











**Table 1.** Characteristics of the sample

<b>Discharged to own home, 43% (n=142/330)</b>	
Length of hospital stay	
Mean	10.4 days
Median	7 days
Time since discharge	
Mean	16.7 days
Median	14 days
ADL-sum <sup>1</sup> (S.D.)	
Mean	10.5 (1.79)
Median	11
IADL-sum <sup>2</sup> (S.D.)	
Mean	4.9 (1.83)
Median	5
Age	
Mean	85.9 years
Median	85 years
	<b>% (n)</b>
Gender	
Women	70.4 (100)
Men	29.6 (42)
Marital status	
Married	29.1 (41)
Widow/widower	62.4 (88)
Divorced	3.5 (5)
Cohabiting	0.7 (1)
Unmarried	4.3 (6)
Level of education	
Primary school	46 (64)
Lower secondary/vocational school	38.8 (54)
Upper secondary school	5.8 (8)
University or college degree	9.4 (13)
Living status	
Alone	66.2 (92)
With someone	33.8 (47)
Type of residence	
Private, not adapted	42.8 (59)
Private, adapted	26.8 (37)
Municipal housing, adapted	29 (40)
Other	1.4 (2)

<sup>1</sup>ADL-sum ranges from 4—dependent in all activities to 12—dependent in all activities.

<sup>2</sup>IADL-sum ranges from 3—dependent in all activities to 9—dependent in all activities.

**Table 2.** Self-reported post-discharge outcome

<b>How have you managed since coming home from hospital?</b>	<b>% (n)</b>
It has been okay all along	54.1 (66)
It was difficult at first, but okay after a while	18.9 (23)
It has been mixed (difficult and okay) all along	16.4 (20)
It has been difficult all along, and I still find it difficult	9.8 (12)
My experience does not fit in any of the categories	0.8 (1)
Total <sup>1</sup>	100 (122)

<sup>1</sup>Total number of patients discharged to own home were 142. For various reasons family caregivers were interviewed as proxy for 19 of the patients. Proxies were not asked to answer this question, thus, the total number of respondents who were asked this question was 123. One person did not answer the question, resulting in a total number of 122 answers.

reported being surprised by the timing of the discharge or whether they reported that there was a discharge planning conference were not statistically significant predictors in this model.

## Discussion

In our study, having someone at home upon returning from hospital was an important predictor for a self-reported successful post-discharge outcome. The patients were met at their home by family members in 57.7% of the cases and by others in 16.3% of the cases. The family’s involvement commences early in the transition process, preparing and assisting in the homecoming for the patients. Our findings suggest that it is imperative for a successful post-discharge outcome that the patient does not come home to an empty house.

Another important predictor for a self-reported successful post-discharge outcome was having adequate formal home health care. In our sample all patients received formal home-help and/or home-nursing care. However, 28.4% of the patients found the formal help insufficient. Earlier research has pointed towards the inadequacy of municipal home-care services [2, 32]. In our study we are unable to pinpoint precisely what the patients found insufficient. But statements made by the patients suggest that the need for social support in addition to practical help with instrumental activities of daily living is perhaps the one need not commonly met by formal caregivers in today’s ‘stopwatch service’ provision. To promote a feeling of well-being and mastery after coming home, it seems to be important for the municipality to perform an assessment of the patients’ needs for services that correspond to the patients’ own expectations.

As earlier research has shown, informal help from family and friends is an important supplement to the formal home help provided by the municipality [6, 12, 28, 32–35]. In our sample 80.3% of the patients received help from family and friends. Our findings, supported by patients stating ‘it would not have gone this well without my daughter’ and ‘the home nurses and my wife are helping me’ (Table 3), highlights the importance of both the informal and formal caregivers at homecoming.

In our logistic regression model ADL and IADL function were not statistically significant with regard to the dependent variable. That is not to say that the patient’s functional status does not affect the post-discharge outcome, it probably just means that the patient’s functional dependency was compensated for by the amount of formal and informal help received post-discharge.

Despite the fact that 91.2% of the patients reported that there was no discharge planning conference and

