

Evaluation report

Evaluation of the Regular Practice Review Programme

August 2017



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Definitions and abbreviations

Abbreviation	Definition
bpac ^{nz}	Best Practice Advocacy Centre, responsible for delivering RPR.
СМЕ	Continuing Medical Education
CPD	Continuing professional development programmes
Colleague feedback	Provided on rating scales of one (poor) to five (excellent) for each of the following domains: clinical reasoning, clinical practice, communication, trust and personal aspects.
CRP	Collegial Relationship Providers
MCNZ	Medical Council of New Zealand (Council)
Patient feedback	Patients rating their doctors on one (poor) to five (best) scales for each of: manner, providing care, patient involvement, trust.
PDP	Professional Development Plans
RPR	Regular Practice Review
RPR ratings	Reviewers assign numerical ratings of between one and nine over thirteen categories (1-3 = unsatisfactory, 4-6 = satisfactory, 7-9 = superior). The thirteen categories are grouped into four domains.

Executive Summary

Regular practice review is a quality improvement process

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.

The design of RPR is based on evidence about what is effective in improving practice. It 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 multi-source 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 summarising findings
- **Post-visit follow-up**: by bpac^{nz} with doctors where areas of concern or noncompliance with requirements were identified through the review.

RPR has been implemented through the bpac^{nz} *Inpractice* programme since July 2013. To the end of July 2017, there have been 744 reviews including 63 doctors first reviewed in the early stages of RPR who have now completed a second review.

- The first years of the review focussed on doctors working in general practice settings, and these doctors account for 59% of all reviews.
- Most reviewed doctors have been in practice for less than 10 years (46%) or between 11 and 30 years (42%) with few (10%) in practice for more than 30 years
- Most trained in New Zealand (35%) or the United Kingdom (24%)
- English was not the first language for approximately a quarter (26%).

About the evaluation of RPR

The RPR evaluation provides substantive mid-year evaluation reports and near the start of each year provides an update to the end of the previous calendar year. Previous reports include:

- Interim 2014 report November 2014
- End of year 2014 report March 2015
- Mid-year 2015 report October 2015
- End of year 2015 report February 2016
- Mid-year 2016 report August 2016
- End of year 2016 report March 2017.

This report includes information drawn from interviews and surveys of doctors participating in RPR to the end of July 2017. It provides an overview of findings to date drawn from:

- 355 post-RPR survey responses (64% of reviewed doctors) and 66 interviews conducted shortly after doctors received their RPR report.
- 163 12-month survey responses (66% of post-RPR survey respondents) and 24 interviews with doctors approximately one year after their review. All doctors included in this report who completed the 12-month survey also completed the post-RPR survey.
- Administrative data from:
 - 744 RPR reports (681 RPR results for first time doctors and 63 RPR results for doctors doing their second RPR).
 - 5,303 colleague feedback forms
 - 15,054 patient feedback forms.

Before their review, doctors held mixed views on the usefulness of RPR

Before their first review, approximately one-third (32%) of doctors thought RPR would be useful and one-quarter that it would not be useful. Many doctors saw RPR as a form of assessment and felt anxious about the practice visit.

After their review, nearly three-quarters (72%) of doctors agreed it was a positive experience. 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 learnt about new development opportunities.

Over half (56%) of responding doctors would recommend RPR to their colleagues: Overall, the RPR ratings doctors received were not associated with whether they would recommend RPR to a colleague.

Considerations:

There are opportunities to influence doctors' personal views about RPR through the communication sent to doctors selected to participate in RPR. For example, emphasising RPR's focus on quality improvement may improve doctors' expectations of RPR before they participate and reduce their anxiety.

Pre-visit

Nearly half of doctors (46%) considered the multi-source feedback was useful. Almost all colleague feedback was rated between 4 and 5 out of a possible score of 5. The highest proportion of high scores (95.6%) was in the 'trust' domain. The lowest proportion of high scores (69.4%) was in the 'communication' domain. Patient feedback was very positive across all domains.

Considerations:

Some doctors described not being sure who they could or should ask to provide colleague feedback. Such issues may reflect a wider problem of lack of professional contact. However, at a practical level it may be worth considering changing the instructions in the 'who should fill these in' section to provide clearer guidance for reviewed doctors.

Although it provided some doctors with reassurance, the uniformly positive patient feedback did not provide an effective mechanism to identify opportunities for quality improvement. There may be potential to review the patient feedback questionnaire to improve the extent it identifies opportunities for development.

The practice visit

The practice visit is a key part of RPR. Most doctors were positive about the practice visit: Doctors' feedback highlighted the importance of the practice visit as a quality improvement tool to prompt self-reflection.

The reviewer's skill and the extent the reviewed doctors considered the reviewer was credible were important factors in whether the review influenced changes in practice.

Considerations:

The organisation and logistics of the practice visit are working well. Generally, the reviewers and the reviewed doctors were positive about the practice visit and the value it brings to the review.

The skill of the reviewer and the extent the reviewed doctor respects the reviewers experience and knowledge of their practice type are very influential in whether the doctor makes changes or not.

The challenge of finding reviewers for the small number of more unusual practice settings is ongoing. The reviewer's attitudes and training are important in overcoming the reviewed doctor's reservations.

Post-visit report

In RPR, feedback is provided verbally during the practice visit through discussion between the reviewer and the participating doctor. The feedback is formalised in a written report sent by bpac^{nz} after the review. Two-thirds (67%) of doctors found the RPR report useful and more than half (56%) said it identified new opportunities for development.

Doctors are assigned 13 numerical ratings (from one to nine) over the four domains of records/requirements, doctor/patient relationship, clinical reasoning and clinical practice. Average ratings were high across all domains. Approximately one-quarter of doctors recorded consistently 'superior' RPR ratings (7-9) across all 13 RPR categories. A very small proportion had consistently low ratings across many of the 13 categories.

Considerations:

The extent the RPR report identified new opportunities for development influenced the reviewed doctors' opinions about the usefulness of the report and the extent they made changes.

As approximately one-quarter of doctors received 'superior' RPR ratings across all categories it may be difficult to provide new opportunities for development for these doctors. However, exploring options for information to include for these doctors would strengthen the value of the RPR process for them. Options to be explored might include generic information about how to improve self-audit processes, ways to explore new opportunities for innovative practice and/or linkages to ways these doctors could mentor and support their colleagues.

Tracking the progress of the small proportion who had consistently low ratings across all domains has the potential to improve practice and patient outcomes.

There is merit given the costs of the practice visit in considering differential timing of subsequent reviews based on the proportions of superior and consistently low RPR ratings.

The reviewers have a key role in RPR

Reviewers were 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.
- The ideal number of reviews for most reviewers was about one per month.

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 routinely have follow-up contact with doctors they reviewed.

Considerations:

Giving feedback is a skilled role. Developing the reviewer's ability to provide feedback about opportunities to develop the reviewed doctor's 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 doctors to use information from the review to make changes.

Doctors reported making changes following their review

Doctors made changes to their practice: After RPR, nearly half (45%) of doctors said they had made changes to their practice as a result of their review. A further 14% intended to make changes in the future. The changes doctors said they made to their practice included changes to consultation management and style, patient care and administration.

Doctors who reported changes included those with mainly superior ratings (no RPR ratings below 7) as well as those with lower ratings.

Doctors working in general practice have been consistently more likely to make changes to their practice than doctors in other practice settings, although the gap is closing.

Twelve-months after participating in RPR, many doctors continued to report they had made changes to their practice. Of the doctors who had completed the post-RPR and 12-month survey, the overall proportion who reporting changes to their practice decreased from 50% in the post-RPR survey to 41% in the 12-month survey.

Doctors made changes to their professional development planning: In the post-RPR survey, nearly half (43%) of doctors planned to make changes to their PDP following their review.

Twelve-months after their review, 28% of doctors reported making changes to their PDP, 20% of doctors said they had changed how they managed their PDP and 20% had changed their PDP to make it more useful.

Some doctors thought the care they provided patients had improved: 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. In response to the post-RPR survey, 44% of doctors thought that participating in RPR improved the care they delivered to their patients and/or helped in other ways (51%).

Considerations:

Many doctors reported making changes to their practice and professional development plans. While these are self-reported changes, they provide evidence that RPR achieves its aims for many of the participating doctors.

Most doctors who made changes following their review maintained these changes at 12-months. However, few doctors who said they had not yet made changes after RPR but intended to do so had made changes 12-months later.

Of note is that a higher proportion of doctors who had consistently lower RPR ratings reported making changes than those with all superior ratings, suggesting RPR is improving the overall quality of practice.

