

# ALIGNING INTERPROFESSIONAL EDUCATION AND COLLABORATION IN PRACTICE

using promising regional experiences for international exchange

# ICF-BASED TOOLS AND PRACTICES TO PROMOTE THE USE OF ICF

a summary on the development actions

The International Classification of Functioning, Disability and Health (ICF) is a linking framework for interprofessional collaboration and structuring the needs of a client. The need for practical training for professionals and the need for applications and tools to implement the ICF in clinical practice has been recognised.

In total, 18 of the 20 planned development actions were completed. Four themes emerged: ICF training in the workplace (n=8), ICF videos (n=4), ICF tools (n=4) and ICF documentation (n=2).

Bridging the gap between higher education and the work field was one of the ultimate objectives of the INPRO project. Much has been done, but it is clear that this work needs to continue in the future, in partnership with higher education institutions and working life.

This report provides an insight into how the developments were done and what the ICF-based tools and practices are. More detailed information of them is available on the INPRO website.



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- Rehabilitation Centre Revalidatie Friesland, The Netherlands
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# 1. Introduction

The pressure on the European health care system is increasing considerably. The number of elderly or chronically ill people with declining functional capacity is growing rapidly. At the same time as the demand for health care is increasing, the workforce is diminishing, and health care costs are rising steadily. (Cieza et al., 2021; Dussault et al., 2018.) The World Health Organization estimated in 2010 that that the worldwide shortage of 4.3 million health workers has unanimously been recognized as a critical barrier to achieving the health-related Millennium Development Goals (World Health Organization, 2010).

One of the most promising solutions can be found in interprofessional collaboration (World Health Organization, 2010), which can reduce the length of stay in a hospital or rehabilitation centre by improving **interprofessional and person-centred collaboration** between health and social care professionals (Martin et al., 2010). Although there is a lot of attention for interprofessional education and collaborative practice (IPECP), there is a gap between competence levels of future professionals and the levels needed in rehabilitation practice (World Health Organization, 2010).

The use of a common language in interprofessional collaboration is very important. The World Health Organization International Classification of Functioning, Disability and Health, known more commonly as ICF (World Health Organization, 2001), has been chosen by the INPRO consortium as the linking framework for interprofessional collaboration and structuring the needs of a client.

It has been recognised that training aimed at professionals could be a simple and effective approach for increasing the use of ICF as a tool for practice by professionals (Polese et al., 2019). The implementation of the ICF in clinical practice requires applications and tools (Doornebosch et al. 2022, Johansen et al. 2022; Pernambuco et al. 2018; Rauch et al. 2008). This was also highlighted in the ICF needs focus groups organised during the INPRO project for HEI lecturers and rehabilitation professionals in spring 2021. It was a starting point of ICF-based Tools and practices development.

The aim of this process was to develop ICF-based tools and practices based on the individual need of each partner. These tools and practices aim to promote person-centred and interprofessional training and practices in the work field. Secondly, they could also be used in ICF education in higher education institutes (HEI). This document provides an overview of iterative development processes and deliverables of the ICF-based tools and practices.

# 2. ICF-based Tools and Practices development

It is recognised that the implementation of the ICF in clinical practice requires applications and tools. Therefore, all three INPRO consortium partners from work field - Coronaria Rehabilitation and Therapy Services (Coronaria, Finland), Moorheilbad Harbach Gesundheits- & Rehabilitationszentrum (MoHa, Austria) and Revalidatie Friesland (RF, The Netherlands) - were cornerstones in the development of ICF-based tools and practices. In Belgium, where there was no partner from work life, AP University of Applied Sciences (UAS) participated in the development.

















They all started to develop the ICF-based tools and practices they need after the ICF needs focus groups in June 2021. The development was carried out between autumn 2021 and June 2023 by appointed members of the ICF working group and their colleagues from three rehabilitation centres and the AP UAS. (Figure 1). In addition, during the ICF Facilitator course in January-June 2023, St. Poelten UAS also participated in the development of ICF-based tools needed for ICF education. The partners are described in Table 1.

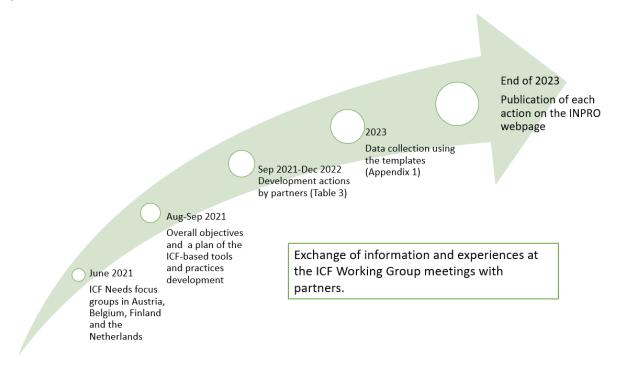


Figure 1. A description of the development process.

The working approach was aimed at the exchange of information, experiences, and suitable ICF-based tools and practices internationally with partners and nationally with work field partner and HEI during ICF Working Group meetings and other INPRO meetings.

ICF Working Group members were responsible for implementing the development and collected their development data for this report using data collection templates (a and b) (Annex 1). WP5 leaders, Jaana Paltamaa (Jamk UAS) and Laura Mutanen (Coronaria), compiled the data provided in the templates and wrote the final report with co-authors from other partners.

# 3. Objectives and development actions

The objectives, and therefore the actions, were individual varied by partner to partner. Development action between partners ranged from one to eight. By partner, the general objectives are set out in Table 2, and Table 3 lists all the development actions.



















Table 1. Description of the participated organisations.

Name	Coronaria Rehabilitation and therapy services, Coronaria Contextia Ltd (Coronaria) by Laura Mutanen	Moorheilbad Harbach Gesundheits- & Rehabilitationszentrum (MoHa) by Christine Haumer and Susanne Schulner-Weiß	Revalidatie Friesland (RF) by Ellen van Lingen	AP university of applied science and arts (AP UAS) by Ingrid Aerts	St. Poelten University of Applied Sciences (St. Poelten UAS) by Anita Kidritsch
Country	Finland	Austria	Netherlands	Belgium	Austria
Description of the organisation	Rehabilitation and healthcare services nationwide in Finland. Services to the clients of KELA (the social insurance institution of Finland), hospital districts, insurance companies and to fee-paying customers. Under rehabilitation we offer physiotherapy, occupational therapy, speech and language therapy, psychological services and psychotherapy, occupational services, remote appointments and multidisciplinary rehabilitation services. Our clients are from all ages and both in- and outclients. We have approximately 1600 employees and over 100 service units all over Finland.	Moorheilbad Harbach, opened in 1980, is an inpatient health resort for inflammatory and degenerative rheumatic diseases. Additionally, orthopaedic rehabilitation as well as preventive health care is offered. Speciality services at the Moorheilbad Harbach are integrated pain therapy and a spine centre. There is a high focus on cooperation between the professional groups and improving the health situation of patients.	Revalidatie Friesland has several locations. An interprofessional team works on an in and outpatient basis and treats patients with brain injury and chronic pain, among other things. This team includes nurses, physical therapist, speech therapist, occupational therapist, music therapist, activity therapist, psychomotor therapist, psychomotor therapist, psychologist, social work, physician assistant, rehabilitation doctor.  We help adults, young persons or children limited by the complex consequences of a disorder, accident or illness to recover optimally. Every patient works with us on maximum self-reliance, with the aim of participating in society.  The patient's question is the starting point of every treatment. Rehabilitation professionals work closely	AP is a broad University of Applied Sciences. The working language of the institution and of most instruction is Dutch. AP has 14000 students in 26 vocational and 8 art programmes, clustered into 6 faculties and 2 schools of arts. The university is also hosting several programmes of both adult education and vocational education and training. According to its mission statement the purpose of the university college is to provide higher education in a pluralistic perspective, focusing on active recognition and appreciation of the various ideological, philosophical, and religious ideologies and founded on the principle of independent governance.  Our dietetics programme is an education member of INPRO team. For already more than ten years we have included in the curriculum learning activities	With more than 3,700 students, the St. Poelten University of Applied Sciences is a key player in the Austrian higher education sector and one of the most important employers in the region. The range of courses is constantly growing and highly relevant, graduates achieve an almost 100% employment rate. We have strong interdisciplinary cooperation and international networking.









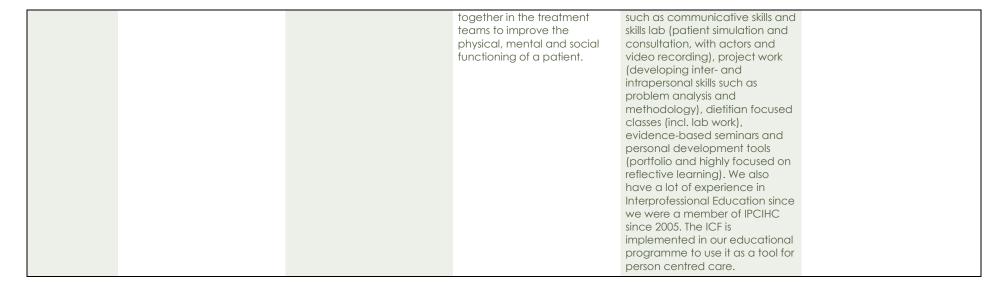
























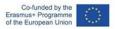




Table 2. Overall objectives described by each partner.

Name	Coronaria Rehabilitation and therapy services (Coronaria) by Laura Mutanen	Moorheilbad Harbach Gesundheits- & Rehabilitationszentrum (MoHa) by Christine Haumer and Susanne Schulner-Weiß	Revalidatie Friesland (RF) by Ellen van Lingen	AP University of Applied Science and Arts (AP UAS) by Ingrid Aerts	St. Poelten University of Applied Sciences (St. Poelten UAS) by Anita Kidritsch
Country	Finland	Austria	The Netherlands	Belgium	Austria
Overall objectives	In line with the overall objectives of the project, Coronaria's internal objective for the INPRO project was to:  1) develop interprofessional working models that serve the entire rehabilitation staff of Coronaria.  2) develop ICF-based tools to promote ICF implementation and practice and to increase staff competence in the use of ICF in rehabilitation (training).	Increasing communication between all professions at MoHa to enhance the treatment of the patients has always been one of the main goals of the therapy department. For several years MoHa has tried to increase interprofessionalism in the rehabilitation centre, for example by organising weekly team meetings in which all professions can exchange their thoughts on certain topics or patients. Moreover, physiotherapists and occupational therapist got the opportunity of using the platform "Infomed", which is an online system that allows the professionals to document the most important information of every patient. The documentation is based on ICF. However, all the other professions have not used the platform actively but rather looked at it only passively to receive information. Therefore, the need for more professional groups to use "Infomed" came up quite	A lot of colleagues know and use the ICF framework but all in different ways. Some colleagues don't know the ICF framework but because of how our electronic patient device (EPD) is built they do use it. The ICF framework gives a lot of possibilities to improve our care. The overall objective is to improve all of the colleague's and interns' knowledge of the ICF framework and facilitate the use of the ICF framework within the treatment.	During a workshop held on August 6, 2021, members from higher education institutions (HEIs) and professionals from the field identified several needs related to the implementation of the ICF in healthcare. The following needs were highlighted following issues: access to Information, workforce constraints, knowledge gap, resistance to change, standardized training, integrated system, bridging theory and practice, alignment of theory and practice, and demonstrating benefit.:  Overall, the identified needs revolve around enhancing access to information, providing comprehensive training, promoting collaboration, and establishing a more effective integration of ICF in healthcare practice.  We want to give examples of how to use ICF and how it can benefit in time. Our goal is that more students learn to work with ICF on the same way. The more students learn to work with ICF.	Overall objectives were to:  1) teach students in small groups the basics of ICF by facilitating interaction on a person's functioning  2) develop a digital game to be used in training of health professionals to introduce person-centred, interprofessional collaboration



















strongly during the INPRO project. So, MoHa decided to increase the use of an ICF based documentation system for dietitians with the goals of increasing the knowledge of ICF in different professions and to generally enhance	the less time the work field needs to spend on it. We also want to show that there is time gained in communication and collaboration with the patients if ICF is used.
interprofessionalism at MoHa.	

















Table 3. List of planned development actions per partner.

Name	Coronaria Rehabilitation and therapy services (Coronaria) by Laura Mutanen	Moorheilbad Harbach Gesundheits- & Rehabilitationszentrum (MoHa) by Christine Haumer and Susanne Schulner-Weiß	Revalidatie Friesland (RF) by Ellen van Lingen	AP University of Applied Science and Arts (AP UAS) by Ingrid Aerts	St. Poelten University of Applied Sciences (St. Poelten UAS) by Anita Kidritsch
Country	Finland	Austria	The Netherlands	Belgium	Austria
Actions	1) ICF and goal setting workshops (Appendix 2)	1) Implementation of ICF documentation system for dietitians - step-by-step guideline (Appendix 10)	1) Workshop setting a main goal (Appendix 11)	1) A series of (short) separate videos that are linked with each other. We will create a webinar with the description of how to use the movies and which learning objectives can be achieved from them. This can be used in education and in practice. (Appendix 16)	1) a video of a team meeting of two interviews and a team meeting role play for international use. A short openly accessible video created by the Harbach team in collaboration with media technology students from St. Poelten UAS. Students produced four further team meeting role play videos in German for regional use, after they had visited Moorheilbad Harbach. (Appendix 20)
	2) ICF specialist hours "get to know each other" (Appendix 3)		2) ICF table in electronic patient device (Appendix 12)	2) A presentation of a case abroad. For example, an accident in Finland, patient is hospitalised and after that repatriated to receive further care in his own country. A report according ICF coding and Finnish writing report (collaboration with Finland). (Appendix 17)	2) Development of a digital escape room (Appendix 21)
	3) ICF case specialist hours (Appendix 4)		3) Training for all disciplines to explain how ICF is integrated in our EPD (Appendix 13)	3) A diary of someone in practice who applies ICF in very small steps in the existing patient file and get experience of the reaction to this. (Appendix 18)	

















4) Pilot of ICF based tools and practices to occupational therapists (Appendix 5)	4) Discussion-tool (Appendix 14)	4) A video on the basic explanation of ICF made with the ZORO project (interregg, also financied by EU) and Julie and Giannoula. (Appendix 19)	
5) Pilot of ICF based tools and practices to speech therapists (Appendix 6)	5) Blackboard course ICF interprofessional (Appendix 15)		
6) Pilot of ICF based tools and practices to physiotherapists (Appendix 7)			
7) Video between a rehabilitation professional and a client (Appendix 8)			
8) ICF training to all rehabilitation professionals (Appendix 9)			



















# 4. Evaluating the implementation of development actions

The evaluation on how the planned (see Table 3) ICF-based tool and practice development actions were implemented was done by each organization (Table 4).

Table 4: Success of development actions and factors influencing them.

