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Qualitative Research

‘It’s what we should be doing anyway’: using financial incentives to promote relational continuity in Australian General Practice—a nested case study analysis

Using financial incentives to promote relational continuity in General Practice—a nested case study analysis

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Abstract

Background: Relational continuity is a fundamental component of primary care. The ‘Quality in General Practice Trial’ (EQuIP-GP), was a 12-month cluster randomized trial, designed to investigate whether financial incentives can improve relational continuity in primary care.

Aim: To examine (i) how financial incentives are perceived and experienced by primary care patients, providers, and practice staff, and (ii) how clinical and organizational routines related to relational continuity are influenced by the introduction of a financial model designed to incentivize relational continuity.

Design and setting: We used a mixed methods case study approach with six of the intervention arm practices participating in the EQuIP-GP trial.

Method: Semi-structured interviews were conducted with patients, providers, practice staff, and intervention facilitators. Intervention facilitators kept structured diaries to capture reflective notes. To contextualize results, practices completed a modified practice attributes survey and patients completed the Primary Care Assessment Tool at baseline and 12 months.

Results: Patient-perceived relational continuity was not impacted by the intervention. Financial incentives were preferred for rewarding, as opposed to incentivizing, quality care; however, they were perceived as a blunt and inflexible instrument. The introduction of the incentive model increased attention to pre-existing organizational routines rather than creating new ones.

Conclusion: Incentive models should be suitably flexible to accommodate diversity in patient and practice needs. Small changes can be made to existing practice routines that will improve awareness and conscientiousness of relational continuity. Further research should examine how feasible these routine changes would be in practices that do not already focus on continuity.

Keywords: Primary health care; general practice; continuity of care; relational continuity; financial incentives; pay for performance

Background

Continuity is an essential and valued component of primary healthcare [1, 2], and has been conceptualized as combining concepts of informational, management, and relational continuity [1]. Relational continuity has been defined as “a therapeutic relationship between a patient and one or more providers that spans various healthcare events and results in accumulated knowledge of the patient and care consistent with the patient’s needs’ [3]. Relational continuity has been associated with enhanced patient satisfaction, improved treatment adherence, and reduced mortality [4, 5]. It is valued by

Key messages

- Relational continuity is a core feature of quality primary care.
- There is interest in using financial incentives to promote quality care.
- We explored GPs experience of a trial incentivizing relational continuity.
- While participants valued continuity, they felt it should not be incentivized.
- The intervention had minimal impact on practice routines.

both patients and providers, and its absence is associated with health and economic costs [6, 7].

The concept of continuing therapeutic relationships in primary care has been challenged by the changing landscape of primary health care. Fee-for-service funding models tend to promote shorter consultations and rapid patient turnover [8, 9], while increasing practice sizes and a shift to part-time general practitioner (GP) work has been found to be associated with a reduced likelihood of strong GP-patient relationships [1, 10].

In the UK and Canada, a range of financial incentives have been introduced alongside fee-for-service funding models to reinforce quality in primary care [11]. These incentives have shown success in improving standardization of care and evidence-based practice [11]. Australia first introduced quality of care incentives for primary care through the 1996 'Better Practice Program' [12]. The resulting Practice Incentives Payment and additional Service Incentives Payment provide practice incentives for activities that contribute to quality care, such as education, accessibility in rural settings, and the provision of after-hours clinical care [13]. Researchers and policymakers have speculated that routines related to relational continuity, reflecting the quality of doctor-patient interactions, could be similarly incentivized. However, there are no direct financial incentives for relational continuity within the current Australian primary care funding scheme, and little evidence from Australia or internationally directly linking financial incentives to improvements in relational continuity [14].

