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Studying both patient and staff experience to investigate their perceptions and to target key interactions to improve: a scoping review.

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3 **Studying both patient and staff experience to investigate their perceptions**
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6 **and to target key interactions to improve: a scoping review.**
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30 **ABSTRACT**
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33 **Objective** The improvement of Patient Experience (PE) is related to the experience of staff
34 caring for them. Yet there is little evidence as to which interactions matter the most for both
35 patients and staff, or how they are perceived by them. We aimed to summarise the interactions
36 and the perceptions between patients and staff from studies using both patient and staff
37 experience data in healthcare institutions.
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43 **Design** Scoping review.
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47 **Methods** We conducted a scoping review including studies dealing with patient experience and
48 staff experience. Two authors independently reviewed each title/abstract and the selected full-
49 text articles. A list of variables (objective, study design, data sources, tools used, results,
50 interactions, perceptions, actions) was charted and summarised using a narrative approach
51 including both qualitative and quantitative data. Studies were grouped according to their
52 objective and the key interactions summarised according to this stratification. The perceptions
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3 of patients and staff were identified in the results of selected studies and were classified into 4
4 categories: commonalities and disagreements of perceptions, patients' perceptions not
5 perceived by professionals, and professional's perceptions not perceived by patients.
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10 **Results** A total of 42 studies were included. The stratification of studies by type of objective
11 resulted in 6 groups that allowed to classify the key interactions (n=154) identified in the results
12 of the selected studies. A total of 128 perceptions related to interaction between patient and
13 staff were reported with the following distribution: commonalities (n=35), disagreements
14 (n=18), patients' perceptions not perceived by professionals (n=47), and professional's
15 perceptions not perceived by patients (n=28). We separated positive and negative perceptions,
16 which resulted in 7 scenarios, each with actions that can be carried out for one or both
17 populations to overcome barriers.
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28 **Conclusion** The study of both patient and staff experience allows to identify the actions that
29 can be taken to change the perceptions of patients and staff.
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32 33 **Strengths and limitations of this study**

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35 • This review adds a strategic value to studying both patient and staff experience, by
36 identifying the different types of perceptions according to the existing literature.
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38 • This review did not exclude any study according to quality.
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40 • The search and inclusion process were conducted by two reviewers which adds to the
41 validity of data collection.
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43 • Given the breadth of this topic, we may have missed relevant studies that did not include
44 a required search term.
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46 • The lack of a shared definition and dimensions of staff experience prevents us from
47 being fully exhaustive on the subject and the heterogeneity of definition of staff
48 experience could bring in to question the validity of pooling certain data.
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3 **Key words:** patient experience; staff experience; scoping review; interactions; perceptions.
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6 7 **BACKGROUND** 8

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10 Patient Experience (PE) has been recognised as a major lever to improve healthcare systems,[1].
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12 However, there are few studies that consider PE and the experience of the persons who work
13
14 with patients every day,[2]. While it has been shown that the five most important components
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16 of PE are the interactions with staff,[3], and that both patient and staff experiences are
17
18 related,[4].
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21 Although there is an internationally recognised definition of PE,[1], this is not the case for staff
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23 experience in healthcare studies; it is, however, defined by the UK National Health Service
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25 (NHS) as “*attitudinal or psychological factors that determine how an individual employee feels*
26
27 *about their job, their colleagues and their organisation*”,[4], that is characterised by staff
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29 engagement, motivation, satisfaction, morale, work pressure, stress and intention to leave, and
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31 management behaviour and practices at work,[4].
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35 The study of both experiences could, however, allow the identification of key interactions
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37 (“*touchpoints of people, processes, policies, communications, actions, and environment*”:[1])
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39 for patients and/or staff, and to investigate the perceptions of patients and staff of these
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41 interactions (“*what is recognized, understood, and remembered*”:[1]). This could allow to
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43 understand which interactions mattered the most for both patients and staff, and how they are
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45 perceived. This is of importance as same event or situation can be perceived differently by the
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47 patient and the staff,[5].
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51 We therefore aimed to summarise the interactions and the perceptions from studies using both
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53 patient and staff experience data in healthcare structures. The secondary objectives were to
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55 describe the characteristics of the studies (methods implemented, tools used, quality and
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3 limitations, term used for staff experience) and the actions implemented to improve the
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5 interactions.
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10 **METHODS**

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12 We conducted a scoping review. The scoping review is a synthesis technique of knowledge that
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14 is used when: it is difficult to identify a narrow review question; studies in the reviewed sources
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16 are likely to have employed a range of data collection and analysis techniques; no prior
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18 synthesis has been undertaken on the topic,[6].
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22 **Data Sources.** We searched PubMed and Google Scholar in July 2021 for studies dealing with
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24 PE and staff experience, that used patient and staff data, and that were published between 1
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26 January 2007, and 21 July 2021. Six major search terms related to staff experience were used:
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28 staff experience, employee experience, clinician experience, physician experience, professional
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30 experience, and workforce experience. A combination of multiple key words and search terms
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32 was used (see Appendix 1).
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35 **Inclusion/Exclusion Criteria.** Studies fulfilling the following criteria were included: (i) to
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37 focus on PE defined as “*the sum of all interactions, shaped by an organization’s culture, that*
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39 *influence patient perceptions, across the continuum of care*”,[1]; (ii) to include patient and staff
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41 data in a common setting (no geographical or type of patient care restriction); (iii) to present
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43 original data. There was no restriction on the type of healthcare institution (public, private,
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45 academic). Studies published in a language other than English or French, that did not focus on
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47 PE (but on other concepts such as patient satisfaction, engagement, etc.), that focused only on
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49 trainees (residents, medical students), that only concerned staff behaviour and communication
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51 were excluded; as were opinion papers, presentations of protocol/study framework, thesis, and
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53 case reports.
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3 **Study Selection and Data Analysis.** Two authors (MC; SC) independently reviewed each
4 title/abstract and the selected full-text articles.
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8 The following variables were charted: year of publication, country, term used for staff
9 experience (physician experience, professional experience, etc.), aim/objective/purpose, study
10 design (qualitative, quantitative, or mixed methods), data sources, tools used, results (key
11 interactions and perceptions of patients and staff were dissociate), actions, conclusions, and
12 limitations. Substantial heterogeneity was anticipated in study design, measures, interventions,
13 and outcomes reported in the eligible studies, which would render it impossible to analyse
14 pooled data; data were therefore summarised using a narrative approach including both
15 qualitative and quantitative data.
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19 Studies were grouped according to their objective (irrespective of the context), and the key
20 interactions summarised according to this stratification. The perceptions of patient and staff
21 were identified in the results of selected studies; these were classified into 4 categories: (i)
22 commonalities (when patients and staff have the same perception of a same event, situation,
23 interaction, etc.), (ii) disagreements (when patients and staff do not have the same perceptions),
24 (iii) patients' perceptions not perceived by professionals, and (iv) professional's perceptions
25 not perceived by patients. Only clear and non-anecdotal perceptions were retained, i.e. those
26 that presented an unambiguous formulation and that involved more than one individual.
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28 Commonalities and disagreements were summarised in a table and formulated in a way that
29 does not require contextual elements to understand them.
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33 **Quality Assessment.** Two authors (MC; SH) independently abstracted and assessed the quality
34 of each study. The studies were assessed according to their methodology (qualitative,
35 quantitative, mixed) by using the appropriate analysis grid (Critical Appraisal Skills Program
36 [CASP] Qualitative Research Checklist; Effective Public Health Practice Project [EPHPP]
37 Quality Assessment Tool; Mixed Methods Appraisal Tool [MMAT]).
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3 **Patient and Public Involvement.** Patients and the public were not involved in this research.
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8 **RESULTS**

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10 **Selected studies.** The initial search identified 626 records; there were 6 duplicates that were
11 excluded, as were 407 records following the screening phase, and 171 after abstract and full-
12 text assessment. A total of 42 studies were included (Figure 1).
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17 **Country and timeline.** Most studies were conducted in the UK (n=18) or in the USA (n=17).
18 More than half of the studies (n=25) were published in the last 5 years (between 2017 and 2021).
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21 **Methodology and tools used.** The study design was qualitative (n=16), quantitative (n=15), or
22 mixed methodology (n=11). Data was collected using surveys (n=28), interviews (n=20),
23 observation (n=8), focus groups (n=5), workshop or co-creation sessions (n=3), document
24 analysis (n=2), time and/or motion baseline (tools to measure the time spent, the number of
25 steps) (n=2).
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33 **Quality Assessment.** According to the CASP Qualitative Research Checklist, the quality of
34 qualitative studies (n=16) was strong for 10, moderate for 3, and weak for 3. The limitations of
35 the studies with quality issues were: insufficiently rigorous data analysis (n=5); no clear
36 statement of findings (n=5); no description of biases of the relationship between researcher and
37 participants (n=4); lack of detailed recruitment strategy (n=4); lack of description on the data
38 collection (n=1); no consideration of ethical issues (n=1).
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According to the EPHPP Quality Assessment Tool, the quality of quantitative studies (n=15)
was strong for 9, moderate for 3, and weak for 3. The quality issues were: selection biases
(n=6); method not appropriate (n=4); lack of detailed recruitment strategy (n=1); lack of
description on the data collection (n=1); no clear statement of findings (n=1).

According to the MMAT appraisal tool, the quality of mixed method studies (n=11) was good
for 4, strong limitations for 4, and poor for 3. The 4 studies with strong limitations raised two

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3 issues: lack of detailed of divergencies and inconsistencies between qualitative and quantitative
4 results (n=4); lack of description of the quantitative method and results (n=3). The 3 studies in
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6 the poor category had an insufficiently detailed method as the articles were the presentation of
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8 the application of a programme.
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11 **Staff Experience.** In the 42 studies, the terms used more than once were: staff experience
12 (n=11), clinician experience (n=5), and physician experience (n=3).
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15 **Aims, results, and key interactions.** A total of 154 key interactions were identified in the
16 results of the 42 studies included. The studies were classified into 6 groups according to their
17 objective (irrespective of the context). (i) The studies that explored associations between
18 patient and staff experience (n=11) described key interactions (n=59) for patient or staff that
19 have an impact on the other population experience (e.g. work-related stress was negatively
20 associated with patient experience). (ii) The studies that measured the impact of a change of
21 tool or process (n=11) presented key interactions improvements (e.g. reduction in time spent
22 on patient related administration) or failures (e.g. technical problems; n=11). (iii) The studies
23 that measured the impact of a change of environment (n=3) found both improvements (e.g.
24 better patient privacy) and deteriorations (e.g. patient felt isolated) of their key interactions
25 (n=23). (iv) The studies that aimed to uniquely describe the experience of patients and
26 professionals (n=11) identified the key interactions (n=35) for patients and/or professionals
27 (e.g. waiting for medical treatments or procedures). (v) The studies that explored the
28 perceptions of patients and professionals regarding a type of therapy or care management (n=3)
29 identified key interactions (n=18) that were barriers to successful care management or therapy
30 (e.g. medication issues encountered by the patients). (vi) The studies that evaluated the impact
31 of a specific nurse role on the experience of patients and staff (n=3) reported improvements
32 (e.g. reduction of waiting time) in their key interactions (n=8) (Table 1).
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Table 1. List of interactions identified in the results of selected studies, classified by groups of objective of the selected studies.

