiatives. By targeting the younger population, Romania can lay the foundation for a healthier future and instill lifelong habits that promote cardiovascular well-being.
4. **Strengthening Screening Programs:** The National Institute of Public Health should develop and implement comprehensive screening programs to identify individuals at high risk of developing CVDs. These programs can target specific age groups or population segments and should be conducted regularly to ensure early detection and intervention. The institute should collaborate with healthcare providers and community organizations to facilitate the screening process and promote participation. Additionally, efforts should be made to ensure the availability of affordable and accessible diagnostic tests, such as blood pressure measurements, cholesterol screenings, and glucose tests. By prioritizing screening programs, Romania can identify high-risk individuals and provide them with appropriate interventions to reduce their cardiovascular risk.
5. **Enhancing Data Collection and Research:** The National Institute of Public Health should strengthen its data collection and research capabilities to monitor the progress and impact of the Young50 project in Romania. A centralized database should be established to gather information on screening results, interventions, and outcomes. Additionally, research studies can be conducted to evaluate the effectiveness of different interventions, identify barriers to implementation, and explore innovative approaches to CVD prevention. By generating robust evidence, Romania can continuously improve the project's strategies and interventions, ultimately leading to better cardiovascular health outcomes for its population.
6. **Mobilizing Community Engagement:** The National Institute of Public Health should actively involve communities in the implementation of the Young50 project. Community engagement programs, such as health fairs, awareness campaigns, and support groups, can be organized to foster a sense of ownership and empower individuals to take control of their cardiovascular health. The institute should collaborate with local authorities, community leaders, and non-governmental organizations to mobilize resources, share knowledge, and promote collective action. By harnessing the power of communities, Romania can create a supportive environment that encourages healthy behaviours and sustainable lifestyle changes.



3. Section B: Transferability of Young50 project at the European level

3.1. The work process

3.1.1. Evaluation design and methodological approach

The work process outlined by Synergia encompasses two primary lines of intervention, each characterized by distinct objectives, methodologies, and expected outcomes. The evaluation methodology employed for this assessment comprises both vertical and horizontal/transversal evaluations.

The horizontal evaluation, which is the focus of this report, aims to generate recommendations and guidelines regarding the transferability of the CARDIO50 model at the EU Community level. The primary objective is to identify exemplary models and best practices that can be effectively implemented in various contexts, promoting the integration of cardiovascular disease prevention based on the YOUNG50 model into regional or national health plans.

The horizontal evaluation of the CARDIO50 model's transferability at the European Community level will be carried out in two distinct phases, namely:

Phase 1: Comprehensive Analysis and Assessment - This phase involved an in-depth analysis and assessment of the CARDIO50 model's potential transferability within the European Community context. It will encompass an examination of relevant factors such as policy frameworks, regulatory considerations, resource requirements, and stakeholder engagement. The goal is to provide a comprehensive understanding of the model's applicability and potential challenges in different regional or national contexts.

Phase 2: Development of Recommendations and Guidelines - Building upon the findings from Phase 1, this phase focuses on the formulation of actionable recommendations and guidelines for effectively transferring and implementing the CARDIO50 model at the EU Community level. The recommendations will encompass strategies for adaptation, capacity building, knowledge exchange, and monitoring and evaluation. The ultimate objective is to facilitate the successful integration of cardiovascular disease prevention initiatives based on the YOUNG50 model into existing health plans at the regional or national level.

By employing a horizontal/transversal evaluation approach, Synergia aims to provide a comprehensive and contextually relevant assessment of the transferability of the CARDIO50 model at the European Community level. This will enable policymakers and stakeholders to make informed decisions and implement effective strategies to combat cardiovascular diseases across diverse healthcare settings.

3.1.2. Tools

1. Desk Collection of Existing Sources

To collect information that will be useful for the final chapter of policy recommendation regarding the transferability of Project Young50 at the EU level, the methodology involves the initial phase of Desk Collection of Existing Sources. This phase entails conducting comprehensive research to gather relevant existing legislation sources, programmatic sources, and recommendations concerning health promotion, prevention of noncommunicable diseases, and the reduction of health inequalities at the supranational level.



During this phase, an extensive study of various documents will be undertaken. These include but are not limited to, the “Agenda and strategies for health promotion and chronic diseases prevention” of the European Commission, the Inter-Agency Task Force of the World Health Organization (WHO) and the United Nations on the Prevention and Control of Non-Communicable Diseases, the WHO Framework Convention on Tobacco Control and the Tobacco Products Directive, the WHO global strategy on diet, physical activity and health, the European food and nutrition action plan, the Global Action Plan for the prevention and control of non-communicable diseases, the Rome Declaration on Nutrition, and the 2030 Agenda for sustainable development.

By conducting a comprehensive desk research during this phase, the aim is to gather valuable insights and authoritative sources related to health promotion, noncommunicable diseases prevention, and the reduction of health inequalities at the supranational level. The collected information will be crucial in formulating the final paragraph of the policy recommendation, providing evidence-based justifications and support for the transferability of Project Young50 within the EU context.

2. Delphi-Analysis Methodology

To comprehensively assess the transferability of the CARDIO50 model, the Delphi-Analysis methodology was employed. This rigorous meta-analytical evaluation technique involves assembling a diverse panel of experts consisting of policy officers, academics, stakeholders from non-governmental organizations (NGOs), and international organizations. The selection of experts was based on their demonstrated competence in the field of health and disease prevention.

The Delphi-Analysis process encompasses multiple iterative phases, ensuring a systematic approach to gather insights and opinions. The panel of experts provides their informed perspectives on the transferability of the CARDIO50 model, evaluating its applicability within various contexts. Through carefully designed questionnaires and controlled feedback mechanisms, the Delphi-Analysis process aims to converge the viewpoints of participants over time, even if initially divergent. The iterative nature of the methodology allows for refining subsequent position statements based on the collective input received from the panel, building upon the previous results and fostering consensus on the transferability of the CARDIO50 model.

To conduct the Delphi Analysis to evaluate the potential transferability of a project like YOUNG50 at the EU level, Synergia organized a roundtable during the final conference of YOUNG50 in Brussels. This roundtable brought together a panel of experts specializing in various areas of prevention, such as tobacco prevention and obesity. To ensure a comprehensive understanding of YOUNG50's objectives, results, and the cardiovascular disease prevention instrument, Synergia shared several project documents with the panel of experts in advance of the roundtable.

The roundtable discussion lasted for one hour, during which Synergia requested concise contributions from the experts regarding two specific questions. The main objective was to gather their expert opinions on the main obstacles or critical elements that could enhance the transferability of a cardiovascular prevention program like YOUNG50 at the EU level. Synergia encouraged the experts to provide their insights based on their specific fields of expertise and professional experiences.

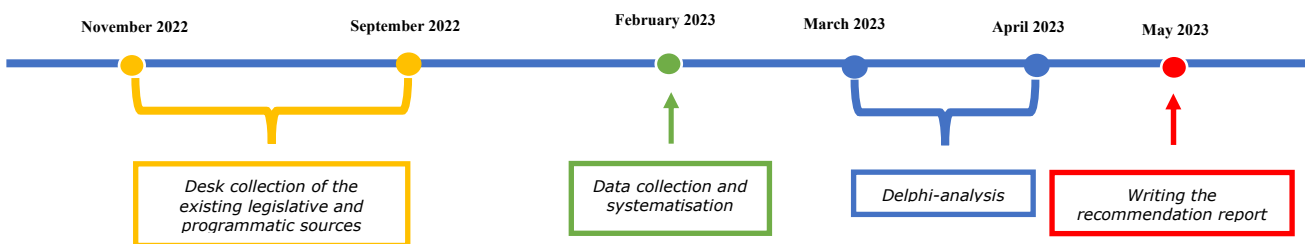
Thanks to the valuable contributions shared during the roundtable discussion, Synergia was able to prepare a position statement summarizing the key findings and recommendations regarding the transferability of the YOUNG50 model at the EU level. This position statement aimed to capture the collective insights and perspectives of the panel of experts, ensuring their input was accurately represented. To promote a collaborative and iterative process, Synergia shared the draft position statement with the experts for their

review and feedback. This step was essential to refine the document and ensure convergence in the final output.

The experts' review and feedback were carefully considered and integrated into the position statement, strengthening its clarity, coherence, and relevance. By engaging the experts in this iterative feedback process, Synergia sought to establish a shared understanding and promote consensus on the recommendations for the transferability of the YOUNG50 model at the EU level. Their expertise and insights played a pivotal role in shaping the final position statement, which will serve as a valuable resource for policymakers, stakeholders, and decision-makers involved in cardiovascular disease prevention initiatives at the supranational level.

3.1.3. Timetable

The evaluation process for the Young50 project took place over a 10-month period, starting in July 2022 and ending in May 2023. Specifically, the horizontal evaluation process lasted for six months and consisted of four well-structured phases, aimed at conducting a thorough assessment and producing valuable recommendations.



3.2. Data analysis

3.2.1. Technical Analysis of the existing legislation sources, programmatic sources and recommendations related to the topic of the project at a supranational level

The main causes of premature death (two-thirds of premature deaths in Europe, 86%¹, and 74% globally each year²) and avoidable disabilities are attributed to four non-communicable diseases: cardiovascular diseases - the main cause - cancers, chronic respiratory diseases, and diabetes³. Generally, these are incurable diseases with slow progression that cannot be prevented through vaccination.