The 'Quality in General Practice Trial' (EQuIP-GP) [15] was a cluster randomized trial that examined whether patient enrolment with a preferred GP and a funding model incentivizing continuity could improve patient-perceived relational continuity. Intervention practices received incentives for achieving early post-hospital follow-up, reducing hospitalization rates, provide longer consultations alongside reducing the use of unnecessary prescriptions and tests. The potentially unnecessary prescriptions and tests were chosen from high-priority items selected from Australia's Choosing Wisely initiative, using recommendations from the Royal Australian College of General Practitioners (RACGP) on treating common clinical scenarios based on the latest available evidence [16]. The trial ran from 1 August 2018 to 31 July 2019 and included a total of 774 patients, aged 18–65 years with a chronic illness or aged over 65 years, from 34 general practices in metropolitan, regional, and rural Australia across three states.

The primary EQuIP-GP trial outcomes are reported elsewhere [17]. The study found that patient-reported relational continuity was not influenced by the intervention, and did not support the hypothesis that financial incentives would improve patience experience of relational continuity. Nevertheless, EQuIP-GP's comprehensive data set provided an opportunity to conduct a closer exploration of practices' experiences with the financial incentives underpinning Australian general practice.

Our research questions were:

- How are financial incentives perceived and experienced by primary care patients, providers, and practice staff?
- How are clinical and organizational routines pertaining to relational continuity influenced by the introduction of a financial model to incentivize relational continuity?

Methods

Design

Our explanatory mixed methods study [18] used case studies of a subset of general practices participating in the intervention arm of the EQuIP-GP trial. Case study approaches have an increasing role in health services research when studying complex phenomena and the contexts in which they are embedded [19]. Our exploration of the contextual influences on the EQuIP-GP intervention drew on Stange and Glasgow's conceptual model [20] of the influence of context on primary care transformation.

Recruitment and randomization

Practice recruitment for the larger EQuIP-GP trial occurred in 2018 and is described in detail elsewhere [15]. Practices were recruited through three participating Practice-Based Research Networks (PBRNs). Participants included intervention facilitators, GPs, practice nurses (PNs), and practice managers (PMs). Three intervention facilitators, one from each state, were employed at each of the study sites to support the implementation of the intervention model. Once practices were recruited, practice staff conducted an electronic database search to identify active patients (> 3 practice attendances over 2 years) who met one of three groups of 'high-risk' patients:

- Patients aged over 65 years;
- Patients aged 18–65 years with common chronic and/or complex illness (chronic obstructive pulmonary disease, diabetes, angina (or ischaemic heart disease), cardiac failure, or asthma); or
- Patients aged less than 16 years and at risk of hospitalization, defined by previous diagnosis with a high-risk condition (e.g. asthma, epilepsy, dental condition, acute bronchiolitis, pneumonia, or croup).

These eligible patients were screened by participating GPs to exclude patients with barriers to participating such as non-English speaking or significant cognitive impairment. Those remaining were sent study invitations and information

packs in waves of 200 per practice to meet recruitment targets. Practices were also able to opportunistically recruit patients.

Practices were randomized into an intervention or control arm using randomization by minimization to ensure the balance between trial arms in terms of practice size and Index of Relative Socio-economic Disadvantage (IRSD) using Socio-Economic Indexes for Areas (SEIFA) [21]. The statistician responsible for randomization was blinded to the identity of the practices until after the analyses were performed.

For practices randomized to the intervention arm, enrolled patients were offered enrolment with a preferred provider, who they were encouraged to see for the duration of the trial. In Australia, patients have freedom of choice of GP and general practice. Practice incentive payments were made to the relative degree of change achieved across patients in varied incentive categories (Supplementary Appendix 1).

Incentives for patients < 16 years:

1. See a minimum of 70% of enrolled patients on same-day appointments requested.
2. Reduce potentially avoidable hospitalizations by up to 40% for < 16-year-old enrolled patients.

Incentives for patients 18–65 years with chronic disease, and > 65 years:

1. Provide three longer consultations (over 15 min) per enrolled patient alongside reducing potentially unnecessary prescriptions and tests.
2. See a minimum of 70% of enrolled patients within 1 week of hospital discharge.
3. Reduce hospitalizations by up to 40% for enrolled patients.

The financial incentive structure is further detailed in Supplementary Appendix 1. All incentives were calculated and paid at the conclusion of the 12-month trial. Practices were free to distribute incentive payments to practice clinicians as they saw fit.