<p>1. Explore associations between patient and staff experience (n=11 studies; n=59 key interactions identified). [4,7-16]</p> <p><u>Associations between staff and patient experience (n=3 studies; n=18 key interactions identified):</u></p> <ul style="list-style-type: none"> - Factors positively associated with patients' responses: support from immediate managers (n=2); witnessing potential errors (n=2); effectiveness of team working (n=1); opportunities for career progression or promotion (n=1); satisfaction about the quality of work and patient care (n=1); satisfaction about the use of patient feedback (n=1); and availability of hand-washing materials (n=1). - Factors negatively associated with patients' responses: work-related stress (n=1); working extra hours (n=1); work pressure felt by staff (n=1); poor staffing (n=1); issues with ward leadership (n=1); poor co-worker relationships (n=1); staff experiencing physical violence from colleagues (n=1); staff experiencing discrimination (n=1); and staff witnessing potentially harmful errors, near misses or incidents (n=1). <p><u>Associations between staff burnout and patient experience (n=4 studies; n=13 key interactions identified):</u></p> <ul style="list-style-type: none"> - Neither burnout nor engagement on their own was associated with quality or patient experience measures (n=3). - Physician burnout had a negative impact on patient-reported experience of patient-provider communication (n=1). - Clinicians reporting more frequent symptoms of burnout reported less ability to decompress and less feeling of activation. Individual elements of decompression (n=1) and activation (n=1) were associated with patient experience. - Clinicians feeling that their work makes a difference (n=1) and believing it is meaningful (n=1) were positively associated with patient experience with their care provider. - Elements of decompression such as being able to free one's mind from work (n=1) and being able to disconnect from work communications such as e-mails (n=1) were negatively associated with patient experience with their care providers. - Clinicians with high burnout but with high engagement had the highest average ratings for all 3 patient experience domains: clinician communication (n=1); overall rating of the clinician (n=1); overall rating of the clinic (n=1). <p><u>Associations between physician behaviour, work processes, and productivity and patient experience (n=1 study; n=17 key interactions identified):</u></p> <ul style="list-style-type: none"> - Characteristics of physicians with strong productivity and strong patient satisfaction were: focused on teaching and explanations (n=1); conveys warmth from the start (n=1); well-planned flow of visit with focus on patient's agenda (n=1); controlled script with clear parts (n=1); extremely personable (n=1); always looking for buy-in from the patient that the patient fully understands (n=1); recap the patient history (n=1); confident but not arrogant (n=1); finishes dictation and coding each day (n=1); clinical staff enters orders and prepares after-visit summary (n=1). - Characteristics of physicians with weak productivity and weak patient satisfaction: lack of being there emotionally (n=1); lack of smiling (n=1); abrupt actions (n=1); behaviour changes when not interested in the patient's case (n=1); patients kept waiting; no handshake (n=1); sense of interrogating to get a diagnosis (n=1); no attempt to match the patient's energy (n=1). <p><u>Associations between patient-physician communication about pain and patient and physician visit experience (n=1 study; n=5 key interactions identified):</u></p> <ul style="list-style-type: none"> - Two communication variables—patient-physician disagreement (n=1) and patient requests for opioid dose increases (n=1)—were each associated with both worse ratings of patient experience and greater physician-reported visit difficulty. - Patient desire for increased pain medicine was positively associated with both worse ratings of patient experience and greater physician-reported visit difficulty (n=1). - Greater pain severity (n=1) and more patient questions (n=1) were each associated with greater physician-reported visit difficulty, but not with patient experience.
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<p><u>Associations between staff civility climate and civility towards patients (n=1study; n=5 key interactions identified):</u></p> <ul style="list-style-type: none"> - Positive association between civility climate and civility toward patients (n=1). - Direct effect of civility climate on overall hospital rating (n=1); intent to recommend (n=1); and willingness to return (n=1) and an indirect effect mediated by civility toward patients (n=1). <p><u>Associations between patient experience and patient-physician racial/ethnic and gender concordance (n=1; n=1 key interactions identified):</u></p> <ul style="list-style-type: none"> - Compared with racially/ethnically concordant patient-physician dyads, discordance was associated with a lower likelihood of physicians receiving the maximum score (n=1).
<p>2. Measure the impact of a change of tool or process (n=11 studies; n=11 key interactions identified). [17-27]</p> <ul style="list-style-type: none"> - The change of tool (e.g., mobile devices) or process (e.g., hospital discharge process) had a positive impact on: feedback from patients and staff (n=2); reduction in time spent on patient related administration (n=2); collaborative work between professionals (n=1); patient grievances (n=1). - The change negatively impacts the emergency admissions (n=1) but positively impacts elective admissions (n=1) and outpatient attendance (n=1). - Technical problems experienced by patients (=1) and clinicians (n=1).
<p>3. Measure the impact of a change of environment (n=3 studies; n=23 key interactions identified). [28-30]</p> <ul style="list-style-type: none"> - The impact of a change of environment (e.g single rooms) were positively reported by patients for: comfort (n=1); privacy (n=1); confidentiality (n=1); flexibility for visitors (n=1); trust of the physicians (n=1); better experience with their care (n=1); better interactions with physicians (n=1); better access to care (n=1); better care coordination (n=1); better involvement in their care (n=1). - Patients used more e-mail, phone, and specialist visits, but fewer emergency services (n=1). - The impact of a change of environment were positively reported by staff for: patient comfort (n=1); patient confidentiality (n=1); patient care (n=1); relationships with patients (n=1); comprehension of environmental and social factors affecting patients (n=1); reduction of staff burnout (n=1). - The negative impact for patients was the feeling of isolation (n=1). - The negative impact for staff were: worse for visibility (n=1); surveillance (n=1); teamwork (n=1); monitoring and keeping patients safe (n=1); increased walking distances (n=1).
<p>4. Investigate the experience of patients and professionals (n=11 studies; n=35 key interactions identified). [31-41]</p> <p><u>Factors, themes, and issues that are key concerns for patient and/or professionals, and that could improve patient and/or staff experience:</u> communication and information flow (n=10); environmental context and resources (n=8); personal relationships between patient and staff (n=6); waiting for medical treatments or procedures (n=3); staff morale (n=2); treatment of condition (n=2); organisational and administrative issues (n=1); patient's transport solution (n=1); patient's transition from home to hospital (n=1); lack of a consistent approach in identifying and preparing patients for treatment (n=1).</p>
<p>5. Explore the perceptions of patients and professionals regarding a type of therapy or care management (n=3 studies; n=18 key interactions identified). [42-44]</p> <p><u>Key barriers to successful care management or therapy:</u> patients' personal constraints (n=3); patients' social constraints (n=3); communication failures encountered by the patients (n=2); medication issues encountered by the patients (n=3); healthcare system barriers encountered by the patients to collaborate with their clinicians (n=2); lack of knowledge of patient (n=2); patients' feeling isolated with their symptom (n=1) and patient's feeling stress (n=1); environmental context and resources (n=1).</p>
<p>6. Evaluate the impact of a specific nurse role (e.g advanced nurse practitioner) on the experience of patients and staff (n=3 studies; n=8 key interactions identified). [45-47]</p> <p>Improved communications between the patient and the service (n=2); positive impact on care (n=1); better coordination of services (n=1); patients described an increased level of confidence in the service (n=1); reduction in unnecessary hospital admissions (n=1); reduction of waiting time (patient's perceptions; n=1); improved practice (n=1).</p>

Commonalities and disagreements in perceptions. A total of 128 perceptions related to interaction between patient and staff were reported in the 42 included studies. The perceptions were commonalities (n=35), disagreements (n=18), patients' perceptions not perceived by professionals (n=47), and professional's perceptions not perceived by patients (n=28). The commonalities (n=35) were either *win-win* interactions (n=21) where patients and staff both had positive perceptions, or *deadlock* interactions (n=14) with negative perceptions on both sides. Disagreements in perceptions (n=18) were either staff having a positive perception while patients had a negative perception (n=15) or the converse (n=3). In the first situation, staff thought they were doing the right thing (e.g. providing sufficient information, providing clear information, etc.) while patients reported negative perceptions on these. In the second situation, patients reported good patient experience while staff reported poor experience or assumed that the patient had a poor experience. The patients' perceptions not perceived by staff (n=47) were either positive (n=8) or negative (n=39). These perceptions either concerned staff, processes, policies, or environment. The perceptions concerning staff were blind spots of the staff on their attitudes (e.g. importance of smiling), patients' fears that prevent them from interacting as they would like with staff (e.g. patients were afraid to be judged by staff), and aspects that patients hid from staff (e.g. concealment of significant symptoms). The professional's perceptions not perceived by patients (n=28) had a focus on issues encountered to deliver a good patient experience (Table 2).

Table 2. Summary of patient and staff perceptions in the selected studies.

Commonalities (n=35).
<i>Positive perceptions on both sides (n=21).</i>
<u>Reassurance (n=5):</u> Patients needed reassurance and felt that staff were helping them to feel better. Staff perceived the need for reassurance and tried to be attentive and sensitive to the patients.
<u>Popularisation of explanations (n=4):</u> Patients had a better understanding thanks to a popularisation of explanations. Staff tried to facilitate the understanding of the patients (choice of words, use of sketches, etc.).
<u>Quality of work and patient care (n=2):</u> Patients were satisfied with the quality of care they received. Staff were satisfied with the quality of work and patient care they were able to deliver.
<u>Personal relationships (n=2):</u> Both patients and staff reported that the knowledge of the interlocutor provided a better interaction and the development of personal relationship.