Name	Coronaria Rehabilitation and therapy services		
	Coronaria		
Country	Finland		
Overall success and its determinants at organisational level	We have increased staff competence in the education of ICF in rehabilitation in 17 service units to all different rehabilitation professionals and we have also developed ICF based tools which have been piloted in four different units.		
	The aim of developing different interprofessional working models has been started through the interprofessional ICF and goal setting workshops and through the ICF specialist hours "get to know each other". However, we had some challenges in bringing together different professionals to both workshops and the specialist hours. We also had a change in people in charge and therefore we had to make the decision to cancel some of the plans (some workshops and specialist hours and those are described in detail in phase b).		
	Furthermore, we have a plan to implement ICF education and ICF based tools to all units and the works starts in year 2023 and continues after this INPRO project.		
Those who completed the form	Laura Mutanen, physiotherapist, project manager at Coronaria and colead of WP5		
Date	31.1.2023		

Name	Moorheilbad Harbach Gesundheits- & Rehabilitationszentrum		
	МоНа		
Country	Austria		
Overall success and its determinants at organisational level	At the beginning MoHa faced the challenge of dietitians being rather averse to use ICF for documentation. They had their own system already and to be confronted with something new naturally led to resistance at first. However, after several meetings and explaining the benefits of ICF for interprofessional work, the dietitians agreed on trying out the new system. The focus was put on showing the employees the benefits rather than just forcing them to change their documentations system.		
	Some difficulties also occurred during the training phase since ICF codes sometimes led to confusion; however, one could overcome those difficulties by getting help by professionals with ICF experience. Another		



















factor, that could make the implementation difficult is of course the availability of resources. Due to staff shortage the implementation took longer than expected at first. Moreover, Moha relied on the company MP2, which creates the platform, to finalize their task, which caused some delays, too. Sometimes also laws or certain rules could make it difficult to implement an online ICF documentation system, for example, at Moha it was quite difficult to recruit psychologists to use "Infomed", too. This is something we are planning to work on in the future, so that in the end everyone uses the platform.

However, besides all the obstacles one must face during such a project, the overall success was that the professionals, especially the dietitians, feel that the communication between the professional groups has increased. Moreover, they can treat the patients a lot more efficient, due to the fact that one can easily find more information on the patient in the system now. Before, one had to ask someone in person, which was often not possible or too time-consuming. There are weekly team meetings, but there is not the time to discuss every patient in detail. Therefore, the platform is a nice opportunity for still being in regular contact with others and having ongoing information exchange. Now, all it takes is to take a look at "Infomed" and the health care professional already knows the most important details to be able to treat the patient as good as possible.

Christine Haumer (administrative staff) Susanne Schulner-Weiß (team leader of therapy department)

Date

29.1.2023

Name	Revalidatie Friesland
	RF
Country	Netherlands
Overall success and its determinants at organisational level	The overall success is that there is a broader knowledge of the ICF framework and an improvement of colleagues using the ICF framework. A lot (unfortunately not all) of the colleagues' report using the ICF framework. Goals are set using the ICF framework and other locations of Revalidatie Friesland have asked to also follow this goal setting workshop. The awareness has grown and the potential of using the ICF framework is seen. A tool has been developed for the interns and will be used next semester (autumn 2023). This will be further

Those who completed the form Ellen van Lingen, physiotherapist 26.1.2023 Date

developed and improved.

Name	AP university of applied science and arts	
	AP UAS	
Country	Belgium	



















Overall success and its determinants at organisational level	It is not possible to speak of an overall success, because the result varies from project to project. The best result is the videos that have been made. These can be used in different ways. Due to lack of time, the presentation of a case study about being repatriated to Belgium after a hospital stay in Finland was not carried out. The enthusiasm for the idea is still big, but making the videos of the case was already very time-consuming. It was disappointing to see how colleagues reacted when filling in the patient forms in ICF terminology (by using the domains), but this was written in a diary. The YouTube movie with the basic explanation of what ICF is can still be reused.		
Those who completed the form	Ingrid Aerts, lecturer and researcher AP UAS		
Date	30.1.2023		
Name	St. Poelten University of Applied Sciences		
	St. Poelten UAS		
Country	Austria		
Overall success and its determinants at organisational level	Students collaborated interactively with a focus on a person's functioning. Further, the approach of gamification to teach a complex concept was pursued based on a student group's project idea.		
	Challenges were experienced by the need to adapt into a virtual setting during COVID-19 and technically during prototyping.		
Those who completed the form	Anita Kidritsch, Physiotherapist and senior researcher at St. Poelten UAS		
Date	27.3.2023		

# 5. Summary

In total, 18 of the 20 planned development actions were completed. Four themes emerged: ICF training in the work field, ICF videos, ICF-based tools and ICF documentation (Figure 2). These different actions were not developed by all partners, but each of them was addressed by one to three different workplace or higher education partners. These four themes are shown in Figure 2 including the actions and the responsible partner.

Almost half of them concerned ICF training specifically for work-life partners (n=8). Four actions concerned the development of specific ICF-based tools. Four videos were also produced. Two organisations continued to develop their ICF-based documentation system and training in its use.

The ICF case specialist hours by Coronaria (appendix 4) and a presentation of a case abroad in collaboration with Finland by AP UAS (appendix 17) were not fulfilled. The development processes are described in the annexes. More detailed information of competed actions is available on the INPRO project website.





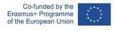














ICF training in the work field (n=8)

- ICF and goal setting workshops (Coronaria)
- ICF specialist hours "get to know each other" (Coronaria)
- ICF training to all rehabilitation professionals (Coronaria)
- Workshop setting a main goal (RF)
- Training for all the disciplines to explain how ICF is integrated in our electronic patient device (EPD) (RF)
- Blackboard course ICF interprofessional (RF)
- A diary of someone in practice who applies ICF in very small steps (AP UAS)
- Development of a digital escape room (St.Poelten UAS)

ICF videos (n=4)

- Video between a rehabilitation professional and a client (Coronaria)
- A series of (short) separate videos that are linked with each other (AP UAS)
- A video on the basic explanation of ICF (AP UAS)
- A video of a team meeting (St.Poelten UAS)

ICF-based tools (n=4)

- Pilot of ICF based tools and practices to occupational therapists (Coronaria)
- Pilot of ICF based tools and practices to speech therapists (Coronaria)
- Pilot of ICF based tools and practices to physiotherapists (Coronaria)
- Discussion tool (RF)

ICF documentation (n=2)

- Implementation of ICF documentation system for dietitians step-by-step guideline (MoHa)
- ICF table in electronic patient device (RF)

Figure 2. A summary of themes (n=4) and fully implemented ICF-based tools and practices actions (n=18)



















It is not possible to speak of a general success rate for a single partner, as the results vary from one action to another as described in the chapter 4. Many partners face common challenges in implementing their actions. These included limitations in human resources on the organisational level such as a lack of time for the project expert, turnovers and limitations of the availability of colleagues. However, none of the partners mentioned any challenges with the attitude of their supervisor. The different perceptions of colleagues and lack of interest in the ICF was also perceived as a challenge. Challenges also included the need to adapt to the virtual environment during the COVID-19 pandemic. For these reasons, implementation initially took longer than expected.

However, despite all the obstacles, the overall success has been positive. New ICF training and documentation materials have been developed and implemented. Videos and digital games have been produced to support ICF learning. Communication and collaboration between professional groups has increased. In particular, the professional partners have plans to continue the work done after the INPRO project and to extend the use of ICF to other professional groups. HEIs can use the material to educate professionals, thus future professional partners.

# 6. Discussion

The aim of this development process was to develop ICF-based tools and practices based on the individual need of each partner. These tools and practices aim to promote person-centred and interprofessional training and practices in the work field. Secondly, they could also be used in ICF education in higher education institutes (HEI). Overall, a large number of different tools or practices were successfully developed. Of the 20 actions planned, 18 were implemented, but their effectiveness was not examined. Further research would be useful.

The ICF is the international standard for framing, describing, recording and measuring functioning and disability (Leonardi et al. 2022; Madden & Buddy, 2019; World Health Organization, 2001; World Health Organization, 2013). Furthermore, ICF offers a universal language for rehabilitation professionals (Rauch et al. 2008; Wade 2005) and a tool for interprofessional collaboration (Johnson et al. 2020). The material developed supports interprofessional collaboration in practice, its training in the work field as well as its education for students. In line with ICF principles (Jefferson 2020; World Health Organization, 2013), they promote person-centred practice. Thus, we see that they can narrow the gap between education and future professionals and the knowledge needed in IPECP reported by World Health Organization (2010, 18) (Figure 3).



















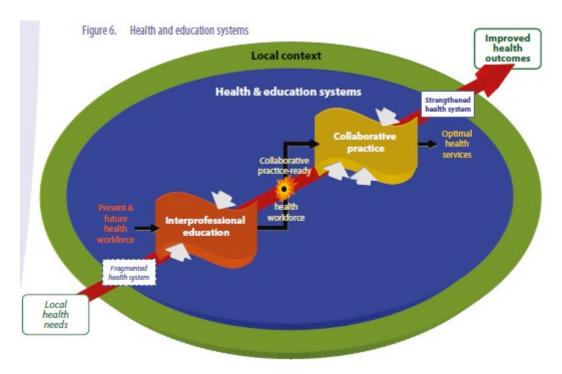


Figure 2. Framework for Action on Interprofessional Education & Collaborative Practice to strengthen the health workforce (adapted from World Health Organization, 2010, 18)

The developed tools and practices included eight ICF training sessions specifically designed for work field partners, four ICF-based specific tools, four videos and two ICF-based documentation systems development. These are all available on the INPRO project website for future use and development.

# ICF training in work field

One of the areas of application of ICF which has constantly been driving the process of ICF implementation is the clinical practice. ICF training providers in the work field have recognised that the use of ICF categories and qualifiers would make ICF implementation complex and have therefore sought to increase the likelihood of ICF use by developing tools such as ICF subsets and core sets, ICF-based assessment tools and ICF-based assessment methods. (Leonardi et al, 2022.) The rehabilitation professionals involved in the INPRO project felt the need to develop their own methods because they perceived a lack of ICF-based tools. Whether ICF-based tools were missing, or has there been a lack of knowledge of existing tools? In practice, it was recommended to study the existing ones and start developing material from the one that is suitable for the work field professionals. This was also done, for example with the introduction of the Rehabilitation Problem Solving (RPS) form (Annexes 5-7).

The use of the ICF is widely educated (Leonardi et al, 2022; Stucki et al. 2017). However, its system-wide implementation is lacking in day-to-day practice across all rehabilitation services of national health systems (Stucki et al. 2017). Different training workshops were arranged. In addition to



















traditional training and workshops, it is possible to use new innovative methods to support the implementation of the ICF. As an example, the HEI partner in Austria (St. Poelten) used the approach of gamification to teach a complex ICF concept developing an escape room game (annexes 21). The focus is on how an escape game can be used in training of health professionals to introduce personcentred and interprofessional collaboration. The AP UAS made an experiment in a public hospital of how rehabilitation and nursing staff would react to ICF based documentation in the patient files. This happened eventually after a meeting with the hospital team including nurses, caretakers, occupational therapists, physiotherapists, head nurse, director nursing and care manager. It was found out that the nursing staff was lacking in collection of patient information. A project specialist, physiotherapist by herself, working in the hospital in question did the documentation experiment without talking about the experiment to her colleagues. She kept diary notes from her experiences. The experience was found rather disappointing. This perhaps demonstrates the need to guide staff on ICF based documentation.

> "Claudia does it every day, but nobody makes attention to it. Claudia writes the daily sessions of physiotherapy with an A for activities; EF: external factor; IF: internal factor. She also writes the first intake differently. So far no comment on it. Even after talking to persons and even asking persons to fill it in with ICF terms, no reaction."

Professions are associated with varying assumptions and values. The knowledge of the ICF framework varies a lot among rehabilitation professionals. Thus, one important step in ICF implementation in work life is training rehabilitation professionals into its use. Several training materials were developed by the two work field partners, Coronaria in Finland and Revalidatie Friesland in the Netherlands. A part of the material consists of goal setting and ICF workshops for rehabilitation professionals such as physiotherapists, activity therapists, social workers, psychologists, occupational therapists, music therapists, speech therapists and social workers.

Doctors and nurses were attending some of the workshops, but they were a minority. One of the work field partners stated that "we could have made a better mix of all the different disciplines, but this was not possible with matching workdays." It was also explored that nurses did not have the same level of ICF knowledge as the rehabilitation professionals. Doctors and nurses have traditionally been regarded as medical staff who are not involved in rehabilitation. It was felt that management should prioritise their active involvement in the interprofessional use of the ICF.

Apart from being a universal language ICF may also be facilitator in clarification of team roles and clinical reasoning for intervention (Edward & Jones 2008; Tempest & McIntyre, 2006). This has been studied for example within stroke rehabilitation with involved nursing staff (Tempest & McIntyre 2006). This is also emphasised in the Universal Health Coverage (UHC), which covers essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care (WHO-FIC newsletter, 2013). Based on the WHO-FIC Collaborating Centre in South Africa (2023) the clinical practices must reflect holistic interprofessional services across the life-course, considering care at all levels and all aspects of a health condition that impact on functioning, health and well-being.



















The aim of the workshops was to give rehabilitation professionals tools to become better in goal setting and to learn more about the ICF framework and its benefits in goal setting. The ICF framework was clearly seen as an advantage in viewing the client's situation from a biopsychosocial perspective. Participants also realised that it is good to change your own perspective and approaching style as a professional. The workshop also opened up thinking about which guidance style would work best for the client in question and how the person-centredness is present. Some feedback from the participants at Coronaria workshops here below.

> "Implementing the ICF in work requires working on one's own approaches, changing one's own perspectives in the direction of the ICF."

"Important: taking the whole client into account."

"Consideration of the type of guidance style that is most beneficial to the client. What is this person made of?"

Professionals at Revalidatie Friesland (RF) also found the workshop as useful. The workshop facilitator stated the workshop as successful "a lot of colleagues are nowadays taking more time and effort when formulating a main goal." There is evidence for using the ICF framework for identifying goals that capture all aspects of a person's life and to inform clinical goal-setting processes has (Nguyen et al, 2021). Furthermore, especially joint rehabilitation objectives are an essential component for effective teamwork in the rehabilitation field. Especially the activities and participation domain of the ICF provides a common language for rehabilitation professionals when setting goals. ICF provides a comprehensive analysis of experiences and needs from the person perspective. The involvement of clients in the formulation of rehabilitation goals provides a personcentred approach to the rehabilitation. (Alford et al., 2015; Harty et al, 2011; Jefferson, 2020.)

One of the work field partners wondered at what point it would be fruitful to organise ICF workshops. The professionals in the workshops had different levels of ICF knowledge. The question is, would professionals get more out of the goal setting and ICF workshops if they had the same basic knowledge of ICF framework? Or could the participants also teach each other in the workshops? It is important to remember that the "I don't know" can be the fruitful step into learning something new from another angle. In the role of the interprofessional trainer or educator the readiness to address own "I don't know" is also valuable. The INPRO Process Guide for trainers in rehabilitation practice (Kidritsch et al., 2023) draws attention to the fact that group discussion of uncertainties supports the development of a climate of trust.

On the other hand, the more familiar professionals are with the ICF framework, the easier it may be to delve into specific themes that link interprofessional cooperation and person-centredness. It could therefore be useful to take the different levels of ICF knowledge of professionals, the objective of the workshops and their implementation into account accordingly. Apart from organizing workshops there could also be instructor-led training into the use of ICF. A major project in Italy in 2009, which aimed to reach hundreds of health professionals, has conducted a study showing that combining workshops and pre-lectures has had a positive impact (Martinuzzi et al, 2008).



















Parts of the ICF education material produced during the INPRO project (basic knowledge course and advanced material to support the implementation) were used in the development work by the work field partners. The ICF work field training material can be used both for self-study and by a workplace facilitator. In a study of Reed et al (2009) three model curricula for teaching clinicians in the use of ICF has been studied. They found that length and format of training can be differentially developed depending on the specific training goals (i.e., knowledge, attitudes, and coding skills), but only instructor-led training led to a significant improvement in coding skill.

Report from a work life partner about their training material stated following:

"The manual aims to support both professionals and students, to stimulate interprofessional working and use the ICF in setting common rehabilitation goals. The ultimate goal is to improve the care for people which are impacted by functional impairments."