A good quality of life, especially in old age, is more important than ever in countries with high life expectancy and challenges of aging with multiple morbidities. It is, therefore, essential to diagnose and effectively treat major non-communicable diseases early, as timely actions lead to significant differences in outcomes. In the assessment, management, and early rehabilitation, coordinated and multidisciplinary care can reduce mortality and prevent and limit disability⁴.

To address non-communicable diseases, a key challenge lies in multi-sectoral action capable of promoting health and health equity to ensure health as a human right (exacerbated by the COVID-19 pandemic)⁵. Among the Sustainable Development Goals (SDGs) of the 2030 Agenda, there is also the goal of reducing premature mortality from non-communicable diseases by one-third and promoting mental health and well-being through prevention and treatment⁶.

The main fields to intervene, therefore, related to the risk factors of non-communicable diseases, are nutrition, physical activity, tobacco use, and alcohol consumption. Risk factors disproportionately affect people with mental health problems. Investigations regarding these risk factors are being strengthened throughout Europe, and effective policies are needed to reduce them. Targeted population-level approaches and more complex and patient-centered care models are necessary.

The trends are uneven (in terms of gender and socioeconomic groups) and too slow regionally to achieve the relevant objectives. The four aforementioned risk factors are the subject of strategies and plans adopted by the Regional Committee for Europe: continuous implementation and evaluation are fundamental to alleviate the pressure on healthcare and social assistance systems. Air pollution and chemical and physical agents should be also considered, as environmental exposure to them causes one-fifth of deaths in Europe (from cancers, cardiovascular, and respiratory diseases).

Furthermore, risk factors often combine and act multiplicatively. Recent WHO STEPS surveys have found that one-third of people have three or more risk factors, so the assessment should be comprehensive, aiming to reduce the total risk. For example, in people with known CVD (following a heart attack or stroke), diabetes, or compromised kidney function or high levels of individual risk factors, the CVD risk is increased, and the management of all possible factors is necessary. Risk stratification tools are useful for estimating the total risk, focusing treatment attention on individuals with high levels of risk, which helps avoid excessive

¹ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21-paesi-1.pdf>

² At link: <https://apps.who.int/iris/rest/bitstreams/1462121/retrieve>

³ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

⁴ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

⁵ <https://apps.who.int/iris/rest/bitstreams/1462121/retrieve>

⁶ https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/who-ncd-accountability-framework-for-ncd-implementation-roadmap.pdf?sfvrsn=346fb61b_1&download=true



medicalization and more efficient use of limited resources. Risk stratification tools can also be a communication tool to support patient adherence to advice and treatment for risk management. This strategy can largely be based on primary healthcare. Opportunistic screening of patients for risk factors in primary care may represent a more efficient use of healthcare resources compared to general screening programs, although this strategy should consider the best way to engage those who have fewer opportunities to adhere regularly.

There is increasing evidence that even people known to have increased CVD risks are not adequately followed: risk factor control is often inadequate, and only half of coronary patients receive advice to participate in secondary prevention and rehabilitation programs. Valuable contributions can come from nurses, healthcare workers, and patient associations.

It is essential to increase awareness about risk factors, enhance clinical skills in early diagnosis, and establish effective and rapid referral pathways, diagnosis, and treatment⁷.

Health promotion and disease prevention programs, therefore, are the first response to the challenge of chronic diseases. Health promotion involves individuals and communities, encouraging them to adopt healthy behaviours and produce changes that reduce risks. In the European context, there is ongoing complexity in this regard, limited attention is given to it, and the path for health promotion to occupy a central position in the perspectives of policymakers and stakeholders is long⁸.

The following sections will analyze specific policy guidelines for the various mentioned areas of intervention, as well as those that cut across these areas, identified through the in-depth research on regulatory and programmatic texts.

Nutrition

The prevalence of overweight and obesity is a concern for all age groups of the population. The examined documents converge on the thesis that non-communicable diseases related to nutrition are strongly influenced by social determinants of health and have a profound negative impact⁹. Of particular concern is the widespread marketing of high-energy-density foods that are rich in salt, sugar, and saturated fats, with pervasive marketing practices. Initiatives are needed to promote the availability and economic accessibility of healthy foods (fruits, vegetables, and whole grains). Excessive intake of saturated fats is associated with an increased risk of cardiovascular disease (CVD). The World Health Organization (WHO) recommends a free sugar intake not exceeding 10% of total energy intake, suggesting that reducing it below 5% would have health benefits. Public health interventions such as food and nutrition labeling, consumer education, and product reformulation strategies can help reduce sugar intake. Excessive sodium intake is associated with an increased risk of CVD, and many countries exceed the WHO recommendation of less than 5 grams per day. Achieving a 30% reduction in intake by 2025 presents a significant challenge. The success of integrated salt reduction programs depends on monitoring, stakeholder engagement, and the goals and benchmarks established by government leadership¹⁰.

⁷ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

⁸ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21- paesi-1.pdf>

⁹ <https://apps.who.int/iris/bitstream/handle/10665/329405/9789289051231-eng.pdf?sequence=1&isAllowed=y>

¹⁰ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>



As regards the policy guidelines, identified, strong measures are needed to reduce all forms of harmful food marketing, including the use of economic tools to discourage consumption and improve the accessibility and availability of healthy diets. For example, taxation on sugary beverages could prove useful. Product reformulation and improved packaging labeling are necessary. National policies should be developed and implemented to balance the saturated and unsaturated fat content of food products and ban trans fats from the food supply. Promoting the reduction of free sugars in processed foods and beverages through regulatory actions is important. National policies can develop, expand, and evaluate salt reduction strategies. Strengthening healthcare systems for the promotion of healthy diets, improving the capacity and training of basic healthcare providers in nutritional counselling, weight monitoring, and management is necessary. Additionally, enhancing the training of nutrition professionals and providing high-quality nutritional services in healthcare facilities is important. Promoting healthy meals in social and healthcare institutions is crucial¹¹.

Nutrition policies should promote diverse, balanced, and healthy diets in schools, public institutions, workplaces, households, and among families. Improvements require legislative frameworks for food safety and quality, promoting participation in the activities of the Codex Alimentarius Commission to develop international standards for food safety and quality, improving consumer information, and avoiding inappropriate marketing and advertising of harmful food and beverages. Empowering consumers through informative and educational actions is essential. National healthcare systems should provide continuous assistance, including health promotion and prevention, addressing nutrition-related needs¹².

The European Action Plan on Nutrition and Food supports intersectoral policies and a comprehensive approach, recognizing the essential role of governments (in collaboration with the healthcare sector) in improving diets through the modification of environments and contexts in which daily food choices are made. Policy influence pertains to food promotion, availability, and accessibility. Shared tools, data availability, and a focus on knowledge translation and transfer are crucial. Comprehensive research, monitoring, surveillance, and evaluation mechanisms are essential to identify trends and measure the impact of policies. Sharing best practices and translating and exchanging knowledge are important. Member States can consider developing monitoring frameworks to assess the extent of marketing within their country, capturing the impact of policies and regulations on all forms of marketing of high-energy foods, saturated and trans fats, sugar, or salt. Such frameworks could also clarify the potential impact of cross-border marketing. Monitoring frameworks could also track food price trends and assess the impact of economic measures (disaggregating data, where possible, by gender and socioeconomic status). Member States should continue to expand and strengthen representative national surveys on diet and nutrition, establishing national food composition databases. Government leaders and policymakers should establish governance mechanisms to safeguard the integrity of an effective decision-making process, mobilizing political commitment through intersectoral cooperation among government departments, national and local institutions, experts, civil society, and the private sector. Building networks for a health-in-all-policies approach is essential, strengthening coordinated action at different administrative levels and across government departments, supporting mechanisms to enhance multilateral action and empower communities at the local and regional levels. Multisectoral collaboration, communication, and community participation should be promoted to ensure broader policy action. Attention should be given to mechanisms for strengthening links between the agri-food sector,

¹¹ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

¹² At link: <https://www.fao.org/3/ml542e/ml542e.pdf>



education, local government, and healthcare. Attention to conflicts of interest is important. Economic tools that can decrease or increase prices, improve the affordability of healthy diets, and discourage the consumption of harmful foods should be considered. Member States could introduce targeted subsidies to influence the economic accessibility of healthy foods, including the inclusion of fruits and vegetables in food and nutrition assistance programs. Schemes for promoting healthy diets, particularly in schools and institutions, are essential. Actions to reduce inequalities in access to healthy food, thereby ensuring human rights, are fundamental¹³.

The recommendations focus on younger individuals as there is a recognition of the importance of maintaining good health through appropriate lifestyle choices. The Young50 project aims at capitalising on the outcomes of prevention programs with an integrated approach. Therefore, Young50 should align with long-term programs on correct dietary habits, starting from schools.