<p><u>Discretionary care (n=1)</u>: Patients were cognisant of their vulnerability to becoming seen by staff as difficult or demanding patients and sought to manage their relationships with staff accordingly. Staff reported having patients for whom they preferred to care for and by extension offer good care selectively to them.</p> <p><u>Communication facility (n=1)</u>: Patients and physicians reported being comfortable discussing primary non-compliance.</p> <p><u>Feeling care (n=1)</u>: Patients reported that their clinicians made them feel cared for. Clinicians tended to treat patients in the same way as family members.</p> <p><u>Listening (n=1)</u>: Patients felt to be listened to and understood. Staff took time to listen non-judgmentally.</p> <p><u>Professionalism (n=1)</u>: Patients described the professionalism of their clinicians. Clinicians were aware of their professional image and tended to appear calm regardless of the circumstances.</p> <p><u>Respect and grievances (n=1)</u>: Patients reported better communication with staff and better courtesy and respect from staff. Staff reported hearing fewer grievances from patients.</p> <p><u>Skills training (n=1)</u>: Professionals provided progressive patients skills training. Patients felt more aware and described an increase of their knowledge.</p> <p><u>Summary notes (n=1)</u>: Both patient and staff felt that summary notes helped patients to better understand their care, through both improved recall and enhanced communication.</p>
<i>Negative perceptions on both sides (n=14).</i>
<p><u>Time constraints (n=3)</u>: Patients and staff felt that the staff's time constraints affected the availability of staff, the interactions with the patients, and the quality of service.</p> <p><u>Administrative issue (n=2)</u>: Patients and staff identified similar administrative issues impacting interactions and care delivery.</p> <p><u>Organisational issues (n=2)</u>: Patients and staff identified similar organisational issues impacting the interactions with patients and the quality of service.</p> <p><u>Absence of interaction (n=1)</u>: Reciprocal dynamic where both patients and staff withdrew from interactions, having felt the other did not want to engage with them.</p> <p><u>Burnout (n=1)</u>: Converging views of patient and staff on the impact of staff burnout on communication.</p> <p><u>Confidentiality (n=1)</u>: Both patients and staff reported privacy issues during the interactions.</p> <p><u>Discretionary care (n=1)</u>: Patients reported dehumanising aspects of their care; staff saw these patients as difficult or demanding.</p> <p><u>Environment (n=1)</u>: Patients and staff highlighted that noisy, distracting, and demanding environment impact on the therapeutic quality of one-to-ones.</p> <p><u>Lack of staff (n=1)</u>: Patients and staff felt that the lack of staff affects the availability of nursing staff and impact on rehabilitation.</p> <p><u>Respect of patient intimacy (n=1)</u>: Both practitioners and patients reported negative perceptions on the respect of patients' intimacy.</p>
Disagreements (n=18).
<i>Staff had a positive perception while patient had negative perception (n=15).</i>
<p><u>Diverging views on the amount of information (n=4)</u>: Patients were unaware of information, had to ask for more information while staff thought they deliver enough information.</p> <p><u>Diverging views on the quality of information (n=3)</u>: Patients were confused about some aspect of disease process, role of medications, or treatment plan while staff thought patients were fully aware of them.</p> <p><u>Divergences in expectations (n=3)</u>: Patients wanted to talk about different points (quality of life, different health issues, family, ...), while physicians focused on the characteristics of the disease and asked very specific question.</p> <p><u>[Ambulance Service] Diagnosis (n=1)</u>: Patient did not want to hear diagnosis, while clinicians assumed that patients expected them to offer a diagnosis and felt that they had a duty to be honest to patients.</p> <p><u>Disparity between staff self-reported care performance and patient rated care performance (n=1)</u>: Staff consistently rated the patient care they provided much higher than the ratings of the patients themselves.</p> <p><u>Loneliness and anxiety (n=1)</u>: Patients felt loneliness and anxiety, specifically between diagnosis and commencement of treatment, when interactions with health professionals were minimal. Health professionals perceived patients to be under this level of stress.</p> <p><u>Pharmacological approach (n=1)</u>: Management of condition was influenced by the clinical condition and was pharmacologically driven. Patient lacked understanding of the pharmacological approach and perceived a loss of control.</p> <p><u>Wrong assumption (n=1)</u>: Elderly patients wanted to talk about sexual function. Health professionals indicated that older patients were not interested in sexual rehabilitation.</p>
<i>Staff had a negative perception while patient had positive perception (n=3).</i>
<p><u>After implementing a program (n=1)</u>: Patient reported a more positive experience with staff while staff did not report reduced barriers with patients or a better care experience.</p> <p><u>Telemedicine 1/2 (n=1)</u>: Patients wanted and were comfortable doing telemedicine while professionals thought patient were not ready for it.</p> <p><u>Telemedicine 2/2 (n=1)</u>: Non shared satisfaction about telemedicine. High level of satisfaction was reported by patients, while clinicians reported dissatisfaction due to technical problems and complexity of the platform.</p>
Patients' perceptions not perceived by staff (n=47).
<i>Positive perception (n=8).</i>
<p><u>Staff knowing the patient (n=1)</u>: Patients said they felt reassured when staff clearly knew about them.</p>

<p><u>Personable (n=1)</u>: Patients were satisfied when physicians were extremely personable, connected with every patient.</p> <p><u>Recap history (n=1)</u>: Patients were satisfied when their physicians recapped their history.</p> <p><u>Staff confidence (n=1)</u>: Patients were satisfied when their physicians were confident but not arrogant.</p> <p><u>Warmth (n=1)</u>: Patients were satisfied when their physicians conveyed warmth from the start.</p>
<i>Negative perception (n=39).</i>
<p><u>Waiting (n=6)</u>: Patients had to wait for medical treatments or procedures or results. Staff seemed to be unaware of this issue.</p> <p><u>Quality of information (n=3)</u>: Patients were confused about some aspect of disease process, role of medications, or treatment plan. Staff did not mention information issues.</p> <p><u>Involved in decisions (n=2)</u>: Patients felt that their physician was or was not involving them in the care decisions.</p> <p><u>Rigidity of process (n=2)</u>: Patients reported frustration with rules and procedures but never mentioned discussing these system issues with physicians.</p> <p><u>Fear to be stigmatised (n=2)</u>: Patients were afraid to be judge by staff.</p> <p><u>Isolation (n=2)</u>: Patients felt alone and isolated. Staff did not discuss this issue.</p> <p><u>Access to medications (n=1)</u>: Patients hid from clinicians their problems obtaining medications.</p> <p><u>Choose the physician (n=1)</u>: Patients found difficulties to see a physician or nurse of their choice.</p> <p><u>Compared care with other patients (n=1)</u>: Patients observed the care other patients receive, they tended to note, and reflect upon, the witnessed care of patients who they felt to be more vulnerable than themselves.</p> <p><u>Concealment of symptoms (n=1)</u>: Patients' concealment of significant symptoms.</p> <p><u>Concerns (n=1)</u>: Patients felt their concerns were dismissed.</p> <p><u>Emotional implication (n=1)</u>: Patients felt that staff were not there emotionally.</p> <p><u>Energy (n=1)</u>: Patients were not satisfied when physicians did not attempt to match their energy.</p> <p><u>Fear of complaining (n=1)</u>: Patients feared to become unpopular with staff or care worsening as a result.</p> <p><u>Handshake (n=1)</u>: Patients were not satisfied when physicians did not handshake.</p> <p><u>Health beliefs (n=1)</u>: Health beliefs were omitted by the patients from discussions with physicians.</p> <p><u>Heavy-handed (n=1)</u>: Patients believed that staff were unnecessarily heavy-handed.</p> <p><u>Importance of smile (n=1)</u>: Patients were not satisfied when physicians lack of smiling.</p> <p><u>Interest of physician (n=1)</u>: Patients were not satisfied when the behaviours of physicians changed when they were not interested in their case.</p> <p><u>Interrogating (n=1)</u>: Patient did not appreciate the sense of interrogating to get a diagnosis.</p> <p><u>Knowledge of the patient (n=1)</u>: Patients felt insecure if the nurse did not appear to know about their care or treatments.</p> <p><u>Lack of interaction (n=1)</u>: Patient felt that staff's lack of communication during interaction.</p> <p><u>Memory (n=1)</u>: Patients were unable to remember what they had been told because of their disease.</p> <p><u>Must repeat (n=1)</u>: Patients needed to repeat information to staff.</p> <p><u>Other treatment (n=1)</u>: Patients were looking for a cure and/or better treatment options.</p> <p><u>Social and work challenges (n=1)</u>: Patient fear to speak of social and work challenges.</p> <p><u>Softness in gestures (n=1)</u>: Patients were not satisfied when their physicians made abrupt actions.</p> <p><u>Staff workload (n=1)</u>: Patients did not always ask for help when needed because they thought that staff were too busy.</p>
Staff's perceptions not perceived by patients (n=28).
<p><u>Trainings (n=5)</u>: Lack or inadequacy of trainings that impact the interactions with the patients.</p> <p><u>Co-worker relationships (n=5)</u>: Importance of co-worker relationship and collaboration to deliver a good patient experience.</p> <p><u>Autonomy and decision making (n=3)</u>: Staff felt their level of discretion and autonomy in making decisions at work was insufficient to deliver a good patient experience.</p> <p><u>Time constraints (n=3)</u>: Staff felt that the time schedule/time pressure affect their availability and quality of service/care.</p> <p><u>Staffing level (n=2)</u>: Inadequate or unpredictable staffing levels that impacted patient experience.</p> <p><u>Tools (n=2)</u>: Issues encountered with tools that impacted interactions and patient experience.</p> <p><u>Confidentiality and privacy (n=1)</u>: Staff expressed concerns regarding confidentiality, discomfort at talking about a patient in front of them, lack of privacy leading to divulging sensitive information.</p> <p><u>Inadequate resources to work with (n=1)</u>: Inadequate resources to work that impacted staff care (tools, syringes, gloves, ...) and patient experience.</p> <p><u>Information transfer (n=1)</u>: Issues with the information transfer were encountered by staff and impacted the patient experience.</p> <p><u>Job title (n=1)</u>: Staff noted that patients are more likely to share sensitive information with the physician only.</p> <p><u>Keep reminding (n=1)</u>: Staff needed to keep reminding patients of the time of their appointments and how to prepare for them.</p> <p><u>Logistical problem (n=1)</u>: Staff reported logistic issues that affect both experiences.</p> <p><u>Organisational (n=1)</u>: Organisational and administrative issues impacting on care delivery and both experiences.</p> <p><u>Workload (n=1)</u>: Staff reported too much workload that affect both experiences.</p>