As realised, the ICF framework provides a common language (Rauch et al. 2008) that facilitates interprofessional collaboration by clarifying the roles of each professional (Allan et al, 2006; Doornebosch et al. 2022, Snyman et al., 2015). The need for different professional paradigms to move towards a commonly shared vision to guide clinical decision-making is evident. Our process highlighted the value of the shared language and conceptual framework of the ICF for interprofessional collaboration. One of the prerequisites for successful interprofessional cooperation is that professionals know each other's roles and tasks and have an eagerness for cooperation (Doornebosch et al. 2022). The ICF specialist hour "get to know each other" (see annex 3) aimed to improve interprofessional cooperation by giving different rehabilitation professionals the opportunity to learn more about each other's tasks. During the sessions, the different rehabilitation professionals also discussed which dimensions of functioning require particular attention in the different professional groups. They also discussed what their cooperation with other rehabilitation professionals looks like and how it could be improved. Effective teamwork can be seen as a key solution to the current gap between client demand and health provider supply.

Furthermore, it is of course worth asking why the working life partners felt that the ICF education developed by INPRO consortium was not sufficient. When the development of ICF-based tools and practices started in 2021, no additional material developed by INPRO consortium was yet available to implement the ICF. The ICF basic course was aimed to teach the terms and structure of the ICF so that the professionals have the same understanding of the ICF. It was only natural that feedback from participants at the first ICF based tools and practices pilots in Coronaria indicated that more practical examples and even better integration into practice were needed. The ICF basic course developed by INPRO consortium was used as one training model for three different rehabilitation professionals in the pilot of ICF based tools and practices at Coronaria (see appendixes 5-7). The benefit of INPRO's advanced material to support ICF implementation could not be assessed due to its limited use.



















ICF users should remember the wise advice of Wade and Halligan (2017):

"The ICF also requires collaborative sharing and working across existing boundaries, which requires trust and sharing, an agreed understanding of the situation. This takes time to develop – years – and needs to be incremental. It also makes it obvious the patient-related factors".

# Videos to support ICF training in work field and students' ICF education

The ICF gives understanding of the distinguishment of different components which operationalize the interplay between the person, their ability and the environment (Harry et al, 2011). It is also shown that the ICF enabled a patient-centred approach and patients felt listened to and cared for (Snyman et al., 2015). It can be learnt through real client case videos involving clients and different rehabilitation professionals (appendixes 8, 16, 19 and 20).

These are examples of how an interprofessional, and person-centred approach can be taught with connection to practice. They are suitable both for training professionals and for students' education. A big benefit is that it can be used in very different ways, depending on what you want to teach. In an interprofessional group they can learn from each other how every professional looks in a different way to the person and her family. They might evaluate and look at different problems. They can identify the client's health needs and to decide for an interprofessional goal (by using the ICF sheet).

# **ICF-based tools**

To take advantage of the ICF in rehabilitation management there is a need to develop appropriate ICF-based Tools for clinical practice. Such Tools have been developed to help rehabilitation professionals integrated in a problem-solving approach, the Rehab-Cycle (Rauch et al., 2008). The Rehab-Cycle can facilitate the structuring, organization and documentation of the rehabilitation process, as well as help the professionals involved in a patient's rehabilitation with coordinating their actions. This iterative process includes four key elements: 1) assessment, 2) assignment, 3) intervention and 4) evaluation, in which each one includes one ICF-based Tool. (ICF Research Branch, 2018.) Existing ICF Core Sets in combination with the use of ICF Qualifiers were the basis for this development (Rauch et al. 2008).

It is essential to integrate these ICF Tools into the existing processes. Two work field partners, Coronaria and Revalidatie Friesland introduced these existing ICF Tools as help for rehabilitation professionals in the assessment and goal setting phases of the Rehabilitation CYCLE. One was the Rehabilitation Problem Solving (RPS) form, also known as the ICF Assessment Sheet. The RPS form allows health care professionals to analyse the client's functioning by presenting the assessment results in all components of human functioning and environmental and personal factors. In particular, the RPS form was designed to address the clients' perspectives and enhance their participation in the decision-making process of rehabilitation. It can therefore be used as a tool for clinical assessment data collection (Eberhardt & Greiner, 2008).



















It is a continuous process involving identification of the problem and needs of individuals, relating the problem to relevant factors of the person and the environment, defining therapy goals and planning and implementing the interventions using measurements of relevance (Eberhardt & Greiner, 2008). The ICF framework is sometimes said to be problem focused. It is therefore important to point out that the ICF framework also strongly highlights the client's resources. There is also a modified RPS form which takes the resources of the client into account (Moran et al., 2020). This has been decided to be implemented by Coronaria after their pilot (see annexes 5-7) of the original RPS form.

However, the use of the RPS model seems to require more knowledge of ICF and, in particular, more familiarity with ICF terms. This was highlighted by feedback from the piloting of ICF tools and practices. Support questions which can be used in client interviews were pointed out as help from occupational therapist in the pilot. "Well, maybe it's the support questions that would make the RPS form easier to use." As ICF skills increase, it becomes easier to adopt less structured tools.

A discussion tool to help rehabilitation professionals in the first phase when meeting a client for information gathering was developed by Revalidatie Frisland.

> "With these questions you can get to the most important things of a patient life. It can be found challenging to get to know someone's values and motivators. Some colleagues and interns use the discussion tool, not a lot. It is experienced as added work instead of minimalize work. To think of useful tools for my co-workers so it will be successful and will help the work field was difficult."

Interview forms which were piloted for speech therapists at Coronaria (see annex 6) were found useful but at the same time too time consuming. Evaluation of the implementation had following statements.

> "The interview forms for parents were found as useful when it came to the next question: the questionnaires were useful in getting an overall picture of the client's ability to function.

"The interview forms were found from all three participants as too time consuming but they were found good in goal setting (rating 4/5, on a scale from 1-5)."

Rehabilitation professionals are often looking for easy and time-efficient tools. We certainly need to take into consideration the fact that the work field is facing new challenges all the time and we need innovative solutions for both work field partners and HEIs when developing ICF-based tools and practices. We need innovative information technology solutions in terms of how, for example, data collection is transferred more easily into electronic devices. On the other hand, it is of essence to remember that the integration of ICF-based tools and practices requests time (Martinuzzi et al, 2008; Pernambuco et al. 2018). We found that ICF training and mentoring should ideally run parallel with integration of different ICF tools at different stages. It is also important at organisational level to consider which ICF tools can be put in place at what stage and there should be a time and space for regular evaluation. Tools and other practices can change along the way. Once the ICF framework is a



















base in interprofessional cooperation and in the rehabilitation process, work becomes more efficient and timesaving (ref to be added)

### ICF documentation

The ICF offers a conceptualization of functioning and disability that can underpin assessment and documentation in rehabilitation, with a growing body of experience to draw on for guidance. (Madden & Bundy, 2019; World health Organization, 2013). In general, based on the surveys of Leonardi et al (2022), the information technology infrastructure available for documenting, coding and reporting functioning status remains poor. The ICF is a framework and a coding system that allows for the operationalisation of functioning and the use of the ICF in documentation and statistics (Madden & Buddy, 2019.; Maritz et al, 2017; Newman-Griffis et al, 2019; Stucki et al, 2020.)

Two work field partners had ICF-based documentation systems. At the start of the INPRO project, not all rehabilitation professionals used the ICF based documentation. In addition, there were professionals who were not aware enough of its use or used it in an incorrect way. One of them, Moorheilbad Haarbach (MoHa), used ICF codes in their documentation. They reported challenges related to the lack of interest of dietitians in the use of ICF codes. However, they organised training led by professionals with ICF experience, which eventually led to good results.

> "One could overcome those difficulties by getting help by professionals with ICF experience"

It is good to understand that often when you are facing something new and anything new requires more effort, and it can be difficult to see the benefits. During the development process it was also found that more important than forcing employees to adopt a new record-keeping system was highlighting the benefits of the new system. New professionals need explanations of the ICF and its meaning to induce and sustain the changes in mindset that are a prerequisite for constructive application (Madden & Buddy, 2019).

After all, the experience can be transformed into something beneficial for professionals and it happened especially for the dieticians at Moorheilbad Harbach.

> "However, besides all the obstacles one has to face during such a project, the overall success was that the professionals, especially the dieticians, feel that the communication between the professional groups has increased."

The ICF e-learning was used as training before the use of ICF-based documentation in an electronic patient device (EPD) by Revalidatie Friesland. "We made a module on our own intranet for the elearning from WHO." A half an hour meeting for all rehabilitation professionals including speech therapists, physiotherapists, occupational therapists, doctors, social workers, psychologists, activity therapists and music therapists was arranged. The professionals were taught how to use the ICF table in the electronic device system. Resistance against ICF among the professionals was experienced.

> "There was already resistance against ICF so maybe I needed to address this before the education. To see what the resistance is and use this in the education. This influenced



















some of the meetings. But at the end a lot of colleagues have more knowledge of ICF and how it is integrated in our EPD."

As evaluation of the benefits of the education into the use of ICF documentation in Revalidatie Friesland stated a clear improvement.

> "Better overview of the ICF information from the patient. All the information is clearly arranged in one place. Now we can find all the information easier and changes during time can be reported at the same place. A part of the resistance has changed/gone but a lot of work and start using the ICF table and report using ICF."

In a systematic review Maritz et al (2017) summarised, that main benefits of using the ICF in electronic health records were ICF's unique comprehensive perspective on health and its interdisciplinary focus. They also identified challenges that took time to implement. Main challenges included the fact that the ICF is not structured as a formal terminology and there is a need for a reduced number of ICF codes for more feasible and practical use. Keeping this in mid, ICF core sets are designed to limit the number of codes (ICF Research Branch, 2017). It is also important to remember that ICF can underpin assessment and documentation in rehabilitation and the individual whose functioning is being described is central to data collected using ICF (Madden & Buddy, 2019).

### **Evaluation**

Overall, the completion of the development actions launched was excellent, with only two out of 20 remaining unfinished. However, common challenges were faced. These included lack of time for the project expert and the turnover and availability of colleagues. In addition, the different perceptions and lack of interest in ICF among professionals was very challenging.

The barriers for interprofessional cooperation can be stated to be on different levels; on system, national/political, organisational and inter-individual level. On the organisational level we talk about limitations in human resources referring to lack of time and skilled professionals. (Rawlinson et al., 2020.) These limitations were reported from all three work field partners in their reports of the different actions taken in development of ICF-based tools and practices. It is of course essential to question how this could be prevented. According again to the study from Rawlinson et al. (2020) the barriers on system level concerns financial issues. The question is therefore how to collaborate on these different levels to find a sustainable solution for the barriers of interprofessional collaboration. it is important to create a positive organisational culture in adopting the ICF-based practices.

The development period was relatively long, a couple of years, which allowed for a long-term and gradual development. On the other hand, the disadvantage was that often the development work was overshadowed by the clinical work. Each organisation had a named person responsible for the development, but a pair could be a more sensible solution if only the organisation would allow it.

In order to deepen and widen the integration of different ICF-based tools and practices, it is important to carry on the interactive discussion between management and its employees. The



















interactive discussion needs to cover the different service providers in the health care system and their service requesters (health care insurance companies etc). How do the ICF-based tools and practices benefit the client and how to communicate about the most accurate information about the client's functional capacity and its changes? What are the benefits of the ICF based tools and practices and how to support employees in using them? What need to be changed and what need to be faced critically? We also need to be able to critically reflect on whether we need to continue to develop new ICF tools that take better account of the multiple challenges of work life, such as time use.

# 7. Conclusion

Four themes emerged with 18 actions: ICF training in the workplace (n=8), ICF videos (n=4), ICF tools (n=4) and ICF documentation (n=2). New ICF training and documentation materials have been developed and implemented. Videos and digital game have been produced to support ICF learning. They enhance the learning of the ICF as an interprofessional and person-centred tool. Communication and collaboration between professional groups has increased. The developed ICFbased tools and practices also give the opportunity to identify further possibilities for ICF future use. In particular, the professional partners have plans to continue the work done after the INPRO project and to extend the use of ICF to other professional groups. HEIs can use the material to educate professionals, thus future professional partners.

ICF use in the interprofessional collaboration needs collaboration with the client and her/his family, rehabilitation professionals and medical staff. It is important to facilitate expanded ICF use by other professions such as doctors and nurses. The further development of training materials suitable for all professional groups will hopefully facilitate the holistic use of the ICF in assessing a client's functioning and identifying goals.

Today most of the rehabilitation professionals are familiar with the ICF framework and know that the acronym stands for the International Classification of Functioning, Disability and Health. It is known in promoting functioning assessment and clinical reasoning, however, translating that knowledge for recording and monitoring has been slow in coming. Future development should be done in the documentation guides and systems.

ICF training in clinical practice enhance person-centred rehabilitation process, supports understanding of the client and her/his level of functioning and participation in relation to activities within her/his environment.

One of the ultimate objects of INPRO project was to fill the gap between higher education and work field. Much has been done, but it is clear that this work must continue in the future, in cooperation with universities and working life.



















# 8. References

Alford, V. M., Ewen, S., Webb, G. R., McGinley, J., Brookes, A., & Remedios, L. J. (2015). The use of the International Classification of Functioning, Disability and Health to understand the health and functioning experiences of people with chronic conditions from the person perspective: a systematic review. Disability and rehabilitation, 37(8), 655–666. <a href="https://doi.org/10.3109/09638288.2014.935875">https://doi.org/10.3109/09638288.2014.935875</a>

Allan, C.M., Campbell, W.N., Guptill, C.A., Stephenson, F.F. & Campbell, K.E. (2006) A conceptual model for interprofessional education: The international classification of functioning, disability and health (ICF), Journal of Interprofessional Care, 20:3, 235–245.

# https://doi.org/10.1080/13561820600718139

Cieza, A., Causey, K., Kamenov, K., Hanson, S.W., Chatterji, S. & Vos, T. (2021). Global estimates of the need for rehabilitation based on the Global Burden of Disease study 2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet, Dec 19;396(10267):2006-2017. https://doi.org/10.1016/S0140-6736(20)32340-0

Doornebosch, AJ., Smaling, H. J. A., & Achterberg, W. P. (2022). Interprofessional Collaboration in Long-Term Care and Rehabilitation: A Systematic Review. Journal of the American Medical Directors Association, 23(5), 764–777.e2. <a href="https://doi.org/10.1016/j.jamda.2021.12.028">https://doi.org/10.1016/j.jamda.2021.12.028</a>

Dussault, G., Kawar, R., Castro Lopes, S. & Campbell, J. (2018). Building the primary health care workforce of the 21st century - Background paper to the Global Conference on Primary Health Care: From Alma-Ata Towards Universal Health Coverage and the Sustainable Development Goals. World Health Organization.

