



ProFouND: Prevention of Falls Network for Dissemination

DELIVERABLE D 3.1

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Executive summary

1. Description of deliverable and tasks for WP3	page 3
2. Development of content classification scheme	page 4
2.1 Categorisation of resources and Tags	page 4
2.1.1. Categorisation of resources and on the website	page 4
2.1.2. Tags	page 6
2.2 Test on the classification scheme on the Web of Science	page 11

1. Description of deliverable and tasks for WP3

The ProFouND website will be a resource for the community of falls prevention practitioners and the community of technology developers and manufacturers. It will provide a “one stop shop” for people looking for information about the domains related to falls prevention and ICT.

WP3 is responsible for the resources content management. The overall objective for WP3 is to provide the technical content for the ProFouND website resources library. Each member of the crowd will source and catalogue resources and add them to the resources library, by use of the protocol/content classification scheme.

The overall aim for WP3 is to provide technical content of the ProFouND website resource library by

- Co-ordinate crowdsourcing of content
- Define architecture of categorisation schemes
- Moderate content input

The deliverable for WP3 month 4 was the following:

D3.1

Content classification scheme: Devise a content management system with discipline, intervention, location, population, technology, and study design specific areas. Devise consensus protocol for assessing robustness of resource items (e.g. following “evidence pyramid” approach) [month 4]

WP3 has performed and completed the following tasks during the first four months (M1-4):

Task 3.1:

Divide the work of populating the content management system into discipline interest areas such as epidemiology of falls, interventions to reduce falls in hospitals; in residential and nursing homes; in community dwelling; special populations and disease groups; exercise based interventions; environmental modification interventions; medications; trials, motivation, and ICT approaches, different technologies, active and passive monitoring, and different sensor types, balance technologies etc. Devise consensus protocol for assessing robustness of resource items (e.g. following “evidence pyramid” approach)

Task 3.2:

Devise content classification scheme(s) and test on retrospective resources from e.g. Web of Science searches.

This report includes a description of the work undertaken for Task 3.1 and 3.2, where the content classification scheme has been developed, revised and tested.

2. Development of a content classification scheme

The work for the content classification scheme has been carried out by WP3, led by the group in Trondheim, in close collaboration with WP2 and WP4.

The classification scheme is presented in the following document along with descriptions on how the work within this scheme has been carried out.

The resource categories were also tested by use of simple searches on the Web of Science, and gave us input on relevance as well as to test volume of retrospective resources available. The searches indicated, not surprisingly, that geriatrics and gerontology is the main category of reports for all of our categories. The results from these searches are included in section 2.2 on page 11.

2.1 Categorisation of resources and Tags

A classification scheme is utilized to structure the content classification for the website. It includes

- 1) **Categories** for classification of resources on the website
- 2) **Tags** to be used on all resources

Thus, it is important to choose categories that cover the full spectrum of content that is planned to be uploaded on the website. The categories can also be used for RSS feeds. Each source of content can be classified under each category, and thus, the categories may partly overlap.

It was important to come up with a simple scheme that included the most important categories, to facilitate simple search and retrieval of resources from the website.

The decision for the included discipline interest areas was developed in collaboration between WP2, WP3 and WP4, based on the experiences from the development and function of the ProFaNE website (<http://profane.co/>).

The suggestion for a classification scheme was then sent to all partners for input and suggestions. Response from 6 partners was collected, and included in the final review of the scheme. These partners provided input on both the tags and the content categories, and several changes based on this input were made on the version presented in this document.

It should be noted that because of differences in culture and organisation of health care between countries some tag groups could be difficult to use or judge.

2.1.1. Categorisation of resources on the website

The categorisation includes the system that should be used when resources are presented on the website.

The resources on the website will be organised following these categories (Table 1):

Table 1: Website resource categories

Category	(content)	Resources
Falls	Will include the definition of falls etc.	
Epidemiology of falls	Number of falls, risk of falls, injury etc.	
Interventions in hospitals	Fall interventions in hospitals (including day hospitals)	
Interventions in residential and nursing homes	Fall interventions in residential or nursing homes	
Interventions in community dwelling elders	Fall interventions in community dwelling elders (including outpatient care)	
Interventions in special populations and disease groups	Fall interventions in special populations and disease groups	
Exercise based interventions	Exercise based interventions	f.ex the transferred booklets with exercises
Environmental modification interventions	Environmental modification interventions	
Clinical trials	Research reporting clinical trials	
Psychological interventions	Motivation, education etc.	
Technology	New applications, technology, tech games etc.	e.g. the cell phone app
Implementation	Implementation strategies and guidelines	e.g. fall prevention weeks, conferences etc
Events	Events organized by consortium partners	

Some resources will be available under more than one category to improve accessibility.

After input from the other partners, two further categories were added to the website organisation of resources (highlighted in yellow), as well as some additional content descriptions. Where to put the generic advices was also further discussed further, and a separate category may be included in the final version of the scheme.

Suggestions for a separate category of “good practice” were given, but were not included because all content should be “best practice”. Furthermore, we also did not include data base harmonisation as a category, but this will be discussed further and may be included in the final version of the scheme.

