Malatest International

Evaluation report: August 2016

Evaluation of the Regular Practice Review Programme

Table of contents

Definitions and abbreviations

Abbreviation	Definition
bpac^{nz}	Best Practice Advocacy Centre, responsible for delivering RPR.
CME	Continuing Medical Education
CRP	Collegial Relationship Providers
PDP	Professional Development Plans
RPR	Regular Practice Review

Executive Summary

About RPR

One of the key roles of the Medical Council of New Zealand (Council) is to ensure recertification programmes for all doctors are robust, help assure the public doctors are competent and fit to practice, and improve the current high standards of practice in New Zealand.

Regular practice review (RPR) is a quality improvement process. Its primary purpose is to help maintain and improve the standards of the medical profession by helping individual doctors identify aspects of their performance that could be improved, benefiting not only their own professional development but also the quality of care their patients receive. RPR has been implemented through the bpac^{nz} *Inpractice* programme from July 2013.

RPR involves:

- **Pre-visit**: Review of the doctor's professional development e-Portfolio, prescribing and laboratory test reports, phone call with the collegial relationship provider and multisource and/or patient feedback
- **Practice visit**: Interviews with the doctor and in some cases colleagues, observation of consultations, review of records and clinical reasoning
- **Post-visit**: Report delivered to the doctor and Council summarising findings
- **Post-visit follow-up**: by bpac^{nz} with doctors where areas of concern or non-compliance with requirements were identified through the review.

The design of RPR is based on evidence about what works in improving practice. RPR has been implemented and 517 doctors have been reviewed. The initial focus was on doctors in general practice settings.

About the evaluation

The RPR evaluation provides mid-year and end of year evaluation reports. Previous reports include:

- Interim 2014 report – November 2014
- End of year 2014 report – provided in March 2015
- Mid-year 2015 report – provided in October 2015
- End of year 2015 report – provided February 2016.

This report has been requested for the start of September and updates the end of year 2015 report – provided February 2016. It updates information drawn from

interviews and surveys of doctors participating in RPR and provides an overview of findings to date.

All 367 doctors who completed RPR since the evaluation began in June 2014 have been invited to participate in the evaluation. Since the last report there are:

- 249 post-RPR survey responses (55 new) and 47 interviews (eight new), conducted shortly after doctors receive their RPR report.
- 76 twelve-month survey responses (40 new) and 12 interviews (six new), conducted approximately one year after the RPR. All doctors included in this report who completed the twelve-month survey also completed the post-RPR survey.

Review, colleague and patient ratings are high for the majority of reviewed doctors.

Doctors review ratings, colleague feedback and patient feedback were analysed. It was found that:

- Over half of doctors had superior ratings and very few had unsatisfactory ratings
- Nearly all doctors were rated between four or five out of five in all categories by their colleagues
- Nearly all doctors were rated between four or five out of five in all categories by their patients.

Most doctors find participating in RPR a more positive experience than they expected

Before participating, approximately one-third of doctors expected RPR to be useful. Reasons it was not thought to be useful were expectations the review would be a 'tick-box' exercise, nervousness about being assessed, uncertainty about what to expect and/or feeling a review was not needed.

Many doctors found participating in RPR a more positive experience than they had expected. Nearly three-quarters (71%) agreed it was a positive experience, 67% found the RPR report useful and more than half (59%) would positively recommend a review to colleagues.

Many doctors said they changed their opinion about RPR because they valued the opportunity to have an objective perspective on their practice from a senior colleague. Learning about new development opportunities, engaging in self-reflection and having reassurance about their practice also contributed to doctors

forming positive views about RPR. RPR report ratings did not appear to influence whether a doctor would positively recommend RPR to colleagues or not.

Strengthening RPR

In early evaluation reports we anticipated the proportion of doctors who did not expect RPR to be useful would decrease over time as word spread it was a positive experience. This does not appear to be happening and RPR is still seen as an audit process by a substantial proportion of doctors.

Is there potential to further communicate RPR as a quality improvement process?

Doctors are reporting making changes to their practice following their review

After RPR, nearly half (47%) of doctors said they had made changes to their practice as a result of participating. A further 12% intended to make changes in the future.

The reviews did not suggest changes for all doctors. Doctors with high RPR ratings were generally less likely to receive feedback about new opportunities for development and less likely to make changes.

The seventy-six doctors who had completed the post-RPR and twelve month surveys were asked about whether they had maintained practice changes or made planned changes. The proportion of doctors who reported they had made changes twelve months later was slightly lower than shortly after RPR (45% compared to 55%). Some doctors who earlier reported having made changes reported no changes at twelve months, and vice versa. The information suggests changes made in response to RPR were maintained for many doctors.

Doctors who at twelve months after RPR continued to report making changes were more likely than those who had not made changes to have learned about new development opportunities from RPR, to be positive about their reviewer and to recommend RPR to their colleagues.

Strengthening RPR

Doctors are reporting making changes. While these are self-reported changes, they provide evidence that RPR is achieving its aims for many of the participating doctors. Most doctors who had made changes as a result of the review maintained these changes at 12 months. However, few doctors who said they intended to make changes post-RPR did so.

Would additional post-RPR follow-up for doctors with low and mid-RPR ratings support further changes?

Doctors are making changes in professional development planning following their review

One of the aims of RPR is to improve the way doctors engage with professional development activities and planning.

Post-RPR, around half of the responding doctors planned to adjust their PDP based on the results of their review. Doctors were more likely to adjust their PDPs to target new opportunities for development than to build on strengths. Approximately half (49%) of the doctors who responded to the survey had already made changes to their PDPs as a result of their participation in RPR.

Of the doctors who completed the post-RPR and12-month surveys, 61% reported making changes to their PDP post-RPR and this decreased to 37% twelve months later. Changes included modifications to the way PDP was managed and planning PDP activities to align with RPR feedback. Doctors who had participated in RPR were on average setting fewer new goals, possibly reflecting a more focussed PDP.

Strengthening RPR

Providing effective feedback for PDP requires skills and experience that collegial relationship providers (CRP) may not have. The extent to which changes in PDP result in changes in professional development activities may be increased with additional support for doctors as the CRP relationship varies.

Changes in the quality of care received by patients

It is difficult to measure the impacts of changes in practice and PDP on the quality of care patients receive. However, where changes in practice and PDP are in response to feedback from a review it is reasonable to expect they will flow through to improvements in the quality of care received by patients.

Just under half of doctors expected changes made following their review to contribute to improvements in the care they deliver to their patients (46%) and/or had improved their practice in other ways (52%).

Changes made by doctors are influenced by their characteristics, practice settings and experiences of RPR

Doctors' backgrounds, characteristics and personal views and experiences can influence their response to RPR.

Doctors were more likely to make changes to practice if they:

- Practiced as a GP
- Did not speak English as a first language.

A minority of doctors did not acknowledge the value of a review. Some considered they were sufficiently experienced to gain no benefit from a review. Some considered their selection for a review was unfair and believed all doctors should be treated the same.

Certain experiences of RPR were also associated with increased likelihood of making changes to practice and professional development plans. Doctors were more likely to make changes if they:

- Agreed reviewers had the appropriate skills to review them
- Would positively recommend RPR
- Learned new opportunities for development
- Agreed their report was accurate.

Strengthening RPR

RPR is working effectively for the majority of doctors being reviewed.

Some doctors receive very high RPR ratings and reviewers identify no or few new opportunities for development. The frequency of re-review may need to be considered for this group.

Ensuring that the feedback is given in an effective manner and that the next step, how it can be incorporated into professional development plans, is discussed could be a way to increase the impact of RPR.

With the small number of RPR participants in atypical practices it is not always feasible to match the reviewers' specialty area with RPR participants. However, it is important to ensure the reviewed doctors understand the purpose of the review, how it applies to their practice, how the practice visit process can be modified to take the characteristics of their practice into account and why the reviewer is qualified to undertake the review.

The reviewers have a key role in RPR

Survey results indicate reviewers are positive about all aspects of the programme.

- Almost all reviewers felt they had the necessary training, support and information about the doctor to be effective reviewers.
- More than half felt they were completing the right number of reviews, with just under one-third wanting more reviews and a very small proportion wanting fewer. About one review per month was the ideal number of reviews for most reviewers.

Reviewers were confident their feedback led to changes in practice that would improve care for patients. However, they were uncertain if changes took place because they did not have any follow-up contact with the doctors they reviewed.

Strengthening RPR

Developing the reviewers' ability to provide feedback on opportunities to develop the reviewed doctors' practice has been a focus of reviewer training.

Further development for reviewers has the potential to strengthen RPR. Aspects of reviewer development suggested by the evaluation are:

- Confirming the effectiveness of their collegial approach to RPR as a quality improvement process
- Confirming they are effective as reviewers even when the doctor being reviewed has a different scope of practice to their own
- How to provide feedback and advice that would assist RPR doctors to use information from the review to make changes.

Evaluation next steps

The evaluation will continue to collect data from RPR participants as they receive their reports and twelve-months after they receive their reports. Additional completions will facilitate further time-series analysis.

1. Background to Regular Practice Review (RPR)

The Medical Council of New Zealand (Council) ensures recertification programmes for all doctors are robust, helps assure the public doctors are competent and fit to practice, and improves the current high standards of practice of doctors in New Zealand.[1]

Continuing professional development programmes (CPD) are one of the mechanisms professional organisations use to ensure the competencies of their members are maintained. Council has introduced regular practice review (RPR) as a mandatory requirement of the recertification programme for doctors registered in a general scope of practice, the majority of whom work in general practice.

RPR is a quality improvement process. Its primary purpose is to help maintain and improve the standards of the profession. It aims to do this by helping individual doctors identify aspects of their performance that could be improved, benefiting not only their own professional development but also the quality of care their patients receive. RPR may also assist in the identification of poor performance which may adversely affect patient care.

Council has implemented RPR through the bpac^{nz} *Inpractice* programme from July 2013. To the end of July 2016, 517 doctors have been reviewed. The funding for the RPR component of the *Inpractice* recertification programme comes from the annual fee general registrants pay to be part of the *Inpractice* programme.

The programme design has been developed over the past three years by Council based on evidence from the literature, New Zealand experiences and discussions with stakeholders such as professional organisations. RPR involves:

- **Pre-visit**: Review of the doctor's professional development e-Portfolio, prescribing and laboratory test reports, a phone call with the collegial relationship provider and multisource and/or patient feedback
- **Practice visit**: Interviews with the doctor and in some cases colleagues, observation of consultations, review of records and clinical reasoning
- **Post-visit**: Report delivered to the doctor and Council summarising findings
- **Post-visit follow-up**: by bpac^{nz} with doctors where areas of concern or non-compliance with requirements were identified through the review.

[1] http://www.mcnz.org.nz/assets/Policies/Policy-on-regular-practice-review.pdf

2. The evaluation of RPR

As with any programme, it is important to evaluate the RPR programme to ensure it is working as intended, to understand outcomes for participating doctors and to inform ongoing programme development.

Council has commissioned an evaluation of the RPR programme to determine whether:

- RPR helps individual doctors identify areas of strength and areas of their practice that could be improved such as assisting in the planning of professional development
- Doctors act on the RPR report and make changes
- RPR helps assure Council that competence is being maintained
- RPR has any impact on the quality of care being delivered to patients
- RPR has any impact on indicators that suggest improved clinical outcomes.

The focus of the evaluation is on what is being achieved by RPR and responsibility for monitoring the effectiveness of the implementation sits with the service provider, bpac^{nz}.

2.1 The evaluation design

The RPR evaluation approach is based on a logic model and evaluation framework that sets out the evaluation questions, the indicators and information sources (Appendix One). The evaluation framework was agreed with Council and provided the basis for the development of surveys and interview guides for participating doctors and reviewers.

2.2 Information sources

Like previous reports, this report updates information drawn from interviews and surveys of doctors participating in RPR[2]. Data have been collected from online surveys sent to all reviewed doctors two-weeks after they receive their RPR report. Doctors who complete the survey are asked if they are available to be interviewed. In interviews doctors are asked for the name of their collegial relationship provider (CRP) who is then invited to take part in an interview.

[2] As this report builds on earlier evaluation reports, some of the quotes used are the same as those used in previous reports.

Twelve-months after their participation in RPR, doctors who completed the post-RPR survey are sent a follow-up survey. The follow-up survey also includes a request for an interview.

Figure 1 provides a summary of the data sources used for the evaluation of RPR to the end of July 2016. The evaluation started slightly after the introduction of RPR hence the total doctors invited to take part in the evaluation is less than the total number of doctors reviewed.

Data from:	Doctors	Reviewers
Online surveys	• Post-RPR survey of participating doctors (249 of 367, 68%) • Twelve-months after RPR (76 of 121, 63%)	• 2014 survey of reviewers about their role (19 of 19, 100%) • 2016 survey of reviewers about their role (22 of 30, 73%)
Interviews	• Post-RPR interviews with participating doctors (47) • Interviews with doctors approximately 12 months after RPR (12)	• 2014 interviews with reviewers about their role (6) • 2016 interviews with reviewers about their role for RPR (9)
	Other sources of data	
bpac^{nz} data	• Patient feedback forms on doctors completed before the RPR visit (10,359) • Colleague feedback for participating doctors completed before the RPR visit (3,663) • RPR report results for all participating doctors (517) • E-portfolio goals data for all Inpractice doctors (1,717)	
Other	• A review of the literature about professional development	
	• Interviews with collegial relationship providers (9)	

Figure 1. Information sources for the evaluation from end of July 2016.

2.3 The participating doctors

Doctors completing the online surveys were fairly evenly divided between those with fewer than ten years of practice in New Zealand and those with between 10 and 30 years. A smaller proportion had been practicing for more than 30 years (Table 1). Most of the doctors who had been in practice in New Zealand for fewer than ten years had trained overseas.

Around two-thirds of doctors who responded to the post-RPR and twelve-month surveys had completed their training outside New Zealand. English was not the first language for approximately one-fifth.

There were small differences in the profiles of the doctors who completed the post-RPR and twelve-month survey. Notably, a higher proportion of doctors were practicing as GPs in the twelve-month survey. This is a result of the earlier selection of GPs for review with later inclusion of doctors in other practice types.

Table 1. Characteristics of doctors who completed post-RPR and twelve-month surveys.

Characteristic	Post-RPR survey (n = 249)	Twelve-month survey (n = 76)
Practicing in New Zealand for: • <10 years • 11-30 years • 30+ years	 45% 43% 12%	 47% 45% 8%
Training location: • New Zealand • UK • South Africa • Other • Unknown	 35% 24% 10% 23% 8%	 33% 24% 9% 25% 9%
English not first language	22%	22%
Current role[3]: • GP • Other[4]	 65% 35%	 80% 20%

2.4 Strengths and limitations at this stage of the evaluation

The survey response rate of 68% doctors provides confidence that the sample included in the evaluation are broadly representative of all doctors reviewed over the evaluation period. Demographic data are not available to compare responding and non-responding doctors.

Doctors who completed both the post-RPR survey and the twelve-month survey were more likely to be GPs. Comparisons between the post-RPR survey and twelve-month survey responses are based on only doctors who answered both surveys.

The evaluation findings are based on the reviewed doctors' self-reported changes to practice. We have no way of validating whether or not actual changes have been made to practice. However, more objective information about the extent changes have been made will be available when ratings can be compared between the first and second times doctors participate in RPR.

[3] Based on bpac^{nz} designations

[4] Roles included obstetrics and gynaecology, medical officers, certifying consultants for abortion, primary youth health doctor, skin cancer physician, family planning clinicians, emergency department doctors and psychiatrists.