Eberhardt, B., & Greiner, J. (2008). Implementation of the RPS-Form in two centres in Indonesia and Nepal. A Descriptive Pilot Study. Medicine. https://api.semanticscholar.org/CorpusID:55800096

Edwards, I., & Jones, M. (2008). The role of clinical reasoning in understanding and applying the International Classification of Functioning, Disability and Health (ICF). Medicine, Psychology. https://api.semanticscholar.org/CorpusID:204920615

Harty, M., Griesel, M. and van der Merwe, A. (2011). The ICF as a Common Language for Rehabilitation Goal-Setting: Comparing Client and Professional Priorities. Health and Quality of Life Outcomes, 9, 87. https://doi.org/10.1186/1477-7525-9-87

ICF Research Branch. (2017). ICF Core Sets Projects. Available from: https://www.icf-researchbranch.org/icf-core-sets-projects2

ICF Research Branch. (2018). Introduction to ICF-based Documentation Tools and Rehab-Cycle. Available from: https://www.icf-casestudies.org/introduction/introduction-to-icf-baseddocumentation-tools-and-rehab-cycle-2

Jefferson, R.D. (2020). Using the International Classification of Functioning, Disability and Health (ICF) to promote biopsychosocial clinical reasoning and person-centred practice (PCP) in two multidisciplinary teams. Brunel University. https://bura.brunel.ac.uk/handle/2438/20944

Johansen, T., Kvaal, A.M. & Konráősdóttir, Á.D. (2022). Developing and Implementing ICF-Based Tools for Occupational Rehabilitation Supporting the Communication and Return to Work Process Between



















Sickness Absentees, Clinical Team and Jobcentre Contacts. Frontiers in Rehabilitation Sciences, 3:830067. https://doi.org/10.3389/fresc.2022.830067

Johnson, A. M., Woltenberg, L. N., Heinss, S. H., Carper, R., Taylor, S., & Kuperstein, J. (2020). Whole Person Health: Using Experiential Learning and the ICF Model as a Tool for Introductory Interprofessional Collaborative Practice. Journal of allied health, 49(2), 86–91.

Kidritsch, A., Zimmel C., Atsma, L., Haumer, C., Hemetek, U., Lang, C., Mayer, S., Mutanen, L., Neubauer, M., Freisleben-Teutscher, C. (2023). INPRO Process Guide for Trainers in Rehabilitation Practice. INPRO (in press).

Leonardi, M., Lee, H., Kostanjsek, N., Fornari, A., Raggi, A., Martinuzzi, A., Yáñez, M., et al. (2022). 20 Years of ICF—International Classification of Functioning, Disability and Health: Uses and Applications around the World. International Journal of Environmental Research and Public Health, 19(18), 11321. http://dx.doi.org/10.3390/ijerph191811321

Madden, R. & Buddy, A. (2019). The ICF has made a difference to functioning and disability measurement and statistics. Disability and Rehabilitation, 41(12):1450–1462. https://doi.org/10.1080/09638288.2018.1431812

Maritz, R., Aronsky, D., & Prodinger, B. (2017). The International Classification of Functioning, Disability and Health (ICF) in Electronic Health Records. A Systematic Literature Review. Applied clinical informatics, 8(3), 964–980. <a href="https://doi.org/10.4338/ACI-2017050078">https://doi.org/10.4338/ACI-2017050078</a>

Martin, J., Ummenhofer, W., Manser, T. & Spirig, R. (2010). Interprofessional collaboration among nurses and physicians: Making a difference in patient outcome. Swiss Med Wkly. 140:w13062. https://doi.org/10.4414/smw.2010.13062

Martinuzzi, A., Salghetti, A., Betto, S., Russo, E., Leonardi, M., Raggi, A., & Francescutti, C. (2009). The International Classification of Functioning Disability and Health, version for children and youth as a roadmap for projecting and programming rehabilitation in a neuropaediatric hospital unit. Journal of Rehabilitation Medicine, 42(1), 49–55. <a href="https://doi.org/10.2340/16501977-0468">https://doi.org/10.2340/16501977-0468</a>

Miller, K. L. (2016). Patient centered care: A path to better health outcomes through engagement and activation. NeuroRehabilitation, 39(4), 465–470. https://doi.org/10.3233/NRE-161378

Moran, M., Bickford, J., Barradell, S., & Scholten, I. (2020). Embedding the International Classification of Functioning, Disability and Health in Health Professions Curricula to Enable Interprofessional Education and Collaborative Practice. Journal of medical education and curricular development, 7, 2382120520933855. https://doi.org/10.1177/2382120520933855

Newman-Griffis, D., Porcino, J., Zirikly, A., Thieu, T., Camacho Maldonado, J., Ho, P. S., Ding, M., Chan, L., & Rasch, E. (2019). Broadening horizons: the case for capturing function and the role of health informatics in its use. BMC public health, 19(1), 1288. https://doi.org/10.1186/s12889-019-7630-3

Nguyen, L., Cross, A., Rosenbaum, P., & Gorter, J. W. (2021). Use of the International Classification of Functioning, Disability and Health to support goal-setting practices in pediatric rehabilitation: a rapid review of the literature. *Disability and rehabilitation*, 43(6), 884–894.

https://doi.org/10.1080/09638288.2019.1643419



















Pernambuco, A.P., Lana, R.D.C. & Polese, J.C.. (2018). Knowledge and use of the ICF in clinical practice by physiotherapists and occupational therapists of Minas Gerais. Fisioterapia e Pesquisa, Vol. 25(2):134–142. https://doi.org/10.1590/1809-2950/16765225022018

Polese, J.C., Lana, R.C., Fonseca, A.C.S., Costa, P.H.V. & Pernambuco, A.P. (2019). Impact of training on the use of the International Classification of Functioning, Disability and Health. Acta Fisiátrica, 26(2):83-8 7. https://doi.org/10.11606/issn.2317-0190.v26i2a165643

Rauch, A., Cieza, A., & Stucki, G. (2008). How to apply the International Classification of Functioning, Disability and Health (ICF) for rehabilitation management in clinical practice. European journal of physical and rehabilitation medicine, 44(3), 329–342.

Rawlinson, C., Carron, T., Cohidon, C., Arditi, C., Hong, Q. N., Pluye, P., Peytremann-Bridevaux, I., & Gilles, I. (2021). An Overview of Reviews on Interprofessional Collaboration in Primary Care: Barriers and Facilitators. International journal of integrated care, 21(2), 32. https://doi.org/10.5334/ijic.5589

Reed, G.M., Dilfer K., Bufka, L.F., Scherer, M.J., Kotze, P., Tshivhase, M. & Stark, S.L. (2008). Three model curricula for teaching clinicians to use ICF. Disability and Rehabilitation, 30 (00): 1–15. https://doi.org/10.1080/09638280701800301

Snyman, S., Von Pressentin, K. B., & Clarke, M. (2015). International Classification of Functioning, Disability and Health: Catalyst for interprofessional education and collaborative practice. Journal of interprofessional care, 29(4), 313-319. https://doi.org/10.3109/13561820.2015.1004041

Stucki, G., Rubinelli, S., & Bickenbach, J. (2020). We need an operationalisation, not a definition of health. Disability and rehabilitation, 42(3), 442-444.

https://doi.org/10.1080/09638288.2018.1503730

Stucki, G., Zampolini, M., Juocevicius, A., Negrini, S., & Christodoulou, N. (2017). Practice, science and governance in interaction: European effort for the system-wide implementation of the International Classification of Functioning, Disability and Health (ICF) in Physical and Rehabilitation Medicine. European journal of physical and rehabilitation medicine, 53(2), 299–307.

https://doi.org/10.23736/S1973-9087.16.04436-1

Tempest, S. & McIntyre, A. (2006). Using the ICF to clarify team roles and demonstrate clinical reasoning in stroke rehabilitation. Disability and Rehabilitation, May 30;28(10):663-667. https://doi.org/10.1080/09638280500276992

Wade, D.T. (2005). Describing rehabilitation interventions. Editorial. Clinical Rehabilitation. 19, 811-818. https://doi.org/10.1191/0269215505cr923ed

Wade, D. T., & Halligan, P. W. (2017). The biopsychosocial model of illness: a model whose time has come. Clinical rehabilitation, 31(8), 995–1004. https://doi.org/10.1177/0269215517709890

WHO-FIC Collaborating Centre in South Africa. (2023). Invitation to comment: ICF-based criteria for the development of clinical guidelines in UHC. Available from: https://www.whofic.org.za/16criteria

WHO-FIC Newsletter. (2013). Universal Health Coverage within the WHOFIC Network: Information and Classification. Available from: https://www.whofic.nl/sites/default/files/2018-05/WHO-FIC%20newsletter%202013-2.pdf



















World Health Organization. (2001). International classification of functioning, disability and health: ICF. Geneva: World Health Organization. <a href="https://apps.who.int/iris/handle/10665/42407">https://apps.who.int/iris/handle/10665/42407</a>

World Health Organization. (2010). Framework for Action on Interprofessional Education & Collaborative Practice (WHO/HRH/HPN/10.3). Geneva: World Health Organization. https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-educationcollaborative-practice

World Health Organization. (2013). How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF). Exposure draft for comment. October 2013. Geneva: World Health Organization. <a href="https://www.who.int/publications/m/item/how-to-use-the-icf---">https://www.who.int/publications/m/item/how-to-use-the-icf---</a> a-practical-manual-for-using-the-international-classification-of-functioning-disability-and-health World Health Organization. (2020). Rehabilitation Competency Framework. September 2019.

https://iris.who.int/bitstream/handle/10665/338782/9789240008281-eng.pdf?sequence=1





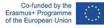














# **Appendixes**

- Appendix 1. Data collection instructions and templates (a and b).
- Appendix 2. ICF and goal setting workshops (Coronaria)
- Appendix 3. ICF specialist hours "get to know each other" (Coronaria)
- Appendix 4. ICF case specialist hours (Coronaria)
- Appendix 5. Pilot of ICF based tools and practices to occupational therapists (Coronaria)
- Appendix 6. Pilot of ICF based tools and practices to speech therapists (Coronaria)
- Appendix 7. Pilot of ICF based tools and practices to physiotherapists (Coronaria)
- Appendix 8. Video between a rehabilitation professional and a client (Coronaria)
- Appendix 9. ICF training to all rehabilitation professionals (Coronaria)
- Appendix 10. Implementation of ICF documentation system for dietitians step-by-step guideline (Moorheilbad Harbach)
- Appendix 11. Workshop setting a main goal (Revalidatie Friesland)
- Appendix 12. ICF table in electronic patient device (Revalidatie Friesland)
- Appendix 13. Training for all the disciplines to explain how ICF is integrated in our EPD (Revalidatie Friesland)
- Appendix 14. Discussion-tool (Revalidatie Friesland)
- Appendix 15. Blackboard course ICF interprofessional (Revalidatie Friesland)
- Appendix 16. A series of (short) separate videos. (AP UAS)
- Appendix 17. A presentation of a case abroad. (AP UAS)
- Appendix 18. A diary of someone in practice. (AP UAS)
- Appendix 19. A video on the basic explanation of ICF. (AP UAS)
- Appendix 20. A video of a team meeting (St.Poelten UAS)
- Appendix 21. Development of a digital escape room (St.Poelten UAS)



















# Appendix 1. Data collection instructions and templates (a and b).

Isana Paltamaa and Laura Mutanen

December 15th 2022





# INPRO WP5 Task 5.3 reporting ICF-based Tools and practices

# Allocation of tasks:

The ICF Working group members from the working field partners, Coronaria, Moorheilbad Harbach (MOHA) and Revalidatie Friesland (RF) and from AP University of Applied Sciences

- who were responsible the development of ICF-based tools and practices
- are responsible for compiling their data for the INPRO WP5 ICF-based Tools and practices report

There are two templates (phase a) and phase b)) for data collection (annexes). Instructions on how to fill in the templates are later in this guide.

WP5 leaders Jaana Paltamaa (Jamk) and Laura Mutanen (Coronaria) are responsible for compiling the data provided in the templates and writing the final report.

### The authors:

- Jaana Paltamaa and Laura Mutanen and all other data providers are authors of the
  - o Jaana Paltamaa (Jamk), Laura Mutanen (Coronaria), Christine Haumer (MOHA), Ellen van Lingen (RF) and Ingrid Aerts (AP).
  - Please tell to Jaana if there are other data collectors or writers in your organisation.
- An article will be written based on the report and submitted to an international professional journal by the authors. Jaana Paltamaa is responsible for this.

### A timetable:

- The guide will be presented at the 19<sup>th</sup> December 2022 in the ICF-based Tools and Practices working group meeting.
- It can be started filling right away.



















- They will be saved in the Hanze Teams
  - WP5 > Task 5.5. (2023) Reporting and dissemination > Achieved from x (each organisation's own folder).



- Fill in both templates found in the Teams (below for more detailed instructions on how to do it).
- Firstly, fill in the phase (a) template
  - o only once
  - o describe the organisation and give a list of the actions taken
  - o deadline January 31, 2023 (31-01-2023)
  - Save using your organisation name (for example Coro template a)
- Secondly, fill in as many phase (b) templates as there were actions.
  - o first drafts should be ready by March 31, 2023 (31-03-2023)
  - Save each action separately using the name of the action (for example Coro action x template b)
- Jaana and Laura will make a summary to the Belgium 20-21.4.2023 Transnational meeting.
- It is possible to continue filling in after April.
- Templates (b) should be completed by June 2, 2023 (2-6-2023)
  - o attach the output (material) either at the end of the description in template (b) or as a separate attachment or add a reference to where it is available.
- Jaana and Laura will finalize the report in August 2023 for commenting.
- After authors comments the final report will be ready in September 2023.



















# Tips and advice

- Keep in mind the aim of WP5 Task 5.3:
  - o to develop ICF-based tools and practices
  - o to promote person-centred and interprofessional collaborative practices
  - o based on the needs of the working field partner (Coronaria, MOHA, DF) and AP university of applied sciences.
- Deliverables are: Several iterative developed ICF-based tools or practices in each country
- The development processes and deliverables are described in this English language report
  - o Each partner may write a report in its national language if necessary.
- you as the developer is the best expert to describe
  - o how the development of the ICF-based tool or practice was done,
  - o what the outcome is,
  - o how it is used in practice, and
  - o what are the future plans!
- You can decide what and how much to write, as long as the big picture is presented well enough.
- Think about what is of interest to your readers or those in the field.
- Keep in mind the themes of person-centred functioning (ICF) and interprofessional practices.

We can have a meeting if there are any questions that are unclear.





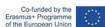














## **Templates:**

Phase a) information on the organisation



# **WP5 ICF-based Tools and Practices**

Template for reporting phase a) information on the organisation

# Organisation information

Name	Enter organisation legal name
	Enter short name if used in the text
Country	Enter country
Description of the organisation	Enter a short description
Overall objectives	Describe your organisation's starting point and overall objectives when you started to design ICF-based tools and practices for INPRO WP5
Task 5.3 Actions	List all the actions planned (only name, add more if needed):
	1)
	2)
	3)
	4)
	5)
Overall success and its determinants at organisational level	The overall success (at organisational level): what/how was successful and what were the challenges (e.g., slow start-up, difficult to recruit people in addition to clinical work, turnover of people in charge)
Those who completed the form	Enter names and occupations
Date	Enter date
·	

### Guide:

- Headings are in the left column [do not change them].
- Fill in your own information in the right column [replace the text in the column].
- The text in the right column is an instruction on what to fill in.
- Describe in the row "Task 5.3 Actions" all the actions planned in WP5 Task 5.3 of the INPRO project.
  - o Note! including those that were not implemented.
  - o add short name and use the same name in the phase (b) template
  - add more raws if needed

Task 5.3 Actions	List all the actions planned (only name, add more if needed):
	1)
	2)

- Save according to the instructions above.
- Phase (a) information is used in the report written by Jaana and Laura when describing the organisations.



















