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Goals of older hospitalised patients: A qualitative descriptive study.

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Title:

Goals of older hospitalised patients: A qualitative descriptive study.

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ABSTRACT

Objectives Since the population continues aging and the number of patients with multiple chronic diseases is rising in Western countries, a shift is recommended from disease oriented towards goal oriented healthcare. As little is known about individual goals and preferences of older hospitalised patients, the aim of this study is to elucidate the goals of a diverse group of older hospitalised patients.

Design Qualitative descriptive method with open interviews analysed with inductive content analysis.

Setting A university teaching hospital and a regional teaching hospital.

Participants Twenty-eight hospitalised patients ages 70 years and older.

Results Some older hospitalised patients initially had difficulties describing concrete goals, but after probing all were able to state more concrete goals. A great diversity of goals were categorised into: Wanting to know what the matter is; controlling disease; staying alive; improving condition; alleviating complaints; improving daily functioning; improving/maintaining social functioning; resuming work/hobbies; enhancing quality of life; regaining/maintaining independence/freedom. These categories were applicable for all patient groups, except the category 'wanting to know what the matter is', which was only applicable for acutely admitted patients and 'improving condition', which was only applicable for frail medical or cardiac patients.

Conclusions Older hospitalised patients have a diversity of goals in different domains, which are almost all applicable for diverse patient categories. Discussing goals with older patients is not common practice yet. Timely discussions about goals should be encouraged, because individual goals are not self-evident and this discussion can guide decision making, especially in patients with multimorbidity and frailty. Aids can be helpful to facilitate the discussion about goals and evaluate the outcomes of hospitalisation.

1
2
3 **Keywords:** Geriatric medicine; Older adults; Hospitalisation; Patient perspective; Goal
4
5 setting; Qualitative research
6

7 **ARTICLE SUMMARY**
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9
10 **Strengths and limitations of this study**
11

- 12 • Qualitative descriptive research stays close to the perspective of the older patient
- 13
- 14 • We interviewed a broad variety of older patients during their hospitalisation, in a real life
15 situation.
16
- 17 • It is difficult to reach saturation on level of goals. Although the categories became clear,
18 there might always emerge new specific individual goals when approaching new patients.
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BACKGROUND

Since the population continues aging and the number of patients with chronic diseases is rising in Western countries, a shift is recommended from disease-oriented towards goal-oriented healthcare. Questioned is whether healthcare always aims for the desired outcomes for patients.¹⁻³

Little is known about the individual goals and preferences of older hospitalised patients.

Observations revealed that the main concerns for older hospitalised patients were whether they would be able again to carry out activities that were important to them such as working on the allotment, attending the wedding of a granddaughter or whether they would be able to live at home again. Older patients, however, seldom spoke spontaneously about this with their care professionals.⁴

The need for and emphasis on social and physical activities and to live at home, is also reflected in other studies. A study into patient goals after aortic aneurysm repair revealed that patients prioritize functional outcomes and recovery time after the operation, as well as energy levels, pain and the ability to walk again. In this study, recovery time was found more important than survival.⁵ This was also seen in a study into patient goals of the treatment of severe aortic stenosis. In that study, patients prioritised to be able to perform activities again such as hobbies or social activities, followed by remaining independent. Staying alive had the lowest priority for most patients.⁶ Since older hospitalised patients form a heterogeneous group because of the reason for hospitalisation, comorbidities, polypharmacy, disabilities and social background, the aim of this study is to elucidate the goals of a broad group of older patients hospitalised for medical or surgical reasons.

METHODS

To take account of the perspective of the older patients, a qualitative descriptive method was used.^{7, 8}

Population

Patients were recruited during their hospitalisation at the University Medical Centre Groningen (UMCG), a university teaching hospital in the northern part of the Netherlands and at the Gelre Hospitals, a regional teaching hospital in the central of the Netherlands.

Inclusion criteria were: (1) hospitalisation expected for at least 48 hours; (2) aged 70 years and older; (3) being able to speak and understand Dutch; (4) not expected to die within the next 48 hours; (5) informed consent to the interview and audio recording.

A purposive sample was used. Within the group of eligible patients we aimed for variation in age, frailty, living at home or in a nursing home, university hospital or regional hospital. We aimed to continue sampling until saturation was achieved.

In total 28 patients were interviewed. Details of the sample are shown in Table 1.

Table 1. Patient characteristics

	n
Gender	
Male	16
Female	12
Age (years)	
70-79	14
80-89	11
90-99	3
Frailty	
Non-frail	11
Frail	17
Living situation	
At home	22
Senior home	3
Nursing home	3
Hospital	
UMCG	26
Gelre	2
Specialism	
Internal medicine	20
Surgery	5
Cardiology	3

Admission due to*	
Dyspnoea	7
Constipation	3
Malignancy	3
Fall	2
Swollen leg	2
General malaise	2
Abdominal pain	2
Diarrhoea	2
Vomiting	1
Infection device	1
Myocardial infarction	1
Aorta surgery	1
Transcatheter aortic valve replacement	1
Type of admission	
Acute	23
Planned	5

*Admission reason according to patient interview

Data collection

After establishing inclusion criteria by the staff nurse, eligible patients were given an information letter and were approached by the interviewer (MJvdK) for further information about the procedure and to obtain informed consent during their hospitalisation. The Medical Ethics Research Committee of the UMCG confirmed that the Medical Research Involving Human Subjects Act did not apply to the research project. Official approval by the committee was hence not required.

Open interviews were conducted during hospitalisation by MJvdK. MJvdK is an experienced nurse, but not working as a nurse in the hospitals where the interviews took place. MJvdK is trained in qualitative research and interviewing. To comfort the patient, the interviews started with giving the patient the opportunity to explain the reason for hospitalisation. After that, the main question posed by the interviewer was: What do you hope to accomplish with this hospitalisation? Probes were used to clarify the goals of the participants. The interviews took place in the patient's room or, when the patient shared a room, in a family or examination room on the ward. The interviews took 15 to 60 minutes and were audio-recorded and

1
2
3 transcribed verbatim. After each interview an interview memo was written to gather initial
4
5 impressions of the interview.
6

7 **Analysis**

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10 Since little is known about the goals of older hospitalised patients, an inductive content
11
12 analysis was used.^{9, 10}
13

14 Data gathering and data analysis were alternated. The analysis started with open coding; the
15
16 codes were then grouped into categories and data were compared within and between
17
18 categories and the categories were described.⁹
19

20
21 All transcripts were read by the first (MJvdK) and second author (GJD) independently and
22
23 then the goals and codes were compared. The grouping of the codes into categories was also
24
25 done by the first and second author independently, the differences were then discussed and
26
27 solved by consensus.
28
29

30 During the entire process memos were written about the interviews, and coding process. Data
31
32 analysis and organization was supported by the use of Atlast.ti Version 5.2.18.
33
34

35 **Patient and public involvement**

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37 Patients or public were not involved in the design and conduct of this study.
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41

42 **RESULTS**

43
44 After the question ‘What do you hope to accomplish with this hospitalisation?’, some
45
46 participants replied with clear, concrete answers while others initially started with broad,
47
48 abstract answers like ‘getting better’ and ‘recovering’. With probing, all participants were
49
50 able to explain what, for example, ‘getting better’ meant for them and were able to state more
51
52 concrete goals, except for one patient with delirium.
53
54

55
56 The goals patients had, were grouped into the following categories: wanting to know what the
57
58 matter is; controlling disease; staying alive; improving condition; alleviating complaints;
59
60

1
2
3 improving daily functioning; improving/maintaining social functioning; resuming
4
5 work/hobbies; enhancing quality of life; regaining/maintaining independence/freedom (Table
6
7
8 2).

9
10 Table 2. List of categories and codes

Categories	Codes
Wanting to know what the matter is	<ul style="list-style-type: none"> - Finding cause of complaints - Ruling out severe affairs
Controlling disease	<ul style="list-style-type: none"> - Curing - Slowing down progression of the disease
Staying alive	<ul style="list-style-type: none"> - Staying alive
Improving condition	<ul style="list-style-type: none"> - Improving condition - Increasing energy - Feeling better - Reducing uncertainty - Regaining weight
Alleviating complaints	<ul style="list-style-type: none"> - Reducing/ eliminating pain - Reducing shortness of breath - Stopping vomiting - Reducing dizziness - Restoring stools - Reducing sweating - Restoring appetite - Restoring sleep
Improving daily functioning	<ul style="list-style-type: none"> - General functioning - Walking - Moving - Housekeeping - Shopping - Cooking - Self-care
Improving/ maintaining social functioning	<ul style="list-style-type: none"> - Visiting family/ friends - Making a day trip - Enjoying presence of partner/ children
Resuming work/ hobbies	<ul style="list-style-type: none"> - Resuming (volunteer) work - Gardening - Resuming hobbies - Resuming sport
Enhancing quality of life	<ul style="list-style-type: none"> - Enhancing quality of life - Enjoying life
Regaining/ maintaining independence/ freedom	<ul style="list-style-type: none"> - Going back home - (Re)gaining freedom - Regaining/ maintaining independence

57
58 **Wanting to know what the matter is**
59
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1
2
3 Several patients indicated that they wanted to know what was the cause for their complaints,
4
5 or the patient wanted to rule out severe other explanations. For example:
6

7 *That pain is caused by something. And I would really like to know what that is. (P22,*
8
9 *74 years)*
10
11
12

13 14 **Controlling disease**

15
16 The group 'Controlling disease' is used for medical control of diseases. Some patients aimed
17
18 for complete cure, like people with cancer. But for most the goal was to stop or slow down the
19
20 disease progression, because they knew their chronic condition was not curable. For example:
21
22

23 *That the process of ... Or the consequences of the diabetes, that those will be stopped,*
24
25 *eh. That it does not get worse or that the sugars are all the time too high. (P13, 71*
26
27 *years)*
28
29
30
31
32

33 **Staying alive**

34
35 Several patients stated that they hoped to stay alive, or to live a few more years due to hospital
36
37 admission. For some patients the argument to stay alive was the main reason to go to
38
39 hospital, for example:
40
41