3. RPR ratings

Key points

Ratings from reviewer, colleague and patient feedback for most doctors was high. More than half of the reviewed doctors received superior ratings for each of the review areas. Almost all of the others achieved satisfactory ratings. Most unsatisfactory ratings were about the quality of note keeping or use of patient management system, although numbers were low.

Data collected by bpac^{nz} as part of the review process were analysed to examine the overall distribution of doctors' ratings.

When the report ratings overall were considered, 52% percent of all reviewed doctors that data was available for were rated as superior (had an average rating of over seven) and 47% were rated as satisfactory (had an average rating of between four and six) (Table 2).

Table 2. Average percentage of doctors in each RPR rating category (1-3 = unsatisfactory, 4-6 = satisfactory, 7-9 = superior) (~0 indicates less than 0.5%)

	1-3	4-6	7-9
Records/requirements (n = 486)	2%	54%	44%
Doctor/patient relationship (n = 478)	~0	38%	61%
Clinical reasoning (n = 478)	~0	47%	53%
Clinical practice (n = 473)	~0	51%	49%
Total	**~0**	**47%**	**52%**

When each of the four categories assessed were considered separately, substantial proportions of doctors received a 'superior' rating (Figure 2).

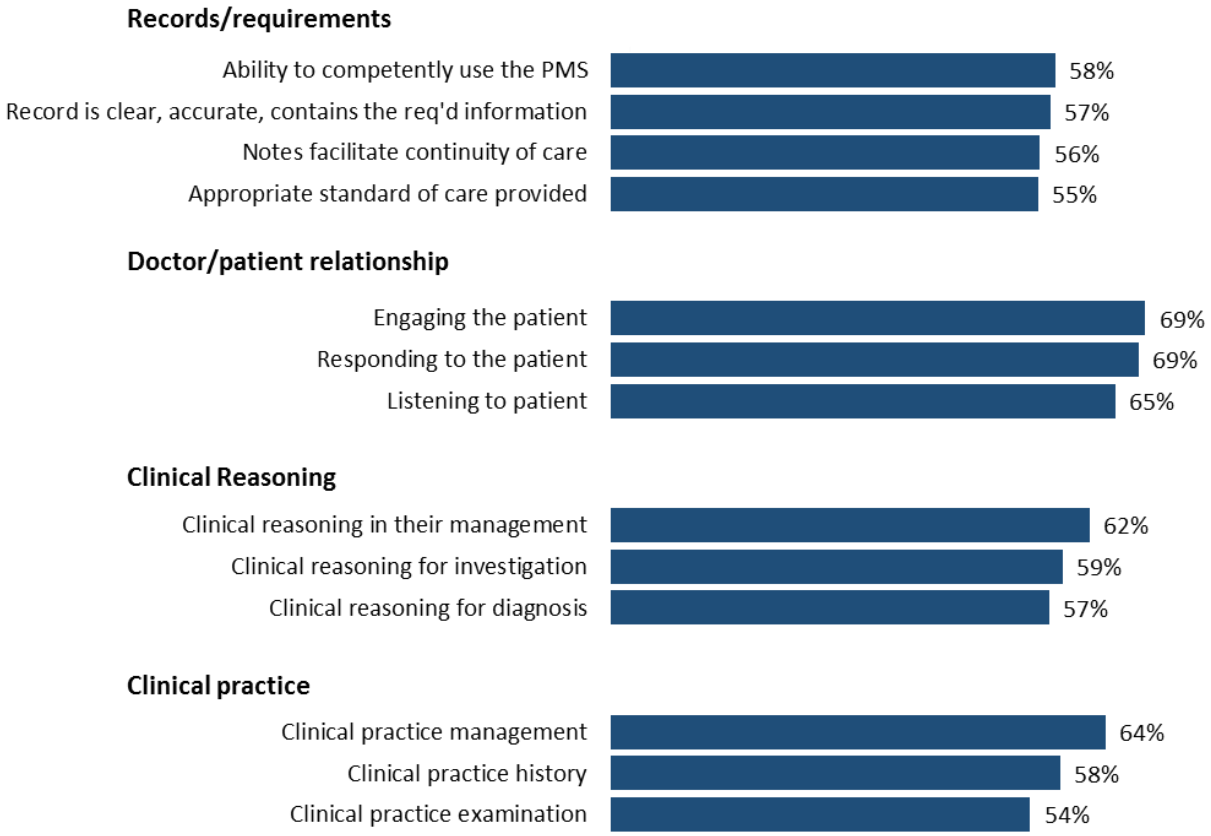


Figure 2. Proportion of doctors receiving the 'superior' rating for each of the RPR report rating questions (n = 461-485).

Analysis of the colleague and patient feedback data found doctors received high ratings for all assessed aspects of their care (Table 3 and Table 4).

Table 3. Average percentage of doctors in each colleague feedback rating category (1 = worst, 5 = best) (n=335)

	1-3	3.01-4	4.01-4.5	4.51-5
Clinical reasoning	-	3%	22%	75%
Clinical practice	-	2%	22%	76%
Communication	-	3%	26%	71%
Trust	-	-	4%	96%
Personal	-	1%	13%	86%
Total	**-**	**2%**	**17%**	**81%**

Table 4. Average percentage of doctors in each patient feedback rating category (1 = worst, 5 = best)

	1-3	3.01-4	4.01-4.5	4.51-5
Manner (n = 275)	-	1%	2%	96%
Providing care (n = 275)	-	1%	3%	95%
Patient involvement (n = 274)	-	2%	6%	92%
Trust (n = 275)	-	1%	6%	93%
Total	**-**	**1%**	**4%**	**94%**

4. Doctors' overall views of RPR

Key points

Before participating, approximately one-third of doctors expected RPR to be useful. Reasons it was not thought to be useful were because they thought the review would be a 'tick-box' exercise, were nervous about being assessed, were not sure what to expect and/or felt they had no need for a review.

Many doctors found participating in RPR a more positive experience than they had anticipated. Nearly three-quarters (71%) agreed it was a positive experience, 67% found the RPR report useful and more than half (59%) would positively recommend a review to colleagues.

Doctors said they changed their opinions about RPR because it provided reassurance about their practice, they valued the opportunity to have an objective perspective on their practice from a senior colleague, and/or they learned about new development opportunities.

RPR report ratings did not appear to influence whether a doctor would positively recommend RPR to colleagues or not.

4.1 Expectations of RPR before participating

Before they participated, doctors said they had held mixed views on the usefulness of RPR: Approximately one-third (31%) thought RPR would be useful (Figure 3). Two-fifths (41%) were neutral, suggesting they may not have known enough about RPR to form a view.

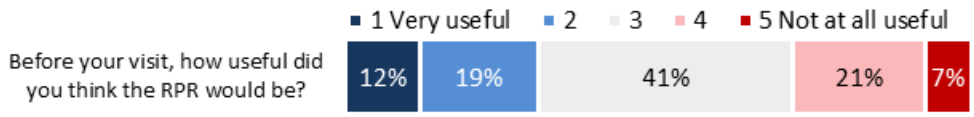


Figure 3. How useful participating doctors thought the RPR visit would be (Post-RPR survey, n = 249).

In the post-RPR survey doctors were asked to explain their expectations about RPR (Table 5). Many of those who thought RPR would be useful expected to get *"at least something"* out of the review. The doctors who did not expect RPR to be useful commonly explained it was because they thought the review would be a *"tick-box"* exercise, were nervous about being assessed, were not sure what to expect and/or felt they had no need for a review.

Table 5. Reasons why participating doctors did not expect RPR to be useful (Post-RPR survey, n = 249).

Expectations of RPR	Percentage who spoke about it
Viewed as a tick-box exercise	13%
Nervous about what to expect / being assessed / being observed	12%
Did not expect it to be a useful experience	8%
Unsure what to expect beforehand	7%
Keep self up to date (e.g. internal quality improvement programme)	6%
Expected emphasis would be on criticising practice	5%
Expected to get (at least some) useful feedback	16%

In earlier evaluation reports, we suggested that as RPR becomes better known the positive experiences of participating doctors may lead to an increase in the number who expect RPR to be useful. However, the proportions of doctors who expected RPR to be useful before participation appears to be decreasing. As doctors start to participate in their second review we will monitor their expectations and compare them with their expectations of their first review.

The proportion who would recommend a review to their colleagues has remained fairly constant (Figure 4).

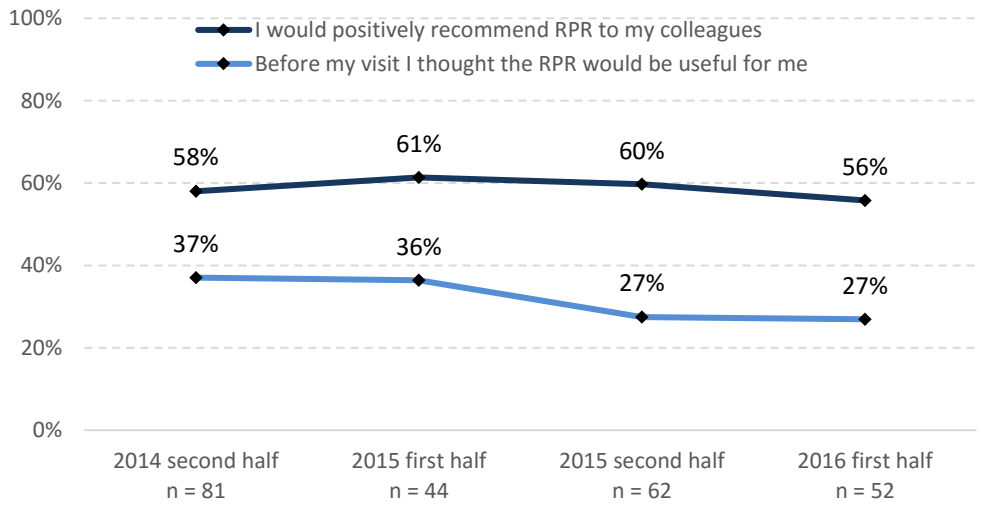


Figure 4. Participating doctors' views on RPR over time (not including first half 2014) (Post-RPR survey, n = 241).

There was no substantial difference between GPs and doctors in other types of practice (non-GPs) in their overall view of RPR.

4.2 Participating doctors' opinions after completing RPR

Doctors were more positive about RPR after their review. Nearly three-quarters (71%) agreed it was a positive experience, 67% found the RPR report useful and more than half (59%) would positively recommend RPR to colleagues (Figure 5).

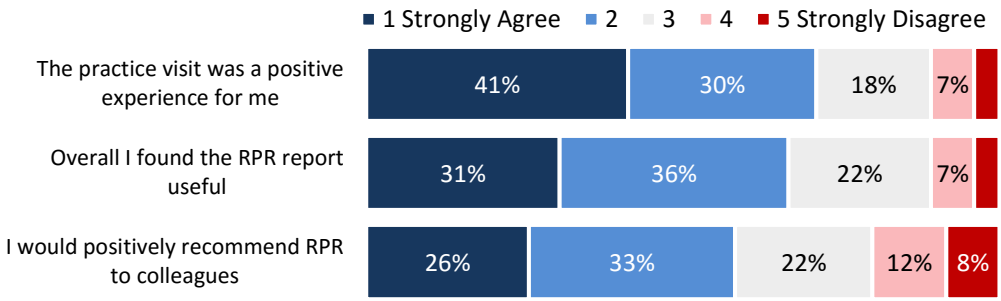


Figure 5. Participating doctors' overall experience of RPR (Post-RPR survey, n = 249).

Doctors said they changed their opinions about RPR because it provided reassurance about their practice, they valued the opportunity to have an objective perspective on their practice from a senior colleague, and/or they learned about new development opportunities (Table 6).

Table 6. Reasons why participating doctors found their RPR useful (Post-RPR survey, n = 249).

	Reasons why RPR was useful	Percentage who spoke about it
Personal knowledge	To know where you stand in relation to other doctors, provides proof of competency (to self and others) which can increase confidence in skills	29%
	Opportunity for self assessment / self reflection and gain insight on practice	9%
Feedback	Opportunity to get advice / have a discussion with a senior colleague or peer	24%
	Get an objective perspective on how they practice	15%
	Positive to get feedback from someone who has actually observed practice	11%
Strengths and opportunities	Have opportunities for improvement highlighted	23%
	Have strengths highlighted	19%

Overall RPR ratings were not associated with whether or not a doctor said they would recommend RPR to a colleague (Table 7).

Table 7. The proportion of doctors with superior ratings (seven or above) in each category who strongly agree or agree they would or would not positively recommend RPR (bpac^{nz} and Post-RPR survey data).

	Proportion with a superior rating for all questions in a category			
	Records/ requirements	Dr patient relationship	Clinical reasoning	Clinical practice
Would positively recommend RPR (n = 145)	43%	57%	49%	41%
Would not recommend RPR (n = 104)	38%	59%	52%	44%

5. Changes following participation in RPR

Key points

After their review, nearly half (47%) of the doctors said they had made changes to their practice as a result of participating. A further 12% intended to make changes in the future.

The reviews did not suggest changes for all doctors. Doctors with high RPR ratings were generally less likely to receive feedback about new opportunities for development and less likely to make changes.

Most doctors maintained the changes they made as a result of their review. Twelve months after RPR, the proportion of doctors who reported they had made changes was slightly lower than shortly after RPR (45% compared to 55%). Some doctors who earlier reported having made changes reported no changes at twelve months, and vice versa.

Doctors who at twelve months after RPR continued to report making changes were more likely than those who had not made changes to have learned about new development opportunities from RPR, to be positive about their reviewer and to recommend RPR to their colleagues.

Post-RPR, around half of the responding doctors planned to adjust their PDP based on their review. They were more likely to adjust their PDPs to target new opportunities for development than to build on strengths. Approximately half (49%) of the doctors who responded to the post-RPR survey had already made changes to their PDPs as a result of their participation in RPR. Twelve months later, smaller proportions (61% post-RPR survey compared to 37% at twelve-month survey) reported changes.

Just under half of doctors expected changes made following their review to contribute to improvements in the care they deliver to their patients (46%) and/or had improved their practice in other ways (52%).

Accumulated evidence suggests commonly used continuing medical education (CME) methods such as conferences can be ineffective in changing doctors' professional practice (Davis 1995). An analysis of systematic reviews by Bloom 2005 found changing practice was possible. Interactive techniques were the most effective way to change physician care, including approaches such as audit/feedback, academic detailing/outreach and reminders. O'Brien (2007) provides an example of how educational outreach visits were used to create sustainable and small but potentially important changes in prescribing habits.

5.1 Changes in practice

This section examines the post-RPR changes reported by doctors participating in RPR and whether those changes were maintained twelve-months later[5].

5.1.1. Two-weeks after RPR

In the post-RPR survey, nearly half (47%) of responding doctors said they had already made changes to their practice as a result of RPR and a further 12% intended to make changes (Figure 6).

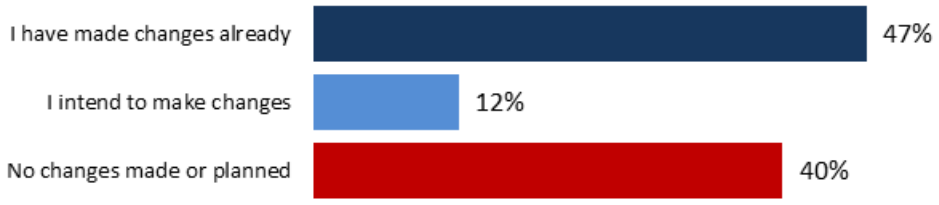


Figure 6. Proportion of participating doctors who said they had made changes, intended or did not intend to make changes (Post-RPR survey, n = 249).

