Key items for reports of primary care research: an international Delphi study

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ABSTRACT
Objective Reporting guidelines can improve dissemination and application of findings and help avoid research waste. Recent studies reveal opportunities to improve primary care (PC) reporting. Despite increasing numbers of guidelines, none exists for PC research. This study aims to prioritise candidate reporting items to inform a reporting guideline for PC research.

Design Delphi study conducted by the Consensus Reporting Items for Studies in Primary Care (CRISP) Working Group.

Setting International online survey.

Participants Interdisciplinary PC researchers and research users.

Main outcome measures We drew potential reporting items from literature review and a series of international, interdisciplinary surveys. Using an anonymous, online survey, we asked participants to vote on and whether each candidate item should be included, required or recommended in a PC research reporting guideline. Items advanced to the next Delphi round if they received >50% votes to include. Analysis used descriptive statistics plus synthesis of free-text responses.

Results 98/116 respondents completed round 1 (84% response rate) and 89/98 completed round 2 (91%). Respondents included a variety of healthcare professions, research roles, levels of experience and all five world regions. Round 1 presented 29 potential items, and 25 moved into round 2 after rewording and combining items and adding 2 new items. A majority of round 2 respondents voted to include 23 items (90%–100% for 11 items, 80%–89% for 3 items, 70%–79% for 3 items, 60%–69% for 3 items and 50%–59% for 3 items).

Conclusion Our Delphi study identified items to guide the reporting of PC research that has broad endorsement from the community of producers and users of PC research. We will now use these results to inform the final development of the CRISP guidance for reporting PC research.

INTRODUCTION
Primary care (PC) is a distinct model of healthcare that can improve patient and population health, and PC has its own set of research questions that are of interest to the PC community. PC research uses an array of research methods and has developed approaches that emphasise patient-centred, problem-oriented care of whole patients. Despite the breadth in topics and approaches that are employed in PC research, there are underlying common elements that are always needed to make PC research useful for researchers, clinicians, patients and policy-makers.

Consensus Reporting Items for Studies in Primary Care (CRISP) is an international, interprofessional, interdisciplinary initiative to help improve the reporting of PC research (http://www.crisp-pc.org/). The goal of CRISP is to improve the quality and usefulness of reports of PC research so that the results may be appropriately applied to improve the process of care and health outcomes for patients and communities.

CRISP research has studied current practices, assessed needs and collated ideas for improvement through a scoping review and surveys of PC researchers and clinicians. These studies have demonstrated the need to improve PC research reporting, documented a desire for research reporting guidelines tailored to the needs and characteristics of PC research and generated lists of specific suggestions for items that would make reports more useful. Our prior work has emphasised that reports of PC research are not always useful to readers as the reports do not include contextual elements, nor the recognition of competing demands, nor the
factors that impact on function such as multidisciplinary teams and therapeutic relationships.

Researchers across many fields recognise the need to improve research reporting.5–6 The Enhancing the QUAlity and Transparency Of Health Research (EQUATOR) network catalogues a growing number of guidelines for the reporting of health research (https://www.equator-network.org). Many have been widely adopted, with potential benefits including more effective dissemination, translation and implementation of new knowledge and reduction of research waste. Many well-known EQUATOR guidelines focus on standard research methods (eg, Preferred Reporting Items for Systematic Reviews and Meta-Analyses7, Consolidated Standards of Reporting Trials8 and Strengthening the Reporting of Observational Studies in Epidemiology9), but the bulk of the 400-plus guidelines are discipline specific. However, no guideline focuses directly on the reporting needs of PC.

This study aims to reach a consensus around the potential items for the CRISP guidance statement based on the expertise of the international PC research community. We will use these results to inform the final CRISP guidance to improve the reporting of PC research.

**METHODS**

We used a Delphi survey to reach a consensus on potential items for PC research reporting among the broad international community of producers and users of PC research. A Delphi survey is a consensus building method that gathers opinions from a select group of participants and allows participants to compare their opinion to others in the group via consecutive surveys.10 We chose the Delphi design as the most appropriate consensus-building method as it enables participation by people who are distant in place10 and we published our study protocol online.11 Our reporting is informed by Guidance on Conducting and Reporting Delphi Studies12 and the Checklist for Reporting Results of Internet E-Surveys Checklist for reporting internet e-surveys.13

**Delphi panel**

We sought to recruit a diverse panel to reflect the nature of the PC research community to represent the producers and users of PC research who bring unique expertise to the subject. This approach differs from most Delphi studies that typically use a small, homogeneous group of experts.10 12 We aimed for 100 participants to include practitioners, researchers, patients and policy-makers from high-income and lower-middle-income countries.

We recruited participants from a list of volunteers from our prior surveys and CRISP activities3 4 as well as our professional networks. We emailed volunteers, inviting them to complete a demographic survey and consent to participate in the online Delphi survey. Based on these survey returns, we identified target groups to guide our further invitation efforts.

### Table 1 Source of potential reporting items and Delphi panellists in the Consensus Reporting Items for Studies in Primary Care programme of research

<table>
<thead>
<tr>
<th>Source</th>
<th>Target group sampling method</th>
<th>Numbers</th>
<th>Items</th>
<th>Volunteers for Delphi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online survey 2021*</td>
<td>International PC research community Producers and users of PC research Purposive and snowball† sampling</td>
<td>255 respondents 24 nations 60% physicians 56% North American</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>Online survey 2021‡</td>
<td>Practicing PC clinicians—sees patients≥half-time Physician, nurse/Nurse Practitioner, Physician Assistant, psychologist, social worker, pharmacist Purposive and snowball† sampling</td>
<td>252 respondents 29 nations 88% physicians 55% women</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>Literature review 2021§</td>
<td>Scoping review on PC research reporting Systematic review of seven databases</td>
<td>25 papers included/2847 titles screened</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Editor interviews</td>
<td>Editors of journals regularly publishing PC research</td>
<td>9/11 journals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Phillips et al.4 †Lewis-Beck et al.19 ‡Phillips et al.3 §Phillips et al.2

PC, primary care; WONCA, World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians.
We used a purposeful sampling procedure and developed a matrix to stratify targeted characteristics including world regions, demographic factors, healthcare professions, research disciplines, research roles and experience levels. Inclusion criteria required participants to be actively engaged in some aspect of PC, read English well enough to complete the survey, be able to access the online survey and give informed consent. We applied no exclusion criteria.

**Delphi survey development**

The round 1 survey presented a list of potential reporting items drawn from the results of our prior CRISP research: a needs assessment survey among the international PC research community, a survey focusing on the needs of practicing clinicians and a scoping review. (table 1) In each of the surveys, we asked respondents for their views on what could be improved in PC research reporting and what items are important to include in research reports so that they are useful for their own research and/or clinical practice. We extracted the free-text comments from the two surveys, and EAS, WRP and PP synthesised the comments into an initial list of potential reporting items. The whole CRISP Working Group then reviewed the list, commented on each item and suggested new wording for clarity. We presented this aggregate list of potential items to the Delphi panel in round 1. We pilot tested the survey with the Working Group and colleagues who made suggestions to improve clarity of the potential items and survey instructions.

Participants received an email invitation between May to September 2021. Qualtrics XM software (Qualtrics, Seattle, Washington, USA) was used to provide respondents with online access to the closed Delphi survey using a unique survey code that allowed us to link participant responses between rounds.

The survey presented questions in the same order to all participants (online supplemental appendix 1 and 2). Round 1 presented 29 potential items over 32 pages and required the participant to respond within 4 weeks. Round 2 presented 25 potential items over 29 pages and required participants to respond within 6 weeks. Respondents could review and change answers, and no question forced response to advance the survey. We did not offer any financial incentive for participation, but participants could elect to be named in the acknowledgement of the manuscript (see below).

**Analysis**

Round 1 presented 29 potential reporting items to the Delphi participants. We calculated the percentage of participants that voted to include each item, exclude the item or indicated that they were unsure. Only participants who voted to include an item were asked about whether it should be required or recommended. For incomplete surveys, we included questions that were answered in the analysis.