Post-visit follow-up

Doctors participating in *Inpractice* are required to establish and maintain a collegial relationship with a vocationally registered colleague working in the same or similar scope of practice. The collegial relationship provider (CRP) is expected to provide guidance and mentorship for doctors registered in a general scope. Doctors who received a greater number of lower RPR ratings (below seven) appeared to be more likely than doctors who received higher ratings to discuss their PDP with someone.

Considerations:

CRP's have an important mentoring role. Providing effective feedback for PDP requires skills and experience CRPs may not have. The extent to which changes in PDP result in changes in professional development activities may be increased with additional support for CRP development.

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

The likelihood of doctors making changes to practice and professional development are influenced by doctors' characteristics, practice settings and experiences of RPR. Doctors were more likely to have changed their practice if they:

- Worked in general practice
- 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 or adequately supervised/reviewed and would not benefit from RPR. 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 PDPs. Doctors were more likely to make changes if they:

- Agreed reviewers had the appropriate skills to review them
- Learnt new opportunities for development
- Agreed their report was accurate.

Considerations:

RPR is working effectively as a quality improvement tool for most doctors being reviewed.

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

With the small number of reviewed doctors 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.

Evaluation next steps

The evaluation will continue to collect data from RPR participants as they receive their reports and 12-months after they receive their reports. Additional completions will facilitate further analysis.

1. Background to Regular Practice Review

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

Recertification should ensure that each doctor is supported by education that provides for their individual learning needs and is delivered by effective, efficient and reflective mechanisms that support maintenance of high standards and continuing improvement in performance.²

The principles that underpin recertification define quality recertification activities as:

- Evidence-based
- Formative in nature
- Informed by relevant data
- Based in the doctor's actual work and workplace setting
- Profession-led
- Informed by public input and referenced to the Code of Consumers' Rights
- Supported by employers.

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, many of whom work in general practice.

1.1 The Regular Practice Review (RPR)³ is a quality improvement process

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.

³ https://www.inpractice.org.nz/guide/IpGuide.aspx

¹ <u>http://www.mcnz.org.nz/assets/Policies/Policy-on-regular-practice-review.pdf</u>

² MCNZ (2016) 'Vision and Principles for Recertification'. https://www.mcnz.org.nz/assets/News-and-Publications/Vision-and-principles-for-recertification-following-the-consultation.pdf

Council implemented RPR through the bpac^{nz} *Inpractice* programme from July 2013. The funding for RPR comes from the annual fee general registrants pay to be part of the *Inpractice* recertification programme.

The programme design has been developed over the past three years by bpac^{nz} and Council based on evidence from the literature, New Zealand experiences and discussions with stakeholders such as professional organisations.

RPR involves:

- **Pre-visit**: The reviewer:
 - o reviews the doctor's professional development e-Portfolio
 - reviews prescribing and laboratory test reports
 - o reviews multi-source and/or patient feedback
 - o has a phone call with the doctor's collegial relationship provider
 - has a phone call with the doctor being reviewed.
- **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 summarising findings
- **Post-visit follow-up**: by bpac^{nz} with doctors where areas of concern or noncompliance with requirements were identified through the review.

1.2 Other recertification requirements⁴

In addition to completing a RPR every three years, doctors participating in the *Inpractice* programme must:

- Complete a minimum of 50 hours of activity per year which must include at least:
 - A minimum of 10 hours of peer review
 - o A minimum of 20 hours of continuing medical education (CME)
 - Participation in an annual audit of medical practice.
- Develop a professional development plan (PDP)
- Complete the Essentials quiz (a knowledge test based on Council's statements)
- Complete multi-source feedback (MSF) every three years
- Have a collegial relationship with a vocationally registered doctor.

⁴ https://www.inpractice.org.nz/guide/IpGuide.aspx

1.3 The Collegial Relationship Provider (CRP)⁴

Doctors participating in *Inpractice* are required to establish and maintain a collegial relationship with a vocationally registered colleague working in the same or similar scope of practice. The collegial relationship provider (CRP) is expected to provide guidance and mentorship for doctors registered in a general scope.

Doctors are required to meet with their CRP:

- Six times in the first 12-months of registration in general scope
- Four times per annum in subsequent years.

Meetings may be conducted face-to-face or at a distance (e.g. teleconference, Skype). The key requirement is that they are simultaneously interactive; email exchanges for example do not meet the requirements.

A CRP should be a role model of good medical practice, a sounding board for the doctor and a resource in times of difficulty. It is important to note that the collegial relationship is not a supervisory relationship.

1.4 Evidence about what works in improving practice

A synthesis of systematic reviews published in 2015 concluded that CME is effective in improving physician knowledge and skills.⁵ The methodologies that are most effective are those that are interactive, use multiple methods, involve multiple exposures and are focused on topics considered relevant to the learner. A summary of the evidence about CME is provided in Appendix One.

A review of the evidence to support change in doctors' performance completed by Dr Steven Lillis⁶ concludes RPR has a basis in educational evidence of effectiveness. There was evidence to support the effects of CME on:

- Improvements in physician knowledge
- Changes to performance but to a lesser degree than improvements in knowledge
- Changes to patient outcomes but also to a lesser degree than gains in knowledge.

⁶ Lillis S (2017)

⁵ Cervero RM, Gaines JK. The impact of CME on physician performance and patient health outcomes: an updated synthesis of systematic reviews. J Contin Educ HealthProf. 2015 Spring;35(2):131-8.

1.5 Doctors who have been reviewed

To the end of July 2017, there have been 744 reviews including 63 doctors first reviewed in the early stages of RPR who have now completed a second review. The first years of the review focussed on doctors working in general practice settings and these doctors account for 59% of all reviews⁷.

Information about the demographic profile of reviewed doctors, from the post-RPR survey, shows:

- Most have been in practice for less than 10 years (46%) or between 11 and 30 years (42%) with few (10%) in practice for more than 30 years
- Most trained in New Zealand (35%) or the United Kingdom (24%)
- English was not the first language for approximately a quarter (26%).

⁷ Other medical branches included: Orthopaedic surgery, Internal medicine, Academic / Research, Other, Palliative medicine, Dermatology, Family planning and reproductive health, Occupational medicine, Psychiatry, Obstetrics and gynaecology, Medical administration, Public health medicine, Sexual health medicine, Urgent care, Travel medicine, Rural hospital medicine, Paediatrics, General medical and surgical runs, General surgery, Emergency medicine, Rehabilitation medicine, Vascular surgery, Sports medicine, Oral and maxillofacial surgery, Cardiothoracic surgery.

2. The evaluation of Regular Practice Review

Council commissioned this 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. Responsibility for monitoring the effectiveness of the implementation sits with the service provider, bpac^{nz}.

The RPR evaluation provides substantive mid-year evaluation reports and near the start of each year provides an update to the end of the previous calendar year. Previous reports include:

- Interim 2014 report November 2014
- End of year 2014 report March 2015
- Mid-year 2015 report October 2015
- End of year 2015 report February 2016
- Mid-year 2016 report August 2016
- End of year 2016 report March 2017.

This report updates the end of year 2016 report with information drawn from interviews and surveys of doctors participating in RPR to the end of July 2017 and provides an overview of findings to date.

2.1 The evaluation design

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

2.2 Information sources

This report is based on information drawn from:

• RPR information collected by bpac^{nz} as part of administrating RPR

- Online surveys sent to all reviewed doctors approximately two-weeks after they receive their RPR report and twelve-months later
- Interviews Doctors who complete the surveys are asked if they are available to be interviewed⁸. In interviews, doctors are asked for the name of their collegial relationship provider (CRP) who is then invited to take part in an interview.
- Online surveys and interviews with reviewers.

Figure 1 provides a summary of the numbers completing the survey and interviews to the end of July 2017.⁹

	1st review	2nd review					
Number of reports	681 RPR reports (Evaluation did not include first 192)	63 RPR reports					
Data from:	Doctors 1st report	Doctors 2nd report	Reviewers				
Online surveys	 Post-RPR survey of doctors (326 of 489, 68%) Twelve-months after RPR (160 of 242, 66%) 	 Post-RPR survey of doctors (29 of 63, 46%) Twelve-months after RPR (3 of 5, 60%) 	 2014 survey (19 of 19, 100%) 2016 (22 of 30, 73%) 2017 (17 of 19, 89%) 				
Interviews	 Post-RPR interviews with doctors (62) Interviews approximately 12 months after first RPR (24) 	 Post-RPR interviews with doctors (4) Interviews approximately 12 months after second RPR (0) 	 2014 reviewer interviews (6) 2016 reviewer interviews (9) 2017 reviewer interviews (5) 				
		Other sources of data					
bpac ^{nz} data	 Patient feedback forms on doctors completed before the RPR visit (15054) Colleague feedback for participating doctors completed before the RPR visit (5303) RPR report results for all participating doctors (1st RPR 681, 2nd RPR 63, total RPR reports 744) 						
Other	• A review of the literature about	t professional development					
	Interviews with collegial relation	nship providers (12)					

Figure 1. Information sources for the evaluation from end of July 2017.