The proportion of doctors who reported changes in practice as a result of RPR has varied over time and by practice type (Figure 7). GPs have been consistently more likely to make changes to their practice than doctors in other practice settings.

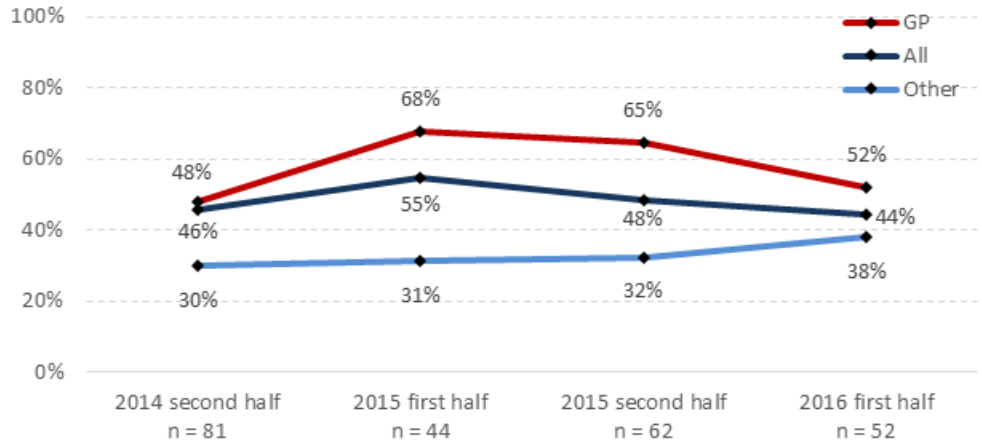


Figure 7. Proportion of post-RPR participating doctors who had made changes to practice showing the calendar half year the post-RPR survey was completed (first half 2014 was excluded as n = 8) (Post-RPR survey, total n = 241, GP n = 153, non-GP n = 88)

[5] Post-RPR results when not compared with twelve-months results are reported for all doctors who participated in the evaluation (n = 249). When comparing twelve-month survey results with post-RPR, results are reported for doctors who completed both the post-RPR and twelve-month surveys (n = 76).

RPR rating data from bpac[nz] were compared for doctors who did and did not report making changes to their practice. Doctors who received superior ratings in clinical reasoning and clinical practice were under-represented in the group of doctors who reported making changes to practice (Table 8).

Table 8. The proportion of doctors with superior ratings (seven or above) in each category who in RPR who had made changes to their practice (Significant differences are in bold) (bpac[nz] and Post-RPR survey data).

	Proportion with a superior rating for all questions in a category			
	Records/ requirements	**Dr patient relationship**	**Clinical reasoning**	**Clinical practice**
Made changes to practice (n = 118)	42%	53%	**44%**	**33%**
No changes to practice (n = 131)	40%	61%	56%	**50%**

The changes doctors said they made to their practice included changes to consultation management and style, patient care and administration (Table 9). The percentages in the table represent doctors who volunteered this information in response to an open-ended question about changes they had made.

Table 9. Changes participating doctors' have made as a result of RPR (Post-RPR survey, n = 249)

Area of change		Percentage who spoke about it	Example
Consultation	Changed how consult is managed	16%	*Tried to change consultation style, trying to prioritise patient questions.*
	Communicating more effectively	13%	*Changed how I word questions to patients. Better use of silence.*
Patient care	Improved notes and record keeping	14%	*Consult notes are completely different and try to reflect content of consult and more accurately report findings as well as future intentions for better follow-up by colleagues.*
	Reviewed prescribing	8%	*[I] have made changes to my prescribing methods and there is a new awareness of having to constantly check current guidelines.*
	Reviewed tests ordered	2%	
Administration	E-management	5%	*I've made a lot more use of, our IT person helped, the bpac embedded in medtech.*
	Audit	3%	*Starting audit my clinic record and make a protocol to avoid the chance of missing document.*
Other	Unspecified or technical change	9%	*[Changes were] some specific things about airway management.*
	Self-care	3%	*I have done a routine annual personal health check!*
None	No changes planned	3%	*I haven't made any changes it was just a waste of time*

5.1.2. Impact of changes to practice

Although there is evidence about how to influence changes in practice, Bloom 2005 and Boonyasai 2007 report the difficulty of measuring the impact of initiatives such as RPR on patient outcomes. The impacts of changes in practice on patient care are complex and hard to quantify, particularly where the intervention takes a broad approach. Additional studies are needed to determine whether educational interventions create clinical benefits (Boonyasai 2007).

In the RPR survey and interviews, doctors often reported they had made small changes in response to RPR. Small improvements are relatively easy for doctors to make with minimal ongoing support and may therefore be more likely than more substantive changes.

5.1.3. Twelve months later: maintenance of changes to practice

The extent changes were maintained was examined by comparing the doctors who by the end of July had completed both the post-RPR survey and the survey twelve months later. Twelve months after participating in RPR, the proportion of doctors who said they had made changes to their practice after their review decreased from 55% to 45% (Figure 8).

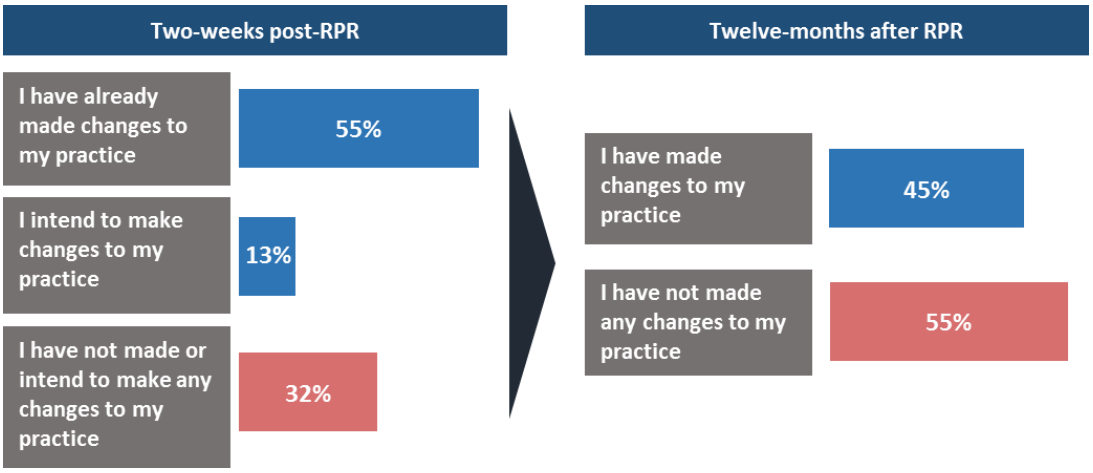


Figure 8. Proportion of participating doctors who had made changes to their practice (Post-RPR and 12-month survey, n = 76)

Many doctors gave consistent answers in both surveys (for example, saying that they had made changes to practice both post-RPR and twelve months later) (Figure 9). The doctors who reported post-RPR they had made changes to practice but not twelve-months later had a similar profile to the doctors who reported making changes in both surveys. Potential explanations are:

- Doctors forgot they made changes, or felt they were small and not worthwhile mentioning a year later
- Changes became business as usual
- The change was a one-time event (e.g. going to a workshop or seminar)
- Doctors made a change but then reverted back to their previous practice.

The likelihood that some doctors forgot the changes they had made is supported by interviews with two of the 14 doctors who reported practice changes post-RPR but not at twelve-months. Although they reported making no changes in the twelve-month survey, during the interviews at twelve months both doctors discussed changes they had made and maintained after their review.

> *Yes, absolutely, I changed a few things in my consultation style. So that was a lot about how I changed how I wrap up and finish the consultation in a timely way…. I have also made changes in my testing.*

So the main thing was to try to work on my communication, have a more patient centred approach, focus on the family history, occupation history and updating the mammograms and smear screening…. I think the more patient centred approach has really improved the quality of the service I provide. And other things like blood tests and what they are effective for.

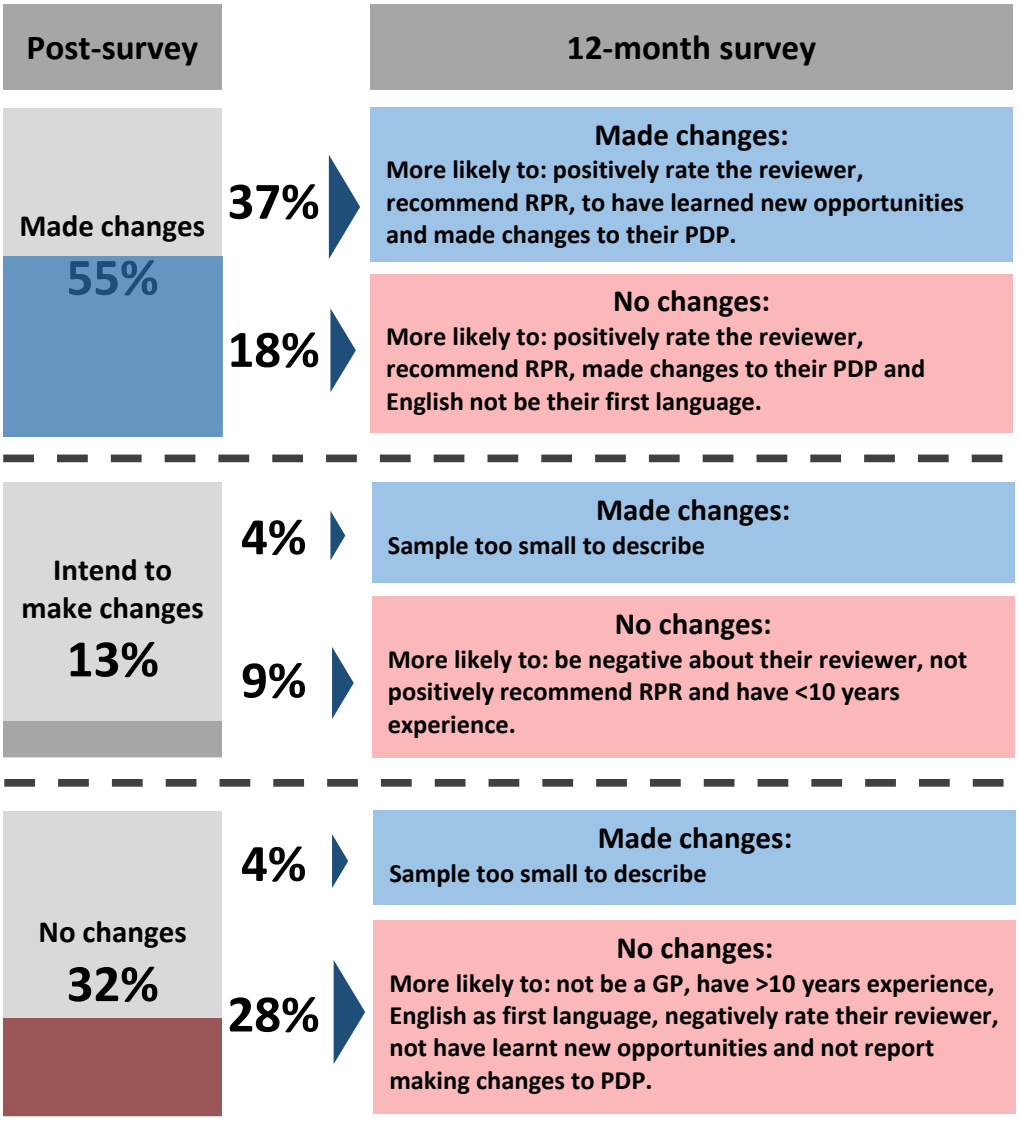


Figure 9. Changes to practice due to RPR over time (Post-RPR and 12-month survey, n = 76)

The characteristics of doctors belonging to these different groups in Figure 9 were compared (Table 10). Where characteristics are over-represented in a group, they are shaded dark blue and where they are under-represented they are light coloured.

Table 10. Prevalence of different doctor views and the sustainability of changes to practice (Post-RPR and 12-month survey, n = 76).

Characteristics	Proportion overall (n = 76)	Stable - changes made (n = 28)	Moved - from changes to no changes (n = 14)	Intended to make changes to did not (n = 7)	Stable - no changes (n = 21)
GPs	80%	86%	86%	86%	**67%**
Practiced for < 10 years	47%	50%	50%	**71%**	**33%**
NZ trained	33%	36%	29%	29%	29%
English not first language	22%	21%	**50%**	29%	**10%**
Positive about reviewer	76%	**93%**	**93%**	**57%**	**57%**
Positively recommend RPR	64%	**89%**	**93%**	**43%**	**29%**
Learned new opportunities	53%	**89%**	50%	57%	**0%**
Have made changes to PDP	61%	**86%**	**86%**	57%	**19%**
Agree report was accurate	71%	**89%**	64%	71%	**48%**

The differences between groups in the RPR evaluation reflect findings in the literature about factors that are important in supporting practice change:

- Respecting the skills of the reviewer
- Identifying opportunities for development
- Capturing development opportunities in professional development plans.

These three aspects of RPR are also linked to doctors' comments about their expectations of RPR and why they found their reviews useful.

Making changes to PDPs is associated with making changes to practice and supports the theory that PDPs form a connection between learning of opportunities for development and making changes to practice.

5.2 Changes to professional development

In general, CPD is valued and seen as effective when it addresses the needs of individual clinicians, and the context in which they work (Hays 2002 and Schostak 2010). One of the aims of RPR is to improve the way doctors engage with professional development activities and planning. As the evaluation progresses, comparison between doctors' first and subsequent RPR ratings will provide a more objective measure of changes.

5.2.1. Post-RPR changes to professional development

Half of the doctors planned to make changes to their PDP following their review (Figure 10). Doctors were more likely to agree they would change their PDPs to target opportunities for development than to maintain areas of strength.

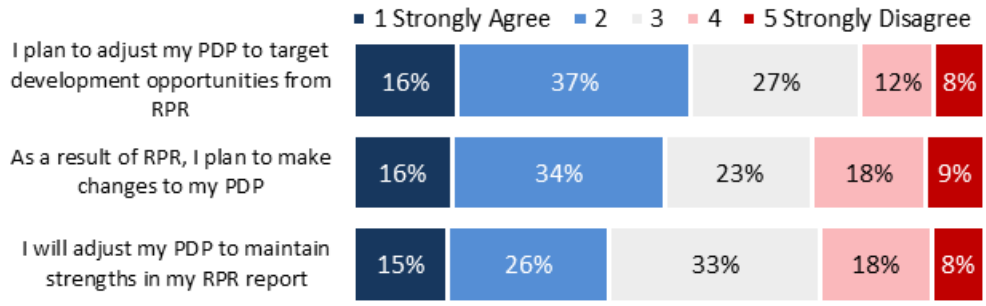


Figure 10. Doctors' changes to their professional development plans (Post-RPR survey, n = 249).

In the post-RPR survey, close to half (49%) the doctors reported making changes to their PDP. Close to one-third (29%) of those who had had not made PDP changes said they still planned to make them in the future as a result of their RPR.

Doctors record goals in their PDPs then record the activities they undertake to meet those goals. Analysis of bpac^{nz} records of RPR doctors' goals showed the number of goals set by GPs rose in the three months prior to their RPR (Figure 11). Possibly as doctors updated their e-portfolio prior to their review. When doctors set goals before their review reviewers can examine and provide feedback on recent goals.

