

# Final Report

## Project identification

Project title	Improving celiac disease management in the Danube region by raising the awareness, improving the knowledge, and developing better skills
Project acronym	CD SKILLS
Project number	DTP571
Name of the lead partner organisation/English	University Medical Center Maribor
Project duration	01.07.2020 - 31.12.2022

## Project summary

Please give a short overview of the project and describe	
<ul style="list-style-type: none"> <li>• the common challenge of the programme area you jointly tackled in your project;</li> <li>• the overall objective of the project and the expected change your project made to the current situation;</li> <li>• the main outputs you produced and who benefited from them;</li> <li>• the approach you took and why is cross-border/transnational approach needed</li> <li>• what was new/original about it</li> </ul>	
EN	<p>CD SKILLS project addressed challenges of the Danube region healthcare sector in the management of Celiac Disease (CD), which has a profound effect on patients, their families and on healthcare and catering services. In previous projects major gaps and differences in disease management were detected in Central Europe. It was therefore the aim of the project partners to define whether similar gaps and differences can be found in the Danube region and to develop tools and services to improve the awareness and knowledge about celiac disease and to develop tools, services and strategies to improve the capacity of stakeholders involved in multidisciplinary management of celiac disease.</p> <p>To address these challenges partners assessed current state of the art in celiac disease management and knowledge and awareness of healthcare professionals (HCPs) and patients. Results showed important gaps in the Danube region, with few improvements during the last years.</p> <p>Partners developed improved diagnostic and confirmatory tests for celiac disease. Based on that, they proposed a modified diagnostic strategy. Through seven pilot actions they proposed solutions for early detection of disease and detection of its complications, management of the disease with telemedicine solutions, development of disease registries and improved service of catering providers and establishment of gluten-free products registry.</p> <p>Partners They published updated e-learning tools and translated them in new languages and developed two video cartoons to rise the knowledge about the disease alongside with several publications. They established an information exchange platform to discuss interesting topics/cases. They organized local, regional and transnational learning events and presented project results at events focusing on different stakeholders. They participated in study visits. All results were effectively communicated with different target groups via different media channels.</p>

**Additional texts**

<p>Project intervention logic – result orientation of the project</p>	<p>The main objective of the CD SKILLS project was to improve and harmonize Celiac disease management practices in the Danube region, by innovative capacity building of existing public healthcare services. This objective was achieved by activities addressing three project specific objectives: a.) to increase competences of existing healthcare sector, b.) to harmonize celiac disease management practices and c.) to improve the uptake of ICT solutions in the management of celiac diseases in the Danube region which were achieved by development of innovative diagnostic tools and proposal of improved diagnostic strategy, by implementation of innovative learning strategy combining traditional learning (lectures, publications) with novel ICT supported learning methods (two e-learning tools, two video cartoons), by establishment of web-based international information exchange platform, by implementing seven innovative pilot services and by extensive awareness raising activities. With these activities partners reached main result of the project: Improved knowledge, skills, competences, and innovative potential of social services involved in Celiac disease management in the Danube region. Project outputs contributing to the main project result were four Celiac disease management assessment tools which targeted patients and HCPs; two Novel diagnostic methods and one Improved diagnostic strategy targeting infrastructure providers, higher education institutions and national authorities; seven Pilot services developed and tested targeting infrastructure providers, education institutions, NGOs, SMEs, enterprises, local, regional and national authorities and general public; one Established HCPs information exchange network; four Innovative e-learning tools for HCPs and patients; and 43 Documented Celiac disease learning interactions targeting infrastructure providers, education institutions, NGOs, SMEs, enterprises, local, regional and national authorities and general public.</p>
<p>Project partnership</p>	<p>Existing healthcare systems vary substantially between countries in the Danube region, having important impact on the management of patients with chronic diseases. Activities of the CD SKILLS project were building on projects LQ-CELIAC and CD in Focus and were implemented with transnational involvement of partners, many times including stakeholders outside the region. Activities of the project had an impact on celiac disease management practices in the region and beyond. Four Celiac disease management assessment tools in partner languages were used to define gaps in celiac disease management. Developed Celiac disease management assessment tools are used beyond the project duration as a worldwide ESPGHAN activity CD in Focus. Two Novel diagnostic methods and one Improved diagnostic strategy brought harmonization of diagnostic methods across the region. Seven Pilot services improved transnational exchange of expertise and brought trans-sectoral and cross-border cooperation of stakeholders to improve and harmonize capacities of healthcare sector and to improve quality of life of patients. New solutions were exchanged at ESPGHAN CD SIG for their further use. Important outputs aiming at transnational harmonization of services in the Danube region were also: HCPs international information exchange network; four Innovative e-learning tools for HCPs and patients harmonizing the knowledge about celiac disease among HCPs and patients; and 43 Documented learning interactions (local, regional and transnational), which improved competences of stakeholders in management of celiac disease. Additionally, project publications in different languages aiming at different target groups had an important transnational impact. Exchange of solutions with D-CareLabs was organized during the project. All the learning tools and publications will remain active and are already used by users from the Danube region and beyond as a part of international Early Nutrition Academy project.</p>