⁸ As this report builds on earlier evaluation reports, some of the quotes used are the same as those used in previous reports.

⁹ The total number of doctors invited to take part in the evaluation is less than the total number of doctors reviewed because the evaluation started after the introduction of RPR. Survey responses to the second review are not included in analyses in this report. As the number of second reviews increases there will be further analysis comparing first and second reviews.

2.3 Doctors included in the evaluation

There was limited demographic information to compare doctors who took part in RPR and those responding to the two-week survey. Doctors completing the post-RPR and 12-month surveys were similar with the exception that a higher proportion of doctors for whom English was not their first language did not complete the 12-month survey (Table 1).

Characteristic	Post-RPR survey (n = 352) ¹⁰	12-month survey (n = 162)
Practicing in New Zealand for:		
 <10 years 	46%	45%
• 11-30 years	42%	45%
• 30+ years	12%	10%
Training location:		
New Zealand	35%	35%
• UK	24%	24%
South Africa	9%	11%
• Asia	7%	6%
North America	6%	6%
• Europe	5%	4%
Australia	3%	3%
• Other	4%	4%
Unknown	8%	8%
English not first language	26%	20%

Table 1. Demographic characteristics of doctors who completed post-RPR and 12-monthsurveys

RPR participants and doctors responding to the surveys were similar in terms of average RPR score and the proportions with RPR ratings less than 6 (Table 2). Information about practice type demonstrated a slightly increased rate of follow-up with doctors working in general practice settings.

¹⁰ Data are not included for three doctors who have been reviewed twice.

	Total RPR participants (n=741)	Doctors completing post- RPR survey ¹¹ (n=352)	Doctors completing 12- month survey (n=163)	
Practice type ¹² :				
General practice	58%	58%	62%	
Other practice type ¹³	42%	42%	38%	
Average RPR score				
General practice	6.79	6.80	6.77	
Other practice type	6.74	6.82	6.94	
Number of RPR ratings	below 7 ¹⁴			
None	27.0%	29.4%	30.3%	
1 – 2	11.9%	12.9%	13.5%	
3 – 4	13.7%	12.3%	12.3%	
5 – 6	10.7%	10.8%	12.9%	
7 – 8	8.5%	8.7%	6.5%	
9 – 10	9.8%	9.3%	9.0%	
>10	18.3%	16.5%	15.5%	

Table 2. Comparisons between RPR participants and the evaluation survey participants

2.4 Strengths and limitations at this stage of the evaluation

Approximately two-thirds of invited doctors responded to the surveys (66% to the post-RPR survey, 69% to the 12-month survey). The response rates and similar profiles between RPR participants and survey respondents provide confidence that the sample included in the evaluation is broadly representative of all doctors reviewed over the evaluation period.

 $^{^{\}rm 11}$ Data are not included for three doctors who have been reviewed twice.

¹² Based on bpac^{nz} designations.

¹³ Other practice settings included: Orthopaedic surgery, Internal medicine, Academic / Research, Other, Palliative medicine, Dermatology, Family planning and reproductive health, Occupational medicine, Psychiatry, Obstetrics and gynaecology, Medical administration, Public health medicine, Sexual health medicine, Urgent care, Travel medicine, Rural hospital medicine, Paediatrics, General medical and surgical runs, General surgery, Emergency medicine, Rehabilitation medicine, Vascular surgery, Sports medicine, Oral and maxillofacial surgery, Cardiothoracic surgery.

¹⁴ Based on RPR report ratings for doctors on a scale of one to nine over thirteen categories.

The evaluation findings are based on the reviewed doctors' self-reported changes to practice. We have no way of validating whether 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. Overview of Regular Practice Reviews

Key points

Doctors held mixed views on the usefulness of RPR before they participated: Before their first review, approximately one-third (32%) of doctors thought RPR would be useful and one-quarter that it would not be useful. Many doctors saw RPR as a form of assessment and felt anxious about the practice visit.

Doctors were more positive about RPR after their review: After their review, nearly three-quarters (72%) of doctors agreed it was a positive experience. 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 learnt about new development opportunities.

Nearly half of doctors (46%) considered the multi-source feedback was useful: Nearly half of doctors (46%) considered the multi-source feedback was useful. Almost all colleague feedback was rated between 4 and 5 out of a possible score of 5. The highest proportion of high scores (95.6%) was in the 'trust' domain. The lowest proportion of high scores (69.4%) was in the 'communication' domain. Patient feedback was very positive across all domains.

Most doctors were positive about the practice visit: The practice visit is a key part of RPR. Most doctors were positive about the practice visit: Doctors' feedback highlighted the importance of the practice visit as a quality improvement tool to prompt self-reflection.

The reviewer's skill and the extent the reviewed doctors considered the reviewer was credible were important factors in whether the review influenced changes in practice.

The RPR report is useful and communicates opportunities for development: 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. Two-thirds (67%) of doctors found the RPR report useful and more than half (56%) that it identified new opportunities for development.

On average most RPR ratings were high: Doctors are assigned RPR ratings over four domains (records/requirements, doctor/patient relationship, clinical reasoning and clinical practice). Average ratings were high across all domains. Approximately one-quarter of doctors recorded consistently 'superior' RPR ratings (7 and over) across all 13 RPR categories. A very small proportion had consistently low ratings across many of the 13 categories.

Data collected by bpac^{nz} as part of the review process and information about the review process from the post-RPR survey were analysed to describe the experiences of the doctors who had been reviewed, the review process and the doctors' ratings.

3.1 Doctors held mixed views on the usefulness of RPR before they participated

Before their first review, approximately one-third (32%) of doctors thought RPR would be useful and one-quarter that it would not be useful (Figure 2). Doctors working in general practice were slightly more likely than doctors in other scopes of practice to think RPR would be useful.

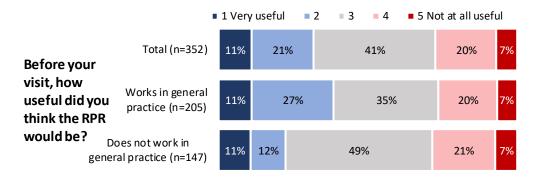


Figure 2. How useful participating doctors thought the RPR visit would be prior to their review (Post-RPR survey, n = 352).

In response to the post-RPR survey, doctors were asked to explain their expectations of RPR (Table 3). Many of those who thought RPR would be useful expected to get *"at least something"* out of the review. Many doctors saw RPR as a form of assessment and felt anxious about the practice visit.

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, they were nervous about being assessed, and they were not sure what to expect and/or felt they had no need for a review.

Table 3. Reasons why participating doctors did not expect RPR to be useful (Post-RPR survey, n = 352).

Expectations of RPR	Percentage who spoke about it
Expected to get (at least some) useful feedback	30%
Viewed as a tick-box exercise	14%
Nervous about what to expect / being assessed / being observed	12%
Did not expect it to be a useful experience	11%
Unsure what to expect beforehand	9%
Keep self up to date (e.g. internal quality improvement programme)	8%
Expected emphasis would be on criticising practice	4%

Pre-visit anxiety may 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.

Not as painful as I thought, a much more useful process than I expected. Thank you to all.

When you have one you feel nervous beforehand which is just what happens when someone is looking at you. But I knew they weren't there to criticise you or fail you, it wasn't a test.... After the first review, I really took on board what [the reviewer] did say, so I wasn't too worried about the whole thing. I could see what the whole aim was.

After their review, many doctors changed their opinions about RPR. Over half (56%) said they would recommend RPR to their colleagues (Figure 7).



Figure 3. Would participating doctors recommend RPR (Post-RPR survey, n = 352).

Doctors said they changed their opinions about RPR because their review had provided reassurance about their practice, they valued the opportunity to have an objective perspective on their practice from a senior colleague, and/or they learnt about new development opportunities (Table 4).

Table 4. Reasons why participating doctors found their RPR useful (Post-RPR survey, n = 352).

