

SUPPLEMENTAL MATERIALS

Appendix A – Protocol Registration, 11 May 2020

No. [CRD42020166002](https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=166002) – https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=166002



PROSPERO
International prospective register of systematic reviews

To enable PROSPERO to focus on COVID-19 submissions, this registration record has undergone basic automated checks for eligibility and is published exactly as submitted. PROSPERO has never provided peer review, and usual checking by the PROSPERO team does not endorse content. Therefore, automatically published records should be treated as any other PROSPERO registration. Further detail is provided [here](#).

Citation

Michael Tringale, Genia Stephen, Carl Heneghan, Anne-Marie Boylan. Incorporating patient values and preferences in health care for adults with noncommunicable diseases: A systematic review of qualitative evidence. PROSPERO 2020 CRD42020166002 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020166002

Review question

What are the approaches, barriers, and facilitators that practicing health care professionals (HCPs) experience regarding the integration of patient values and preferences in primary and secondary care for adults with noncommunicable diseases (NCDs)?

Searches

This review is concerned with identifying studies regarding HCPs and their experiences incorporating patient values and preferences into their evidence based care (Sackett 1996). Reviewers will use the Joanna Briggs Institute (JBI) search method (Aromataris and Munn 2017) with terms adapted from an initial scoping of electronic databases MEDLINE and CINAHL with an analysis of text from titles, abstracts, and index terms used to describe references. Then, full systematic literature searches will be tailored and conducted for 12 databases including ASSIA, CINAHL, DARE, EMBASE, ERIC, Google Scholar, GreyLit, GreyNet, MEDLINE (via Ovid and PubMed), PsycINFO, Scopus and Web of Science.

Types of study to be included

This review will consider studies and other evidence with full text available in English that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research, other interpretive studies, and methods such as interviews, focus groups, and surveys. Also considered will be mixed-methods studies reporting relevant qualitative data or analysis regarding the topic and population of interest. This review is concerned with current relevant practice so only studies from the year 2000 or later will be included.

Condition or domain being studied

This review will consider studies involving care for adults in the four major NCD groups: cancers, cardiovascular diseases, diabetes, and chronic respiratory diseases (WHO 2020).

Participants/population

The population of interest is practicing HCPs in primary and secondary care. To the extent that some studies of patient populations may also include relevant HCP data, these studies may be included but only the HCP perspectives will be extracted.

Intervention(s), exposure(s)

The population of interest is practicing HCPs in primary and secondary care. To the extent that some studies of patient populations may also include relevant HCP data, these studies may be included but only the HCP perspectives will be extracted.

Comparator(s)/control

None

Context

This review will consider evidence from non-emergency and non-inpatient settings where clinicians provide primary or secondary care for adults with NCDs.

Main outcome(s)

- Approaches to integrating patient values and preferences into clinical care.
- Barriers to integrating patient values and preferences into clinical care.
- Facilitators to integrating patient values and preferences into clinical care.
- Thematic analysis, interpretation, and insights.

Measures of effect

Main outcomes will be presented as qualitative data such as verbatims from, and interpretations of, included studies, as well as an author synthesis and interpretation of the qualitative evidence reviewed.

Additional outcome(s)

- Practice recommendations for integration of patient values and preferences into evidence based care.
- Further research recommendations.

Measures of effect

Additional outcomes will be presented as recommendations by the author.

Data extraction (selection and coding)

Prospective studies will be saved in RefWorks for cataloging and reference management, imported to EPPI Reviewer for screening, and uploaded to NVivo for data extraction and coding. The primary author will screen titles and abstracts for inclusion, with double-screening of a random sample by a secondary reviewer (Taylor-Phillips et al, 2017), with disagreement resolved by discussion or with a third reviewer/advisor. A full text screening will be performed to identify references for final inclusion.

Qualitative data will be extracted from included references using a modified version of the JBI Data Extraction Tool (Aromataris and Munn 2017) to include specific details about the population, context, study methods, the phenomena of interest relevant to the review question. Data will be synthesized using a meta-aggregation approach and a narrative synthesis. Where textual pooling is not possible, findings will be presented in narrative form.

Risk of bias (quality) assessment

In addition to double-screening references, quality appraisal will be performed by the primary author using the JBI Critical Appraisal Checklist for Qualitative Research (Aromataris and Munn 2017) with a random sample assessed by the second reviewer with disagreement resolved by discussion or with a third reviewer/advisor. The CONQual approach (Munn et al, 2014) will also be used wherein an overall ranking will be assigned to rate the confidence of any synthesized qualitative findings which will be presented in a summary of findings table describing the dependability and credibility of each finding.

Strategy for data synthesis

The data will be analyzed using meta-aggregation and thematic synthesis. Qualitative research findings will be pooled using the coding and synthesis strategies and tools enabled by NVivo including further collection and synthesis of findings to generate a set of statements that represent the aggregation, organization, and categorization of the findings based on similarity in meaning. These categories will then be subjected to further synthesis to produce a single comprehensive set of findings that can be used as the basis for analysis, interpretation, reporting, and recommendations.

Analysis of subgroups or subsets

Data related to different contexts such as disease severities, prognoses, multimorbidities, and/or HCP types, to the extent that such data will be available in the included studies, may be analyzed as subgroups.