Physical Activity

The data on physical activity is alarming: almost three-quarters of the young population does not meet the recommended levels¹⁴. Globally, 1 in 4 adults and 3 out of 4 adolescents do not meet the global recommendations established by the World Health Organization (WHO), and as countries experience economic development, levels of inactivity tend to increase. This is influenced by transportation patterns, increased use of technology, and urbanization, with cultural values also playing a role¹⁵. The positive effects of physical activity are manifold, ranging from mental to pulmonary and musculoskeletal health. It reduces the risk of cardiovascular diseases, diabetes, cancers, and memory disorders, and plays a fundamental role in managing chronic conditions and weight control. Promoting active living and mobility involves redesigning community environments (home, daycare, school, workplace, etc.) to facilitate healthy behaviors, including active transportation. Public spaces and activity-friendly neighbourhoods, policies aimed at improving road safety, the affordability, accessibility, and attractiveness of public transportation are likely to encourage active mobility.

Rehabilitation programs based on exercise are significant. Interventions on physical activity should consider the specific needs and opportunities of different age groups. Integrating physical activity into prevention, treatment, and rehabilitation is crucial, enabling individuals with reduced mobility to maximize exercise. Providing guidance in all healthcare and social care settings for people with mental health issues and the elderly (through educational and therapeutic programs) is also important¹⁶. Global progress in promoting physical activity has been slow, mainly due to lack of awareness and investment. Primary and secondary healthcare and social care can help make people more active and prevent non-communicable diseases, also implementing the use of physical activity to increase rehabilitation and recovery rates¹⁷.

Regarding policy guidelines, improving access to physical activity facilities and offerings, with attention to vulnerable groups, is necessary. Providing children with access to safe environments and promoting walking and cycling for childcare centers and schools is important. Promoting physical activity for all individuals at all

¹³ At link: <https://apps.who.int/iris/bitstream/handle/10665/329405/9789289051231-eng.pdf?sequence=1&isAllowed=y>

¹⁴ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

¹⁵ At link: <https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf>

¹⁶ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

¹⁷ At link: <https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf>

ages, with attention to people with disabilities and the elderly, through community environments and social activities, providing housing and neighborhoods that facilitate mobility and autonomy, plays a key role. National public awareness campaigns with communicative and motivational strategies for behaviour change are crucial. For healthcare practitioners, promoting physical activity should be the norm, integrated into standard practice. Incentives and reimbursements for physical activity-based prevention and rehabilitation should be considered¹⁸.

Political actions on physical activity bring multiple health, social, and economic benefits. They also directly contribute to achieving the following Sustainable Development Goals (SDGs): good health and well-being; end all forms of malnutrition; quality education; gender equality; decent work and economic growth; industry, innovation and infrastructure; reduced inequalities; sustainable cities and communities; responsible consumption and production; climate action; life on land; peace, justice, and strong institutions; partnerships. Effective national action requires a "systems-based" approach, combining policy actions to improve social, cultural, economic, and environmental factors with individually focused educational and informational approaches.

The WHO Global Action Plan on Physical Activity 2018-2030 establishes four strategic objectives to be achieved through universally applicable policy actions, bearing in mind that countries have different starting points. In particular, it should be promoted the presence and the creation of the following aspects:

- Active societies through a paradigm shift across society, improving knowledge, understanding, and appreciation of the benefits of regular physical activity.
- Active environments (spaces and places) that promote and protect the rights of all individuals to have equitable access to safe places and spaces in cities and communities to engage in regular physical activity.
- Active people by promoting access to opportunities and programs to help people of all ages and abilities engage in regular physical activity.
- Active systems by strengthening leadership, governance, multisectoral partnerships, workforce capacity, and information systems in all sectors to achieve excellence in resource mobilization and implementation of coordinated international, national, and subnational actions to increase physical activity and reduce sedentary behavior¹⁹.

Regular physical activity is a fundamental component of primary cardiovascular prevention. Sedentary behaviour has been identified as a significant risk factor for cardiovascular diseases. Research indicates that individuals who engage in limited physical movement face twice the risk of experiencing a heart attack and three times the risk of mortality following an attack, compared to those who consistently participate in physical activity. In light of these findings, it is key for Young50 to further integrate and emphasise aspects related to physical activity. This integration can be achieved through wider implementation of comprehensive strategies that promote regular exercise, raise awareness about the importance of an active lifestyle, and provide appropriate resources and support systems, at local, regional and national level.

¹⁸ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

¹⁹ <https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf>

Tobacco Use prevention

The European plan to combat cancer aims to achieve a tobacco-free generation by 2040²⁰. Individuals should have adequate information about the health consequences, nature of addiction, and the lethal threat posed by tobacco consumption and exposure²¹. Tobacco use is the largest avoidable health risk and the leading cause of premature death in Europe, responsible for nearly 0.7 million deaths annually²². Tobacco use is higher (and its control is poorer) in low-income countries. Its market is rapidly growing (especially among women and minors) due to skillful marketing by the tobacco industry. Combined actions addressing multiple issues simultaneously (such as tobacco and alcohol) are more effective. Imposing taxes that influence individual choices (also applicable to alcohol and food) is advantageous to promote healthier behavioral choices. The tax revenue could also be used to fund public health programs.

It is necessary to establish sustainable evidence-based and accredited tobacco cessation services that cover the costs, incorporate cessation advice into the healthcare system, promote the integration of smoking cessation treatments and prevention in healthcare provider training, and support specific groups of people (such as pregnant women, parents, and individuals with mental, cardiac, and respiratory health issues)²³.

To promote an effective prevention strategy, the WHO Framework Convention on Tobacco Control (FCTC) should be ratified, strengthening its implementation and establishing consistent long-term fiscal policies that monitor, increase, or adjust tobacco product tax rates and enforce a global ban on tobacco advertising, promotion, and sponsorship. The development of appropriate policies to prevent and reduce tobacco consumption, exposure, and nicotine addiction, with a focus on youth, non-smokers, and vulnerable groups, is essential²⁴. Goal 3 of the 2030 Agenda also supports strengthening the implementation of the WHO Framework Convention on Tobacco Control in all countries²⁵. Effective legislative, executive, administrative, or other measures at the governmental level should be implemented to protect people from exposure to tobacco smoke. Strong political commitment with multisectoral measures and coordinated responses is needed. International cooperation, technology transfer, knowledge and financial assistance, and the provision of related expertise are crucial for establishing and implementing effective tobacco control programs that consider cultural, social, economic, political, and legal factors. Protecting policies from commercial interests and other tobacco industry interests in accordance with national legislation is essential²⁶. Measures related to reducing tobacco demand, reducing tobacco supply, scientific and technical cooperation, and information communication are fundamental. The development and promotion of research on tobacco and electronic cigarette products, evaluating their use, potential abuse, and health risks, are anticipated. The findings will support training, capacity development, and information sharing in this regard²⁷.

According to WHO, tobacco use and second-hand smoke exposure are major causes of CVD, contributing to approximately 17% of all cardiovascular deaths globally, about 3 million deaths per year.

²⁰ At link: https://www.salute.gov.it/imgs/C_17_notizie_6078_0_file.pdf

²¹ At link: <https://fctc.who.int/who-fctc/overview>

²² At link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9251630/>

²³ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

²⁴ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

²⁵ <https://sdgs.un.org/agenda2030>

²⁶ At link: <https://fctc.who.int/who-fctc/overview>

²⁷ At link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9251630/>



Integrating Young50 with tobacco prevention is essential to address the significant impact of smoking on cardiovascular health. By integrating tobacco prevention recommendations, the program can lead to comprehensive and holistic approaches to cardiovascular prevention. This interdisciplinary approach acknowledges the interconnectedness of various risk factors and aims to provide individuals with comprehensive guidance and support for adopting a healthy lifestyle.

Prevention of excessive alcohol intake

Europe has the highest rates of excessive alcohol intake globally, especially among young people. The impact of marketing (including social media) should be recognized and managed through regulatory frameworks to reduce exposure for the benefit of public health. Regulation or legislation is necessary as voluntary agreements often prove ineffective²⁸.

To reduce accessibility, countries should have pricing policies and systems to prevent inappropriate and irresponsible advertising and marketing targeting children and youth. It is important to enforce restrictions on the physical availability of alcoholic beverages (e.g., through reduced hours of sale). Adequate systems and provider training should be implemented to offer early identification and brief advice programs to at least 30% of the population at risk of harmful consumption²⁹. Goal three of the 2030 Agenda supports the importance of strengthening prevention and treatment of substance abuse (including alcohol)³⁰.

Considering the potential exacerbating effects between alcohol consumption and other risk factors such as tobacco use and unhealthy diet, integrating alcohol prevention strategies and recommendations within the Cardio50 program allows for a comprehensive and multidimensional approach to cardiovascular prevention.

Cross-cutting Policy Guidelines

To improve population health, reduce inequalities, and enhance participatory leadership and governance for health, synergistic work between strategies and action plans is crucial. Greater and more intense efforts are needed on strategic themes and interventions to achieve agreed international and regional goals. Additionally, new scientific and policy developments must be taken into account.

Intersectoral action, although complex, is necessary for policy coherence between trade and economic policies, and nutritional and health policies. Health-related issues, particularly those related to non-communicable diseases (NCDs), require the influence of all policy sectors with improved connections between policymakers and experts.

It is essential to shift the debate on health from an individual choice perspective to a societal responsibility perspective. A people-centered system considers individuals as partners in the decision-making process and provides comprehensive, equitable, and high-quality services³¹. Greater attention is needed on social determinants of health to move away from the contested medical model of health³².