42 *No, I had to stay alive. I felt. And nothing more. I mean, yes, no, that is, of course,*
43
44 *everything. (P2, 88 years)*
45
46
47
48

49 **Improving condition**

50
51 This category contains codes like improving condition, augmenting energy, feeling better,
52
53 reducing uncertainty, and regaining weight. For example:
54
55

56 *Patient: Yes, enhancing condition and that I can cope a bit more, actually much more.*
57
58 *But yes, that I have to, to, to play a football match, no, that time does not return.*
59
60

1
2
3 Interviewer: *That is pretty far-fetched? And what would be a realistic goal for you?*

4
5 Patient: *Being able to walk a bit more decently, and sustaining, my fitness, building*
6
7 *that up again. Yes, to be able to do a little bit more conditionally.* (P3, 70 years)

11 12 **Alleviating complaints**

13
14 A broad variety of complaints were described, which participants wished to alleviate,
15 including: pain, shortness of breath, vomiting, dizziness, obstipation, diarrhoea, sweating, lack
16
17 of appetite, insomnia. For example:

18
19
20
21 *That diarrhoea must stop. That's what it's all about.* (P17, 88 years)

22 23 24 25 26 **Improving daily functioning**

27
28 While some patients stated improving functioning in general, others named specific functions
29 like walking, moving, housekeeping, shopping, cooking, and self-care. For example:

30
31
32
33 *That I can function independently again with a walker.* (P7, 82 years)

34 35 36 37 38 **Improving/maintaining social functioning**

39
40 Participants mentioned various social activities they wanted to be able to participate in again,
41 like visiting family or friends or making a day trip. For example:

42
43
44
45 *Meeting friends and taking a drive around and perhaps drink a cup of tea somewhere,*
46
47 *it does not have to be luxurious or fancy at all. But enjoying things. Going to the*
48
49 *theatre once and yes, those things.* (P8, 86 years)

50
51 For some just enjoying the presence of their partner and close family members was very
52 important.

53 54 55 56 57 **Resuming work/ hobbies**

1
2
3 Several participants indicated that they wanted to resume their work, for example volunteer
4 work, assisting in the family business, or scientific work. Others wanted to resume their
5 sports, working in the garden or hobbies. For example:
6
7

8
9
10 *And, uh, now I hope to achieve, that I can go outside more and enjoy my garden too,*
11
12 *because I love gardening a lot and so, that was all gone. (P27, 72 years)*
13
14

15 16 17 **Enhancing quality of life**

18
19 While some participants stated in general terms that they wanted to enhance their quality of
20 life, others stated that they wanted to be able again to enjoy life.
21

22
23
24 *Yes, but I just want to enjoy life again. (P8, 86 years)*
25
26

27 28 29 **Regaining or maintaining independence/freedom**

30
31 This category was used for statements of participants about maintaining or regaining their
32 independence or freedom. Also the code 'going back to own house', was placed into this
33 category. For example:
34
35

36
37
38 *Yes, a bit more freedom, going somewhere alone once again. Yes, I just can't. (...) Yes,*
39 *then I have to take a taxi. Yes, then I also lost my freedom. Because then you also need*
40 *certain ... And I love my freedom. If I want to go somewhere, I have to be able to do*
41 *that. And not arranging everything in advance. (P26, 74 years)*
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48 49 **Comparing groups**

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51 We examined whether the categories of goals were applicable for all patient groups or if there
52 were distinctions between acute, planned, medical, surgical, cardiac, frail and non-frail
53 patients. It appeared that the categories of goals were applicable for all groups, with only a
54 few exceptions: Patients who had a planned hospital admission did not mention the goals
55 'wanting to know what the matter is', as was the case for patients with acute cardiac
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3 complaints. The goals related to ‘enhancing condition’ were, in this study, not mentioned by
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5 either surgery patients or non-frail patients.
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10 **DISCUSSION**

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12 As far as we know, this is the first study investigating the goals of already hospitalised older
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14 patients admitted for a broad diversity of reasons. It was remarkable that some patients
15
16 initially had difficulties stating concrete goals, but after probing all were able to state concrete
17
18 goals. Although the reasons for hospitalisation were very diverse, the categories ‘controlling
19
20 disease’, ‘staying alive’, ‘alleviating complaints’, ‘improving daily functioning’,
21
22 ‘improving/maintaining social functioning’, ‘resuming work/hobbies’, ‘enhancing quality of
23
24 life’, ‘regaining/maintaining independence/ freedom’ were applicable for all patient groups.
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26 Only the category ‘wanting to know what the matter is’, was solely applicable for acutely
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28 admitted patients and ‘improving condition’ which was just applicable for frail medical or
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30 cardiac patients.
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35 Since we used an inductive method, our categorisation is different from other studies, but also
36
37 showed some similarities. Coylewright et al., categorised the goals of older adults eligible for
38
39 an aortic valve replacement into the groups: ‘staying alive’, ‘reducing/eliminating pain or
40
41 symptoms’, ‘maintaining independence’ and ‘ability to do a specific activity’.⁶ This
42
43 categorisation has many similarities with the categories we constructed, although ours were
44
45 more detailed.
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48
49 Goals of community-dwelling older adults visiting an outpatient geriatric clinic were placed
50
51 in the categories ‘health problems’, ‘mobility’, ‘emotions’, ‘independence and autonomy’,
52
53 ‘social and family relationships’, ‘activities’, ‘living accommodation’, ‘healthcare services’
54
55 and ‘finances’.¹¹
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3 Vermunt et al., investigated patient goals from the perspective of general practitioners (GPs)
4 and geriatricians and came to the following categories: 'fundamental goals', 'functional goals'
5 and 'disease-specific or symptom-specific goals'.¹² Again our categorisation has similarities,
6
7 but is more detailed.
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12 The goals set during hospitalisation, also are in line with what community-dwelling older
13 adults find important in quality of life or well-being, namely 'staying independent', 'social
14 life', 'hobbies', 'activities', 'health' and 'own environment'.^{13, 14} Apparently, hospitalisation
15
16 is seen by patients as an option to improve or maintain quality of life or well-being.
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21 Setting goals is not yet common practice, not from the perspective of the patient, nor from the
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23 healthcare professional. This could be explained because historically patients presented with
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25 acute problems and it was expected that the healthcare professional would solve the acute
26
27 problem and the patient would return to a normal healthy state. However, nowadays many
28
29 complaints of older patients are caused by, often multiple, chronic diseases, which can only
30
31 be controlled but not completely cured. Probably this shift still has not entered completely
32
33 into daily clinical practice.¹⁵ Several other barriers for discussing goals are described,
34
35 including considering talking about personal goals impertinent, lack of skills by healthcare
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37 professionals, focus on symptoms, limited time and the presumption by both patients and
38
39 healthcare professionals that all patients have the same goals.¹⁵ There are, however, several
40
41 examples which rebut this last presumption.^{12, 16, 17} Therefore, it is important to discuss
42
43 individual goals explicitly with the patient, which can also guide decision-making in case of
44
45 multimorbidity and provide important information for handling acute health situations in
46
47 future.¹²
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53 **Strengths and limitations**

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56 The strengths of our study include that we interviewed older patients during their
57
58 hospitalisation, in a real life situation, at different hospital wards, and we included a broad
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3 variety of patients. One limitation is that it is difficult to reach saturation on level of goals.
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5 Although the categories became clear, there might always emerge new specific individual
6
7 goals when approaching new patients.
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10 **Conclusions**

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12 Older hospitalised patients have a diversity of goals in different domains, which are almost all
13
14 applicable for diverse patient and diagnosis groups. Discussing goals with older hospital
15
16 patients is not common practice yet and many patients and healthcare professionals are not
17
18 familiar with discussing personal goals. Timely discussions about goals should be
19
20 encouraged, because individual goals are not self-evident and this discussion can guide
21
22 decision making, especially in patients with multimorbidity and frailty. Aids are needed to
23
24 facilitate the discussion about goals and the evaluation of goals of hospitalisation.
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29

30 **Acknowledgements** We would like to thank all interviewees for participating in this study
31
32 and sharing their stories with us. And Daniël Bosold for his help with text editing.
33
34

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36

37 **Competing interests** None declared
38

39
40 **Author contributions** MJvdK, designed the study. MJvdK conducted the interviews. MJvdK
41
42 and GJD read all transcriptions. MJvdK predominantly performed the qualitative analysis. As
43
44 part of this analysis MJvdK and GJD regularly discussed the coding process and
45
46 categorisation. MJvdK wrote the first draft of the manuscript, GJD and SEdR contributed
47
48 significantly to subsequent manuscript revisions. All authors have read and approved the final
49
50 version of the manuscript.
51
52

53 **Patient consent** All interviewees gave informed consent for anonymised publication
54

55
56 **Data sharing** The results in this paper are based on the transcripts of the recorded audio
57
58 interviews with patients. Data supporting the findings of this study are found in the translated
59
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1
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3 quotes as seen in the results section of this article. However, to protect the participants'
4
5 identities, the full data of this study (transcripts and audio files) will not be made available to
6
7 the public.
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12 REFERENCES