Our case study used a maximum variation sample of the study practice selection criteria (practice size and IRSD [21]) to select two practices from each participating Australian state (New South Wales, Victoria, and Tasmania), resulting in a sample of six practices.

Qualitative data

Qualitative data were sourced from semi-structured face-to-face or telephone interviews conducted by research officers with experience in qualitative interviewing and practice-based primary care research. Each interview was audio-recorded and transcribed verbatim with consent of the interviewee.

Patients, GPs, and practice staff were interviewed twice: first, after the intervention facilitators had completed at least one practice visit; and subsequently at completion of the intervention. Early staff interviews provided an understanding of individual and practice approaches to relational continuity. Later interviews ascertained practice experiences with the implementation of the EQuIP-GP trial, particularly in relation to any changes in practice-based routines linked with relational continuity and the trial's financial incentives.

Facilitators were interviewed once for each of the case study practices within their region at the end of the intervention. Facilitators were asked to reflect on their perceptions of factors influencing the fidelity of the intervention, having also used a structured diary to capture reflective notes relating to their three scheduled visits to each practice.

Quantitative data

Data relating to the six case study practices were extracted from the EQuIP-GP trial dataset. Data were collected from the Primary Care Assessment Tool (PCAT) Short Form [22], a patient survey that assesses perceptions and experience of primary care attributes. We extracted patient scores for the 'Continuity' subdomain, which is measured using four-point Likert-type questions with a maximum scale score of 4 [23]. Participants were surveyed at trial entry and completion (12 months later). PCAT surveys were administered online, on paper, or via telephone interview. A practice attributes survey adapted from the Canadian Institute for Health Information *Measuring Organizational Attributes of Primary Health Care survey* [24] was completed by a PM, nurse or lead clinician at each site at trial entry, providing insight into demographics, organizational values, mechanisms, and contextual factors.

Data management and analysis

We used NVivo software (version 12) [25] to assist coding of interview transcripts and intervention facilitator diaries. First round of coding by members of the broader research team (CM and JR) generated 'intervention narratives' focussing on the experience, acceptability, and success of the intervention. These intervention narratives provided contextual background for a second round of coding by a separate research team (SW, JA, and GR), which used the whole data set, but focussed on attitudes about and experiences with relational continuity and financial incentives. The second coding tree was based upon key components of Stange and Glasgow's contextual analysis framework [20] combined with inductive themes emerging from the data. We used an immersion crystallization approach [26] involving repeated cycles of reflection, identification, and articulation of themes. Findings were periodically brought to key members of an EQuIP-GP trial Steering Committee to verify consistency.

Descriptive statistics from the practice attributes survey were used to identify key practice demographic and contextual factors. We compared the baseline and post-intervention practice PCAT scores using paired *t*-tests and compared changes between practices with one-way Analysis of variance (ANOVA). Finally, we synthesized quantitative and qualitative findings to identify principal explanatory factors.

Results

Sample and participants

We conducted pre-and-post-intervention interviews with 13 patients, 10 GPs, and five PMs from the six case study practices. In one practice, a PN was interviewed instead of a PM, given her more active role in the trial's implementation. Three facilitators were interviewed after the intervention. The PCAT survey was completed by between 23 and 30 patients per practice. For further participant demographic information see Supplementary Appendices 2–4.

Table 1 highlights variations between the practices' setting, size, and SEIFA decile. Of the six practices, one was rural, one was mixed rural-suburban, and the remainder suburban. The practices ranged from SEIFA decile 1 to 10, and differed by number of staff, though all but one practice (Practice B) were multi-GP practices.

Attitude to and experience of financial incentives

Cases were initially analysed internally, with subsequent cross-case analysis. Ultimately, we found minimal quantitative or qualitative differences regarding the practices' perceptions and experiences with financial incentives. Due to the homogeneity within cases regarding perspectives on financial incentives, we report the qualitative findings collectively. Financial incentives were largely acceptable to participants, but for the purpose of *rewarding* as opposed to *creating* quality care.