**Table 3.** Examples of patient statements

Question	Typical statements—patient quotes	
How have you managed at home since your discharge?	Well	“I have received a lot of help, my son is visiting” “It has been okay all along thanks to the home nurses” “The home nurses and my wife are helping me” “It would not have gone this well without my daughter”
	Not well	“I have not been well, very dizzy and powerless” “I feel tired and weak, and the home nurses are not here long enough” “I think I was discharged too early considering my health status” “I have had some pain, it has been difficult to walk” “I feel lonely after coming home”
If you came home to an empty house, how was that experience for you?	Good	“It was okay, I didn’t need someone there” “It was okay, I had my telephone and TV. I have always lived alone, so I’m used to it” “I knew I would be on my own at home, it was okay”
	Bad	“No one was there. No one was there to say, “welcome home”. The mailbox was full. But the home care aide came and helped me to bed” “I was too tired to “feel anything”, I fell asleep in my chair. The taxi driver helped me to my living room” “I felt lonely and abandoned. I had a dream that the home care aide would be there ready with a cup of coffee” “It was very difficult. I had great pain in my hip, and I had to walk the stairs to my house. Luckily, a neighbor came to my assistance” “On account of a misunderstanding the hospital’s discharge notice failed to reach my family. That’s why I came to an empty house. I was able to reach my family, and they came shortly after.”
If the formal help you receive is insufficient, what would you want differently?		“I would like to exercise more” “I could use some more physical therapy” “It is not enough and the job they do is often unsatisfactory” “I need more help with laundry and window cleaning. I am lonely” “I wish someone could do my grocery shopping” “I need help with house cleaning” “I only get help with one shower per week” “I wish I could get more than two hours per week now that I am ill”
Did the timing of the discharge surprise you?	No	“I was prepared” “I was told the same day, but felt prepared” “No, I was prepared they wouldn’t let me stay long, despite me feeling weak and weary”
	Yes	“I felt I was too ill to go home” “I thought they would run more tests and that the stay would be longer. I was very ill” “I wanted to stay at the hospital longer” “I had not been told what was wrong with me, I was surprised. They took our beds in the morning, and I had to sit on a chair waiting for the taxi until 5 pm. It was horrible” “Yes, and because of that I asked to stay longer, but my request was declined”

**Table 4.** Homecoming

Was someone present when you came home from the hospital?	% (n)
Not necessary, I can manage on my own	10.6 (13)
No, I came home to an empty house	15.4 (19)
Yes, my next of kin was present	57.7 (71)
Yes, someone from the formal home health services was present	12.2 (15)
Someone else was present	4.1 (5)
Total <sup>1</sup>	100 (123)

<sup>1</sup>Total number of patients discharged to own home was 142. For various reasons family caregivers were interviewed as proxy for 19 of the patients. Proxies were not asked to answer this question, thus, the total number of respondents who were asked this question was 123.

that 20% reported being surprised by the timing of their discharge, the logistic regression model did not confirm our assumption that these variables are significant

predictors of a successful post-discharge outcome. However, these findings raise questions that need further exploration concerning the quality of the discharge planning and the cooperation between formal and informal caregivers regarding the patient’s discharge.

The capacity in the Norwegian home-care sector is under pressure [9] and the findings from this study indicate that both informal care and formal home health care are vital elements for older patients discharged from hospital.

## Conclusion

Our findings show that having someone at home upon returning from hospital and having adequate formal home-care services are significantly associated with patient-reported success in managing well in the long-term after returning home from hospital.

**Table 5.** Logistic regression model

	<b>B (S.E.)</b>	<b>p-Value</b>	<b>Odds ratio (95% CI)</b>
Gender (0=female)	0.396 (0.514)	0.411	1.486 (0.543–4.070)
Age	–0.090 (0.056)	0.110	0.914 (0.819–1.021)
Length of stay	–0.026 (0.025)	0.298	0.974 (0.927–1.024)
ADL-sum <sup>1</sup>	–0.246 (0.166)	0.140	0.782 (0.565–1.084)
IADL-sum <sup>2</sup>	0.076 (0.149)	0.608	1.079 (0.806–1.446)
Adequate help from municipality (0=no)	1.430 (0.518)	0.006	4.177 (1.514–11.526)
Someone present when I came home (0=no)	1.558 (0.682)	0.022	4.749 (1.248–18.078)
Live alone (0=yes)	0.525 (0.520)	0.313	1.690 (0.610–4.682)
Help from family now (0=no help)	–0.885 (0.600)	0.140	0.413 (0.127–1.337)
Discharge planning conference (0=no)	0.513 (0.995)	0.606	1.671 (0.238–11.752)
Surprised by discharge (0=yes)	0.903 (0.576)	0.117	2.467 (0.797–7.634)
Constant	7.736 (5.350)	0.148	2288.178

\*The dependent variable: self-reported post-discharge outcome (0=the first 2–3 weeks after discharge from hospital were difficult in the beginning, but ok after a while/both difficult and ok all along/difficult all along and still difficult, 1=ok all along).

<sup>1</sup>ADL-sum ranges from 4—dependent in all activities to 12—independent in all activities.

<sup>2</sup>IADL-sum ranges from 3—dependent in all activities to 9—independent in all activities.

(Hosmer and Lemeshow model goodness of fit  $p=0.894$ ) ( $n=122$ ).

## Reviewers

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