- 13
14
15
16 1 Reuben DB, Tinetti ME. Goal-oriented patient care--an alternative health outcomes paradigm. *N*
17 *Engl J Med* 2012;366:777-9 doi:10.1056/NEJMp1113631.
18
19 2 Tinetti ME, Fried T. The end of the disease era. *Am J Med* 2004;116:179-85
20 doi:S0002934303006661 [pii].
21
22 3 Tinetti ME, Esterson J, Ferris R, et al. Patient Priority-Directed Decision Making and Care for Older
23 Adults with Multiple Chronic Conditions. *Clin Geriatr Med* 2016;32:261-75
24 doi:10.1016/j.cger.2016.01.012 [doi].
25
26 4 van der Meide H, Olthuis G, Leget C. Feeling an outsider left in uncertainty - a phenomenological
27 study on the experiences of older hospital patients. *Scand J Caring Sci* 2015;29:528-36
28 doi:10.1111/scs.12187.
29
30 5 Dubois L, Novick T, Power A, et al. Identification of patient-derived outcomes after aortic aneurysm
31 repair. *J Vasc Surg* 2014;59:1528-34 doi:10.1016/j.jvs.2013.12.033.
32
33 6 Coylewright M, Palmer R, O'Neill ES, et al. Patient-defined goals for the treatment of severe aortic
34 stenosis: a qualitative analysis. *Health Expect* 2015 doi:10.1111/hex.12393.
35
36 7 Neergaard M, Olesen F, Andersen R, et al. Qualitative description - the poor cousin of health
37 research?. *BMC Med Res Methodol* 2009;9:52- doi:10.1186/1471-2288-9-52.
38
39 8 Sandelowski M. Whatever happened to qualitative description?. *Res Nurs Health* 2000;23:334-40
40 doi:10.1002/1098-240X(200008)23:43.0.CO;2-G.
41
42 9 Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs* 2008;62:107.
43
44 10 Hsieh H, Shannon S. Three approaches to qualitative content analysis. *Qual Health Res*
45 2005;15:1277-88 doi:10.1177/1049732305276687.
46
47 11 Robben SH, Perry M, Olde Rikkert MG, et al. Care-related goals of community-dwelling frail older
48 adults. *J Am Geriatr Soc* 2011;59:1552-4 doi:10.1111/j.1532-5415.2011.03515.x [doi].
49
50 12 Vermunt NP, Harmsen M, Elwyn G, et al. A three-goal model for patients with multimorbidity: A
51 qualitative approach. *Health Expect* 2018;21:528-38 doi:10.1111/hex.12647 [doi].
52
53 13 Puts MTE, Shekary N, Widdershoven G, et al. What does quality of life mean to older frail and non-
54 frail community-dwelling adults in the Netherlands?. *Qual Life Res* 2007;16:263-77
55 doi:10.1007/s11136-006-9121-0.
56
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60

1
2
3 14 Douma L, Steverink N, Hutter I, et al. Exploring Subjective Well-being in Older Age by Using
4 Participant-generated Word Clouds. *Gerontologist* 2017;57:229-39 doi:10.1093/geront/gnv119.
5

6 15 Schulman-Green DJ, Naik AD, Bradley EH, et al. Goal setting as a shared decision making strategy
7 among clinicians and their older patients. *Patient Educ Couns* 2006;63:145-51 doi:S0738-
8 3991(05)00275-2 [pii].
9

10 16 Voigt I, Wrede J, Diederichs-Egidi H, et al. Priority setting in general practice: health priorities of
11 older patients differ from treatment priorities of their physicians. *Croat Med J* 2010;51:483-92.
12
13

14 17 Kuluski K, Gill A, Naganathan G, et al. A qualitative descriptive study on the alignment of care
15 goals between older persons with multi-morbidities, their family physicians and informal caregivers.
16 *BMC Fam Pract* 2013;14:133- doi:10.1186/1471-2296-14-133.
17
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25
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Reporting checklist for qualitative study.

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	Reporting Item	Page Number
	#1 Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2 Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	2
Problem formulation	#3 Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	4
Purpose or research question	#4 Purpose of the study and specific objectives or questions	4
Qualitative approach and research paradigm	#5 Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	5
Researcher characteristics	#6 Researchers' characteristics that may influence the research, including personal	6

1	and reflexivity		attributes, qualifications / experience, relationship with participants, assumptions and / or	
2			presuppositions; potential or actual interaction between researchers' characteristics and	
3			the research questions, approach, methods, results and / or transferability	
4				
5	Context	#7	Setting / site and salient contextual factors; rationale	5,6
6				
7				
8	Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for	
9			deciding when no further sampling was necessary (e.g. sampling saturation); rationale	
10				
11	Ethical issues pertaining to	#9	Documentation of approval by an appropriate ethics review board and participant	6
12	human subjects		consent, or explanation for lack thereof; other confidentiality and data security issues	
13				
14				
15	Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate)	6,7
16			start and stop dates of data collection and analysis, iterative process, triangulation of	
17			sources / methods, and modification of procedures in response to evolving study	
18			findings; rationale	
19				
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21				
22	Data collection instruments	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio	6
23	and technologies		recorders) used for data collection; if / how the instruments(s) changed over the course of	
24			the study	
25				
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27				
28	Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the	5,6
29			study; level of participation (could be reported in results)	
30				
31				
32	Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data	6,7
33			entry, data management and security, verification of data integrity, data coding, and	
34			anonymisation / deidentification of excerpts	
35				
36				
37	Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the	7
38			researchers involved in data analysis; usually references a specific paradigm or	
39			approach; rationale	
40				
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42				
43	Techniques to enhance	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member	7
44	trustworthiness		checking, audit trail, triangulation); rationale	
45				
46				
47	Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development	7-11
48			of a theory or model, or integration with prior research or theory	
49				
50				
51	Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic	9-11
52			findings	
53				
54				
55	Intergration with prior work,	#18	Short summary of main findings; explanation of how findings and conclusions connect	12,13
56	implications, transferability		to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of	
57	and contribution(s) to the		scope of application / generalizability; identification of unique contributions(s) to	
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1	field	scholarship in a discipline or field	
2			
3	Limitations	#19 Trustworthiness and limitations of findings	3,13,14
4			
5	Conflicts of interest	#20 Potential sources of influence of perceived influence on study conduct and conclusions; 6 how these were managed	14
7			
8			
9	Funding	#21 Sources of funding and other support; role of funders in data collection, interpretation 10 and reporting	14
11			

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13 checklist can be completed online using <https://www.goodreports.org/>, a tool made by the [EQUATOR Network](#) in collaboration with
14 [Penelope.ai](#)
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Goals of older hospitalised patients: A qualitative descriptive study.

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Title:

Goals of older hospitalised patients: A qualitative descriptive study.

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Tables: 3

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ABSTRACT

Objectives Since the population continues aging and the number of patients with multiple chronic diseases is rising in Western countries, a shift is recommended from disease oriented towards goal oriented healthcare. As little is known about individual goals and preferences of older hospitalised patients, the aim of this study is to elucidate the goals of a diverse group of older hospitalised patients.

Design Qualitative descriptive method with open interviews analysed with inductive content analysis.

Setting A university teaching hospital and a regional teaching hospital.

Participants Twenty-eight hospitalised patients ages 70 years and older.

Results Some older hospitalised patients initially had difficulties describing concrete goals, but after probing all were able to state more concrete goals. A great diversity of goals were categorised into: Wanting to know what the matter is; controlling disease; staying alive; improving condition; alleviating complaints; improving daily functioning; improving/maintaining social functioning; resuming work/hobbies; enhancing quality of life; regaining/maintaining independence/freedom. These categories were applicable for all patient groups, except the category 'wanting to know what the matter is', which was only applicable for acutely admitted patients and 'improving condition', which was only applicable for frail medical or cardiac patients.

Conclusions Older hospitalised patients have a diversity of goals in different domains, which are almost all applicable for diverse patient categories. Discussing goals with older patients is not common practice yet. Timely discussions about goals should be encouraged, because individual goals are not self-evident and this discussion can guide decision making, especially in patients with multimorbidity and frailty. Aids can be helpful to facilitate the discussion about goals and evaluate the outcomes of hospitalisation.

1
2
3 **Keywords:** Geriatric medicine; Older adults; Hospitalisation; Patient perspective; Goal
4
5 setting; Qualitative research
6

7 **ARTICLE SUMMARY**
8

9
10 **Strengths and limitations of this study**
11

- 12 • Qualitative descriptive research stays close to the perspective of the older patient
- 13
- 14 • We interviewed a broad variety of older patients during their hospitalisation, in a real life
15 situation.
16
- 17 • It is difficult to reach saturation on level of goals. Although the categories became clear,
18 there might always emerge new specific individual goals when approaching new patients.
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BACKGROUND

Since the population continues aging and the number of patients with chronic diseases is rising in Western countries, a shift is recommended from disease-oriented towards goal-oriented healthcare. Questioned is whether healthcare always aims for the desired outcomes for patients.¹⁻³

Goals are the personal health and life outcomes that people hope to achieve through their health care.³ Little is known about the individual goals and preferences of older hospitalised patients. Observations by a phenomenological researcher revealed that the main concerns for older hospitalised patients were whether they would be able again to carry out activities that were important to them such as working on the allotment, attending the wedding of a granddaughter or whether they would be able to live at home again. Older patients, however, seldom spoke spontaneously about this with their care professionals.⁴

The need for and emphasis on social and physical activities and to live at home, is also reflected in other studies. A study into patient goals after aortic aneurysm repair revealed that patients prioritize functional outcomes and recovery time after the operation, as well as energy levels, pain and the ability to walk again. In this study, recovery time was found more important than survival.⁵ This was also seen in a study into patient goals of the treatment of severe aortic stenosis. In that study, patients prioritised to be able to perform activities again such as hobbies or social activities, followed by remaining independent. Staying alive had the lowest priority for most patients.⁶ Since older hospitalised patients form a heterogeneous group because of the reason for hospitalisation, comorbidities, polypharmacy, disabilities and social background, the aim of this study is to elucidate the goals of a broad group of older patients hospitalised for medical or surgical reasons.

METHODS

To take account of the perspective of the older patients, a qualitative descriptive method was used.^{7,8}

Population

Patients were recruited during their hospitalisation in a university teaching hospital in the northern part of the Netherlands and a regional teaching hospital in the central of the Netherlands.

Inclusion criteria were: (1) hospitalisation expected for at least 48 hours; (2) aged 70 years and older; (3) being able to speak and understand Dutch; (4) not expected to die within the next 48 hours; (5) informed consent to the interview and audio recording.

A purposive sample was used. Within the group of eligible patients we aimed for maximum variation in age, frailty, living at home or in a nursing home, planned and unplanned admissions, university hospital or regional hospital. Frailty was determined by the Fried- criteria as operationalized by Ávila-Funes⁹ and asked to the patient himself.

Data gathering and analysis were alternated. We aimed to continue sampling until saturation was achieved, meaning no new information emerged from the patients. Since it appeared during the study difficult to reach saturation on goal level, we decided to aim for saturation on category level.