	Reasons why RPR was useful s					
Personal	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%				
knowledge	Opportunity for self assessment / self reflection and gain insight on practice	11%				
	Opportunity to get advice / have a discussion with a senior colleague or peer	34%				
Feedback	Get an objective perspective on how they practice	19%				
	Positive to get feedback from someone who has actually observed practice	12%				
Strengths and	Have areas for improvement highlighted	29%				
opportunities	Have strengths highlighted	20%				

In earlier evaluation reports, we suggested that as RPR became better known the positive experiences of participating doctors may lead to an increase in the number who expect RPR to be useful. However, the proportion of doctors expecting RPR to be useful before participation has not increased past 2014-15 levels (Figure 4). The proportion who would recommend a review to their colleagues has also remained similar.

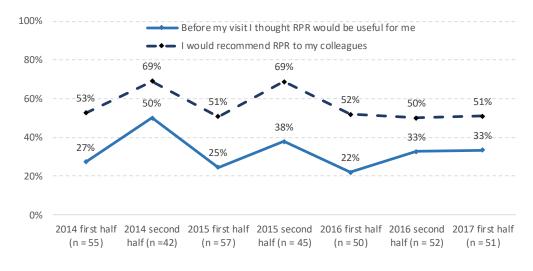


Figure 4. Participating doctors' views on RPR over time (Post-RPR survey, n = 352, year half based on RPR meeting date).

3.2 Pre-visit feedback

Prior to the practice visit, doctors seek feedback from colleagues and patients. In response to the post-RPR survey, 46% of doctors agreed the multi-source feedback provided useful information (Figure 5).



Figure 5. Doctors' views on multi-source feedback (Post-RPR survey, n = 352).

3.2.1. Colleague feedback

Almost all colleague feedback was rated between 4 and 5 out of a possible score of 5. The highest proportion of high scores (95.6%) was in the 'trust' domain (Table 5). The lowest proportion of high scores (69.4%) was in the 'communication' domain.

Table 5. Average percentage of doctors in each colleague feedback rating category (1 = worst, 5 = best) (n=496)

	1 - 3	3.01 - 4	4.01 - 4.5	4.51 - 5
Clinical reasoning	0	3.8%	23.0%	73.2%
Clinical practice	0	2.8%	24.0%	73.2%
Communication	0	4.8%	25.8%	69.4%
Trust	0	0.4%	4.0%	95.6%
Personal	0	1.6%	13.5%	84.9%
Total mean score	0	1.2%	15.3%	83.5%

Some doctors described not being sure who they could or should ask to provide colleague feedback:

- Locum doctors often described getting colleague feedback as a challenge as they do not work in one location for long
- Some doctors working in specialist areas of medicine (especially outside of the larger New Zealand cities) said they only interact with a few health professionals and often it is in the form of referral letters.

Such issues may reflect a wider problem of lack of professional contact. However, at a practical level it may be worth considering changing the instructions in the 'who should fill these in' section to provide clearer guidance for reviewed doctors.

3.2.2. Patient feedback

Patient feedback was based on one to five scales where patients could rate their doctor over four areas (one = worst, five = best). Almost all patient feedback was positive (The uniformly positive patient feedback did not provide an effective mechanism to identify opportunities for quality improvement.

Table 6). The uniformly positive patient feedback did not provide an effective mechanism to identify opportunities for quality improvement.

	1-3	3.01-4	4.01-4.5	4.51-5
Manner (n = 391)	0	1.3%	4.3%	94.4%
Providing care (n = 391)	0	1.3%	5.1%	93.6%
Patient involvement (n = 390)	0.5%	1.5%	7.7%	90.3%
Trust (n = 391)	0	0.8%	7.4%	91.8%
Total mean score	0	0.5%	5.9%	93.6%

Table 6. Average percentage of doctors in each patient feedback rating category (1 = worst,5 = best)

Some doctors (34%) valued the positive patient feedback as validating their practice (Figure 6).

I was reassured to know that patients felt I was doing a good job as that is ultimately the best benchmark to my performance.

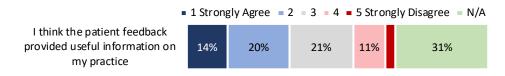


Figure 6. Doctors' views on patient feedback (Post-RPR survey, n = 352).

Other doctors did not consider patient feedback a valid source of useful feedback. Some raised the point that doctors could choose who they got to fill in their feedback form so they can cherry pick people they think will rate them positively.

The patient and collegial feedback are not that useful, the latter being a group of self-selected referees answering a fixed set of written questions and the former collected from loyal patients on a day when I tried harder to be nice.

Some doctors described challenges in obtaining patient feedback:

Because of the setting I work I'm finding it really difficult to get it [the patient feedback] done in the timeframe required, so I'm getting endless emails saying I've only submitted this and it's not done yet... But I certainly understand the requirements its more making it practical in my workplace is the problem I'm having.

- Lack of an ongoing relationship with patients: Where doctors only see the patient once such as emergency care, travel medicine and health screening. Doctors often discuss how the ratings they get are not comparable to doctors working practice settings where they can build an ongoing relationship with patients).
- Too many patient feedback forms required: Some doctors spoke about how the number of patient feedback forms required is inappropriate for some settings such as emergency medicine, palliative care or caring for patients with neurological disorders where patients are not always aware of their surroundings. In settings such as these getting the required number of patient feedback forms can take a lot of time and effort and doctors suggested reducing the number required in certain situations.
- No patients: Doctors who do not see patients do not have to meet this requirement but some do mention the annoyance of having to deal with this and then still receiving the generic RPR information stating the patient feedback requirement.

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

Dr A – Very positive about RPR

Having graduated around five years ago, Dr A considers himself a junior doctor. He has worked in urgent care medicine but was working in general practice at the time of his review.

Dr A felt he was working mostly on his own and it was easy to be isolated from his peers. The majority of his interactions with other doctors were about patients he was referring. He 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... There are many ways to skin a cat so it's good to see what other people are doing out in primary care.

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

RPR did more than just reduce isolation for Dr A. 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.

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

Insights from Dr A's feedback

Dr A's understanding of the purpose and the intention of the RPR contributed to his positive attitude towards the whole experience.

Dr A also received multiple tangible suggestions for how to improve his practice which helped him to make positive changes.

3.3 The practice visit

The practice visit is a key part of RPR. 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 was representative of their practice and their opinion of the reviewer.

Doctors' feedback highlighted the importance of the practice visit as a quality improvement tool to prompt self-reflection. Most doctors considered the practice visit was the only way to objectively assess how a doctor is practicing. Receiving an objective view about their practice enabled self-reflection that was beneficial. The opportunity to have this objective view often influenced doctors' overall opinions 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.

It's very important to get an objective overview of how you are going. I am sure some people could be a little intimidated by the visit but I think it's a very good idea.

In the post-RPR survey, doctors were generally positive about the practice visit with only a very small proportion disagreeing the practice visit was a positive experience (Figure 7).

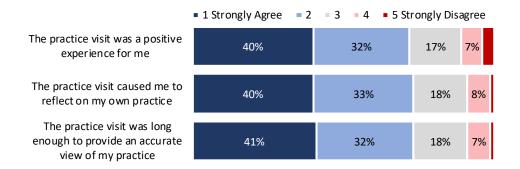


Figure 7. Doctors' views on their experience of the RPR practice visit (Post-RPR survey, n = 352).

A few doctors who did not consider the practice visit a positive experience suggested a review could be based on notes and a phone call.

What I think would be better would be to have a phone call every year. A personalised phone call checking up on what I'm doing and what are the issues etc., because the RPR is such a big deal you know.

The following example describes how and why the practice visit changed a doctor's opinion of RPR from a negative to a positive experience.

Dr B – Changed from negative to positive

Dr B 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 B had a very poor impression of RPR. He knew it was important because there was the potential to lose his practising certificate but felt the majority of doctors were being punished for the sins of the few. He tried to find out more about RPR but did not know any colleagues who had been reviewed and felt the information on the website was not adequate. Dr B 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 B 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 B'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 B works. Dr B talked about matching reviewers with doctors being of *"utmost importance"*.

During the visit and in the RPR report the reviewer suggested changes Dr B 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 B 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 B felt the review was "very fair, accurate and a really worthwhile exercise".

Insights from Dr B's feedback

Dr B'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 the areas addressed in a review.

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

3.3.1. Logistics and organisation

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

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.

I really encourage that initial phone call from the reviewer, I found that really helpful to engage with a person. It felt much more comfortable and more friendly and if something had occurred to me I would have been able to ask about it.