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3 **Actions taken.** The actions (n=19) developed in reply to the results of selected studies
4 concerned either patients (n=8), staff (n=8), or both patients and staff (n=4).
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7 The actions developed for the patients were: admission or discharge pack (n=2); checklist to
8 help patients to prepare for their visit (n=1); information kit (n=1); postcard to help patients
9 navigate around the hospital (n=1); tool to help patients explain what they are going through to
10 their family or caregivers (n=1); improvements in the environment in which patients are treated
11 (n=1); instruments to measure patient experience (n=1).
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14 The actions developed for the staff were: tools to help staff (educational tool to help physicians
15 broaden their understanding of the kinds of behaviours and characteristics expected by patients,
16 and an online tool to facilitate communication among nurses; n=2); communication training
17 (individual, n=1; group, n=1); shadow coaching programme for physicians (n=1); development
18 of autonomous nursing actions (n=1); changes in the nurses' schedule (n=1).
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21 The actions developed that involved both patients and staff (n=4) showed initiatives that
22 encouraged staff to adopt new postures (e.g. trained nurses acting as coaches for the patients,
23 n=1) and to create new moments of exchanges (e.g. development of staff feedback to patients,
24 n=1). Another action presented the need to include peer support in the development of a new
25 programme (e.g. development of a prehabilitation programme [inclusion of peer support, group
26 exercises and a multidisciplinary team education approach, n=1]). Furthermore, the actions
27 described initiatives that encourage a greater involvement of patient and their family members
28 in their care and to develop a partnership between patients and staff (e.g. development of
29 meetings where staff, patients, and family members can share their experiences, n=1).
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52 53 **DISCUSSION**

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55 The study of perceptions allows to understand how the interactions between patients and staff
56 are perceived by both populations, and the present study identified 7 scenarios, each with
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3 actions that can be carried out. These include *win-win* interactions with positive perceptions of
4 patients and staff; these touchpoints can be seen as pillars of the experience and be fostered and
5 deployed. Conversely, there are also deadlock interactions with negative perceptions on both
6 sides, which should be treated as a priority since both populations suffer from it. There are also
7 interactions where patients and staff disagree for instance when the staff believe they are doing
8 the right thing, but the patient is not satisfied; one answer to such interactions is to raise
9 awareness among staff on what patients are going through and what they expect. Conversely,
10 patients may be satisfied but staff unsatisfied; to retain patient satisfaction, it seems important
11 to help staff with their issues so that they continue to invest in these interactions. In addition,
12 there are two scenarios where the staff are unaware of patient perception, the first is the *stroke*
13 *of luck* with satisfied patients but staff who seem unaware of the impact of their actions; in such
14 cases, there is a need to raise staff awareness so that they continue. The second is *blind spot*
15 when patients are unsatisfied and staff who are unaware of their difficulties; there are two
16 situations in such cases, either staff understanding of the patient experience, or the patient is
17 hiding information from staff. The first could require raising awareness or to develop training
18 for professionals, and the second is more problematic as it is related to patient's fears and
19 culture, but it remains one of the most essential perceptions to prioritise since it can prevent the
20 correct treatment or diagnosis of the patient (e.g. patients hide from physicians their problems
21 obtaining medication, concealment of significant symptoms, etc.),[44]. The last scenario is
22 when professional's perceptions are not perceived by patients; such situations are more related
23 to their work than to their postures with patients, and staff describe very practical needs:
24 training, tools, level of autonomy, etc.

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26 Furthermore, studies that consider both patient and staff experience lead to specific actions
27 deployed to improve one or both experiences. The actions developed only for patients show
28 improvements that target different stages of the patient journey: pre-admission, admission,
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3 movement within the establishment, etc. For professionals, the actions described are linked
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5 either to themes that depend on Human Resources (training and coaching, educational tool,
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7 level of autonomy), or to subjects related to the organisation of work (changes in schedule, tool
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9 to help communication during a team change). The actions developed that involved both
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11 populations present improvements that are longer and more complex, but which are also part
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13 of deeper changes in perceptions and practices. As for the development of the patient
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15 participation in the care relationship, and within the health system,[48-49]. Our results indicate
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17 that this integration of the perspective of patients and their family members is not limited to the
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19 wish of the patient but that it arises from a request from patients and staff, to improve both
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21 experiences.
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26 A strong point of this review is that it adds a strategic value to studying both patient and staff
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28 experience, by identifying the different types of perceptions according to the existing literature,
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30 without excluding any study according to quality. Additionally, the search and inclusion process
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32 were conducted by two reviewers which adds to the validity of data collection. The review does,
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34 however, have certain limitations. For instance, given the breadth of this topic, we may have
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36 missed relevant studies that did not include a required search term. In addition, the lack of a
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38 shared definition and dimensions of staff experience prevents us from being fully exhaustive
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40 on the subject and the heterogeneity of definition of staff experience could bring in to question
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42 the validity of pooling certain data.
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49 **CONCLUSIONS**

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51 The study of both patient and staff experience allows healthcare facilities to identify the actions
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53 that can be taken to change the perceptions of patients and staff; among them, the actions
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55 directed to both populations include the development of patient partnership, a promising field
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3 for reinforcing ownership of action by professionals and patients, therefore optimising the
4 efficiency of quality and safety improvement actions.
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12
13

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16 interpreted the data.
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19

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22
23
24

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27

28 **Patient consent for publication.** Not required.
29

30 **Research ethics approval.** Not required.
31

32 **Data sharing statement.** The datasets used and/or analysed during the current study are
33 available from the corresponding author on reasonable request.
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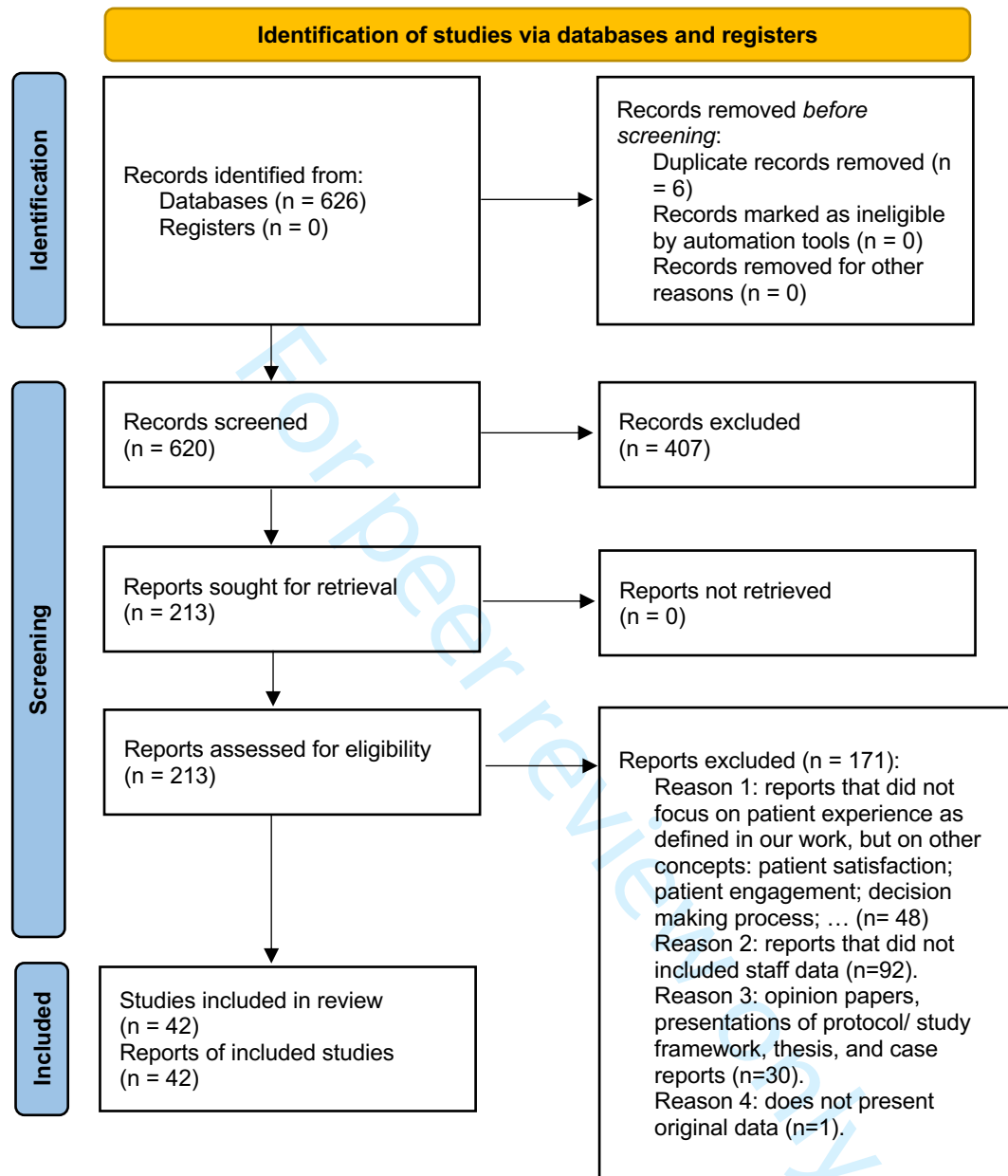
APPENDIX

Appendix 1. Detail search query in PubMed

Search: (((((((((((("patient experience"[Title/Abstract] AND "staff
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "employee
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "clinician
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "physician
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "professional
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "workforce
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "professional
patient relations"[MeSH Terms] Filters: from 2007/1/1 - 2021/7/21

FIGURE

Figure 1. PRISMA 2020 Flow Diagram



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1-2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	3
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	3
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	16
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	4-5
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	4-5
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Appendix 1
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	4-5
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	4-5
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	4-5
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	5
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	5



SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	6
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	6
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	6
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	6-13
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	6-13
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	13-15
Limitations	20	Discuss the limitations of the scoping review process.	15
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	15
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	16

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: 10.7326/M18-0850.



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BMJ Open

Studying both patient and staff experience to investigate their perceptions and to target key interactions to improve: a scoping review.