<p>Transnational impact of the project and synergies with other projects or initiatives</p>	<p>Transnational and cross-disciplinary composition of the partnership was crucial for implementation of project activities. Project activities were co-created and implemented by all the partners. University based hospitals (UKC MB, MUG, UDK, GUHP, INSMC, HP, UNIDEB, SUMP, LMU) from all participating regions as experts in developing and implementing diagnostic methods were responsible for the introduction of diagnostic tools and strategies. As members of international expert societies, medical partners were able to disseminate tools and results to international audience. With patient support organizations responsible for welfare of membership (USZC and CeliVita) and local public authorities responsible for ensuring infrastructure for general public (MOM) they provided input for the state-of-the-art analysis and ensured dissemination of all results. Medical partners, patient support organisations with associated strategic partners provided input for innovative learning strategies, organized local, regional and transnational learning interactions sharing medical perspective, patient perspective, perspective of local community and food producing industry. International information exchange platform was established with participation of medical and patient support organisations, enabling transnational exchange of expertise. Partners with different institutional backgrounds and perspectives joined efforts in development of e-learning tools and publications in different languages. Activity was supported by gluten-free producers/suppliers (ASP-dr. Schaer). Pilot activities were co-designed and implemented by medical partners, patient support organisations and local authority. By exchanging individual expertise and examples of good practice they designed universally applicable pilot services supplemented by transferability plan. Learning activities were organized with participation of all partners experts with different focus, which improved knowledge uptake by target groups.</p>
<p>Project contribution to the horizontal principles</p>	<p>CD SKILLS project contributed to the three horizontal principles with its many activities. Activities such as the developed ICT supported state of the art assessment tools, development of novel diagnostic tools, implementation and testing of pilot activities, lectures, e-learning tools, establishment of international knowledge transfer platform, different publications and communication activities had an effect on improved knowledge and on harmonization of celiac disease management practices in the Danube region and beyond. These activities contributed to increased capacities of the healthcare sector effectively contributing to a lesser burden of the disease and contributing to a more sustainable development. Development of generic tools enables their uptake in the future. The use of telemedicine solutions and uptake of ICT solutions decreased environmental burden of project activities. Educational activities contributed to a better healthcare service and management capacity of celiac disease. Patients, healthcare professionals and catering providers obtained more skills and competences through project activities. These activities are contributing to the decreased risk of discrimination social exclusion. New solutions will in long term help in harmonizing celiac disease management practices and overcome inequalities in the Danube region. All publications were published as e-publications. Together with e-tools and video-cartoons this enabled the uptake of new knowledge from any place at any time regardless of the social background. As women are representing 2/3 of patients with celiac disease all project activities affected them in higher proportion. Women also represent the majority of employees in the healthcare and are more often responsible for keeping a safe household. Therefore, all project tools focusing on knowledge, skills and competences had stronger effect on women with a long-lasting positive effect on gender inequalities.</p>

<p>Project publicity and visibility</p>	<p>An important objective of the CD SKILLS project was to improve awareness, knowledge and competences among different target groups, to harmonize management practices in the region and to promote the uptake of ICT solutions. This is reflected in large number of different communication activities implemented by the partnership guided by a Common communication strategy. Assessment of the current state of the art involved large number of participants from different regions. Activity served to provide feedback to participants on detected gaps in knowledge about celiac disease. This activity was a basis for implementation of innovative learning strategies including combination of almost 50 traditional local/regional/transnational learning interactions, implementation of interactive e-learning tools in different languages and publication of video cartoons for patients and catering providers and for HCPs. Throughout the project several publications were published both in paper format and as e-publications and were disseminated through partner networks. Project aims, activities and results were presented to different target groups at local, regional, national and international events. Results were disseminated at international umbrella societies' meetings of HCPs and patients, where target groups outside the Danube region were reached. Project results were continuously reported on project web page and disseminated to target groups via different channels including publication of periodic Newsletter, Facebook, YouTube and Twitter. International study visits enhanced the knowledge uptake of partners and dissemination of project results. Same objective was reached with Transnational information exchange platform, where different stakeholders were able to discuss challenges of celiac disease management. Target groups were also invited to take part of project activities with specific promotion material and during national awareness rising campaigns organized by partners.</p>					
<p>Lessons learnt</p>	<p>Partners of the CD SKILLS project successfully reached all project objectives. In many aspects they achieved more than anticipated. Most important strengths of the partnership were strong commitment towards the management of celiac disease, well-established expertise, previous experience with project management and implementation and active participation in international networks of majority of partners. However, there were also some important challenges that need to be overcome during the project implementation. An important difference was observed between partners with previous project management experience and partners not previously involved in project implementation. This was further emphasized by an unexpected COVID-19 epidemic which practically disabled any face-to-face communication in early stages of project implementation. As majority of partners were healthcare institutions epidemic affected them even stronger. Rapid transfer to virtual communication platform with intense schedule of weekly partner meetings helped in overcoming this important challenge, but with a lot of effort, and with less success for some partners specially regarding financial issues. Epidemic also had an impact on implementation part of the project. Due to severe restrictions patient/doctor interactions were very limited, delaying several activities like sample collection, rapid testing and telemedicine solutions. Several activities were implemented using modified web-based solutions. Communication activities and learning interactions were initially severely limited, however the use of virtual platforms and implementation during the later stages of project enabled partners to eventually reach larger audience than anticipated. The only activity where partners achieved less than anticipated, was the organization of study visits. Although some were organized at the end of the project, not all partners were able to travel abroad to gain experience and share project results.</p>					
Nr	Criteria	Question	Answer			Comment
There are no questions			Yes	No	NA	