Three investigators (EAS, WRP and PP) reviewed and summarised all comments and presented them to the Working Group, along with the descriptive statistics. Reworded items from round 1 were included in round 2 if they met the protocol criteria, which included at least 50% of participants agreeing that the item should be included (figure 1). We chose this relatively low threshold so as not to prematurely exclude items that could be reconsidered by participants after rewording or reflection on the comments from other participants. We prespecified that round 3 would only proceed if items had less than 50% of participants agreeing it should be included, plus suggestions for changes in wording.
Table 2  Continued

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Respondents, N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical region* (N=88)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>3 (3)</td>
<td></td>
</tr>
<tr>
<td>Region of the Americas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td>4 (5)</td>
<td></td>
</tr>
<tr>
<td>Caribbean</td>
<td>2 (3)</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>26 (30)</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>9 (10)</td>
<td></td>
</tr>
<tr>
<td>Asia region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern-Eastern Asia</td>
<td>4 (5)</td>
<td></td>
</tr>
<tr>
<td>Western Asia</td>
<td>2 (2)</td>
<td></td>
</tr>
<tr>
<td>European region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Europe</td>
<td>5 (6)</td>
<td></td>
</tr>
<tr>
<td>Southern Europe</td>
<td>1 (1)</td>
<td></td>
</tr>
<tr>
<td>Western Europe</td>
<td>4 (5)</td>
<td></td>
</tr>
<tr>
<td>British Isles</td>
<td>9 (10)</td>
<td></td>
</tr>
<tr>
<td>Pacific region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>18 (20)</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>1 (1)</td>
<td></td>
</tr>
<tr>
<td>Direct patient care of healthcare professionals (N=57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤50% of working week</td>
<td>27 (49)</td>
<td></td>
</tr>
<tr>
<td>&gt;50% of working week</td>
<td>12 (21)</td>
<td></td>
</tr>
<tr>
<td>Role/specialty of healthcare professionals (N=57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician—General Practitioner/ family doctor</td>
<td>41 (72)</td>
<td></td>
</tr>
<tr>
<td>Nurse and nurse practitioner</td>
<td>6 (11)</td>
<td></td>
</tr>
<tr>
<td>Pharmacist</td>
<td>3 (5)</td>
<td></td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>2 (4)</td>
<td></td>
</tr>
<tr>
<td>Physician assistant</td>
<td>1 (2)</td>
<td></td>
</tr>
<tr>
<td>Social worker</td>
<td>1 (2)</td>
<td></td>
</tr>
<tr>
<td>Physician—paediatrician</td>
<td>1 (2)</td>
<td></td>
</tr>
<tr>
<td>Podiatrist</td>
<td>1 (2)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1 (2)</td>
<td></td>
</tr>
<tr>
<td>Primary profession¶</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare professional</td>
<td>39 (44)</td>
<td></td>
</tr>
<tr>
<td>Scientist/researcher</td>
<td>37 (42)</td>
<td></td>
</tr>
<tr>
<td>Educator</td>
<td>7 (8)</td>
<td></td>
</tr>
<tr>
<td>Public health</td>
<td>1 (1)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5 (6)</td>
<td></td>
</tr>
<tr>
<td>Highest non-clinical research degree attained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No research degree</td>
<td>8 (9)</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>2 (4)</td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>18 (20)</td>
<td></td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>61 (69)</td>
<td></td>
</tr>
<tr>
<td>Level of primary care research experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>11 (12)</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>40 (45)</td>
<td></td>
</tr>
<tr>
<td>Advanced</td>
<td>38 (43)</td>
<td></td>
</tr>
</tbody>
</table>

*Geographical regions are presented using the United Nations M49 Standard. Regions without participants are not listed.
†Ethnicity data were collected but not presented, following current recommendations.
‡Other first languages spoken (N=1 for each): Arabic, Basque, Malay, Catalan, German, Hebrew, Kuche and Phusto.
§Respondents may have identified more than one role in primary care research.
¶Respondents were required to select only one primary profession. Some healthcare professionals listed other primary professions, thus the total n of healthcare professionals in this item may exceed the responses in the role/specialty of healthcare professionals item.

Patient and public involvement

We included clinician-researchers in our research team. Researchers, clinicians, educators and patients were involved as participants in the Delphi survey.

RESULTS

Following our prespecified sampling procedure, we invited 116 respondents to participate in the Delphi study. Round 1 was completed by 98 (84%). Round 2 was completed by 89 of the original 98 (91%; 77% of those agreeing to participate) (table 2). Panelists were from all five world regions and demographics are detailed in table 2.

Round 1 was completed by 98 people (84% of 116 volunteers), with 96% completing all questions. Tables 3 and 4 lists the levels of endorsement for inclusion, requirement and recommendation for each potential reporting item in rounds 1 and 2, respectively.

Respondents suggested rewording or combining for most items. In addition, they suggested two new items: reporting demographics of participants and theory informing research (table 4, item 16).

For one item in round 1, “report or translate measures into forms useful in PC patient care”, 28% were unsure if it should be included (ie, they answered ‘unsure’ in the survey, note that this is not shown in table 3), and participant comments suggested that they did not understand...
## Table 3 Potential reporting items in Delphi round 1 reporting respondent votes to include, require or recommend items

<table>
<thead>
<tr>
<th>Potential reporting items</th>
<th>Delphi round 1, N=98</th>
<th>Among respondents Voting to include item*</th>
<th>Require item*</th>
<th>Recommend item*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ranked by % voting to include item then by % voting to require item</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Discuss implications of study findings for research, patient care, education and policy with specific focus on primary care.</td>
<td>97% (88/91)</td>
<td>72% (63/88)</td>
<td>28% (25/88)</td>
</tr>
<tr>
<td>2</td>
<td>Include ‘primary care’ in the title, abstract and/or keywords or a discipline-specific term (eg, general practice, family medicine).</td>
<td>97% (95/98)</td>
<td>55% (52/95)</td>
<td>45% (43/95)</td>
</tr>
<tr>
<td>3</td>
<td>Describe the patients and populations in sufficient detail to allow comparison to other PC patient populations, including multimorbidities, inequity, vulnerability.</td>
<td>89% (84/94)</td>
<td>53% (43/84)</td>
<td>47% (38/84)</td>
</tr>
<tr>
<td>4</td>
<td>Describe clinical interventions in detail sufficient to allow readers to judge applicability to a variety of PC settings, including resources required, implementation, sustainability, challenges faced, solutions adopted.</td>
<td>88% (80/91)</td>
<td>55% (44/80)</td>
<td>43% (34/80)</td>
</tr>
<tr>
<td>5</td>
<td>Describe study interventions in detail sufficient to allow reader to replicate the research.</td>
<td>86% (78/91)</td>
<td>71% (55/78)</td>
<td>28% (22/78)</td>
</tr>
<tr>
<td>6</td>
<td>If a single disease is being studied, address the limitations and how multimorbidity might affect interpretation of study findings.</td>
<td>85% (77/91)</td>
<td>40% (31/77)</td>
<td>60% (46/77)</td>
</tr>
<tr>
<td>7</td>
<td>Describe if and how measures have been validated in PC settings.</td>
<td>85% (77/91)</td>
<td>41% (31/77)</td>
<td>59% (45/77)</td>
</tr>
<tr>
<td>8</td>
<td>Describe the research processes and how they might influence validity, transferability and scalability across PC settings (eg, recruitment, incentives, support for the intervention in a research setting).</td>
<td>83% (78/94)</td>
<td>65% (51/78)</td>
<td>34% (27/78)</td>
</tr>
<tr>
<td>9</td>
<td>Describe the importance of the issue under study (eg, problem, disease, diagnosis or illness) within the PC setting.</td>
<td>82% (79/96)</td>
<td>57% (45/79)</td>
<td>42% (33/79)</td>
</tr>
<tr>
<td>10</td>
<td>Use person-first language (eg, person with diabetes, not diabetic).</td>
<td>82% (80/98)</td>
<td>44% (35/80)</td>
<td>55% (44/80)</td>
</tr>
<tr>
<td>11</td>
<td>Describe the national and local healthcare system to allow comparison to other systems, such as: access to care, organisation of primary care, payment system, universal care or coverage, self referral to consultants, drug coverage, any characteristics likely different from the setting for most readers.</td>
<td>81% (74/91)</td>
<td>47% (35/74)</td>
<td>51% (38/74)</td>
</tr>
<tr>
<td>12</td>
<td>Describe how PC patients and/or community members were involved throughout the research process.</td>
<td>78% (75/96)</td>
<td>39% (29/74)</td>
<td>58% (43/74)</td>
</tr>
<tr>
<td>13</td>
<td>Describe how measures are relevant to PC patients and PC patient care.</td>
<td>73% (66/91)</td>
<td>42% (28/66)</td>
<td>58% (38/66)</td>
</tr>
<tr>
<td>14</td>
<td>Describe the clustering of patients, clinicians, teams and clinics and how it is addressed in the analysis.</td>
<td>71% (67/94)</td>
<td>55% (37/67)</td>
<td>42% (28/67)</td>
</tr>
<tr>
<td>15</td>
<td>Describe the origin of the research question and how it relates to patient care and primary care practice.</td>
<td>70% (69/98)</td>
<td>48% (33/69)</td>
<td>46% (32/69)</td>
</tr>
<tr>
<td>16</td>
<td>Describe implementation strategies used to encourage adoption of the intervention into routine PC clinical care.</td>
<td>70% (64/91)</td>
<td>30% (19/64)</td>
<td>64% (41/64)</td>
</tr>
<tr>
<td>17</td>
<td>Specify if the focus is on single clinical encounters or on a longitudinal course of care for a clinical problem (eg, episode of illness, episode of care).</td>
<td>66% (61/92)</td>
<td>44% (27/61)</td>
<td>54% (33/61)</td>
</tr>
<tr>
<td>18</td>
<td>If clinicians are an object of study, report separate groups separately or give rationale for aggregating different types of clinicians.</td>
<td>64% (60/94)</td>
<td>50% (30/60)</td>
<td>47% (28/60)</td>
</tr>
<tr>
<td>19</td>
<td>Describe how PC practicing clinicians were involved throughout the research process.</td>
<td>63% (60/96)</td>
<td>28% (17/60)</td>
<td>72% (43/60)</td>
</tr>
<tr>
<td>20</td>
<td>Discuss the impact of any recommendations on competing demands in PC practice.</td>
<td>63% (57/90)</td>
<td>23% (13/57)</td>
<td>75% (43/57)</td>
</tr>
<tr>
<td>21</td>
<td>Practice team—describe the composition and organisation of teams delivering patient care.</td>
<td>59% (55/94)</td>
<td>42% (23/55)</td>
<td>56% (31/55)</td>
</tr>
<tr>
<td>22</td>
<td>Describe the professional backgrounds of members of the research team and their experience in PC.</td>
<td>56% (54/96)</td>
<td>39% (21/54)</td>
<td>56% (30/54)</td>
</tr>
</tbody>
</table>