Comments on the importance of highlighting other areas than exercise and technology alone, such as pharmaceuticals, food and vitamins were also made.

2.1.2 Tags

Tags are non-hierarchical keywords that will be assigned to each resource on the website to help describe the resource and facilitate access by allowing it to be found by searching. We have suggested the use of 6 compulsory tag groups as well as a group of additional tags.

How to use tags: All resources on the website should have a minimum of 6 tags, at least one from each of the compulsory groups of tags. A resource could have more than one tag from one of the compulsory tag groups, as well as include one or more from the additional tags.

Table 2: Overview of the Tag Groups, the Tags, and the Description for use:

TAG GROUP	TAG	Description
Related to app		
1)Related to APP	Not relevant for app	
1)Related to APP	Will be decided together with RBMF (Clemens Becker) WP1 - when we know the wording on APP	
1)Related to APP		
Language		
2)Language of resource	English	Resource in the English Language
2)Language of resource	Norwegian	Resource in the Norwegian Language
2)Language of resource	Greek	Resource in the Greek Language
2)Language of resource	German	Resource in the German Language
2)Language of resource	Spanish	Resource in the Spanish Language
2)Language of resource	Italian	Resource in the Italian Language
2)Language of resource	Dutch	Resource in the Dutch Language
2)Language of resource	Hungarian	Resource in the Hungarian Language
2)Language of resource	Swedish	Resource in the Swedish Language
2)Language of resource	French	Resource in the French Language
2)Language of resource	Finnish	Resource in the Finnish Language
2)Language of resource	Turkish	Resource in the Turkish Language
Organisation/ setting		
3)Organisations/ settings	Hospital	Target population is hospital wards
3)Organisations/ settings	Care homes	Target population is care home residents
3)Organisations/ settings	Community dwellers	Target population is community dwellers
3)Organisations/ settings	Housing corporations	Target population is housing corporations/associations
3)Organisations/ settings	Older persons	Target population is older persons in general
3)Organisations/ settings	Insurance agencies	Target population is insurance agencies
3)Organisations/ settings	Primary health care systems	Resource related to the Primary health care system
3)Organisations/ settings	Senior citizen	Resource related to Senior citizen organisations

settings	organisations	
3) Organisations/ settings	Health administration	Resource related to Health administration
3) Organisations/ settings	Health authorities	Resource related to Health authorities
3) Organisations/ settings	Government	Resource related to the Government
3) Organisations/ settings	Non- governmental organisations	Resource that are related to non-governmental organisations
3) Organisations/ settings	Profit organisations	Resource that has a cost associated
3) Organisations/ settings		
3) Organisations/ settings		
3) Organisations/ settings		
Professions and interest groups		
4) Profession	Geriatricians Podiatrists/Chiro podists	Resource has content relevant for Geriatricians
4) Profession	Psychologists	Resource has content relevant for Podiatrists/Chiropodists
4) Profession	GP	Resource has content relevant for Psychologists Resource is relevant for a General practitioner or a Physician
4) Profession	Fitness leaders	Resource is relevant for instructors/leaders of fall prevention groups or interventions
4) Profession	Nurses	Resource has content relevant for Nurses
4) Profession	Occupational therapist	Resource has content relevant for Occupational therapists
4) Profession	Physiotherapist	Resource has content relevant for Physiotherapists
4) Profession	Multidisciplinary team	Resource is relevant for several disciplines or multidisciplinary teams
4) Profession	Caregivers	Resource relevant for caregivers (family etc)
4) Profession	Non-specific	Resource that are non-specific related to professions
Type of resource		
5) Type of resource	Technology	Technology that covers all area where equipment and technology are used in the falls prevention, including flooring, mobile applications, exercise equipment, assessment devices (electronic gait mat etc), gaming (wii fit etc) etc....
5) Type of resource	Video Clip	Short movie clip that covers an area of interest to falls prevention (should have additional tag on area of interest)
5) Type of resource	Leaflet	Leaflet on falls prevention information for older people, a few pages long with generalised in content (should have additional tag on language)
5) Type of	Research	Key publications from high quality research on falls and falls

resource		prevention (should have additional tags on content and target population)
5) Type of resource	Guidelines	Best practice guidelines for falls prevention (should have additional tags on type of resource)
5) Type of resource	Implementation	Description of how to successfully implement the falls prevention
5) Type of resource	Book	Book with content related to fall prevention
5) Type of resource	Power point	Power point presentations
5) Type of resource	Online learning	Online learning
5) Type of resource	Assessment tool	Assessment tools related to falls, f.ex FESI
5) Type of resource	Aids	Aids and equipment
5) Type of resource	Blogs	Blog with content related to fall prevention
5) Type of resource	Case study	Common fall events and actions to prevent them
5) Type of resource	Podcasts	Podcasts with content related to fall prevention
5) Type of resource	Presentations	Relevant Power Point presentations, Prezi etc.
Type of intervention		
6) Type of intervention	Medications	Interventions concerning medication or polypharmacy
6) Type of intervention	Vitamins/calcium	Resource has content linked to vitamins (Vitamin D, K2 etc) and/or calcium and falls risk or prevention
6) Type of intervention	Exercise	Exercise is structured training aiming to improve components such as balance, strength, endurance
6) Type of intervention	PA	Physical activity includes all interventions or resources that describes movement, activity etc in general related to falls prevention
6) Type of intervention	Risk assessment	Risk assessments
6) Type of intervention	Vision	Interventions concerning poor vision
6) Type of intervention	Surgery	Surgery
6) Type of intervention	Psychological	Psychological interventions; including motivation, advice etc
6) Type of intervention	Education	Education
6) Type of intervention	Environmental	Environmental interventions
6) Type of intervention	Games	Proposed technology games to increase physical activity