Contact details for further information

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NIHR | National Institute
for Health Research**PROSPERO**
International prospective register of systematic reviews**Organisational affiliation of the review**University of Oxford
www.ox.ac.uk**Review team members and their organisational affiliations**Michael Tringale. University of Oxford
Genia Stephen. University of Oxford
Dr Carl Heneghan. University of Oxford
Dr Anne-Marie Boylan. University of Oxford**Type and method of review**

Narrative synthesis, Synthesis of qualitative studies, Systematic review, Other

Anticipated or actual start date

01 February 2020

Anticipated completion date

01 December 2020

Funding sources/sponsors

Self-funded with a Research Support Grant from Kellogg College, University of Oxford

Conflicts of interest**Language**

English

Country

United States of America

Stage of review [1 change]

Review Completed published

Details of final report/publication(s) or preprints if available [1 change]

Pre-reviewed, pre-graded, pre-published summary of results and conclusions includes:

Results: From 3331 potential records, 35 met inclusion criteria. Findings comprised: 146 approaches to incorporating patient values and preferences grouped into 18 main themes with 12 subthemes; 92 barriers grouped into 4 main themes with 13 subthemes; 46 facilitators grouped into 5 main themes with 8 subthemes; and, 52 epistemologies related to incorporating patient values and preferences. Four primary concepts summarize all of these findings: Concern, Competence, Communication, and Congruence.

Conclusions: HCPs incorporate patient values and preferences into health care through actions of Concern, Competence, Communication, and Congruence, and there are numerous philosophies that influence how HCPs regard and approach patient values and preferences. HCPs face a number of barriers to incorporating patient values and preferences but they are also facilitated by several factors.

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

MeSH headings have not been applied to this record

Date of registration in PROSPERO

05 July 2020

Date of first submission

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11 May 2020

Stage of review at time of this submission [2 changes]

Stage	Started	Completed
Preliminary searches	Yes	No
Piloting of the study selection process	Yes	No
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

05 July 2020

18 November 2020

29 November 2020

Appendix B – Search Strategy Details

NOTE: Unless otherwise stated, all searches were limited to publication dates 2000 to 2020, English language only. Standard “MeSH” terms ([Medial Subject Headings](#)) established by the National Library of Medicine for use with Medline and other databases were of some use for this review’s search. Main MeSH headings of interest included:

- Communication
- Communication Barrier/s
- Communication Method/s
- Consumer Preference/s
- Decision-Making, Shared
- Evidence-Based Medicine
- Evidence-Based Nursing
- Evidence-Based Practice
- Health Communication
- Implementation Science
- Patient Advocacy
- Patient-Centered Care
- Patient Preference/s
- Patient Participation
- Physician-Patient Relation/s (Relationship/s)
- Professional-Patient Relations

EMBASE – Excerpta Medica DataBASE

<https://www.elsevier.com/solutions/embase-biomedical-research>

(January 2000 to May 2020) 1031 studies identified

Primary keywords and search string in “advanced search” tool; preselect English only, titles, abstracts and indexed terms:

1. ((physician* OR "health professional*" OR "healthcare professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") ADJ10 (perspective* OR attitude* OR opinion* OR behavior* OR behaviour* OR practices))
2. (integrat* OR implement* OR incorporat* OR consider* OR promote* OR use* OR using OR approach* OR barrier* OR facilitate* OR regard*) AND ((patient* OR client* OR individual* OR consumer*) ADJ5 (values OR preferences))
3. (qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*")
4. (patient NOT (palliative OR "end of life" "end-of-life" OR "advanced directive*" OR child OR surge* OR emergenc* OR resuscitat* OR terminal*))
5. 1 and 2 and 3 and 4

PubMed-Medline

<http://www.pubmed.com/>

(January 2000 to May 2020) 661 studies identified

Primary keywords and search string in “advanced” search tool; preselect English only, titles, abstracts and indexed terms:

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(((((("physician"[Title] OR "health professional"[Title] OR "healthcare professional"[Title] OR "health care professional"[Title] OR "practitioner"[Title] OR "specialist"[Title] OR "doctor"[Title] OR "nurse"[Title] OR "provider"[Title] OR "clinician"[Title] OR ("clinic"[All Fields] AND ("staff"[All Fields] OR "staff s"[All Fields] OR "staffs"[All Fields]))) AND (((("perspective"[Title] OR "attitude"[Title] OR "opinion"[Title] OR "behavior"[Title] OR "behaviour"[Title] OR (((((((("practicability"[All Fields] OR "practicable"[All Fields] OR "practical"[All Fields] OR "practicalities"[All Fields] OR "practicality"[All Fields] OR "practically"[All Fields] OR "practicals"[All Fields] OR "practice"[All Fields] OR "practice s"[All Fields] OR "practiced"[All Fields] OR "practices"[All Fields] OR "practicing"[All Fields]))) AND (((((((("qualitative"[Title] OR "review"[Title] OR "synthesis"[Title] OR "analysis"[Title] OR "narrative"[Title] OR "interview"[Title] OR "observation"[Title] OR "survey"[Title] OR "focus group"[All Fields])) AND (((("patient"[Title] OR "client"[Title] OR "individual"[Title] OR "consumer"[All Fields]) AND ("values"[Title] OR (((((((("prefer"[All Fields] OR "preferable"[All Fields] OR "preferably"[All Fields] OR "preferred"[All Fields] OR "preference"[All Fields] OR "preferences"[All Fields] OR "preferred"[All Fields] OR "preferring"[All Fields] OR "prefers"[All Fields]))))