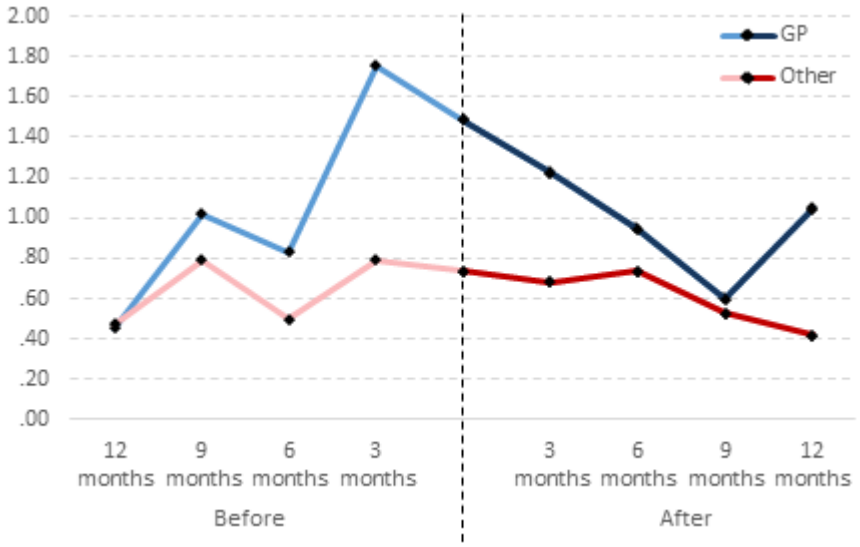


Figure 11. Average number of goals created per three months, before and after RPR (only includes doctors who have two years of data available (bpac^{nz} data n = 128, GP n = 90, non-GP n = 38)

The average number of goals created within a two-year period is lower for doctors who have completed RPR. The reasons are unclear but some doctors explained that RPR helped them develop more appropriate goals and improve their management of their PDP.

Table 11. Average number of goals created over two years (bpac^{nz} data for RPR doctors who have one year of data either side of their RPR meeting date).

	Average number of goals created
Have completed RPR (n = 245)	6.64
Have not completed (n = 494)	7.59

RPR data from bpac^{nz} were compared to the changes to PDPs reported by doctors. With the exception of the records/requirement category, doctors who received 'superior' ratings were significantly more likely to have made no changes to their PDP (Table 12).

Table 12. Percentage of doctors who received all superior ratings (seven or above) in each category in RPR for those who did and did not make changes to their PDP (Significant differences are in bold) (bpac^{nz} and Post-RPR survey data).

	Proportion with a superior rating for all questions in a category			
	Records/ requirements	Dr patient relationship	Clinical reasoning	Clinical practice
Made changes to PDP (n = 123)	40%	**49%**	**44%**	**33%**
No changes to PDP (n = 126)	42%	**66%**	**56%**	**52%**

5.2.2. Twelve months later: changes to professional development

Twelve months later, fewer doctors reported making changes to their PDP (37%) compared to the post-RPR survey (61%) (Figure 12). At 12-months, close to one-quarter of doctors reported they had changed how they managed their PDP and one-quarter had changed their PDP to make it more useful.

The lower proportion reporting changes to PDP could be for similar reasons as the drop in changes in practice.

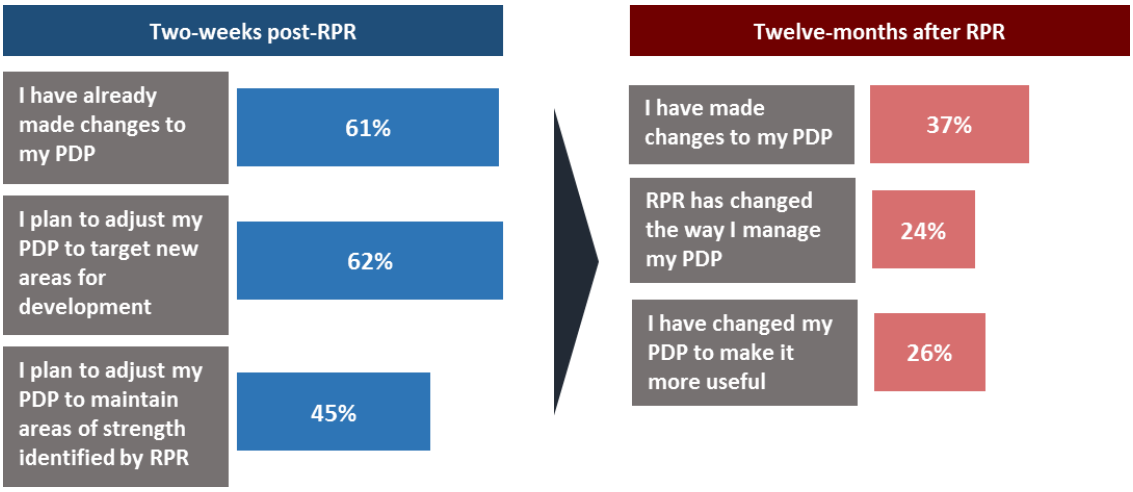


Figure 12. Comparing the views of the twelve-month survey cohort on changes to professional development plans post-RPR and after 12-months (n = 76).

5.2.3. Examples of changes to professional development

Only a small number of doctors reported the specific changes they had made to their PDP. Their examples are summarised in Table 13.

Table 13. Examples of changes to professional development

Change to PDP	Example
Improving management of professional development, such as updating them more regularly.	*I've changed the way I document my CME in the bpac^{nz} system; PDP is set first, then followed by the appropriate CME.*
Improving the quality of PDP and goals	*Created a real PDP!*
Fine tuning their PDP activities	*More study and build up experience on paediatric infectious disease.* *Some of the basic background knowledge is a bit rusty. I'll just hit the books a bit more and keeping abreast of the journals*
Participating in network meetings	*I've also signed up for the monthly post grad meetings that the GPs and public health doctor meetings that people here have in [town].*
Entering further training	*I have joined the GP registrar training programme.*

Self-audit activities	*I researched note keeping and then I did an audit of my notes keeping.* *RPR has identified that my use of laboratory investigations was higher than that of most other GPs. This had made me develop the plan to conduct an audit.*

5.3 Changes to quality of care

RPR aims to improve outcomes for patients by improving the quality of care they receive. It is difficult to assess the impact of changes to practice on patient outcomes. However, difficulty in measuring the impact of changes does not mean the examined initiatives do not improve the care for patients. Ivers 2012, discusses the significance of small changes, reporting that audit and feedback can lead to small but potentially important improvements in practice for doctors.

In the RPR evaluation, potential improvements in outcomes for patients are assessed by considering the types of changes to practice and professional development reported by doctors. Changes aligned with improvements in 'best practice' suggest the potential for improved outcomes for patients.

In response to the post-RPR survey, approximately half (46%) of doctors thought that participating in RPR improved the care they deliver to their patients and/or helped in other ways (52%) (Figure 13). Between one-fifth and one-quarter disagreed that RPR had improved the care they delivered to their patients or helped improve their practice in other ways.

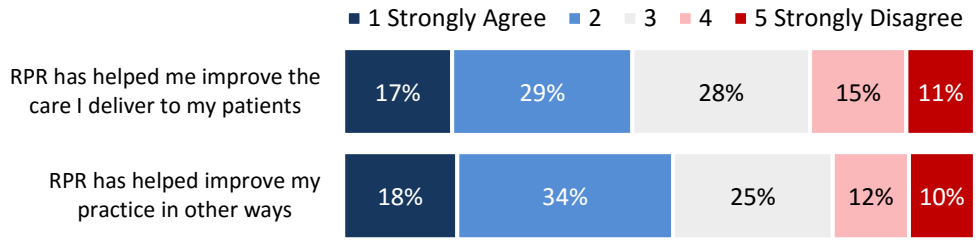


Figure 13. Doctors' views on the impact of the RPR (Post-RPR survey, n = 249).

6. What can influence a doctor's response to RPR

Key points

Doctors' backgrounds, characteristics, personal views and experiences can influence their response to RPR.

Doctors' characteristics influenced their likelihood of making changes to practice and PDPs as a result of their participation in RPR. Doctors were more likely to make changes to practice if they:

- Practiced as a GP
- Did not speak English as a first language.

A minority of doctors did not acknowledge the value of a review of their practice. Some considered they were sufficiently experienced to gain no benefit from a review. Some considered their selection for a review was unfair and believed all doctors should be treated the same.

Certain experiences of RPR were also associated with increased likelihood of making changes to practice and professional development plans. Doctors were more likely to make changes if they:

- Agreed reviewers had the appropriate skills to review them
- Would positively recommend RPR
- Learned new opportunities for development
- Agreed their RPR report was accurate.

While some factors influencing responses to RPR cannot be changed, there is the potential to adapt the RPR process to influence doctors' experiences.

6.1 Characteristics of the participating doctors

Doctors' backgrounds, characteristics and personal views and experiences can influence their response to RPR. When completing the post-RPR survey, doctors recorded their:

- Years in practice
- Whether English was their first language
- Where they trained
- Their area of practice.

In interviews with doctors the evaluation team explored other characteristics influencing doctors' responses to RPR.

6.1.1. Background

Doctors who did not speak English as a first language were more likely to have made changes to their practice and PDP. They were also more likely to positively recommend RPR to their colleagues (Table 14).

Table 14. The influence of demographic factors on doctors' responses to RPR (Post-RPR survey, n=249) (Statistically significantly differences are in bold)

	Number of doctors	Have made changes to their PDP	Have made changes to their practice	Would recommend RPR to their colleagues
English as a first language	193	**88 (46%)**	**81 (42%)**	**105 (54%)**
English as a second language	56	**35 (63%)**	**37 (66%)**	**40 (71%)**
Less than 10 years in practice in NZ	113	60 (53%)	60 (53%)	71 (63%)
11-30 years in practice in NZ	106	48 (45%)	46 (43%)	56 (53%)
30+ years in practice in NZ	30	15 (50%)	12 (40%)	18 (60%)
Trained in NZ	87	42 (48%)	37 (43%)	46 (53%)
Trained elsewhere	162	81 (50%)	81 (50%)	99 (61%)

6.2 Doctors' personal views about reviews

Doctors' understanding of RPR influences their expectations of the programme. Their expectations may be influenced by their personal views on the following:

- **Relevance of RPR programme for themselves.** Some doctors see themselves as already highly competent and see no need to be reviewed. Some consider they work in settings where peer review is readily available. Others see the need for the programme and think it will be useful.
- **Equity of RPR selection**. Some consider it is unfair vocationally registered doctors are not part of RPR and either think they should also be excluded or that all doctors should be reviewed.

- **The cost (time and financial) of RPR compared to the perceived benefit.** Doctors either thought it was a good or poor use of resources, both of their own time and the cost to bpac[nz].
- **Practice visit is appropriate.** Views on the practice visit ranged. Some doctors considered the practice visit was the only way to objectively assess how a doctor is practicing whilst others thought it was unnecessary and a review could be based on notes and a phone call.

While doctors held divergent views, those who fundamentally disagree with the concept of a review were less likely to find RPR useful compared to those who supported reviews.

The RPR programme has some opportunity to influence doctors' personal views through the communication sent to doctors selected to participate in RPR. For example, emphasising RPR's focus on quality improvement rather than identifying unsafe doctors may improve doctors' outlook before they participate.

A brief case story illustrating how a doctor's characteristics and personal views influence RPR and its outcomes is outlined below.

Dr 1 – negative about RPR and no changes made

Dr 1 is a doctor with over 30 years' experience and has overseas training in a specialty, although the doctor's training is not recognised in New Zealand.

Dr 1 did not expect to get anything out of the RPR and therefore had a somewhat negative attitude. The doctor felt, both before and after their RPR that they were already a senior doctor with a good record and should not need to be checked.

The doctor thought RPR was unnecessary because in the specialist environment doctors constantly collaborate with other professionals and concerns about competency would have come up a long time ago. Dr 1 felt RPR was more suited for doctors who practice in isolation.

Dr 1 found RPR was resource intensive and organising and participating in it was somewhat *"anxiety inducing"*. Dr 1 did not think getting patient feedback would be valid in the specialist setting due to low response rates and especially the short term nature of care. Dr 1 also felt embarrassed asking patients to fill in the feedback forms. The doctor felt the alternative of getting feedback from colleagues would not yield anything that would not come to light without the review.

Dr 1 also had some negative experiences with the practice visit itself. Dr 1 considered the reviewer to be the doctor's junior as the reviewer only had some experience in Dr 1's speciality whilst Dr 1 had many years' experience and had previously worked as a consultant. Although Dr 1 found RPR unhelpful, the doctor

commented that the reviewer did as good a job as could be done considering the circumstances, they had a pleasant collegial experience and the doctor enjoyed meeting the reviewer.

Dr 1 thought the questions during the RPR visit were not well suited to the speciality area. Another problem outlined by Dr 1 was very few patients attending his speciality on the day of the review so the review was predominantly based on case reviews, which Dr 1 thought could have been done over the phone.

Dr 1 reported not receiving any suggestions about ways to improve. The doctor said that while it was nice to have practice affirmed with positive feedback, the doctor was aware of them already. There were no new goals created in the doctor's e-portfolio following their RPR.

Dr 1's feedback highlights the importance of communicating the purpose and reason for RPR and the current process. For example, reframing the patient feedback as a way to work on making consultations as positive as possible for patients rather than a reflection on the doctor.

Considerations from Dr 1's feedback

Initial view of RPR: Although not much can be done to change doctors' opinions on the idea of the RPR, other smaller changes can be made to potentially improve the experience.

Reviewer match: Dr 1 saw the reviewer as a junior in their area of practice. This could be remedied by having a more experienced reviewer or by explaining the reviewer's experience as a reviewer and the generic nature of some aspects of a review. There has been an increased focus on improved matching between participants and reviewers since Dr 1 was included in the evaluation.

Match between RPR process and area of practice: RPR was seen to be designed for general practice. The questions and report could be adapted to be more suited to the doctor's professional area of practice. Increased flexibility about the review process may be required to meet the needs of doctors in specialist practice.

Reviewer feedback and suggestions about how to improve their practice are very important to participants. There may be generic information that could be helpful for example, about the evidence supporting effective approaches to professional development that could be developed and provided to participants as well as personalised feedback.

6.3 Doctors' professional context

6.3.1. Type of practice

Two-thirds of the doctors who have participated in RPR to date work in general practice settings. While often similar in some ways, general practices can vary in characteristics such as the number of doctors and other staff, patient loads, demographics of the patient population and levels of managerial/supervisor support. Doctors can also hold different positions within practices, for example owning the practice or working as a locum.

Overall, GPs were significantly more likely to report making changes to their practice and professional development plans than doctors working in other settings such as hospitals or clinics specialising in an area of health. Compared to one in twenty GPs, close to one in five non-GPs considered RPR did not fit with them and their practice in some way.

Table 15. Influence of the practice setting (Post-RPR survey, n = 249) (Statistically significantly differences are in bold)

	Number of doctors	Have made changes to PDP	Have made changes to practice	Would recommend RPR to colleagues
Current role as a GP	161	**88 (55%)**	**88 (55%)**	99 (61%)
Other current role	88	**35 (40%)**	**30 (34%)**	46 (52%)

Doctors working in team based settings, such as hospitals, were less likely to see the need for RPR than those working in more isolated situations. They often believed they already took part in similar activities or worked closely enough with other professionals that any concerns would become apparent. This view was closely linked to seeing RPR as a tool for identifying doctors practicing unsafely rather than a tool for ongoing quality improvement.

The variety of practices and circumstances highlights the importance of flexibility in the RPR process and for the reviewer to adjust the process to suit the participating doctor. For example, this could include going to multiple locations over the day, waiving the patient feedback requirement and/or adapting the questions asked during the RPR. Currently the RPR process can be somewhat adapted to the type of practice a doctor works in as long as it still covers the main areas of RPR. Some doctors appreciated this level of flexibility but others thought it did not go far enough.