# Phase b) information on the actions done



# WP5 ICF-based Tools and Practices

Template for reporting phase b) information on the actions done

# Enter name of the organisation

Action number: (enter)

Enter name of the action (same the phase a)

Contact person: (Enter name and email address)

Research question	Describe overall goal and/or the research question
Implemented	Yes (continue filling in the form) No (if no, describe why not, you can stop here)
Start	Enter start date of the action
End	Enter the end date of the action
Responsible person(s)	Enter name(s) and occupation(s) of the person(s) who implemented the action; describe those person(s) experience and knowledge of the ICF
Target group	Describe the target group of the development action (numbers and professions/background of participants, etc.)
Setting	Describe where implemented (whole/part of organisation, in/outpatient, etc.)
Implementation	Describe what was done and how
Outcome	Describe outcome (verbally, you can add pictures, attachments, web links, etc. as necessary)
Evaluation of the implementation	Evaluate the action implementation, reflect on whether it was successful, what helped to achieve the result, what was an obstacle / what could have been done differently, what was changed in the life of the project, etc.)
Evaluation of the benefits	What is the benefit of the result for everyday work / practices
Is it in use	Yes/Partially/No
	Describe the current use. If not in use, indicate why.
Further plans	Yes/No
	Describe if you have any further plans

### Guide:

- Fill in as many phase (b) templates as there were separate actions mentioned in phase (a).
- Template
  - o headings are in the left column [do not change them]





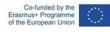














- o fill in the details on the certain action in the right column [replace the text in the
- o the text in the right column is an instruction on what to fill in
- o if a heading is not applicable, enter NA (not applicable)
- Attach the output(s) [name it by the action] or add a reference to where it is available.
- Save according to the instructions above.
- The descriptions of the actions in template (b) will be attached to the report as such.
  - o if, for example, information from another company is involved, think about how it is presented.



















### **Appendix 2. ICF and goal setting workshops (Coronaria)**

Research question	What are benefits of ICF and goal setting workshops for rehabilitation professionals at Coronaria?
Implemented	Yes
Start	01-05-2021
End	31-03-2022
Responsible person(s)	Laura Mutanen, physiotherapist, project specialist Johanna Naamanka, speech therapist, project specialist Elina Kuohuva-Ikonen, occupational therapist, WP5 co-lead Mervi Huttula, nurse, regional manager, INPRO Coronaria steering group member All the responsible persons had basic to advanced knowledge of ICF.
Target group	Rehabilitation professionals including physiotherapists, occupational therapists, speech therapists, psychologists, social workers and nurses  Number of attenders in all workshops: 43
Setting	Number of workshops: four in four different service units (Seinäjoki, Lahti, Jyväskylä, Kokkola) for professionals working with both in and out clients.  Three live settings and one virtual setting. One workshops for 6,5h and three workshops for 5,5 hours each were kept. Ten to fifteen different rehabilitation professionals from their service units.
Implementation	One workshops for 6,5h and three workshops for 5,5 hours each were kept. After one workshop the length of the workshops was reduced for financial reasons to 5,5 hours. The workshops were interactive with short power point presentations in the beginning and working in groups in the end of the day. The content of the workshops was changed during the time after feedback from participants.  Content of the workshop
	- Introduction round

- Introduction round
- Motivational interviewing
- ICF and goal setting
- ICF based tools at Coronaria
- Lunch
- Workshop working
- Summary of the day

The service units were selected from the regions managed by Mervi Huttula and Tiina Vauhkonen. The service units were also approved by the INPRO Coronaria steering group. The number of participants was selected to be ten to fifteen attenders. E-



















mails were sent to the team leaders in Seinäjoki, Jyväskylä and Kokkola with an information PowerPoint and schedule of the half day workshop. The team leaders were asked to recruit ten to fifteen different rehabilitation professionals from their service units.

The content of the workshops was discussed between the responsible persons of this action. KELA, the social insurance institution, has given feedback to Coronaria that the clients goal setting and rehabilitation planning should be more systematic and concrete. Therefore, regional manager Mervi Huttula hoped to pilot ICF and goal setting workshops at Coronaria.

#### Outcome

# Evaluation of the implementation

#### ICF-based Tools & Practices – INPRO (inproproject.eu)

The workshops gave an opportunity to reflect upon ICF and goal setting in an interprofessional setting and it raised up good ideas and further development suggestions. This kind of setting gave an opportunity to talk more freely about issues around client centredness and interprofessionalism. However, the time was limited in the workshops. Similar workshops are needed to be really able in implementing ICF in goal setting since many of the participants had little knowledge about ICF from before. The workshops could have also been built in another way with even more focus on ICF and client cases. Furthermore, such workshops work best with professionals who already have at least basic knowledge of the ICF framework. On the other hand, the professionals with less knowledge in ICF might have more fresh views in what could work and how ICF education should be built.

#### **Evaluation of the benefits**

We received feedback on the workshop itself, the ICF tools and attitudes towards the ICF framework. We also received a lot of valuable feedback from different rehabilitation professionals on what is needed to implement ICF-based tools and practices in Coronaria.

Examples of the feedback from the participants when it comes to the workshop in itself and thoughts about ICF:

"The workshop helped to understand the importance of ICF in practice."

"Although everyday life at Coronaria is busy, it's wonderful to see that people here focus on talking about these things too" "Implementing the ICF in work requires working on one's own approaches, changing one's own perspectives in the direction of the ICF."

"Important: taking the whole client into account."

"Consideration of the type of guidance style that is most beneficial to the client



















	"What is this person made of?"
Is it in use	Not at the moment
	One of the reasons why workshops are not currently used is due to fact that there are about 160 service units at Coronaria, and we are planning more effective ways to reach everyone when it comes to ICF and goal setting at Coronaria. We have plans of creating ICF education at a platform called Moodle. Workshop working could be connected to ICF education in the future but as such the workshops are not useful. A basic knowledge of ICF before attending an ICF workshop would have given the participants a greater ability to internalise new aspects of the workshop.
Further plans	Not at the moment
Contact person	Laura Mutanen, laura.mutanen@coronaria.fi



















### Appendix 3. ICF specialist hours "get to know each other" (Coronaria)

Research question	The aim was to give rehabilitation workers the opportunity to get to know each other's professional roles and which dimensions of functioning need special attention in different professions. The aim was also to deepen interprofessional understanding among the participants and how the ICF framework can be a tool in interprofessional working setting. Furthermore, how to gain understanding from ICF in client cases. The idea for this came from an interprofessional survey of Coronaria's rehabilitation staff in January 2022.
Implemented	Yes
Start	17-03-2022
End	20-04-2022
Responsible person(s)	Laura Mutanen, physiotherapist, WP5 co-lead Piia Aro-Pulliainen, speech therapist Jenna Sillanpää, occupational therapist Anna-Leena Kontiainen, social worker Tiia-Tuulia Kääntä, nurse Elin Lövdahl, sexual counsellor Inkka Sundblad, speech therapist, service manager  All the responsible persons had basic to advanced knowledge of ICF.
Target group	Rehabilitation professionals all over Coronaria
Setting	The specialist hour sessions were held in teams and recorded so that they could be listened to afterwards. Participants in the live team meetings: 21
Implementation	The specialist hours are 60 min each with an active part for 45 minutes and afterwards 15 minutes time for interactive discussions around the topic. There were two specialist hours with three different professionals giving speech in each specialist hour á 15 minutes. The first included contributions from a physiotherapist, an occupational therapist and a speech therapist. The second included contributions from a social worker, a nurse and a sexual counsellor. The professionals had contact with each other on teams beforehand to go through the specialist hour. There were only two specialist hours because of difficulties in getting interested rehabilitation workers to give specialist hours. Lack of time was also cited as a reason. The third specialist hour would have contained speeches from a psychologist, a neuropsychologist, and a family therapist.



















Outcome	<ol> <li>Inkka Sunblad, service manager, coordinates specialist hours in Coronaria and started by welcoming participants to the specialist hour</li> <li>A short introduction of ICF why and how it be used in daily working life</li> <li>A presentation of the rehabilitation professionals` work description in general</li> <li>A presentation of the rehabilitation professionals` work description specifically in Coronaria</li> <li>A client case description filled in RPS form</li> <li>ICF domains in functioning particularly in the working role in question</li> <li>Each rehabilitation professional in an interprofessional context</li> </ol> ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	The action implementation was partly successful. The number of participants was small on the Teams meetings. However, the specialist hour sessions are recorded and can be listened to afterwards and can also serve as introduction material to new rehabilitation workers in Coronaria. These specialist hours also serve as an introduction to new professionals into the working roles of different rehabilitation professionals. It is one of the interprofessional competences to become familiar with other professionals and to know their roles which is also essential when we continue in the implementation of ICF framework into our daily working life. However, we failed in recruiting a wider variety of professionals into these specialist hours as planned. Furthermore, although these specialist hours are a good idea we need to find other ways too to reach our professionals since time limitation is very often the case why professionals do not attend these specialist hours in general.
Evaluation of the benefits	The specialist hours could be more interactive in the future with themes around ICF and interprofessionalism. Perhaps some prematerial is needed which is sent to every service unit as a base for interprofessional and interactive discussions? We need to be innovative in the way we want to reach to as many professionals as possible.
Is it in use	Partially
	Since the specialist hours are recorded are those in use for the professionals interested in listening to them.
Further plans	Not at the moment





Contact person









Laura Mutanen, laura.mutanen@coronaria.fi







# **Appendix 4. ICF case specialist hours (Coronaria)**

Research question	The aim was that the specialist hours would include real clients, with whom professionals from different fields would interact with. They would talk about the client's functioning using the ICF as the common language.
Implemented	No, the purpose was to implement it but due to staff turnover there was no time for it.
Start	Not implemented
End	Not implemented
Responsible person(s)	
Target group	
Setting	
Implementation	
Outcome	
Evaluation of the implementation	The action was not carried out due to a lack of resources resulting from staff turnover.
Evaluation of the benefits	
Is it in use	
Further plans	No
Contact person	Laura Mutanen, laura.mutanen@coronaria.fi



















# Appendix 5. Pilot of ICF based tools and practices to occupational therapists (Coronaria)

Research question	How can ICF based tools (RPS-form and ICF subsets) help occupational therapists in goal setting and rehabilitation planning?
Implemented	Yes
Start	08-09-2022
End	31-08-2023
Responsible person(s)	Laura Mutanen, physiotherapist, WP5 co-lead Annukka Kivini, occupational therapist, product manager of occupational and speech therapy services, steering group member of Coronaria INPRO Anu Kiuru, physiotherapist, product manager of physiotherapy services Maija Mannisenmäki, physiotherapist, service manager Ulla Äijälä, occupational therapist Jenny Lapinoja, physiotherapist Maria Hammare, speech therapist
Target group	All the responsible persons had basic to advanced knowledge of ICF.  Occupational therapists working with outpatients at Coronaria
C a Hitman	rehabilitation
Setting	For a pilot of the ICF based tools and practices: two occupational therapists at two different service units.  After the pilot the ICF based tools are meant to be available to all occupational therapists at Coronaria who work with out-patients.
Implementation	An ICF working group was created in May 2022 which planned and made the decisions upon the ICF based tools and practices. A pilot was agreed in the beginning to make it easier to decide upon which ICF based tools and practices to implement at Coronaria.  An information letter about the ICF pilot was sent to four team leaders in spring 2022 in four service units: Espoo, Tampere, Jyväskylä and Turku. A teams meeting was also held with the team leaders the 7th of June á 60 minutes. The team leaders were asked to recruit physiotherapists, occupational therapists and speech therapists as followed:  - Espoo: two occupational therapists, two speech therapists - Tampere: two physiotherapists, two occupational therapists - Jyväskylä: two physiotherapists - Turku: two speech therapists















Introduction was held into ICF framework and the ICF based tools selected. There were three one-hour ICF introduction specialist





hours and one reflection teams á 60 minutes for one occupational therapist. The material in these hours was taken from the ICF basic course developed by INPRO, the ICF e-learning material made by WHO was left out. The second occupational therapist attended the INPRO ICF basic course and one specialist hour about ICF based tools and furthermore she attended the reflection teams á 60 minutes which was meant to every attender. The specialist hour about ICF based tools for occupational therapists was held by Annukka Kivini. The ICF based tools for occupational therapists were the RPS form and ICF subsets modified from a HEI master work in rehabilitation.

There was independent working by each participant in between the meetings. Every participant was informed to use the ICF based tools with two clients (children).

From the planned four occupational therapists there were only two participants since Tampere failed in recruiting participants.

After the pilot, we expanded the ICF working group to include new physiotherapists, occupational therapists and speech therapist members from the field. We reviewed feedback from the pilot participants with the ICF working group and set about further refining the subsets and decided to introduce a modified RPS form for us at Coronaria. The rehabilitation core set added with minimal set of environmental factors and personal factors was also decided upon to be used in the future with support questions made by physiotherapists Laura Mutanen and Ida Rasi during a pilot of ICF based tools for physiotherapist. Please see the separate template b, action number five.

Maija Mannisenmäki and Annukka Kivini are both participants of the INPRO ICF facilitator course and they carried on in building our own ICF training manual based on the material produced in INPRO. This is explained on template b, action seven.

#### **Outcome**

# Evaluation of the implementation

#### ICF-based Tools & Practices - INPRO (inproproject.eu)

Since we failed in recruiting the planned number of pilot participants the evaluation of the pilot implementation is of course more challenging. It was challenging to receive answers from the team leaders and also challenging to decide upon a common date for the teams meeting with information about the ICF pilot. In general, the ICF training was found good although the one who attended the shorter INPRO ICF training found it too short. More client case reports would also have been helpful. The ICF based tools were found good in understanding the whole picture of the client. However, the subset was found good and comprehensive although it would have needed testing on more clients.



















Feedback from the participants:

"The subset for children in occupational therapy is brilliant and speaks the language I find it easy to pick things up from. A questionnaire for parents would also be very good."

"Having tried it with a few clients, it's hard to say. Seemed comprehensive."

The RPS form was found as little confusing with its terms.

Feedback from participants when it comes to a question if support questions would have been needed: "Well, maybe it's the support questions that would make the RPS form easier to use."

There was also one who thought that support questions would help in raising up certain questions:

"Yes, support questions would be good. Some issues difficult to raise."

A larger number of participants could have given a more informative evaluation of the usage of the ICF based tools and also about the ICF training. On the other hand, we succeeded in recruiting participants from different service units which is of importance since the practices differs from unit to unit.

#### **Evaluation of the benefits**

We learnt that the ICF training needs to be longer than a few hours and also more client case example are beneficial. Furthermore, the RPS form is challenging to manage if your ICF knowledge is on a basic knowledge level or less. The ICF language is not in the case rooted. The less ICF knowledge you have the more structured tools you need. On the other hand, when you have gained more ICF knowledge the less structured ICF tools are more useful.

The use of different core lists or subsets is a good idea for the future. Support questions for interviewing could be a good idea for occupational therapists too in the future.

Another benefit from the pilot was the recorded ICF training specialist hours which can be listened not only by the pilot participants but by every rehabilitation professional at Coronaria. It was also our plan that we could reach out to as many listener as possible.

#### Is it in use

ICF training and ICF based tools will be introduced in 2023 and 2024. The ICF training will be targeted on all rehabilitation professionals and the ICF based tools for physio- occupational and speech therapists working with out-patients as a first step. The second step is to develop ICF based tools for other rehabilitation professionals too.

#### **Further plans**

After the pilot and further development of the ICF based tools Coronaria has plans to introduce ICF tools to all occupational therapists, physiotherapists and speech therapists working with outpatients.



















ICF training is planned for all those working in rehabilitation. ICF tools will in the future also be implemented to rehabilitation workers working with in-patients and with multiprofessional services (KELA services). Changes will also be made to the client report forms to make the ICF more visible to service payers.

ICF will be viewed in the whole rehabilitation process, from the beginning in the planning of rehabilitation to the end reporting.