Scopus

<https://www.elsevier.com/solutions/scopus>

(January 2000 to July 2020) 627 studies identified

Primary keywords and search string: (NOTE: 147,000 results originally from this string; Scopus provides pre-set search inclusion/exclusion options to choose. To narrow this search I selected publication year range 2000-2020; included only Med, Nursing, Health Professions; only USA, UK, CAN, and the 4 primary NCDs of interested to this study, Oncology, CV, Respiratory, Diabetes.)

("primary care" OR "specialist care" OR "secondary care") AND (diabetes OR asthma OR cardiovascular OR cancer OR COPD) AND (((((physician* OR "health professional*" OR "healthcare professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") W/10 (perspective* OR attitude* OR opinion* OR behavior* OR behaviour* OR practices)) AND ((integrat* OR implement* OR incorporat* OR consider* OR promote* OR use* OR using OR approach* OR barrier* OR facilitate* OR regard*) AND ((patient* OR client* OR individual* OR consumer*) W/5 (values OR preferences)))) AND (qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*")) AND NOT ("patient-reported" OR "advance planning" OR palliative OR "end of life" "end-of-life" OR "advanced directive*" OR child OR children OR pediatric OR teen* OR adolescent* OR surge* OR emergenc* OR resuscitat* OR terminal*) AND NOT (patient W/3 (perspective* OR attitude* OR opinion* OR behavior* OR behavior* OR understanding OR awareness OR education OR satisfaction))

OVID-Medline

<https://www.ovid.com/product-details.901.html>

(January 2000 to May 2020) 583 studies identified

Primary keywords and search string in "advanced search" tool; preselect English only, titles, abstracts and indexed terms:

1. ((physician* OR "health professional*" OR "healthcare professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") ADJ10 (perspective* OR attitude* OR opinion* OR behavior* OR behavior* OR practices))

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2. (integrat* OR implement* OR incorporat* OR consider* OR promote* OR use* OR using OR approach* OR barrier* OR facilitate* OR regard*) AND ((patient* OR client* OR individual* OR consumer*) ADJ5 (values OR preferences))
3. (qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*")
4. (patient NOT (palliative OR "end of life" "end-of-life" OR "advanced directive*" OR child OR surge* OR emergenc* OR resuscitat* OR terminal*))
5. 1 and 2 and 3 and 4

CINAHL – Cumulative Index to Nursing and Allied Health Literature

<https://www.ebscohost.com/nursing/products/cinahl-databases/the-cinahl-database>

(January 2000 to July 2020) 464 studies identified after duplicates removed)

Primary keywords and search string; titles and abstracts:

((qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*") AND (physician* OR "health professional*" OR "healthcare professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") AND (perspective* OR attitude* OR opinion* OR behavior* OR behavior* OR practices*) AND (integrat* OR implement* OR incorporat* OR consider* OR promote* OR use* OR using OR approach* OR barrier* OR facilitate* OR regard*) AND ("patient* values" OR "patient* preferences" OR "client* values" OR "client* preferences" OR "individual* values" OR "individual* preferences" OR "consumer* values" OR "consumer* preferences")) NOT (palliative OR "end of life" OR "end-of-life" OR "advanced directive*" OR child OR surge* OR emergenc* OR resuscitat* OR terminal*)

ASSIA – Applied Social Science Index and Abstracts

<https://search.proquest.com/assia? ga=2.36367776.1827441237.1546299943-1531284045.1543164998>

(January 2000 to July 2020) 407 studies identified

Primary keywords and search string:

(ab(((patient NEAR/2 (values OR preferences))) AND ((physician OR doctor OR provider) NEAR/5 (practices OR perspectives OR attitudes OR opinions))) AND qualitative) OR ti((patient AND (values OR preferences)) AND (physician OR doctor OR provider)) OR ti(patient values) OR ((((((physician OR "health professional" OR "healthcare professional" OR "health care professional" OR practitioner OR specialist OR doctor OR nurse OR provider OR "clinician" OR staff) NEAR/10 (perspectives OR attitudes OR opinions OR behavior OR behaviour OR practices)) AND ((integrate OR implement OR incorporate OR consider OR promote OR approaches OR barriers OR facilitate OR facilitators) NEAR/5 ((patient OR client OR individual OR consumer) NEAR/3 (values OR preferences)))))) AND (qualitative OR review OR synthesis OR analysis OR narrative OR interviews OR observations OR survey OR "focus groups")) NOT (palliative OR "end of life" "end-of-life" OR "advanced directives" OR child OR surgery OR emergency OR resuscitation OR terminal)) AND pd(20000101-20200630))

PsychINFO

<https://www.apa.org/pubs/databases/psycinfo/index.aspx>

(January 2000 to July 2020) 255 studies identified

Primary keywords and search string using "advanced search" tool; limited to abstracts:

1. ((physician* OR "health professional*" OR "healthcare professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") ADJ10 (perspective* OR attitude* OR opinion* OR behavior* OR behaviour* OR practices))
2. (integrat* OR implement* OR incorporat* OR consider* OR promote* OR use* OR using OR approach* OR barrier* OR facilitate* OR regard*) AND ((patient* OR client* OR individual* OR consumer*) ADJ5 (values OR preferences))
3. (qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*")
4. (patient* NOT (palliative OR "end of life" "end-of-life" OR "advanced directive*" OR child OR surge* OR emergenc* OR resuscitat* OR terminal*))
5. 1 and 2 and 3 and 4

Web of Science

<http://apps.webofknowledge.com/>

(January 2000 to July 2020) 231 studies identified

Primary keywords and search string:

((physician* OR "health professional*" OR "healthcare professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") NEAR/10 (perspective* OR attitude* OR opinion* OR behavior* OR behavior* OR practices)) AND ((integrat* OR implement* OR incorporat* OR consider* OR promote* OR use* OR using OR approach* OR barrier* OR facilitate* OR regard*) NEAR/5 ((patient* OR client* OR individual* OR consumer*) NEAR/3 (values OR preferences))) AND (qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*") NOT (palliative OR "end of life" "end-of-life" OR "advanced directive*" OR child OR surge* OR emergenc* OR resuscitat* OR terminal*)

Google Scholar

<https://scholar.google.com/>

(January 2000 to April 2020) 95 studies identified

Primary keywords and search strategy:

- Screened for "qualitative" and/or "review"
- Exact phrases "patient values" and/or "patient preferences"
- Must include "physician" "health professional" "doctor" "nurse" or variants
- Also included anything re. various types of cancers or "patient/physician communication & relationship" or "joint/shared decision-making" etc.
- Excluded "end of life" "terminal" "end stage" "directives" "advanced care planning" arthritis, fibromyalgia (non-top NCDs) or resuscitation

DARE – Database of Abstracts of Reviews for Effectiveness

<https://www.crd.york.ac.uk/CRDWeb/>

(January 2000 to July 2020) 19 studies identified

Primary keywords and search string; select DARE database only; publication year 2000 to 2020; search titles only:

((qualitative OR review OR synthesis OR analysis OR narrative OR interview* OR observation* OR survey* OR "focus group*") AND (physician* OR "health professional*" OR "healthcare

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professional*" OR "health care professional*" OR practitioner* OR specialist* OR doctor* OR nurse* OR provider* OR "clinician*" OR "clinic* staff") AND (perspective* OR attitude* OR opinion* OR behavior* OR behavior*)

ERIC – Education Resources Information Center

<https://eric.ed.gov/>

(January 2000 to July 2020) 7 studies identified

Primary keywords and search string; full text available only:

("patients values" OR "patients preferences")

GreyLit

<http://greylit.org/>

(2000 to 2020) 1 study identified

Primary keywords and search string (note this database was discontinued in 2017, but remains searchable up to that date):

"patients preferences" (6 results) narrowed with additional keyword "values"

Forward-Backward Searches

(January 2000 to August 2020) 86 studies identified

Appendix C – Appraisal Checklist & Quality Assessment of Included Records



JBI Critical Appraisal Checklist for Qualitative Research

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is there congruity between the research methodology and the research question or objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is there congruity between the research methodology and the methods used to collect data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there congruity between the research methodology and the representation and analysis of data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is there congruity between the research methodology and the interpretation of results?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is there a statement locating the researcher culturally or theoretically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the influence of the researcher on the research, and vice-versa, addressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are participants, and their voices, adequately represented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Quality Assessment of Included Records

Key to JBI Critical Appraisal Checklist for Qualitative Research	
JBI-Q1	Is there congruity between stated philosophical perspective and research methodology?
JBI-Q2	Is there congruity between research methodology and research question or objective?
JBI-Q3	Is there congruity between the research methodology and the data collection methods?
JBI-Q4	Is there congruity between the research methodology and the representation and analysis of data?
JBI-Q5	Congruity between the research methodology and the interpretation of results.
JBI-Q6	Is there a statement locating the researcher culturally or theoretically?
JBI-Q7	Is the influence of the researcher on the research, and vice-versa, addressed?
JBI-Q8	Are participants voices adequately represented?
JBI-Q9	Is the research ethical according to current criteria, or evidence of ethical approval by an appropriate body?
JBI-Q10	Do the conclusions flow from the analysis, or interpretation, of the data?