²⁸ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

²⁹ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

³⁰ At link: <https://sdgs.un.org/agenda2030>

³¹ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

³² At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hdpd-21-paes1-1.pdf>

The implementation of evidence-based population-based screening programs is important. Improving the availability of basic technologies and essential medicines at affordable prices for treating major NCDs and supporting the implementation of a minimal set of essential primary care interventions will enhance coverage and equity in basic care.

Regarding promotion, it is important to raise awareness about the symptoms and signs of heart attacks or strokes for early recognition. Coordinated and multidisciplinary care should be implemented in the assessment, management, and early rehabilitation of heart attacks, strokes, and other conditions that would benefit from it. European healthcare systems need to ensure care for children and adolescents with NCDs, with a focus on improving access for all, particularly for individuals with mental disorders. Vaccination promotion and control of communicable diseases are important to prevent or exacerbate NCDs³³.

Addressing the complex issue of chronic diseases requires an integrated approach that involves sharing knowledge and evidence of what works, where, and for whom, to replicate successes and prevent the repetition of mistakes. It is important to assess how different strategies can be implemented in diverse social, cultural, and political contexts³⁴. Some initiatives, projects, interventions, policy elements, and practices serve as positive examples of good practices, such as stakeholder engagement management (Cyprus, Germany, Hungary), the localization of healthcare services in a decentralized system (Denmark), and the implementation of "Health in All Policies" (Iceland, Finland)³⁵.

The legislation and programmatic sources, as well as the recommendations at a supranational level, emphasize the importance of surveillance and monitoring of NCDs, for which suitable national health information systems must be established or strengthened. Harmonization of indicators and case definitions is necessary. Disaggregating data to highlight evolving trends and inequalities is crucial, including examining gender norms, values, and biases in healthcare systems. Innovative analytical and predictive techniques should be leveraged to support coordinated actions. Timely collection and use of data, such as healthcare quality indicators, can support the quality management and monitoring of healthcare performance. The implementation of electronic health records can support the quality of healthcare management³⁶.

National reports from partner countries recognize the need for common and robust criteria for monitoring and evaluating health promotion policies, programs, and primary prevention practices. To this end, there is a need for improved levels of sharing and dissemination of best practices, facilitated through a mechanism that promotes the diffusion and application of results. National reports demonstrate a wealth of knowledge that can be shared among countries with more experience in health promotion and prevention. Agreed criteria on what constitutes best practices, as well as shared objectives, methodologies, and interventions, should be established³⁷. Therefore, it would be beneficial to have a universal method and develop agreed

³³ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

³⁴ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hdp-21- paesi-1.pdf>

³⁵ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hdp-21- paesi-1.pdf>

³⁶ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

³⁷ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hdp-21- paesi-1.pdf>

criteria and a distribution mechanism to assess qualitative and quantitative process research, with attention to intersectoral and intrasectoral collaboration³⁸.

Strengthened public health capacity and services will support actions on non-communicable diseases, requiring adequately trained personnel in prevention. New approaches to training, deployment, and management of healthcare personnel, improved pharmaceutical policies (a major cause of cost inefficiency and disparities), accessible and quality healthcare technologies, and more robust and accessible health information are needed³⁹. A key challenge is securing adequate funding levels for health promotion. Strengthening healthcare systems as part of universal health coverage is crucial⁴⁰.

National reports indicate the need for consistent and specific financing (increasing national and international funding) to support health promotion and primary prevention. Additionally, a better understanding of economic, market, and trade factors is necessary⁴¹.

Promotion of healthy consumption should occur through global fiscal and marketing policies with strong and cross-cutting regulatory measures. Health promotion interventions can be provided universally and to targeted population groups, taking into account the contexts in which they may occur⁴². Strong and clear political leadership is urgently needed in the field of health promotion. Country reports highlight that most policy initiation and development take place at the national level, with subsequent implementation at the regional/local level⁴³.

The Sustainable Development Goals (SDGs) provide an important entry point for health promotion in all policies, requiring strong political actions and commitment. They provide an imperative for mobilizing efforts toward addressing health determinants across various sectors⁴⁴. Priorities include supporting countries in accelerating multisectoral action towards these goals. Resources must be mobilized to develop national actions that aim to achieve the SDGs, and action must be harmonized with the establishment of intersectoral partnerships. SDG 3, "Good Health and Well-being," aims to ensure healthy lives and promote well-being for all at all ages, reducing premature mortality from NCDs through prevention, treatment, mental health promotion, and well-being. It includes recommendations such as achieving universal health coverage, including protection from financial risks, access to essential quality health services, and access to essential medicines and vaccines (with a commitment to support research and development)⁴⁵.

³⁸ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21- paesi-1.pdf>

³⁹ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

⁴⁰ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21- paesi-1.pdf>

⁴¹ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21- paesi-1.pdf>

⁴² At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

⁴³ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21- paesi-1.pdf>

⁴⁴ At link: <https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>

⁴⁵ At link: <http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21- paesi-1.pdf>



3.2.2. Results of the Delphi analysis

List of experts

Name	Affiliation
Paul Dendale	European Association of Preventive Cardiology
Michele Calabrò	European Regional and Local Health Authorities (EUREGHA)
Annmarie Wesley	Public Health Agency in Sweden; project leader for European Physical Activity on Prescription (EUPAP)
Jacqueline Bowman-Busato	European Association for the Study of Obesity
Cornel Radu	European Network for Smoking Prevention

The timely implementation of preventive measures is vital in reducing the incidence of cardiovascular disease, which not only results in better health outcomes for individuals, but also contributes to the sustainability of healthcare systems by reducing the burden of preventable disease. The resulting **Young50 model**, which has proven to be transferable to Luxembourg, Lithuania, and Romania, holds promise for preventing cardiovascular disease throughout the European Union. Nevertheless, several obstacles must be overcome to ensure successful integration and transferability of this model.

One key challenge is establishing a **proactive and integrated policy environment** that involves all stakeholders, including governments, non-governmental organizations, and individuals. Fragmented approaches must be replaced by collaborative efforts that prioritize prevention and early intervention.

Another challenge is optimizing resources and **implementing efficient, cost-effective early diagnosis and screening programs**. Providing comprehensive data to individuals while respecting privacy and GDPR regulations could increase participation rates in screening programs.

The success of the Young50 model also relies on the **confidence of GPs** in its efficacy and efficiency. Thus, it is imperative to convince healthcare providers that such screening programs are effective since they are the primary advocates of the model.

In addition, **adequate time and resources** must be allocated to develop policies, programs, and projects that incorporate successful tools like the Young50 model. Effective organizations capable of managing such screenings are also crucial.

Finally, successful implementation and transferability of the Young50 model require **knowledge-sharing and collaboration** across countries and networks. The successful implementation and transferability of the Young50 model require a partnership approach that engages with other projects and networks, such as patient organizations, to understand different contexts and share experiences. Copy-pasting approaches

across countries may not always be feasible, and it is crucial to understand different stakeholders, including patients, professionals, and regional authorities.

Information and awareness campaigns must be implemented to reach as many people as possible.

In conclusion, successful implementation and transferability of the Young50 model require a collaborative approach involving all stakeholders, efficient resource optimization, early diagnosis and screening programs, effective organizations, and a focus on prevention and early intervention in healthcare.



3.3. Policy Guidelines to Maximize Transferability and Sustainability of the Young50 Cardiovascular Prevention Program at the EU Level

These guidelines have emerged as a result of the recommendations derived from the Technical Analysis of existing legislation sources, programmatic sources, and recommendations on the topic of the project at a supranational level, along with the insights from the Delphi analysis. This strategic approach is projected to yield remarkable improvements in population health and contribute to a notable reduction in the prevalence of cardiovascular diseases. Moreover, leveraging the transferability of the Young50 program will reinforce the resilience of healthcare systems, equipping them with the capability to effectively address the burden posed by preventable cardiovascular conditions. The realization of these guidelines necessitates collaborative efforts and a steadfast commitment, ultimately paving the way for a healthier future that benefits individuals, communities, and societies at large.

1. Synergistic Approach and Policy Coherence

To ensure the successful transferability and impact of the Young50 cardiovascular prevention program at the EU level, it is essential to adopt an integrated approach. This approach encompasses synergistic collaboration, policy coherence, intersectoral action, and comprehensive services.

By aligning strategies, action plans, and policies across sectors, population health can be improved, health inequalities can be reduced, and participatory leadership and governance for health can be enhanced. This requires intensified efforts on strategic themes that contribute to international and regional goals for cardiovascular prevention.

A people-centered approach should guide the development and implementation of the Young50 program, empowering individuals as partners in decision-making. Comprehensive, equitable, and high-quality services must be provided to effectively address cardiovascular health needs and promote a societal responsibility for healthcare.

2. Strengthening the Relationship with General Practitioners (GPs)

To enhance the effectiveness of screening programs, it is crucial to motivate and engage medical doctors at primary care facilities to take a leading role in supporting the implementation and enhancement of the screening program.

3. Regulatory maturity

While there were variations in regulatory approaches among the Young50 project partners, they were collectively successful in effectively implementing project activities in the short-term. However, from the point of view of sustainability, regulatory maturity is crucial to ensure the long-term success and impact of the CVD prevention and screening project.

