

# The Patient Centred Assessment Method for improving nurse-led biopsychosocial assessment of patients with long-term conditions: a feasibility RCT

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**Disclaimer:** This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

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## Scientific summary

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# Scientific summary

## Background

The recent Quality and Outcomes Framework (QOF) initiatives to promote primary care-led assessment of mental health problems in people living with long-term conditions (LTCs) did not have the intended impact. This may be as a result of the limited experience and lack of confidence of primary care nurses who conducted most depression screening as part of routine annual reviews. The tick-box and medicalised nature of the QOF served only to limit these skills even further and contributed to little or no attention being paid in these assessments to the social problems that might contribute to poor physical and mental well-being. The Patient Centred Assessment Method (PCAM) has been developed to enable broad assessment of patient biopsychosocial needs in primary care, and to promote action based on the severity and urgency of needs. The PCAM is an adapted version of the Minnesota Complexity Assessment Method, which was derived from the INTERMED (a method to assess health service needs). The PCAM has previously been evaluated in anticipatory (Keep Well) health check clinics, which were initiated by the Scottish Government for early identification of LTCs, or risk of LTCs, in those aged 40–64 years and living in deprived communities in Scotland. However, the PCAM has neither been evaluated for use by primary care practice nurses (PNs) in regard to its potential value for addressing mental well-being in patients with LTCs nor been subject to clinical trial to determine its impact on nurse behaviour and patient outcomes.

## Research questions

Is it feasible and acceptable to use the PCAM in primary care nurse-led annual reviews for people with LTCs? Is it feasible and acceptable to run a cluster randomised trial of the PCAM intervention in primary care?

## Aim

This research aimed to assess the acceptability and implementation requirements of the PCAM for enhancing the care of patients with LTCs and comorbid mental and social care needs in primary care. It also aimed to assess the fidelity of its implementation/use among nurses (i.e. do they use it to explore the range of health and psychosocial domains covered by the PCAM?), and to conduct a feasibility trial to determine whether or not a future full-scale trial of its impact on nurse-delivered patient care and patient outcomes is feasible.

## Methods

Practitioner and patient focus groups were used to assess the views of primary care professionals and people with LTCs about the acceptability and implementation requirements of the PCAM, especially for nurse consultations for LTCs. The PCAM was then tested in a feasibility cluster randomised controlled trial (RCT), which aimed to recruit eight general practitioner (GP) practices and 16 PNs. Four practices (eight nurses) were to be allocated to deliver the PCAM intervention and four practices (eight nurses) would deliver care as usual (CAU). Baseline data collection was to be conducted in all practices with all study nurses prior to randomisation, and consisted of immediate post-consultation data being collected for a cohort of 10 patients per nurse ( $n = 160$  patients), including patient demographics, a patient-completed evaluation of the consultation and patient-completed outcome measures, and any nurse referrals or signposting to services during the consultation. Patient-completed outcome measures would be collected

by postal questionnaire at the 8-week follow-up. Practices would then be randomised to the PCAM intervention or to deliver CAU. The same data would then be collected for a second cohort of patients in both the intervention and control practices ( $n = 160$  patients), following the introduction of the PCAM in intervention practices. The second cohort would also complete follow-up measures at 8 weeks.

Fidelity of implementation and an understanding of how nurses used the PCAM, and whether or not it changed how they engage in assessments, were tested via a sample of audio-recorded nurse-led annual assessments, both before ( $n = 5$ ) and during the use of the PCAM ( $n = 4$ ). Follow-up interviews with nurses and patients were conducted to gain their reflections on the use and perceived impact of the PCAM.

## Outcomes

The primary outcome for this study was the comparison of planned recruitment and retention of nurses and patient completion of questionnaires (including follow-up) with actual recruitment and completion rates. The patient outcome measurements tested for use in a future trial were the 12-item General Health Questionnaire, the Short Form questionnaire-12 items and the Warwick–Edinburgh Mental Well-Being Scale. Nurse behaviour was measured via the number and types of referrals/signposting and a patient evaluation of the nurse consultations via the Consultation and Relational Empathy measure and the Patient Enablement Instrument (PEI), and nurse confidence in dealing with mental health issues was assessed using the Depression Attitude Questionnaire.

Qualitative focus group, interview and field-note data were used in a process evaluation to identify barriers to, and facilitators of, the use and implementation of the PCAM, as well as the barriers to, and facilitators of, conducting a future trial.

## Results

From approaches to 159 eligible practices, 14 practices expressed an interest in the study and six practices were recruited to take part; five practices accepted the invitation to participate in both phases of the study and one practice agreed to participate in phase 1 only. Of the six participating practices, two had just one PN, resulting in 10 nurses overall. Following the completion of baseline recruitment, the five practices participating in both stages were randomised to either the PCAM arm or the CAU arm in a 2 : 1 ratio. This resulted in three practices (six nurses) being placed in the PCAM arm and two practices (three nurses) in the CAU arm for the second phase of research.

### *Nurse completion*

Only seven out of the 10 nurses (four practices) provided phase 1 and phase 2 data, including nurse demographic data and nurse outcome data. This would indicate that nurse retention is poor, but, when nurses are committed to participating, data completion can be achieved.

### *Patient recruitment and completion*

Each nurse was asked to recruit 10 patients in each phase. This was achieved by all nurses in phase 1 (in which 113 patients were recruited and completed questionnaires) and by six nurses in phase 2 (in which 77 patients were recruited and completed questionnaires). Only one nurse who participated in phase 2 failed to recruit the 10 patients required. This suggests that patient recruitment is achievable using the methods proposed in this feasibility trial. Patient follow-up was approximately 60% in phase 1 and just under 50% in phase 2. Reduced follow-up in phase 2 was affected by the delayed study timetable, which did not allow for the follow-up of all participants.

