Structured scoring of supporting nursing tasks in post-acute care to enhance early supported discharge in geriatric rehabilitation

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Introduction

The reason for this study was the idea that patients rehabilitating in a skilled nursing facility (SNF) could be discharged home earlier and could continue their rehabilitation during office hours. In addition there is the desire to rehabilitate patients in their own living environment.

A first pilot study showed that 13 of 31 patients (49%) with scheduled evening and night nursing care could be dismissed home earlier.

Therefore the aim of this study was to evaluate if the use of a structured scoring of supporting nursing tasks in the evening and night, leads to earlier discharge home in geriatric rehabilitation patients.

Methods

A pre- and post-implementation cohort design. One cohort (n=200) was assessed before and the other (n=283) after the implementation of the scorecard. The implementation consisted of completing a validated structured scorecard for identifying the supporting nursing tasks during the evening and night every week. Figure 1 shows the items on the scorecard.

The outcome on the scorecard is discussed in the multidisciplinary team-meeting in order to establish if discharge home was possible. If the patient needs help in less than 3 nursing tasks he could be dismissed within 2 weeks.

Four SNF's in South-Holland, the Netherlands, participated. Participants were followed until 120 days after admission.

Results

Both cohorts were comparable in age, gender and reasons for admission (mean age 80 years (SD 10); 69% females). Reasons for admission were stroke (23%), joint replacement (13%), traumatic injuries (32%), and other (32%). At discharge 58% of the participants need help in less than 3 nursing tasks.

Participants from the post-implementation cohort were discharged home earlier, within 48 days (SD 26) compared with 56 days (SD 31) in the pre-implementation cohort (see table 1).

37 of 133 participants (28%) that were able to be discharged home according to the supporting nursing tasks, were discharged within 2 weeks. Reasons for discharge delay were: no realised home adjustments (47%), diminished cognition participant (29%) and impaired general condition participant or informal caregiver (65%).

Figure 1: Items on the scorecard

Assistance with:

Medication intake
Fluid and food intake
Transfer to toilet room
Going on or off the toilet
Getting (un)dressed when toileting
Hygiene
Incontinence pads
Transfer to bedroom
Going in and out of bed
Getting (un)dressed for the night
Position in bed
Change of position in bed

Table 1: Discharge destination and average length of stay in days

	Pre-implementation cohort (n=160)		Post-implementation cohort (n=197)		
	%	Mean	%	Mean	P-value*
Home	53	56	61	48	0.04
Residential home	9	61	13	69	0.43
Nursing home	14	57	10	71	0.20
Hospital	8	43	6	42	0.93
Deceased	17	40	10	39	0.85

Table 2: Discharge destination and average length of stay in days when help is needed in ≤ 3 nursing tasks for participants discharged within and after two weeks

	Discharge ≤ 2 weeks (n=37)		Discharge > 2 weeks (n=96)	
	%	Mean	%	Mean
Home	92	28	74	61
Residential home	8	61	19	81
Nursing home	0	---	7	85

Conclusion

The use of a structured scorecard for discharge planning may lead to earlier discharge home. After being indicated for discharge, this is often not realised within 2 weeks.

An early inventarisation of the possibilities and barriers in the home situation is needed to avoid discharge delay.

Next

- A training module was developed in which patients fill in the scorecard by themselves from admission to discharge for every week. With the aim to give the patient more insight in their achieved rehabilitation goals.
- Groups of 6 patients participate in the training. They discuss the results of their individually completed scorecard with the intention to advise each other and come up with solutions for their problems.
- Patients were responsible for and directly involved in their rehabilitation goals and preparation for dismissal.

This training module shows that rehabilitation patients are busy with the approaching date of dismissal from the first day of admission. Possibly this approach will lead to a more successful rehabilitation: shorter length of stay on the SNF and discharge to home.

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