4. Long-Term Perspective

From the point of view of sustainability, it is important to acknowledge the significance of time in implementing comprehensive programs and policies and to recognize that achieving substantial progress in areas such as CVD control through regulation of tobacco, alcohol, and consumption of sugar, salt, and processed food etc. requires a sustained effort over extended periods. Short-sightedness should be avoided, ensuring that projects and initiatives are developed with a long-term perspective in mind.

5. Predictive Strategies

A shift from a reactive approach to a predictive one is required. Investment in research and analysis is needed to identify emerging challenges and trends in CVD prevention and risk factor control. This will allow for proactive measures to be taken, including the development of regulations and policies to address new products and industry tactics.

6. Evidence-Based Screening Programs and Basic Care

The implementation of evidence-based population-based screening programs is vital in maximizing the transferability of the Young50 program. These programs play a significant role in early recognition and prevention of cardiovascular diseases. Additionally, ensuring the availability of basic technologies and essential medicines at affordable prices is crucial for treating CVDs and other major NCDs and supporting the implementation of essential primary care interventions. By enhancing the coverage and equity in basic care, individuals could be provided with the necessary resources for effective prevention and treatment of cardiovascular diseases.

7. Coordinated Care and Access Improvement

A coordinated, multidisciplinary approach is essential in the assessment, management, and early rehabilitation of cardiovascular conditions. Implementing such an approach ensures that individuals receive comprehensive and timely care early, leading to better health outcomes. Moreover, it is essential to improve access to care for all individuals. European healthcare systems should prioritize the development of inclusive services that address the specific needs of these populations. Furthermore, an integrated approach to vaccination promotion and control of communicable diseases should be undertaken to prevent or mitigate the exacerbation of CVDs and other NCDs.

8. Comprehensive Approach for Effective Transferability and Knowledge Sharing

Sharing successful strategies, interventions, and practices across countries and networks is crucial for promoting transferability. By learning from positive examples of good practices, stakeholder engagement management, and localized healthcare services, the program can replicate successes and avoid mistakes. However, it is important to recognise that context matters and to carefully assess how different strategies can be adapted to diverse social, cultural, and political contexts. This tailoring of the program ensures its effectiveness and relevance in specific settings.

Besides, establishing mechanisms for sharing and disseminating best practices is vital for successful implementation and transferability. A dedicated platform should be created to facilitate the spread and application of results across countries. National reports serve as valuable sources of information, sharing knowledge and lessons learned. Defining agreed criteria, methodologies, and interventions allows for the identification of best practices and shared objectives, with a specific focus on intersectoral and intrasectoral collaboration. This approach promotes the adoption of effective approaches and ensures consistency in monitoring and evaluating health promotion policies and practices.

By integrating knowledge sharing, contextual adaptation, and the dissemination of best practices, the Young50 program can be effectively transferred, implemented, and sustained across different contexts. This comprehensive approach enhances the program's impact, fosters collaboration, and promotes continuous improvement in cardiovascular prevention efforts.

9. Surveillance and Monitoring

Establishing robust surveillance and monitoring systems is vital for effective implementation and transferability of the Young50 program. National health information systems should be strengthened or established to collect and analyze data on non-communicable diseases. It is crucial to harmonize indicators and case definitions to facilitate meaningful comparisons and highlight evolving trends and inequalities. Gender norms, values, and biases in healthcare systems should be examined to ensure equitable outcomes. Leveraging innovative analytical and predictive techniques can provide valuable insights for coordinated actions. Furthermore, the implementation of electronic health records can support quality management and monitoring of healthcare performance.

10. Strengthening Public Health Capacity and consistent Financing

Strengthening public health capacity and services is paramount in addressing non-communicable diseases in general and maximizing the transferability of the Young50 program in particular. This requires investment in adequately trained personnel who specialize in prevention. New approaches to training, deployment, and management of healthcare personnel should be explored to optimize their effectiveness. Furthermore, consistent and specific financing is necessary to support health promotion and primary prevention initiatives, including the Young50 program. Increasing both national and international funding is crucial in ensuring the availability of resources for implementation.

11. Political Leadership and Partnership Approach

The successful implementation and transferability of the Young50 program depend on strong political leadership and a partnership approach. Political leaders must provide clear and unwavering support for health promotion initiatives. They should prioritise prevention and early intervention in healthcare, recognizing their importance in reducing the burden of cardiovascular diseases. Collaboration and partnerships with other projects, networks, and patient organizations are vital to understand different contexts and share experiences. The partnership with organizations dealing with key stakeholders is crucial for effective screening. It is important to recognize that engaging different stakeholders goes beyond regional authorities; it involves the entire ecosystem. It is also important to explore solutions that leverage existing screening programs. Partnerships with regional and local health authorities, as well as their networks, are essential to ensure that awareness-raising information campaigns reach a wide population to ensure the program's reach and encourage active participation from individuals and communities. Without sufficient participation, even the best screening system will not yield desired results.

12. Fostering equity

In populations with lower education levels and presumably lower socioeconomic status, there exist significant challenges that contribute to reduced effectiveness and lower participation in screening efforts.⁴⁶ These disparities underscore the critical need for targeted interventions that address barriers and strive for equitable access to CVD prevention and screening services. Consequently, it is

⁴⁶ Lang, S. J., Abel, G. A., Mant, J., & Mullis, R. (2016). Impact of socioeconomic deprivation on screening for cardiovascular disease risk in a primary prevention population: a cross-sectional study. *BMJ open*, 6(3), e009984. <https://bmjopen.bmj.com/content/6/3/e009984.short>. Clark, A. M., DesMeules, M., Luo, W., Duncan, A. S., & Wielgosz, A. (2009). Socioeconomic status and cardiovascular disease: risks and implications for care. *Nature Reviews Cardiology*, 6(11), 712-722. <https://www.nature.com/articles/nrcardio.2009.163>.

imperative to develop communication strategies that are specifically tailored to the target audience. Moreover, these strategies should be further personalised to effectively engage both the upper and lower socioeconomic and educational subgroups within the same target population.

Compliance checklist and guidelines

In conclusion, it is of utmost importance to outline the key aspects that have emerged in the implementation of the Cardio50 program across different countries through the Young50 project. Therefore, the following table has been compiled, highlighting the essential elements that member states should ideally possess or consider before implementing the program. Additionally, the table underscores the importance of these elements, providing guidance to other member states interested in adopting the Cardio50 best practice.

Table 2: Compliance checklist

<p>Presence of a Department of Prevention or equivalent</p>	<p>Essential: Having a dedicated department/organisation focused on prevention, including screening, allows for a systematic and organized approach to managing the program. It facilitates the allocation of resources, including personnel, equipment, and funding, to support screening initiatives.</p>
<p>Centralised registry</p>	<p>Essential: A centralised registry is fundamental, allowing for efficient management, tracking, and monitoring of screening activities and individuals participating in the program.</p>
<p>Ability to reach the target population</p>	<p>Essential: The program's effectiveness is directly tied to its ability to engage and encourage participation from the target population. Without the ability to effectively reach the target population, the program may miss individuals who could benefit from screening, resulting in missed opportunities for early intervention and potentially compromising the overall effectiveness of the program.</p>
<p>Collaborative relationship with GPs</p>	<p>Essential: It is strategic to involve and endorse general practitioners, who play a critical role in advocating for and implementing screening initiatives.</p>
<p>Presence of prevention policies with specific objectives</p>	<p>Essential: By having specific objectives, the program can align its efforts with evidence-based practices, prioritize resources, and measure its success in achieving the desired outcomes. Without such policies, the implementation of a screening program may lack direction, consistency, and effectiveness in addressing the targeted health issues.</p>

Creation of partnerships	A significant but not mandatory element initially: it is important to acknowledge that collaborating with relevant stakeholders is important not only to reach target population, but also to deliver effective programs and policies.
Integrated prevention network	A significant but not mandatory element: it is important to have a strong integrated prevention network to ensure availability of resources and technical support across the prevention domain.
Importance of the right communication strategies	Essential: communications must be carefully tailored to the target audience. The approach may need to be further personalised to reach upper versus lower socioeconomic and educational subgroups of the same target population.
Long-term vision	Essential: According to experts, it takes on average 17 years for evidence to change practice.* Hence, it is fundamental to embrace a long-term perspective.

