## **Data collection tools (translated from German)**

- Semi-structured interview with the chief physicians at the study start
- Paper-based survey with senior hospital physicians after the instruction
- Digital survey with senior and junior hospital physicians at the end of the study: Intervention group
- Digital survey with senior and junior hospital physicians at the end of the study: Control group
- Postal survey with general practitioners at the end of the study

# Semi-structured interview with the chief physicians at the study start (Interview guide)

Themes	Questions	Probes
	What tipped the scales for participation?     Were there additional reasons?	■ Did the following aspects (also) play a role?  - discharge management - medication review - Education/ training junior HP - contact to GPs
Motivation for participation	What are your expectations of the study for your clinic?	■ if improved medication review: owing to  - increased awareness?  - Improved organisation/structure?  ■ If improved communication with GP: for  - Quality improvement?  - improving relations?  ■ Are you hoping for a reduction in the rate of rehospitalization?  ■ What role does «marketing/prestige» play?
	Does the fact that the intervention is conducted as a scientific study (instead of a quality support programme) make a difference for you?     Why?	If study is a plus point: Did the following aspect (also) play a role? - general scientific interest - credibility
Concerns regarding the study	Were there also hurdles/barriers/obstacles? What did you have to weigh up against?     Why were these not decisive?	■ Hospitals that could not participate gave us the following reasons:  • - Time expenditure (especially for senior HP)  • - lack of financing of the study  • - no direct benefit for the hospital Why did these points play a lesser role for you?
Special circumstances (internal/external)	Are there any internal or external particularities/circumstances in your hospital that could be important for us?	■ for the (short or longterm) implementation ■ How is the relation/contact to GPs (and acute hospitals, for rehabilitation centres) ■ For rehabilitation centres: How is the quality of admissions? (from acute hospitals)
Miscellaneous	Spontaneous input	

# Paper-based survey with senior hospital physicians after the instruction

1.	On which ward(s) do you work? (open end)			
2.	Have you ever been involved in a project or study on the following topics?			
	- Polypharmacy/appropriate medication:	□ scientific study	□ project	
	- Older, frail people:	□ scientific study	□ project	
	- Discharge management:	□ scientific study	□ project	
	- Communication/contact with general practitioner:	□ scientific study	□ project	
	- Others:	□ scientific study	□ project	
<ul><li>3.</li><li>4.</li></ul>				
5.	Please rate the following statements (5-point likert scale)  The study objective is clear.  The course of the study in the hospital is clear.			
	My tasks in the study are clear to me.			
	<ul> <li>The instruction has met my expectations.</li> </ul>			
	o The subject of the study is relevant for me.			
6.	Would you like further assistance/tools? If so, which of	ones? (open end)		
7.	We try to make the participation in the study as convenient as possible for you. We are			

pleased to receive suggestions for improvement or other comments. (open end)

# Digital survey with senior and junior hospital physicians at the end of the study: Intervention group

#### Personal details

- In which hospital did you participate in the Hospital Discharge study? (open end)
- What was your position during the Hospital Discharge Study?
  - □ Senior hospital physicians / □ Junior hospital physicians
- How many years have you been working as a physician? (integer)
- Please indicate how well the following statements apply to you: (5-point likert scale)
  - o I would like to talk to my patients in more detail about their medication.
  - I would welcome the introduction of a medication review as a discharge standard.

#### Instruction of junior hospital physicians (only for senior hospital physicians)

- How much time (in minutes) did you spend for the content part of the instruction of all
  involved junior hospital physicians (only for the theoretical part, without explanation of the
  course of studies and handling of the study material)? (integer)
- How was the instruction of the junior hospital physicians delivered?
  - □ Incorporated into mandatory continuing education (e.g. assistant training, journal club)
  - $\hfill\Box$  At a specially convened meeting
  - $\hfill \square$  Single instruction
  - □ I don't know
  - □ Other (please specify)

#### Instruction by the senior hospital physicians (only for junior hospital physicians)

- How long (in minutes) did the content part of the training by the senior hospital physicians take (only theoretical part, without explanation of the course of studies and handling of the study material)? (integer)
- How was the instruction by the senior hospital physicians delivered?
  - □ Incorporated into mandatory continuing education (e.g. assistant training, journal club)
  - □ At a specially convened meeting
  - □ Single instruction
  - □ I don't know
  - □ Other (please specify)

#### **Patient recruitment**

-	Did you use the prepared patient information (on the familiated document) for the recruitment
	of patients?
	□ Yes
	□ Sometimes
	□ No
	□ I don't know

#### Checklist

- Approximately how many checklists have you filled out? (integer)
- For which percentage of patients did you already start filling out the checklist before the discharge consultation? (in percent, on a slider)
- Please indicate how well the following statements apply (5-point likert scale)
  - The proposed activities were feasible.
  - The paper format was practical.
  - The checklist was useful.
  - The systematic approach according to the checklist was helpful.
  - I personally would continue to use the checklist after the study.
- What activity did the checklist remind you of that you would otherwise not consistently perform? (multiple answers possible)
  - □ discuss treatment goals with the patient
     □ question every single drug
     □ motivate patients to contact their general practitioner within 7 days
     □ none
     □ other (please specify)
- How could the checklist be improved? (open end)

#### Discharge letter

- Please indicate how well the following statements apply (5-point likert scale)
  - o The comparison of the entry and exit medications is meaningful.
  - The communication offer to the general practitioner is meaningful.