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

A very small number of doctors 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 [the reviews]. It infringes on a doctor's doctor-patient relationship

3.3.2. The reviewer

The reviewer has a crucial role in influencing the doctor's perceived value of the practice visit, RPR and the extent doctors make changes following their review. Reviewed doctors highlighted the value of an objective view on their practice from someone they respected. Most responding doctors (81%) reported their reviewer demonstrated appropriate skills to evaluate their practice (Figure 8).

[He] was great to talk to, very easy to get along with.... what he's done is that he's done the exact same thing [as me] except he's gone down [a different route]. So from the GP world and has gone into a small area of medicine. So he got it completely so that was great. It didn't matter that he didn't have the content knowledge of what I do, it just didn't matter.

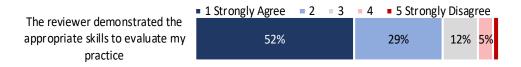


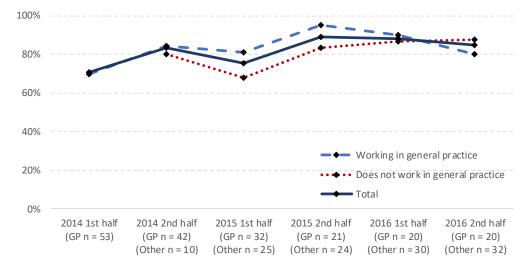
Figure 8. Doctors' views on reviewer skills (Post-RPR survey, n = 352)

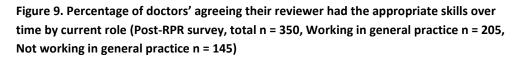
Doctors considered their reviewer to have the necessary skills as a reviewer if they were senior doctors, demonstrated their knowledge, and had experience in the doctor's type of practice.

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.

There was no significant difference in the proportion of doctors working in general practice and those in other types of practice who considered their reviewer demonstrated appropriate skills to evaluate their practice (Figure 9).





Only a small percentage of doctors (7%) disagreed the reviewer demonstrated the skills necessary to evaluate their practice. These doctors described their reasons for dissatisfaction with the review process:

 The reviewed doctor did not consider the reviewer was a good match for their type of practice. For example, the doctor being reviewed practiced in a specialised type of practice and the reviewer was from a different practice specialty and perceived as not able to provide adequate feedback. 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.

I would like to see the match of reviewer to reviewee be better.

He did a good assessment. But in terms of understanding what we do, on a day to day basis, I don't think the level of knowledge was there to be able to pass judgement.

- The reviewed doctor felt the reviewer's feedback and recommendations were clinically incorrect. This was raised by a very small number of doctors. They just criticised everything and it was all medically incorrect. It was just hard to be criticised the whole time with this medically incorrect information.
- A very small number of doctors made negative comments about their reviewer's conduct both in the reviewer's content knowledge and interactions. An example is outlined below.

Dr C's second review was not a collegial experience

Dr C has now had two RPR's. She enjoyed her first review and learnt from the experience but felt her second was a disappointment. Her first reviewer had some interest in Dr C's niche area of practice whereas the recent reviewer did not.

My experience this time was totally different to my first one. The first person was... friendly and collegial, so I was hoping it would be quite similar but it wasn't at all.

Her first reviewer created a collegial environment with a reciprocal exchange of ideas and knowledge which facilitated positive, peer review like discussions about patients and discussions on Dr C's current CME. She was hoping to have another productive collegial day. In contrast, Dr C felt her second review was not collegial and more of an exam/test situation. Although the reviewer did suggest a few potential minor improvements with which Dr C agreed, she did not feel it was worthwhile.

The biggest issue I had was that it wasn't a normal interchange of conversation, it was just more questions and criticisms.

It can be really good. I found the first one really good and interesting. When he sat in with me he helped with patient diagnosis and discussed cases with me, so that was quite helpful. The second one was more a critical analysis and I didn't feel I really gained anything from it. So, it was drastically different experiences. I think it's got really good potential and I found the first excellent and the second not so much. I think it's really important to find someone that is suitably matched perhaps.

Insights from Dr C's feedback

In this situation, there was a need for the reviewer to have some understanding and acceptance of the practice area where the reviewed doctor worked.

Creating a collegial experience between the reviewer and reviewee is important when trying to create a positive experience and gain the most from the RPR.

3.4 Post-visit feedback

3.4.1. Reviewer feedback

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 subsequent report does not contain any surprises.

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 a suggestion it is much more likely to be taken seriously.

As more doctors complete their second RPR there is an opportunity for reviewers to concentrate on the suggestions for change from the previous RPR and follow up on the doctor's progress in a positive way.

She did say I had clearly changed [the way I practice] so she was obviously familiar with my last RPR and she wasn't even the same doctor. So, it was really good of her to mention that sort of thing.

3.4.2. RPR reports

RPR reports are the formal mechanism for providing feedback. Two-thirds (67%) of doctors found their RPR report useful and more than half (56%) that it identified new opportunities for development (Figure 10).

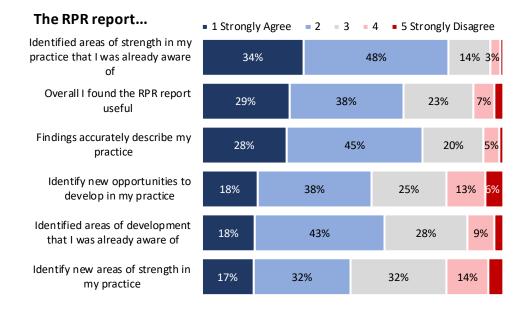


Figure 10. Doctors' views on the RPR report (Post-RPR survey, n = 352)

Three-quarters of reviewed doctors (73%) agreed their RPR report was accurate.

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.

Their report findings were accruate (Figure 11). The correlation between number of ratings below seven and agreeing if the report findings were accurate was significant (P < 0.05).



Percent that agree report findings accurately describe practice



Figure 11. Percent of participants who agreed their RPR report accurately described their practice by the number of RPR ratings below superior (1-6 out of 9 over 13 RPR categories) (n = 336).

Making practice change requires doctors to understand the steps required to respond to development opportunities. Almost all (86%) doctors whose reports identified new opportunities for development agreed the action needed to address the new development opportunities was clear.

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.

3.4.3. RPR report ratings

Reviewers assign numerical ratings of between one and nine over thirteen categories (1-3 = unsatisfactory, 4-6 = satisfactory, 7-9 = superior). The thirteen categories can be grouped into four domains (Table 7).

When the overall report ratings overall were considered, on average 51% percent of all reviewed doctors for whom data were available were rated as superior (had an average rating of over seven) and 49% were rated as satisfactory (had an average rating of between four and six).

RPR rating scores	Superior	rior Satisfactory		Unsatisfactory	
	7-9	6	5	4	3-1
Records/requirements (n = 648 – 669)					
Ability to competently navigate and use PMS	58%	30%	10%	2%	0.8%
Notes facilitate continuity of care	56%	28%	11%	3%	2.0%
Records show appropriate standard of care	55%	28%	10%	3%	2.4%
Record is clear, accurate, has required information	56%	29%	11%	3%	2.1%
Average	56%	29%	10%	3%	1.8%
Doctor/patient relationship (n = 659 -	- 660)				
Engaging the patient	68%	24%	6%	1%	0.2%
Responding to the patient	68%	24%	7%	2%	0.0%
Listening to patient	66%	25%	7%	2%	0.2%
Average	67%	25%	7%	2%	0.1%
Clinical reasoning (n = 651 – 656)					
Clinical reasoning for their management	62%	28%	8%	2%	0.6%
Clinical reasoning for investigation	57%	30%	10%	2%	0.6%
Clinical reasoning for diagnosis	56%	32%	10%	2%	0.5%
Average	58%	30%	9%	2%	0.6%
Clinical practice (n = 642 - 653)					
Clinical practice management	63%	26%	9%	2%	0.3%
Clinical practice history	54%	30%	13%	3%	0.3%
Clinical practice examination	57%	30%	10%	2%	0.2%
Average (n=653)	58%	29%	11%	3%	0.3%

Table 7. Average percentage of doctors in each RPR rating category (n = 642-669)¹⁵

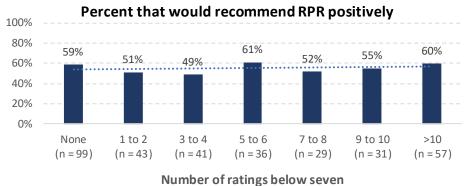
¹⁵ N varies as not all doctors are rated in all areas, if an area does not have relevance to the doctors area of practice then there was no rating recorded.

