

Table 1.: Programme studies 1-6

	Study subjects	What we know	What to study	How to study	Expected outcome	By whom
Investigate	1. Cognitive impairment	one year after ICU admission, 20-71% of patients have cognitive impairment	Cognitive impairment and interventions that have an impact on cognitive function.	Updated systematic review.	State of the art.	Programme group
	2. Cognitive rehabilitation	There is a gap in evidence concerning when and how to support cognitive rehabilitation.	ICU patients' rehabilitation pathways and the role of relatives in the process.	Observational case study of patients during the ICU pathway. Interviews with patients, relatives, ICU and primary care staff.	Better understanding of when and how to support the cognitive rehabilitation of former ICU patients and the role of the relatives.	Investigate: Prof. Pia Dreyer (AUH), Hanne Irene Jensen (Lillebælt), Helle Svenningsen (VIA), & Helene Korvenius Nedergaard (Lillebælt), and one PhD student, NN
Develop	3. Cognitive training	Impairment of cognitive functioning has been detected in 39-91% of patients at hospital discharge	Development of a patient-centred cognitive rehabilitation intervention in the ICU and post-ICU.	Development and feasibility/pilot test. Delphi study. Interviews with patients, relatives, ICU and primary care staff.	Feasibility and acceptability of a cognitive rehabilitation intervention.	Investigate: Anna Holm (AUH), and Helene Korvenius Nedergaard (Lillebælt), and one Master student and one project nurse
	4. Family caregivers in the ICU and beyond	Relatives are key partners, but also vulnerable through ICU patients' rehabilitation pathway.	Development of a structured support guide for relatives in regard to their support role vis-a-vis cognitive patient rehabilitation in the ICU and beyond.	Develop and feasibility/pilot test. Interviews with patients, relatives, ICU and primary care staff.	Feasibility and acceptability of structured support guide for relatives participating in the care and rehabilitation of the ICU patient	Investigate: Anne Sophie Ågård (AUH) and Hanne Irene Jensen (Lillebælt) and one Master student and one project nurse
Determine the effect	5. Overall cognitive rehabilitation programme	Evidence concerning cognitive rehabilitation interventions is sparse.	The effect of a patient-centred cognitive rehabilitation programme.	Multi-centre RCT. Mixed methods: measurements, questionnaires and interviews. Statistical and qualitative analysis.	Primary outcome: Level of cognitive impairment. Secondary outcome: Level of functioning in activities of daily living and quality of life.	Investigate: Prof. Pia Dreyer (AUH), Helle Svenningsen (VIA), & Helene Korvenius Nedergaard (Lillebælt), and one PhD student, NN
Implement	6. Implementation of the cognitive rehabilitation programme	Patients' rehabilitation is random across sectors, both in hospital and after discharge.	The implementation strategy (inpatient and outpatient).	Implementation study where qualitative process evaluation will be the overall guide	A rich in-depth description and meaningful appraisal of the implementation process. A deeper understanding of trial effects.	Investigate: Anna Holm (AUH), and Helene Korvenius Nedergaard (Lillebælt) and one project nurse