

Supplementary information

Integration of Geriatric assessment – guided care plan modifications and interventions into clinical paths of older adults with cancer (GORILLA): Study Protocol of a prospective cohort trial

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1. Patient-/MDT-specific caregiver/practitioner interview

After each discussed patient case during MDTs, primary healthcare providers are requested to rate the integration of CGA with the following questionnaire.

Dear colleague,

For the patient we just discussed, we presented the results of the Comprehensive Geriatric Assessment (CGA) in this multidisciplinary tumor board (MDT). We would like for ask you for evaluation of the presentation as well as the recommended interventions.

Date of MDT: _____

Medical specialty: _____

Patient (in case of study participation)

Healthcare provider -related questions:

In which medical speciality do you work?

- ☐ Surgery
- ☐ Gynaecology
- ☐ Radiation oncology
- ☐ Pulmonology
- ☐ Urology
- ☐ Palliative care
- ☐ Hematology/Oncology

1. How long have they been working in this field? (Working experience)

- ☐ < 5 years
- ☐ 5-10 years
- ☐ 11-20 years
- ☐ >20 years

Patient-related questions:

2. Did you perceive the presentation of CGA results in the MDT as helpful?

--	-	0	+	++
Not at all helpful	Not helpful	Neutral	Moderately helpful	Very helpful

3. Did the presented information change or influence your treatment recommendation?

- ☐ NO ☐ YES ➔ If „YES“, which kind of change have you made to the treatment recommendation?
- ☐ more intensive therapy
 - ☐ less intensive therapy
 - ☐ Other: _____

4. What did you expect in addition that was not covered sufficiently?

Information/Suggestion on...

- ☐ Deprescribing/polypharmacy
- ☐ Further geriatric interventions based on geriatric assessment (ADL, mood, social network, cognition etc.)
- ☐ Precise recommendations for cancer treatment
- ☐ Others _____

2. Structured interview with the primary caregivers/practitioners: Interview guidance

Selected primary healthcare providers are asked for a structured interview after trial recruitment is finished. The interview guidance is as follows:

“Thank you for taking the time to participate in this interview. The aim of this interview is to gather your experiences and assessments regarding the integration of Comprehensive Geriatric Assessment (CGA) into MDTs. Your answers will help us to enable and optimize the introduction and implementation of CGA in clinical routine. The interviews will be anonymized and treated confidentially.

General information:

- a. Please state your area of expertise (e.g., gynecology, urology, oncology).*
- b. How long have you been working in your field? (please state in years, if applicable)*
- c. How much experience do you have with integrating CGA into MDTs (please rate on an ordinal scale: Never/Once/2 to 4 times/5 to 10 times/More than 10 times)?*

Main questions:

- 1) How useful did you find the integration of CGA into the MDT?*
- 2) How helpful do you find the integration of CGA into tumor conferences for your professional decision-making? (please explain)*
- 3) What specific information from the CGA was particularly relevant to you?*

Presentation and communication of CGA results:

- 4) How do you rate the way in which the results of the CGA were presented in the MDT? (e.g., clarity, relevance, comprehensibility)*
- 5) What suggestions for improvement do you have for the presentation of CGA results?*

Expected or recommended interventions:

- 6) We assume that targeted interventions were presented based on the CGA results. Which of these interventions were recommended in the MDTs, and how did they influence your treatment planning?*
- 7) Were there any interventions missing that you expected?*
- 8) Were these discovered during the CGA, or not?*

If so, can you remember them (or some of them)?

- 9) How much additional effort did you experience due to the integration of CGA into your clinical practice? (e.g., time required, additional coordination/resources required)*
- 10) Were there any challenges in implementing the proposed interventions into the treatment plan?*
- 11) Did the results of the CGA in the tumor conference lead to changes in your planned therapy? If so, please describe these changes.*
- 12) Which geriatric aspects (e.g., mobility, cognition, nutrition) were particularly decisive for your decisions?*

Additional questions:

- 13) Were there any aspects that you would have rated as underrepresented in the MDTs?*
- 14) What other geriatric factors do you believe should be given greater consideration in oncological treatments/decision-making?*
- 15) Do you have any suggestions on how cooperation between geriatric and oncological disciplines could be further improved?*
- 16) Do you have any other comments or recommendations you would like to share with us regarding the integration of CGA into tumor conferences?*

Thank you very much for your participation and valuable contributions!”

3. Assessment of media competency

To assess basic media competency, we use the following questions:

- 1) Do you regularly use a smartphone, tablet or computer (yes/no)?
- 2) If yes, what do you use them for (select all that apply):
 - Online banking and dealing with governmental agencies
 - Payments
 - Navigation (e.g., Google Maps)
 - Use of social media (communication via Facebook and other social media channels)
 - Writing emails or messages to stay in touch, e.g. via WhatsApp
 - Writing and printing individual letters (computer)
 - Only to take telephone calls (smartphone)

4. “What matters most to you?”

To rapidly screen for patient priorities regarding their cancer treatment, the following questions were applied.

On a scale from „Strongly Disagree”/-- to “Strongly Agree”/++, how much would you agree to the following questions?

a) I want to live as long as possible.

--	-	O	+	++
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

b) It is important to me to have the best possible quality of life for the remaining lifetime, even if it might be shorter.

--	-	O	+	++
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

c) I want to spend as much time at home as possible.

--	-	O	+	++
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

5. Assessment of audio and visual impairments

Subjective audio and visual impairments were assessed with the following questions.

Do you need a hearing aid?	Yes	No
If yes – are you able to follow conversations with your hearing aid without difficulties?	Yes	No
Do you need glasses/vision aid?	Yes	No
If yes – is your vision sufficient with your current glasses?	Yes	No

6. Assessment of social situation

To address the social situation of the patient, we used the eight items from the MOS social survey (1) that are included in the 'Practical Geriatric Assessment' as recommended in the recent ASCO guideline on geriatric assessment in older adults undergoing systemic cancer treatments (2). The German version is available at: <https://www.dgho.de/arbeitskreise/a-g/geriatriische-onkologie/dokumente-des-ak/pqa-assessment-management-deutschsprachige-version.pdf>.

References:

1. Sherbourne CD, Stewart AL. The MOS social support survey. Soc Sci Med. 1991;32(6):705-714.
2. Williams GR, Hopkins JO, Klepin HD, Lowenstein LM, Mackenzie A, Mohile SG, et al. Practical Assessment and Management of Vulnerabilities in Older Patients Receiving Systemic Cancer Therapy: ASCO Guideline Questions and Answers. JCO Oncol Pract. 2023;19(9):718-723.

7. Size of confidence intervals in relation to number of approached versus participating patients

Table S1. Size of confidence intervals in relation to number of approached versus participating patients.

N \ p	50	100	150	200	250	300
0.5	0.289	0.203	0.165	0.143	0.127	0.116
0.6	0.284	0.199	0.162	0.14	0.125	0.114
0.7	0.267	0.187	0.152	0.131	0.117	0.107
0.8	0.237	0.165	0.134	0.115	0.103	0.094
0.9	0.185	0.127	0.103	0.088	0.078	0.071

Abbreviations: N, number of approached patients; p, real participation rate