Clinician barriers and facilitators to heart failure advance care plans: a systematic literature review and qualitative evidence synthesis

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ABSTRACT

Background Clinicians hesitate to engage with advance care planning (ACP) in heart failure. We aimed to identify the disease-specific barriers and facilitators for clinicians to engage with ACP.

Methods We searched Medline, Embase, CINAHL, PubMed, Scopus, the British Nursing Index, the Cochrane Library, the EPOC register, ERIC, PsycINFO, the Science Citation Index and the Grey Literature from inception to July 2018. We conducted the review according to Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) guidelines. Two reviewers independently assessed original and empirical studies according to Critical Appraisal Skills Programme criteria. The SURE framework and thematic analysis were used to identify barriers and facilitators.

Results Of 2308 articles screened, we reviewed the full text of 42 studies. Seventeen studies were included. The main barriers were lack of disease-specific knowledge about palliative care in heart failure, high emotional impact on clinicians when undertaking ACP and lack of multidisciplinary collaboration between healthcare professionals to reach consensus on when ACP is indicated. The main facilitators were being competent to provide holistic care when using ACP in heart failure, a patient taking the initiative of having an ACP conversation, and having the resources to deliver ACP at a time and place appropriate for the patient.

Conclusions Training healthcare professionals in the delivery of ACP in heart failure might be as important as enabling patients to start an ACP conversation. This twofold approach may mitigate against the high emotional impact of ACP. Complex interventions are needed to support clinicians as well as patients to engage with ACP.

BACKGROUND

To be better prepared in the event of a health crisis, conversations about care choices and future care planning in heart failure are widely recommended.1–3 Advance care planning (ACP) is known to facilitate these conversations4 and may improve end-of-life (EOL) care outcomes. But a number of studies have shown that clinicians are hesitant to engage with ACP in clinical practice.5 Only the minority of eligible patients were given the opportunity of having these conversations.6 As a result, patient care in heart failure is affected.7 Only 37% of patients with end-stage heart failure were aware of a poor prognosis, merely 8% of patients and 44% of family members were told by clinicians that time was short, and 36% of these patients died alone.7 The barriers and facilitators for clinicians to engage with ACP in heart failure have not been systematically evaluated.

Past reviews looked at barriers to ACP or conversations in heart failure, but no review had rigorously assessed the qualitative evidence base for barriers and facilitators to engage clinicians with ACP in heart failure. Lund et al’s8 systematic review investigated the barriers and facilitators to the implementation of ACP focusing on their workability and integration in clinical practice. However, their review did not concentrate on heart failure and addressed only to some extent the barriers facing clinicians. The review by Barclay et al9 investigated the literature concerning conversations between professionals and patients suffering from heart failure but did not focus on barriers to ACP. The narrative synthesis of Momen and Barclay10 reviewed the extent to which there was evidence that
conversations with patients with heart failure occurred in practice and built on findings from Barclay’s work. Similarly, her narrative did not focus on barriers to the implementation of ACP. Slort et al.11 identified barriers and facilitators for the general practitioner (GP)—patient communication in palliative care. While some of their findings were relevant to this study, the authors did not focus on heart failure or on barriers to the implementation of ACP by clinicians. De Vleminck et al.12 did explore perceived factors hindering or helping GPs in engaging with ACP, but a focus on the disease-specific barriers to heart failure was missing. A qualitative synthesis of the evidence by Smeets et al.13 sought to identify barriers and facilitators for optimal care in heart failure from a GP’s perspective. But the study did only concentrate on the clinical management aspects of heart failure rather than on what might improve clinicians’ behaviour to initiate ACP. Consequently, a focus on ACP was lacking. Hence, the gap in the evidence was an identification of barriers and facilitators to the engagement of clinicians with ACP in heart failure.

AIM AND OBJECTIVES

The aim of this study was to conduct an exploratory systematic review of qualitative studies investigating the barriers and facilitators to the implementation of ACP by clinicians in heart failure.

The objectives were as follows:
- To identify the barriers and facilitators to the implementation of ACP by healthcare professionals in heart failure.
- To synthesise the evidence on recommendations on how to engage clinicians with ACP in heart failure.