In total 28 patients were interviewed. Details of the sample are shown in Table 1.

Table 1. Patient characteristics

	n
Gender	
Male	16
Female	12
Age (years)	
70-79	14
80-89	11
90-99	3
Frailty	
Non-frail	11
Frail	17
Living situation	
At home	22

Senior home	3
Nursing home	3
Hospital	
University	26
Regional	2
Admission day interview	
<3 days	5
3-5 days	16
6-10 days	4
>10 days	3
Specialism	
Internal medicine	20
Surgery	5
Cardiology	3
Admission due to*	
Dyspnoea	7
Constipation	3
Malignancy	3
Fall	2
Swollen leg	2
General malaise	2
Abdominal pain	2
Diarrhoea	2
Vomiting	1
Infection device	1
Myocardial infarction	1
Aorta surgery	1
Transcatheter aortic valve replacement	1
Type of admission	
Acute	23
Planned	5

*Admission reason according to patient interview

Data collection

After establishing inclusion criteria by the staff nurse, eligible patients were given an information letter and were approached by the interviewer (MJvdK) for further information about the procedure and to obtain informed consent during their hospitalisation. The Medical Ethics Research Committee of the UMCG confirmed that the Medical Research Involving Human Subjects Act did not apply to the research project. Official approval by the committee was hence not required.

Open interviews were conducted during hospitalisation by MJvdK. MJvdK is an experienced nurse, but not working as a nurse in the hospitals where the interviews took place. MJvdK is

1
2
3 trained in qualitative research and interviewing. To comfort the patient, the interviews started
4
5 with giving the patient the opportunity to explain the reason for hospitalisation. After that, the
6
7 main question posed by the interviewer was: What do you hope to accomplish with this
8
9 hospitalisation? Probes were used to clarify the goals of the participants, like “what do you
10
11 mean with...”, “can you give an example of...”, summarizing. The interviews took place in
12
13 the patient’s room or, when the patient shared a room, in a family or examination room on the
14
15 ward. The interviews took 15 to 60 minutes and were audio-recorded and transcribed
16
17 verbatim. After each interview an interview memo was written to gather initial impressions of
18
19 the interview.
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23 **Analysis**

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25 Since little is known about the goals of older hospitalised patients, an inductive content
26
27 analysis was used.^{10, 11}
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31 Data gathering and data analysis were alternated. The analysis started with open coding; the
32
33 codes were then grouped into categories and data were compared within and between
34
35 categories and the categories were described.¹⁰
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39 All transcripts were read by the first (MJvdK) and second author (GJD) independently and
40
41 then the goals and codes were compared. The grouping of the codes into categories was also
42
43 done by the first and second author independently, the differences were then discussed and
44
45 solved by consensus.
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47
48 During the entire process memos were written about the interviews, and coding process. Data
49
50 analysis and organization was supported by the use of Atlast.ti Version 5.2.18.

51
52 Interviews and analysis were all in Dutch. The categories, codes and quotes were translated
53
54 into English in the final stage and checked and edited by a native English speaker.
55

56 **Patient and public involvement**

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58 Patients or public were not involved in the design and conduct of this study.
59
60

RESULTS

After the question ‘What do you hope to accomplish with this hospitalisation?’, some participants replied with clear, concrete answers while others initially started with broad, abstract answers like ‘getting better’ and ‘recovering’. With probing, all participants were able to explain what, for example, ‘getting better’ meant for them and were able to state more concrete goals, except for one patient with delirium.

For example:

Interviewer: *Because what is your goal with this hospitalisation?* Patient: *Goal?* Interviewer: *Yes.* Patient: *That I am getting better.* Interviewer: *And what is better for you, can you describe that?* Patient: *Yes, that I ... well ... get my appetite back and drink well, because I am not interested in whether I get anything or not at the moment. I am not hungry, I am not thirsty and that has to change.* Interviewer: *Yes.* Patient: *And if I then grow stronger again. I have lost a lot of weight. From 88 to 82, I believe.* Interviewer: *In how much time?* Patient: *About a week. I was still very weak yesterday.* Interviewer: *Yes Yes. So grow stronger.* Patient: *To grow stronger. And that I am back on my feet, that I can walk with a crutch and I'm done here as soon as possible and that I can go back home. That is my goal.* (P11, 89 years, acute admission, internal medicine, frail)

The goals patients had, were grouped into the following categories: wanting to know what the matter is; controlling disease; staying alive; improving condition; alleviating complaints; improving daily functioning; improving/maintaining social functioning; resuming work/hobbies; regaining/maintaining autonomy (Table 2).

Table 2. List of categories and codes

Categories	Codes
Wanting to know what the matter is	<ul style="list-style-type: none"> – Finding cause of complaints – Ruling out severe affairs
Controlling disease	<ul style="list-style-type: none"> – Curing – Slowing down progression of the disease

1 2 3	Staying alive	– Staying alive
4 5 6 7 8 9	Improving condition	– Improving condition – Increasing energy – Feeling better – Reducing uncertainty – Regaining weight
10 11 12 13 14 15 16 17 18	Alleviating complaints	– Reducing/ eliminating pain – Reducing shortness of breath – Stopping vomiting – Reducing dizziness – Restoring stools – Reducing sweating – Restoring appetite – Restoring sleep
19 20 21 22 23 24 25 26 27	Improving daily functioning	– General functioning – Walking – Moving – Housekeeping – Shopping – Cooking – Self-care
28 29 30	Improving/maintaining social functioning	– Visiting family/ friends – Making a day trip – Enjoying presence of partner/ children
31 32 33 34 35	Resuming work/hobbies	– Resuming (volunteer) work – Gardening – Resuming hobbies – Resuming sport
36		–
37 38 39 40	Regaining/maintaining autonomy	– Going back home – (Re)gaining freedom – Regaining/ maintaining independence

Wanting to know what the matter is

Several patients indicated that they wanted to know what was the cause for their complaints, or the patient wanted to rule out severe other explanations. For example:

That pain is caused by something. And I would really like to know what that is. (P22,

74 years, acute admission, internal medicine, non-frail)

Controlling disease

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3 The group 'Controlling disease' is used for medical control of diseases. Some patients aimed
4 for complete cure, like people with cancer. But for most the goal was to stop or slow down the
5 disease progression, because they knew their chronic condition was not curable. For example:
6
7

8 *That the process of ... Or the consequences of the diabetes, that those will be stopped,*
9 *eh. That it does not get worse or that the sugars are all the time too high. (P13, 71*
10 *years, planned admission, surgery, frail)*
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16 17 18 19 **Staying alive**

20 Several patients stated that they hoped to stay alive, or to live a few more years due to hospital
21 admission. For some patients the argument to stay alive was the main reason to go to
22 hospital, for example:
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26 *No, I had to stay alive. I felt. And nothing more. I mean, yes, no, that is, of course,*
27 *everything. (P2, 88 years, acute admission, internal medicine, non-frail)*
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35 **Improving condition**

36 This category is a subjective experience by the patient and contains codes like improving
37 condition, augmenting energy, feeling better, reducing uncertainty, and regaining weight. For
38 example:
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44 *Patient: Yes, enhancing condition and that I can cope a bit more, actually much more.*

45 *But yes, that I have to, to, to play a football match, no, that time does not return.*

46 *Interviewer: That is pretty far-fetched? And what would be a realistic goal for you?*

47 *Patient: Being able to walk a bit more decently, and sustaining, my fitness, building*
48 *that up again. Yes, to be able to do a little bit more conditionally. (P3, 70 years, acute*
49 *admission, internal medicine, frail)*
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Alleviating complaints

A broad variety of complaints were described, which participants wished to alleviate, including: pain, shortness of breath, vomiting, dizziness, obstipation, diarrhoea, sweating, lack of appetite, insomnia. For example:

That diarrhoea must stop. That's what it's all about. (P17, 88 years, acute admission, internal medicine, frail)

Improving daily functioning

While some patients stated improving functioning in general, others named specific functions like walking, moving, housekeeping, shopping, cooking, and self-care. For example:

That I can function independently again with a walker. (P7, 82 years, acute admission, internal medicine, frail)

Improving/maintaining social functioning

Participants mentioned various social activities they wanted to be able to participate in again, like visiting family or friends or making a day trip. For example:

Meeting friends and taking a drive around and perhaps drink a cup of tea somewhere, it does not have to be luxurious or fancy at all. But enjoying things. Going to the theatre once and yes, those things. (P8, 86 years, acute admission, internal medicine, frail)

For some just enjoying the presence of their partner and close family members was very important.

Resuming work/ hobbies

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3 Several participants indicated that they wanted to resume their work, for example volunteer
4 work, assisting in the family business, or scientific work. Others wanted to resume their
5 sports, working in the garden or hobbies. For example:
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9
10 *And, uh, now I hope to achieve, that I can go outside more and enjoy my garden too,*
11 *because I love gardening a lot and so, that was all gone. (P27, 72 years, planned*
12 *admission, cardiology, frail)*
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19 **Regaining or maintaining autonomy**

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21 This category was used for statements of participants about maintaining or regaining their
22 independence or freedom. Also the code 'going back to own house', was placed into this
23 category. For example:
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27

28 *Yes, a bit more freedom, going somewhere alone once again. Yes, I just can't. (...) Yes,*
29 *then I have to take a taxi. Yes, then I also lost my freedom. Because then you also need*
30 *certain ... And I love my freedom. If I want to go somewhere, I have to be able to do*
31 *that. And not arranging everything in advance. (P26, 74 years, planned admission,*
32 *surgery, frail)*
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43 **DISCUSSION**

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45 As far as we know, this is the first study investigating the goals of already hospitalised older
46 patients admitted for a broad diversity of reasons. It was remarkable that some patients
47 initially had difficulties stating concrete goals, but after probing all were able to state more
48 concrete goals.
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54 Patients reported a variety of goals, which could be grouped into the categories 'wanting to
55 know what the matter is', 'controlling disease', 'staying alive', 'improving condition',
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3 'alleviating complaints', 'improving daily functioning', 'improving/maintaining social
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5 functioning', 'resuming work/hobbies', 'regaining/maintaining autonomy'.
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8 Since we used an inductive method, our categorisation is different from other studies, but also
9
10 showed some similarities. Coylewright et al., categorised the goals of older adults eligible for
11
12 an aortic valve replacement into the groups: 'staying alive', 'reducing/eliminating pain or
13
14 symptoms', 'maintaining independence' and 'ability to do a specific activity'.⁶ This
15
16 categorisation has many similarities with the categories we constructed, although ours were
17
18 more detailed.
19

