

Additional file 3. CROSS checklist

Consensus-Based Checklist for Reporting of Survey Studies (CROSS; Sharma A, et al. J Gen Intern Med. 2021;36:3179–87). Manuscript: Adoption of, attitudes towards, and perceived challenges of digital health in hospice and palliative care among professionals in Germany: a national cross-sectional web-based survey.

Section/topic	Item	Item description	Reported in (section)
Title and abstract	1a	State the word “survey” along with the commonly used terms (e.g., cross-sectional, questionnaire) in the title	Title (“national cross-sectional web-based survey”)
	1b	Provide an informative summary in the abstract, covering background, methods, results and conclusions	Abstract
Introduction	2	Background: provide a background about the rationale of study, what has been previously done, and why this survey is needed	Section 1, paragraphs 1–4
	3	Purpose/aim: identify specific purposes, aims, goals or objectives of the study	Section 1, study questions and aim
Methods	4	Study design: specify the study design in the methods section with a commonly used term (e.g., cross-sectional or longitudinal)	Section 2.1
	5a	Data collection methods: describe the questionnaire (e.g., number of sections, number of questions, number and names of instruments used)	Section 2.4 (approx. 50 items, seven screens, domains; GR-eHEALS)
	5b	Describe all questionnaire instruments that were used in the survey to measure particular concepts; report target population, reported validity and reliability information, scoring/classification procedure and reference links	Section 2.4 (GR-eHEALS: validation, factor structure, scoring); study-specific items described; Additional file 1
	5c	Provide information on pretesting of the questionnaire, if performed (method, number of times, number and demographics of participants, similarity to sample population)	Section 2.3 (consensus refinement by working group; pilot test within research team)
	5d	Questionnaire if possible, should be fully provided (in the original language, and/or translated)	Additional file 1 (translated questionnaire)
	6a	Sample characteristics: describe the study population (background, locations, eligibility criteria, exclusion criteria)	Section 2.2
	6b	Describe the sampling techniques used (e.g., single stage or multistage, random, stratified, cluster, convenience). Specify the locations of sample participants recruitment	Section 2.2 (complete enumeration of DGP membership; self-selected convenience sample); Section 2.5 (email list; DGP congress)
	6c	Provide information on sample size, along with details of sample size calculation	Section 2.2 (no a priori calculation; entire membership invited); Section 3.1
	6d	Describe how representative the sample is of the study population (or target population if possible)	Sections 2.7 and 3.2 (comparison with DGP membership; χ^2 tests, Cohen’s ω)
	7a	Survey administration: provide information on how the survey was administered, and how respondents were recruited	Section 2.5

Section/topic	Item	Item description	Reported in (section)
	7b	Provide information of the type of cooperation requested from participants (e.g., anonymous participation, incentives, informed consent)	Section 2.5 (voluntary, anonymous, no incentives, consent on first screen)
	7c	Provide information on survey timeframe, and the geographic locations	Section 2.5 (15 August to 28 September 2024; Germany, all federal states)
	8	Study preparation: describe any preparation process before conducting the survey (e.g., interviewers' training process, advertising the survey)	Sections 2.3 and 2.5 (qualitative exploratory phase; pilot test; invitation email, reminder, congress)
	9	Ethical considerations: provide information on ethical approval for the survey if obtained, including informed consent, and details of security of data collection and storage	Section 2.8; Declarations
	10a	Statistical analysis: describe statistical methods and analytical approach. Report the statistical software that was used for data analysis	Section 2.7 (R 4.4.1)
	10b	Report any modification of variables used in the analysis (e.g., grouping of continuous variables into categories)	Section 2.7 (age groups for representativeness comparison; >50% vs. <50% working time; GR-eHEALS mean score)
	10c	Report details about how missing data was handled (rate of missing items, missing data mechanism, methods used)	Section 2.6 (sources of missing values; no imputation; item-specific denominators)
	10d	State how non-response error was addressed	Sections 2.6, 2.7, 3.2 (comparison with membership; no weighting); Section 4.8
	10e	For longitudinal surveys, state how loss to follow-up was addressed	Not applicable (cross-sectional)
	10f	Indicate whether any methods such as weighting of items or propensity scores have been used to adjust for non-representativeness of the sample	Section 2.6 (no weighting or adjustment)
Results	11a	Respondent characteristics: report numbers of individuals at each stage of the study. Consider using a flow diagram, if possible	Section 3.1 (6,449 invited; 702 started; 618 completed)
	11b	Provide reasons for non-participation at each stage, if possible	Section 3.1 (reasons not recorded)
	11c	Report response rate, present the definition of response rate or the formula used to calculate response rate	Section 3.1 (9.6% = completed/invited)
	11d	Provide information to define how unique visitors are determined. Report number of unique visitors along with relevant proportions (view rate, participation rate, completion rate)	Section 3.1 (cookies; participation rate 10.9%; completion rate 88.0%; view rate not available)
	12a	Descriptive results: provide characteristics of study participants, as well as information on potential comparisons between respondents and non-respondents in the study population	Section 3.2
	12b	Main findings: give the main results of the survey	Sections 3.3–3.10; Figures 1–5

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	12c	Present results of any adjustments made for non-representativeness	Not applicable (no adjustments; Section 2.6)
	12d	Provide results on multiple comparisons/adjustments if used	Not applicable (no correction for multiple comparisons; bivariate tests reported individually, Section 2.7)
Discussion	13a	Limitations: discuss the limitations of the study, considering sources of potential biases and imprecisions	Section 4.8
	13b	Interpretations: give a cautious overall interpretation of results, based on potential biases and imprecisions and suggest areas for future research	Sections 4.1–4.7
	13c	Generalizability: discuss the external validity of the results	Section 4.8, paragraphs 1–2
Other sections	14	Role of funding source: state whether any funding organization has had any roles in the survey's design, implementation, and analysis	Declarations, Funding
	15	Conflict of interest: declare any potential conflict of interest	Declarations, Competing interests
	16	Acknowledgements: provide names of organizations/persons that have contributed to the survey, alongside their roles	Declarations, Acknowledgements