*Source: JAMA. 2023;329(16):1333–1336. doi:10.1001/jama.2023.4387

4. Appendices

4.1. Country evaluation report

4.1.1. Online survey questions

Sample

Name of the organisation:	
Country:	<input type="checkbox"/> Italy
	<input type="checkbox"/> Lithuania
	<input type="checkbox"/> Luxembourg
	<input type="checkbox"/> Romania
Legal status:	<input type="checkbox"/> Public body
	<input type="checkbox"/> No profit
	<input type="checkbox"/> International organisation
	<input type="checkbox"/> International organisation of European interest
	<input type="checkbox"/> Secondary or Higher education establishment
	<input type="checkbox"/> Research organisation
	<input type="checkbox"/> Legal person
	<input type="checkbox"/> Other (specify)

Please, insert the required information on the project

Please, if another name was used for the implementation of the Young50 program in your country/region, enter it:	
What is or was the target population of the program? (Select all that apply)	Age:
	<input type="checkbox"/> 17 or younger
	<input type="checkbox"/> 18-29
	<input type="checkbox"/> 30-39
	<input type="checkbox"/> 40-49
	<input type="checkbox"/> 50-59
	<input type="checkbox"/> 60-69
	<input type="checkbox"/> 70-79
	<input type="checkbox"/> 80 or older
	Gender:
	<input type="checkbox"/> Female
	<input type="checkbox"/> Male
	<input type="checkbox"/> Other (specify):

% persons enrolled in screening program out of total population:	
What types of interventions have been set up? (Select all that apply)	<input type="checkbox"/> Young50 program has been piloted in selected region and cities
	<input type="checkbox"/> People coming to screening have been classified into risk groups
	<input type="checkbox"/> The existing screening program has been expanded
	<input type="checkbox"/> An app has been developed to improve accessibility to screening
	<input type="checkbox"/> Other regions/organisations have been involved
	<input type="checkbox"/> Initiatives and campaigns to raise awareness for CVD prevention
	<input type="checkbox"/> Other (specify):
Is it planned to implement an information campaign about the program?	<input type="checkbox"/> Yes, an information campaign has already been done
	<input type="checkbox"/> Yes, an information campaign is planned
	<input type="checkbox"/> No
	<input type="checkbox"/> Other (specify)
If yes, what tools are used to inform the local community? (Select all that apply)	<input type="checkbox"/> Dedicated website
	<input type="checkbox"/> Conferences
	<input type="checkbox"/> Distribution of information material
	<input type="checkbox"/> Other (specify)
Has been carried out internal staff training to disseminate the knowledge of the project?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
Does this project introduce innovations in the context of implementation?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
If yes, please provide a brief description of the innovations that the project introduces:	
Has the project been connected to other existing screening or health prevention programs?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
If yes, please provide a brief description of the other programs connected to the project, specifying their implementation level (local, regional, national, ...):	
Have partnerships been developed with other organisations?	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
If yes, please specify which are the partner organisations:	
	<input type="checkbox"/> Yes



Is there evidence that the project is likely to grow beyond the project life?		<input type="checkbox"/> No	
Are there any funding programs for the future sustainability of the project?		<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
If yes, please specify which are the financing organisations:			
Is the project reproducible in other regions?		<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
Is the project reproducible at a national level?		<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
Please, provide a brief description of the possible future developments of the project:			
Please, if the program is/was implemented at regional level, answer the following question (1, 2, 3, 4, 5 and 6):			
1	Is the adoption of the Young50 prevention protocol planned into the regional policy and planning?	<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
2	If yes, please specify the level of achievement of this objective:		
3	Is there a legal framework guiding the CVD prevention in the region?	<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
4	If yes, please provide the following information for the existing legal document/s related to CVD prevention across the region:	Legal Document A	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__
		Name of the institution that issued the regulation	
		Nature of the document	<input type="checkbox"/> Law
			<input type="checkbox"/> Decree
			<input type="checkbox"/> Ministerial Directive or Resolution
			<input type="checkbox"/> Other/s
Provide a brief description in English			

		Web-link (if not available, please send the full document to research@synergia-net.it)	
		Legal Document B	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__
		Name of the institution that issued the regulation	
		Nature of the document	<input type="checkbox"/> Law
			<input type="checkbox"/> Decree
			<input type="checkbox"/> Ministerial Directive or Resolution
			<input type="checkbox"/> Other/s
		Provide a brief description in English	
		Web-link (if not available, please send the full document to research@synergia-net.it)	
		Legal Document C	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__
		Name of the institution that issued the regulation	
		Nature of the document	<input type="checkbox"/> Law
			<input type="checkbox"/> Decree
			<input type="checkbox"/> Ministerial Directive or Resolution
			<input type="checkbox"/> Other/s
		Provide a brief description in English	
		Web-link (if not available, please send the full document to research@synergia-net.it)	
5	Are there guidelines available on how to implement CVD prevention across the region?	<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
6	If yes, please provide the following information for the existing guideline/s:	Guideline A	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__



	Name of the institution that issued the guideline	
	Provide a brief description in English	
	Web-link (if not available, please send the full document to research@synergia-net.it)	
	Guideline B	
	Title	
	Date of release	__/__/__
	Date of the last update	__/__/__
	Name of the institution that issued the guideline	
	Provide a brief description in English	
	Web-link (if not available, please send the full document to research@synergia-net.it)	
	Guideline C	
	Title	
	Date of release	__/__/__
	Date of the last update	__/__/__
	Name of the institution that issued the guideline	
	Provide a brief description in English	
	Web-link (if not available, please send the full document to research@synergia-net.it)	

Please, if the program is/was implemented at national level, answer the following question (7, 8, 9, 10, 11 and 12):

7	Is the adoption of the Young50 prevention protocol planned into the national policy and planning?	<input type="checkbox"/> Yes
		<input type="checkbox"/> No
8	If yes, please specify the level of achievement of this objective:	
9	Is there a legal framework guiding the CVD prevention in the country?	<input type="checkbox"/> Yes
		<input type="checkbox"/> No
10	If yes, please provide the following information for	Legal Document A
		Title



the existing legal document/s related to CVD prevention across the country:	Date of release	__/__/__
	Date of the last update	__/__/__
	Name of the institution that issued the regulation	
	Nature of the document	<input type="checkbox"/> Law
		<input type="checkbox"/> Decree
		<input type="checkbox"/> Ministerial Directive or Resolution
		<input type="checkbox"/> Other/s
	Provide a brief description in English	
	Web-link (if not available, please send the full document to research@synergia-net.it)	
	Legal Document B	
	Title	
	Date of release	__/__/__
	Date of the last update	__/__/__
	Name of the institution that issued the regulation	
	Nature of the document	<input type="checkbox"/> Law
		<input type="checkbox"/> Decree
		<input type="checkbox"/> Ministerial Directive or Resolution
		<input type="checkbox"/> Other/s
	Provide a brief description in English	
	Web-link (if not available, please send the full document to research@synergia-net.it)	
	Legal Document C	
	Title	
	Date of release	__/__/__
	Date of the last update	__/__/__
Name of the institution that issued the regulation		
Nature of the document	<input type="checkbox"/> Law	
	<input type="checkbox"/> Decree	
	<input type="checkbox"/> Ministerial Directive or Resolution	
	<input type="checkbox"/> Other/s	
Provide a brief description in English		

		Web-link (if not available, please send the full document to research@synergia-net.it)	
11	Are there guidelines available on how to implement CVD prevention across the country?	<input type="checkbox"/> Yes	
		<input type="checkbox"/> No	
12	If yes, please provide the following information for the existing guideline/s:	Guideline A	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__
		Name of the institution that issued the guideline	
		Provide a brief description in English	
		Web-link (if not available, please send the full document to research@synergia-net.it)	
		Guideline B	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__
		Name of the institution that issued the guideline	
		Provide a brief description in English	
		Web-link (if not available, please send the full document to research@synergia-net.it)	
		Guideline C	
		Title	
		Date of release	__/__/__
		Date of the last update	__/__/__
		Name of the institution that issued the guideline	
		Provide a brief description in English	
		Web-link (if not available, please send the full document to research@synergia-net.it)	

We ask you to provide the contact details of at least one policy maker (with programmatic and governance responsibilities) to be involved in a short interview about the policy implementation:

A	Name:	
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	Organisation:	
	Position:	
	E-mail:	
	Other information:	
B	Name:	
	Organisation:	
	Position:	
	E-mail:	
	Other information:	
C	Name:	
	Organisation:	
	Position:	
	E-mail:	
	Other information:	

Results

Ulss 6 Euganea (Italy)

REGIONAL LEGAL FRAMEWORK

Legal Document A

- **Name:** “Conference of State and Regions and Autonomous Provinces”
- **Date of release:** 06/08/2020
- **Date of the last update:** N/A
- **Issuing body:** Conference of State and Regions and Autonomous Provinces
- **Nature of the document:** Other/s

Brief description of the document: “With the agreement of the State Regions and Autonomous Provinces Conference of 6/8/2020 the National Prevention Plan (PNP) 2020-2025 was approved.”

Key points:

- Art. 1(1): With the legal document “Conference of State and Regions and Autonomous Provinces” National Prevention Plan (PNP) 2020-2025 is approved.
- Art. 1(2): Within four months from the date of release (06/08/2020) the Ministry of Health guarantees access to the following support resources: the online platform “Regional Plans for Prevention” (“I Piano Regionali della Prevenzione”), the “Health Equity Audit” (HEA) guidelines, and the objective indicator fact sheets.
- Art. 1(8): Positive evaluation aimed at certifying the Region Prevention Plan for years 2020 and 2021. Positive evaluation for years 2022-25 will be achieved in case an increasing share (60% in 2022, 70% in 2023, 80% in 2024, 90% in 2025) of the total certification indicators reach the target for its reference year.

Legal Document B

- **Name:** “Regional Prevention Plan 2020-2025”
- **Date of release:** 12/29/2020



- **Date of the last update:** N/A
- **Issuing body:** Veneto Region
- **Nature of the document:** Decree

Brief description of the document: “Implementation of the Conference of State and Regions and Autonomous Provinces by Veneto Region with the D.G.R. no. 1866 of 12/29/2020.”