METHODS

We conducted the review according to the Enhancing Transparency in Reporting the Synthesis of Qualitative Research statement.14 This included, but was not limited to, defining the research aims and objectives, developing a review protocol, conducting database searches, extracting data based on inclusion and exclusion criteria, assessing the methodological quality of studies and synthesising the evidence.15

Inclusion/exclusion criteria

Types of studies
We included studies that used qualitative study designs and reported original and empirical study data. Qualitative methods for data collection were focus groups, interviews, observational studies, surveys and document analysis. Studies had to address barriers and facilitators for healthcare professionals to engage with ACP in heart failure. Barriers and facilitators were defined as predisposing factors described by clinicians that either impede or promote their engagement with ACP.16 Studies describing other terminal illnesses but not heart failure were excluded from the primary analysis. Studies that described ACP for people with life-limiting illnesses that involved heart failure were included. Editorials and narrative reviews were excluded unless they presented original study findings.

Types of participants
Participants included were all healthcare professionals like GPs, primary care nurses, palliative care consultants and nurses, cardiologists, heart failure specialist nurses, providing end-of-life care (EOLC) for patients suffering from heart failure. Studies that solely focused on patients without any reference to healthcare providers were excluded from the review.

Types of interventions
ACP was defined as a process of formal decision-making that aimed at helping patients to make decisions about their future care.17 As such, ACP could provide an opportunity for clinicians to clarify a patient’s care preferences in anticipation of future loss of mental capacity. This could involve future treatment choices or resuscitation options. In this way, ACP was meant to reduce uncertainty about a future course of action.17

Types of outcome and healthcare setting
We included studies that primarily described the perceptions and experiences of healthcare professionals on barriers and facilitators to their engagement with ACP in clinical practice. The healthcare setting could be primary care, nursing homes, secondary care, hospital or hospices.

Search strategy and data sources
Studies were retrieved through systematic searches of electronic databases, screening reference lists and contacting authors. Together with a specialist health science librarian (Nia Roberts), we searched the following data sources: Medline, Embase, CINAHL, PubMed, Scopus, the British Nursing Index, the Cochrane Library, the EPOC register, ERIC, PsycINFO, Science Citation Index and the Grey Literature. We searched databases from their inception until July 2018. An example of a Medline search strategy is provided in online supplementary appendix 1. Additionally, we searched the reference lists of five reviews8 9 11–13 and all potential relevant cross-references and records to identify any other studies. Where required, we contacted the study authors or experts in the field for further information.

Data analysis
We elected to use a thematic synthesis approach which drew on the methods from thematic analysis of primary sources18 and managed these findings with the SURE framework.19 The SURE framework (online supplementary appendix 2) had been validated across a number of healthcare sectors as a systematic yet
Selection of studies

Two reviewers (SC, MS) independently assessed titles and abstracts of identified studies against inclusion criteria. Full text papers were retrieved if the content was potentially relevant to one or both authors. Two authors (MS, SC) evaluated whether these studies should be included in the review. Differences between reviewers were resolved by discussion. A list of excluded papers with reasons for their exclusion is given in online supplementary appendix 3.

Data extraction and management

Initially, we extracted the background information on each included study (study objectives, study design and methods, participants) and summarised these in tables. Following that, we designed a data extraction sheet that was informed by components of the SURE framework. Components of the data extraction focused on barriers and facilitators to implementing ACP by clinicians in healthcare systems. We extracted data from included studies and mapped them on to the relevant categories of the SURE framework.

Quality assessment

Two authors (MS, SC) independently assessed the quality of included studies by using the Critical Appraisal Skills Programme (CASP) quality assessment tool. We used its seven main quality criteria for assessment (online supplementary appendix 4). Each criterion was assessed with ‘yes’ or ‘no’. If the study did not present adequate information, the rating was ‘no.’ This resulted in a total quality score ranging from 0 to 7 after applying equal weights. Individual studies were categorised as high quality (ratings from 6 to 7), medium quality (ratings from 4 to 5) and low quality (scores ≤3). We excluded studies of poor quality and resolved differences by discussion.

Data synthesis and analysis

Findings were corroborated narratively using a thematic synthesis approach which drew on the methods from thematic analysis of primary sources, extending them to systematic reviews. Thematic synthesis was one of a number of methods suggested by the Cochrane Qualitative Review Methods Group where evidence was likely to be largely descriptive as opposed to highly theorised or conceptual. After reading the text of each study, we developed ‘descriptive themes’. We (MS, BW, JIM) discussed the set of descriptive themes which informed the categories of the SURE framework as a pragmatic approach that was designed to inform healthcare policy.