20
21 Goals of community-dwelling older adults were placed in the categories 'health problems',
22
23 'mobility', 'emotions', 'independence and autonomy', 'social and family relationships',
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25 'activities', 'living accommodation', 'healthcare services' and 'finances'.¹²
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28
29 Vermunt et al., investigated patient goals from the perspective of general practitioners (GPs)
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31 and geriatricians and came to the following categories: 'fundamental goals', 'functional goals'
32
33 and 'disease-specific or symptom-specific goals'.¹³ Again our categorisation has similarities,
34
35 but is more detailed.
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37
38 The goals set during hospitalisation, also are in line with what community-dwelling older
39
40 adults find important in quality of life or well-being, namely 'staying independent', 'social
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42 life', 'hobbies', 'activities', 'health' and 'own environment'.^{14, 15} Apparently, hospitalisation
43
44 is seen by patients as an option to improve or maintain quality of life or well-being.
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47 Setting goals is not yet common practice, not from the perspective of the patient, nor from the
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49 healthcare professional. This could be explained because historically patients presented with
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51 acute problems and it was expected that the healthcare professional would solve the acute
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53 problem and the patient would return to a normal healthy state. However, nowadays many
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55 complaints of older patients are caused by, often multiple, chronic diseases, which can only
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57 be controlled but not completely cured. Probably this shift still has not entered completely
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3 into daily clinical practice.¹⁶ Several other barriers for discussing goals are described,
4 including considering talking about personal goals impertinent, lack of skills by healthcare
5 professionals, focus on symptoms, limited time and the presumption by both patients and
6 healthcare professionals that all patients have the same goals.¹⁶ There are, however, several
7 examples which rebut this last presumption.^{13, 17, 18} Therefore, it is important to discuss
8 individual goals explicitly with the patient, which can also guide decision-making in case of
9 multimorbidity and provide important information for handling acute health situations in
10 future.¹³

21 **Strengths and limitations**

22
23 The strengths of our study include that we interviewed older patients during their
24 hospitalisation, in a real life situation, at different hospital wards, and we included a broad
25 variety of patients. This led to a broad overview of categories of goals, but did not lead to
26 very specific individual goals. Another limitation is that it is difficult to reach saturation on
27 level of goals. Although the categories became clear, there might always emerge new specific
28 individual goals when approaching new patients.

37 **Conclusions**

38
39 Older hospitalised patients have a diversity of goals in different domains. Discussing goals
40 with older hospital patients is not common practice yet and many patients and healthcare
41 professionals are not familiar with discussing personal goals. Timely discussions about goals
42 should be encouraged, because individual goals are not self-evident and this discussion can
43 guide decision making, especially in patients with multimorbidity and frailty. Aids are needed
44 to facilitate the discussion about goals and the evaluation of goals of hospitalisation.

55
56 **Acknowledgements** We would like to thank all interviewees for participating in this study
57 and sharing their stories with us. And Daniël Bosold for his help with text editing.
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1
2
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4

5 **Competing interests** None declared
6

7 **Author contributions** MJvdK, designed the study. MJvdK conducted the interviews. MJvdK
8 and GJD read all transcriptions. MJvdK predominantly performed the qualitative analysis. As
9
10 part of this analysis MJvdK and GJD regularly discussed the coding process and
11
12 categorisation. MJvdK wrote the first draft of the manuscript, GJD and SEdR contributed
13
14 significantly to subsequent manuscript revisions. All authors have read and approved the final
15
16 version of the manuscript.
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20

21 **Patient consent** All interviewees gave informed consent for anonymised publication
22

23 **Data sharing** The results in this paper are based on the transcripts of the recorded audio
24
25 interviews with patients. Data supporting the findings of this study are found in the translated
26
27 quotes as seen in the results section of this article. However, to protect the participants'
28
29 identities, the full data of this study (transcripts and audio files) will not be made available to
30
31 the public.
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37 REFERENCES

38
39
40

41 1 Reuben DB, Tinetti ME. Goal-oriented patient care--an alternative health outcomes paradigm. *N*
42 *Engl J Med* 2012;366:777-9 doi:10.1056/NEJMp1113631.
43

44 2 Tinetti ME, Fried T. The end of the disease era. *Am J Med* 2004;116:179-85
45 doi:S0002934303006661 [pii].
46

47 3 Tinetti ME, Esterson J, Ferris R, et al. Patient Priority-Directed Decision Making and Care for Older
48 Adults with Multiple Chronic Conditions. *Clin Geriatr Med* 2016;32:261-75
49 doi:10.1016/j.cger.2016.01.012 [doi].
50

51 4 van der Meide H, Olthuis G, Leget C. Feeling an outsider left in uncertainty - a phenomenological
52 study on the experiences of older hospital patients. *Scand J Caring Sci* 2015;29:528-36
53 doi:10.1111/scs.12187.
54
55

56 5 Dubois L, Novick T, Power A, et al. Identification of patient-derived outcomes after aortic aneurysm
57 repair. *J Vasc Surg* 2014;59:1528-34 doi:10.1016/j.jvs.2013.12.033.
58
59
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2
3 6 Coylewright M, Palmer R, O'Neill ES, et al. Patient-defined goals for the treatment of severe aortic
4 stenosis: a qualitative analysis. *Health Expect* 2015 doi:10.1111/hex.12393.
5
6
7 7 Neergaard M, Olesen F, Andersen R, et al. Qualitative description - the poor cousin of health
8 research?. *BMC Med Res Methodol* 2009;9:52- doi:10.1186/1471-2288-9-52.
9
10 8 Sandelowski M. Whatever happened to qualitative description?. *Res Nurs Health* 2000;23:334-40
11 doi:10.1002/1098-240X(200008)23:43.0.CO;2-G.
12
13 9 Avila Funes JA, Helmer C, Amieva H, et al. Frailty among community-dwelling elderly people in
14 France: the three-city study. *J Gerontol A Biol Sci Med Sci* 2008;63:1089-96.
15
16 10 Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs* 2008;62:107.
17
18 11 Hsieh H, Shannon S. Three approaches to qualitative content analysis. *Qual Health Res*
19 2005;15:1277-88 doi:10.1177/1049732305276687.
21
22 12 Robben SH, Perry M, Olde Rikkert MG, et al. Care-related goals of community-dwelling frail older
23 adults. *J Am Geriatr Soc* 2011;59:1552-4 doi:10.1111/j.1532-5415.2011.03515.x [doi].
24
25 13 Vermunt NP, Harmsen M, Elwyn G, et al. A three-goal model for patients with multimorbidity: A
26 qualitative approach. *Health Expect* 2018;21:528-38 doi:10.1111/hex.12647 [doi].
27
28 14 Puts MTE, Shekary N, Widdershoven G, et al. What does quality of life mean to older frail and non-
29 frail community-dwelling adults in the Netherlands?. *Qual Life Res* 2007;16:263-77
30 doi:10.1007/s11136-006-9121-0.
31
32 15 Douma L, Steverink N, Hutter I, et al. Exploring Subjective Well-being in Older Age by Using
33 Participant-generated Word Clouds. *Gerontologist* 2017;57:229-39 doi:10.1093/geront/gnv119.
34
35 16 Schulman-Green DJ, Naik AD, Bradley EH, et al. Goal setting as a shared decision making strategy
36 among clinicians and their older patients. *Patient Educ Couns* 2006;63:145-51 doi:S0738-
37 3991(05)00275-2 [pii].
38
39 17 Voigt I, Wrede J, Diederichs-Egidi H, et al. Priority setting in general practice: health priorities of
40 older patients differ from treatment priorities of their physicians. *Croat Med J* 2010;51:483-92.
41
42 18 Kuluski K, Gill A, Naganathan G, et al. A qualitative descriptive study on the alignment of care
43 goals between older persons with multi-morbidities, their family physicians and informal caregivers.
44 *BMC Fam Pract* 2013;14:133- doi:10.1186/1471-2296-14-133.
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Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. Acad Med. 2014;89(9):1245-1251.

	Reporting Item	Page Number
	#1 Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2 Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	2
Problem formulation	#3 Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	4
Purpose or research question	#4 Purpose of the study and specific objectives or questions	4
Qualitative approach and research paradigm	#5 Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	5
Researcher characteristics	#6 Researchers' characteristics that may influence the research, including personal	6

1	and reflexivity		attributes, qualifications / experience, relationship with participants, assumptions and / or	
2			presuppositions; potential or actual interaction between researchers' characteristics and	
3			the research questions, approach, methods, results and / or transferability	
4				
5	Context	#7	Setting / site and salient contextual factors; rationale	5,6
6				
7				
8	Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for	
9			deciding when no further sampling was necessary (e.g. sampling saturation); rationale	
10				
11	Ethical issues pertaining to	#9	Documentation of approval by an appropriate ethics review board and participant	6
12	human subjects		consent, or explanation for lack thereof; other confidentiality and data security issues	
13				
14				
15	Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate)	6,7
16			start and stop dates of data collection and analysis, iterative process, triangulation of	
17			sources / methods, and modification of procedures in response to evolving study	
18			findings; rationale	
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22	Data collection instruments	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio	6
23	and technologies		recorders) used for data collection; if / how the instruments(s) changed over the course of	
24			the study	
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28	Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the	5,6
29			study; level of participation (could be reported in results)	
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32	Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data	6,7
33			entry, data management and security, verification of data integrity, data coding, and	
34			anonymisation / deidentification of excerpts	
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37	Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the	7
38			researchers involved in data analysis; usually references a specific paradigm or	
39			approach; rationale	
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43	Techniques to enhance	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member	7
44	trustworthiness		checking, audit trail, triangulation); rationale	
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47	Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development	7-11
48			of a theory or model, or integration with prior research or theory	
49				
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51	Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic	9-11
52			findings	
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55	Intergration with prior work,	#18	Short summary of main findings; explanation of how findings and conclusions connect	12,13
56	implications, transferability		to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of	
57	and contribution(s) to the		scope of application / generalizability; identification of unique contributions(s) to	
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1	field	scholarship in a discipline or field	
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3	Limitations	#19 Trustworthiness and limitations of findings	3,13,14
4			
5	Conflicts of interest	#20 Potential sources of influence of perceived influence on study conduct and conclusions; 6 how these were managed	14
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9	Funding	#21 Sources of funding and other support; role of funders in data collection, interpretation 10 and reporting	14
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Title:

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ABSTRACT

Objectives Since the population continues aging and the number of patients with multiple chronic diseases is rising in Western countries, a shift is recommended from disease oriented towards goal oriented healthcare. As little is known about individual goals and preferences of older hospitalised patients, the aim of this study is to elucidate the goals of a diverse group of older hospitalised patients.