#### **Patient reaction**

- Please indicate how well the following statement applies (5-point likert scale)
  - o My patients appreciated being involved in decisions regarding their medication plan.
- What percentage of patients rejected your drug change proposals? (in percent, on a slider)
- What reasons were given for the opposition? (open end)

#### **Case vignettes**

The following two case studies refer to the following situation: You have already gathered the patient's preferences and needs. Assuming that the patient is open to your suggestions, what would you prescribe from a medical point of view?

#### Example 1:

An 82-year-old female patient has had type 2 diabetes for 15 years. She also suffers from arterial hypertension, dyslipidemia, gonarthrosis on both sides and sleep disorders. So far, no cardiovascular events. She is physically severely restricted by her joint pain and lives in seclusion. Her HbA1c is 6.9%. She takes two antidiabetics, three antihypertensives, a statin, an aspirin, a PPI, two analgesics and a hypnotic.

- What would you recommend regarding diabetes treatment?
  - □ expand / □ continue / □ reduce/deprescribe
- What would you recommend regarding the statin?
  - □ expand / □ continue / □ reduce/deprescribe
- What would you recommend regarding the aspirin?
  - □ expand / □ continue / □ reduce/deprescribe
- Explanations (optional, open end)

#### Example 2:

A 75-year-old male patient with mild cognitive impairment has arterial hypertension, COPD after nicotine abuse, moderate overweight and lumbo-tebral arthrosis. He's spry for his age. The passionate alpinist reports occasional dyspepsia after fondue eating in the alpine hut and suffers under sleep disturbance. Gastroscopy 10 years ago showed mild antral gastitis. He takes three antihypertensives, a long-acting bronchodilator, two analgesics, a ginko preparation, a hypnotic and a PPI every other day.

- What would you recommend regarding the PPI?
  - □ continue / □ replace with phytotherapeutics / □ in rare reserve/deprescribe
- What would you recommend regarding the hypnotic?
  - $\ \square$  continue /  $\ \square$  replace with herbal medicine/  $\ \square$  in rare reserve/deprescribe
- Explanations (optional, open end)

#### **Final questions**

- Has your discharge management changed <u>during the course</u> of the study? If so, how? (open end)
- Would you have liked additional support from us? If yes, which? (open end)
- Would you have liked additional support from your senior hospital physicians? If yes, which?
   (open end, only for junior hospital physicians)
- Finally, we would like to ask you: What do you think the focus should be at hospital discharge? (open end)
- Comments (open end)

# Digital survey with senior and junior hospital physicians at the end of the study: Control group

#### Personal details

- In which hospital did you participate in the Hospital Discharge study? (open end)
- What was your position during the Hospital Discharge Study?
  - □ Senior hospital physicians / □ Junior hospital physicians
- How many years have you been working as a physician? (integer)
- Please indicate how well the following statements apply to you: (5-point likert scale)
  - I would like to talk to my patients in more detail about their medication.
  - I would welcome the introduction of a medication review as a discharge standard.

#### Patient recruitment

-	Did you use the prepared patient information (on the laminated document) for the recruitment
	of patients?
	□ Yes
	□ Sometimes
	□No
	□ I don't know

#### **Case vignettes**

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A 75-year-old male patient with mild cognitive impairment has arterial hypertension, COPD after nicotine abuse, moderate overweight and lumbo-tebral arthrosis. He's spry for his age. The passionate alpinist reports occasional dyspepsia after fondue eating in the alpine hut and suffers under sleep disturbance. Gastroscopy 10 years ago showed mild antral gastitis. He takes three antihypertensives, a long-acting bronchodilator, two analgesics, a ginko preparation, a hypnotic and a PPI every other day.

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#### **Final questions**

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## Postal survey with general practitioners at the end of the study

- Please indicate how well the following statements apply to you: (5-point likert scale)
  - I think questioning patients' long-term medication is one of the tasks of hospital physicians.
  - It is important to me that the hospital physicians contact me proactively regarding a change in the long-term medication of my patients.
  - o I find a comparison of the entry and discharge medication in the discharge letter helpful.
  - If the long-term medication is changed in the hospital, I usually contact the hospital physicians.
    - → Follow up: If you do not normally make contact: What do you do if the long-term medication of your patient is changed in the hospital?
      - $\hfill \square$  I usually reset the medication to the previous medication.
      - $\hfill \square$  I usually accept the change of medication.
- (Optional) Further comments on hospital discharge (open end)