RESULTS

The literature search identified 2308 potentially eligible studies, and of these, 17 papers were included in the final qualitative synthesis (figure 1, PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow diagram). Most studies (n=11) were conducted in the United Kingdom. Two studies were undertaken in Australia, one in Canada, one in Sweden, the USA and Belgium. The majority of studies (n=13) included clinicians from primary care. A summary of included study characteristics is given in table 1.

Methodological quality of studies

Of the 17 papers, we rated 15 as high quality (CASP score 6–7) and 2 as medium quality (CASP score 4–5). One study was excluded due to low quality. The CASP quality ratings of the included studies are summarised in table 2.

Barriers and facilitators

We summarised the factors reported as barriers and facilitators for the engagement of clinicians with ACP in heart failure using the SURE framework (table 3). All barriers and facilitators at a clinician level were categorised under (1) knowledge and skills, (2) attitudes regarding ACP’s acceptability, appropriateness and credibility and (3) motivation to engage with ACP.

Barriers to clinicians

We identified the following key barriers to the engagement of clinicians with ACP in heart failure.

Knowledge and skills

One common reported barrier for clinicians to engage with ACP in heart failure was a lack of heart failure disease-specific knowledge which mainly...
Many times, this disease-specific barrier was aggravated by uncertainty about the prognosis of the illness which prevented ACP from taking place.26 30

Furthermore, healthcare professionals described a lack of knowledge about ACP in general,25 35 what ACP should contain or what the legal differences were between ACP and advance decisions to refuse treatment (ADRTs).27 35 This in turn made communication about ACP very challenging for clinicians. A number of studies described a lack of communication and negotiation skills in EOLC as a barrier to the implementation