Continued
the statement, so the item was substantially reworded for round 2 to be ‘report findings in forms useful to PC clinicians and patients (Examples: number needed to treat, absolute risks instead of just relative risks, etc.)’ (table 4, item 18). A majority (81%) voted to include ‘describe the national and local healthcare system to allow comparison to other systems...’ (table 3, item 11) and 14/15 of those who answered ‘no’ were from North America.

We invited the 98 people who completed round 1 to participate in round 2 and 89 (91%) responded. Round 2 presented 25 items, including the two new items (table 4). Some of the items from round 1 items were combined for round 2: (1) three items (table 3, items 4, 5 and 16) from round 1 were combined into: ‘describe how PC patients, practicing clinicians, community members and other stakeholders were involved in the research process’ and (2) and three items (table 3, items 12, 19 and 26) were combined into ‘describe interventions and their implementation in sufficient detail to allow readers to judge applicability to routine practice in a variety of PC settings’.

There were limited suggestions for rewording in round 2 and no suggestions about adding or combining items. Round 2 results showed only minor changes from round 1, demonstrating Delphi panel consensus on the list of items. Therefore, per protocol, we did not proceed to a round 3 (figure 1).

A majority of round 2 respondents voted to include 23 items (90%–100% for 11 items, 80%–89% for 3 items, 70%–79% for 3 items, 60%–69% for 3 items and 50%–59% for 3 items). Among those voting to include items, over 50% voted to require reporting for 11 items. For many items, votes were relatively close between required and recommended (eg, 60:40 or less), with few items showing a strong preference.

**DISCUSSION**

This Delphi study of the international PC research community reached consensus on potential items for guidance for the reporting of PC research. The study represents the first time that the PC research community has been consulted on this topic. These items highlight the unique needs of PC research and complement the items commonly listed in guidelines developed by other experts for specific research methods and other purposes. The process prioritised 21 reporting items for inclusion in reports of PC research, and there was limited support for making items mandatory.
## Table 4  Potential reporting items in Delphi round 2 reporting respondent votes to include, require or recommend items

<table>
<thead>
<tr>
<th>Potential reporting items</th>
<th>Delphi round 2, N=89</th>
<th>Among respondents Voting to include item*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranked by % voting to include item then by % voting to require item</td>
<td>Include item</td>
<td>Require item*</td>
</tr>
<tr>
<td>1</td>
<td>Discuss implications of study findings for research, patient care, education and policy with specific focus on primary care.†</td>
<td>99% (86/87)</td>
</tr>
<tr>
<td>2</td>
<td>Describe the patients and populations in sufficient detail to allow comparison to other primary care patient populations.†</td>
<td>97% (84/87)</td>
</tr>
<tr>
<td>3</td>
<td>Describe the research processes and how these might influence the validity, generalisability and applicability of the study findings for primary care practice. (Examples: recruitment, incentives, implementation, study supports not routinely available in practice.)</td>
<td>97% (84/87)</td>
</tr>
<tr>
<td>4</td>
<td>Use person-focused language to refer to populations and participants in the research.†</td>
<td>96% (85/89)</td>
</tr>
<tr>
<td>5</td>
<td>Include ‘primary care’ and/or discipline-specific terms in the title, abstract and keywords. (Discipline-specific terms include general practice, family medicine, nursing, general internal medicine, general paediatrics and other primary care team members.)</td>
<td>93% (83/89)</td>
</tr>
<tr>
<td>6</td>
<td>Describe interventions and their implementation in sufficient detail to allow readers to judge applicability to routine practice in a variety of primary care settings. (Examples: resources required, sustainability, challenges faced, solutions adopted.)‡</td>
<td>95% (83/87)</td>
</tr>
<tr>
<td>7</td>
<td>Describe the healthcare system in sufficient detail to allow comparisons to other systems. (Examples: access to care, organisation of primary care, payment system, universal care or coverage, patient self-referral to consultants, payment of medication, technology including electronic health records, others.)</td>
<td>94% (82/87)</td>
</tr>
<tr>
<td>8</td>
<td>Describe how primary care patients, practicing clinicians, community members and other stakeholders were involved in the research process.‡</td>
<td>91% (79/87)</td>
</tr>
<tr>
<td>9</td>
<td>Explain the rationale for the research question and how it relates to primary care.†</td>
<td>90% (79/88)</td>
</tr>
<tr>
<td>10</td>
<td>Describe if and how study measures have been validated in primary care populations or settings.</td>
<td>90% (78/87)</td>
</tr>
<tr>
<td>11</td>
<td>Describe how study outcome measures are meaningful to primary care patients and their care.†</td>
<td>90% (78/87)</td>
</tr>
<tr>
<td>12</td>
<td>If clinical research focuses on a single disease, report if multimorbidity is present and how it might affect interpretation of the study findings.</td>
<td>89% (77/87)</td>
</tr>
<tr>
<td>13</td>
<td>Specify if the study focus is single clinical encounters or longitudinal courses of care for a clinical condition (eg, episode of care vs episode of illness).</td>
<td>83% (72/87)</td>
</tr>
<tr>
<td>14</td>
<td>Describe the magnitude or importance of the topic under study in the primary care setting. (Examples: disease prevalence, burden of suffering, disability.)</td>
<td>80% (70/87)</td>
</tr>
<tr>
<td>15</td>
<td>Describe any grouping of patients, clinicians, teams or clinical settings and how it is addressed in the analysis.</td>
<td>75% (65/87)</td>
</tr>
<tr>
<td>16</td>
<td>Identify the theory, model or framework used and explain why it is appropriate to the research question in primary care.§</td>
<td>71% (62/87)</td>
</tr>
<tr>
<td>17</td>
<td>Report categories of clinicians separately or provide a rationale for aggregating different groups.</td>
<td>70% (61/87)</td>
</tr>
<tr>
<td>18</td>
<td>Report findings in forms useful to primary care clinicians and patients. (Examples: number needed to treat, absolute risks instead of just relative risks, etc.)</td>
<td>63% (55/87)</td>
</tr>
<tr>
<td>19</td>
<td>Describe the backgrounds of members of the research team and the team’s familiarity with primary care.</td>
<td>61% (53/87)</td>
</tr>
</tbody>
</table>

Continued
While consensus was reached on all 21 reporting items, participants varied in the strength of their support for individual items. Greatest consensus (≥90% agreement to include) was reached with items relating to research implications, strategies to improve indexing and searching and transferability of study findings. Less support was directed at items that were seen as being more difficult to collect and report, including describing PC teams, relationships among patients–clinicians–researchers, and specific patient demographics. Potential items pertaining to research team background and experience in PC were less well supported. A few comments suggested this information might make some team members feel unwelcome or under-appreciated.