6) Type of intervention	Hearing	Interventions concerning poor hearing
6) Type of intervention	Dizziness	Intervention concerning dizziness
6) Type of intervention	Incontinence	Intervention concerning incontinence
6) Type of intervention	Housing Construction	Intervention concerning housing construction in fall prevention
6) Type of intervention	Nutrition	Intervention concerning nutrition
6) Type of intervention	Restraints	Intervention concerning restraints
6) Type of intervention	Awareness	Promote and increase public awareness
6) Type of intervention	Case finding	Case finding (tools)
6) Type of intervention	No intervention	None of the above described tags cover the content of this resource
Additional tag		
7) Additional tag	Balance training	Resource where the intervention aims to improve balance
7) Additional tag	Strength training	Resource where the intervention aims to improve muscle strength and power
7) Additional tag	Multifactorial Single interventions	The resources/intervention/etc are multifactorial
7) Additional tag	Fear of falling	The resources/intervention/etc are single interventions (should include tags on content and target population) Resource where the intervention aims to reduce fear of falling
7) Additional tag	Brain training	Resource where the intervention is related to cognitive rehabilitation
7) Additional tag	Stroke	Resource related to Stroke
7) Additional tag	Parkinson disease	Resource related to Parkinson disease

Following recommendations from the partners we included 19 tags (highlighted in yellow in the table) and changed “vitamin D” to “vitamins/calcium”. We also changed the group “profession” to “profession and interest groups”.

Table 3: List of excluded tags suggested by partners

Tag group 3) Organisations/settings	
Informal carers, relatives, family, community	
Schools for health professionals	
Secondary health care system	
Pharmacy health care system	
Researchers	
Tag group 4) Profession	
Rehabilitation expert	Should be covered by the other tags
Tag group 5) Type of resource	
News	Will not be a permanent tag and therefore not included
Training	Will be covered by the app
Tag group 6) Type of intervention	
Healthcare plans	Will be covered by other tags

2.2 Test of the classification scheme on the Web of Science

The resources on the website will be organised by use of different categories. Results from web searches of the first 11 included categories are presented here.

Results indicate that the records found by the search are relevant, where the most recorded category was “geriatrics gerontology”.

We used simple searches of each category, results are presented below.

1. Topic=(falls) AND Topic=(elder*)
 - Results showed that “geriatrics gerontology” was the most recorded category (24.8%), 2180 out of 8803 records
2. Topic=(falls) AND Topic=(epidemiology)
 - Results showed that “Public environmental occupational health” was the most recorded category (16.9%), 559 out of 3302 records
3. Topic=(falls) AND Topic=(interventions)
 - Results showed that “geriatrics gerontology” was the most recorded category (10.6 %), 918 out of 8680 records
4. Topic=(falls) AND Topic=(interventions) AND Topic=(hospital)
 - Results showed that “geriatrics gerontology” was the most recorded category (12.8%), 193 out of 1505 records
5. Topic=(falls) AND Topic=(interventions) AND Topic=(residential OR nursing home)
 - Results showed that “geriatrics gerontology” was the most recorded category (42.6%), 241 out of 566 records
6. Topic=(falls) AND Topic=(interventions) AND Topic=(community)

- Results showed that “geriatrics gerontology” was the most recorded category (24%), 463 out of 1930.
7. Topic=(falls) AND Topic=(interventions) AND Topic=(disease)
 - Results showed that “medicine general internal” was the most recorded category (13%) with 238 out of 1825 records
 8. Topic=(falls) AND Topic=(interventions) AND Topic=(exercise)
 - Results showed that “geriatrics gerontology” was the most recorded category (23.5%), 303 out of 1292 records
 9. Topic=(falls) AND Topic=(interventions) AND Topic=(environmental)
 - Results showed that “public environmental occupational health” was the most recorded category (19.3%), 74 out of 384 records
 10. Topic=(falls) AND Topic=(interventions) AND Topic=(clinical trials)
 - Results showed that “medicine general internal” was the most recorded category (15.8%), 157 out of 995 records
 11. Topic=(falls) AND Topic=(interventions) AND Topic=(psychological)
 - Results showed that “geriatrics gerontology” was the most recorded category (16.8%), 47 out of 280 records
 12. Topic=(falls) AND Topic=(interventions) AND Topic=(technology)
 - Results showed that “rehabilitation” was the most recorded category (9.7%), 20 out of 207