A few doctors (2%) raised concerns about the effect of the practice visit on their patients. Issues related to obtaining consent from the patient for the reviewer to observe a consultation and perceived risks to patient wellbeing associated with the reviewer observing a consultation.

I don't like them. It infringes on a doctor's doctor-patient relationship.

Below is a summary of how one doctor's type of practice influenced how they viewed their RPR.

Dr 2 – Likes the idea of RPR but more suited for doctors practicing in isolation

Dr 2 trained and has worked in New Zealand for more than 20 years. The doctor has completed postgraduate qualifications in his specialty but does not belong to a college.

Prior to his current role, Dr 2 worked in relative isolation and relished the chance to be reviewed by peers and felt it was an important way to continue practicing safely. Dr 2 also thought RPR could be helpful even for doctors who are in colleges, as it is more important to support doctors who work in isolation than those with less qualifications.

I think it's a great idea for people who work in isolation. I certainly think there is nothing to fear from peer review.

However, Dr 2 currently works in a fairly large multidisciplinary team surrounded by others in his speciality and believes he is reviewed continuously in his regular working life and RPR would not add anything.

Dr 2 did not find the RPR visit stressful but did find organising the time to do it very onerous due to a full schedule. Dr 2's patients had specific characteristics that made gathering patient feedback difficult and time consuming. He did not think the RPR process was appropriate for his type of practice.

It was stressful in terms of having to find the time but it was not stressful in terms of having the visit or interacting with the reviewer. I've got no concerns, but that's because I'm confident in myself and am regularly peer reviewed.

Dr 2 felt his concerns were confirmed after the practice visit as he found he did not learn from the experience. RPR did not identify any areas to work on or for further development and he was already aware of the strengths highlighted by the review. Dr 2 did not create any e-portfolio goals following RPR.

Although Dr 2 believes RPR is good in theory he concluded it does not suit all doctors and practices.

Considerations from Dr 2's feedback

How isolated someone is in their practice influences their opinions about the need for RPR. Doctors who are regularly reviewed and who do not work in isolation may not see the need for an additional review.

When a doctor has a non-standard patient population, patient feedback may be more difficult to obtain. Flexibility to consider ways to obtain feedback may be required, such as reducing the numbers of patients from whom feedback is sought.

6.4 Experiences of the review process

The experience of the practice visit is the most important part of RPR for doctors as it is the part of the process with the highest cost and the greatest potential benefit. Aspects of the practice visit which can influence doctors' experiences include how easy the visit is to organise, the availability of patients, how well RPR fits into their practice, whether they considered the day of the practice visit represented their practice and their opinion of the reviewer.

6.4.1. Logistics and organisation

Most doctors were positive about the communication and organisation of their review. The majority either had no comment or found RPR easy to organise.

> *The phone call people, bpac^{nz}, are really helpful. When I rang up and I was nervous, they couldn't be more helpful and they, as a person doing it first time round, they facilitate it and make it clearer. They're great, very clear and you can ring them with any questions.*

However, a small number of doctors (6%) found RPR disruptive to their practice and difficult to schedule (Section 6.3). Some doctors mentioned it was sometimes difficult to arrange a time that suited both the reviewer and themselves but most understood the struggle of being busy.

Many doctors valued speaking directly to their reviewer to discuss plans for the day and any accommodations or changes to the usual RPR process their practice required.

6.4.2. Practice visit

Post-RPR survey respondents were generally positive about the practice visit with only a small proportion disagreeing the practice visit was a positive experience (Figure 14).

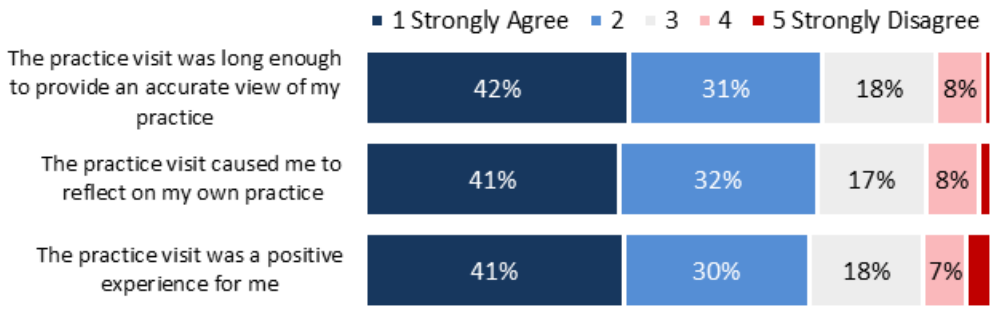


Figure 14. Doctors' views on their experience of the RPR practice visit (Post-RPR survey, n = 249).

Many doctors saw RPR as a form of assessment and felt anxious about the practice visit. Afterwards, most felt their anxiety was unfounded and reported they would be less worried in the future. This change generally arose from the collegial interaction and understanding RPR's focus is on quality improvement. Pre-visit anxiety is likely to be lower for subsequent reviews as doctors are familiar with the process. However, some doctors said they would always feel some nerves before practice visits.

> *It was the first time, I was anxious, but [the reviewer] was so friendly his positive attitude was a relief.*
>
> *Not as painful as I thought, a much more useful process than I expected. Thank you to all.*

Doctors' feedback highlighted the importance of the practice visit as a quality improvement tool to prompt self-reflection. Receiving an objective view about their practice enabled self-reflection that was beneficial. The opportunity to have this objective view often drove doctors' overall opinion of RPR.

> *I think it can be very difficult for colleagues to say "I don't think you're doing this very well, or you could be doing this better" that sort of thing. So [the reviewer] can be honest which is valuable.*

The following case story describes how and why the practice visit for a particular doctor changed their opinion of RPR from a negative to a positive experience.

Dr 3 – Changed from negative to positive

Dr 3 completed his medical training in New Zealand 34 years ago and currently works outside general practice in a small niche area of medicine.

Before his review, Dr 3 had a very poor impression of RPR. He knew it was important because there was the potential to lose his license and felt the majority of doctors were being punished for the sins of the few. He tried to research more about RPR

but did not know any colleagues who had been reviewed and felt the information on the website was not adequate. Dr 3 also felt having to tell his patients he was being *"checked up on"* was *"destructive of public trust"* because it implied there was something to check up on. Before the visit he expected *"a bit of a grilling"* and to hear he was good for another three years and didn't expect much more.

Dr 3 had no problems with the preparation for the visit, it was a mild annoyance and he thought he probably over prepared. Once he was in direct contact with the reviewer he thought it was straightforward.

Once the visit was complete Dr 3's opinion of RPR changed dramatically. Rather than getting a *"grilling"* he found the review was constructive. He described the reviewer as *"collegial but necessarily formal"*. He found the reviewer good because he was of a similar age and had a lot of experience in the medical area in which Dr 3 works. Dr 3 talked about matching reviewers with doctors being of *"utmost importance"*.

During the visit and in the RPR report the reviewer suggested changes Dr 3 could make to improve his practice. These included suggestions on practical case administration, insights into his practice as well as discussions on CME.

Following the review, Dr 3 said he had made changes to the way he works, "*not big things but little improvements that would improve his practice"*. He created one specific goal to address an opportunity highlighted in his RPR feedback.

At the conclusion of the process Dr 3 felt the review was *"very fair, accurate and a really worthwhile exercise".*

Considerations from Dr 3's feedback

Dr 3's initial impression of RPR arose from his slight misunderstanding of the process. He suggested giving people who had not been reviewed an example report to show what the areas addressed were, as well as a phone call from the reviewer a month before the review date to discuss the process and put the doctor's mind at ease. Since Dr 3's review, the RPR process has changed and reviewers are now expected to call doctors prior to the practice visit.

There were two important aspects of the visit which helped to change Dr 3's attitude. Matching him to an appropriate reviewer in both seniority and area of medicine, and providing helpful and actionable suggestions to multiple areas of practice, including administration, clinical practice and continuing education.

6.4.3. The reviewer

Systematic reviews by Miller 2010 and Veloski 2006 found changes to practice were more likely to occur when feedback was from a credible source and feedback was likely to be more effective when it was from a supervisor or senior colleague.

Reviewed doctors highlighted the value of an objective view on their practice from someone they respected. The majority of responding doctors (80%) reported their reviewer demonstrated appropriate skills to evaluate their practice. Only a small percentage (8%) disagreed (Figure 15).

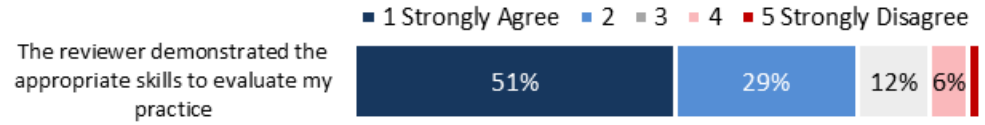


Figure 15. Doctors' views on reviewer skills (Post-RPR survey, n = 249)

Doctors' opinions of their reviewer were closely related to their likelihood of making changes to their practice and their overall opinion of RPR. Figure 16 and Figure 17 show reviewed doctors who had positive opinions of their reviewer were more likely to make changes and more likely to recommend RPR positively to their colleagues.

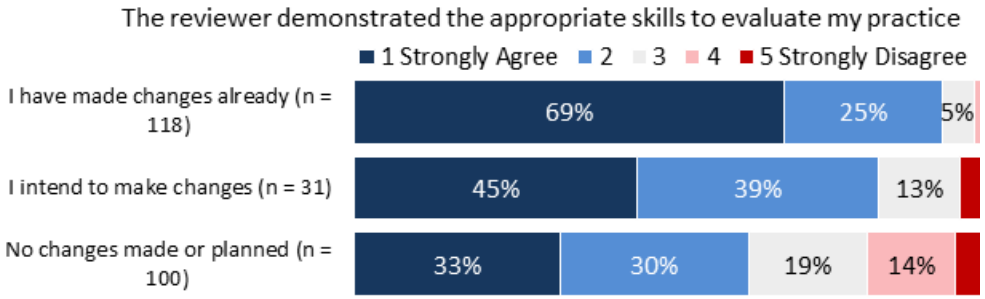


Figure 16. Doctors' opinions of their reviewer's skills and whether they have made changes to their practice (Post-RPR survey)

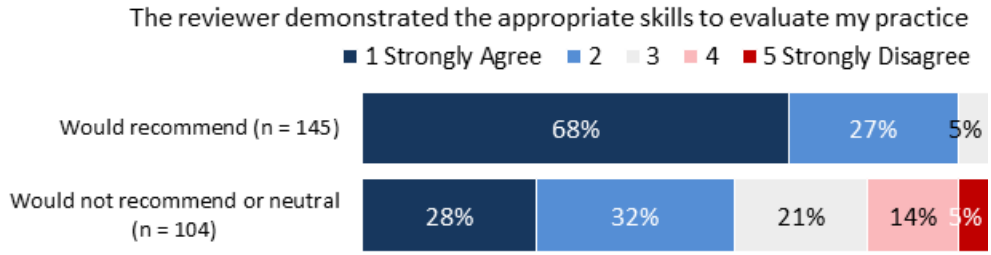


Figure 17. Doctors' opinions of their reviewer's skills and whether they would recommend RPR (Post-RPR survey)

There is a slight trend towards doctors becoming more positive about their reviewers over time, but this trend has not reached significance (Figure 18). This may reflect the work bpac^{nz} has done to match doctors with reviewers who work in their speciality and have an appropriate level of seniority.

My assessor was well versed in my particular area of practice and therefore had good insight and was able to provide useful feedback. I feel an assessment by a "generalist" would not have been as useful.

So matching the seniority and making sure the reviewer is familiar with the branch of medicine is very important. And with my visit I was very impressed. So whatever effort it takes to continue that, it's worth it.

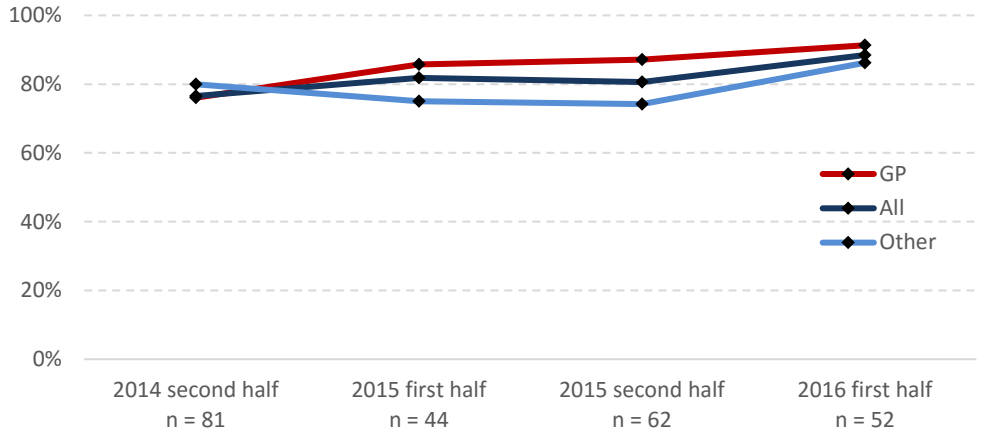


Figure 18. Percentage of doctors' agreeing their reviewer had the appropriate skills over time by current role (not including first half 2014) (Post-RPR survey, n = 241)

Doctors who misunderstood the purpose of the review (seeing it as a pass/fail practice audit) seemed to place a higher importance on the expertise of the reviewer in their area of practice.

A small number of doctors made negative comments about their reviewer's conduct, unrelated to their knowledge and experience. Nearly all negative comments about reviewers were made in the first year of the evaluation, suggesting the investment in recruiting, training and matching reviewers has further raised reviewer quality.

6.4.4. Variation in response to reviewers

Linking post-RPR and twelve-month survey responses from doctors to their reviewers highlights some differences between reviewers. Reviewers at the top of Table 16 had the highest proportion of doctors reporting changes in practice, along with other positive outcomes. Those in the lower section had the lowest proportion of positive responses in most areas.

Table 16. Cells show the percentage of doctors with positive results in each area for each reviewers. Only reviewers who reviewed at least five survey respondents are included in the table. (Number of reviews done by reviewer n = 5-19, Doctor n = 220, Reviewer n = 20) (bpac^{nz} data matched to post-RPR survey)

Reviewer	Active in last 8 months	Have made changes to practice	Have made changes to PDP	Learnt new dev opportunities	Visit was a positive experience	Would recommend RPR	Positive about reviewer
1	Y	73%	80%	80%	93%	73%	93%
2	Y	78%	78%	67%	89%	89%	89%
3	Y	67%	50%	83%	100%	83%	100%
4	Y	69%	81%	69%	81%	88%	88%
5	Y	82%	82%	64%	82%	82%	82%
6	Y	67%	100%	67%	67%	50%	83%
7	N	50%	60%	70%	100%	50%	80%
8	N	55%	73%	64%	64%	64%	82%
9	Y	42%	26%	53%	84%	63%	89%
10	Y	40%	60%	50%	70%	60%	70%
11	Y	50%	64%	64%	50%	43%	79%
12	N	58%	42%	33%	75%	67%	67%
13	Y	20%	20%	80%	60%	60%	100%
14	Y	40%	20%	60%	80%	40%	100%
15	N	80%	60%	40%	40%	40%	60%
16	Y	31%	25%	50%	75%	50%	88%
17	Y	42%	25%	50%	58%	75%	58%
18	Y	20%	40%	20%	60%	50%	80%
19	Y	24%	29%	41%	41%	29%	65%
20	Y	9%	18%	45%	55%	18%	55%
Average		**49%**	**51%**	**56%**	**71%**	**59%**	**80%**

Differences between reviewers may result from non-random allocation of doctors to reviewers. Some reviewers may consistently be allocated more challenging doctors. The number of reviews completed by a reviewer did not appear to be a factor. The differences between reviewers may also reflect variation in reviewer capability. For example, low rates of practice and PDP change paired with a high rate of recommendation could indicate the reviewer was not able to identify any development opportunities, either because there were none or because the review was not robust enough.