The preparatory programme of CRISP research and its international, interdisciplinary, inclusive approach gave this study particular strengths. Our Delphi panel engaged diverse participants reflecting the breadth of PC and its research enterprise. Consensus across these groups suggests broad agreement on what is important in PC and the research supporting practice, research, education and policy.

The Delphi process is a broadly accepted method for reaching consensus among expert groups. It is recommended for the development of research reporting guidelines, though not yet employed by most groups. There are multiple approaches to determining the ideal size and composition of Delphi panels. Most research reporting guidelines have relied on small homogenous groups of academic experts in research methodology. We elected to engage a large and diverse panel, as we recognise the complexity of PC research and the value of expertise contributed by researchers, clinicians, educators and patients.

Study limitations include the practical adaptations required by the current COVID-19 pandemic. Our authorship team could not meet in person, but a small group (WRP, EAS and PP) had frequent virtual meetings and communicated by email with the Working Group. Most respondents had English as their first language, but there are no indications that the needs differed between English and non-English speaking participants, and the global geographic spread of participants increases confidence that findings can be widely generalised. Also, a large proportion of the respondents were bilingual. There were only four clinicians who did not have another non-clinical professional role. This may represent a missing clinician perspective or more likely the commonality of portfolio careers.

This Delphi study is one of the final steps in the crystallisation of CRISP reporting checklist for PC research. The Working Group will use the Delphi findings to inform the next steps, which will include a group discussion on the final wording and order of the items and pilot testing of the checklist with diverse groups of researchers with different levels of expertise and experience. The overall vision of CRISP is to improve research reporting in PC to ensure reports are as helpful as possible for researchers, patients, clinicians and policy-makers. This Delphi survey

<table>
<thead>
<tr>
<th>Potential reporting items</th>
<th>Delphi round 2, N=89</th>
<th>Among respondents Voting to include item*</th>
<th>Include item</th>
<th>Require item*</th>
<th>Recommend item*</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Discuss the impacts of any recommendations on other demands and priorities in primary care practice.†</td>
<td>52% (45/87)</td>
<td>22% (10/45)</td>
<td>78% (35/45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 When collecting and reporting personal characteristics of study participants, define classify and identify the characteristics. Describe the source of data and the rationale for inclusion.†</td>
<td>51% (44/87)</td>
<td>52% (23/44)</td>
<td>45% (20/44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Specify if study patients have existing relationships with the clinicians/teams or are new patients.†</td>
<td>48% (42/87)</td>
<td>36% (15/42)</td>
<td>62% (26/42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 In studies of patients with a clinical condition, specify if it is acute or chronic, new or recurrent.†</td>
<td>48% (42/87)</td>
<td>31% (13/42)</td>
<td>69% (29/42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Describe the membership, roles and collaboration of the team delivering primary care to the patient.</td>
<td>46% (40/87)</td>
<td>18% (7/40)</td>
<td>80% (32/40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 For each category of clinician, report profession, specialty and qualifications. (Examples: physicians, certified family physicians, nurses, nurse practitioners, registered dieticians, masters degree social workers.)</td>
<td>40% (35/87)</td>
<td>20% (7/35)</td>
<td>80% (28/35)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
represents an important step on the CRISP journey to providing the support for PC researchers.

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REFERENCES

Appendix 1

CRISP Round 1 Delphi

Thank you for agreeing to be a panel member for the CRISP Delphi study. We value the contribution you are making to the development of CRISP - Consensus Reporting Items for Studies in Primary Care.

This is Round 1 of the Delphi survey and it will take approximately 30 minutes to complete. You will be shown each reporting item and asked to answer questions about whether it should be included in the CRISP guidance. You will also be given an opportunity to a rationale for your answer and suggest any potential rewording of statements.

Please do not share your link, this link and survey are your own unique to you.

Could you please complete Round 1 by 25th June 2021? If you are having trouble meeting that deadline, please email us to discuss

After you have completed the survey, you will be emailed a copy of your responses. In about 4 weeks, you will be sent Round 2 of the Delphi survey.

Q1 Include “primary care” in the title, abstract and/or keywords, or a discipline specific term (e.g. general practice, family medicine).

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

☐ Yes (1)
☐ No (2)
☐ Unable to answer (3)

Display This Question:
If include “primary care” in the title, abstract and/or keywords, or a discipline specific term (e.g... = Yes
Q2 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q3 Please give a reason for your answer.

________________________________________________________________

Q4 Do you have any suggestions for improving the wording of this statement?
Include “primary care” in the title, abstract and/or keywords, or a discipline specific term (e.g. general practice, family medicine).

________________________________________________________________

Q7 Use person-first language (e.g., person with diabetes, not diabetic)
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Use person-first language (e.g., person with diabetes, not diabetic) In your opinion, do you th... = Yes
Q8 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q9 Please give a reason for your answer.
________________________________________________________________

Q10 Do you have any suggestions for improving the wording of this statement?
Use person-first language (e.g., person with diabetes, not diabetic)
________________________________________________________________

Q11 Describe the origin of the research question and how it relates to patient care and primary care practice.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Describe the origin of the research question and how it relates to patient care and primary care... = Yes
Q12 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q13 Please give a reason for your answer.

Q14 Do you have any suggestions for improving the wording of this statement?

Describe the origin of the research question and how it relates to patient care and primary care practice.

Q15 Describe the importance of the issue under study (e.g., problem, disease, diagnosis or illness) within the PC setting.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q16 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q17 Please give a reason for your answer.

________________________________________________________________

Q18 Do you have any suggestions for improving the wording of this statement?

Describe the importance of the issue under study (e.g., problem, disease, diagnosis or illness) within the PC setting.

________________________________________________________________

Q19 Describe the professional backgrounds of members of the research team and their experience in PC.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q20 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q21 Please give a reason for your answer.

Q22 Do you have any suggestions for improving the wording of this statement?

Describe the professional backgrounds of members of the research team and their experience in PC.

Q23 Describe how PC practicing clinicians were involved throughout the research process.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Describe how PC practicing clinicians were involved throughout the research process. In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research? = Yes
Q24 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q25 Please give a reason for your answer.

________________________________________________________________

Q26 Do you have any suggestions for improving the wording of this statement? Describe how PC practicing clinicians were involved throughout the research process.

________________________________________________________________

Q27 Describe how PC patients and/or community members were involved throughout the research process.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Describe how PC patients and/or community members were involved throughout the research process... = Yes
Q28 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

○ Required (1)
○ Recommended (2)
○ Unsure (3)

Q29 Please give a reason for your answer.

________________________________________________________________

Q30 Do you have any suggestions for improving the wording of this statement? Describe how PC patients and/or community members were involved throughout the research process.

________________________________________________________________

Q31 Describe the relationships between researchers and treating clinicians/team members and how relationships might influence the process and outcomes of the research.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

○ Yes (1)
○ No (2)
○ Unable to answer (3)

Display This Question:
If Describe the relationships between researchers and treating clinicians/team members and how relat... = Yes
Q32 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q33 Please give a reason for your answer.

Q34 Do you have any suggestions for improving the wording of this statement? Describe the relationships between researchers and treating clinicians/team members and how relationships might influence the process and outcomes of the research.

Q35 Describe the research processes and how they might influence validity, transferability and scalability across PC settings (e.g. recruitment, incentives, support for the intervention in a research setting)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q36 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q37 Please give a reason for your answer.

________________________________________________________________

Q38 Do you have any suggestions for improving the wording of this statement?
Describe the research processes and how they might influence validity, transferability and scalability across PC settings (e.g. recruitment, incentives, support for the intervention in a research setting)

________________________________________________________________

Q39 Practice team - Describe the composition and organization of teams delivering patient care.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q40 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q41 Please give a reason for your answer.