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Primary Subject Heading:	Public health
Secondary Subject Heading:	Medical management
Keywords:	Health & safety < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, Quality in health care < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, EDUCATION & TRAINING (see Medical Education & Training), Organisational development < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, PUBLIC HEALTH, Health policy < HEALTH SERVICES ADMINISTRATION & MANAGEMENT

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3 **Studying both patient and staff experience to investigate their perceptions**
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6 **and to target key interactions to improve: a scoping review.**
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30 **ABSTRACT**
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33 **Objective** The improvement of Patient Experience (PE) is related to the experience of staff
34 caring for them. Yet there is little evidence as to which interactions matter the most for both
35 patients and staff, or how they are perceived by them. We aimed to summarise the interactions
36 and the perceptions between patients and staff from studies using both patient and staff
37 experience data in healthcare institutions.
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43 **Design** Scoping review.
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47 **Methods** We conducted a scoping review including studies dealing with patient experience and
48 staff experience. Two authors independently reviewed each title/abstract and the selected full-
49 text articles. A list of variables (objective, study design, data sources, tools used, results,
50 interactions, perceptions, actions) was charted and summarised using a narrative approach
51 including both qualitative and quantitative data. Studies were grouped according to their
52 objective and the key interactions summarised according to this stratification. The perceptions
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3 of patients and staff were identified in the results of selected studies and were classified into 4
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5 categories: commonalities and disagreements of perceptions, patients' perceptions not
6
7 perceived by professionals, and professional's perceptions not perceived by patients.
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10 **Results** A total of 42 studies were included. The stratification of studies by type of objective
11
12 resulted in 6 groups that allowed to classify the key interactions (n=154) identified in the results
13
14 of the selected studies. A total of 128 perceptions related to interaction between patient and
15
16 staff were reported with the following distribution: commonalities (n=35), disagreements
17
18 (n=18), patients' perceptions not perceived by professionals (n=47), and professional's
19
20 perceptions not perceived by patients (n=28). We separated positive and negative perceptions,
21
22 which resulted in 7 scenarios, each with actions that can be carried out for one or both
23
24 populations to overcome barriers.
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28 **Conclusion** The study of both patient and staff experience allowed the identification of actions
29
30 that can be taken to change the perceptions of patients and staff.
31
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33 **Strengths and limitations of this study**

- 34
35 • This review adds a strategic value to studying both patient and staff experience by
36
37 identifying the different types of perceptions according to the existing literature.
- 38
39 • This review did not exclude any study according to quality.
- 40
41 • The search and inclusion of studies was conducted by two reviewers which adds to the
42
43 validity of data collection.
- 44
45 • Given the breadth of this topic, we may have missed relevant studies that did not include
46
47 a required search term.
- 48
49 • The lack of a shared definition and dimensions of staff experience prevents us from
50
51 being fully exhaustive on the subject and the heterogeneity of definition of staff
52
53 experience could bring in to question the validity of pooling certain data.
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3 **Key words:** patient experience; staff experience; scoping review; interactions; perceptions.
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6 7 **BACKGROUND** 8

9
10 Patient Experience (PE) has been recognised as a major lever to improve healthcare systems.[1]
11
12 However, there are few studies that consider PE and the experience of the persons who work
13
14 with patients every day,[2] although it has been shown that the five most important components
15
16 of PE are the interactions with staff,[3] and that both patient and staff experiences are related.[4]
17
18 Although there is an internationally recognised definition of PE,[1] this is not the case for staff
19
20 experience in healthcare studies; it is, however, defined by the UK National Health Service
21
22 (NHS) as “*attitudinal or psychological factors that determine how an individual employee feels*
23
24 *about their job, their colleagues and their organisation*”,[4] that is characterised by staff
25
26 engagement, motivation, satisfaction, morale, work pressure, stress and intention to leave, and
27
28 management behaviour and practices at work.[4]
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33 The study of both experiences could allow the identification of key interactions (“*touchpoints*
34
35 *of people, processes, policies, communications, actions, and environment*”:[1]) for patients
36
37 and/or staff, and to investigate the perceptions of patients and staff of these interactions (“*what*
38
39 *is recognized, understood, and remembered*”:[1]). This could allow the identification of which
40
41 interactions mattered the most for both patients and staff, and how they are perceived. This is
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43 of importance as same event or situation can be perceived differently by the patient and the
44
45 staff.[5]
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49 We therefore aimed to summarise the interactions and the perceptions from studies using both
50
51 patient and staff experience data in healthcare structures. The secondary objectives were to
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53 describe the characteristics of the studies (methods implemented, tools used, quality and
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55 limitations, term used for staff experience) and the actions implemented to improve the
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57 interactions.
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METHODS

We conducted a scoping review. A scoping review is a synthesis technique of knowledge that is used when: it is difficult to identify a narrow review question; studies in the reviewed sources are likely to have employed a range of data collection and analysis techniques; and no prior synthesis has been undertaken on the topic.[6]

Data Sources. We searched PubMed and Google Scholar in July 2021 for studies dealing with PE and staff experience, that used patient and staff data, and that were published between 1 January 2007, and 21 July 2021. Six major search terms related to staff experience were used: staff experience, employee experience, clinician experience, physician experience, professional experience, and workforce experience. A combination of multiple key words and search terms was used (see Appendix 1).

Inclusion/Exclusion Criteria. Studies fulfilling the following criteria were included: (i) to focus on PE defined as “*the sum of all interactions, shaped by an organization’s culture, that influence patient perceptions, across the continuum of care*”,[1]; (ii) to include patient and staff data in a common setting (no geographical or type of patient care restriction); (iii) to present original data. There was no restriction on the type of healthcare institution (public, private, academic). Studies published in a language other than English or French, that did not focus on PE (but on other concepts such as patient satisfaction, engagement, etc.), that focused only on trainees (residents, medical students), that only concerned staff behaviour and communication were excluded; as were opinion papers, presentations of protocol/study framework, thesis, and case reports.

Study Selection and Data Analysis. Two authors (MC; SC) independently reviewed each title/abstract and the selected full-text articles; a third author (JH) was called upon to settle disagreements.

1
2
3 The following variables were charted: year of publication, country, term used for staff
4 experience (physician experience, professional experience, etc.), aim/objective/purpose, study
5 design (qualitative, quantitative, or mixed methods), data sources, tools used, results (key
6 interactions and perceptions of patients and staff were dissociate), actions, conclusions, and
7 limitations. Substantial heterogeneity was anticipated in study design, measures, interventions,
8 and outcomes reported in the eligible studies, which would render it impossible to analyse
9 pooled data; data were therefore summarised using a narrative approach including both
10 qualitative and quantitative data.
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21 Studies were grouped according to their objective (irrespective of the context), and the key
22 interactions summarised according to this stratification. The perceptions of patient and staff
23 were identified in the results of selected studies; these were classified into 4 categories: (i)
24 commonalities (when patients and staff have the same perception of a same event, situation,
25 interaction, etc.), (ii) disagreements (when patients and staff do not have the same perceptions),
26 (iii) patients' perceptions not perceived by professionals, and (iv) professional's perceptions
27 not perceived by patients. Only clear and non-anecdotal perceptions were retained, i.e. those
28 that presented an unambiguous formulation and that involved more than one individual.
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Quality Assessment. Two authors (MC; SH) independently abstracted and assessed the quality
of each study; a third author (JH) was called upon to settle disagreements. The studies were
assessed according to their methodology (qualitative, quantitative, mixed) by using the
appropriate analysis grid (Critical Appraisal Skills Program [CASP] Qualitative Research
Checklist; Effective Public Health Practice Project [EPHPP] Quality Assessment Tool; Mixed
Methods Appraisal Tool [MMAT]).

Patient and Public Involvement. Patients and the public were not involved in this study.

RESULTS

Selected studies. The initial search identified 626 records; there were 6 duplicates that were excluded, as were 407 records following the screening phase, and 171 after abstract and full-text assessment. Two disagreements were resolved through discussion with the third author. A total of 42 studies were included (Figure 1).

Country and timeline. Most studies were conducted in the UK (n=18) or in the USA (n=17). More than half of the studies (n=25) were published in the last 5 years (between 2017 and 2021).

Methodology and tools used. The study design was qualitative (n=16), quantitative (n=15), or mixed methodology (n=11). Data was collected using surveys (n=28), interviews (n=20), observation (n=8), focus groups (n=5), workshop or co-creation sessions (n=3), document analysis (n=2), and time and/or motion baseline (tools to measure the time spent, the number of steps; n=2).

Quality Assessment. According to the CASP Qualitative Research Checklist, the quality of qualitative studies (n=16) was strong for 10, moderate for 3, and weak for 3. The limitations of the studies with quality issues were: insufficiently rigorous data analysis (n=5); no clear statement of findings (n=5); no description of biases of the relationship between researcher and participants (n=4); lack of detailed recruitment strategy (n=4); lack of description on the data collection (n=1); no consideration of ethical issues (n=1).

According to the EPHPP Quality Assessment Tool, the quality of quantitative studies (n=15) was strong for 9, moderate for 3, and weak for 3. The quality issues were: selection biases (n=6); method not appropriate (n=4); lack of detailed recruitment strategy (n=1); lack of description on the data collection (n=1); no clear statement of findings (n=1).

According to the MMAT appraisal tool, the quality of mixed method studies (n=11) was good for 4, strong limitations for 4, and poor for 3. The 4 studies with strong limitations raised two

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3 issues: lack of detailed of divergencies and inconsistencies between qualitative and quantitative
4 results (n=4); lack of description of the quantitative method and results (n=3). The 3 studies in
5
6 the poor category had an insufficiently detailed method as the articles were the presentation of
7
8 the application of a programme.
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12 **Staff Experience.** In the 42 studies, the terms used more than once were: staff experience
13 (n=11), clinician experience (n=5), and physician experience (n=3).
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17 **Aims, results, and key interactions.** A total of 154 key interactions were identified in the
18 results of the 42 studies included. The studies were classified into 6 groups according to their
19 objective (irrespective of the context). (i) Studies that explored associations between patient
20 and staff experience (n=11) described key interactions (n=59) for patient or staff that have an
21 impact on the other population experience (e.g. work-related stress was negatively associated
22 with patient experience). (ii) Studies that measured the impact of a change of tool or process
23 (n=11) presented key interactions improvements (e.g. reduction in time spent on patient related
24 administration) or failures (e.g. technical problems; n=11). (iii) Studies that measured the
25 impact of a change of environment (n=3) found both improvements (e.g. better patient privacy)
26 and deteriorations (e.g. patient felt isolated) of their key interactions (n=23). (iv) Studies that
27 aimed to uniquely describe the experience of patients and professionals (n=11) identified the
28 key interactions (n=35) for patients and/or professionals (e.g. waiting for medical treatments or
29 procedures). (v) Studies that explored the perceptions of patients and professionals regarding a
30 type of therapy or care management (n=3) identified key interactions (n=18) that were barriers
31 to successful care management or therapy (e.g. medication issues encountered by the patients).
32
33 (vi) Studies that evaluated the impact of a specific nurse role on the experience of patients and
34 staff (n=3) reported improvements (e.g. reduction of waiting time) in their key interactions
35 (n=8; Table 1).
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Table 1. List of interactions identified in the results of selected studies, classified by groups of objective of the selected studies.