Author (Year)	Ref.	JBI-Q1	JBI-Q2	JBI-Q3	JBI-Q4	JBI-Q5	JBI-Q6	JBI-Q7	JBI-Q8	JBI-Q9	JBI-Q10
Aita V et al. (2005)	36	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Chhabra KR et al. (2013)	37	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Davis K et al. (2017)	38	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Elwyn G et al. (2000)	39	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Feiring E et al. (2020)	40	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Ford S et al. (2002)	32	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Ford S et al. (2003)	31	Yes	Yes	Yes	Yes	Yes	No	No	Yes	yes	Yes
Ford S et al. (2006)	41	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes
Friedberg MW et al. (2013)	42	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Golden SE et al. (2017)	43	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gruß I et al. (2019)	44	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Hall J et al. (2011)	45	Yes	Yes	Yes	Yes	Yes	No	No	No	N/A	Yes
Hart PL et al. (2014)	46	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hisham R et al. (2016)	47	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Jefford M et al. (2002)	48	Yes	Yes	Yes	Yes	Yes	No	No	No	N/A	Yes
Kennedy BM et al. (2017)	49	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Landmark AM et al. (2016)	50	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Lown B et al. (2009)	51	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
McLeod H et al. (2017)	33	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Murdoch J et al. (2020)	52	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Paiva D et al. (2019)	53	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Pieterse AH et al. (2011)	54	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes

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Author (Year)	Ref.	JB1-Q1	JB1-Q2	JB1-Q3	JB1-Q4	JB1-Q5	JB1-Q6	JB1-Q7	JB1-Q8	JB1-Q9	JB1-Q10
Salter C et al. (2019)	55	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Schulman-Green DJ et al. (2006)	56	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Shepherd HL et al. (2011)	57	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Shortus T et al. (2011)	58	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tracy CS et al. (2003)	59	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Van Humbeeck et al. (2020)	60	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Vermunt N et al. (2019)	61	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Visser LNC et al. (2018)	62	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Zulman DM et al. (2020)	63	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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Appendix D – Data Extraction Tool

Modified version of the JBI Data Extraction Tool

Item to be Extracted	Data
Study ID	
Publication Year	
Title	
Publication	
Study Reference in Full	
Study Aim/Objective/Phenomena of Interest	
Qual Methodology	
Qual Method(s)	
Analytical Approach	
HCP Participant Type	
No. HCP Participants	
Level of HCP Experience	
Setting (Clinical Context)	
Location (Geography)	
No. Practices/Sites/Clinics	
No. Clinical Consultations, Encounters, Interactions	
NCD Category	
Qual Findings	
Author Conclusions	
Reviewer Comments	
Extraction Completed Date	

Appendix E – Findings & Citations: Table of Approaches to Values Integration

Primary Themes	Subthemes	Healthcare Professional Approaches/Behaviors	Citation(s)
Approaches of CONCERN	Advocating	Advocating for the Patient	Aita, Davis, Elwyn, Ford'02, Ford'03, Lown, Paiva, Tracy
		Making Referrals, Seeking Second Opinions	Aita, Chhabra, Ford'06, Friedberg, McLeod, Murdoch, Tracy, Visser
	Caring & Connecting	Acting in a Relational Way	Aita, Lown, Paiva, Zulman
		Being Genuine/Sincere	Aita, McLeod, Salter, Shortus, Van Humbeeck, Zulman
		Comforting/Reassuring/Supporting the Patient	Aita, Feiring, Ford'02, Ford'03, Friedberg, Grub, Hart, Jefford, Kennedy, Landmark, Lown, McLeod, Murdoch, Paiva, Pieterse, Salter, Schulman-Green, Shepherd, Tracy, Van Humbeeck, Visser, Zulman
		Creating a Safe Space to Talk/Question/Disagree	Chhabra, Elwyn, Feiring, Ford'02, Ford'03, Golden, Grub, Hisham, Jefford, Landmark, Lown, McLeod, Paiva, Pieterse, Salter, Shepherd, Tracy, Van Humbeeck
		Expressive Touch	Hall, McLeod, Zulman
		Focus on Prevention	Aita, Murdoch
		Making the Patient Feel Comfortable	Ford'02, Lown, McLeod, Visser
		Mindfulness	Grub, Lown, McLeod, Zulman
		Seeing Patient Perspective/Having (vs. "showing/exhibiting/displaying") Empathy	Aita, Davis, Elwyn, Ford'03, Friedberg, Golden, Grub, Hall, Kennedy, Landmark, Lown, McLeod, Murdoch, Paiva, Pieterse, Schulman-Green, Van Humbeeck, Vermont, Visser, Zulman
		Sharing Doctor's Own Personal Experiences, Making the Doctor Approachable	Kennedy, McLeod
		Sharing Personal Interests, Feelings, Experiences	Lown, McLeod
		Showing/Exhibiting/Displaying (vs. "having") Compassion, Empathy, Caring	Ford'03, Golden, Grub, Kennedy, Lown, McLeod, Murdoch, Paiva, Van Humbeeck, Visser, Zulman
		Showing Curiosity About the Patient/Condition	Hall, Zulman
		Treating Patient as a Unique Person/Individual	McLeod, Van Humbeeck
		Valuing Feeling Comfortable	McLeod, Pieterse, Visser
		Empowering	Enabling Patient Self-Management, Patient Agency
	Establishing Equality		Elwyn, Ford'03, Lown, McLeod, Murdoch, Van Humbeeck
	Giving Patient Control, Final Say, Patient Empowerment		Ford'02 Ford'03, Grub, Kennedy, Lown, McLeod, Murdoch, Salter, Shepherd, Van Humbeeck, Visser, Zulman
	Having Patience, Letting the Patient Set the Pace		Ford'03, McLeod, Visser
	Invites Patient to Lead		McLeod, Salter
	Opportunities to Reconsider		Elwyn, Ford'03, Pieterse