Design Qualitative descriptive method with open interviews analysed with inductive content analysis.

Setting A university teaching hospital and a regional teaching hospital.

Participants Twenty-eight hospitalised patients ages 70 years and older.

Results Some older hospitalised patients initially had difficulties describing concrete goals, but after probing all were able to state more concrete goals. A great diversity of goals were categorised into: Wanting to know what the matter is; controlling disease; staying alive; improving condition; alleviating complaints; improving daily functioning; improving/maintaining social functioning; resuming work/hobbies; regaining/maintaining autonomy.

Conclusions Older hospitalised patients have a diversity of goals in different domains.

Discussing goals with older patients is not common practice yet. Timely discussions about goals should be encouraged, because individual goals are not self-evident and this discussion can guide decision making, especially in patients with multimorbidity and frailty. Aids can be helpful to facilitate the discussion about goals and evaluate the outcomes of hospitalisation.

Keywords: Geriatric medicine; Older adults; Hospitalisation; Patient perspective; Goal setting; Qualitative research

ARTICLE SUMMARY

Strengths and limitations of this study

- Qualitative descriptive research stays close to the perspective of the older patient.
- We interviewed a broad variety of older patients during their hospitalisation, in a real life situation.
- It is difficult to reach saturation on level of goals. Although the categories became clear, there might always emerge new specific individual goals when approaching new patients.

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BACKGROUND

Since the population continues aging and the number of patients with chronic diseases is rising in Western countries, a shift is recommended from disease-oriented towards goal-oriented healthcare. Questioned is whether healthcare always aims for the desired outcomes for patients.¹⁻³

Goals are the personal health and life outcomes that people hope to achieve through their health care.³ Little is known about the individual goals and preferences of older hospitalised patients. Observations by a phenomenological researcher revealed that the main concerns for older hospitalised patients were whether they would be able again to carry out activities that were important to them such as working on the allotment, attending the wedding of a granddaughter or whether they would be able to live at home again. Older patients, however, seldom spoke spontaneously about this with their care professionals.⁴

The need for and emphasis on social and physical activities and to live at home, is also reflected in other studies. A study into patient goals after aortic aneurysm repair revealed that patients prioritize functional outcomes and recovery time after the operation, as well as energy levels, pain and the ability to walk again. In this study, recovery time was found more important than survival.⁵ This was also seen in a study into patient goals of the treatment of severe aortic stenosis. In that study, patients prioritised to be able to perform activities again such as hobbies or social activities, followed by remaining independent. Staying alive had the lowest priority for most patients.⁶ Since older hospitalised patients form a heterogeneous group because of the reason for hospitalisation, comorbidities, polypharmacy, disabilities and social background, the aim of this study is to elucidate the goals of a broad group of older patients hospitalised for medical or surgical reasons.

METHODS

To take account of the perspective of the older patients, a qualitative descriptive method was used.^{7, 8}

Population

Patients were recruited during their hospitalisation in a university teaching hospital in the northern part of the Netherlands and a regional teaching hospital in the central of the Netherlands.

Inclusion criteria were: (1) hospitalisation expected for at least 48 hours; (2) aged 70 years and older; (3) being able to speak and understand Dutch; (4) not expected to die within the next 48 hours; (5) informed consent to the interview and audio recording.

A purposive sample was used. Within the group of eligible patients we aimed for maximum variation in age, frailty, living at home or in a nursing home, planned and unplanned admissions, university hospital or regional hospital. Frailty was determined by the Fried- criteria as operationalized by Ávila-Funes⁹ and asked to the patient himself.

Data gathering and analysis were alternated. We aimed to continue sampling until saturation was achieved, meaning no new information emerged from the patients. Since it appeared during the study difficult to reach saturation on goal level, we decided to aim for saturation on category level.

In total 28 patients were interviewed. Details of the sample are shown in Table 1.

Table 1. Patient characteristics

	n
Gender	
Male	16
Female	12
Age (years)	
70-79	14
80-89	11
90-99	3
Frailty	
Non-frail	11
Frail	17
Living situation	
At home	22

Senior home	3
Nursing home	3
Hospital	
University	26
Regional	2
Admission day interview	
<3 days	5
3-5 days	16
6-10 days	4
>10 days	3
Specialism	
Internal medicine	20
Surgery	5
Cardiology	3
Admission due to*	
Dyspnoea	7
Constipation	3
Malignancy	3
Fall	2
Swollen leg	2
General malaise	2
Abdominal pain	2
Diarrhoea	2
Vomiting	1
Infection device	1
Myocardial infarction	1
Aorta surgery	1
Transcatheter aortic valve replacement	1
Type of admission	
Acute	23
Planned	5

*Admission reason according to patient interview

Data collection

After establishing inclusion criteria by the staff nurse, eligible patients were given an information letter and were approached by the interviewer (MJvdK) for further information about the procedure and to obtain informed consent during their hospitalisation. The Medical Ethics Research Committee of the UMCG confirmed that the Medical Research Involving Human Subjects Act did not apply to the research project. Official approval by the committee was hence not required.

Open interviews were conducted during hospitalisation by MJvdK. MJvdK is an experienced nurse, but not working as a nurse in the hospitals where the interviews took place. MJvdK is

1
2
3 trained in qualitative research and interviewing. To comfort the patient, the interviews started
4
5 with giving the patient the opportunity to explain the reason for hospitalisation. After that, the
6
7 main question posed by the interviewer was: What do you hope to accomplish with this
8
9 hospitalisation? Probes were used to clarify the goals of the participants, like “what do you
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11 mean with...”, “can you give an example of...”, summarizing. The interviews took place in
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13 the patient’s room or, when the patient shared a room, in a family or examination room on the
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15 ward. The interviews took 15 to 60 minutes and were audio-recorded and transcribed
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17 verbatim. After each interview an interview memo was written to gather initial impressions of
18
19 the interview.
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23 **Analysis**

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25 Since little is known about the goals of older hospitalised patients, an inductive content
26
27 analysis was used.^{10, 11}
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31 Data gathering and data analysis were alternated. The analysis started with open coding; the
32
33 codes were then grouped into categories and data were compared within and between
34
35 categories and the categories were described.¹⁰
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37

38
39 All transcripts were read by the first (MJvdK) and second author (GJD) independently and
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41 then the goals and codes were compared. The grouping of the codes into categories was also
42
43 done by the first and second author independently, the differences were then discussed and
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45 solved by consensus.
46

47
48 During the entire process memos were written about the interviews, and coding process. Data
49
50 analysis and organization was supported by the use of Atlast.ti Version 5.2.18.

51
52 Interviews and analysis were all in Dutch. The categories, codes and quotes were translated
53
54 into English in the final stage and checked and edited by a native English speaker.
55

56 **Patient and public involvement**

57
58 Patients or public were not involved in the design and conduct of this study.
59
60

RESULTS

After the question ‘What do you hope to accomplish with this hospitalisation?’, some participants replied with clear, concrete answers while others initially started with broad, abstract answers like ‘getting better’ and ‘recovering’. With probing, all participants were able to explain what, for example, ‘getting better’ meant for them and were able to state more concrete goals, except for one patient with delirium.

For example:

Interviewer: *Because what is your goal with this hospitalisation?* Patient: *Goal?* Interviewer: *Yes.* Patient: *That I am getting better.* Interviewer: *And what is better for you, can you describe that?* Patient: *Yes, that I... well ... get my appetite back and drink well, because I am not interested in whether I get anything or not at the moment. I am not hungry, I am not thirsty and that has to change.* Interviewer: *Yes.* Patient: *And if I then grow stronger again. I have lost a lot of weight. From 88 to 82, I believe.* Interviewer: *In how much time?* Patient: *About a week. I was still very weak yesterday.* Interviewer: *Yes Yes. So grow stronger.* Patient: *To grow stronger. And that I am back on my feet, that I can walk with a crutch and I'm done here as soon as possible and that I can go back home. That is my goal.* (P11, 89 years, acute admission, internal medicine, frail)

The goals patients had, were grouped into the following categories: wanting to know what the matter is; controlling disease; staying alive; improving condition; alleviating complaints; improving daily functioning; improving/maintaining social functioning; resuming work/hobbies; regaining/maintaining autonomy (Table 2). In Table 3 preferences patterns and examples per patient are shown.