**Contact person** 

Laura Mutanen, laura.mutanen@coronaria.fi



















### Appendix 6. Pilot of ICF based tools and practices to speech therapists (Coronaria)

Research question	How can ICF tools (RPS-form and ICF interview forms for parents and speech therapists) help speech therapists in goal setting and rehabilitation planning?
Implemented	Yes
Start	08-08-2022
End	31-08-2023
Responsible person(s)	Laura Mutanen, physiotherapist, WP5 co-lead Piia Aro-Pulliainen, speech therapist Annukka Kivini, occupational therapist, product manager of occupational speech therapy services, steering group member of Coronaria INPRO Anu Kiuru, physiotherapist, product manager of physiotherapy services Maija Mannisenmäki, physiotherapist, service manager Ulla Äijälä, occupational therapist Jenny Lapinoja, physiotherapist Maria Hammare, speech therapist
	All the responsible persons had basic to advanced knowledge of ICF.
Target group	All speech therapists at Coronaria working with out-patients
Setting	For a pilot of ICF based tools and practices: three speech therapists from two different service units working with out-patients After the pilot: the ICF based tools will be available for all speech therapists at Coronaria who work with out-patients.
Implementation	An ICF working group was created in May 2022 which planned and made the decisions upon the ICF based tools and practices. A pilot was agreed in the beginning to make it easier to decide upon which ICF based tools and practices to implement at Coronaria. An information letter about the ICF pilot was sent to four team leaders in spring 2022 in four service units: in Espoo, Tampere, Jyväskylä and Turku. A teams meeting was also held with the team leaders the 7th of June á 60 minutes. The team leaders were asked to recruit physiotherapists, occupational therapists and speech therapists as followed:  Espoo: two occupational therapists, two speech therapists  Tampere: two physiotherapists, two occupational therapists  Jyväskylä: two physiotherapists  Turku: two speech therapists















Introduction was held into ICF framework and ICF based tools. There were three one-hour ICF introduction specialist hours and one reflection teams á 60 minutes for two speech therapists. The material in these hours was taken from the ICF basic course developed by INPRO, the ICF self-study material made by WHO was left out. The third speech therapist attended INPRO ICF basic





course and one specialist hour about ICF based tools and furthermore she attended the reflection teams á 60 minutes which was meant to every attender. The specialist hour about ICF based tools for speech therapists was held by Piia Aro-Pulliainen. The ICF based tools for speech therapists were the RPS form and interview forms made to both speech therapists and parents. The interview forms are made by Pia Lindevall in a project in 2019-201 "ICF in children's rehabilitation"

There was independent working by each participant in between the meetings. Every participant was informed to use the ICF based tools for two clients (children).

From the planned four speech therapists there were only three participants since Espoo failed in recruiting participants.

After the pilot, we expanded the ICF working group to include new physiotherapists, occupational therapists and speech therapist members from the field. We reviewed feedback from the pilot participants with the ICF working group and decided not to take into use the interview forms for speech therapists. Instead of the interview forms there will be a modified RPS form and subsets. The rehabilitation core set and support questions will also be taken into practice, see please the template b, action five.

Maija Mannisenmäki and Annukka Kivini are both participants of the ICF facilitator course and they carried on in building our own ICF training manual based on the material produced in INPRO. This is explained on a separate template.

#### **Outcome**

#### **Evaluation of the** implementation

#### ICF-based Tools & Practices - INPRO (inproproject.eu)

Since we failed in recruiting the planned number of participants the evaluation of the pilot implementation is of course more challenging. It was challenging to receive answers from the team leaders and also challenging to decide upon a common date for the teams meeting with information about the ICF pilot. In general, the ICF education was found good although more client cases would have been useful. The ICF based tools were found good in understanding the whole picture of the client.

Feedback from the participants of the interview forms: "The questionnaires focus mainly on the domains of performance and participation. The parent questionnaire has only a small questionnaire on bodily functions (b), but no item on environmental factors (e). The speech therapist's assessment form was missing a section on bodily functions, which could be useful for some clients."

"There could be more specific questions for speech and language therapists about environmental factors, which were hardly discussed at all. However, it is known that environmental factors play an important role in either supporting or hindering





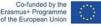














independent communicative functioning in the client's everyday life."

The interview forms were found from all three participants as too time consuming, but they were found good in goal setting (rating 4/5, on a scale from 1-5). Assessing the functioning in the rating scale was found as difficult by all three speech therapists. Furthermore, the interview forms for speech therapists were still found as good when it comes to assessing the overall functional capacity of the client (4,33 rating in a scale 1-5). The interview forms for parents were found as useful when it came to the next question: the questionnaires were useful in getting an overall picture of the client's ability to function. The rating was 4/5 (1-5 scale). The same rating on goal setting.

The RPS form was rated for its usefulness in goal setting as 3/5 (1-5 scale). The same rating was given in the usefulness of the RPS form in receiving a holistic picture of the functioning of the client.

A larger number of participants could have given a more informative evaluation of the usage of the ICF based tools and also about the ICF education. On the other hand, we succeeded in recruiting participants from different service units which is of importance since the practices in general differs from unit to unit.

#### **Evaluation of the benefits**

We learnt that the ICF training needs to be longer than a few hours and more client case examples would be beneficial. Another benefit from the pilot was the recorded ICF training specialist hours which can be listened not only by the pilot participants but by every rehabilitation professional at Coronaria. It was also our plan that we could reach out to as many listener as possible.

The ICF based tools for speech therapist were experienced as useful but too time-consuming. The interview forms were also seen as lacking in body functions and structures and environmental factors. The RPS form was rated to have some usefulness in goal setting. The ICF based tools for goal setting and rehabilitation planning piloted could give more information to its users with deeper ICF knowledge. Furthermore, the interview forms might need some modification to be more useful.

#### Is it in use

ICF training and ICF tools will be introduced in 2023 and 2024. The ICF training will be targeted on all rehabilitation professionals and the ICF based tools for physio- occupational and speech therapists working with out-patients as a first step. The second step is to develop ICF based tools for other rehabilitation professionals too. After the pilot and further development of the ICF based tools Coronaria has plans to introduce ICF tools to all occupational therapists, physiotherapists and speech therapists working with outpatients. ICF training is planned for all those working in rehabilitation. ICF tools will in the future also be implemented to

#### **Further plans**













rehabilitation workers working with in-patients and with







	multiprofessional services (KELA services). Changes will also be made to the client report forms to make the ICF more visible to service payers.  ICF will be viewed in the whole rehabilitation process, from the beginning in the planning of rehabilitation to the end reporting.
Contact person	Laura Mutanen, laura.mutanen@coronaria.fi



















### Appendix 7. Pilot of ICF based tools and practices to physiotherapists (Coronaria)

Research question	How can ICF based tools (RPS-form, support questions for interviewing, rehabilitation core set added with minimal set of environmental factors and personal factors) help for physiotherapists in goal setting and rehabilitation planning?
Implemented	Yes
Start	08-09-2022
End	02-12-2022
Responsible person(s)	Laura Mutanen, physiotherapist, WP5 co-lead Ida Rasi, physiotherapist Annukka Kivini, occupational therapist, product manager of occupational and speech therapy services, steering group member of Coronaria INPRO ' Anu Kiuru, physiotherapist, product manager of physiotherapy services Maija Mannisenmäki, physiotherapist, service manager Ulla Äijälä, occupational therapist Jenny Lapinoja, physiotherapist Maria Hammare, speech therapist All the responsible persons had basic to advanced knowledge of ICF.
Target group	Physiotherapists working with out-patients at Coronaria rehabilitation
Setting	For the pilot of ICF based tools and practices: three physiotherapists working on two different service units  After the pilot: the ICF based tools will be available for all physiotherapists at Coronaria who work with out-patients.
Implementation	An ICF working group was created in May 2022 which planned and made the decisions upon the ICF based tools and practices. A pilot was agreed in the beginning to make it easier to decide which ICF based tools to implement in Coronaria.  An information letter about the ICF pilot was sent to four team leaders in spring 2022 in four service units: in Espoo, Tampere, Jyväskylä and Turku. A teams meeting was also held with the team leaders the 7th of June á 60 minutes. The team leaders were asked to recruit physiotherapists, occupational therapists and speech therapists as followed:  Espoo: two occupational therapists, two speech therapists  Tampere: two physiotherapists, two occupational therapists  Jyväskylä: two physiotherapists  Turku: two speech therapists

















material made by WHO was left out. The third physiotherapist

Introduction was held into ICF framework and ICF based tools. There were three one-hour ICF introduction specialist hours and one reflection teams á 60 minutes for two physiotherapists. The material in these hours was taken from the ICF basic course, the ICF self-study



attended INPRO ICF basic course and one specialist hour about ICF based tools and furthermore she attended the reflection teams á 60 minutes which was meant to every attender. The specialist hour about ICF based tools for physiotherapists was held by Laura Mutanen. The ICF based tools for physiotherapists were the RPS form, support questions for interviewing, rehabilitation core set added with minimal set of environmental factors and personal factors made by Laura Mutanen and Ida Rasi.

There was independent working by each participant in between the meetings. Every participant was informed to use the ICF based tools for two clients (adults).

From the planned four physiotherapists there were only three participants since Tampere failed in recruiting participants.

After the pilot, we expanded the ICF working group to include new physiotherapists, occupational therapists and speech therapist members from the field. We reviewed feedback from the pilot participants with the ICF working group and set about further refining the subsets and decided to introduce a modified RPS form for us at Coronaria. The rehabilitation core set including minimal set of environmental factors and personal factors and was also decided upon to be used in the future with support questions.

Maija Mannisenmäki and Annukka Kivini are both participants of the INPRO ICF facilitator course and they carried on in building our own ICF training manual based on the material produced in INPRO. This is explained on template b, action seven.

#### Outcome

#### **Evaluation of the** implementation

#### ICF-based Tools & Practices – INPRO (inproproject.eu)

Since we failed in recruiting the planned number of participants the evaluation of the pilot implementation is of course more challenging. It was challenging to receive answers from the team leaders and also challenging to decide upon a common date for the teams meeting with information about the ICF pilot. In general, the ICF training was found good although more client cases would have been useful. The ICF based tools were found good in understanding the whole picture of the client.

Feedback from the participants of the pilot:

"The use of rehabilitation core list facilitated a holistic assessment of the client's functional capacity."

"Helped to structure (rehabilitation core set) the interview and thus also to map the capacity to act."

The RPS form was rated as number 3 in a scale from 51-5 when it comes to goal setting.

A larger number of participants could have given a more informative evaluation of the usage of the ICF based tools and also about the ICF education. On the other hand, we succeeded in





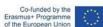














recruiting participants from different service units which is of importance since the practices in general differs from unit to unit.

Evaluation of the benefits	We learnt that the ICF training needs to be longer than a few hours and also more client case examples would be beneficial. Another benefit from the pilot was the recorded ICF training specialist hours which can be listened not only by the pilot participants but by every rehabilitation professional at Coronaria. It was also our plan that we could reach out to as many listener as possible.  The ICF based tools for physiotherapists were experienced as useful, especially the rehabilitation core set added with minimal set of environmental factors and personal factors. Wishes for useful core lists have come from the rehabilitation professionals in general. The RPS form was seen as giving some help in goal setting with a rating of 3/5 (1-5 scale). The ICF based tools for goal setting and rehabilitation planning piloted could give more information to its users with deeper ICF knowledge.
Is it in use	ICF training and ICF tools will be introduced in 2023 and 2024. The ICF training will be targeted on all rehabilitation professionals and the ICF based tools for physio- occupational and speech therapists working with out-patients as a first step. The second step is to develop ICF based tools for other rehabilitation professionals too.
Further plans	After the pilot and further development of the ICF based tools Coronaria has plans to introduce ICF tools to all occupational therapists, physiotherapists and speech therapists working with outpatients. ICF training is planned for all those working in rehabilitation. ICF based tools will in the future also be implemented to rehabilitation workers working with in-patients and with multiprofessional services (KELA services). Changes will also be made to the client report forms to make the ICF more visible to service payers.  ICF will be viewed in the whole rehabilitation process, from the beginning in the planning of rehabilitation to the end reporting.
Contact person	Laura Mutanen, laura.mutanen@coronaria.fi



















### Appendix 8. Video between a rehabilitation professional and a client (Coronaria)

Research question	Development of video material between a rehabilitation professional and a client which can be used e.g., when practicing the use of the RPS-form
Implemented	Yes
Start	February 2022
End	May 2022
Responsible person(s)	Laura Mutanen, physiotherapist, co-lead of WP5
	Advanced knowledge of ICF
Target group	For all rehabilitation professionals and students
Setting	A rehabilitation professional (physiotherapist) and the client
Implementation	A short video produced at a client's home
Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	The video material was finished as planned and has been material in the ICF education material developed in WP5 in INPRO
Evaluation of the benefits	The working field partners has asked for practical examples, and we have responded to this request with this video. Of course, we need more videos like this in the future.
Is it in use	Yes
	It will be used in ICF training at Coronaria.
Further plans	Yes
	There is a plan to develop more of this kind of practical videos to be used when practicing the use of different ICF based tools.
Contact person	Laura Mutanen, laura.mutanen@coronaria.fi



















### Appendix 9. ICF training to all rehabilitation professionals (Coronaria)

Research question	Coronaria have employees from many different professional groups. Coronaria produces several different services for the social and health sector. The age distribution is wide and work experience in the field varies. Due to the reasons mentioned above, there is a need for ICF training to make sure that employees have the same basic awareness in the subject. Finland's social insurance institute (KELA) already requires service providers to use ICF in clinical rehabilitation process. Our plan is to make a practical orientation guide for our colleagues. Our intention is to divide the whole ICF into parts and the first part is focusing on the overall knowledge to ICF's sub-areas. Basic knowledge of the sub-areas helps employee in recognizing factors from different areas and to learn in naming various component. The orientation guide will be built in a similar form as teaching and learning will be inclusive and in connection with practice. The following parts on our orientation guide deepen ICF knowledge.
Implemented	Yes
Start	Work on the project started in January 2023
End	Intended to be implemented during the fall of 2023
Responsible person(s)	Annukka Kivini, Product manager of speech and occupational therapy services Maija Mannisenmäki, Service manager, physiotherapist  Both responsible persons have advanced knowledge of ICF.
Target group	For all Coronaria rehabilitation services employees
Setting	Customers of the entire organization
Implementation	A plan that will be ready by the end of May. Planning meetings, which have been held about once a week. An initial survey questionnaire for employees, regarding the current level of ICF knowledge
Outcome	The orientation guide is going to be built to a similar form as teaching and learning will be inclusive and in connection with practice. Intended to use the material produced by the project in training. We use ICF -basic and -advanced course materials developed by INPRO as training materials. The following parts on our orientation guide deepen ICF knowledge.  ICF-based Tools & Practices – INPRO (inproproject.eu)



















Evaluation of the implementation	The purpose is to pilot the training with about ten experts and make the required corrections before the training is organized for the entire staff.
Evaluation of the benefits	To make sure that everyone's basic knowledge is at the same level and to spread the know-how of ICF. Employees know the basic tools that helps the use of ICF and knowing the minimum level required of knowledge of ICF
Is it in use	Partially
	Employees use parts of the ICF in their work, but the level of knowledge is at different levels
Further plans	Yes
	The following parts on our orientation guide deepen ICF knowledge.
Contact person	Annukka Kivini, annukka.kivini@coronaria.fi



















### Appendix 10. Implementation of ICF documentation system for dietitians - step-by-step guideline (Moorheilbad Harbach)

Research question / aim Does the documentation system "infomed" help to increase the

interprofessional communication at Moorheilbad Harbach (MoHa)?