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Primary Themes	Subthemes		Healthcare Professional Approaches/Behaviors	Citation(s)	
			Recognizing, Confirming, Validating Patient Autonomy	Chhabra, Elwyn, Ford'02, Ford'03, Ford'06, Jeffords, Lown, McLeod, Shortus, Van Humbeek	
			Respectful Environments/Clinics/Waiting Rooms	Aita, Ford'03, McLeod	
			Respecting Privacy	Ford'03, McLeod, Van Humbeek	
			Sharing Control Overall	Lown, McLeod	
			Trusting/Respecting the Patient	Elwyn, Ford'03, Ford'06, Golden, Hart, Kennedy, Lown, McLeod, Paiva, Shortus, Vermont, Zulman	
			Valuing the Individual Patient	Hart, McLeod	
	Inviting		Invite/Involve Carers/Caregivers	Ford'03, Paiva	
			Invite/Involve Family/Loved Ones	Chhabra, Davis, Elwyn, Friedberg, Golden, Hart, Lown, Paiva, Salter, Van Humbeek, Visser, Zulman	
			Invite/Involve Others	Elwyn	
			Seeks Input from Colleagues and Other Experts	Elwyn, Hisham	
	Partnering		Develop Partnership with the Patient	Aita, Elwyn, Kennedy, McLeod, Zulman	
			Forms Therapeutic Alliance/Relationship with Patient	McLeod, Paiva	
			Mutual Respect Between Patient and HCP	Elwyn, Ford'03, McLeod, Paiva, Vermont	
			Personalizing Approach/Decisions/Care	Chhabra, Feiring, Friedberg, Jefford, McLeod, Murdoch, Paiva, Salter, Shortus, Van Humbeek, Zulman	
			Takes the Long-Term View	Davis, Golden, Murdoch, Schulman-Green, Shortus	
			Understanding the Patient	Davis, Elwyn, Feiring, Ford'03, Ford'06, McLeod, Friedberg, Golden, Kennedy, Landmark, Lown, Salter, Van Humbeek, Visser, Zulman	
	Sensing		Cultural Sensitivity	Aita, Hart, Kennedy, Lown, McLeod, Shepherd	
			Interpersonal Sensitivity, Overall Concern	Ford'03, Hall, McLeod, Paiva, Pieterse, Zulman	
			Non-Judgmental	Lown	
			Respect/Include Religion	McLeod, Van Humbeek	
			Using Intuition	Tracy	
	Approaches of COMPETENCE	Decision Making	Decision Support	Patient Decision Aids/Tools	Davis, Ford'03, Friedberg, Grub, Jefford, Lown, McLeod, Shortus, Vermont
				Stories, Vivid Descriptions	Aita, Ford'03, Landmark, Lown, McLeod, Paiva
		Directing	Giving an Opinion to the Patient		Ford'03, Ford'06, Landmark, Lown, McLeod, Tracy
				Listing	Elwyn, Salter
				Making Recommendations	Aita, Chhabra, Davis, Feiring, Ford'03, Friedberg, Golden, Kennedy, Landmark, McLeod, Murdoch, Paiva, Pieterse, Schulman-Green, Shepherd, Shortus, Tracy, Vermont
		Sharing Decisions	Competence with Research Evidence		Elwyn, Ford'02, Ford'06, McLeod