Reviewers have strengths and areas for development. For example, a smaller percentage of doctors reviewed by reviewer 9 made changes to their PDP compared

to other reviewers. This may indicate reviewer 9 could put more emphasis on encouraging PDP changes. Higher percentages of doctors reviewed by reviewer 13 learnt new opportunities for development and were positive about the skills of the reviewer.

Comparison between reviewers also highlights the correlation between making practice and PDP changes and whether the reviewer identified new opportunities for development. Reviewers tended to have high success rates in all or none of these areas. However, some doctors had high opinions of their reviewer even where they did not make practice changes.

6.5 Feedback received

The content and delivery of feedback has been shown to influence whether changes to practice are made (Pelgrim 2013 and Ivers 2012). The Ivers 2012 review found feedback may be more effective when it is provided both verbally and written, and when it includes measurable targets and a plan to achieve them.

Miller 2010 and Pelgrim 2013 discuss how feedback and suggestions for change should ideally be linked to the doctor's previously identified strengths and weaknesses as it makes any suggestions more relevant. Effective feedback is feedback in which information on previous performance is used to promote positive development. It should be planned and delivered in an effective manner (Archer, 2010).

In RPR, feedback is provided verbally through discussion between the reviewer and the participating doctor during the practice visit. The feedback is formalised in a written report delivered after the review. Reviewers discuss strengths and opportunities for development with doctors and link them to PDP goals. Reviewers aim to ensure all points for development are discussed with the doctor during the practice visit so that the report does not contain any surprises.

6.5.1. Relevance of feedback

Pelgrim 2013 reports that reflection occurs when specific feedback is provided and doctors who reflect on their performance are more likely to make use of feedback. In interviews, doctors often identified the opportunity for self-reflection as one of the benefits of RPR.

The perceived relevance of the feedback from the reviewer is an important factor in whether doctors act on suggestions. If the doctor can see the reason for the suggestion then it is much more likely to be taken seriously. For example, a reviewer suggested to one doctor they should lower their chair. The doctor thought the suggestion was a waste of time and the reviewer was just trying to find something to comment on. Without explanation the suggestion could seem insignificant, but could

be taken more seriously if framed in a way that explains a lower chair can make patients feel more comfortable.

6.5.2. Feedback content

RPR reports are the formal mechanism for providing feedback. In the RPR evaluation, two-thirds (67%) of doctors found the RPR report useful and more than half (57%) that it identified new opportunities for development (Figure 19). Some doctors wanted more guidance on how they could improve their practice. In interviews, even doctors who received very positive ratings wanted to receive some practical advice.

> *To some extent she was pointing out things that I maybe hadn't thought of, so she outlined some things I was aware of and others that I wasn't so much.*

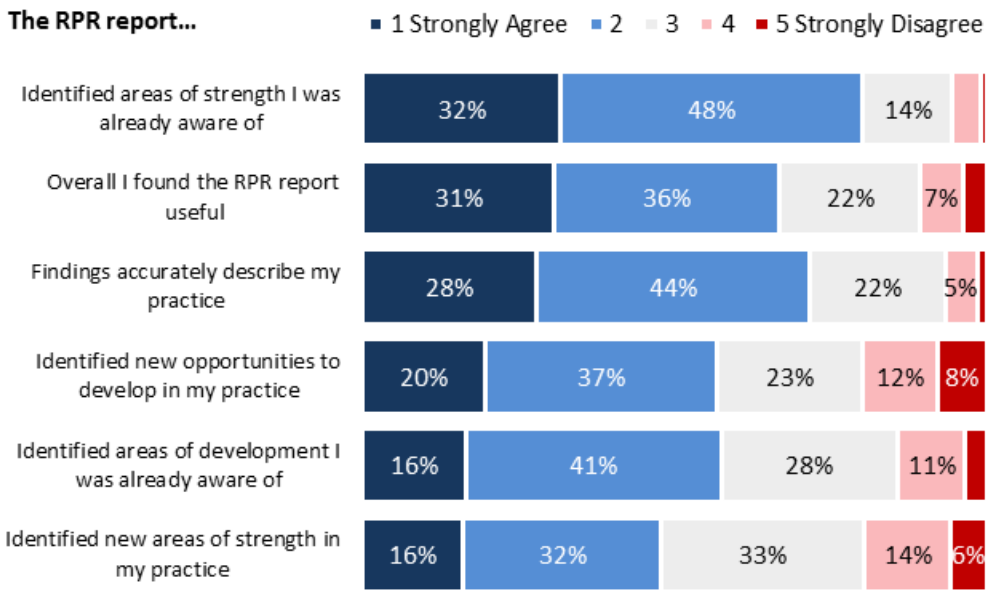


Figure 19. Doctors' views on the RPR report (Post-RPR survey, n = 249)

Feedback should be incorporated into the learning process by relating it to learning goals and plans for improvement (Archer, 2010). The doctors who learned new opportunities for development in their report were significantly more likely than those who did not to make changes in their PDP, practice and be more positive about RPR (Table 17). This highlights the importance of reviewers identifying new opportunities for development for participating doctors.

Table 17. Impact of learning new opportunities for development on making changes to practice, PDPs and how positively doctors rated RPR (Post-RPR survey, n = 249) (Statistically significantly differences are in bold)

	Number of doctors	Have made changes to their PDP	Have made changes to their practice	Would recommend RPR to their colleagues
Learned no new development opportunities in their report	108	**38 (35%)**	**24 (22%)**	**38 (35%)**
Learned new opportunities for development in their report	141	**85 (60%)**	**94 (67%)**	**107 (76%)**

Making practice change requires doctors to understand the steps required to respond to development opportunities. Almost all (87%) doctors who had new opportunities for development identified agreed the action needed to address the new development opportunities was clear.

In the group of doctors who reported not learning any new opportunities for development, there were more doctors who had superior ratings compared to the group which did learn new opportunities (Table 18).

Table 18. Percentage of doctors who received all superior ratings (seven or above) in each category of RPR compared to if they reported learning new opportunities for development (bpac^{nz} and Post-RPR survey data)

	Proportion with a superior rating for all questions in a category			
	Records/ requirements	Dr patient relationship	Clinical reasoning	Clinical practice
New opportunities learned (n = 141)	40%	55%	**44%**	**36%**
No opportunities learned (n = 108)	43%	61%	**58%**	**50%**

The perceived accuracy of the RPR report also appears to be associated with whether changes were made and the overall impression of RPR. One-quarter (28%) of doctors who were neutral or disagreed their report was accurate reported making changes compared to 55% of those who agreed their RPR report was useful. The majority of the group who did not think their report was accurate (70%) would also not positively recommend RPR to their colleagues (Table 19**Error! Reference source not found.**).

The report was very accurate, he definitely understood what I do differently to other doctors and the same as other doctors…. If he hadn't written it, I would have forgotten all the detail after a few months so the report is pretty essential.

Table 19. Accuracy of report compared to changes made and overall impression of RPR (Post-RPR survey, n = 249) (Statistically significantly differences are in bold)

	Number of doctors	Have made practice changes	Would positively recommend RPR
Agree the report was accurate	178	**98 (55%)**	**124 (70%)**
Neutral or disagree the report was accurate	71	**20 (28%)**	**21 (30%)**

Analysis comparing RPR results with how accurate doctors felt their reports were showed that more doctors who received all superior ratings in all categories agreed their report was accurate (Table 20**Error! Reference source not found.**).

Table 20. Percentage of doctors who received all superior ratings (seven or above) in each category in RPR compared to if doctors thought their report was accurate (Significant differences are in bold) (bpac^{nz} and Post-RPR survey data).

	Proportion with a superior rating for all questions in a category			
	Records/ requirements	Dr patient relationship	Clinical reasoning	Clinical practice
Agreed their report was accurate (n = 178)	**46%**	**65%**	**58%**	**46%**
Did not agree their report was accurate (n = 71)	**30%**	**39%**	**31%**	**32%**

6.5.3. Patient and multi-source feedback

Doctors participating in RPR provide patient and/or multi-source feedback in advance of their RPR practice visit. Miller 2010 has shown multi-source feedback can lead to practice improvement, although the context and help in facilitation to make changes also has a large effect on the usefulness of multisource feedback. In the RPR

evaluation, approximately half of doctors strongly agreed or agreed the multi-source feedback (51%) and patient feedback provided useful information (Figure 20).

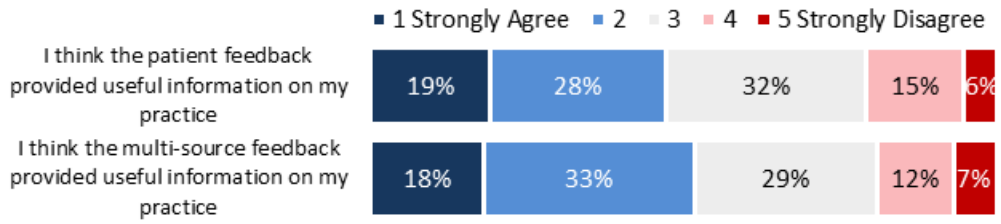


Figure 20. Doctors' views on colleague and patient feedback (Post-RPR survey n is variable as the questions were not applicable to all doctors).

A short summary of how one doctor received useful feedback and made changes is provided below.

Dr 4 – Very positive about RPR

Having graduated around five years ago, Dr 4 considers himself a junior doctor. He has worked in urgent care medicine but now works in general practice where he was reviewed.

Dr 4 felt he was working mostly on his own and it was easy to be isolated from his peers, especially working in urgent care where often only one doctor worked at a time. The majority of his interactions with other doctors was about patients he was referring.

Dr 4 was pleased to have the opportunity to take part in RPR.

> *I found it very helpful to actually get the opportunity to have another doctor sit in on my consults and to be able to comment on what I could improve and what I was doing well…. these sorts of opportunities don't come around very easily in primary care.*
>
> *It was an opportunity to work in a less isolated way…. it's easy to get stuck in the mind set of doing it one way, and it was really good getting another doctor's opinion of how to do stuff to figure out the right way to do things. There are many ways to skin a cat so it's good to see what other people are doing out in primary care.*

Dr 4 found the visit so helpful he suggested it could be good to have the visits more often, potentially up to one a year.

RPR did more than just reduce isolation for Dr 4. He also reported making significant changes to his practice because of the feedback. The changes included being more patient-centred, taking more care to delve further into a patient's history as well as improving note taking.

> *So basically, coming from a background where……. I brought that mind set of patching people up and sending them away…. So since the RPR session I am reminded of how it can be helpful in certain situations to delve a bit more into patient history and ask a bit*

more and spend a bit more time with the patients to help provide care for my patients, so it has helped immensely in that way.

Also in recording of notes…. It's quite easy to get carried away [doing short notes], especially when reading notes of other GPs. Some of them are very, very brief and quite inadequate but I had learnt to adopt what they were doing. So the RPR was quite a helpful experience to steer me back towards making sure my notes hold up.

Dr 4 also discussed how RPR helped him understand and implement his PDP more effectively as well as being more engaged with his own self-monitoring such as note reviews and audits.

I have started auditing my clinical notes and history taking and I am doing much better with that now. The RPR was really helpful in steering me how to implement my PDP. Initially I was quite unclear how to do it. But following my RPR it was much clearer.

Dr 4 went on to create two e-portfolio goals directly after RPR to address the RPR feedback.

Considerations from Dr 4's feedback

Dr 4 understood the purpose and the intention of the RPR which resulted in him having a positive attitude towards the whole experience.

Dr 4 also received multiple tangible suggestions for how to improve his practice which allowed him to make positive changes in the way he practices.

6.5.4. Follow-up

The extent of follow-up after the written RPR report depends on the individual doctor. Follow-up could involve reminder emails or phone calls. If there were any concerns or non-compliance issues raised by the RPR bpac^{nz} follows up with the doctor. Other doctors do not generally receive further feedback until their next RPR (three years later).

After RPR, doctors are encouraged to speak with their collegial relationship provider (CRP) about their RPR feedback and plans for how to best utilise the feedback. Doctors most often discussed their PDPs with their CRP, followed by other colleagues, the RPR reviewer and/or a supervisor (Table 21).

Table 21. Who doctors discussed their PDP with (Post-RPR and 12-month survey).

Person PDP discussed with	Post-RPR (n = 249)	Twelve-months later (n = 76)
Collegial relationship provider	67%	56%
Other colleagues	41%	45%
RPR reviewer	37%	8%
Employer/manager	18%	19%
Other	11%	-
Inpractice medical advisor	-	9%

There is an opportunity for the CRP and/or the reviewer to be more involved in the feedback and create an action plan following the RPR. This could help to reaffirm/consolidate the feedback and provide encouragement from multiple sources.

7. The RPR reviewer perspective

The reviewers have a key role in the RPR process. Survey results indicate reviewers are positive about all aspects of RPR.

- Almost all reviewers felt they had the necessary training, support and information about the doctor to be effective reviewers.
- More than half felt they were completing the right number of reviews, with just under one-third wanting more reviews and a very small proportion wanting fewer. About one review per month was the ideal number of reviews for most reviewers.

Reviewers were confident their feedback led to changes in practice that would improve care for patients. However, they were uncertain if changes took place because they did not have any follow-up contact with the doctors they reviewed.

Giving feedback is a skilled role. Developing the reviewers' ability to provide feedback on opportunities to develop the reviewed doctors' practice has been a focus of reviewer training. Further development for reviewers has the potential to strengthen RPR. Aspects of reviewer development suggested by the evaluation are:

- Confirming the effectiveness of their collegial approach to RPR as a quality improvement process
- Confirming they are effective as reviewers even when the doctor being reviewed has a different scope of practice to their own
- How to provide feedback and advice that would assist RPR doctors to use information from the review to make changes.

The expertise of the reviewers underpins the effectiveness of RPR. Reviewers were recruited through advertising and provided with training and workshops to develop their skills as reviewers.

7.1 The reviewer surveys

Feedback from reviewers was sought through two surveys of all reviewers and interviews with a sample of reviewers. The first reviewer survey was completed at the end of 2014, relatively early in the implementation of RPR. There were 19 active reviewers and all completed the survey.

By February 2016, the number of active reviewers had increased to 30, 13 were new and 17 had continued in their roles since 2014. All were invited to complete a survey and 22 responded.

Almost all (93%) of the reviewers were still in clinical practice. The three reviewers not in clinical practice had been out of practice for three, 25 and 33 years. Most of the reviewers had between 20 and 40 years of practice.

All results reported in this report are from the February 2016 survey of reviewers.

7.2 Reviewer training and preparation

RPR reviewers reported they had the necessary support and training to carry out effective reviews and had sufficient information about the doctor being reviewed. None disagreed with any of the three statements (Figure 21).

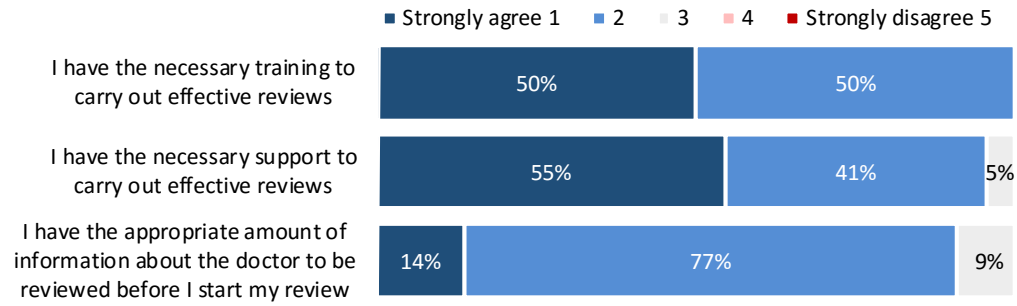


Figure 21. Reviewers' views on their preparation for the reviewer role (Reviewer survey, n = 22).