Table 1 Characteristics of included studies

| Study ID         | Country          | Relevant study objectives                                                                                                                                                                                                 | Study design                                                                 | Participants                                                                                      | CASP quality assessment (Score) |
|------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------|
| Barnes (2006)26  | United Kingdom   | To explore attitudes of primary care professionals and older people toward communication of diagnosis, prognosis and symptoms in HF. 27 35 This in turn made communication between ACP and advance decisions to refuse treatment (ADRTs). | Focus groups with HCPs and interviews with patients                          | 39 GPs, 37 nurses, 2 health visitors, 1 nursing home manager, 41 patients with CHF               | High (6)                      |
| Bloomer (2013)24 | Australia        | To explore and identify the preparedness and ability of nurses to provide EOLC through the patient’s dying phase and their families. 36 37 This related predominantly to the complexity of available drugs or the use of implantable cardioverter defibrillator (ICDs) and cardiac resynchronization therapy (CRT). | Focus groups study with clinical nursing and management staff               | 12 nurses from an intensive care unit looking after cardiac and surgical patients             | High (6)                      |
| Boyd (2004)25    | United Kingdom   | To identify some barriers and facilitators for clinicians to engage in ACP with patients in their last phase of life. 38 39 This related predominantly to the complexity of available drugs or the use of implantable cardioverter defibrillator (ICDs) and cardiac resynchronization therapy (CRT). | Interviews and focus groups with patients, carers and clinicians              | 16 clinicians from primary and secondary care, social and palliative care specialists           | High (7)                      |
| Brooks (2017)    | Australia        | To explore the experiences of physicians and nurses on barriers and enablers to providing EOLC. 40 41 This related predominantly to the complexity of available drugs or the use of implantable cardioverter defibrillator (ICDs) and cardiac resynchronization therapy (CRT). | Focus group study                                                             | 11 physicians and 17 nurses at an intensive care unit                                        | High (6)                      |
| Close (2013)26   | United Kingdom   | To examine the experience of HF diagnosis of HCPs, nursing home staff and residents. 42 43 This related predominantly to the complexity of available drugs or the use of implantable cardioverter defibrillator (ICDs) and cardiac resynchronization therapy (CRT). | Qualitative interviews                                                        | 5 GPs, 3 HF nurses, 17 nursing home residents                                              | High (6)                      |
| De Vleminck (2014)27 | Belgium       | To identify barriers from a GP’s perspective to initiating ACP and to gain insight into any differences in barriers between cancer, CHF and dementia. 44 45 They were vividly described by GPs. | Five focus groups with GPs                                                   | 36 GPs looking after terminally ill patients                                            | High (6)                      |
| Dennir (2014)28  | United Kingdom   | To explore the optimal content and design of a trial on EOL intervention for advanced heart disease. 46 47 They were vividly described by GPs. | Community-based and hospital-based focus groups and interviews               | 11 primary and secondary care HCPs                                                           | High (6)                      |
| Fuat (2003)29    | United Kingdom   | To ascertain the beliefs and decision-making practices of GPs on the impact of EOLC on the management of CHF. 48 49 They were vividly described by GPs. | Focus group study                                                             | 30 GPs                                                                                         | Medium (5)                    |
| Glogowska (2015)30 | United Kingdom | To explore perceptions and experiences of HCPs caring for patients suffering from HF. 50 51 They were vividly described by GPs. | Qualitative interview study                                                  | 24 HCPs including GPs, cardiologists, geriatricians, HF specialist nurses                    | High (7)                      |
| Hancock (2014)31 | United Kingdom   | To explore changes in HCPs views about the diagnosis and management of HF. 52 53 They were vividly described by GPs. | Focus groups and a national survey                                           | 56 focus group participants (39 GPs, 4 cardiologists, 6 general physician, 7 HF nurses); 514 survey responses | High (7)                      |
| Hannatty (2002)32 | United Kingdom   | To identify doctors’ perceptions of the need for palliative care for HF and barriers to change. 54 55 They were vividly described by GPs. | Focus groups study                                                             | 34 GPs, cardiologists, geriatricians, medical and palliative care doctors                  | High (6)                      |
| Hayes (2015)33   | Canada           | To identify the potential challenges and opportunities to improve care for CHF in the community. 56 57 They were vividly described by GPs. | Clinician interview series                                                   | 28 HCPs including 5 GPs, 8 cardiologists, 8 nurses, 4 pharmacists, 3 admin staff              | High (7)                      |
| Hjelmfors (2014)34 | Sweden          | To describe nurses’ perspective on discussing EOL issues and prognosis with patients with CHF. 58 59 They were vividly described by GPs. | National survey                                                               | 111 HF nurses                                                                                  | High (6)                      |
| Murray (2015)35  | United Kingdom   | To document the barriers and facilitators to palliative care in the community. 60 61 They were vividly described by GPs. | European survey                                                               | Primary care HCPs from 20 European nations                                                    | High (7)                      |
| Ostertag (2006)36 | USA              | To identify concerns about EOLC among HCPs and members of the community. 62 63 They were vividly described by GPs. | Interview and focus group study                                             | 14 primary care physicians, 19 hospice staff, 18 nursing home staff, 19 carers               | Medium (5)                    |
| Selman (2007)37  | United Kingdom   | To investigate communication between staff, patients and carers on EOL issues for patients suffering from HF. 64 65 They were vividly described by GPs. | Semistructured qualitative interviews                                         | 20 patients with CHF, 11 carers, 6 palliative care clinicians and 6 cardiology clinicians   | High (7)                      |
| Seymour (2010)38 | United Kingdom   | To identify factors surrounding community nurses’ implementation of ACP and nurses’ educational needs. 66 67 They were vividly described by GPs. 68 69 They were vividly described by GPs. | Six focus group discussions and three workshops                               | 23 community nurses looking after patients affected by a terminal illness                    | High (7)                      |
of ACP. Euphemisms were seen as a way to avoid talking about heart failure as a diagnosis as well as the terminal nature of the disease. However, the use of euphemisms was generally not endorsed by healthcare staff.

Attitudes regarding ACP’s acceptability, appropriateness and credibility

One attitude emerging as a barrier in implementing ACP by clinicians in heart failure was the perception that in doing so a healthcare professional would admit defeat and treatment failure. This was associated with a considerable negative, emotional impact. Another major factor that discouraged clinicians from engaging with ACP was a lack of resources, mainly time, qualified staff and the right opportunity to address such a sensitive topic. Additional barriers to motivation of healthcare professionals to carry out ACP were the competing demands of their clinical role. Workloads and stress often prevented some clinicians from undertaking ACP in heart failure.

Facilitators for clinicians

Studies reported a number of significant facilitators to engage clinicians with ACP in heart failure.