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Primary Themes	Subthemes		Healthcare Professional Approaches/Behaviors	Citation(s)
			Formulating the Patient's Stance/Priorities	Grub, Landmark, Murdoch
			Negotiate Decisions	Aita, Elwyn, Ford'03, Hall, Landmark, Lown, McLeod, Murdoch, Paiva, Salter, Shepherd, Shortus, Tracy, Vermont
			Shared Decision-Making (SDM)	Chhabra, Davis, Elwyn, Ford'02, Ford'03, Ford'06, Friedberg, Golden, Grub, Hall, Jefford, Landmark, Lown, McLeod, Murdoch, Paiva, Pieterse, Salter, Schulman-Green, Shepherd, Shortus, Van Humbeek, Vermont, Visser, Zulman
			Understanding Diseases/Treatments	Ford'03, Davis, Elwyn, Feiring, Golden, Grub, Kennedy, McLeod
	Managing	Agenda Setting	Mutual Agenda Setting	Ford'06, McLeod, Murdoch, Salter, Shortus, Zulman
			Mutually Set Priorities	Aita, Lown, McLeod, Murdoch, Salter, Shortus, Vermont, Zulman
	Emotions		Anxiety (Prevent, Recognize or Reduce)	Chhabra, Davis, Elwyn, Feiring, Ford'03, Golden, Hall, Jefford, Landmark, Salter, Shepherd, Tracy, Visser, Zulman
			Distress Management	Chhabra, Golden, Hall, Jefford, Kennedy, McLeod, Paiva, Visser, Zulman
			Processing Emotions	Hall, Landmark, Lown, McLeod, Paiva, Visser, Zulman
	Negotiating		Assess, Evaluate Treatment Options	Davis, Friedberg, Golden, Grub, McLeod, Murdoch, Pieterse, Salter, Shepherd, Vermont
			Deliberate, Weigh, Negotiate Options	Davis, Elwyn, Ford'03, Friedberg, Golden, Grub, Landmark, McLeod, Pieterse, Shepherd
			Contesting Patient Understanding/Responses	Murdoch, Pieterse, Salter
			Discuss Pros/Cons of Options	Chhabra, McLeod, Shepherd, Van Humbeek, Vermont
			Giving, Outlining, Providing Options	Davis, Chhabra, Elwyn, Ford'02, Ford'03, Friedberg, Golden, Grub, Jefford, McLeod, Pieterse, Shortus, Tracy, Van Humbeek
			Handling Agreement & Disagreement	Chhabra, Landmark, Lown, McLeod, Pieterse, Schulman-Green, Shortus
			Mutual Agreement	Pieterse
			Negotiate Roles/Responsibilities of Patient and HCP	Elwyn, Lown, Murdoch, Salter, Shepherd
	Planning & Preparing		Action Plans	Elwyn, Feiring, Murdoch, Salter, Vermont
			Agreeing on Priorities	Aita, McLeod, Ford'06, Lown, Murdoch, Salter, Shortus, Van Humbeek, Vermont, Zulman
			Arranging Follow-Up	Elwyn, Ford'03, Ford'06, Golden, Landmark, Lown, McLeod, Salter, Shepherd, Vermont
			Mutual Planning	McLeod, Paiva, Salter, Schulman-Green, Shortus
			Collaborative Goal Setting	Murdoch, Paiva, Salter, Vermont
			Prepare for the Consultation	Ford'03, Salter, Shortus Zulman
			Preparing for Personalization	Shortus, Zulman
	Processing		Actively Manage the Patient's Involvement	Shortus
			Allowing/Investing Time	Friedberg, Lown, McLeod, Salter
			Coordination/Continuity of Care	Aita, Davis, Feiring, Ford'03, Friedberg, Landmark, McLeod, Salter

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Primary Themes	Subthemes	Healthcare Professional Approaches/Behaviors	Citation(s)
		Don't Rush, Take Time	Ford'03, Lown, McLeod, Schulman-Green
		EHR, Recording, Record-Keeping Documenting	For'02, Friedberg, Hisham, Jefford, McLeod, Zulman
		Following-Up	Davis, Elwyn, Feiring, Ford'03, Ford'06, Golden, Landmark, McLeod, Pieterse, Vermont
		Keeps a Long-Term Focus	David, Murdoch, Schulman-Green, Shortus
		Leaving Time for Questions	Golden
		Systematic Process, Stages, Approaches to the Consultation and Care	Vermont
	Professionalism	Being Consistent with Information/Care/Decisions	Paiva, Vermont
		Honesty and Transparency	Feiring, Ford'03, Golden, Jefford, Lown, McLeod, Shortus, Van Humbeeck
		Responsiveness	Aita, Jefford, McLeod, Pieterse, Shepherd, Shortus, Van Humbeeck, Vermont
		Realistic Approach the Patient, Care	Aita, Jefford, Murdoch, Pieterse, Salter, Shortus, Tracy
Approaches of COMMUNICATION	Acknowledging	Acknowledging Patient's Role, Effort	Ford'03, Grub, Hart, Lown, McLeod, Murdoch, Visser, Zulman
		Celebrating Successes	McLeod, Zulman
		Legitimizing Personal Preferences, Validating the Patient	Landmark, Lown, McLeod, Murdoch, Pieterse, Salter, Tracy, Zulman
		Reassurances	Ford'03, Kennedy, Landmark, McLeod, Pieterse, Salter, Tracy, Van Humbeeck, Visser, Zulman
		Showing Own Emotions	Hall, Landmark, Lown, McLeod, Visser, Zulman
		Showing Understanding	Chhabra, Davis, Elwyn, Fore'03, Grub, Jefford, Kennedy, Landmark, Lown, McLeod, Murdoch
		Valuing, Acknowledging, Validating, Responding to Patient Emotions	Aita, Chhabra, Feiring, Ford'02, Ford'03, Grub, Hall, Jefford, Landmark, Lown, McLeod, Paiva, Visser, Zulman
	Clarifying	Checking, Rechecking	Elwyn, Ford'03, Ford'06, Landmark, Murdoch, Paiva, Pieterse
		Clarifying Values, Preferences, Views	Elwyn, Ford'03, Friedberg, Landmark, Lown, Murdoch, Pieterse, Vermont
		Framing & Reframing	Elwyn, Golden, Landmark, McLeod, Murdoch, Vermont, Zulman
		Repeating	Paiva, Pieterse
		Revisiting (Decisions Over Time)	McLeod, Shortus
	Encouraging	Approving/Amplifying Patient Appraisals/Choices	Pieterse
		Encouraging/Inviting Patient Comments/Questions	Chhabra, Fore'd'03, Jefford, Hisham, Landmark, McLeod, Murdoch, Pieterse, Salter
		Encouraging Patient to Prepare	Murdoch, Salter
		Encouraging Storytelling	McLeod
		Inviting Patient Participation	Chhabra, McLeod, Pieterse, Salter
		Motivational Interviewing	McLeod, Paiva, Zulman