Findings from the practice attributes survey (Table 2) suggested that a continuous relationship with patients was an important goal for all practices, while most also valued profitability. Interestingly, profitability was least valued by the practices with the highest (Practice D) and lowest (Practice F) SEIFA decile.

Table 3 displays the PCAT survey results with respect to continuity of care. Patients perceived high levels of relational continuity in their clinical care at trial entry, with all practices averaging above three on the four-point scale. There were no statistically significant changes in the PCAT relational continuity score over the trial period except for Practice E, which increased by 0.25 (Standard deviation (SD): 0.46, $P = .01$). Triangulation with our qualitative data failed to reveal any changes in practice routines associated with this minor change. There was no significant difference between practices in the change in continuity score between groups one-way ANOVA.

A common assertion from the GPs we interviewed was that high-quality patient care drives their work, rather than financial gain, with one GP calling reimbursement, in the context of government payments for doing certain tasks, a 'necessary evil' (Case Study E GP 2). GPs and their staff reported that financial incentive programs had the potential to undermine quality, and practice philosophies implied a consistent prioritization of patient care above profitability. According to one PM, '…it's always been the duty of care before the dollar sign' (Case Study A PM post).

Patients and PMs felt that financial incentives should not be required to encourage GPs to 'do their job'; 'In a way I feel that they really shouldn't need a financial incentive to give good care. They should strive to give excellent care, whether they're getting paid extra or not' (Case Study B Patient 1 post). Some GPs were similarly uncomfortable with the

Table 1. Practice demographics for case study primary care practices (Source: Practice attributes survey).

	Practice A	Practice B	Practice C	Practice D	Practice E	Practice F
Practice Context	Rural town, NSW	Suburban, NSW	Suburban, VIC	Suburban, VIC	Regional city, Suburban, TAS	Rural city, TAS
SEIFA decile* [21]	3	6	8	10	4	1
Patient population	8800 active patients	1200 active patients	35 000 active patients	13 000 active patients	12 820 active patients	6810 active patients
Staffing (roles, leadership)	3 FT GPs; 3 PT GPs	1 FT GP 1 part-time mental health social worker	2 FT GPs; 7 PT GPs	2 FT GPs; 5 PT GPs Allied health (podiatrist and dietician)	9 FT GPs; 9 PT GPs	6 FT GPs
Bookings for new patient visits	15 min	30 min	10 min	20 min	30 min	20 min
Bookings for follow-up visits	15 min	15 min	10 min	15 min	15 min	10 min

*SEIFA is a system developed by the Australian Bureau of Statistics that ranks areas in Australia according to relative socio-economic advantages and disadvantages. The lowest 10% of areas are given a decile number of 1, progressing in 10% increments until the highest 10% of areas which are given a decile number of 10 [21].

Table 2. Practice values and activities (Source: Practice attributes survey).

	Practice A	Practice B	Practice C	Practice D	Practice E	Practice F
Using the scale (1–10, with 10 being 'most important'), indicate the importance of the following goals for your clinic						
Continuous relationship with patients	10	10	10	9	10	10
Profitability of the clinic	8	10	10	6	10	6
At your clinic, for follow-up of people with chronic illnesses (e.g. COPD, diabetes, heart failure), how often do you (doctors or clinic staff)						
Use a tracking system to remind patients about needed visits or services?	Always	Always	Often	Often	Often	Always
Offer to contact patients between visits by telephone?	Often	Always	Rarely	Rarely	Sometime	Often
Does your clinic have formal or informal arrangements with other primary health care clinics, hospitals, and/or medical specialist clinics for follow-up for hospitalized patients or patients seen at the clinic?						
	Yes	No	No	No	No	Yes

Table 3. Patient-perceived continuity (Source: PCAT survey).