Key points:

- The “Regional Prevention Plan 2020-2025” – developed within the “National Prevention Plan 2020-2025” framework – placed the individual at the central of health and social-healthcare policies. (p.3)
- A network of facilities belonging to the Prevention Department has been established to promote cross-sectional support people with chronic diseases. Such network has activated for example 28 tobacco treatment clinics and 12 nutritional centres and promotes physical activity (through regional gyms “Palestre della Salute”, established by regional law 8/2011). “Cardio 50” has been introduced within such strategic framework. However, the network faces coordination issues: partner facilities fail to work in synergy with each other and particularly with the facility managing the chronic patient. The objective of the current regional prevention plan (“Regional Prevention Plan 2020-2025”) is to address such weakness, strengthening the connection at the nodes of the network in pursuit of an effective provision of integrated healthcare services. (p.4)
- In accordance with the “Regional Prevention Plan 2014-2018”, the Veneto Region established the cardiovascular screening program “Cardio 50”, an ongoing project implemented previously in several local health authorities starting from 2009. The screening program offered targeted recipients (age: 50/51, male and female) counselling and a selection of activities designed ad hoc for individuals at risk of developing a chronic disease. Regional Government resolution n. 792/2018 extended the Regional Prevention Plan to 2019 and established a regional work team in charge of revising the available tools and resources with regards to cardiovascular screening, with the objective of drafting guidelines and outlining a training program. 8 out of 9 local health authorities (ULSS) implemented “Cardio 50”, and 57% of targeted recipients enrolled in the program. Unfortunately, due to the Covid pandemic the project was temporarily suspended. (p. 204)
- Veneto Region, along with LHA ULSS 6 Euganea, are partners participating in the European project “Young50”. The latter has identified the pre-existing “Cardio 50” project as a European best practise and aims to adapt and export it to other European countries (i.e., Lithuania, Romania, Luxembourg). Within the Young50 context the program is referred to as “CARDIO50”. (p. 204)
- “Cardio 50” is implemented within the Regional Prevention Plan’s “Integrated system to address chronic determinants⁴⁷” (PL11), line of Action 9 “Design and implementation of integrated data visualization tools for NCDs (noncommunicable chronic diseases) and strengthening of existing screening provisions to facilitate early identification of people with risk factors⁴⁸”. It aims to satisfy

⁴⁷ Sistema integrato per il contrasto dei determinanti della cronicità

⁴⁸ Realizzazione di strumenti di visualizzazione integrata dei dati sulle MCNT e rafforzamento degli strumenti per l'identificazione precoce di soggetti con fattori di rischio



objective OS03, “Promote and implement multifactorial prevention initiatives (tobacco, alcohol, physical inactivity, unhealthy diet) aiming to reduce NCDs within the general population and for people with physical and/or mental disabilities”⁴⁹. Action Line 9 provides an integration of the CCM Project 2017’s experimental model with “Cardio50”’s screening program and outlines the following IT tools for NCDs: (a) the integrated visualization of epidemiological data on NCDs coming from ordinary flows, disease registries, local monitoring systems distinguishing between health inequality factors (i.e., age, gender, education level, etc...) among the several professionals of the socio-healthcare system; (b) remotecommunication between patients and healthcare providers; (c) development of digital telemedicine tools to carry out cardiovascular screening remotely.

- With regards to the equity objectives of the program, the Regional Prevention Plan aims to improve the data collection process including information on recipients’ country of origin, social status, education levels, etc. Additionally, to address the lack of follow up information on recipients who have received counselling and who come for a follow-up visit 6 months/one year later, network action specific tools must be identified to collect the relevant follow up data for all recipients. Such data collection will be useful to better the program and contribute to the network of Integrated Prevention (p.218-219).

Legal Document C

- **Name:** “Deliberation of the Director General of LHA Ulss6 Euganea”
- **Date of release:** 05/05/2022
- **Date of the last update:** N/A
- **Issuing body:** Local Health Authority Ulss6 Euganea
- **Nature of the document:** Other/s

Brief description of the document: “Deliberation of the Director General of Local Health Authority Ulss6 Euganea No. 327 of 05/05/2022 implementing the Regional Prevention Plan 2020-2025 by LHA Ulss6 Euganea”

Key points:

- The “Local Health Authority Prevention Plan”⁵⁰ is the action plan highlight the shared strategic and programmatic tools to implement at the local level of the Regional Prevention Plan and achieve its objectives. (p.6)
- The General Director deliberated to (p.2):
 - Adopt the Local Health Authority Prevention Plan
 - Task the Director of the Prevention Department with responsibility for implementing and monitoring the Plan

⁴⁹ Promuovere e implementare iniziative di prevenzione multifattoriali (fumo, alcool, sedentarietà, scorretta alimentazione) allo scopo di ridurre le MCNT rivolte alla popolazione generale e apersone con fragilità fisiche e/o mentali.

⁵⁰ Piano di Prevenzione Aziendale



- Confirm Mary Elizabeth Tamang as the Local Health Authority Prevention Plan coordinator
 - Identify coordinators for each macro objective, predefined and non-predefined plans
- “Cardio 50” is implemented within the Regional Prevention Plan program “Integrated system to address chronic determinants⁵¹” (PL11) framework. The program has been implemented in 6 territorial areas of LHA ULSS6 for many years. ULSS 6 Euganea is identified as coordinator for Italy in the Young50 project, and the LHA Prevention Plan identifies as a fundamental objective the uniform implementation of the screening program CARDIO50 across the territorial areas. Additionally, it reconfirms the equity objectives outlined in the Regional Prevention Plan. (p. 73-75)

Legal Document D

- **Name:** “Deliberation of the Veneto Regional Council: Regional Social Health Plan 2019-2023”
- **Date of release:** 28/05/2018
- **Date of the last update:** N/A
- **Issuing body:** Regional Council (Veneto Region)
- **Nature of the document:** Other/s

Brief description of the document: The legal document approves the Regional Health and Social Plan 2019-2023.

Key points:

Among the objectives of Regional Health and Social Plan 2019-2023 is the promotion of health and the prevention of risk factors (section 2 of Part I). Specific mention is given to the “Cardio 50” project within the subsection addressing the individual-based strategies to reduce the incidence of chronic diseases (p. 35-36).

NATIONAL LEGAL FRAMEWORK

Legal Document A

- **Name:** “Piano Nazionale della Prevenzione 2020-2025”
- **Date of release:** 06/08/2020
- **Date of the last update:** N/A
- **Issuing body:** Ministero della Salute (Direzione Generale della Prevenzione Sanitaria)
- **Nature of the document:** Other/s

Brief description of the document: The National Prevention Plan 2020-2025

⁵¹ Sistema integrato per il contrasto dei determinanti della cronicità



2.2.1.2. Ministry of Health in Luxembourg (Luxembourg)

LEGAL FRAMEWORK

Legal document A

- **Name:** Law on the organization of the Directorate of Health
- **Date of release:** 1980
- **Date of the last update:** 2022
- **Issuing body:** Government Grand Duchy Luxembourg
- **Nature of the document:** Law

Brief description of the document: “Missions of the Health Department: the protection and promotion of health; the study, monitoring and evaluation of the state of health of the population; the implementation of prevention programs; promoting quality”.

Legal document B

- **Name:** Social Security Code, Book 1: health-maternity-insurance
- **Date of release:** 2022
- **Date of the last update:** 2022
- **Issuing body:** Government Grand Duchy Luxembourg
- **Nature of the document:** Code

Brief description of the document: “Article 8 specifies that the object of the law is in particular the organization and management of preventive medicine measures and participation in them. Thus, preventive medicine measures can be taken and organized in collaboration with the Directorate of Health within the framework of partnership agreements (art. 17).”

Legal document C

- **Name:** Law relating to the rights and obligations of the patient
- **Date of release:** 2014
- **Date of the last update:** 2014
- **Issuing body:** Government Grand Duchy Luxembourg
- **Nature of the document:** Law

Brief description of the document: “Patients' rights must be respected in the context of screening programs. Whether it is, in particular: mutual respect, dignity and loyalty; access to quality care; the right to information; record keeping and access to it”.

NATIONAL GUIDELINES

Guidelines A

- **Name:** National Plan for Cardio-Neuro-Vascular Diseases
- **Date of release:** 2022
- **Date of the last update:** N/A
- **Issuingbody:** Direction de la Santé



- **Nature of the document:** N/A

Brief description of the document: “The main objective of this plan is to reduce morbidity and mortality from cardio-neurovascular diseases in Luxembourg. The national plan also contains three cross-cutting objectives relating to innovation, evidence-based medicine and the fight against health inequalities. Due to the health crisis, this plan could not yet be launched. Its next launch will depend on the health situation and government priorities in this area.”