Q42 Do you have any suggestions for improving the wording of this statement?

Practice team - Describe the composition and organization of teams delivering patient care.

Q43 Practice context - Describe PC clinicians by profession, specialty, training and certification.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
### Display This Question:
*If Practice context - Describe PC clinicians by profession, specialty, training and certification.*

$... = Yes$

Q44 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- [ ] Required (1)
- [ ] Recommended (2)
- [ ] Unsure (3)

Q45 Please give a reason for your answer.

________________________________________________________________

Q46 Do you have any suggestions for improving the wording of this statement?

*Practice context - Describe PC clinicians by profession, specialty, training and certification.*

________________________________________________________________

Q47 If clinicians are an object of study, report separate groups separately or give rationale for aggregating different types of clinicians.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- [ ] Yes (1)
- [ ] No (2)
- [ ] Unable to answer (3)
Q48 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q49 Please give a reason for your answer.

________________________________________________________________

Q50 Do you have any suggestions for improving the wording of this statement?

If clinicians are an object of study, report separate groups separately or give rationale for aggregating different types of clinicians.

________________________________________________________________

Q51 Describe the clustering of patients, clinicians, teams and clinics and how it is addressed in the analysis.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q52 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q53 Please give a reason for your answer.

________________________________________________________________

Q54 Do you have any suggestions for improving the wording of this statement?
Describe the clustering of patients, clinicians, teams and clinics and how it is addressed in the analysis.

________________________________________________________________

Q55 Describe the patients and populations in sufficient detail to allow comparison to other PC patient populations, including multimorbidities; inequity, vulnerability.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q56 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q57 Please give a reason for your answer.

________________________________________________________________

Q58 Do you have any suggestions for improving the wording of this statement?
Describe the patients and populations in sufficient detail to allow comparison to other PC patient populations, including multimorbidities; inequity, vulnerability.

________________________________________________________________

Q59 Report if the clinical problem studied is a new, continuing, recurrent or chronic/persistent problem.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q60 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q61 Please give a reason for your answer.

________________________________________________________________

Q62 Do you have any suggestions for improving the wording of this statement?

Report if the clinical problem studied is a new, continuing, recurrent or chronic/persistent problem.

________________________________________________________________

Q63 Specify if the focus is on single clinical encounters or on a longitudinal course of care for a clinical problem (e.g., episode of illness, episode of care)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Display This Question:
If Specify if the focus is on single clinical encounters or on a longitudinal course of care for a c... = Yes

Q64 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q65 Please give a reason for your answer.

Q66
Do you have any suggestions for improving the wording of this statement?
Specify if the focus is on single clinical encounters or on a longitudinal course of care for a clinical problem (e.g., episode of illness, episode of care)

Q67
Specify the focus of study as: a problem (e.g., headache) disease/diagnosis (e.g., migraine) illness (e.g., person living with migraines)
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
**Display This Question:**

If Specify the focus of study as: a problem (e.g., headache) disease/diagnosis (e.g., migraine) illness = Yes

Q68 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q69 Please give a reason for your answer.

________________________________________________________________

Q70 Do you have any suggestions for improving the wording of this statement?

Specify the focus of study as: a problem (e.g., headache) disease/diagnosis (e.g., migraine) illness (e.g., person living with migraines)

________________________________________________________________

Q71 Describe the relationships between study patients and clinicians/teams, including, the definition used and method for classifying patients.

- New or established patient.
- Continuity patient. (Does the patient receive most of their care over time from the clinician?)
- Referred or primary patient. (Was the patient referred to the clinician for a consultation?)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?
Q72 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q73 Please give a reason for your answer.

________________________________________________________________

Q74 Do you have any suggestions for improving the wording of this statement?

Describe the relationships between study patients and clinicians/teams, including the definition used and method for classifying patients.
- New or established patient.
- Continuity patient. (Does the patient receive most of their care over time from the clinician?)
- Referred or primary patient. (Was the patient referred to the clinician for a consultation?)

________________________________________________________________
Q75
If a single disease is being studied, address the limitations and how multi-morbidity might affect interpretation of study findings.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Q76 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q77 Please give a reason for your answer.

Q78 Do you have any suggestions for improving the wording of this statement?

If a single disease is being studied, address the limitations and how multi-morbidity might affect interpretation of study findings.
Q79
Describe the national and local healthcare system to allow comparison to other systems, such as:
- Access to care
- Organization of primary care
- Payment system
- Universal care or coverage
- Self referral to consultants
- Drug coverage
- Any characteristics likely different than the setting for most readers.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Q80 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q81 Please give a reason for your answer.

Q82
Do you have any suggestions for improving the wording of this statement?
Describe the national and local healthcare system to allow comparison to other systems, such as:
- Access to care
- Organization of primary care
- Payment system
- Universal care or coverage
coverage- Self referral to consultants- Drug coverage- Any characteristics likely different than the setting for most readers.

Q83
Describe clinical interventions in detail sufficient to allow readers to judge applicability to a variety of PC settings, including resources required, implementation, sustainability, challenges faced, solutions adopted.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

○ Yes (1)
○ No (2)
○ Unable to answer (3)

Display This Question:
If Describe clinical interventions in detail sufficient to allow readers to judge applicability to a... = Yes

Q84 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

○ Required (1)
○ Recommended (2)
○ Unsure (3)

Q85 Please give a reason for your answer.
Q86
Do you have any suggestions for improving the wording of this statement?
*Describe clinical interventions in detail sufficient to allow readers to judge applicability to a variety of PC settings, including resources required, implementation, sustainability, challenges faced, solutions adopted.*

Q87
*Describe study interventions in detail sufficient to allow reader to replicate the research.*
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
*If Describe study interventions in detail sufficient to allow reader to replicate the research. In... = Yes*

Q88 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q89 Please give a reason for your answer.

___________________________________________________________________
Q90
Do you have any suggestions for improving the wording of this statement?
*Describe study interventions in detail sufficient to allow reader to replicate the research.*

Q91
*Describe implementation strategies used to encourage adoption of the intervention into routine PC clinical care.*
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

**Display This Question:**
*If Describe implementation strategies used to encourage adoption of the intervention into routine PC clinical care = Yes*

Q92 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q93 Please give a reason for your answer.

________________________________________________________________
Q94
Do you have any suggestions for improving the wording of this statement?
Describe implementation strategies used to encourage adoption of the intervention into routine PC clinical care.

Q95
Describe if and how measures have been validated in PC settings.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

○ Yes (1)
○ No (2)
○ Unable to answer (3)

Display This Question:
If Describe if and how measures have been validated in PC settings. In your opinion, do you think t... = Yes

Q96 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

○ Required (1)
○ Recommended (2)
○ Unsure (3)

Q97 Please give a reason for your answer.
Q98
Do you have any suggestions for improving the wording of this statement?
Describe if and how measures have been validated in PC settings.
_____________________________________________________________________

Q99
Describe how measures are relevant to PC patients and PC patient care.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Describe how measures are relevant to PC patients and PC patient care. In your opinion, do you t... = Yes

Q100 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q101 Please give a reason for your answer.
_____________________________________________________________________

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Q102
Do you have any suggestions for improving the wording of this statement?
Describe how measures are relevant to PC patients and PC patient care.

Q103
Report or translate measures into forms useful in PC patient care.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

☐ Yes  (1)
☐ No  (2)
☐ Unable to answer  (3)

Display This Question:
If Report or translate measures into forms useful in PC patient care. In your opinion, do you think... = Yes

Q104 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

☐ Required  (1)
☐ Recommended  (2)
☐ Unsure  (3)

Q105 Please give a reason for your answer.
Q106 Do you have any suggestions for improving the wording of this statement?

Report or translate measures into forms useful in PC patient care.

Q107 Report strength of recommendations.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Report strength of recommendations. In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research? = Yes

Q108 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q109 Please give a reason for your answer.
Q110
Do you have any suggestions for improving the wording of this statement?
Report strength of recommendations.

Q111 Discuss implications of study findings for research, patient care, education and policy with specific focus on primary care.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Discuss implications of study findings for research, patient care, education and policy with spec... = Yes

Q112 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q113 Please give a reason for your answer.
Q114
Do you have any suggestions for improving the wording of this statement?
Discuss implications of study findings for research, patient care, education and policy with specific focus on primary care.

