

Supplementary file 1

Table S1. Overview of the applications and their underlying behavioural change methods used to change the behavioural determinants of the participants in the ProIntens intensive dietetic care-pathway.

Determinant	Method	Definition	Parameter	Application in ProIntens care-pathway
increase knowledge	providing cue	assuring that the same cues are present at the time of learning and the time of retrieval	cues work best when people can select and provide their own cues	<ul style="list-style-type: none"> • “Protein & Exercise” board is constantly in view at the participants’ bedside during hospitalisation. After discharge the patient can place the board at the kitchen counter as a reminder. • When the EiFit application is used to record dietary intake, the patient can select if they want to be reminded to fill in their diary on the application.
	using imagery	using artefacts that have a similar appearance to some subject	familiar physical or verbal images as analogies to a less familiar process	<ul style="list-style-type: none"> • “Protein & Exercise” knowledge clip • “Protein & Exercise” infographic
	advance organizers	presenting an overview of the material that enables learner to activate relevant schemas so that new material can be associated	schematic representation of content or guides to what is to be learned	<ul style="list-style-type: none"> • “Protein & Exercise” board • “Protein & Exercise” knowledge clip • “Protein & Exercise” infographic • Discharge folder
change awareness and risk perception	self-re-evaluation	encouraging both cognitive and affective assessments of oneself	stimulation of both cognitive and affective appraisal of self-image. Can use feedback and confrontation; however, raising awareness must be quickly followed by increase in problem solving ability and self-efficacy	<ul style="list-style-type: none"> • Frequent consultations with the dietitian and physiotherapist (2-4 times a month) • Daily feedback from nurses and nutrition assistants

change habitual, automatic and impulsive behaviours	implementation intentions	prompting making if-then plans that link situational cues with responses that are effective in attaining goals or desired outcomes	existing positive intention	<ul style="list-style-type: none"> • “Protein & Exercise” knowledge clip • “Protein & Exercise” infographic • Evaluated with the help of the dietitian
change attitudes, beliefs and outcome expectation	repeated exposure	making a stimulus repeatedly accessible to the individual's sensory receptors	neutrality of original attitude	<ul style="list-style-type: none"> • “Protein & Exercise” board • “Protein & Exercise” knowledge clip • “Protein & Exercise” infographic
Change skills, capability and self-efficacy and to overcome barriers	guided practice	prompting individuals to rehearse and repeat the behaviour various times, discuss the experience, and provide feedback	subskill demonstration, instruction and enactment with individual feedback; requires supervision by an experienced person; some environmental changes cannot be rehearsed	<ul style="list-style-type: none"> • Frequent consultations with the dietitian and physiotherapist (2-4 times a month) • Daily feedback from nurses and nutrition assistants
	self-monitoring of behaviour	prompting the person to keep a record of specified behaviour	the monitoring must be of the specific behaviour (that is not of a physiological state of health outcome) the data must be interpreted and used. The reward must be reinforcing to the individual	<ul style="list-style-type: none"> • Use of Eifit application or Rate-a-Plate list to record daily dietary intake • Using the Atris application to track daily physical activity • Using a calendar to record performed exercise advised by the physiotherapist.
	goal setting	prompting planning what the person will do, including a definition of goal-directed behaviours that result in the target behaviour	commitment to the goal; goals that are difficult but available within the individual's skill level	<ul style="list-style-type: none"> • The dietitian and physiotherapist make use of the “My Positive Health” tools to set realistic and meaningful treatment goals • The Eifit app provides the daily goal and direct feedback when eaten food is entered • “Protein & Exercise” board gives an overview on how daily and/or weekly goals can be achieved

	planning coping responses	prompting participants to list potential barriers and ways to overcome these	identification of high-risk situations and practice of coping response	<ul style="list-style-type: none"> • Frequent consultations with the dietitian and physiotherapist (2-4 times a month) • The discharge folder contains tips on cooking, grocery shopping, daily routine changes and 'what to do in case of decreased appetite'
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Table S2. Overview of the applications and their underlying behavioural change methods used to change the behavioural determinants of the participants' environment in the ProIntens intensive dietetic care-pathway.

Determinant	Method	Definition	Parameter	in ProIntens care-pathway
Change of Environmental conditions	Technical assistance	Providing technical means to achieve desired behaviour	Nature of technical assistance will vary by environmental level, but must fit needs, culture, and resources of the recipient	<ul style="list-style-type: none"> • Templates in the electronic patient dossiers for dietitian and physiotherapist to use to register the treatment • Patients' hand-over template for hospital dietitians and physiotherapists to use when handing over the patient to primary care • Atris and EiFit applications are provided to the patient to monitor changes
Change of Social Norms	Mobilizing social networks	Encouraging social networks to provide informational, emotional, appraisal, and instrumental support.	Availability of social network and potential support givers. Will often include information about others' approval, facilitation, and persuasive communication.	<ul style="list-style-type: none"> • The discharge folder encourages the dietitian to note down the social network of the patient. • Knowledge clip directed at the social network of the patient on how they can support the patient • The research team will be in frequent contact with the dietitians, physiotherapist, nurses and nutrition assistants to support them in carrying out the intervention • Regular feedback rounds with dietitians carrying out the intervention
Change Social Support and Social Networks	Enhancing network linkages	Training network members to provide support and members of the target group to mobilize and maintain their networks	Available network.	<ul style="list-style-type: none"> • The hospital dietitian and physiotherapist help the patient and informal caregivers to set up a plan for the first few days at home after discharge before the primary care dietitian and physiotherapist take over the treatment
	Developing new social network linkages	Linking members to new networks by mentor programs, buddy systems, and self-help groups	Willingness of networks to reach out; availability of networks can provide appropriate support and linkage agents	<ul style="list-style-type: none"> • The discharge folder gives inside in the participants' social network. When informal caregivers are not present, the research team will provide information on support groups organized by the municipality

	use of lay health workers; peer education	mobilizing members of the target population to serve as boundary spanners, credible sources of information, and role models	natural helpers in community with opinion leader status and availability to volunteer for training	<ul style="list-style-type: none"> The discharge folder gives inside in the participants' social network. When informal caregivers are not present, the research team will provide information on support groups organized by the municipality
Change organizations	Sense -making	Leaders reinterpret and relabel processes in organization, create meaning through dialogue and model and redirect change	used for continuous change, including culture change.	<ul style="list-style-type: none"> To ensure successful implementations of the ProIntens care-pathway, team leaders of the hospital wards of primary care practices will propagate the importance of the new care-pathway
	Organizational diagnosis and feedback	Assessing of organizational structures and employees' beliefs and attitudes, desired outcomes and readiness to take action, using surveys and other methods	methods appropriate to organizational characteristics, e.g., size and information technology. Will often include feedback and consciousness raising	<ul style="list-style-type: none"> A random sample of involved health care professionals will be interviewed to evaluate the implementation of new care-pathway