Mean PCAT continuity score			
Practice (*N*)	**Pre-trial (SD)**	**Post-trial (SD)**	**Mean change in score*** **(SD, significance. *P-value*)**
Practice A (26)	3.41 (0.56)	3.42 (0.49)	0.01 (0.54, *P* = .92)
Practice B (23)	3.75 (0.43)	3.81 (0.29)	0.06 (0.39, *P* = .50)
Practice C (28)	3.5 (0.45)	3.47 (0.52)	−0.03 (0.44, *P* = .73)
Practice D (23)	3.37 (0.55)	3.29 (0.55)	−0.07 (0.51, *P* = .56)
Practice E (30)	3.36 (0.67)	3.61 (0.52)	0.25 (0.46, ***P* = .01**)
Practice F (27)	3.70 (0.36)	3.83 (0.26)	0.13 (0.36, *P* = .10)
N total = 157	Between groups one-way ANOVA		F: 1.547, *P* = .18

*Paired *T*-test. Bolded text indicates *P*-values ≤ 0.05.

incentivizing quality of care, which they viewed as antithetical to ethical practice:

> *So I don't think that financial incentives work in good practices….it says more about the quality of the practice I think, and it says it's a poor-quality practice. So financial incentives shouldn't work.* ***They just shouldn't work if you're providing good medicine*** (Case Study A GP 1 post).

GPs were more comfortable with the idea of *rewarding* quality practice and receiving greater financial remuneration for their existing work; 'I'm comfortable with the idea of financial incentives **rewarding** quality work but not necessarily trying to **create** quality practice' (Case Study A GP 2 baseline). This idea was closely linked to the sentiment that GPs are poorly recognized and renumerated for their role in the Australian health care system. Patients were also more comfortable with a reward-based system; 'I don't think there's anything wrong with paying somebody to do a really good job' (Case Study B Patient 1 baseline).

Some GPs expressed their belief that financial incentives would have little impact on their work. A GP in Case A explained that payment has little role in their clinical practice overall.

> *Well I'm not the doctor that watches their bottom line all the time. I'm not always checking whether…I've scratched the last penny out of Medicare…I wouldn't notice a financial incentive. I just wouldn't see it* (Case Study A GP 1 post).

Similarly, most patients did not believe that financial incentives would result in major changes (Practices A&B), particularly once a GP has settled into the practice; '…if [GPs] have been in a clinic for a couple of years, a financial incentive is not going to help. Not going to change anything they do' (Case Study B Patient 2 baseline).

However, financial incentives were appreciated for their ability to support and reduce financial stressors within the practice. GPs noted that financial incentives could reduce pressure to 'churn through' patients, improving the quality and time available for patient care. PMs explained that 'There is not a lot of margin in running clinics, so having those incentives do allow you to keep your head above water...' (Case Study D PM baseline).

Practice engagement with the trial and perceptions of financial incentives are detailed in Table 4.

Practice impact of a new financial model

The introduction of the incentives model had no impact on patient-perceived relational continuity, as assessed by the PCAT survey, for most practices (Table 3). However, we found small adjustments to practice routines and increased focus in some practices toward relational continuity, which varied between cases. Case-based examples of changes in routines brought about by the introduction of financial incentives for relational continuity targets are provided in Table 5. Notably, responsibility for routine change within the practices was shared by a range of practice staff including GPs, PMs, PNs, and receptionists.

On the whole, practices had policies in place to reach the incentive targets prior to the trial. Participants spoke of the trial resulting in slight changes to existing routines rather than creating new routines.

> *I don't think it really made that much of a difference to how we operate, because most of the criteria in the trial are standard procedures and processes that we use. I think we were a little more proactive* (Case Study D PM post).

Interviewees spoke about how their participation in the trial brought these targets to 'front of mind', giving practices 'a refresher and a reminder' of how their routines contribute to relational continuity. The trial also highlighted issues in communication and co-ordination with non-GP specialists and hospitals, and made practices more reflective about the gaps in patient management. The collection of performance data by practices themselves enabled them to better understand their performance in relational continuity targets.

> *…It made us more aware of the patients that we miss when we don't get letters…it absolutely drove home to us when our communication broke down but the ones we identified were ones where just no communication came from the hospital* (Case Study F GP2 post).