<p>1. Explore associations between patient and staff experience (n=11 studies; n=59 key interactions identified).[4,7-16]</p> <p><u>Associations between staff and patient experience (n=3 studies; n=18 key interactions identified):</u></p> <ul style="list-style-type: none"> - Factors positively associated with patients' responses: support from immediate managers (n=2); witnessing potential errors (n=2); effectiveness of team working (n=1); opportunities for career progression or promotion (n=1); satisfaction about the quality of work and patient care (n=1); satisfaction about the use of patient feedback (n=1); and availability of hand-washing materials (n=1). - Factors negatively associated with patients' responses: work-related stress (n=1); working extra hours (n=1); work pressure felt by staff (n=1); poor staffing (n=1); issues with ward leadership (n=1); poor co-worker relationships (n=1); staff experiencing physical violence from colleagues (n=1); staff experiencing discrimination (n=1); and staff witnessing potentially harmful errors, near misses or incidents (n=1). <p><u>Associations between staff burnout and patient experience (n=4 studies; n=13 key interactions identified):</u></p> <ul style="list-style-type: none"> - Neither burnout nor engagement on their own was associated with quality or patient experience measures (n=3). - Physician burnout had a negative impact on patient-reported experience of patient-provider communication (n=1). - Clinicians reporting more frequent symptoms of burnout reported less ability to decompress and less feeling of activation. Individual elements of decompression (n=1) and activation (n=1) were associated with patient experience. - Clinicians feeling that their work makes a difference (n=1) and believing it is meaningful (n=1) were positively associated with patient experience with their care provider. - Elements of decompression such as being able to free one's mind from work (n=1) and being able to disconnect from work communications such as e-mails (n=1) were negatively associated with patient experience with their care providers. - Clinicians with high burnout but with high engagement had the highest average ratings for all 3 patient experience domains: clinician communication (n=1); overall rating of the clinician (n=1); overall rating of the clinic (n=1). <p><u>Associations between physician behaviour, work processes, and productivity and patient experience (n=1 study; n=17 key interactions identified):</u></p> <ul style="list-style-type: none"> - Characteristics of physicians with strong productivity and strong patient satisfaction were: focused on teaching and explanations (n=1); conveys warmth from the start (n=1); well-planned flow of visit with focus on patient's agenda (n=1); controlled script with clear parts (n=1); extremely personable (n=1); always looking for buy-in from the patient that the patient fully understands (n=1); recap the patient history (n=1); confident but not arrogant (n=1); finishes dictation and coding each day (n=1); clinical staff enters orders and prepares after-visit summary (n=1). - Characteristics of physicians with weak productivity and weak patient satisfaction: lack of being there emotionally (n=1); lack of smiling (n=1); abrupt actions (n=1); behaviour changes when not interested in the patient's case (n=1); patients kept waiting; no handshake (n=1); sense of interrogating to get a diagnosis (n=1); no attempt to match the patient's energy (n=1). <p><u>Associations between patient-physician communication about pain and patient and physician visit experience (n=1 study; n=5 key interactions identified):</u></p> <ul style="list-style-type: none"> - Two communication variables—patient-physician disagreement (n=1) and patient requests for opioid dose increases (n=1)—were each associated with both worse ratings of patient experience and greater physician-reported visit difficulty. - Patient desire for increased pain medicine was positively associated with both worse ratings of patient experience and greater physician-reported visit difficulty (n=1). - Greater pain severity (n=1) and more patient questions (n=1) were each associated with greater physician-reported visit difficulty, but not with patient experience.

<p><u>Associations between staff civility climate and civility towards patients (n=1study; n=5 key interactions identified):</u></p> <ul style="list-style-type: none"> - Positive association between civility climate and civility toward patients (n=1). - Direct effect of civility climate on overall hospital rating (n=1); intent to recommend (n=1); and willingness to return (n=1) and an indirect effect mediated by civility toward patients (n=1). <p><u>Associations between patient experience and patient-physician racial/ethnic and gender concordance (n=1; n=1 key interactions identified):</u></p> <ul style="list-style-type: none"> - Compared with racially/ethnically concordant patient-physician dyads, discordance was associated with a lower likelihood of physicians receiving the maximum score (n=1).
<p>2. Measure the impact of a change of tool or process (n=11 studies; n=11 key interactions identified). [17-27]</p> <ul style="list-style-type: none"> - The change of tool (e.g., mobile devices) or process (e.g., hospital discharge process) had a positive impact on: feedback from patients and staff (n=2); reduction in time spent on patient related administration (n=2); collaborative work between professionals (n=1); patient grievances (n=1). - The change negatively impacts the emergency admissions (n=1) but positively impacts elective admissions (n=1) and outpatient attendance (n=1). - Technical problems experienced by patients (=1) and clinicians (n=1).
<p>3. Measure the impact of a change of environment (n=3 studies; n=23 key interactions identified). [28-30]</p> <ul style="list-style-type: none"> - The impact of a change of environment (e.g single rooms) were positively reported by patients for: comfort (n=1); privacy (n=1); confidentiality (n=1); flexibility for visitors (n=1); trust of the physicians (n=1); better experience with their care (n=1); better interactions with physicians (n=1); better access to care (n=1); better care coordination (n=1); better involvement in their care (n=1). - Patients used more e-mail, phone, and specialist visits, but fewer emergency services (n=1). - The impact of a change of environment were positively reported by staff for: patient comfort (n=1); patient confidentiality (n=1); patient care (n=1); relationships with patients (n=1); comprehension of environmental and social factors affecting patients (n=1); reduction of staff burnout (n=1). - The negative impact for patients was the feeling of isolation (n=1). - The negative impact for staff were: worse for visibility (n=1); surveillance (n=1); teamwork (n=1); monitoring and keeping patients safe (n=1); increased walking distances (n=1).
<p>4. Investigate the experience of patients and professionals (n=11 studies; n=35 key interactions identified). [31-41]</p> <p><u>Factors, themes, and issues that are key concerns for patient and/or professionals, and that could improve patient and/or staff experience:</u> communication and information flow (n=10); environmental context and resources (n=8); personal relationships between patient and staff (n=6); waiting for medical treatments or procedures (n=3); staff morale (n=2); treatment of condition (n=2); organisational and administrative issues (n=1); patient's transport solution (n=1); patient's transition from home to hospital (n=1); lack of a consistent approach in identifying and preparing patients for treatment (n=1).</p>
<p>5. Explore the perceptions of patients and professionals regarding a type of therapy or care management (n=3 studies; n=18 key interactions identified). [42-44]</p> <p><u>Key barriers to successful care management or therapy:</u> patients' personal constraints (n=3); patients' social constraints (n=3); communication failures encountered by the patients (n=2); medication issues encountered by the patients (n=3); healthcare system barriers encountered by the patients to collaborate with their clinicians (n=2); lack of knowledge of patient (n=2); patients' feeling isolated with their symptom (n=1) and patient's feeling stress (n=1); environmental context and resources (n=1).</p>
<p>6. Evaluate the impact of a specific nurse role (e.g advanced nurse practitioner) on the experience of patients and staff (n=3 studies; n=8 key interactions identified). [45-47]</p> <p>Improved communications between the patient and the service (n=2); positive impact on care (n=1); better coordination of services (n=1); patients described an increased level of confidence in the service (n=1); reduction in unnecessary hospital admissions (n=1); reduction of waiting time (patient's perceptions; n=1); improved practice (n=1).</p>

Commonalities and disagreements in perceptions. A total of 128 perceptions related to interaction between patient and staff were reported in the 42 included studies. The perceptions were commonalities (n=35), disagreements (n=18), patients' perceptions not perceived by professionals (n=47), and professional's perceptions not perceived by patients (n=28). The commonalities (n=35) were either *win-win* interactions (n=21) where patients and staff both had positive perceptions, or *deadlock* interactions (n=14) with negative perceptions on both sides. Disagreements in perceptions (n=18) were either staff having a positive perception while patients had a negative perception (n=15) or the converse (n=3); in the former, staff thought they were doing the right thing (e.g. providing sufficient information, providing clear information, etc.) while patients reported negative perceptions on these, and in the latter, patients reported good patient experience while staff reported poor experience or assumed that the patient had a poor experience. The patients' perceptions not perceived by staff (n=47) were either positive (n=8) or negative (n=39). These perceptions either concerned staff, processes, policies, or environment. The perceptions concerning staff were blind spots of the staff on their attitudes (e.g. importance of smiling), patients' fears that prevent them from interacting as they would like with staff (e.g. patients were afraid to be judged by staff), and aspects that patients hid from staff (e.g. concealment of significant symptoms). The professional's perceptions not perceived by patients (n=28) had a focus on issues encountered to deliver a good patient experience (Table 2).

Table 2. Summary of patient and staff perceptions in the selected studies.

Commonalities (n=35).
<i>Positive perceptions on both sides (n=21).</i>
<u>Reassurance (n=5):</u> Patients needed reassurance and felt that staff were helping them to feel better. Staff perceived the need for reassurance and tried to be attentive and sensitive to the patients.
<u>Popularisation of explanations (n=4):</u> Patients had a better understanding thanks to a popularisation of explanations. Staff tried to facilitate the understanding of the patients (choice of words, use of sketches, etc.).
<u>Quality of work and patient care (n=2):</u> Patients were satisfied with the quality of care they received. Staff were satisfied with the quality of work and patient care they were able to deliver.
<u>Personal relationships (n=2):</u> Both patients and staff reported that the knowledge of the interlocutor provided a better interaction and the development of personal relationship.