The aim of our project is to evaluate if expanding the use of the

documentation system "infomed" for dietitians next to physiotherapists and occupational therapists increases the

interprofessionalism at MoHa.

**Implemented** Yes.

14-10-2021 Start

End 30-12-2022

Christine Haumer, coordinator of the project Responsible person(s)

> only little experience in ICF (attended ICF basic course) Susanne Schulner-Weiß, leader of therapists (deputy)

highly experienced in ICF

Verena Halmenschlager, physiotherapist

highly experienced in ICF

Tina Schwingenschlögl, dietitian

experienced in ICF

Janina Wagner-Jakisic, psychologist

Target group 5 dietitians working at MoHa

Setting The program was adapted to make it useable for all dietitians

working at MoHa in the therapy department. Moha is an inpatient

organisation.

**Implementation** First, MoHa started with a brainstorming, in which the needs of the

> employees and patients were assessed, and information was gathered by discussing how interprofessional communication is currently working out at MoHa. Then the goal was defined in order to expand the use of "Infomed", which was already working well for other professional groups, aiming to achieve this benefit for dietitians

too. In this process the research question was developed. Afterwards, formal aspects needed to be defined, like the start of the project, responsible people, creating an implementation plan and certain standards, evaluation, etc. It was important to have approximately ten formal meetings with the different professional groups as well as dietitians only meetings to find out what they expect from the documentations system and what their needs are. Second, the implementation phase started which needed the company "MP2" in the beginning. They were responsible for creating the "Infomed" system for dietitians. During this phase the dietitians were trained using the INPRO ICF basic and advanced course materials as well as specific training on the usage of "Infomed". This was followed by a testing phase, in which the system

was finally used in practice by the health care professionals.



















Third, the evaluation phase was needed by assessing how well the platform works for interprofessional communication and if a benefit for the treatment can be recognized. This was done by having approximately three one-hour meetings between dietitians and other health care professionals using the platform and the coordinator as well as looking at feedback questionnaires that the patients receive at the end of their stay.

The last step was to inform all employees at MoHa from different departments about the changes via an employee app.

#### Outcome

The outcome was a new adaption of the platform "Infomed", which made it available to not only physiotherapists and occupational therapists but also dietitians.

#### ICF-based Tools & Practices – INPRO (inproproject.eu)

#### **Evaluation of the** implementation

At the beginning MoHa faced the challenge of the dietitians being rather averse to use ICF for documentation. They had their own system already and to be confronted with something new naturally led to resistance at first. However, after several meetings and explaining the benefits of ICF for interprofessional work, the dietitians agreed on trying out the new system. The importance here laid on showing the employees the benefits rather than just forcing them to change their documentations system. Some difficulties also occurred during the training phase since ICF codes sometimes led to confusion; however, one could overcome those difficulties by getting help by professionals with ICF experience. Another factor, that could make the implementation difficult is of course the availability of resources. Due to staff shortage the implementation took longer than expected at first. Moreover, MoHa relied on the company MP2 to finalize their task, which caused some delays, too. Sometimes also laws or certain rules could make it difficult to implement an online ICF documentation system, for example, at MoHa it was quite difficult to recruit psychologists to use "Infomed", too. This is something we are planning to work on in the future, so that in the end everyone uses the platform.

#### **Evaluation of the benefits**

However, besides all the obstacles one must face during such a project, the overall success was that the professionals, especially the dietitians, feel that the communication between the professional groups has increased. Moreover, they can treat the patients a lot more efficient, since one can easily find more information on the patient in the system now. Before, one had to ask someone in person, which was often not possible or too time-consuming. There are weekly team meetings, but there is not the time to discuss every patient in detail. Therefore, the platform is a nice opportunity for still being in regular contact with others and having on-going information exchange. Now, all it takes is to take a look at "Infomed" and the health care professional already knows the most important details to be able to treat the patient as good as possible.





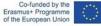














	Generally, it fosters interprofessional communication between all health care professionals at MoHa daily.
Is it in use	Yes
	The platform "Infomed" is used for treating the patients and getting information on their conditions and goals daily.
Further plans	Yes.
	The goal is to expand the use of the platform for other professions at MoHa. Our next step will be to make it available for psychologists, too.
Contact person	Christine Haumer, christine.haumer@moorheilbad-harbach.at



















# **Appendix 11. Workshop setting a main goal (Revalidatie Friesland)**

Research question / aim	All colleagues of RF location Beetsterzwaag have attended the goal setting workshop and are able to formulate accurate goals using the ICF framework.
Implemented	Yes
Start	01-09-2021
End	31-11-2021
Responsible person(s)	Ineke Jager, occupational therapist Marloes Knol, physiotherapist Line Atsma, speech therapist Ellen van Lingen, physiotherapist, completed ICF facilitator course. Their knowledge about ICF is from their education and developed by during their work, not a beginner.
Target group	All colleagues from RF Beetsterzwaag, speech therapists, physical therapists, occupational therapists, doctors, social workers, physiologists, activity therapists, music therapists. We also wanted to include the nurses but because of a shortage in the work field this was not possible. A total of about 50 people.
Setting	It was located at RF location Beetsterzwaag for therapists who treat in and outpatient.
Implementation	Every colleague attended one meeting where the actively participated.
Outcome	Better goal setting using the ICF framework. Goal setting is essential for the therapy especially when you are treating interprofessionally. After the workshop a lot of colleagues made better goals and put in more effort.  ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	It was good to have all the disciplines mixed. The interactive method was very helpful, the colleagues had good discussions and helped each other and had good insights. We could have made a better mix of all the different disciplines, but this was not possible with matching workdays. It was successful, a lot of colleagues are taking more time and effort formulating a main goal.
Evaluation of the benefits	It is clearer what the main goal is and when this has to be completed. It's clear what are the discharges conditions, and this will result in an earlier discharge.
Is it in use	Partially
	We would like to have a follow-up for the location Beetsterzwaag and would like to give the workshop at the other locations. Due to shortages, this is not possible currently.
Further plans	Yes
Contact porces	Give the workshops at the other locations and develop a follow-up for location Beetsterzwaag.  Ellen van Lingen, e.van.lingen@revalidatie-friesland.nl
Contact person	Liien van Lingen, e.van.iingenwievallaane-mesiana.ni



















### Appendix 12. ICF table in electronic patient device (Revalidatie Friesland)

Research question / aim	All the colleagues understand ICF and know what possibilities are in our electronic patient device for ICF.
Implemented	Yes
Start	01-06-2021
End	01-09-2021
Responsible person(s)	Ellen van Lingen, physiotherapist, completed ICF facilitator course.
	Winout Blaauw, ICT, no knowledge of ICF.
Target group	Hix, our Electronic patient device (EPD), used by all colleagues from RF.
Setting	It was located at RF location Beetsterzwaag for therapists who treat in and outpatient.
Implementation	ICF table with all information combined from all the different disciplines so it becomes interprofessional.
Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	Table with all the components of ICF is in our EPD so there is a better overview of all the information and working interprofessional is supported. ICT helped to achieve the result, there was no obstacle.
Evaluation of the benefits	Better overview of the ICF information from the patient. All the information is clearly arranged in one place. Now we can find all the information easier and changes during time can be reported at the same place.
Is it in use	Yes
	It is used by all colleagues to gather information during intake and at the end of treatment.
Further plans	Yes
	Educate all colleagues from RF so the table will be used even more.
Contact person	Ellen van Lingen, e.van.lingen@revalidatie-friesland.nl



















### Appendix 13. Training for all the disciplines to explain how ICF is integrated in our EPD (Revalidatie Friesland)

Research question / aim	All the colleagues understand ICF and know what possibilities are in our electronic patient device (EPD) for ICF.
Implemented	Yes
Start	01-11-2021
End	31-12-2021
Responsible person(s)	Ellen van Lingen, physiotherapist, completed ICF facilitator course.
Target group	All colleagues from RF Beetsterzwaag, speech therapists, physiotherapists, occupational therapists, doctors, social workers, physiologists, activity therapists, music therapists. We also wanted to include the nurses but because of a shortage in the work field this was not possible. A total of about 50 people.
Setting	It was located at RF location Beetsterzwaag for therapists who treat in and outpatient.
Implementation	Half an hour meeting separate with all the different disciplines, show them the new ICF table and discuss with them the advantages of using this. Discuss what information belongs where in ICF and update their knowledge of ICF.
Outcome	All colleagues know of the Hix table how to use it and how to use the ICF form. Know about ICF and know where to find de eLearning of ICF online to study more in depth. We made a module on our own intranet for the ICF eLearning from WHO.  ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	There was already some resistance against ICF so maybe I needed to address this before the training. To see what the resistance is and use this in the training. This influenced some of the meetings. But at the end a lot of colleagues have more knowledge of ICF and how it is integrated in our EPD.  It was best if the nurses also could be included but this wasn't possible because of shortage.
Evaluation of the benefits	Better overview of the ICF information from the patient. All the information is clearly arranged in one place. All colleagues use ICF and report in the same way. A part of the resistance has changed / gone but a lot of colleagues need to change their way of work and start using the ICF table and report using ICF.
Is it in use	Yes
	The colleagues from location Beetsterzwaag improved in using the ICF form.
Further plans	Yes
	Improve use in other locations from RF and further improve at location Beetsterzwaag.
Contact person	Ellen van Lingen, e.van.lingen@revalidatie-friesland.nl



















# **Appendix 14. Discussion tool (Revalidatie Friesland)**

Research question / aim	Use the discussion tool for filling in the ICF form in our electronic patient device (EPD).
Implemented	Yes
Start	01-10-2023
End	20-12-2023
Responsible person(s)	Ellen van Lingen, physiotherapist, completed ICF facilitator course.  Tineke van der Schaaf, physiotherapist. Inge Otten, occupational therapist. Their knowledge about ICF is from their education and developed by during their work, not a beginner.
Target group	Colleagues from RF working on the clinic of Beetsterzwaag.  Speech therapists, physiotherapists, occupational therapists, doctors, social workers, physiologists, activity therapists, music therapists. A total of about 20 colleagues.
Setting	It was located at RF location Beetsterzwaag for therapists who treat in outpatient, only the therapists from the clinic.
Implementation	The discussion tool helps start the conversation and will help to get to know your patient and what is important for your patient. We would like to use the discussion tool during intake.
Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	A few colleagues and interns use have used the discussion tool. It is not implemented in our normal work. We saw resistance to use another form/tool. They did not see the added value yet in using it. The colleagues who did use it saw the benefit but also experienced that it takes more time than normal. We could have included colleagues with resistance to see if their expectation is what they thought or if they do see advantages.
Evaluation of the benefits	With these questions you can get to the most important things of a patient life. It can be found challenging to get to know someone's values and motivators.
Is it in use	Partially
	Some colleagues and interns use the discussion tool, not a lot. It is experienced as added work instead of minimalize work.
Further plans	Yes
	We want to keep and discover how we can use the discussion tool and how we can improve this.
Contact person	Ellen van Lingen, e.van.lingen@revalidatie-friesland.nl



















### **Appendix 15. Blackboard course ICF interprofessional (Revalidatie** Friesland)

Research question / aim	Develop a tool to help the interns make the translation from ICF in education to ICF in practice.
Implemented	Yes
Start	Enter start date of the action
End	Enter the end date of the action
Responsible person(s)	Ellen van Lingen, physiotherapist, completed ICF facilitator course.  Jos Vloet, physiotherapist, docent physical therapist, educator
	of ICF. Leonne Leurink, docent nursing, ICF knowledge from work field, beginner.
Target group	Interns at RF Beetsterzwaag from all disciplines and their supervisors.
Setting	It was located at RF location Beetsterzwaag for therapists who treat in outpatient, only the therapists from the clinic.
Implementation	Developing a supervisor's manual for the training of students participating in an interprofessional internship at a learning ward.
Outcome	The manual consists of learning outcomes, instructions, assignments, and material as well as methods of assessment for the training of a group of bachelor students. It will provide content for a 20-hour training.
	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	The manual is developed and will be tested in the next group of interns. The colleagues of the focus group and advisory board were enthusiastic to start working with the manual.
Evaluation of the benefits	The manual aims to support both professionals and students, to stimulate interprofessional working and use the ICF in setting common rehabilitation goals. The ultimate goal is to improve the care for people which are impacted by functional impairments
Is it in use	Yes
	It will be piloted in the next semester.
Further plans	Yes
	After pilot make improvements and distribute to other locations of RF and maybe other organisations.
Contact person	Ellen van Lingen, e.van.lingen@revalidatie-friesland.nl



















# **Appendix 16. A series of (short) separate videos (AP UAS)**

Research question / aim	The goal was to create a set of movies that could be used in very different ways depending on your learning goal.
Implemented	Yes, we created the videos, and they were used in the online intervention and in the ICF advanced course.
Start	January 2022
End	June 2022
Responsible person(s)	Ingrid Aerts, dietitian and experienced ICF and IPE teacher since 2007; Ursula Hemetek, dietitian and ICF teacher and IPE teacher since 2021; Claudia de Weerdt, physiotherapist and IPE teacher since 2021, knowledge of ICF during student period, after worth no experience in using it until 2022.
Target group	The target group were students during the INPRO online intervention. 3 groups of 8 students so 24 in total. Of different disciplines: nursery, dietitian, physiotherapist, social work.
Setting	It was an online setting.
Implementation	Students had to see a movie of the patient and then the movie of his own discipline. They had to fill in all the information they could find in the Interprofessional Collaboration Form from their own professional perspective. The aim was to get to know their client and the form, so that they were prepared for the interprofessional group work. Then they had to prepare questions they need to ask the client (they will exchange on that with their group with which they will meet the client online in teams for a 20min assessment. The aim is to identify the client's health needs and to decide for an interprofessional goal (by using the ICF sheet). To make sure they are prepared when they meet their interprofessional team for the first time. In the interprofessional team they will introduce themself with:  In their case: what is the role of my profession?  What are the limitations of my professions?  Are there overlaps to other professions?
Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	We had the privilege that there was a moment arranged the interprofessional student group could meet the person online to ask some questions and also after they had finished their shared decision making they could inform the person online during a Teams meeting. The students found this very useful but for the organisers it will not be possible to do so every time. It takes a lot of organisation and also preparation of the person.



