Patients were quasi-enrolled with the practice for the study and therefore often felt enabled to ask for care, such as alerting the practice that they had just been discharged from the hospital. The intervention facilitator, on reflection of Case F, felt that the trial placed more responsibility for relational continuity on the patient. Case E's PM noted that patient participants would identify themselves upon booking.

Table 4. Perceptions of financial incentives and trial engagement (Source: participant interviews).

	Practice A	Practice B	Practice C	Practice D	Practice E	Practice F
Perceptions of financial incentives to improve quality in primary care	This practice adopts a practice-wide approach focussed on patient care rather than finances.	Financial incentives to improve quality are thought to present 'no moral issue' and the practice is pragmatic about the need to balance business requirements with high-quality patient care and welcomes the extra support of financial incentives.	This practice believes that quality care must be paid for and rewarding quality with financial incentives will improve motivation when the goals are attainable.	This practice balances prioritizing of patient care with the need to run a business and concerns that rewarding results could penalize doctors who work with 'non-compliant' patients from low socio-economic backgrounds.	This practice views financial incentives as a good way to inspire GPs to change their usual practices.	While not opposed to the idea of financial incentives, this practice thinks there are other ways of changing practice. One GP here talks about the disconnection between finances and the work of being a GP, stating he doesn't do the work for money.
Perceived engagement with trial	Committed to the project, multiple staff members engaged with intervention facilitator meetings and trouble-shooting.	The intervention facilitator had no contact with the PN or single GP which may have been a limitation of this practice despite the high levels of enthusiasm demonstrated by other staff at baseline interviews (PN).	Self-recruited practice, yet some resistance to change. Practice initially unwilling to have reception staff change routines, gradually increased engagement over time.	PM was new to the role and very enthusiastic and engaged with the practice requirements for the trial.	Practice in the process of busy and stressful accreditation process. Practice required lots of guidance and support from the intervention facilitator. PM had a low engagement. The intervention facilitator did not interact with PM nor GPs	Very engaged. However, there were 'some obvious barriers' (Case Study F Intervention Facilitator) in communication within the practice staff.

Table 5. Changes in routines relating to financial incentive targets for relational continuity (Source: participant interviews).

Trial target	Findings	Exemplar quote
Improved follow-up post-hospital discharge	Routines were modified in some practices to ensure patients who had been hospitalized were identified and booked in for an appointment within 7 days of discharge. • Some practices implemented new discharge letter screening processes by the PN or GP • At Practice E, the GPs in charge of checking discharge letters committed to screening for trial participants • At Practice F, a PN allocated time to review the practice discharge letters • At Practice A the receptionist was involved in checking for trial participants at the time of booking Notably, not all GPs believed that every patient should be followed-up post-hospitalization, demonstrating discordance between practitioner values and the trial goals.	*I will look at the discharge summary and decide whether a person actually needs follow-up after a hospital encounter. Not everyone that presents to hospital requires follow-up* (Case Study A GP 2 baseline).
Increased consultation length	Many practices configured electronic systems to support the trial's incentive targets, including: • Flagging trial patients • Automatic consultation length scheduling While it was on the minds of some GPs, it was not always necessary to increase consultation length. However, the financial incentive was not linked to clinical need, highlighting a lack of sensitivity.	…*That was according to the patient need, you know-some patients have a complex need and that takes a little longer time [and] sometimes I didn't need it to go for a longer consult* (Case Study B GP post).
Routines related to same-day access for < 16-year-olds or urgent appointments	Practices altered routines to increase the number of appointments for on-day bookings: • Most practices already had policies regarding seeing children and young people on the same day of booking • One practice modified their existing policy which was for only under 10-year olds to encompass under 16-year olds • Other GPs found that the financial incentive increased their willingness to 'squeeze' in additional patients, particularly towards the end of a working day (Case Study C)	*It's always been a policy to see sick children if they need to be seen, regardless of whether the book's full or not … It's good to have those guidelines a little bit more central to your thinking. It tends to be, rather than an afterthought, more a forethought. A lot of it's changing routine, isn't it?* (Case Study C GP 2 post).