Approximately one-quarter of doctors recorded consistently 'superior' RPR ratings (7 and over) across all 13 RPR categories. A very small proportion had consistently low ratings across many of the 13 categories (Table 8). There were no significant differences between the demographic profile and practice type of these doctors compared with others.

Table 8. Percent of doctors who consistently had ratings below five, six and seven from all thirteen RPR categories (all categories are rated on a 1 to 9 scale (n = 674))¹⁶

	None	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	>10
Ratings below 5	88.7%	5.3%	3.1%	1.6%	0.4%	0.3%	0.4%
Ratings below 6	65.1%	12.9%	9.9%	3.3%	3.1%	2.4%	3.3%
Ratings below 7	27.0%	11.9%	13.6%	10.7%	8.5%	9.8%	18.5%

Overall, RPR ratings were not associated with whether doctors said they would recommend RPR to a colleague (Figure 12). The correlation between number of ratings below seven and recommending RPR positively was not significant (P < 0.05).



Number of futings below seven

Figure 12. Percent of participants who would positively recommend RPR to colleagues by the number of RPR ratings below superior (1-6 out of 9 over 13 RPR categories) (n = 336).

3.5 Post-visit follow-up

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

After RPR, doctors are encouraged to speak with their collegial relationship provider (CRP) about their RPR report and plan how best to utilise the feedback, and 68% of

¹⁶ Note that some doctors did not have ratings for all categories

doctors said they did so (Table 9). During the reviewer's preliminary conversation with the CRP it may be helpful to make a point of suggesting the CRP ask reviewed doctors about their RPR report and discuss it at their next meeting.

Person PDP discussed with	Post-RPR ¹⁷ (n = 162)	12-months later ¹⁸ (n = 162)
Collegial relationship provider	68%	56%
Other colleagues	38%	41%
RPR reviewer	37%	7%
Employer/manager	17%	21%
Other	11%	-
Inpractice medical advisor	-	7%

Table 9. Who doctors discussed their PDP with (Post-RPR and 12-month survey).

Doctors who received more ratings below seven appeared to be more likely to discuss their PDP with someone than doctors who received fewer RPR ratings below seven (Table 10).

Table 10. Who doctors discussed their PDP with by number of ratings they had below seven
(n = 336 from Post-RPR survey)

Person PDP discussed with	Number of RPR ratings below 7			
reison ror discussed with	None to 2 (n = 142)	3 to 6 (n = 77)	7 or more (n = 117)	
Collegial relationship provider	59%	73%	72%	
RPR reviewer	32%	49%	46%	
Other colleague	29%	43%	74%	
Employer/manager	13%	19%	25%	
Other	7%	10%	9%	

As expected under the *Inpractice* collegial relationship requirements, the CRP relationships involved a combination of informal discussion of particular cases (by phone, email or in-person) and formal and regular meetings. Where relationships were strong, they appeared to be of substantial value in supporting the doctors'

¹⁷ Question was: Have you sought advice regarding your PDP from...

¹⁸ Question was: Since your RPR, have you sought advice regarding your PDP from...

professional development and the CRPs felt that they were contributing to improvements in the doctors' practice.

In other cases, the CRP relationships were primarily informal and at times included barriers to open and honest communication (for example, where the CRP provider was the doctor's employer). Providing feedback and support that can lead to practice improvement is a skilled process and not all CRPs may have the appropriate skills or experience to do so.

Table 11. Feedback from CRPs on their collegial relationships with RPR doctors.

Examples of CRP relationships in practice		
Discussing RPR	Do discuss RPR: [Have you discussed his RPR?] Yes, we have. There were definitely no surprises and I didn't have any concerns, if I had any concerns they would have been highlighted a long time ago. Do not discuss RPR: We haven't spoken about his RPR.	
Nature of CRP relationship	 Working closely helps CRP role: I think ours is absolutely effective and the strength of it is we are consulting and working in the same facility and I'm always available and there is not a day goes by that we don't talk about something. So, it's hard to imagine that it's not effective. Being external is good: I think I give him a chance to talk through certain cases and we can have a frank discussion about things because I'm not working directly with him or anything. 	
Knowledge of what CRP role is	Completes the CRP role: We talk about what she has done since the last meeting. Her reflection on her activity, what she plans to do next, her priorities, areas she can focus on. So, we concentrate on progressive things rather than maintaining the status quo. She brought along her RPR report with her and we went through it. Not sure of CRP role: I'm not sure if I'm fulfilling my role as a CRP adequately, like we are all very busy doctors and we get asked to do the CRP thing and we say yes and we are happy to do it but I haven't gone and read up on what I am meant to be doing I would have liked some guidance around what I'm supposed to be doing.	
How regular CRP sees doctor	See them often: I see [Dr X] every day as we work in the same facility, we are consulting within a few meters of each other and when he's operating I'm generally around We still have the more formalised meetings every month or so but the reality is they are every day we are talking about this or that. Do not see them often: I think [I have seen the doctor] three times in the last 12-months.	

Impact of	Big Impact: I'm sure his practice has been moulded by our specialist practice
CRP on	here and as we are trying to deliver the absolute pinnacle of care for what we
doctor	do here, and we've worked alongside each other for a long time.
	No impact: I don't know that I've changed anything, it's been more support and as for how useful it's been that probably a moot point to be honest. I guess she's grown up in a different kind of culture than there is now, and this mentoring and so on is probably not as well accepted by the older doctors and it's something that has been forced on us rather than something people have opted for.

4. The reviewers

Key points

Reviewers were 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.
- 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 reviewer's ability to provide feedback on opportunities to develop the reviewed doctor's 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. The evaluation has sought feedback from reviewers through surveys and interviews. Findings from the three reviewer surveys have been very similar. This report includes the findings of the third reviewer survey completed in February 2017. Invitations were sent to all 19 active reviewers and 17 responded.

Reviewers were recruited through advertising and provided with training and workshops to develop their skills as reviewers.

Almost all (88%) of the reviewers surveyed were still in clinical practice. Most reviewers had between 20 and 40 years of practice experience. The two reviewers not in clinical practice had been out of practice for one year.

4.1 Training and preparation

RPR reviewers considered they had the necessary support and training to carry out effective reviews and had sufficient information about the doctor being reviewed.

Most strongly agreed or agreed and none disagreed with any of the three statements in Figure 13.

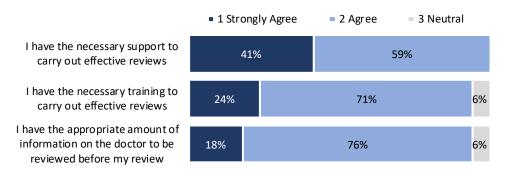


Figure 13. Reviewers' views on their preparation for the reviewer role (Reviewer survey, n = 17).

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.

4.2 Workload

Under half (41%) of the reviewers thought they were completing about the right number of reviews, while the remaining 59% ideally wanted to complete more reviews in the next 12-months than in the past 12-months (Figure 14). The average number of reviews completed by those who wanted the same number of reviews was eight and those who wanted more had completed an average of five reviews in the last 12-months.

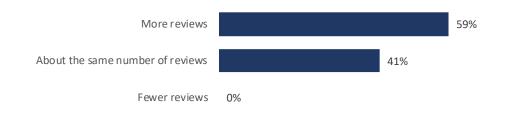


Figure 14. Reviewers' views on the number of reviews they would like to complete in the next 12-months (Reviewer survey, n = 17).

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

4.3 Doctors' reactions to RPR

RPR reviewers reported they were positively received by doctors. Most agreed doctors were receptive to the practice visit and the reviewer's feedback, although 6% disagreed that doctors seemed receptive to the visits (Figure 15).

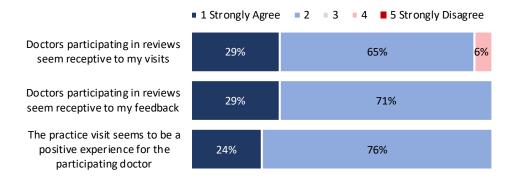


Figure 15. Reviewers' views on doctors' reactions to RPR (Reviewer survey, n = 17).

Almost all reviewers were positive about the practice visit and the feedback they were able to provide doctors (Figure 16).

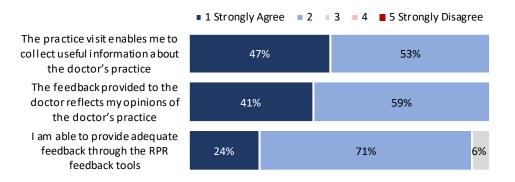


Figure 16. Reviewers' views on the practice visit and feedback to the reviewed doctors (Reviewer survey, n = 17).