Knowledge and skills

Being competent in managing the complexities of palliative care in heart failure was a key factor for clinicians to engage with ACP. Other studies reported that a robust knowledge of drug regimens and the issues surrounding the use of ICDs and CRTs boosted a clinician’s confidence to start the ACP process. Health-care professionals were also more likely to deliver ACP if they had a good understanding about what were the essential criteria of ACP. This was especially relevant when understanding the legal differences between ACP, ADRTs or living wills.

Additional barriers to motivation of healthcare professionals to carry out ACP were the competing demands of their clinical role. Workloads and stress often prevented some clinicians from undertaking ACP in heart failure.

Motivation to engage with ACP

Not wanting to cause alarm to patients or carers was a key motivational barrier for clinicians not to engage with ACP. They feared that in delivering ACP, healthcare professionals would destroy hope. Another study reported that their own fear of talking about death and dying was another reason for not speaking to patients about the last phase of life. Some clinicians feared that starting an ACP discussion would indicate to a patient that they would give up on them and consequently damage their doctor–patient relationship. Another major factor that discouraged clinicians from engaging with ACP was a lack of resources, mainly time, qualified staff and the right opportunity to address such a sensitive topic. Additional barriers to motivation of healthcare professionals to carry out ACP were the competing demands of their clinical role. Workloads and stress often prevented some clinicians from undertaking ACP in heart failure.

Table 2 CASP quality assessment

| Study ID         | CASP question addressed: Yes (+), No (o) |
|------------------|------------------------------------------|
| Barnes (2006)    | + + + + + + o +                          |
| Bloomer (2013)   | + + + + + + o                            |
| Boyd (2004)      | + + + + + + + +                          |
| Brooks (2017)    | + + + + + o +                           |
| Close (2013)     | + + + + + o +                           |
| De Vlemink (2014)| + + + + + o +                           |
| Denvir (2014)    | + + + + + o +                           |
| Fuat (2003)      | + + + + + o +                           |
| Glogowska (2015) | + + + + + + + +                         |
| Hancock (2014)   | + + + + + + + +                         |
| Hanratty (2002)  | + + + + + + + +                          |
| Hayes (2015)     | + + + + + + o +                         |
| Hjelmfors (2014) | + + + + + + o +                         |
| Murray (2015)    | + + + + + + o +                         |
| Ostertag (2008)  | + + + + + o +                           |
| Selman (2007)    | + + + + + + + +                         |
| Seymour (2010)   | + + + + + o +                           |
| CASP, Critical Appraisal Skills Programme. |
Additionally, starting the ACP process was perceived as being easier when primary and secondary healthcare teams collaborated well and had reached consensus on a patient.25 31 34 41

Motivation to engage with ACP
One of the key motivations for clinicians to deliver ACP was being able to provide good or holistic EOLC. Some clinicians thought that ACP was able to improve the quality of life for patients and their carers.27 34 ACP gave clinicians the stimulus to be open and transparent27 and created an opportunity to prepare patients for their last phase of their life.38 A few studies described that an increase in human resources including more staff time and finances were additional motivational factors to deliver ACP.31 33 34 To resolve the lack of time, some healthcare professionals started ACP in the context of a home visit34 or by booking a double clinic appointment. Others arranged follow-up visits after the initial conversation to address any unresolved issues.35 39

**DISCUSSION**

This review synthesised the qualitative evidence from 17 primary studies on barriers and facilitators to the engagement of clinicians with ACP in heart failure. Systematic review methods were based on recommended standards to enhance transparency and reporting for qualitative evidence.15

Significant themes for barriers to the engagement of clinicians with ACP in heart failure were the following:

- Lack of disease-specific knowledge about palliative care in heart failure.
- Lack of skills in communicating ACP with a patient suffering from heart failure.
- Lack of collaboration between healthcare professionals to reach consensus on when ACP should be initiated.
- The high emotional impact on the healthcare professional when undertaking ACP.

Important themes for facilitators to help clinicians engage with ACP in heart failure were the following:

- Being competent in the use of ACP and the clinical management of end-stage heart failure.
- Being able to provide holistic EOLC when using ACP.
Having a trusting and long-term relationship with the patient and carers.

A patient initiating an ACP conversation.

Being able to deliver ACP at a time and place appropriate for the patient.