They can learn from each other how every professional looks in a different way to the person and her family. They evaluate and look at different problems, other things from the environment were highlighted. A big benefit is that it can be used in very different ways, depending on what you want to teach.  Is it in use  Not all the time but it will be re-used in the online intervention in December 2023  Further plans  Yes  We can use the movies as a case for an ICF training with different professionals	Contact person	Ingrid Aerts, ingrid.aerts@ap.be
looks in a different way to the person and her family. They evaluate and look at different problems, other things from the environment were highlighted. A big benefit is that it can be used in very different ways, depending on what you want to teach.  Is it in use  Not all the time but it will be re-used in the online intervention in December 2023		•
looks in a different way to the person and her family. They evaluate and look at different problems, other things from the environment were highlighted. A big benefit is that it can be used in very different ways, depending on what you want to teach.  Is it in use  Not all the time but it will be re-used in the online	Further plans	Yes
looks in a different way to the person and her family. They evaluate and look at different problems, other things from the environment were highlighted. A big benefit is that it can be used in very different ways, depending on what you want to teach.  Is it in use  Not all the time but it will be re-used in the online		
looks in a different way to the person and her family. They evaluate and look at different problems, other things from the environment were highlighted. A big benefit is that it can be used in very different ways, depending on what you	Is it in use	
	Evaluation of the benefits	looks in a different way to the person and her family. They evaluate and look at different problems, other things from the environment were highlighted. A big benefit is that it can be used in very different ways, depending on what you



















# **Appendix 17. A presentation of a case abroad (AP UAS)**

Research question / aim	The aim was to acknowledge the advantages of using the same ICF language
Implemented	No, the purpose was to present the following case: an accident in Finland, patient is hospitalised and after that repatriated to receive further care in his own country. A report according ICF coding and finish writing report. (collaboration with Finland).
Start	Not implemented
End	Not implemented
Responsible person(s)	
Target group	
Setting	
Implementation	
Outcome	
Evaluation of the implementation	The main reason was time and too much other work and deadlines to reach.
Evaluation of the benefits	
Is it in use	
Further plan	No
Contact person	Ingrid Aerts, ingrid.aerts@ap.be



















# **Appendix 18. A diary of someone in practice (AP UAS)**

Research question / aim	It was more an experiment to see if the colleagues will recognize the ICF terms written in the patient files
Implemented	Yes
Start	November 2021
End	February 2022
Responsible person(s)	Claudia De Weerdt, Physiotherapist, experienced with ICF since her studies and since the start of INPRO in 2021
Target group	All the professionals working in the geriatric ward where Claudia works as a physiotherapist.
Setting	A diary of someone in practice who applies ICF in very small steps in the existing patient file and get experience of the reaction to this.  Hospital in Belgium where Claudia is working as a physiotherapist. It is a ward with a lot of changes in the past year. We will start with our fifth head nurse. The nursing staff is a team and the paramedical team. We are separated because we have a different head. The collaboration between the paramedical team (speech therapist, physiotherapist, occupational therapist) is very good. The changes in the nursing staff were big in the last year but now things all fall into place.
Implementation	Monday 4th of October 2021  Meeting with a part of the hospital team (nurses, caretaker, occupational therapist, physiotherapist, head nurse, director nursing, care manager). During this meeting the nursing staff told us that they don't collect a lot of informal information from the patients. The contact between the paramedical team with the patients is better than between the nursing staff and the patients. As a result of this I started with an adjustment in the patient file. I only have access to the physiotherapist file. I know that the paramedical team reads this file. The nursing staff and the doctors I am not sure, but I will find out depending on the reactions.  The purpose is to find information of the patients on a quickly and that it is clear. I will work with abbreviations for the different domains. A: activities IF: internal factors EF: external factors
Outcome	It was disappointing to see how colleagues reacted when filling in the patient forms in ICF terminology (by using the domains)  ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	Claudia does it every day, but nobody makes attention to it. Claudia writes the daily sessions of physiotherapy with an A for activities. EF: external factor. IF: internal factor. I also write the first intake differently. So far no comment on it. Even after talking to



















	persons and even asking person to fill it in with ICF terms, no reaction.
Evaluation of the benefits	No benefits occurred.
Is it in use	No
	It was an experiment to see how the colleagues would react.
Further plans	No
Contact persons	Ingrid Aerts, ingrid.aerts@ap.be; Claudia De Weerdt, claudia.deweerdt@ap.be



















### Appendix 19. A video on the basic explanation of ICF (AP UAS)

#### Research question / aim

European Project ZORO: Empowering Students and Healthcare Professionals in Their Work

In Flanders, more than 350,000 people work in the healthcare sector, and in the Netherlands, that number exceeds 1 million. However, there is still a shortage of healthcare professionals. Moreover, the healthcare landscape is constantly evolving. An increasing number of individuals require long-term care, with a desire to remain in their homes for as long as possible and a strong preference for having a say in the care they receive. Additionally, digitalization is an ever-advancing force in the healthcare industry. As a result, healthcare providers, both current and future, need to possess different skills and expertise than in the past.

The ZORO Training

To address these evolving needs, the Interreg Flanders-Netherlands project, ZORO – Healthcare Labor Market Route, has developed a training program centered around four essential competencies: interprofessional collaboration, technological adaptability, intrapreneurship, and ethical conduct. The ZORO training program commenced its first iteration in January 2021. A second series is scheduled to begin in September 2021 and will take place at various locations among the project partners, including Curio in Roosendaal (NL), Gouverneur Kinsbergencentrum in Wilrijk (BE), VIVES School of Nursing in Kortrijk (BE), and VIVES University College in Brugge (BE).

**Implemented** Yes

Start January 2021

End September 2021

Responsible person(s) Output attached or reference where available

Only in Dutch!

ZORO. (2022). ZORO-GIDS: Een inspiratie voor werkveld en zorgopleidingen. Geraadpleegd op [02/11/2023] via https://www.provincieantwerpen.be/aanbod/dese/dienst-

werk/zoro.html

The Governor Kinsberg Center, the provincial centre for healthcare economics and innovation, initiated this project in 2019 in collaboration with various Flemish and Dutch educational institutions, including Curio, Scalda, the University of Antwerp, VIVES School of Nursing, and VIVES University College. The project is set to span three years,



















and through the co-financing efforts of Interreg Flanders- Netherlands, the Governor Kinsberg Centre, the Province of  Antwerp, and various partners, a budget of 2 million euros  has been allocated for its implementation.  Target group  The training program is designed to cater to a wide range  of participants, including:  Care Assistants  Supportive Care and Welfare Workers  Caregivers (Certified Nursing Assistants)  Care Professionals  Nurses (HBO5 and bachelor's degrees in Flanders,  and MBO and HBO levels in the Netherlands)  This comprehensive approach ensures that learners,  students, newcomers to the field, and experienced  healthcare professionals with various profiles can benefit  from the ZORO training program.  Setting  The developed training program comprises four modules,  each aligned with one of the key competencies:  Interprofessional Collaboration  Technological Adaptability  Intrapreneurship  Ethical Conduct  Each module focuses an developing and enhancing the  corresponding competency, ensuring that participants  receive a well-rounded education in these crucial areas of  healthcare practice.  The introduction movie on ICF framework is a part of the  interprofessional collaboration module that can be used in  other settings to introduce the ICF.  Within INPRO project Belgium used this video in the ICF  basic course as an introduction. Also in the education  program when we talk about ICF, we use the video as a  nice and simple visualizing of the ICF framework.  Outcome  Echased Tools & Practices – INPRO (inproproject.eu)  Evaluation of the  implementation  Fival utility in the  Condition of the longer  in the  Ingrid Aerts, ingrid.aerts@ap.be;  Claudia De Weerdt, claudia.deweerdt@ap.be		
of participants, including:  Care Assistants Supportive Care and Welfare Workers Caregivers (Certified Nursing Assistants) Care Professionals Nurses (HBO5 and bachelor's degrees in Flanders, and MBO and HBO levels in the Netherlands) This comprehensive approach ensures that learners, students, newcomers to the field, and experienced healthcare professionals with various profiles can benefit from the ZORO fraining program.  Setting The developed training program comprises four modules, each aligned with one of the key competencies: Interprofessional Collaboration Technological Adaptability Intrapreneurship Ethical Conduct Each module focuses on developing and enhancing the corresponding competency, ensuring that participants receive a well-rounded education in these crucial areas of healthcare practice. The introduction movie on ICF framework is a part of the interprofessional collaboration module that can be used in other settings to introduce the ICF.  Implementation Within INPRO project Belgium used this video in the ICF basic course as an introduction. Also in the education program when we talk about ICF, we use the video as a nice and simple visualizing of the ICF framework.  Outcome ICF-based Tools & Practices – INPRO (inproproject.eu)  Evaluation of the implementation  Evaluation of the benefits No specific evaluation has been done Is it in use Yes  Further plans Keep on using it Ingrid Aerts, ingrid.aerts@ap.be;		Netherlands, the Governor Kinsberg Centre, the Province of Antwerp, and various partners, a budget of 2 million euros
each aligned with one of the key competencies:  Interprofessional Collaboration Technological Adaptability Intrapreneurship Ethical Conduct Each module focuses on developing and enhancing the corresponding competency, ensuring that participants receive a well-rounded education in these crucial areas of healthcare practice. The introduction movie on ICF framework is a part of the interprofessional collaboration module that can be used in other settings to introduce the ICF.  Implementation Within INPRO project Belgium used this video in the ICF basic course as an introduction. Also in the education program when we talk about ICF, we use the video as a nice and simple visualizing of the ICF framework.  Outcome ICF-based Tools & Practices — INPRO (inproproject.eu) Good feedback, nice and simple explanation of the ICF implementation  Evaluation of the benefits No specific evaluation has been done Is it in use Yes Further plans Keep on using it Contact persons Ingrid Aerts, ingrid.aerts@ap.be;	Target group	of participants, including: <ul> <li>Care Assistants</li> <li>Supportive Care and Welfare Workers</li> <li>Caregivers (Certified Nursing Assistants)</li> <li>Care Professionals</li> <li>Nurses (HBO5 and bachelor's degrees in Flanders, and MBO and HBO levels in the Netherlands)</li> </ul> <li>This comprehensive approach ensures that learners, students, newcomers to the field, and experienced healthcare professionals with various profiles can benefit</li>
basic course as an introduction. Also in the education program when we talk about ICF, we use the video as a nice and simple visualizing of the ICF framework.  Outcome  ICF-based Tools & Practices – INPRO (inproproject.eu)  Evaluation of the Good feedback, nice and simple explanation of the ICF implementation  Evaluation of the benefits  No specific evaluation has been done  Is it in use  Yes  Further plans  Keep on using it  Contact persons  Ingrid Aerts, ingrid.aerts@ap.be;	Setting	<ul> <li>each aligned with one of the key competencies:</li> <li>Interprofessional Collaboration</li> <li>Technological Adaptability</li> <li>Intrapreneurship</li> <li>Ethical Conduct</li> <li>Each module focuses on developing and enhancing the corresponding competency, ensuring that participants receive a well-rounded education in these crucial areas of healthcare practice.</li> <li>The introduction movie on ICF framework is a part of the interprofessional collaboration module that can be used in</li> </ul>
Evaluation of the implementation  Evaluation of the benefits  No specific evaluation has been done  Is it in use  Further plans  Keep on using it  Contact persons  Good feedback, nice and simple explanation of the ICF  where implementation  No specific evaluation has been done  Yes  Further plans  Keep on using it  Ingrid Aerts, ingrid.aerts@ap.be;	Implementation	basic course as an introduction. Also in the education program when we talk about ICF, we use the video as a
implementation  Evaluation of the benefits No specific evaluation has been done  Is it in use Yes  Further plans Keep on using it  Contact persons Ingrid Aerts, ingrid.aerts@ap.be;	Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Is it in use Yes  Further plans Keep on using it  Contact persons Ingrid Aerts, ingrid.aerts@ap.be;		Good feedback, nice and simple explanation of the ICF
Further plans  Keep on using it  Contact persons  Ingrid Aerts, ingrid.aerts@ap.be;	Evaluation of the benefits	No specific evaluation has been done
Contact persons Ingrid Aerts, ingrid.aerts@ap.be;	Is it in use	Yes
	Further plans	Keep on using it
	Contact persons	



















# Appendix 20. A video of a team meeting (St. Poelten UAS)

Research question / aim	How does an interprofessional team meet in rehabilitation with a person-centred approach?
Implemented	Yes
Start	1-10-2021
End	31-5-2022
Responsible person(s)	Media technology student project group (Mohamed Shakauat Ahamed, Simon Reimoser, Leonie Schoenfeldinger, Georg-Christian Schiffer) and their coach (Max Reinhold)  Anita Kidritsch, Physiotherapist, experience and knowledge of the ICF since 2008 in practice and higher education.  Christian Freisleben-Teutscher, didactics consultant, journalist, experience with ICF from collaborating in the INPRO project  Viktoria Magenschab, attorney of Moorheilbad Harbach  Susanne Schulner-Weiss, team leader department of therapy at Moorheilbad Harbach, and Verena Hackl, physiotherapist, implemented ICF in the local documentation system  Iris Grünstäudl, dietitian, Sabine Preißinger, occupational therapist, Janina Wagner-Jaksic, clinical and health psychologist, applying ICF in communication with the team
Target group	Any health professional working in rehabilitation or student
Setting	Implemented in the inpatient health and rehabilitation centre Moorheilbad Harbach for the therapy department, used in INPRO advanced materials as assignment / learning example
Implementation	Planning and Storyboard Development Capture of two interviews and a team meeting role play Postproduction of the video and dissemination Integration in the INPRO advanced materials regarding ICF
Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	More than 15.000 clicks on YouTube, usage of the video for an international exchange of rehabilitation workers in INPRO.  Social work, healthcare and nursing, medical doctors or other professions are not represented, neither is the patient present.  Students who visited the rehabilitation centre as part of their interprofessional learning, exchanged with the four shown professionals regarding ICF-based goal setting on papercases. The following day, they were assigned to role-play own variations (meeting at rehabilitation onset / before



















	dismissal / with the patient participating / as family group conference). As results, four further 10-minute videos developed (German).  https://youtu.be/NDAdmZcYFo4 https://youtu.be/yQkwJ42J3Zc https://youtu.be/5O36-Ns0xVo https://youtu.be/pDX1M444va4
Evaluation of the benefits	This is student-created content that represents daily practice.  With less than 12 minutes short enough as microlearning for professionals with limited time. For being used in education, an assignment could be to summarise the discussed case in an ICF documentation sheet and play a meeting with peers.
Is it in use	Yes
	Used as example assignment the INPRO advanced materials.
Further plans	Yes
	Use for educational purposes in courses / continuous training.
Contact person	Anita Kidritsch, anita.kidritsch@fhstp.ac.at



















### Appendix 21. Development of a digital escape room (St. Poelten UAS)

Research question / aim	How can an escape game be used in training of health professionals to introduce person-centred, interprofessional collaboration?
Implemented	Yes
Start	02-02-2023
End	27-03-2023
Responsible person(s)	Anita Kidritsch, Physiotherapist, experience and knowledge of the ICF since 2008 in practice and higher education.  WEscape project group (Mona Azz, Merry Bakuns, Sophie Kutschi, Sonia Markose, Victoria Pichler, Thomas Tippl), students in the master's degree programme digital healthcare.
Target group	Students and workforce in health, social care and technical professions, in small groups (4 to 5 people per group).
Setting	Higher education course (master digital healthcare) and continuous professional development.
Implementation	Literature Review on Gamification and Escape Rooms, Prototype and Usability Testing (via WEscape project), Piloting the teaching of person-centredness and functioning Inspiration by ICF Facilitator course and EDUdig project  Fusion of these steps in a google site, H5p, and forms
Outcome	ICF-based Tools & Practices – INPRO (inproproject.eu)
Evaluation of the implementation	Usability of prototype tested via several instruments (focus groups, think aloud, observation, survey). Piloting was successful, a disruptive intervention due to involvement of real client persons (which will be continued). Changes resulted in specific direction of the learning pathway and the use of a google site with H5p and forms. Difficulties lie in IT Management and learners' digital literacy.
Evaluation of the benefits	The game can be used to engage learners in an online setting. This is important for the training of professionals in remote settings. The time is limited, so a one-hour training session is feasible. Nevertheless, an introduction of concepts in earlier training sessions and a reflection and transfer of lessons learned for example into an ICF documentation exercise help the benefit. Interactive collaboration in small groups, where each participant is socially present, active, listener and problem-solver facilitate interpersonal and communication skills and the transfer of theory (such as ICF domains) to practice.
Is it in use	Yes
	Used in the master's degree course "Interprofessionalism"
Further plans	Yes



















Usage for continuous professional development on ICF

**Contact person** Anita Kidritsch, <u>anita.kidritsch@fhstp.ac.at</u>