### ***Fidelity of use of the Patient Centred Assessment Method***

Of the six nurses in the PCAM arm of the study, four agreed, initially, to have their consultations recorded; however, subsequently, only two nurses each recruited two patients before and after PCAM. Of the remaining two nurses, only one recruited a single patient within the time given for this stage of the study, giving a total sample of nine patients (five before and four after PCAM training). The analysis of recordings suggested that the PCAM does indeed change nurse behaviour in consultations. In pretraining consultations there was a strong focus on the physical health and lifestyle behaviour domains, and exploration of the impact of physical, lifestyle or other concerns on the patients' mental well-being was not particularly evident. Following PCAM training, there was more evidence of attention being given to the impact of physical, lifestyle or other concerns on patients' mental well-being, with enquiry into these areas beginning much earlier in the consultation. The use of the PCAM in consultations did not require any more time than usual.

### ***Acceptability of the Patient Centred Assessment Method intervention for nurses***

For nurses, the PCAM was fairly easily integrated into a consultation, although some participants reflected that the process of integration took some time and support. Nurses reported that the PCAM appears to help support a positive patient–nurse relationship by increasing the quality and openness of communication, and the understanding of the patient's life. The nurse participants perceived this to be beneficial for both the patient and the nurse, both in relation to the quality of the relationship and the quality of the care provided. Nurses found the resource pack very useful and had been active in signposting patients to various sources of support. This seemed to be accompanied by an approach that involved helping patients to access support for themselves and to address what their own priorities were, rather than focusing on fixing purely clinical issues. Long-term adoption of the PCAM appears likely for some of the nurse participants involved in this research, beyond the research project itself.

### ***Acceptability of the Patient Centred Assessment Method intervention for patients***

The patient participants who were interviewed did not notice any apparent difference to their annual review post PCAM implementation. However, patients did describe talking with their nurse about their lives and their broader concerns during reviews, and described welcoming these conversations with their nurse. PCAM implementation did not have a negative or obstructive impact on the consultation. The use of the PCAM to guide the consultation appeared to be seamlessly integrated into it, from the patient's point of view.

### ***Process evaluation***

There needs to be flexibility in how training and support is delivered. Brief training, followed by nurse reflection on the PCAM, alongside testing small areas of the PCAM and building up to its full use, can be interspersed with training/support sessions as nurses become more familiar and confident with the process or need to come back and ask questions. Training needs to include more on boundaries and how to deal with complex issues over a number of reviews. There is a need to further emphasise where the PCAM fits into the 'pyramid of psychological need'. When this was emphasised in later training sessions, it helped the PNs to see that it was not designed to solve all problems.

The resource pack is an integral part of the PCAM intervention for ensuring that nurses feel confident that they can do something about the issues raised during consultations. Practices need to identify a resource champion who can keep the resource list up to date. In some cases, the practice manager saw this as a role they could fulfil.

Overall, there were few adaptations required to the PCAM intervention beyond flexibility in delivery of training.

In relation to trial implementation, further work would be needed to establish whether or not recruitment efforts focused on PNs, as well as other incentive schemes, such as back-fill of nurses' posts for study duration, would yield better practice participation. Dedicated researcher support is needed to support data collection in both phases, especially for the first couple of clinics or until researchers are confident that research processes are operating as required.

More exploratory work is needed into acceptable methods for monitoring adherence/fidelity to the PCAM by nurses, and understanding nurse reluctance towards consultation recording.

## Conclusions

The PCAM has been shown to be feasible and acceptable for use in primary care in the UK. In addition, it has been shown that the PCAM does indeed have the potential to change the ways in which nurses engage with patients with LTCs in the context of LTC reviews, resulting in more attention being paid to the mental well-being and social care needs of patients. The PCAM is more likely to be feasible when nurses see the asking of these questions as part of the role of nursing, view their role as facilitating links to information or resources that can address concerns (rather than feeling that they have to address the concerns themselves) and have the information about resources available to them, and when there is a whole-practice commitment to the approach. Any future study of implementing or testing of the PCAM in primary care would require these conditions to be met.

A cluster RCT would theoretically be possible at a practice-site level; however, given the above conditions, this would be resource intensive and may require a different approach to working with practices to establish their 'state of readiness' (such as an improvement methodology) and a different research design to evaluate adoption and impact. In addition, the efforts required to recruit to a primary care-based cluster randomised trial and the current 'crisis' climate of primary care (which seems to prevent many practices from engaging with research even when 'interested') would further indicate that a full cluster trial is not feasible or in any way cost-effective at this time.

## Recommendations

The PCAM intervention warrants further exploration as an effective mechanism for improving the quality of care for people with LTCs in primary care, particularly in the holistic review of patient needs by primary care nurses.

A full-scale cluster randomised trial is not recommended within the current climate of primary care research participation in Scotland. This may also include the rest of UK general practice, and a brief survey by primary care research networks in England may determine whether or not this is also the case in England.

Research should explore nurse reluctance towards having their consultations recorded in order to assess whether or not this is still a potential mechanism for assessing fidelity to the PCAM.

Alternative acceptable methods to exploring fidelity to the PCAM should also be explored. This may include observational methods by peers.

## Trial registration

This trial is registered as ISRCTN98973169.

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