Table 2. List of categories and codes

Categories	Codes
Wanting to know what the	– Finding cause of complaints

matter is	– Ruling out severe affairs
Controlling disease	– Curing – Slowing down progression of the disease
Staying alive	– Staying alive
Improving condition	– Improving condition – Increasing energy – Feeling better – Reducing uncertainty – Regaining weight
Alleviating complaints	– Reducing/ eliminating pain – Reducing shortness of breath – Stopping vomiting – Reducing dizziness – Restoring stools – Reducing sweating – Restoring appetite – Restoring sleep
Improving daily functioning	– General functioning – Walking – Moving – Housekeeping – Shopping – Cooking – Self-care
Improving/maintaining social functioning	– Visiting family/ friends – Making a day trip – Enjoying presence of partner/ children
Resuming work/hobbies	– Resuming (volunteer) work – Gardening – Resuming hobbies – Resuming sport
Regaining/maintaining autonomy	– Going back home – (Re)gaining freedom – Regaining/ maintaining independence

Wanting to know what the matter is

Several patients indicated that they wanted to know what was the cause for their complaints, or the patient wanted to rule out severe other explanations. For example:

That pain is caused by something. And I would really like to know what that is. (P22, 74 years, acute admission, internal medicine, non-frail)

Controlling disease

1
2
3 The group 'Controlling disease' is used for medical control of diseases. Some patients aimed
4 for complete cure, like people with cancer. But for most the goal was to stop or slow down the
5 disease progression, because they knew their chronic condition was not curable. For example:
6
7

8 *That the process of ... Or the consequences of the diabetes, that those will be stopped,*
9 *eh. That it does not get worse or that the sugars are all the time too high. (P13, 71*
10 *years, planned admission, surgery, frail)*
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19 **Staying alive**

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21 Several patients stated that they hoped to stay alive, or to live a few more years due to hospital
22 admission. For some patients the argument to stay alive was the main reason to go to
23 hospital, for example:
24
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28 *No, I had to stay alive. I felt. And nothing more. I mean, yes, no, that is, of course,*
29 *everything. (P2, 88 years, acute admission, internal medicine, non-frail)*
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35 **Improving condition**

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37 This category is a subjective experience by the patient and contains codes like improving
38 condition, augmenting energy, feeling better, reducing uncertainty, and regaining weight. For
39 example:
40
41
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43

44 *Patient: Yes, enhancing condition and that I can cope a bit more, actually much more.*

45 *But yes, that I have to, to, to play a football match, no, that time does not return.*

46
47 *Interviewer: That is pretty far-fetched? And what would be a realistic goal for you?*

48
49 *Patient: Being able to walk a bit more decently, and sustaining, my fitness, building*
50 *that up again. Yes, to be able to do a little bit more conditionally. (P3, 70 years, acute*
51 *admission, internal medicine, frail)*
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Alleviating complaints

A broad variety of complaints were described, which participants wished to alleviate, including: pain, shortness of breath, vomiting, dizziness, obstipation, diarrhoea, sweating, lack of appetite, insomnia. For example:

That diarrhoea must stop. That's what it's all about. (P17, 88 years, acute admission, internal medicine, frail)

Improving daily functioning

While some patients stated improving functioning in general, others named specific functions like walking, moving, housekeeping, shopping, cooking, and self-care. For example:

That I can function independently again with a walker. (P7, 82 years, acute admission, internal medicine, frail)

Improving/maintaining social functioning

Participants mentioned various social activities they wanted to be able to participate in again, like visiting family or friends or making a day trip. For example:

Meeting friends and taking a drive around and perhaps drink a cup of tea somewhere, it does not have to be luxurious or fancy at all. But enjoying things. Going to the theatre once and yes, those things. (P8, 86 years, acute admission, internal medicine, frail)

For some just enjoying the presence of their partner and close family members was very important.

Resuming work/ hobbies

1
2
3 Several participants indicated that they wanted to resume their work, for example volunteer
4 work, assisting in the family business, or scientific work. Others wanted to resume their
5 sports, working in the garden or hobbies. For example:
6
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8

9
10 *And, uh, now I hope to achieve, that I can go outside more and enjoy my garden too,*
11 *because I love gardening a lot and so, that was all gone. (P27, 72 years, planned*
12 *admission, cardiology, frail)*
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19 **Regaining or maintaining autonomy**

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21 This category was used for statements of participants about maintaining or regaining their
22 independence or freedom. Also the code 'going back to own house', was placed into this
23 category. For example:
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27

28 *Yes, a bit more freedom, going somewhere alone once again. Yes, I just can't. (...) Yes,*
29 *then I have to take a taxi. Yes, then I also lost my freedom. Because then you also need*
30 *certain ... And I love my freedom. If I want to go somewhere, I have to be able to do*
31 *that. And not arranging everything in advance. (P26, 74 years, planned admission,*
32 *surgery, frail)*
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Table 3. Preference patterns and examples per participant

Participant	Matter	Controlling disease	Staying alive	Improving condition	Alleviating complaints	Daily functioning	Social functioning	Work/hobbies	Autonomy	Example quote
01	X							X		P: My objective is, actually, of course that I uh, recover completely from those uh, defects that I am currently experiencing. That I could do the things again that I do now every day. I: Yes. And what are they? Those things? P: And those are many things. On Sunday morning I walk with a couple of women. Then I walk through the heath and then I walk for an hour and then uh. To maintain my condition. And I always maintain that condition. I'm always busy with that kind of nonsense. Nonsense, well, yes. It limits what I want. Yes, so I think uh, I like doing that. Hey? Just as much as that I like to play tennis. And stand in front of the net and can give a ball a swipe the moment it comes up to me and then place it neatly. Well those are all things. They all play a role.
02			X			X	X			No, I had to stay alive. I felt. And nothing more. I mean, yes, no, that is, of course, everything.
03				X		X			X	Well, walking, moving, covering more distance and more. A better condition.
04					X	X		X		P: Yes, that I could function normally again. Yes. I: And what then are the things that are important for your functioning? P: Well, that I can just do my homework again. I don't have to do anything else. Work a little in the garden, things like that. That. I think that is important, definitely.
05							X	X	X	Well, in my own house, of course!
06				X	X				X	P: That it becomes a little easier. I: And what should become easier? P: That shortness of breath.
07	X					X			X	I, I wanted to know what the matter was. And that, uh, they couldn't judge that from here.
08	X			X	X		X	X	X	Well, that I am getting fit again and have no pain. And that no other annoying things come to light.
09	X				X			X	X	That I am going to get a bit more of my, my freedom. Yes, there is nothing worse if you can't go to the toilet.
10				X	X	X			X	Yes, that I ... well ... get my appetite back and drink well, because I am not interested in whether I get anything or not at the moment. I am not hungry, I am not thirsty and that has to change. And if I then grow stronger again. I have lost a lot of weight.
11						X				Well, that in any case, that I, uh again, will be a little more agile and so hey. Yes.
12					X	X			X	I would like to keep what independence I had.
13		X				X				That the process of ... Or the consequences of the diabetes, that those will be stopped, eh. That it does not get worse or that the sugars are all the time too high.

Table 3 (continued)

Participant	Matter	Controlling disease	Staying alive	Improving condition	Alleviating complaints	Daily functioning	Social functioning	Work/hobbies	Autonomy	Example quote
14			X		X					P: <i>Well that it will be a little bit better and I can go along a bit.</i> I: <i>That you can go along a bit? What do you mean by that?</i> P: <i>Yes well, that I am alive, so to speak.</i>
15				X						P: <i>Getting better and...</i> I: <i>Getting better you say. And what is "better" for you?</i> P: <i>That I, say, could compete again.</i>
16							X	X	X	<i>Well, that I can just, uh, just be home again. And I, uh, still play cards always, and I really like that.</i>
17	X				X			X	X	<i>That diarrhoea must stop. That's what it's all about.</i>
18					X	X				<i>Well, that I get rid of that shortness of breath.</i>
19		X								<i>That I, that little bit kidney that I have, that I can keep that. That's what I hope to achieve.</i>
20			X					X		<i>Well, still live tomorrow and the day after tomorrow. So, uh, I am, what's that called, from 1922 and because of this pacemaker, I don't know if, but my expectations might be too high. But I'm going to live for a few more years because of this pacemaker.</i>
21		X					X	X		<i>Sitting at my desk and writing. Once in a while, when my wife is driving the car, going out for dinner, or having a drink somewhere. Family visits.</i>
22	X				X					<i>That pain is caused by something. And I would really like to know what that is.</i>
23					X	X		X		<i>Just without pain, uh, not vomiting. Function normally. Uh, I'm 70, but I'm still active. I am a forester and, uh, I coordinate the volunteers on the estate.</i>
24		X	X					X		<i>Simply, cosy and nice, living on. And we had it very good, yes, with our family.</i>
25		X	X			X			X	<i>That my, that that bacterium is being fought enough to be able to live on again, or at least that it is gone and that I can just go back to my house and work again.</i>
26		X			X	X	X		X	<i>The main goal for me is that the pain goes away and that I largely stop using those medications.</i>
27				X	X	X	X	X		<i>Well, to go out for a change and enjoy yourself. And visiting friends again. They visited us, but you also want to go out yourself for a change. And I didn't do that anymore at all.</i>
28		X			X	X	X	X	X	<i>And the aim is then simply to get that again, yes, so that you can walk well on that foot again. Yes and that you can make all movements pretty much, right? And not getting extra wear, which only makes it worse.</i>

DISCUSSION

As far as we know, this is the first study investigating the goals of already hospitalised older patients admitted for a broad diversity of reasons. It was remarkable that some patients initially had difficulties stating concrete goals, but after probing all were able to state more concrete goals.

Patients reported a variety of goals, which could be grouped into the categories 'wanting to know what the matter is', 'controlling disease', 'staying alive', 'improving condition', 'alleviating complaints', 'improving daily functioning', 'improving/maintaining social functioning', 'resuming work/hobbies', 'regaining/maintaining autonomy'.

Since we used an inductive method, our categorisation is different from other studies, but also showed some similarities. Coylewright et al., categorised the goals of older adults eligible for an aortic valve replacement into the groups: 'staying alive', 'reducing/eliminating pain or symptoms', 'maintaining independence' and 'ability to do a specific activity'.⁶ This categorisation has many similarities with the categories we constructed, although ours were more detailed.

Goals of community-dwelling older adults were placed in the categories 'health problems', 'mobility', 'emotions', 'independence and autonomy', 'social and family relationships', 'activities', 'living accommodation', 'healthcare services' and 'finances'.¹²

Vermunt et al., investigated patient goals from the perspective of general practitioners (GPs) and geriatricians and came to the following categories: 'fundamental goals', 'functional goals' and 'disease-specific or symptom-specific goals'.¹³ Again our categorisation has similarities, but is more detailed.