Most reviewers described the opportunity the practice visits provided for face-toface 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.

The report template has changed over the last three years. All the interviewed reviewers thought the latest report template allowed them to say what they needed.

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.

4.4 Changes in doctors' practice

Most reviewers thought RPR would enable doctors to make changes to their practice and thought RPR contributed to improving the care delivered to patients (Figure 17).



Figure 17. Reviewers' views on whether RPR contributed to changes in practice and improvements in care delivered to patients (Reviewer survey, n = 17).

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.

4.5 Changes to doctors' PDPs

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 thought more experienced doctors might be less likely to change their PDPs because:

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

4.6 Benefits for reviewers

Reviewers were positive about their roles with nearly all reviewers surveyed agreeing the role had been a positive experience and had improved their own practice (Figure 18).



Figure 18: Reviewers' views on how positive the role is and if it contributes to their own practice (Reviewer survey, n = 17).

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

I think I'm the one who probably learns the most. It is very interesting and informative visiting different practices and seeing how different practitioners and services are organised.

Reviewing doctors in other areas of practice was a good way for reviewers to expand their knowledge. However, many reviewers spoken to did not feel as confident reviewing doctors in different area of medicine to their own, as they did reviewing doctors in similar fields.

I don't think I could review a GP or a surgeon (nor would I be willing to).

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.

Reviewers were also positive about the respect and value others in their profession placed on their role (Figure 19).



Figure 19. Reviewers' views on the perception of them among other doctors (Reviewer survey, n = 17).

5. Changes following doctors participation in RPR

Key points

Doctors made changes to their practice after their review: After RPR, nearly half (45%) of doctors said they had made changes to their practice due to their review. A further 14% intended to make changes in the future. The changes doctors said they made to their practice included changes to consultation management and style, patient care and administration.

Doctors working in general practice have been consistently more likely to make changes to their practice than doctors in other practice settings, although the gap is closing.

Changes were made by doctors with superior ratings and those with lower ratings: Doctors who reported changes included those with mainly superior ratings (no RPR ratings below 7) as well as those with lower ratings. Those with more of the lower ratings were more likely to report making changes.

Many doctors maintained changes to practice 12 months after their review: Twelve-months after participating in RPR, many doctors continued to report they had made changes to their practice. The overall proportion of doctors reporting changes to their practice after their review decreased from 50% in the post-RPR survey to 41% in the 12-month survey.

Doctors made changes to their PDPs: In the post-RPR survey, nearly half (43%) of doctors planned to make changes to their PDP following their review.

Many doctors maintained changes to their PDPs 12 months after their review: Twelve-months after their review, 28% of doctors reported making changes to their PDP, 20% of doctors reported they had changed how they managed their PDP and 20% had changed their PDP to make it more useful.

Some doctors thought the care they provided patients had improved: In response to the post-RPR survey, 44% of doctors thought that participating in RPR improved the care they deliver to their patients and/or helped in other ways (51%)

5.1 Doctors act on the RPR report and make changes

This section examines the changes reported by doctors after participating in RPR and whether those changes were maintained 12-months later¹⁹.

¹⁹ Post-RPR results when not compared with 12-month results are reported for all doctors who participated in the evaluation (n = 295). When comparing 12-month survey results with

5.1.1. Post-RPR changes to practice

In the post-RPR survey, nearly half (45%) the responding doctors said they had already made changes to their practice because of their review and a further 14% intended to make changes (Figure 20).

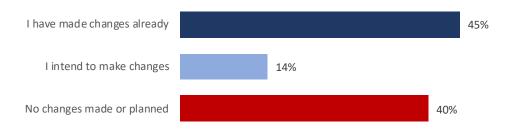


Figure 20. Proportion of participating doctors who said they had made changes, intended or did not intend to make changes (Post-RPR survey, n = 352).

The proportion of doctors who reported making changes in their practice following their review has varied over time and by practice type (Figure 21). Doctors working in general practice have been consistently more likely to make changes to their practice than doctors in other practice settings, although the gap is closing.

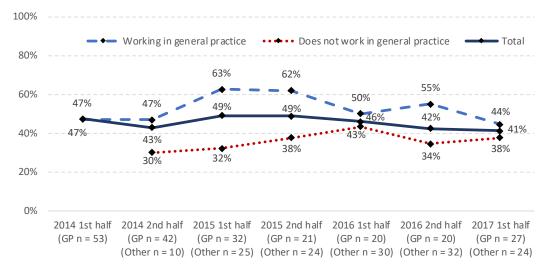


Figure 21. Proportion of doctors who had made changes to practice in the post-RPR survey showing the calendar half year the post-RPR survey was completed (Post-RPR survey, total n = 350, working in general practice n = 205, not working in general practice n = 145)

Doctors who reported changes included those with mainly superior ratings (no RPR ratings below 7) as well as those with lower ratings (Figure 22). Those with more of the lower ratings were more likely to report making changes. The correlation

post-RPR, results are reported for doctors who completed both the post-RPR and 12-month surveys (n = 133).

between the number of ratings below seven and making changes to practice was significant (p < 0.05).

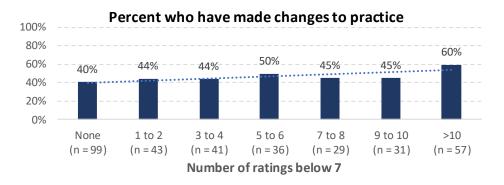


Figure 22. Percent of participants who have made changes to their practice by the number of RPR ratings below superior (1-6 out of 9 over 13 RPR categories) (n = 336).

The changes doctors said they made to their practice included changes to consultation management and style, patient care and administration (Table 12). The percentages in the table represent doctors who volunteered this information in response to an open-ended question about changes they had made.

Area	of change	Percentage who spoke about it	Example
Consultation	Changed how consult is managed		Tried to change consultation style, trying to prioritise patient questions.
Consultation	Communicating more effectively	15%	Changed how I word questions to patients. Better use of silence.
	Improved notes and record keeping	16%	Consult notes are completely different and try to reflect content of consult and more accurately report findings as
Patient care	Reviewed prescribing	8%	well as future intentions for better follow-up by colleagues. [1] have made changes to my prescribing methods and
	Reviewed tests ordered	2%	there is a new awareness of having to constantly check current guidelines.
Administration	E-management	5%	I've made a lot more use of, our IT person helped, the bpac embedded in medtech.
Administration	Audit	4%	Starting to 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.
other	Self-care	4%	I have done a routine annual personal health check!
None	No changes planned	5%	I haven't made any changes it was just a waste of time

Table 12. Changes participating doctors' have made following their review (Post-RPR survey, n = 352)

5.1.2. Twelve-months later: maintenance of changes to practice

We examined the extent changes were maintained by comparing the 162 doctors who by the end of July 2017 had completed **both** the post-RPR survey and the survey 12-months later.

Twelve-months after participating in RPR, many doctors continued to report they had made changes to their practice (Figure 23). The overall proportion of doctors reporting changes to their practice after their review decreased from 50% in the post-RPR survey to 41% in the 12-month survey. Most doctors who made changes made them soon after their review.

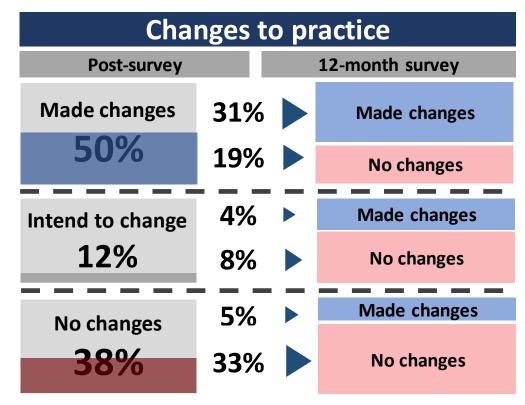


Figure 23. Changes to practice due to RPR over time (Post-RPR and 12-month survey, n = 162). The left side of the diagram shows the initial percent of doctors who reported making changes to their practice, intending to or not making changes. The right side shows what these different groups of doctors reported in their 12-month survey.

Potential explanations for the change in doctors who reported making changes between the post-RPR and 12-month surveys are:

 Doctors forgot they made changes, or felt they were small and not worthwhile mentioning a year later - supported by interviews with five of the 25 doctors who reported practice changes post-RPR but not at 12months. 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.

• Changes became business as usual

So, it was changes to practice management by telling patients what we're going to cover and trying to improve my time management.