All interviewed reviewers thought they received very good support for their role. Reviewers were happy they were able to call bpac^{nz} and ask questions. They thought communication from bpac^{nz} was prompt and simple to follow.

Reviewers reported the training sessions and material for the role were well organised and useful, and catching up with other reviewers was a valuable experience.

> *I think so it was very clearly laid out for what was expected of the reviewer. And had a good training day which pointed out most of the issues we are likely to encounter. I think Inpractice and bpac^{nz} are supportive of any problems that might come up.*

7.3 Reviewer workload

More than half (59%) of the reviewers thought they were completing about the right number of reviews, while one-third (32%) ideally wanted to complete more reviews in the next 12 months than in the past 12 months (Figure 22).

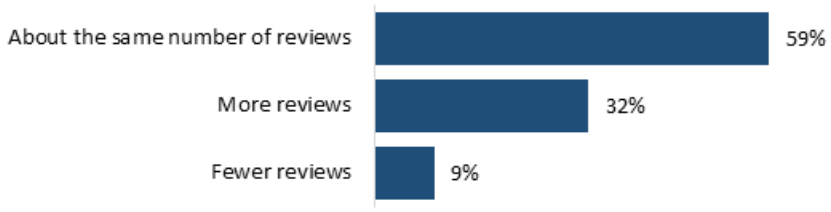


Figure 22. Reviewers' views on the number of reviews they would like to complete in the next 12 months (Reviewer survey, n = 22).

The ideal number of reviews seemed to be between nine and 12 each year, but this depended on the individual reviewer. A number of reviewers explained this number of reviews gave them the opportunity to stay current and to benchmark the reviews they completed against each other.

7.4 Reviewers' perspectives on doctors' reactions to RPR

RPR reviewers reported they were positively received by doctors. Most agreed doctors were receptive to the practice visit and the reviewers' feedback (Figure 23). Compared to the 2014 survey, a higher proportion strongly agreed with each statement.

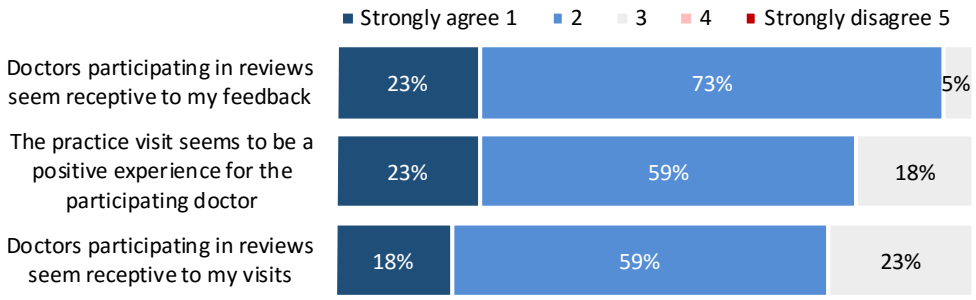


Figure 23. Reviewers' views on doctors' reactions to RPR (Reviewer survey, n = 22).

7.5 The practice visit and feedback to doctors

Almost all reviewers were positive about the practice visit and the feedback they were able to provide doctors (Figure 24). Slightly smaller proportions of reviewers strongly agreed with each statement than in the 2014 survey.

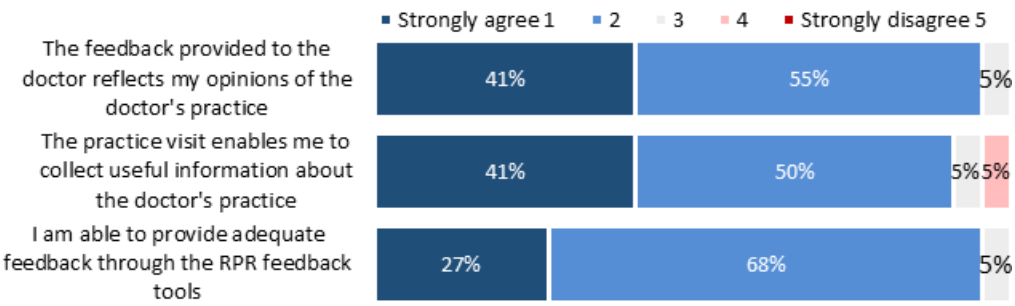


Figure 24. Reviewers' views on the practice visit and feedback to the reviewed doctors (Reviewer survey, n = 22).

Most reviewers described the opportunity the practice visits provided for face-to-face discussions with the doctors as essential, and in some cases the most valuable part of the review.

> *[The practice visit] it's quite valuable because you can really watch what's happening, so yes it's really worthwhile.*

Discussions before and at the beginning of the practice visit were used to put the doctors at ease and reassure them about the purpose of RPR, often explaining RPR was not an audit of their fitness to practice.

> *I try to let them know that I'm a peer, not one step above them and I always give them a call beforehand to introduce myself and put them at ease just to make the whole thing more normal. I just try to reiterate I'm there to help really.*

The debrief sessions at the end of the visit were used to reiterate the main points the reviewer raised throughout the day. Reviewers saw it as a chance to leave a positive message with the doctor and to make sure there would be no surprises in their RPR report.

> *[The debrief session] is a little challenging but it's very useful to cover the things that you've already spoken about. I try and make it so I don't bring something out of the blue, so I try to talk about things as they come up. Also try to leave them feeling positive about the whole thing.*

Since the last survey, a new RPR report template has been introduced. All of the interviewed reviewers thought the new report template allowed them to say what they needed. The only suggestion for improvement, made by one reviewer, was there may be some scope to reduce repetition.

All reviewers thought the report was a good idea, but saw the face-to-face discussions with doctors as the most important part of the review. The report served as a record of the visit that doctors could reflect on after the event.

> *[The report is] great to look back on it too, you can't remember it all on the day.*

7.6 Views on RPR's effectiveness

Most reviewers thought RPR would enable doctors to make changes to their practice (Figure 25). A smaller proportion thought RPR contributed to improving the care delivered to patients. A slightly higher proportion of reviewers agreed with each statement in the 2016 survey compared to the 2014 survey, however a smaller proportion of reviewers strongly agreed.

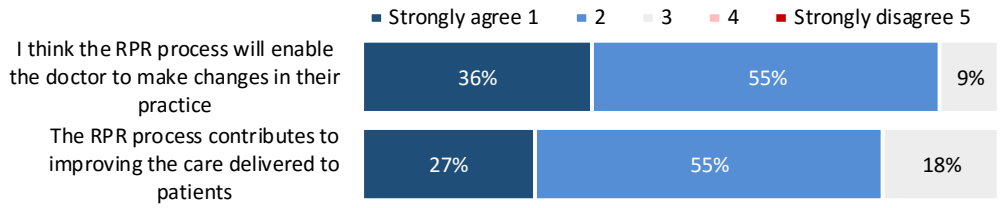


Figure 25. Reviewers' views on whether RPR contributed to changes in practice and improvements in care delivered to patients (Reviewer survey, n = 22).

Although reviewers thought doctors were receptive to feedback, not all were sure doctors would make changes to their practice. Their uncertainty most often related to not having any direct feedback from doctors or follow-up with the doctors after RPR to discuss whether changes were made.

> *It's hard to know [if my recommendations have been acted upon] because I haven't gone back and looked at the e-portfolio or spoken to them so I can't gauge that. But I think my comments were taken seriously and probably will be acted upon.*

All reviewers said they discussed PDPs with the doctors they reviewed. While they were generally confident the feedback they gave would result in changes, they did not have the opportunity to see the changes.

Some reviewers commented that they thought more experienced doctors might be less likely to change their PDPs because:

- They were more likely to be practicing at a high level not need to make and major changes
- They were more set in their ways and confident in their practice.

7.7 Benefits for reviewers

Reviewers were positive about their roles with all reviewers surveyed agreeing the role has been a positive experience and had improved their own practice (Figure 26).

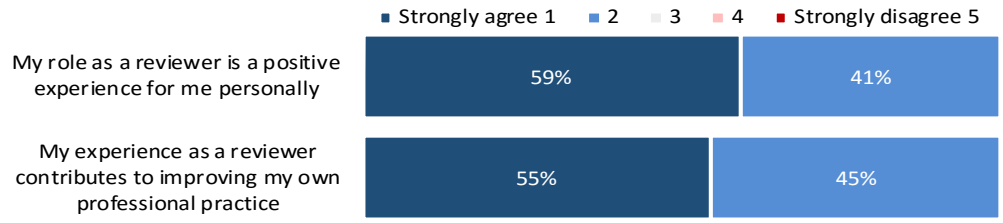


Figure 26: Reviewers' views on how positive the role is and if it contributes to their own practice (Reviewer survey, n = 22).

Reviewers enjoyed getting to see their peers' practice which gave them ideas about how they could improve their own practice.

> *Watching others, it's a real privilege, and I've got lots of ideas form people and seen things that are great.*

Reviewing doctors in other areas of practice was a good way for reviewers to expand their knowledge. However, reviewers' comfort reviewing doctors in different areas of practice varied. Some thought they should only be reviewing doctors in their specific area of practice.

> *I wouldn't have a clue if I spoke to someone doing something like appearance medicine, so I think it's really important to have the right reviewer for the person being reviewed.*

> *Going to another department that you haven't been to before, it's always good to see other ways of doing things and to see someone else doing the job and then feeding back it makes you reflect on what you do.*

Reviewers were also positive about the respect and value others in their profession placed on their role (Figure 27).

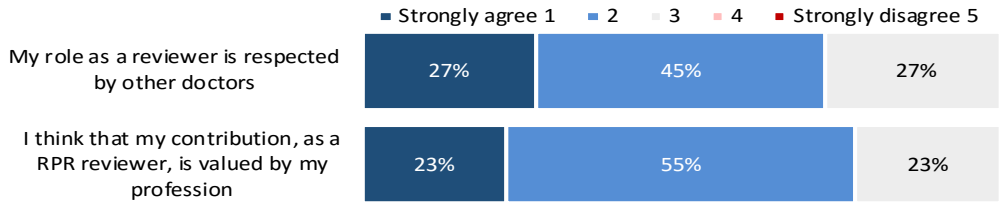


Figure 27. Reviewers' views on the perception of them among other doctors (Reviewer survey, n = 22).

7.8 RPR reviewer suggestions for improvement

Reviewers suggested potential ways to improve the reviewer role and to strengthen the RPR programme.

Suggestions for improving the reviewer role included:

- More feedback for reviewers: While a request for feedback was less common in 2016 than in 2014, some reviewers suggested more personal feedback from the reviewed doctors about how they could improve and what helped.
- Time demands: Completing travel to and from the reviewed doctor and conducting the practice visit in a single day was demanding for some of the reviewers. They suggested when there was a significant amount of travel required, extra time and overnight accommodation could be appropriate.

Suggestions for improving RPR in general included:

- Strengthening the PDP system: Some reviewers commented that making the PDP system more straightforward would make it easier for doctors to use and for them to provide advice to doctors. Many said some reviewed doctors did not understand the process of making an effective PDP.
- CRPs: Giving the CRPs a more formal role in RPR could strengthen the relationship between the CRP and the reviewed doctor and give the reviewer a more complete picture of the reviewed doctor.

Reviewers have contact with the CRP prior to the practice visit as well as having a pre-visit discussion with the doctors to outline the process. Some reviewers mentioned an email could be just as effective as a phone call, but some doctors and reviewers advocated for phone contact to begin building rapport.

The skills of the reviewers continue to be developed by bpac^{nz} through investment in training sessions and the reviewers identified some other opportunities for improving their expertise.

8. Overview

8.1 Evidence base

The RPR design is based on evidence. A review of the literature has provided evidence that audit and feedback can improve practice and the quality of care patients receive:

- CME does improve physician performance and patient health outcomes, and CME has a more reliably positive impact on physician performance than on patient health outcomes (Cervero and Gains, 2015).
- Interactive CME such as outreach visits, and audit and feedback generally lead to small but potentially important improvements (Bloom 2005 and Davis et al., 1995), but effectiveness is linked to baseline performance and how feedback is delivered. A senior colleague, respected by the doctor, is ideally placed to provide effective feedback (Ivers et al., 2012, Veloski et al., 2006 and Miller and Archer, 2010).
- Appraisal can have a significant impact on all aspects of a GP's professional life, and those who value the process report continuing benefit in how they manage their education and professional development (Colthart et al.,2008).
- Multi-source feedback can lead to performance improvement but the context and facilitation of the feedback influenced the degree of improvement (Miller and Archer, 2010).
- Outreach visits have small but consistent effects on prescribing but the effect of outreach visits on other types of professional performance varies between studies from small to modest improvements (O'Brien et al., 2008).
- Reflection only occurs when a trainer has provided specific feedback; trainees who reflect on their performance are more likely to make use of feedback (Pelgrim et al., 2013).
- Feedback as part of workplace based assessment is of greater benefit to trainees if: (i) observation and feedback are planned by the trainee and trainer; (ii) the content and delivery of the feedback are adequate, and (iii) the trainee uses the feedback to guide his or her learning by linking it to learning goals. Negative emotions reported by almost all trainees in relation to observation and feedback led to different responses (Pelgrim et al., 2012).
- CPD is valued and is seen as effective when it addresses the needs of individual clinicians, the populations they serve and the organisations within which they work (Schostak et al., 2010).

8.2 Doctors are rating highly in the RPR categories

Doctors review ratings, colleague feedback and patient feedback were analysed. It was found that:

- Over half of doctors had superior ratings
- Nearly all doctors were rated between four or five out of five in all categories by their colleagues
- Nearly all doctors were rated between four or five out of five in all categories by their patients.

8.3 Doctors are reporting making changes to their practice and professional development plans

Many of the participating doctors have made changes to their practice and their PDPs. While these are self-reported changes, they provide evidence that RPR is achieving its aims for many of the participating doctors. Twelve-months after their review, just under half of the participating doctors continued to report changes in practice. The changes they described are likely to improve the quality of care they provide to their patients.

At twelve-months, learning about new opportunities for development from the RPR process appears to be closely linked to the likelihood of making changes. However, other factors may become significant as the numbers completing the twelve-month survey increase.

8.4 Maintaining changes over time

Twelve months after RPR, a substantial proportion of doctors reported changes in practice. Time series analysis of key outcomes does not yet show improvement over time but the available data are still limited. This aspect of the evaluation will continue to be developed as more doctors complete RPR.

Current data show a slight decrease in the proportion of doctors who reported they had made changes between the post-RPR and 12-month surveys. Looking at the characteristics of the different groups it appears that the doctors who did not maintain changes were still positive about RPR.

The majority of those who intended to make changes in the post-RPR survey reported they had not made any changes at 12-months. Those who intended to make changes were less positive about RPR compared to those who made changes but not as negative as those who did not. This suggests that changes are more likely to happen if they are made close to the time of feedback.

8.5 Why changes are made

There are a range of reasons why doctors do or do not make changes to their practice and/or PDP.

A doctor's background and personal views can contribute to RPR outcomes in terms of changes made and overall experience. Those who are inherently negative about the process are unlikely to make changes and utilise the opportunity of RPR, whereas those who are open to it and have a positive experience are more likely to make changes. The ease of organisation, how well the RPR process fits the individual doctor and how well the practice visit goes can influence doctors' experiences of the process and contribute towards their response to RPR as a whole. Doctors who were positive were more likely to have made changes.