2.2.1.3. Centro poliklinika (Lithuania)

REGIONAL LEGAL FRAMEWORK

Legal Document A

- **Name:** “Decision of Seimas REGARDING LITHUANIAN HEALTH STRATEGY 2014-2025 CONFIRMATION”
- **Date of release:** 06/26/2014
- **Date of the last update:** N/A
- **Issuing body:** Seimas
- **Nature of the document:** Other/s

Brief description of the document: “The Lithuanian Health Strategy 2014-2025 determines the goals and objectives of wellness activities, the health level indicators that are sought, which are necessary in order to implement the State Progress Strategy ‘Lithuania Progress Strategy Lithuania 2030’”

Legal Document B

- **Name:** “ORDER ON THE APPROVAL OF THE DESCRIPTION OF THE PROCEDURE FOR THE ORGANIZATION OF A HEALTH PROMOTION PROGRAM FOR THE PREVENTION OF CARDIOVASCULAR DISEASES AND DIABETES MELLITUS”
- **Date of release:** 09/22/2014
- **Date of the last update:** N/A
- **Issuing body:** Minister of Health of the Republic of Lithuania
- **Nature of the document:** Other/s

Brief description of the document: “The description of the procedure for the organisation of a health promotion program for the prevention of this and vascular diseases and diabetes mellitus (hereinafter referred to as the "Description") sets out the procedure for the implementation of the Health Promotion Program for the prevention of this and vascular diseases and diabetes mellitus (hereinafter referred to as the "Program") and the procedure for monitoring its implementation. The provisions of the Description apply to primary personal health care institutions (hereinafter – PSUR) belonging to the Lithuanian National Health System, regardless of their form of ownership, and municipal public health offices (hereinafter – SVSB).3. The purpose of the description is to ensure its implementation by integrating the Program into the activities of the PSUR and the SVSB in order to motivate the population to live healthier lives and reduce the risk of sprawl and vascular diseases and diabetes mellitus.”

Legal Document C

- **Name:** "ORDER ON THE APPROVAL OF THE DESCRIPTION OF THE PROCEDURE FOR THE ORGANIZATION OF A HEALTH PROMOTION PROGRAM FOR THE PREVENTION OF CARDIOVASCULAR DISEASES AND DIABETES MELLITUS"
- **Date of release:** 09/22/2014
- **Date of the last update:** N/A
- **Issuing body:** Minister of Health of the Republic of Lithuania
- **Nature of the document:** Other/s

Brief description of the document: "The program for financing measures for the selection and prevention of persons belonging to the high-risk group of cardiovascular diseases (hereinafter referred to as the program) provides for the implementation of measures for the prevention of cardiovascular diseases, the effectiveness of which is based on the evidence of medical science, in the Republic of Lithuania.2. The aim of the program is to reduce the incidence of acute cardiovascular syndromes (unstable angina pectoris or myocardial infarction, transient ischemic attack or cerebral infarction, peripheral arterial thrombosis), to identify new cases of latent atherosclerosis conditions (carotid artery stenosis, peripheral artery disease, silent myocardial ischemia) and diabetes mellitus in order to reduce the disability and mortality of patients due to cardiovascular diseases."

NATIONAL LEGAL FRAMEWORK

Legal Document A

- **Name:** "DECISION ON THE ADOPTION OF THE LITHUANIAN HEALTH STRATEGY FOR 2014-2025"
- **Date of release:** 06/26/2014
- **Date of the last update:** N/A
- **Issuing body:** Seimas of the Republic of Lithuania
- **Nature of the document:** Other/s

Brief description of the document: "The description of the procedure for the organisation of a health promotion program for the prevention of this and vascular diseases and diabetes mellitus (hereinafter referred to as the "Description") sets out the procedure for the implementation of the Health Promotion Program for the prevention of this and vascular diseases and diabetes mellitus (hereinafter referred to as the "Program") and the procedure for monitoring its implementation."

Legal Document B

- **Name:** "ORDER ON THE APPROVAL OF A PROGRAM FOR THE FINANCING OF MEASURES FOR THE SELECTION AND PREVENTION OF PERSONS AT HIGH RISK OF CARDIOVASCULAR DISEASES"
- **Date of release:** 11/25/2005
- **Date of the last update:** N/A
- **Issuing body:** Minister of Health of the Republic of Lithuania
- **Nature of the document:** Other/s

Brief description of the document: "The program for financing measures for the selection and prevention of persons belonging to the high-risk group of cardiovascular diseases (hereinafter referred to as the program) provides for the implementation of measures for the prevention of cardiovascular diseases, the effectiveness of which is based on the evidence of medical science, in the Republic of



Lithuania.2. The aim of the program is to reduce the incidence of acute cardiovascular syndromes (unstable angina pectoris or myocardial infarction, transient ischemic attack or cerebral infarction, peripheral arterial thrombosis), to identify new cases of latent atherosclerosis conditions (carotid artery stenosis, peripheral artery disease, silent myocardial ischemia) and diabetes mellitus in order to reduce the disability and mortality of patients due to cardiovascular diseases.”

Legal Document C

- **Name:** “ORDER ON THE APPROVAL OF THE DESCRIPTION OF THE PROCEDURE FOR THE ORGANIZATION OF A HEALTH PROMOTION PROGRAM FORTHE PREVENTION OF CARDIOVASCULAR DISEASES AND DIABETES MELLITUS”
- **Date of release:** 09/22/2014
- **Date of the last update:** N/A
- **Issuing body:** Minister of Health of the Republic of Lithuania
- **Nature of the document:** Other/s

Brief description of the document: “The description of the procedure for the organisation of a health promotion program for the prevention of this and vascular diseases and diabetes mellitus (hereinafter referred to as the "Description") sets out the procedure for the implementation of the Health Promotion Program for the prevention of this and vascular diseases and diabetes mellitus (hereinafter referred to as the "Program") and the procedure for monitoring its implementation.”

2.2.1.4. Asociata AER PUR ROMÂNIA (Romania)

REGIONAL LEGAL FRAMEWORK

Legal Document A

- **Name:** Law regardinghealthreform
- **Date of release:** 04/14/2006
- **Date of the last update:** 08/28/2015
- **Issuing body:** RomanianParliament
- **Nature of the document:** Law

Brief description of the document: “It is not a specific document for cardiovascular-diseases, it is the law for assuring different principles regarding public health and health care in Romania), while no specific law or guidelines are in place with respect to cardiovascular disease prevention.”

4.2.1. Interview questions

Context of implementation of the program	Are there any other CVD prevention programs or health interventions similar to the Young50 project?
	Has collaboration/integration with the other existing programs been developed?
	Have partnerships with public or private organisations been developed?
	If yes, please describe the presence of public institutions of different strategic levels (national, regional, local) in the partnership

Sustainability	How do you evaluate the financial, institutional and technical sustainability of the project in the long run?
	Have funds been allocated, including access to external financial resources, to support the project?
	Is there any evidence that the initiative is likely to grow beyond the project life?
Transferability	Has the Young50 program been implemented/integrated into regional/national programs?
	If not, is it planned a future implementation/integration of the program?
	If not, why isn't it planned?
	Are there any aspects of the Young50 prevention program that can represent a model for other regions or contexts in your country?
To Covid-19	What are the limits and the resources in its transferability?
	How did the project adapt to the spread of coronavirus?
	What difficulties have you experienced because of the Covid 19 emergency?
	Can you estimate the expected delay in the activities?
Strength/weakness	Has the advent of the Covid 19 emergency made it possible to develop operational protocols to be used in response to emergencies?
	What are the Young50 project's main strengths?
	What are the Young50 project's main weaknesses?

4.2. Evaluation of the transferability of Young50 program at the European level

4.2.1. Sitography of data analysis

- Action Plan for the Prevention and Control of Noncommunicable Diseases in the WHO European Region (2016-25)
<https://apps.who.int/iris/bitstream/handle/10665/341522/WHO-EURO-2016-2582-42338-58618-eng.pdf?sequence=1&isAllowed=y>
- ANNEX to the COMMISSION IMPLEMENTING DECISION on the financing of the Program for the Union's action in the field of health ('EU4Health Program') and the adoption of the work program for 2023
https://www.salute.gov.it/imgs/C_17_notizie_6078_0_file.pdf
- European food and nutrition action plan (2015-2020)
<https://apps.who.int/iris/bitstream/handle/10665/329405/9789289051231-eng.pdf?sequence=1&isAllowed=y>
- Health Promotion and Primary Prevention in 21 European Countries JA-CHRODIS A Comparative Overview of Key Policies, Approaches, Examples of Good Practice, and Gaps and Needs
<http://chrodis.eu/wp-content/uploads/2020/10/wp5-final-updated-landscape-report-hpdp-21-countries-1.pdf>
- Rome Declaration on Nutrition
<https://www.fao.org/3/ml542e/ml542e.pdf>
- The Joint Action on Tobacco Control: A cooperation project for strengthening tobacco control in Europe
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9251630/>
- Transforming our world: the 2030 Agenda for Sustainable Development
<https://sdgs.un.org/2030agenda>
- United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases (2022-2025 strategy)
<https://apps.who.int/iris/rest/bitstreams/1462121/retrieve>
- WHO Framework Convention on Tobacco Control
<https://fctc.who.int/who-fctc/overview>
- WHO NCD Accountability Framework, including the Global Monitoring Framework for the prevention and control of NCDs (2021 update) in line with the extension of the Global NCD Action Plan to 2030
https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/who-ncd-accountability-framework-for-ncd-implementation-roadmap.pdf?sfvrsn=346fb61b_1&download=true
- WHO's Global Action Plan on Physical Activity 2018-2030 (GAPPA)
<https://apps.who.int/iris/bitstream/handle/10665/272722/9789241514187-eng.pdf>