Comparison with existing literature
Several of our findings on barriers and facilitators concurred with those from other reviews: the complexity and inherent uncertainty of some aspects of end-stage heart failure management,

skills in initiating ACP and communicating EOL issues or having sufficient resources and a functioning network of collaborations between medical specialties applied to our results as well. Educating and training clinicians in the delivery of ACP should help them become more skilled with the process of initiating these conversations. Being able to conduct these discussions was seen as important, since there were suggestions that supportive or palliative care for patients with heart failure should be made available at all stages of the disease trajectory. Having these conversations as a normal part of heart failure management was balanced by the precaution to adjust the dialogue to a patient’s need for information to avoid a loss of hope or an increase in anxiety. This applied particularly to patients who did not want to talk about EOL issues or engage with ACP. Again, this precaution had to be considered in the context that a number of clinicians avoided disclosing the diagnosis of heart failure all together or evaded answering any questions about the prognosis of the illness. But the majority of patients preferred open and honest information about their condition while maintaining a sense of hope. So, the training of clinicians in communicating ACP sensitively seemed even more important.

Strengths and limitations
This was the first qualitative synthesis specifically addressing barriers and facilitators for engaging clinicians with ACP in heart failure. Several of our findings concurred with other reviews. However, the global transferability of our qualitative results may be limited since the majority of included studies were based in the United Kingdom. Some studies included other life-limiting illnesses like cancer or chronic obstructive pulmonary disease (COPD) in addition to patients suffering from heart failure. Some studies included other life-limiting illnesses like cancer or COPD in addition to patients suffering from heart failure. Consequently, our findings may have been affected by barriers and facilitators to the implementation of ACP that exist in other EOL conditions and not just heart failure.

The SURE framework proved to be helpful in facilitating an understanding of the barriers and facilitators to the implementation of ACP in the published literature. This approach facilitated the synthesise of findings from the thematic analysis in a systematic way according to healthcare professionals’ knowledge and skills, their attitudes regarding ACP’s acceptability, appropriateness and credibility and their motivation to engage with ACP. Once we achieved consensus on the barriers and facilitators in included papers, mapping these to the SURE structure was efficient and straightforward.

Conversely, using the SURE framework largely centred the analysis of thematic findings on barriers and facilitators to the implementation of ACP by clinicians. This approach may have limited the diversity of qualitative data and narrowed the complexity of the phenomenon under investigation to factors affecting the implementation of the intervention by clinicians. Consequently, there may have been a risk that other themes outside the scope of SURE were not sufficiently considered like the wider political or cultural context of ACP.

A novel finding from this review suggests that patients may hold the key in engaging clinicians with ACP. Their initiative in starting an ACP conversation might have the potential to mitigate against the high emotional impact on healthcare professionals. The literature suggests that, for example, question prompt lists (QPLs) have the potential to empower patients to initiate EOL conversations with their healthcare provider. If a patient initiates the discussion about ACP in heart failure, clinicians may feel less reticent about raising the topic by responding to a patient’s question. A number of studies report a small but significant increase in questions by patients about diagnosis, prognosis and treatment when a QPL had been used. Most of these studies investigated the effect of QPLs in a cancer setting. Further research for the effect of QPLs on patients suffering from heart failure is still outstanding since these studies investigated the effect of QPLs in a cancer setting.

Conclusions and recommendations
This review has shown that clinicians often lack disease-specific knowledge about the clinical management of advanced heart failure and the confidence to engage with EOL issues and ACP. Available evidence suggests that training clinicians should include skills to identify the level of a patient’s need for information, clarifying a patient’s care preferences and values and being able to engage a patient in a conversation on all available treatment options. There are a number of suggested methods to achieve these skills which may include interactive educational meetings involving role play preferably facilitated by local opinion leaders and experts in the field of heart failure to enhance clinicians’ engagement.

Based on current findings, training clinicians in the delivery of ACP in heart failure might be equally important to assisting patients to start an ACP conversation. This twofold approach may mitigate against the
high emotional impact of ACP on healthcare professionals. Complex interventions are needed to support both, clinicians as well as patients, to engage with ACP in heart failure.

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Contributors MS had the idea for the review, wrote the protocol, extracted, evaluated and analysed the data, wrote, critically revised and submitted the entire manuscript. BW critically supervised the conduct of the review and revised the entire manuscript. JIM critically revised the study protocol, the narrative synthesis as well as the SURE analysis of barriers and facilitators. SC independently screened papers, extracted data and evaluated the study quality according to the CASP assessment tool. All coauthors approved the version to be published.

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