Statistically, post-RPR, doctors were more likely to have made changes if they were working as GPs, had English as a second language, and/or they learned new development opportunities in their RPR reports. Doctors who trained outside New Zealand were more likely to recommend RPR to their colleagues than New Zealand trained doctors.

Other aspects which made a difference to how positive doctors were included:

- Easy process/easy to organise
- Positive personal view of idea RPR
- Relevant to practice type
- No negative impact on patients
- Reviewer is collegial and credible
- Reviewer has similar background and skills
- Feedback is fair accurate and helpful, with tangible suggestions that doctors are not already aware of.

Ensuring that feedback is given in an effective manner and explaining how it can be incorporated into professional development plans could be a way to increase the impact of RPR.

With the small number of RPR participants in atypical practices it is not always feasible to match the reviewers' specialty area with RPR participants. It is important to ensure the reviewed doctors understand the purpose of the review, how it applies to their practice, how the practice visit process can be modified to take the particular characteristics of their practice into account and why the reviewer is qualified to undertake the review. It is important to note that as the scope of RPR has extended beyond general practice, new reviewers in other areas of practice have been employed, including obstetrics and gynaecology, internal medicine, emergency medicine and psychiatry.

Misunderstanding the purpose of the review (seeing it as a pass/fail practice audit) appears to contribute to reviewed doctors placing a higher importance on the expertise of the reviewer in their area of practice. Some reviewers had this misunderstanding as well. This issue has been present throughout the evaluation but is expected to improve as knowledge of RPR and its purpose becomes more widespread and doctors are re-reviewed.

8.6 The reviewer perspective

Reviewers were generally positive about RPR. Some reviewers liked reviewing doctors outside of their speciality. Reviewing a doctor in a different field posed challenges when they did not have enough knowledge to fully understand the reviewed doctor's role and clinical competence. Others did not view this as their role and instead thought that they could review professionalism and standards of practice without specific content knowledge.

8.7 Strengthening RPR

Surveys and interviews suggested some aspects of RPR where there is potential for improvement:

- **Clarity about the purpose of the review**. The experience for participants is generally positive and many of the doctors who have completed RPR would recommend it to their colleagues. However, some continue to consider RPR as an audit and this results in stress and anxiety.
- **Reassuring doctors about flexibility**. Some doctors, particularly in atypical practices, were concerned about how RPR would work for their practice. More reassurance in the lead-up to the review about how the schedule for the day might be modified to suit their practice could ease concerns and allow the doctor to be adequately prepared.
- **Providing adequate feedback to doctors who rate very highly**. Learning about new opportunities for development contributes to satisfaction with the review process. Approximately half of the reviewed doctors were rated very highly by their reviewers in all reviewed categories. While some welcomed confirmation they were providing a high standard of practice, others felt the process was not worthwhile. Attitudes may become more negative when the highly rated doctors are invited to complete a second review in three years.
- **Follow-up after the review**. Reviewers were positive about having some follow-up with the doctors they reviewed, to support practice changes and see the result of their work. CRPs could be further encouraged to

concentrate on addressing feedback from the RPR report and discussing what type of professional development could best address it.

8.8 Evaluation next steps

The evaluation will continue to collect data from RPR participants as they receive their reports and twelve-months after they receive their reports. Additional completions will facilitate further time-series analysis.

Analysis of bpac^{nz} data on professional development plans will be incorporated into the next report, which will be provided in early 2017.

9. References

Archer, J. C. (2009). State of the science in health professional education: Effective feedback. Medical Education, 44(1), 101-108.

Bloom, B. S. (2005). Effects of continuing medical education on improving physician clinical care and patient health: A review of systematic reviews. International Journal of Technology Assessment in Health Care J. of Inter. Tech. of Health Care, 21(03), 380-385.

Boonyasai, R. T., Windish, D. M., Chakraborti, C., Feldman, L. S., Rubin, H. R., & Bass, E. B. (2007). Effectiveness of Teaching Quality Improvement to Clinicians. JAMA, 298(9), 1023.

Colthart, I., Cameron, N., Mckinstry, B., & Blaney, D. (2008). What do doctors really think about the relevance and impact of GP appraisal 3 years on? A survey of Scottish GPs. Br J Gen Pract British Journal of General Practice, 58(547), 82-87.

Davis, D. A, Thomson M.A, Oxman A.D, and Haynes R.B. (1995). Changing physician performance. A systematic review of the effect of continuing medical education strategies. JAMA: The Journal of the American Medical Association, 274(9), 700-705.

Hays, R. B., Davies, H. A., Beard, J. D., Caldon, L. J., Farmer, E. A., Finucane, P. M., . . . Sibbald, G. R. (2002). Selecting performance assessment methods for experienced physicians. Med Educ Medical Education, 36(10), 910-917.

Ivers, N., Jamtvedt, G., Flottorp, S., Young, J. M., Odgaard-Jensen, J., French, S. D., . . . Oxman, A. D. (2012). Audit and feedback: Effects on professional practice and healthcare outcomes. Cochrane Database of Systematic Reviews Reviews.

Miller, A., & Archer, J. (2010). Impact of workplace based assessment on doctors' education and performance: A systematic review. Bmj, 341(Sep24 1), C5064-C5064.

O'Brien MA, Rogers S, Jamtvedt G, Oxman AD, Odgaard-Jensen J, Kristoffersen DT, Forsetlund L, Bainbridge D, Freemantle N, Davis D, Haynes RB, Harvey E (2008) Educational outreach visits: effects on professional practice and health care outcomes. The Cochrane Library, Issue 4.

Pelgrim, E. A., Kramer, A. W., Mokkink, H. G., & Cees P M Van Der Vleuten. (2012). The process of feedback in workplace-based assessment: Organisation, delivery, continuity. Medical Education, 46(6), 604-612.

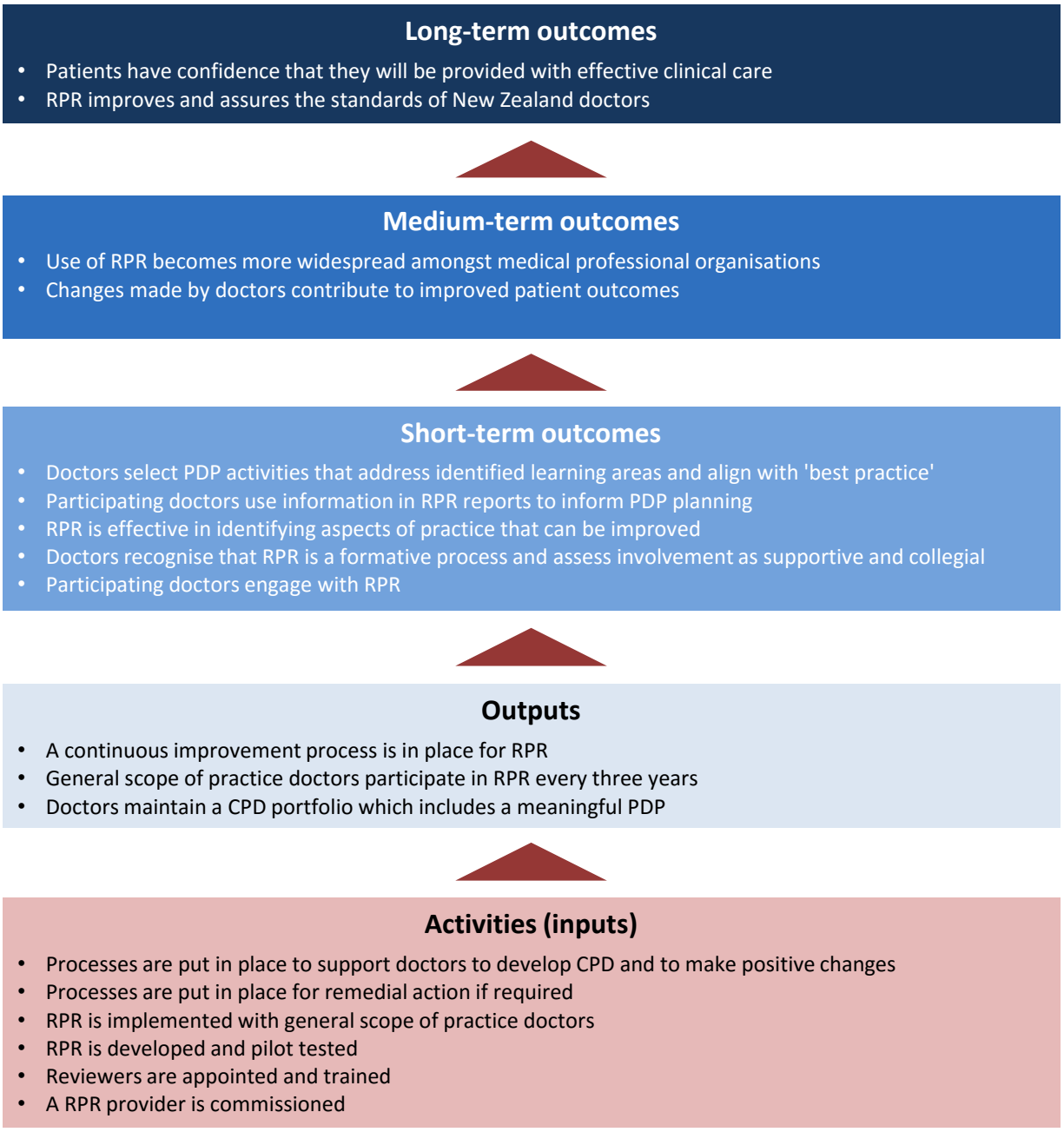
Pelgrim, E., Kramer, A., Mokkink, H., & Vleuten, C. V. (2013). Reflection as a component of formative assessment appears to be instrumental in promoting the use of feedback; an observational study.Medical Teacher, 35(9), 772-778.

Schostak J, Davis M, Hanson J, Schostak J, Brown T, Driscoll P, et al. (2010) Effectiveness of continuing professional development pro¬ject: a summary of findings. Med Teach;32(7):586–92.

Veloski, J., Boex, J. R., Grasberger, M. J., Evans, A., & Wolfson, D. B. (2006). Systematic review of the literature on assessment, feedback and physicians' clinical performance: BEME Guide No. 7. Medical Teacher, 28(2), 117-128.

Wallis, K. (2014) Regular practice review: promised joy or naught but grief and pain? Journal of Primary Healthcare (6)2.

Appendix One: Logic Model and Evaluation Framework



Logic model setting out the activities, outputs and aims of the RPR programme

Evaluation Framework

Evaluation question	Indicator	Data Source
RPR processes		
What is included in the RPR process?	• Description of RPR tools and processes	• Interviews with bpac[nz] • Review of RPR online processes
Participating doctors experiences of taking part in RPR		
How easy or difficult do doctors find completing the pre-review documents?	• Doctors understand the pre-review requirements • Doctors' opinions on obtaining multisource or patient feedback • Doctors' opinions about the ease or difficulty of preparing their e-portfolios in preparation for the review	• bpac[nz] data – numbers selecting different multi-source or patient feedback options and changes over time. • Online survey of doctors • Interviews with doctors
What do participating doctors think about the practice visit?	• Doctors report the practice visit was a positive experience • Doctor's views on working with one reviewer (compared with two reviewers for Colleges reviews) • Doctors report the practice visit provided them with opportunities to reflect on their practice -75% rate the visit as useful or very useful to them	• bpac[nz] data – numbers of visits on the planned date, changed dates (doctor or reviewer) • Online survey of doctors • Interviews with doctors
How useful did participating doctors find the RPR report?	• Doctor's assessments of the usefulness of the RPR reports -75% rate the report as useful or very useful to them • The extent doctors consider the RPR reports reflect their own views on their practice • Doctors consider the report provides them with 'new' insights into how they could improve their practice	• Online survey of doctors • Interviews with doctors
Do doctors respond to RPR information?	• Doctors report that the RPR helps them identify areas of strengths in their practice • Doctors report that the RPR helps them identify areas for improvement	• bpac[nz] data – e-portfolio completion rates at anniversary (a potential insensitive measure) • Interviews with doctors

	• Doctors provide examples of how they have developed a PDP in response to RPR feedback • Doctor's description of changes they intend to make as a result of the RPR process and report • Doctor's description of how they will put changes into practice	• Online survey of doctors
Do the doctors PDP address gaps identified in the RPR report?	• Doctor's PDP respond to gaps in their learning identified by the RPR report • Doctors plan PD activities that are consistent with 'best practice' approaches to learning e.g. comparison of activities that require participation versus those requiring more than participation e.g. quizzes, log of clinical encounters • Comparison of doctors planned and actual PD activities	• Expert advisors evidence about what works • bpac^{nz} records of PDP activities for RPR doctors • Interviews with collegial relationship providers
Reviewers' experiences of RPR		
What is included in the RPR process?	• Description of the reviewer's role • Description of how reviewers were recruited	• Interviews with bpac^{nz} • Interviews with reviewers
Do reviewers consider they are adequately prepared in their role as reviewers?	• 90% of reviewers rate preparedness for the role as prepared or very prepared • 90% of reviewers rate preparedness to use the RPR tools as prepared or very prepared	• Interviews with reviewers • Online survey of reviewers
Is the workload manageable for reviewers?	• 90% of reviewers report the workload is manageable	• Online survey of reviewers
Do the reviewers consider the RPR tools provide an accurate representation of the quality of the doctors they review?	• Reviewers report the RPR tools are effective – 90% of reviewers consider the tools provide an accurate or very accurate representation of doctors they review	• Review of RPR data for completeness • Interviews with reviewers • Online survey of reviewers

Are reviewers positive about the RPR process?	• Drop-out rates of reviewers is within expected limits • 80% of reviewers rate reviewing as a positive or very positive activity • Reviewers comments about changes to their own practice as a result of their role as reviewers	• Interviews with reviewers • Online survey of reviewers
What do reviewers think about the extent RPR doctors use the RPR report to change their practice?	• The extent reviewers engage with collegial relationship providers • The extent doctors discuss PDP with the reviewers • Reviewers' opinions on the impact of RPR on facilitating changes in practice	• Reviewer interviews • Reviewer survey • Collegial relationship provider interviews
Other stakeholders' experiences of RPR		
Is the RPR process meeting the expectation of the Medical Council?	• The Medical Council considers the RPR process is developing in a satisfactory manner	• Interviews with the Medical Council
What is the role of the collegial relationship provider in assisting RPR doctors to develop PDPs in response to RPR?	• Collegial relationship providers' descriptions of their roles and perceived effectiveness • Doctor's description of how they worked with their collegial relationship providers	• Interviews with RPR doctors • Interviews with collegial relationship providers • Survey of RPR doctors
RPR achievements		
Do participating doctors assess the RPR process as useful in developing their practice?	• 80% of doctors rate their understanding of the RPR process as good or very good	• Online survey with doctors • Interviews with doctors
What changes do doctors make/ or plan to make as a result of the RPR report?	• Doctors use RPR to plan PDP and participate in planned PD activities • Doctors report changes to their practice • Tracking of any 'measurable' changes identified by individual doctors	• 12 month online survey of doctors • 12 month interviews with doctors

What aspects of the tools are effective in predicting improvements in practice?	• Variables that are aligned to practice improvement	• Analysis of RPR tool data – factor analysis and multivariate analysis with outcome of practice improvement
Are there particular groups of doctors for whom RPR is more/less effective?	• Profiles of doctors with different outcomes	• Cluster analysis of data identifies clusters of doctors with different outcomes
Does the RPR programme represent value for money for the Council?	• Establish value for money criteria with the Council in the planning year • Monitor against value for money criteria	• Interviews with the Medical Council