Q115
Discuss the impact of any recommendations on competing demands in PC practice.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Discuss the impact of any recommendations on competing demands in PC practice. In your opinion,... = Yes

Q116 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q117 Please give a reason for your answer.
Q118
Do you have any suggestions for improving the wording of this statement?
Discuss the impact of any recommendations on competing demands in PC practice.

Q6 That completes the review of the potential statements.
Are there any other comments you would like to make?
Appendix 2

CRISP Round 2 Delphi

Thank you for your continuing involvement as a panel member for the CRISP Delphi study. We value the contribution you are making to the development of CRISP - Consensus Reporting Items for Studies in Primary Care.

Thank you for the high quality and useful feedback, suggestions, and comments provided in Round 1. We are grateful for the time and consideration you have given to this project.

This is Round 2 of the Delphi survey and it will take approximately 30 minutes to complete. You have been provided with a PDF copy of your responses in Round 1 - this was emailed to you last week.

Please note the following changes to the survey based on the feedback from Round 1:
1. All items are to be considered by researchers if applicable. For brevity, we do not state ‘if relevant’ or ‘if applicable’ in each statement, but this is implied.
2. We have made several revisions to wording of reporting items.
3. We have added two new items. These are specified.
4. We have combined certain items into a single statement. These are specified.
5. We have removed any statements with <50% agreement for inclusion (unless the item was re-worded).

You will again be shown each revised reporting item and asked to answer questions about whether it should be included in the CRISP guidance. You will also be given an opportunity to a rationale for your answer and suggest any potential rewording of statements if necessary.

Please do not share your link, this link and survey are your own unique to you.

Could you please complete Round 2 by Monday 23rd August 2021? If you are having trouble meeting that deadline, please email us to discuss.

After you have completed the survey, you will be emailed a copy of your responses. A third round of the Delphi may or may not be needed. We will be guided by the responses in Round 2 and the CRISP Working Group agreement.

Q1
Original statement: Include “primary care” in the title, abstract and/or keywords, or a discipline specific term (e.g., general practice, family medicine).
97% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
- Makes it easier to search, find and judge the relevance of reports for readers and systematic
reviewers. Primary care is not yet a searchable MeSH term.

• Recognizes that PC practice and research are different than many other areas.
• Promotes the contributions of PC to research, which is often hidden to readers.
  May take up space in titles, restricted by journal style.

**Suggested re-wording:** Include “primary care” and/or discipline-specific terms in the title, abstract, and keywords. (Discipline specific terms include general practice, family medicine, nursing, general internal medicine, general paediatrics, and other primary care team members.)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:

If Original statement: Include “primary care” in the title, abstract and/or keywords, or a disciplin... = Yes

Q2 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q3 Please give a reason for your answer.

Q4 Do you have any suggestions for improving the wording of this statement?
Include “primary care” and/or discipline-specific terms in the title, abstract, and keywords. (Discipline specific terms include general practice, family medicine, nursing, general internal medicine, general paediatrics, and other PC team members.)

Q7
Original statement: Use person-first language (e.g., person with diabetes, not diabetic)
82% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:

• Encourages a respectful move away from disease-oriented to patient-centered language.
• Person-centered is a fundamental principle of primary care practice and research.
  o Some groups have other preferences for what they want to be called.

Suggested re-wording: Use person-focused language to refer to populations and participants in the research. (Examples include person with diabetes, not diabetics; person living with HIV; other language preferred by the affected group.)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

☐ Yes (1)
☐ No (2)
☐ Unable to answer (3)

Q8 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

☐ Required (1)
☐ Recommended (2)
☐ Unsure (3)
Q9 Please give a reason for your answer.

________________________________________________________________

Q10
Do you have any suggestions for improving the wording of this statement?

*Use person-focused language to refer to populations and participants in the research.*
(Examples include person with diabetes, not diabetics; person living with HIV; other language preferred by the affected group.)

________________________________________________________________

Q11

**Original statement:** Describe the origin of the research question and how it relates to patient care and primary care practice.

70% of participants voted “Yes” for this to be included in CRISP guidance.

**Comments:**
Many did not understand or had reservations about calling for “origin” of the research questions.

- Helps ensure that research is grounded in primary care.
- Helps assess relevance to primary care and usefulness in patient care.

It is already in most introduction sections.

**Suggested re-wording:** Explain the rationale for the research question and how it relates to primary care.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Display This Question:

If Original statement: Describe the origin of the research question and how it relates to patient care... = Yes

Q12 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

○ Required (1)
○ Recommended (2)
○ Unsure (3)

Q13 Please give a reason for your answer.

________________________________________________________________________

Q14 Do you have any suggestions for improving the wording of this statement?

Explain the rationale for the research question and how it relates to primary care.

________________________________________________________________________

Q15 Original statement: Describe the importance of the issue under study (e.g., problem, disease, diagnosis, or illness) within the PC setting. 82% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
Many had difficulty separating the origin-rationale-importance of research questions from the clinical importance of the topic-problem under study.
• A topic that may be important in some context may not be so important in primary care.
• Helps the reader assess the context, importance, and scope of the problem being researched.
• “Importance” can be quite subjective.

Suggested re-wording:
Describe the magnitude or importance of the topic under study in the primary care setting.
(Examples: disease prevalence, burden of suffering, disability)
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Original statement: Describe the importance of the issue under study (e.g., problem, disease, diagnosis) = Yes

Q16 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q17 Please give a reason for your answer.

Q18
Do you have any suggestions for improving the wording of this statement?
Describe the magnitude or importance of the topic under study in the primary care setting.
(Examples: disease prevalence, burden of suffering, disability)

Q19
Original statement: Describe the professional backgrounds of members of the research team and their experience in PC.
56% of participants voted “Yes” for this to be included in CRISP guidance.
Comments:
Many questioned the inclusion of “experience in PC,” worried that it would exclude early career people, non-clinicians, and researchers outside of PC. There did not seem to be a pattern in responses from different groups of participants.

- Transparency and reflexivity are important in all research, not just qualitative work.
- PC background is important for relevance and validity of the research.
  - This risks elitism and hierarchy and might discriminate against early career people, non-clinicians, and researchers outside of PC.
  - Excellent research can come from investigators with varied backgrounds, not necessarily clinical PC experience.

Suggested re-wording:
Describe the professional backgrounds of members of the research team and the team’s familiarity with primary care.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Q20 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q21 Please give a reason for your answer.
Q22
Do you have any suggestions for improving the wording of this statement?
Describe the backgrounds of members of the research team and the team's familiarity with primary care.

Q23 Please note: Questions 23, 27 and 31 from Round 1 have been combined.

Original statement 23: Describe how PC practicing clinicians were involved throughout the research process. - 62% voted "Yes"
Comments: • Helps assure relevance of research to real world settings. • Practice in PC is important for PC research and often service, training and research go hand in hand. o Practicing clinicians are not the only people who can be valuable research partners.

Original statement 27: Describe how PC patients and/or community members were involved throughout the research process. - 78% voted "Yes"
Comments: • It’s inconceivable that patients/consumers should not be involved in PC research if we aim to be patient-centered and community-oriented. • Expecting this to be reported for all studies will encourage more authentic involvement of patients as important partners. o Despite a valuable trend in this direction, it will require further culture change and not all investigators are ready. o Not all types of research need or are appropriate for patient involvement.

Original statement 31: Describe the relationships between researchers and treating clinicians/team members and how relationships might influence the process and outcomes of the research. - 50% voted "Yes"
Comments: Many felt this concept is unclear or difficult to operationalize. May not apply to all study types, mostly intervention studies. “Relationships” is ambiguous. Not specific to PC research. • It is essential to know how such relationships might influence study outcomes. • Important for quality appraisal and assessment of risk of bias. o Should already be covered under ethics approval and disclosure of COI. o Relationships and influences are hard to define.

Suggested rewording of the combined statement is:
Describe how primary care patients, practicing clinicians, community members, and other stakeholders were involved in the research process.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Q24 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q25 Please give a reason for your answer.

Q26 Do you have any suggestions for improving the wording of this statement? Describe how primary care patients, practicing clinicians, community members, and other stakeholders were involved in the research process.

Q35 Original statement: Describe the research processes and how they might influence validity, transferability, and scalability across PC settings (e.g., recruitment, incentives, support for the intervention in a research setting).

83% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
This item prioritises trials over other types of primary care research
This is not applicable for qualitative research

- Essential for rigor and external validity

**Suggested rewording:** Describe the research processes and how these might influence the validity, generalizability, and applicability of the study findings for primary care practice. (Examples: recruitment, incentives, implementation, study supports not routinely available in practice.)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

**Q36** Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

**Q37** Please give a reason for your answer.

________________________________________________________________

**Q38**
Do you have any suggestions for improving the wording of this statement?
*Describe the research processes and how these might influence the validity, generalizability,*
and applicability of the study findings for primary care practice. (Examples: recruitment, incentives, implementation, study supports not routinely available in practice.)

39

**Original statement:** Describe the composition and organisation of teams delivering patient care.

59% of participants voted “Yes” for this to be included in CRISP guidance.

**Comments:**
- Teams are important for PC delivery but not necessarily for research
- Will help to understand the research in context
- Will assist with transferability
  - Researchers wouldn’t know this information and would just “guess”

**Suggested rewording:** Describe the membership, roles and collaboration of the team delivering primary care to the patient.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

**Q40** Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)
Q41 Please give a reason for your answer.

Q42 Do you have any suggestions for improving the wording of this statement?

Describe the membership, roles and collaboration of the team delivering primary care to the patient.

Original statement: Describe PC clinicians by profession, specialty, training, and certification. 57% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
Very mixed responses—many thought too much emphasis on credentials, and too medical focus. This question is not about practice context it is about clinician characteristics. Both are probably important/relevant but this seems conflated.
- Helps the reader to contextualise the research as what primary care clinicians do varies by country
- This is important but may read as “20 bios for doctors in the clinic”
- This overemphasises qualifications rather than experience
- This is too much detail for a research report

Suggested rewording:
For each category of clinician, report profession, specialty, and qualifications. (Examples: physicians, certified family physicians; nurses, nurse practitioners; Registered Dieticians; masters degree social workers.)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q44 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q45 Please give a reason for your answer.

________________________________________________________________

Q46 Do you have any suggestions for improving the wording of this statement?

For each category of clinician, report profession, specialty, and qualifications. (Examples: physicians, certified family physicians; nurses, nurse practitioners; Registered Dieticians; masters degree social workers.)

________________________________________________________________

Q47 Original statement: If clinicians are an object of study, report separate groups separately or give rationale for aggregating different types of clinicians.

64% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
Most participants commented that this was a reasonable and important expectation, and a few said they did not understand the concept.

- This is useful, it makes the researcher be thoughtful about how they aggregate
- This would be helpful for future meta-analyses
  - This is only useful if the purpose of the study is to compare clinician groups; may not be relevant in qualitative research

Suggested rewording: Report categories of clinicians separately or provide a rationale for aggregating different groups.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

**Display This Question:**

If Original statement: If clinicians are an object of study, report separate groups separately or gi... = Yes

Q48 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q49 Please give a reason for your answer.

_____________________________________________________________________

Q50

Do you have any suggestions for improving the wording of this statement?

*Report categories of clinicians separately or provide a rationale for aggregating different groups.*

_____________________________________________________________________

Q51

**Original statement:** Describe the clustering of patients, clinicians, teams, and clinics and how it
is addressed in the analysis.
71% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
Most participants felt that the term “clustering” is only relevant for quantitative analysis and only in clinical trials. Some people said that they did not understand the statement; and others felt this was always happening in research. A few people noted that they saw this as a common flaw in PC research reporting.

- This is a common oversight in PC research reports and should be included in guidance
- Clustering is the wrong word and too prescriptive, and only used in quantitative data
- This is only important for clinical trials

Suggested rewording: Describe any grouping of patients, clinicians, teams, or clinical settings, and how it is addressed in the analysis.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Q52 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)
Q53 Please give a reason for your answer.

________________________________________________________________

Q54
Do you have any suggestions for improving the wording of this statement?
Describe any grouping of patients, clinicians, teams, or clinical settings, and how it is addressed in the analysis.

________________________________________________________________

Q55
Original statement: Describe the patients and populations in sufficient detail to allow comparison to other PC patient populations, including multimorbidities; inequity, vulnerability. 89% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
Many thought this was important but hard to report and it was frequently assumed to be standard practice
• Add educational level and ethnicity as these are important indicators for health and often forgotten in research
• Provide specific examples: income; education; ethnicity/racialisation; sexual orientation; gender; migration status; etc
• Remove ‘vulnerability’ as covered by other terms

Suggested rewording: Describe the patients and populations in sufficient detail to allow comparison to other primary care patient populations. (Examples: demographics, multimorbidities, social determinants of health, inequities.)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

  □ Yes  (1)
  □ No  (2)
  □ Unable to answer  (3)
Q56 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q57 Please give a reason for your answer.

Q58 Do you have any suggestions for improving the wording of this statement?

Describe the patients and populations in sufficient detail to allow comparison to other primary care patient populations. (Examples: demographics, multimorbidities, social determinants of health, inequities.)

Q59

Original statement: Report if the clinical problem studied is a new, continuing, recurrent or chronic/persistent problem.

49% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
- Too prescriptive and not relevant to all work
- What is the difference between continuing and chronic? Having clear definitions will be important here

Suggested rewording: In studies of patients with a clinical condition, specify if it is acute or chronic, new or recurrent.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Original statement: Report if the clinical problem studied is a new, continuing, recurrent or chron... = Yes

Q60 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q61 Please give a reason for your answer.
_________________________________________________________________

Q62 Do you have any suggestions for improving the wording of this statement?
In studies on patients with a clinical condition, specify if it is acute or chronic, new or recurrent.

_________________________________________________________________

Q63 Original statement: Specify if the focus is on single clinical encounters or on a longitudinal course of care for a clinical problem (e.g., episode of illness, episode of care)
66% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
• Consider use of term ‘problem’, it can be derogatory.
There were very few suggestions for re-wording.

Suggested rewording:
Specify if the study focus is single clinical encounters or longitudinal courses of care for a clinical condition (e.g., episode of care vs. episode of illness)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

☐ Yes (1)
☐ No (2)
☐ Unable to answer (3)

Display This Question:
If Original statement: Specify if the focus is on single clinical encounters or on a longitudinal co... = Yes

Q64 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?
☐ Required (1)
☐ Recommended (2)
☐ Unsure (3)

Q65 Please give a reason for your answer.

-----------------------------------------------------------------------------------------
Q66
Do you have any suggestions for improving the wording of this statement?

Specify if the study focus is single clinical encounters or longitudinal courses of care for a clinical condition (e.g., episode of care vs. episode of illness)

Q71
Original statement: Describe the relationships between study patients and clinicians/teams, including, the definition used and method for classifying patients. - New or established patient. - Continuity patient. (Does the patient receive most of their care over time from the clinician?) - Referred or primary patient. (Was the patient referred to the clinician for a consultation?)

57% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
Many comments along the lines of ‘no rewording suggestions but not happy with stem and recommend revision’

- Could be helpful but largely not relevant, too complex, too long, not sure how this helps
- Drop the words 'or primary patient'

Suggested rewording: Specify if study patients have existing relationships with the clinicians/teams or are new patients.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q72 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q73 Please give a reason for your answer.

________________________________________________________________

Q74 Do you have any suggestions for improving the wording of this statement?

Specify if study patients have existing relationships with the clinicians/teams or are new patients.

________________________________________________________________

Q75

Original statement: If a single disease is being studied, address the limitations and how multi-morbidity might affect interpretation of study findings.

85% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
• Useful question but only relevant to clinical research
• Not just disease. Symptom / condition / diagnosis / complaint - dependent on setting & context.

Suggested rewording:
If clinical research focuses on a single disease, report if multi-morbidity is present and how it might affect interpretation of the study findings

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?
Q76 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q77 Please give a reason for your answer.

________________________________________________________________

Q78
Do you have any suggestions for improving the wording of this statement?

If clinical research focuses on a single disease, report if multi-morbidity is present and how it might affect interpretation of the study findings

________________________________________________________________

Q79
**Original statement:** Describe the national and local healthcare system to allow comparison to other systems, such as: - Access to care - Organization of primary care - Payment system - Universal care or coverage - Self referral to consultants - Drug coverage - Any characteristics likely different than the setting for most readers.
81% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
All "No" responses, except for one, were from North American participants, but not all North American participants voted "No".
- Journal level summaries would be better – for example for the national primary care journals
- Necessary for understanding context and how to apply in own setting
- Good for international audiences
- Only some are required: payment system/universal coverage and maybe self-referrals
- It is ALWAYS required for Latin American and African studies. It must be equal to all countries.