Our patients that were a part of the trial were quite good at saying 'we're part of the EQUiP trial, so I need to be seen within a certain amount of time and by a certain doctor' (Case Study E PM post).

Practice interpretation of incentive model

The EQuIP-GP incentive structure rewarded practices for meeting quality care targets. These included providing three longer consultations with a GP per enrolled patient alongside reducing potentially unnecessary prescriptions, pathology, and imaging. Participants identified several challenges relating to financial incentives, namely a lack of flexibility and bluntness of the standardized targets. GPs felt that it was not always necessary to increase consultation length, which should rather have been determined by the patient need to reduce unnecessary prescriptions, pathology, and imaging. Longer consultations, consequently, could confound this underlying objective.

Another challenge was that the incentive structure only recorded and potentially rewarded GP time. Consultation time with nursing and other allied health staff was not included in data collection, nor did it contribute to financial incentive payments.

I would have been spending an hour doing care planning with them and then it's just the 15 minutes with the doctor that gets recorded…it was a little frustrating that that wasn't taken into account...(Case Study C PN post).

Interviews also revealed that some participants misunderstood the trial's financial incentive structure, in particular, the fact that some incentives were conditional on reducing Choosing Wisely events, which may have impacted adoption and implementation in the experimental trial arm.

Discussion

Summary

Our study provided important insights into the perspectives of patients, GPs, and practice staff towards the use of financial incentives to improve relational continuity in general practice. Participants almost unanimously felt that financial incentives were more appropriate for rewarding, as opposed to incentivizing, high-quality practice. Each practice had routines prior to the trial for facilitating the incentive targets of timely post-hospitalization follow-up, reducing Choosing Wisely identified events, and improving access for children, which may explain the high levels of patient-perceived relational continuity at baseline and 12 months. Participants highlighted that the implemented incentives model was at times too rigid to accommodate diversity in patient and practice needs.

Strengths and limitations

We acknowledge that questions could be raised about the representativeness of the findings of any studies based on PBRNs. However, a range of studies in the USA, UK, and Australia over the last 3 decades has found minimal differences between practice structure, function, and performance of PBRN practices compared to the broader primary care practice community [27–30]. All participating practices had high levels of patient-reported relational continuity at baseline, which may limit the generalisability of findings to practices that do not provide this.

Although our sampling technique included an awareness of the need to search for alternative and disconfirming cases, we may have been unable to capture different perspectives shared by other participants within the sample. Practices generated patient lists for participation in the broader study, selecting preferentially for 'active' patients, older patients, and those with chronic diseases; all groups known to value relational continuity [1]. Although our maximum variation approach to sampling ensured a range of age, gender, and comorbidity, this selection criteria was biased towards patients with high levels of practice engagement and stronger experience of relational continuity, potentially limiting the input of patients who would have provided alternative perspectives. Notwithstanding, this sample captures valuable perspectives from a group to whom relational continuity is most beneficial; patients over the age of 18 years with chronic conditions, or aged over 65 years, and their providers [1].

Quantitative *post-hoc* analyses were intended to inform our understanding of practice change and were not powered to detect differences between the practices. However, our quantitative analyses largely mirrored the results of the larger trial, showing no change in the PCAT continuity score at 12 months in most practices, with no statistical difference in performance between practices. Potential reasons include insufficient implementation support, the trial duration period of only 12 months, which may have been too brief to allow routine changes to be integrated, and high baseline levels of patient-perceived relational continuity, while the PCAT is more informative in settings of poor relational continuity [2]. Furthermore, the GPs and practices did not know how much money they were accumulating or receive a financial incentives until after the trial's conclusion. Receiving financial incentives during the trial may have driven a larger change in practices.