The goals set during hospitalisation, also are in line with what community-dwelling older adults find important in quality of life or well-being, namely 'staying independent', 'social

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2
3 life', 'hobbies', 'activities', 'health' and 'own environment'.^{14, 15} Apparently, hospitalisation
4
5 is seen by patients as an option to improve or maintain quality of life or well-being.
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8 Setting goals is not yet common practice, not from the perspective of the patient, nor from the
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10 healthcare professional. This could be explained because historically patients presented with
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12 acute problems and it was expected that the healthcare professional would solve the acute
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14 problem and the patient would return to a normal healthy state. However, nowadays many
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16 complaints of older patients are caused by, often multiple, chronic diseases, which can only
17
18 be controlled but not completely cured. Probably this shift still has not entered completely
19
20 into daily clinical practice.¹⁶ Several other barriers for discussing goals are described,
21
22 including considering talking about personal goals impertinent, lack of skills by healthcare
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24 professionals, focus on symptoms, limited time and the presumption by both patients and
25
26 healthcare professionals that all patients have the same goals.¹⁶ There are, however, several
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28 examples which rebut this last presumption.^{13, 17, 18} Therefore, it is important to discuss
29
30 individual goals explicitly with the patient, which can also guide decision-making in case of
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32 multimorbidity and provide important information for handling acute health situations in
33
34 future.¹³
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39 **Strengths and limitations**

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42 The strengths of our study include that we interviewed older patients during their
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44 hospitalisation, in a real life situation, at different hospital wards, and we included a broad
45
46 variety of patients. This led to a broad overview of categories of goals, but did not lead to
47
48 very specific individual goals. Another limitation is that it is difficult to reach saturation on
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50 level of goals. Although the categories became clear, there might always emerge new specific
51
52 individual goals when approaching new patients.
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55 **Conclusions**

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3 Older hospitalised patients have a diversity of goals in different domains. Discussing goals
4 with older hospital patients is not common practice yet and many patients and healthcare
5 professionals are not familiar with discussing personal goals. Timely discussions about goals
6 should be encouraged, because individual goals are not self-evident and this discussion can
7 guide decision making, especially in patients with multimorbidity and frailty. Aids are needed
8 to facilitate the discussion about goals and the evaluation of goals of hospitalisation.
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21
22

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24
25

26 **Competing interests** None declared
27

28 **Author contributions** MJvdK, designed the study. MJvdK conducted the interviews. MJvdK
29 and GJD read all transcriptions. MJvdK predominantly performed the qualitative analysis. As
30 part of this analysis MJvdK and GJD regularly discussed the coding process and
31 categorisation. MJvdK wrote the first draft of the manuscript, GJD and SEdR contributed
32 significantly to subsequent manuscript revisions. All authors have read and approved the final
33 version of the manuscript.
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42 **Patient consent** All interviewees gave informed consent for anonymised publication
43

44 **Data sharing** The results in this paper are based on the transcripts of the recorded audio
45 interviews with patients. Data supporting the findings of this study are found in the translated
46 quotes as seen in the results section of this article. However, to protect the participants'
47 identities, the full data of this study (transcripts and audio files) will not be made available to
48 the public.
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58 REFERENCES 59 60

- 1 Reuben DB, Tinetti ME. Goal-oriented patient care--an alternative health outcomes paradigm. *N Engl J Med* 2012;366:777-9 doi:10.1056/NEJMp1113631.
- 2 Tinetti ME, Fried T. The end of the disease era. *Am J Med* 2004;116:179-85 doi:S0002934303006661 [pii].
- 3 Tinetti ME, Esterson J, Ferris R, et al. Patient Priority-Directed Decision Making and Care for Older Adults with Multiple Chronic Conditions. *Clin Geriatr Med* 2016;32:261-75 doi:10.1016/j.cger.2016.01.012 [doi].
- 4 van der Meide H, Olthuis G, Leget C. Feeling an outsider left in uncertainty - a phenomenological study on the experiences of older hospital patients. *Scand J Caring Sci* 2015;29:528-36 doi:10.1111/scs.12187.
- 5 Dubois L, Novick T, Power A, et al. Identification of patient-derived outcomes after aortic aneurysm repair. *J Vasc Surg* 2014;59:1528-34 doi:10.1016/j.jvs.2013.12.033.
- 6 Coylewright M, Palmer R, O'Neill ES, et al. Patient-defined goals for the treatment of severe aortic stenosis: a qualitative analysis. *Health Expect* 2015 doi:10.1111/hex.12393.
- 7 Neergaard M, Olesen F, Andersen R, et al. Qualitative description - the poor cousin of health research?. *BMC Med Res Methodol* 2009;9:52- doi:10.1186/1471-2288-9-52.
- 8 Sandelowski M. Whatever happened to qualitative description?. *Res Nurs Health* 2000;23:334-40 doi:10.1002/1098-240X(200008)23:43.0.CO;2-G.
- 9 Avila Funes JA, Helmer C, Amieva H, et al. Frailty among community-dwelling elderly people in France: the three-city study. *J Gerontol A Biol Sci Med Sci* 2008;63:1089-96.
- 10 Elo S, Kyngäs H. The qualitative content analysis process. *J Adv Nurs* 2008;62:107.
- 11 Hsieh H, Shannon S. Three approaches to qualitative content analysis. *Qual Health Res* 2005;15:1277-88 doi:10.1177/1049732305276687.
- 12 Robben SH, Perry M, Olde Rikkert MG, et al. Care-related goals of community-dwelling frail older adults. *J Am Geriatr Soc* 2011;59:1552-4 doi:10.1111/j.1532-5415.2011.03515.x [doi].
- 13 Vermunt NP, Harmsen M, Elwyn G, et al. A three-goal model for patients with multimorbidity: A qualitative approach. *Health Expect* 2018;21:528-38 doi:10.1111/hex.12647 [doi].
- 14 Puts MTE, Shekary N, Widdershoven G, et al. What does quality of life mean to older frail and non-frail community-dwelling adults in the Netherlands?. *Qual Life Res* 2007;16:263-77 doi:10.1007/s11136-006-9121-0.
- 15 Douma L, Steverink N, Hutter I, et al. Exploring Subjective Well-being in Older Age by Using Participant-generated Word Clouds. *Gerontologist* 2017;57:229-39 doi:10.1093/geront/gnv119.
- 16 Schulman-Green DJ, Naik AD, Bradley EH, et al. Goal setting as a shared decision making strategy among clinicians and their older patients. *Patient Educ Couns* 2006;63:145-51 doi:S0738-3991(05)00275-2 [pii].

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2
3 17 Voigt I, Wrede J, Diederichs-Egidi H, et al. Priority setting in general practice: health priorities of
4 older patients differ from treatment priorities of their physicians. *Croat Med J* 2010;51:483-92.
5

6 18 Kuluski K, Gill A, Naganathan G, et al. A qualitative descriptive study on the alignment of care
7 goals between older persons with multi-morbidities, their family physicians and informal caregivers.
8 *BMC Fam Pract* 2013;14:133- doi:10.1186/1471-2296-14-133.
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For peer review only

Reporting checklist for qualitative study.

Based on the SRQR guidelines.

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Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

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	Reporting Item	Page Number
	#1 Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2 Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	2
Problem formulation	#3 Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	4
Purpose or research question	#4 Purpose of the study and specific objectives or questions	4
Qualitative approach and research paradigm	#5 Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.	5
Researcher characteristics	#6 Researchers' characteristics that may influence the research, including personal	6

1	and reflexivity		attributes, qualifications / experience, relationship with participants, assumptions and / or	
2			presuppositions; potential or actual interaction between researchers' characteristics and	
3			the research questions, approach, methods, results and / or transferability	
4				
5	Context	#7	Setting / site and salient contextual factors; rationale	5,6
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8	Sampling strategy	#8	How and why research participants, documents, or events were selected; criteria for	
9			deciding when no further sampling was necessary (e.g. sampling saturation); rationale	
10				
11	Ethical issues pertaining to	#9	Documentation of approval by an appropriate ethics review board and participant	6
12	human subjects		consent, or explanation for lack thereof; other confidentiality and data security issues	
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15	Data collection methods	#10	Types of data collected; details of data collection procedures including (as appropriate)	6,7
16			start and stop dates of data collection and analysis, iterative process, triangulation of	
17			sources / methods, and modification of procedures in response to evolving study	
18			findings; rationale	
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22	Data collection instruments	#11	Description of instruments (e.g. interview guides, questionnaires) and devices (e.g. audio	6
23	and technologies		recorders) used for data collection; if / how the instruments(s) changed over the course of	
24			the study	
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28	Units of study	#12	Number and relevant characteristics of participants, documents, or events included in the	5,6
29			study; level of participation (could be reported in results)	
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32	Data processing	#13	Methods for processing data prior to and during analysis, including transcription, data	6,7
33			entry, data management and security, verification of data integrity, data coding, and	
34			anonymisation / deidentification of excerpts	
35				
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37	Data analysis	#14	Process by which inferences, themes, etc. were identified and developed, including the	7
38			researchers involved in data analysis; usually references a specific paradigm or	
39			approach; rationale	
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43	Techniques to enhance	#15	Techniques to enhance trustworthiness and credibility of data analysis (e.g. member	7
44	trustworthiness		checking, audit trail, triangulation); rationale	
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47	Syntheses and interpretation	#16	Main findings (e.g. interpretations, inferences, and themes); might include development	7-11
48			of a theory or model, or integration with prior research or theory	
49				
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51	Links to empirical data	#17	Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic	9-11
52			findings	
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55	Intergration with prior work,	#18	Short summary of main findings; explanation of how findings and conclusions connect	12,13
56	implications, transferability		to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of	
57	and contribution(s) to the		scope of application / generalizability; identification of unique contributions(s) to	
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1	field		scholarship in a discipline or field	
2				
3	Limitations	#19	Trustworthiness and limitations of findings	3,13,14
4				
5	Conflicts of interest	#20	Potential sources of influence of perceived influence on study conduct and conclusions;	14
6			how these were managed	
7				
8				
9	Funding	#21	Sources of funding and other support; role of funders in data collection, interpretation	14
10			and reporting	
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