<p><u>Discretionary care (n=1)</u>: Patients were cognisant of their vulnerability to becoming seen by staff as difficult or demanding patients and sought to manage their relationships with staff accordingly. Staff reported having patients for whom they preferred to care for and by extension offer good care selectively to them.</p> <p><u>Communication facility (n=1)</u>: Patients and physicians reported being comfortable discussing primary non-compliance.</p> <p><u>Feeling care (n=1)</u>: Patients reported that their clinicians made them feel cared for. Clinicians tended to treat patients in the same way as family members.</p> <p><u>Listening (n=1)</u>: Patients felt to be listened to and understood. Staff took time to listen non-judgmentally.</p> <p><u>Professionalism (n=1)</u>: Patients described the professionalism of their clinicians. Clinicians were aware of their professional image and tended to appear calm regardless of the circumstances.</p> <p><u>Respect and grievances (n=1)</u>: Patients reported better communication with staff and better courtesy and respect from staff. Staff reported hearing fewer grievances from patients.</p> <p><u>Skills training (n=1)</u>: Professionals provided progressive patients skills training. Patients felt more aware and described an increase of their knowledge.</p> <p><u>Summary notes (n=1)</u>: Both patient and staff felt that summary notes helped patients to better understand their care, through both improved recall and enhanced communication.</p>
<i>Negative perceptions on both sides (n=14).</i>
<p><u>Time constraints (n=3)</u>: Patients and staff felt that the staff's time constraints affected the availability of staff, the interactions with the patients, and the quality of service.</p> <p><u>Administrative issue (n=2)</u>: Patients and staff identified similar administrative issues impacting interactions and care delivery.</p> <p><u>Organisational issues (n=2)</u>: Patients and staff identified similar organisational issues impacting the interactions with patients and the quality of service.</p> <p><u>Absence of interaction (n=1)</u>: Reciprocal dynamic where both patients and staff withdrew from interactions, having felt the other did not want to engage with them.</p> <p><u>Burnout (n=1)</u>: Converging views of patient and staff on the impact of staff burnout on communication.</p> <p><u>Confidentiality (n=1)</u>: Both patients and staff reported privacy issues during the interactions.</p> <p><u>Discretionary care (n=1)</u>: Patients reported dehumanising aspects of their care; staff saw these patients as difficult or demanding.</p> <p><u>Environment (n=1)</u>: Patients and staff highlighted that noisy, distracting, and demanding environment impact on the therapeutic quality of one-to-ones.</p> <p><u>Lack of staff (n=1)</u>: Patients and staff felt that the lack of staff affects the availability of nursing staff and impact on rehabilitation.</p> <p><u>Respect of patient intimacy (n=1)</u>: Both practitioners and patients reported negative perceptions on the respect of patients' intimacy.</p>
Disagreements (n=18).
<i>Staff had a positive perception while patient had negative perception (n=15).</i>
<p><u>Diverging views on the amount of information (n=4)</u>: Patients were unaware of information, had to ask for more information while staff thought they deliver enough information.</p> <p><u>Diverging views on the quality of information (n=3)</u>: Patients were confused about some aspect of disease process, role of medications, or treatment plan while staff thought patients were fully aware of them.</p> <p><u>Divergences in expectations (n=3)</u>: Patients wanted to talk about different points (quality of life, different health issues, family, ...), while physicians focused on the characteristics of the disease and asked very specific question.</p> <p><u>[Ambulance Service] Diagnosis (n=1)</u>: Patient did not want to hear diagnosis, while clinicians assumed that patients expected them to offer a diagnosis and felt that they had a duty to be honest to patients.</p> <p><u>Disparity between staff self-reported care performance and patient rated care performance (n=1)</u>: Staff consistently rated the patient care they provided much higher than the ratings of the patients themselves.</p> <p><u>Loneliness and anxiety (n=1)</u>: Patients felt loneliness and anxiety, specifically between diagnosis and commencement of treatment, when interactions with health professionals were minimal. Health professionals perceived patients to be under this level of stress.</p> <p><u>Pharmacological approach (n=1)</u>: Management of condition was influenced by the clinical condition and was pharmacologically driven. Patient lacked understanding of the pharmacological approach and perceived a loss of control.</p> <p><u>Wrong assumption (n=1)</u>: Elderly patients wanted to talk about sexual function. Health professionals indicated that older patients were not interested in sexual rehabilitation.</p>
<i>Staff had a negative perception while patient had positive perception (n=3).</i>
<p><u>After implementing a program (n=1)</u>: Patient reported a more positive experience with staff while staff did not report reduced barriers with patients or a better care experience.</p> <p><u>Telemedicine 1/2 (n=1)</u>: Patients wanted and were comfortable doing telemedicine while professionals thought patient were not ready for it.</p> <p><u>Telemedicine 2/2 (n=1)</u>: Non shared satisfaction about telemedicine. High level of satisfaction was reported by patients, while clinicians reported dissatisfaction due to technical problems and complexity of the platform.</p>
Patients' perceptions not perceived by staff (n=47).
<i>Positive perception (n=8).</i>
<p><u>Staff knowing the patient (n=1)</u>: Patients said they felt reassured when staff clearly knew about them.</p> <p><u>Personable (n=1)</u>: Patients were satisfied when physicians were extremely personable, connected with every patient.</p> <p><u>Recap history (n=1)</u>: Patients were satisfied when their physicians recapped their history.</p> <p><u>Staff confidence (n=1)</u>: Patients were satisfied when their physicians were confident but not arrogant.</p> <p><u>Warmth (n=1)</u>: Patients were satisfied when their physicians conveyed warmth from the start.</p>

<i>Negative perception (n=39).</i>	
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4	<u>Waiting (n=6)</u> : Patients had to wait for medical treatments or procedures or results. Staff seemed to be unaware of this issue.
5	<u>Quality of information (n=3)</u> : Patients were confused about some aspect of disease process, role of medications, or treatment plan. Staff did not mention information issues.
6	<u>Involved in decisions (n=2)</u> : Patients felt that their physician was or was not involving them in the care decisions.
7	<u>Rigidity of process (n=2)</u> : Patients reported frustration with rules and procedures but never mentioned discussing these system issues with physicians.
8	<u>Fear to be stigmatised (n=2)</u> : Patients were afraid to be judge by staff.
9	<u>Isolation (n=2)</u> : Patients felt alone and isolated. Staff did not discuss this issue.
10	<u>Access to medications (n=1)</u> : Patients hid from clinicians their problems obtaining medications.
11	<u>Choose the physician (n=1)</u> : Patients found difficulties to see a physician or nurse of their choice.
12	<u>Compared care with other patients (n=1)</u> : Patients observed the care other patients receive, they tended to note, and reflect upon, the witnessed care of patients who they felt to be more vulnerable than themselves.
13	<u>Concealment of symptoms (n=1)</u> : Patients' concealment of significant symptoms.
14	<u>Concerns (n=1)</u> : Patients felt their concerns were dismissed.
15	<u>Emotional implication (n=1)</u> : Patients felt that staff were not there emotionally.
16	<u>Energy (n=1)</u> : Patients were not satisfied when physicians did not attempt to match their energy.
17	<u>Fear of complaining (n=1)</u> : Patients feared to become unpopular with staff or care worsening as a result.
18	<u>Handshake (n=1)</u> : Patients were not satisfied when physicians did not handshake.
19	<u>Health beliefs (n=1)</u> : Health beliefs were omitted by the patients from discussions with physicians.
20	<u>Heavy-handed (n=1)</u> : Patients believed that staff were unnecessarily heavy-handed.
21	<u>Importance of smile (n=1)</u> : Patients were not satisfied when physicians lack of smiling.
22	<u>Interest of physician (n=1)</u> : Patients were not satisfied when the behaviours of physicians changed when they were not interested in their case.
23	<u>Interrogating (n=1)</u> : Patient did not appreciate the sense of interrogating to get a diagnosis.
24	<u>Knowledge of the patient (n=1)</u> : Patients felt insecure if the nurse did not appear to know about their care or treatments.
25	<u>Lack of interaction (n=1)</u> : Patient felt that staff's lack of communication during interaction.
26	<u>Memory (n=1)</u> : Patients were unable to remember what they had been told because of their disease.
27	<u>Must repeat (n=1)</u> : Patients needed to repeat information to staff.
28	<u>Other treatment (n=1)</u> : Patients were looking for a cure and/or better treatment options.
29	<u>Social and work challenges (n=1)</u> : Patient fear to speak of social and work challenges.
30	<u>Softness in gestures (n=1)</u> : Patients were not satisfied when their physicians made abrupt actions.
31	<u>Staff workload (n=1)</u> : Patients did not always ask for help when needed because they thought that staff were too busy.
Staff's perceptions not perceived by patients (n=28).	
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33	<u>Trainings (n=5)</u> : Lack or inadequacy of trainings that impact the interactions with the patients.
34	<u>Co-worker relationships (n=5)</u> : Importance of co-worker relationship and collaboration to deliver a good patient experience.
35	<u>Autonomy and decision making (n=3)</u> : Staff felt their level of discretion and autonomy in making decisions at work was insufficient to deliver a good patient experience.
36	<u>Time constraints (n=3)</u> : Staff felt that the time schedule/time pressure affect their availability and quality of service/care.
37	<u>Staffing level (n=2)</u> : Inadequate or unpredictable staffing levels that impacted patient experience.
38	<u>Tools (n=2)</u> : Issues encountered with tools that impacted interactions and patient experience.
39	<u>Confidentiality and privacy (n=1)</u> : Staff expressed concerns regarding confidentiality, discomfort at talking about a patient in front of them, lack of privacy leading to divulging sensitive information.
40	<u>Inadequate resources to work with (n=1)</u> : Inadequate resources to work that impacted staff care (tools, syringes, gloves, ...) and patient experience.
41	<u>Information transfer (n=1)</u> : Issues with the information transfer were encountered by staff and impacted the patient experience.
42	<u>Job title (n=1)</u> : Staff noted that patients are more likely to share sensitive information with the physician only.
43	<u>Keep reminding (n=1)</u> : Staff needed to keep reminding patients of the time of their appointments and how to prepare for them.
44	<u>Logistical problem (n=1)</u> : Staff reported logistic issues that affect both experiences.
45	<u>Organisational (n=1)</u> : Organisational and administrative issues impacting on care delivery and both experiences.
46	<u>Workload (n=1)</u> : Staff reported too much workload that affect both experiences.
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Actions taken. The actions (n=19) developed in reply to the results of selected studies concerned either patients (n=8), staff (n=8), or both patients and staff (n=4).