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Primary Themes	Subthemes		Healthcare Professional Approaches/Behaviors	Citation(s)	
	Exchanging Information	Defining	Explain, Define, Describe the Problem for Patient	Elwyn, Ford'03, Kennedy, Vermunt	
			Inform Patient of Condition/Diagnosis/Biomedical	Aita, Ford'03, Grub, McLeod, Murdoch, Salter, Schulman-Green, Shortus	
		Educating		Coaching	Jeffords, Zulman
				Information Giving	Golden, Grub, Jefford, McLeod, Paiva, Van Humbeek, Visser
				Information/Education Aids, Materials, Tools	Davis, Golden, Jefford, McLeod, Zulman
				Patient Education	Chhabra, Davis, Feiring, Friedberg, Vermunt
				Sharing Knowledge with the Patient	Ford'03, Golden, McLeod, Paiva
		Interviewing & Eliciting		Eliciting Goals	Aita, Chhabra, Grub, Lown, McLeod, Murdoch, Salter, Schulman-Green, Shortus, Vermunt, Zulman
				Eliciting Patient Appraisals (Strengths of Preferences)	Pieterse
				Eliciting Preferences	Chhabra, Davis, Elwyn, Ford'02, Ford'03, Ford'06, Friedberg, Golden, Grub, Hart, Hisham, Jefford, Kennedy, Landmark, Lown, McLeod, Murdoch, Pieterse, Salter, Schulman-Green, Shepherd, Shortus, Tracy, Van Humbeek, Vermunt, Visser, Zulman
				Eliciting Values	Aita, Chhabra, Davis, Elwyn, Ford'02, Ford'03, Friedberg, Golden, Grub, Hart, Hall, Hisham, Kennedy, Landmark, Lown, McLeod, Murdoch, Schulman-Green, Tracy, Van Humbeek, Vermunt
				Eliciting Circumstances	Aita, Salter, Schulman-Green, Tracy, Zulman
				Eliciting Patient Feelings	Feiring, Golden, Hall, Landmark, Lown, McLeod, Pieterse, Visser
				Patient-Centered Interviewing	Aita, Paiva, Vermunt, Zulman
		Presenting Evidence		Discussing Risks/Benefits/Side-Effects/Trade-Offs	Chhabra, Elwyn, Ford'02, Ford'03, Friedberg, Golden, Jefford, Lown, McLeod, Paiva, Pieterse, Shepherd, Vermunt
				Presenting, Sharing, Explaining Evidence	Ford'03, Friedberg, Grub, McLeod, Pieterse, Tracy, Vermunt
				Willingness to See More Information, Encourages Patient to Look for More Information	Ford'03, Jefford, Lown, Visser
		Exploring		Asking Questions	Chhabra, Ford'02, Ford'03, Jefford, McLeod
	Assessing Values, Preferences, Expectations			Ford'03, Grub, Landmark, Shepherd	
	Explore Ideas, Perspective, Alternatives			Elwyn, Landmark, Shepherd, Visser	
	Explore Cues and Clues (Verbal and Non-Verbal)			Chhabra, Elwyn, Ford'03, Hall, Kennedy, McLeod, Salter, Visser, Zulman	
	Explore Fears, Concerns, Distresses, Emotions			Elwyn, Ford'02, Ford'03, Ford'06, Golden, Lown, Salter, Visser, Zulman	
	Signaling (Pausing, Thinking Out Loud, Non-Verbal Cues)			Chhabra, Elwyn, Jefford, Hall, McLeod, Murdoch, Pieterse, Visser, Zulman	
	Language		Deferential Language	Chhabra	
			Directive Language	Ford'02	

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		Emotion-Oriented Speech	Visser
		Use Common Language, No Jargon	Lown, Paiva, Pieterse
		Using Inviting Language	Chhabra
		Variations in Tone of Voice	Hall, McLeod, Visser, Zulman
	Listening	Active Listening, Without Interruption	Elwyn, Ford'03, Ford'06, Hall, Landmark, Lown, McLeod, Paiva, Salter, Zulman
		Silence, Attentive or As a Response to Emotion	Visser, Zulman
	Summarizing	Highlight/Repeat Patient's Appraisal/Choice	Pieterse
		Providing Summaries to the Patient (Written or Audio)	Hart, Jefford
		Summarizing in the Encounter	Landmark
Approaches of CONGRUENCE	Adjusting & Tailoring	Adjust Approach Based on Patient's Needs, Values, Preferences	Ford'03, Hall, Jefford, Lown, Paiva, Visser, Zulman
		Tailor Options for the Patient	Elwyn, Feiring, Ford'03, Friedberg, Golden, Hart, McLeod, Paiva, Pieterse, Shepherd, Shortus, Van Humbeek, Zulman
	Balancing & Flexibility	Flexibility In Overall Approach to Care	Aita, Elwyn, Ford'02, Ford'03, Ford'06, McLeod, Shortus, Tracy, Van Humbeek, Vermunt, Visser
		Balancing Information, Issues, Needs, Power, and Responsibilities	Ford'03, Friedberg, Golden, Grub, Hisham, Jefford, Lown, McLeod, Paiva, Pieterse, Salter, Shortus