Comparison with existing literature

Acceptable but not for routine care

The concept of using financial incentives to improve quality was acceptable to patients, GPs, and PMs. For many patients and practice staff, the incentivized outcomes were seen as synonymous with good practice. However, both GPs and patients were uncomfortable with the idea that clinicians should be incentivized to do what they saw as being their usual work. Findings resonated with those of Hannon *et al.*'s qualitative exploration of patient perspectives on the UK's pay-for-performance Quality and Outcomes Framework (QOF), where patients felt that simple tasks should not be coupled with financial incentives [31]. Our participants preferred a model where GPs were appropriately *rewarded* for the work they already do, particularly if framed as a reward for pre-existing good practice. Nevertheless, it has been suggested that rewards can only work as a budget-constrained continuous quality improvement mechanism when they are proportional to downstream cost savings from quality improvement, as in this trial [32, 33].

Need for flexibility

Participants viewed financial incentives as being a blunt instrument that had the potential to overlook the benefits of what the participants saw as nuanced and patient-centred

medicine. To the participants, the model overlooked patients' varying needs—needs at times best met by seeing their usual GP while at other times a PN was more appropriate. Similarly, they saw that, occasionally, specific needs were not best met by longer appointments or with close monitoring following a hospital stay. Campbell *et al.*'s qualitative study described similar findings, in which the UK QOF program was felt by clinical staff to stand in the way of delivering appropriate patient-centred care [34].

Personal motivation

For practices where quality and patient care are already prioritized, we found that financial incentives will have less impact in changing existing routines. However, other studies have found contributions from the government can affect the delivery of healthcare services in the general practice setting. Indeed, some studies suggest that personal motivation without financial incentives is not always sufficient in bringing about change [34]. This raises the question as to whether a sample of less proactive practices would have shown a greater response to the intervention. We recommend that research efforts to support relational continuity investigate practices with low levels of continuity, for example those with high patient turnover, and high-risk groups such as patients with no regular GP or barriers to healthcare access such as socio-economic, language, and/or cultural factors [35]. More research is needed on this topic as the provision of primary care and general practice services evolve on the basis of research on funding reforms [36].

Impact of the trial

While the overall impact of the trial's intervention was limited according to our measurement tools, most practices described making small changes to existing practice routines to better meet the incentivized goals of the trial. Participation in this trial gave practices the opportunity to track their clinical data in a way that motivated small changes to their routines. Other Australian studies have shown the value of quality improvement initiatives that offer financial incentives to participate in research [37] and conduct patient data collection and management activities [38].

Implications

There was a consistent view amongst patients, GPs, and PMs that financial rewards shouldn't be required to incentivize high-quality primary care improvement. However, participants were more comfortable with the concept of *rewarding* existing high-quality practices and acknowledged the value of financial support. These findings are particularly timely in Australian health policy. The MyMedicare initiative was introduced in Australia on 1 October 2023, and supports voluntary registration of patients with general practices and the nomination of a patient's preferred GP within their registered practice. This initiative seeks to ensure continuity of care by fostering longitudinal patient-practice and patient-clinician relationships in general practice, with the aim of improving health outcomes [39]. Patient registration is not financially remunerated for patents or practices, but will provide entry to future funding reforms, including blended payment systems.

Our findings suggest that future primary care financial incentive models, aimed to promote quality in health care provision, should be flexible enough to meet variations in patient needs. For example, relational continuity could be with patients' usual primary care physician, or another member of the practice team such as the nurse. For practices where quality and patient care are already prioritized, financial incentive models can reinforce existing routines that will improve awareness and conscientiousness towards relational continuity and would seem best framed as a reward for high-quality care. Given the planned primary care funding changes in Australia, further research should examine what additional supports are required to implement routine changes in practices that do not already focus on continuity, and in high-risk patient groups.

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Supplementary material

Supplementary material is available at *Family Practice* online.

Conflict of interest statement

Prof Nicholas Zwar, Prof Grant Russell, A/Prof Jan Radford, and Prof Danielle Mazza have received honoraria from the RACGP for expert committee roles. A/Prof Jan Radford is paid to sit on the data governance committee of NPS MedicineWise. The other authors have no conflicts to declare.

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Data availability

The full trial protocol can be accessed at: https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?id=374194&showOriginal=true&isReview=true and https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-019-4336-2. Study participants did not provide consent for the release of raw data. Deidentified data will be shared on reasonable request to the corresponding author.

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