Suggested rewording:
Describe the healthcare system in sufficient detail to allow comparisons to other systems. (Examples: access to care, organisation of primary care, payment system, universal care or coverage, patient self-referral to consultants, payment of medication, technology including electronic health records, others)

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Original statement: Describe the national and local healthcare system to allow comparison to othe... = Yes

Q80 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)
Q81 Please give a reason for your answer.
_____________________________________________________________________

Q82
Do you have any suggestions for improving the wording of this statement?
Describe the healthcare system in sufficient detail to allow comparisons to other systems.
(Examples: access to care, organisation of primary care, payment system, universal care or coverage, patient self-referral to consultants, payment of medication, technology including electronic health records, others)
_____________________________________________________________________

Q83
Please note: Items 83, 87 and 91 from Round 1 have been combined.

Original statement 83: Describe clinical interventions in detail sufficient to allow readers to judge applicability to a variety of PC settings, including resources required, implementation, sustainability, challenges faced, solutions adopted.
88% of participants voted “Yes” for this to be included in CRISP guidance.
Comments: • TIDIER and ULTRA already do this. • Only required for complex interventions. • Word limits make this difficult.

Original statement 87: Describe study interventions in detail sufficient to allow reader to replicate the research.
86 % of participants voted “Yes” for this to be included in CRISP guidance.
Comments: • Word limits are problematic, could use an appendix • Too similar to the previous statement – and previous one is preferred. • This is already covered by CONSORT and TIDIER

Original statement 91: Describe implementation strategies used to encourage adoption of the intervention into routine PC clinical care.
70% of participants voted “Yes” for this to be included in CRISP guidance.
Comments: • CRISP is too focused on intervention research. • Overlap with TIDIER • Important and relevant for knowledge translation • Would be beneficial for “implementation research” but not all PC research is focused on this

The suggested rewording of the combined statement is:
Describe interventions and their implementation in sufficient detail to allow readers to judge applicability to routine practice in a variety of primary care settings. (Examples: resources required, sustainability, challenges faced, solutions adopted.)
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Please note: Items 83, 87 and 91 from Round 1 have been combined. Original statement 83: Descr... = Yes

Q84 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q85 Please give a reason for your answer.

________________________________________________________________

Q86 Do you have any suggestions for improving the wording of this statement?

Describe interventions and their implementation in sufficient detail to allow readers to judge applicability to routine practice in a variety of primary care settings. (Examples: resources required, sustainability, challenges faced, solutions adopted.)

________________________________________________________________
Q95

**Original statement:** Describe if and how measures have been validated in PC settings. 85% of participants voted “Yes” for this to be included in CRISP guidance.

**Comments:**
- This information is fundamental to assess and improve the validity of study findings for application in PC.
- Will stimulate research to validate and develop new tools useful for PC research.
- Many accepted measures have not been validated and PC and are all we have available for use.

**Suggested rewording:**
Describe if and how study measures have been validated in primary care populations or settings.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

**Display This Question:**
If Original statement: Describe if and how measures have been validated in PC settings. 85% of part... = Yes

Q96 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q97 Please give a reason for your answer.
Q98
Do you have any suggestions for improving the wording of this statement?
Describe if and how study measures have been validated in primary care populations or settings.

Q99
Original statement: Describe how measures are relevant to PC patients and PC patient care. 73% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
• Relevance of measures and outcomes to patients is crucial to judging the validity of findings and their implications for PC.
• Validity of measures determines the validity of research.
   o Would not apply to research that is not about patient care outcomes.

Suggested rewording:
Describe how study outcome measures are meaningful to primary care patients and their care.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

☐ Yes (1)
☐ No (2)
☐ Unable to answer (3)

Display This Question:
If Original statement: Describe how measures are relevant to PC patients and PC patient care. 73% of... = Yes
Q100 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q101 Please give a reason for your answer.

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Q102
Do you have any suggestions for improving the wording of this statement?
Describe how study outcome measures are meaningful to primary care patients and their care.

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Q103
Original statement: Report or translate measures into forms useful in PC patient care. 25% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
28% of respondents were unable to answer, suggesting difficulties with clarity of language or understanding item intent. Although only 25% of participants voted 'Yes', the higher number of non-responders led to this item being reworded with examples, rather than automatically excluded.
- Concept of “translate” was a stumbling block
- Would need examples.

Suggested rewording:
Report findings in forms useful to primary care clinicians and patients. (Examples: NNT – number needed to treat; absolute risks instead of just relative risks etc)
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

**Display This Question:**

If Original statement: Report or translate measures into forms useful in PC patient care. 25% of par... = Yes

Q104 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q105 Please give a reason for your answer.

________________________________________________________________

Q106

Do you have any suggestions for improving the wording of this statement?

Report findings in forms useful to primary care clinicians and patients. (Examples: NNT – number needed to treat; absolute risks instead of just relative risks etc)

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Q111

**Original statement:** Discuss implications of study findings for research, patient care, education,
and policy with specific focus on primary care.  
97% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
• This is an essential part of the research reporting.
• All parts may not be relevant to every research report.
• It should be in the discussion or conclusion.

Suggested rewording:
Discuss implications of study findings for research, patient care, education and policy with specific focus on primary care.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

○ Yes (1)
○ No (2)
○ Unable to answer (3)

Display This Question:
If Original statement: Discuss implications of study findings for research, patient care, education,... = Yes

Q112 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

○ Required (1)
○ Recommended (2)
○ Unsure (3)
Q114
Do you have any suggestions for improving the wording of this statement?
Discuss implications of study findings for research, patient care, education and policy with specific focus on primary care.

Q115
Original statement: Discuss the impact of any recommendations on competing demands in PC practice.
63% of participants voted “Yes” for this to be included in CRISP guidance.

Comments:
• It may be difficult to achieve within the research study; difficult to discuss within word limits.
• Too subjective (opinion not a finding) and would depend on the lens of the person who is answering the question (e.g. admin, clinician) and what the demands of PC are locally.
• This is uniquely a primary care concept and will help authors contextualise findings and recommendations
• There was some confusion about the term "competing demands".

Suggested rewording:
Discuss the impacts of any recommendations on other demands and priorities in primary care practice.

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)
Q116 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q117 Please give a reason for your answer.

Q118 Do you have any suggestions for improving the wording of this statement?

Discuss the impacts of any recommendations on other demands and priorities in primary care practice.

Q121 Please note: this is a new item. It was suggested by participants in Round 1.

Identify the theory, model, or framework used and explain why it is appropriate to the research question in primary care

In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?
Q122 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q123 Please give a reason for your answer.

________________________________________________________________

Q124 Do you have any suggestions for improving the wording of this statement?

Identify the theory, model, or framework used and explain why it is appropriate to the research question in primary care

________________________________________________________________

Q125 Please note: this is a new item. It was suggested by participants in Round 1.

When collecting and reporting personal characteristics of study participants, define, classify, and identify the characteristics. Describe the source of data and the rationale for inclusion.
In your opinion, do you think this statement should be included in formal guidance for the reporting of primary care research?

- Yes (1)
- No (2)
- Unable to answer (3)

Display This Question:
If Please note: this is a new item. It was suggested by participants in Round 1. When collecting an... = Yes

Q126 Do you think the item should be included as a REQUIRED item, or RECOMMENDED?

- Required (1)
- Recommended (2)
- Unsure (3)

Q127 Please give a reason for your answer.

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Q128 Do you have any suggestions for improving the wording of this statement?

When collecting and reporting personal characteristics of study participants, define, classify, and identify the characteristics. Describe the source of data and the rationale for inclusion.
Q6 That completes Round 2 of the Delphi and review of the potential statements. Are there any other comments you would like to make?

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Q129
We would like to acknowledge your contributions, along with our other CRISP Delphi panel participants, but we need permission to list names in the published report of this study. Names will be listed alphabetically in the acknowledgment section of the academic publication of the Delphi survey.

Please indicate your permission to be acknowledged in the publication and how you would like your name to appear.

- Yes; I give permission to list my name as a Delphi panel participant in the acknowledgement section of academic publications. (1)
- No (2)

________________________________________________________________

Q131 Please list my name as: (name only please, no degrees, titles, positions)

________________________________________________________________

Q133 Please confirm your email. Your responses will be sent to this email for your records.

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