The actions developed for the patients were: admission or discharge pack (n=2); checklist to help patients to prepare their visit (n=1); information kit (n=1); postcard to help patients navigate around the hospital (n=1); tool to help patients explain what they are going through to

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3 their family or caregivers (n=1); improvements in the environment in which patients are treated
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5 (n=1); instruments to measure patient experience (n=1).
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8 The actions developed for the staff were: tools to help staff (educational tool to help physicians
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10 broaden their understanding of the kinds of behaviours and characteristics expected by patients,
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12 and an online tool to facilitate communication among nurses; n=2); communication training
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14 (individual, n=1; group, n=1); shadow coaching programme for physicians (n=1); development
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16 of autonomous nursing actions (n=1); changes in the nurses' schedule (n=1).
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19 The actions developed that involved both patients and staff (n=4) showed initiatives that
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21 encouraged staff to adopt new postures (e.g. trained nurses acting as coaches for the patients,
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23 n=1) and to create new moments for exchange (e.g. development of staff feedback to patients,
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25 n=1). Another action was the inclusion of peer support in the development of a new programme
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27 (e.g. development of a prehabilitation programme [inclusion of peer support, group exercises
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29 and a multidisciplinary team education approach, n=1]). Furthermore, the actions described
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31 initiatives that encourage a greater involvement of patient and their family members in their
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33 care and to develop a partnership between patients and staff (e.g. development of meetings
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35 where staff, patients, and family members can share their experiences, n=1).
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42 **DISCUSSION**

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45 The study of perceptions allows to understand how the interactions between patients and staff
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47 are perceived by both populations, and the present study identified 7 scenarios, each with
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49 actions that can be carried out. These include *win-win* interactions with positive perceptions of
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51 patients and staff; these touchpoints can be seen as pillars of the experience and be fostered and
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53 deployed. Conversely, there are also *deadlock* interactions with negative perceptions on both
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55 sides, which should be treated as a priority since both populations suffer from them. There are
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57 also interactions where patients and staff disagree, for instance when the staff believe they are
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3 doing the right thing, but the patient is not satisfied; one answer to such interactions is to raise
4 awareness among staff on what patients are going through and what they expect. Conversely,
5 patients may be satisfied but staff unsatisfied; to retain patient satisfaction, it seems important
6 to help staff with their issues so that they continue to invest in these interactions. In addition,
7 there are two scenarios where the staff are unaware of patient perception, the first is the *stroke*
8 *of luck* with satisfied patients but staff who seem unaware of the impact of their actions; in such
9 cases, there is a need to raise staff awareness so that they continue. The second is *blind spot*
10 when patients are unsatisfied and staff who are unaware of their difficulties; there are two
11 situations in such cases, either staff understanding of the patient experience, or the patient is
12 hiding information from staff. The first could require raising awareness or to develop training
13 for professionals, and the second is more problematic as it is related to patient's fears and
14 culture, but it remains one of the most essential perceptions to prioritise since it can prevent the
15 correct treatment or diagnosis of the patient (e.g. patients hide from physicians their problems
16 obtaining medication, concealment of significant symptoms, etc.).[44] The last scenario is when
17 professional's perceptions are not perceived by patients; such situations are more related to their
18 work than to their postures with patients, and staff describe very practical needs: training, tools,
19 level of autonomy, etc.

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21 Furthermore, studies that consider both patient and staff experience lead to specific actions
22 deployed to improve one or both experiences. The actions developed only for patients show
23 improvements that target different stages of the patient journey: pre-admission, admission,
24 movement within the establishment, etc. For professionals, the actions described are linked
25 either to themes that depend on human resources (training and coaching, educational tool, level
26 of autonomy), or to subjects related to the organisation of work (changes in schedule, tool to
27 help communication during a team change). The actions developed that involved both
28 populations include improvements that are longer and more complex, but which are also part

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3 of deeper changes in perceptions and practices; an example of such action is the development
4 of the patient participation in health care and within the health system.[48-49] The results herein
5 indicate that this integration of the perspective of patients and their family members is not
6 limited to the patient but is a request made by both patients and staff to improve both
7 experiences.
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14 Three main expectations emerged from patients and can be translated into proposals or
15 recommendations for staff to improve their interactions with patients. (i) Ensuring personalised
16 interactions (e.g. knowing the staff member or being able to choose who they will meet). The
17 patients expect staff to have a good knowledge of their case (e.g. staff who clearly knows the
18 patient's medical file, as well as their treatment, and the patient does not have to repeat
19 information). (ii) Being pleasant and adopting welcoming postures (e.g. handshake, smile,
20 showing emotional implication). (iii) Adopting a more patient-centred approach with the
21 patients during the investigation. The latter is of importance as patients have a negative
22 perception when the investigation is only driven by clinical condition, and in such cases they
23 do not spontaneously mention opinion, belief or fear that could have an impact on their
24 treatment (e.g. financial issues, family matters, health beliefs). Patients also are disappointed
25 by the lack of information that are meaningful to them and could have a strong impact on their
26 daily life (e.g. quality of life, autonomy, sexual rehabilitation). For instance, Newcomb et al.
27 described the concealment of significant asthma symptoms by patients from clinicians during
28 hospital visits; the authors suggest that this was due to a lack of questioning / investigation by
29 staff and that this lack of communication promoted visit efficiency but hindered therapeutic
30 dialog.[44]
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56 A strong point of this review is that it adds a strategic value to studying both patient and staff
57 experience, by identifying the different types of perceptions according to the existing literature,
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3 without excluding any study according to quality. Additionally, the search and inclusion process
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5 were conducted by two reviewers which adds to the validity of data collection. The review does,
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7 however, have certain limitations. For instance, given the breadth of this topic, we may have
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9 missed relevant studies that did not include a required search term. In addition, the lack of a
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11 shared definition and dimensions of staff experience prevents us from being fully exhaustive
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13 on the subject and the heterogeneity of definition of staff experience could bring in to question
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15 the validity of pooling certain data.
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21 **CONCLUSIONS**

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24 The study of both patient and staff experience allows healthcare facilities to identify the actions
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26 that can be taken to change the perceptions of patients and staff; among them, the actions
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28 directed to both populations include the development of patient partnership, a promising field
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30 for reinforcing ownership of action by professionals and patients, therefore optimising the
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32 efficiency of quality and safety improvement actions.
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39
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41

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43
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45
46 interpreted the data.
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52

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54

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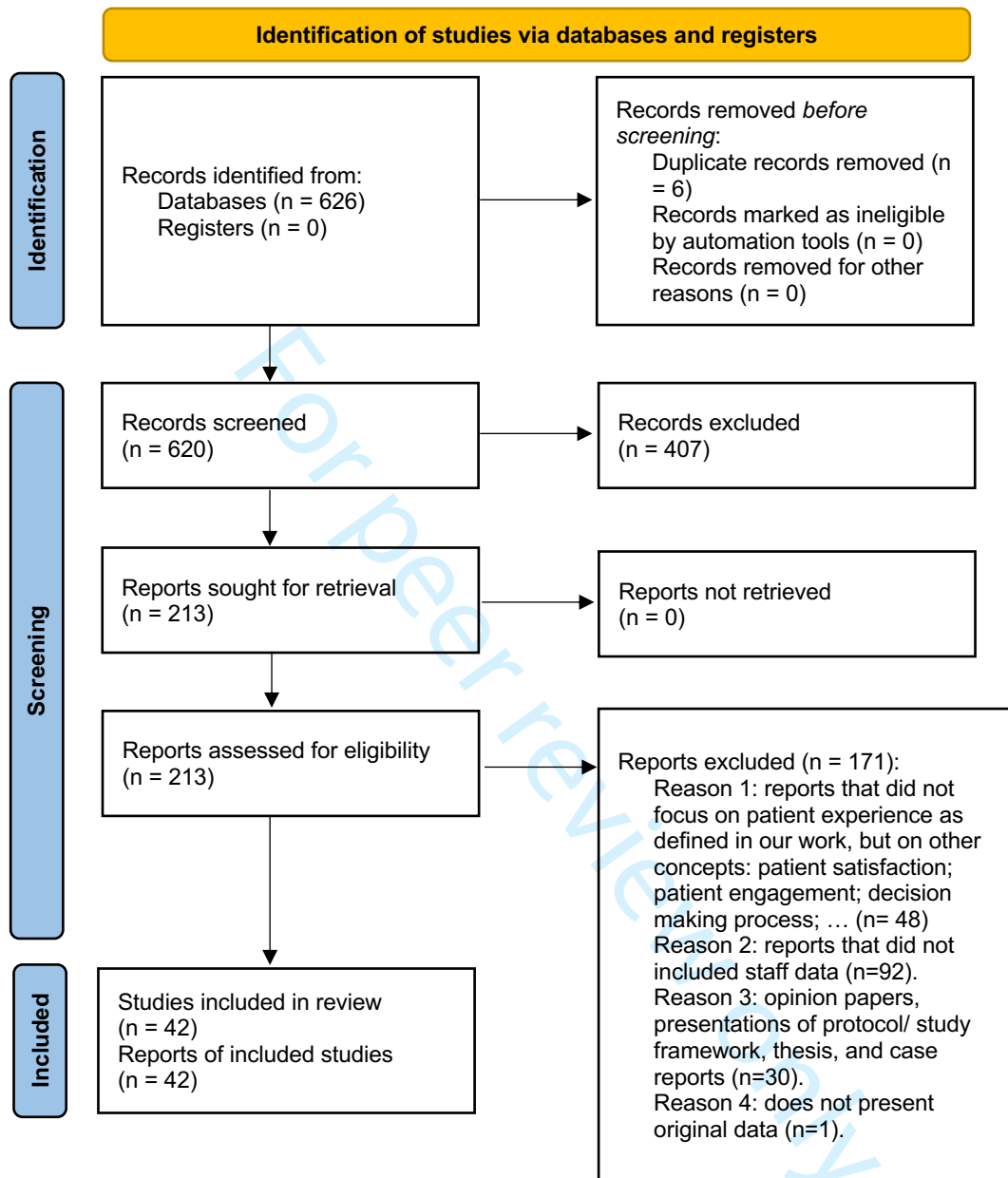
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3 **FIGURE**
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5 **Figure 1. PRISMA 2020 Flow Diagram.**
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FIGURE

Figure 1. PRISMA 2020 Flow Diagram



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

APPENDIX

Appendix 1. Detail search query in PubMed

Search: (((((((((((("patient experience"[Title/Abstract] AND "staff
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "employee
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "clinician
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "physician
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "professional
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "workforce
experience"[Title/Abstract]) OR "patient experience"[Title/Abstract]) AND "professional
patient relations"[MeSH Terms] Filters: from 2007/1/1 - 2021/7/21

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1-2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	3
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	3
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	16
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	4-5
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	4-5
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	Appendix 1
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	4-5
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	4-5
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	4-5
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	5
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	5



SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	6
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	6
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	6
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	6-13
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	6-13
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	13-15
Limitations	20	Discuss the limitations of the scoping review process.	15
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	15
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	16

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: [10.7326/M18-0850](https://doi.org/10.7326/M18-0850).



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