- The change was a one-time event (e.g. going to a workshop or seminar)
- Doctors made a change but then reverted to their previous practice. One doctor explained that while some changes had been maintained others had not, as their previous way of working had been better for him and his patients.

So, there were a few changes but a lot of it went back to the things that actually work for the patients we have here.

5.2 RPR assists in planning professional development

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

5.2.1. Post-RPR changes to professional development

In the post-RPR survey, nearly half (43%) of doctors planned to make changes to their PDP following their review (Figure 24). Doctors were more likely to agree they would change their PDPs to target opportunities for development than to maintain areas of strength.

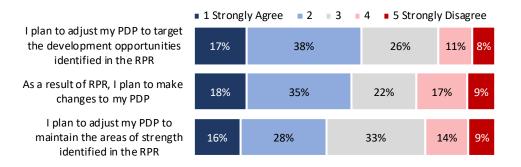
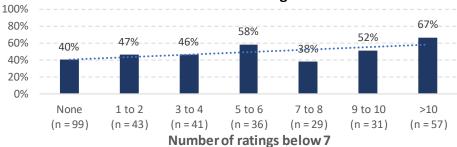


Figure 24. Doctors' changes to their professional development plans (Post-RPR survey, n = 353).

When RPR data from $bpac^{nz}$ about average RPR ratings were compared to the changes to PDPs reported by doctors, there was a significant (p < 0.05) increasing trend for doctors with more RPR ratings under 7 to have said they had made changes to their PDP than higher rating doctors (Figure 25).



Percent who have made changes to their PDP

Figure 25. Percent of participants who reported learning new opportunities for development by the number of RPR ratings below superior (1-6 out of 9 over 13 RPR categories) (n = 336).

5.2.2. Twelve-months later: changes to professional development

Twelve-months after their review, 28% of doctors reported making changes to their PDP, 20% of doctors reported they had changed how they managed their PDP and 20% had changed their PDP to make it more useful (Figure 26).

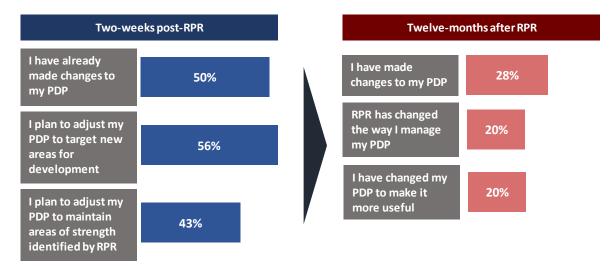


Figure 26. Doctors reporting changes to their professional development plans post-RPR and after 12-months (n = 162).

5.2.3. Examples of changes to professional development

Examples of changes doctors made to their PDPs 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 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! We talked about making my goals SMART goals. I have already put one into my PDP that I will do every year. More focused target goals and plans made.
Improving attitude towards PDP	This programme has widened my thought process on formal CME and professional development and delivered a useful level of benchmarking.
Fine tuning 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 keep abreast of the journals.
Participating in more meetings/ peer review groups	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].
Completion of more PDP	Just attended a conference and completed outstanding tasks for this year.
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 note 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 goals

Within the Bpac^{nz} website which doctors use to keep their PDP up to date, doctors are asked to create PDP goals. Doctors are also asked to report how they identified the need for the goal.

A major challenge in analysis of the goals is that past goals are 'overwritten' with subsequent goals. However, in a small number of cases, doctors specifically identified RPR as the reason they made a PDP goal. Some examples are:

Description of goals	How the need for the goal was identified
Antibiotic use review	RPR review
I wish to improve the quality of my clinical records to reduce my medico- legal vulnerability in first six months of my next CPD cycle	RPR in November 2015 identified a weakness in clinical record keeping. Lack of clear conclusion / diagnosis at conclusion of consultation note as well as a clear management plan - more needed for Medico-legal protection
More appropriate use of labs and bloods	Feedback and RPR visit
Burn Out Prevention	Discussion with [reviewer] during practice visit helped me identify the need for self- preservation to enable me to continue to work at my best in a busy practice.
Contact Māori provider	RPR visit
To be (re)integrated into the [local] medical community and keep up-to-date with local and national public and general practice health issues	This was identified formally at the time of my RPR as being something I needed to dedicate specific effort toward (it had previously been an intention never properly realised).

5.4 Doctors report RPR has improved the quality of care for their patients

RPR aims to improve outcomes for patients by improving the quality of care they receive. The impacts of changes in practice on patient care are complex and hard to quantify, particularly where the intervention takes a broad approach.

In the RPR survey and interviews, doctors often reported they had made changes in response to RPR. In response to the post-RPR survey, 44% of doctors thought participating in RPR improved the care they deliver to their patients and/or helped in other ways (51%) (Figure 27). Just over one-quarter (28%) disagreed that RPR had improved the care they delivered to their patients and 22% disagreed that RPR had helped improve their practice in other ways.

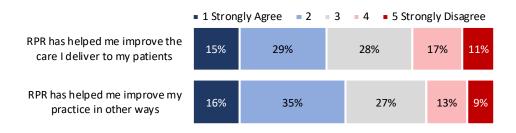


Figure 27. Doctors' views on the impact of the RPR (Post-RPR survey, n = 353).

The case study below is one doctor's description of why RPR worked so well.

Dr D – participated in two reviews and positive about both

Dr D has practised for nearly 40 years and has spent the last 15 years working in two different areas of practice. After having a successful and positive first RPR three years ago, Dr D was looking forward to her next one.

I must say the first one *I* had was just so good so *I* wasn't apprehensive at all about the second one.

Dr D thought the first review was good because the reviewer suggested changes to help improve her practice. These included antibiotic use, being more aware of privacy during consultations, having a standard format for taking notes, how to do an audit of notes and a range of small things.

So now I have a format for histories that I go through in my head and I check off each thing, it's been really good.

I have also audited myself on that to make sure I'm staying on doing it well... I didn't know how to audit but now I do and it's great.

Dr D liked the way the second reviewer commented on the changes she had implemented after the first RPR and made additional suggestions to improve her practice and PDP. Dr D also appreciated the inclusion of personal care in the review and has decreased her hours since her first review. She also appreciated the reviewer speaking to her CRP on the day to get a wider impression of how she practised.

The RPR is also about looking after yourself and I must admit I have cut my hours down since the last RPR. I used to do four nights a week now I do two.

Dr D found the review was collegial, accurate and covered her whole practice. She thought RPR or a similar review process would be useful for all doctors.

For each section, she would write what was good and then things that could be improved on. She had a really good handle on how I was working. We had never met before but it seemed like she knew what I was doing and how I was doing it.

Its suits me, I like it, I think every doctor should have something... I would think no matter how highly qualified they are should have something like this... like if there was a high up consultant it might be quite hard for a nurse to correct them or another colleague to say excuse me I think it might be good to do things this way.

Insights from Dr D's feedback

- A positive RPR experience can reduce anxiety for future reviews.
- Receiving useful/useable feedback helps doctors consider the review is worthwhile. A second review can be an opportunity for following up progress in response to previous suggestions.

6. Factors contributing to changes in practice

Key points

A doctor's place of training and years in practice was not associated with whether they had made changes to their practice, their PDP, or whether they would recommend RPR to their colleagues. However, doctors who did not speak English as a first language were more likely to have made changes to their practice and to recommend RPR to their colleagues.

Practice settings influenced the proportion of doctors making changes: Overall, doctors working in general practice were significantly more likely to report making changes to their practice than doctors working in other settings such as hospitals or clinics specialising in an area of health.

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.

A doctor's understanding of the purpose of RPR influences their expectations of the programme and their attitudes to feedback.

The reviewer has a crucial role in influencing a doctor's perceived value of RPR and the extent doctors make changes: Reviewed doctors highlighted the value of an objective view on their practice from someone they respected.

A doctor's opinion of their reviewer was closely related to their likelihood of making changes to their practice and their overall opinion of RPR. Of the doctors who had made changes to their practice, 93% considered their reviewer demonstrated the appropriate skills to evaluate their practice compared to 68% of those who had not made changes.

Doctors who learnt new opportunities for development in their report were significantly more likely to make changes to their practice to their PDP, and to be more positive about RPR than those who did not.

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 Demographic characteristics of the participating doctors

A doctor's place of training and years in practice was not associated with whether they had made changes to their PDP, their practice or whether they would recommend RPR to their colleagues. However, doctors who did not speak English as a first language were more likely to have made changes to their practice and to recommend RPR to their colleagues (Table 15).

Table 15. The influence of demographic factors on doctors' responses to RPR (Post-RPR survey, n=351-352²⁰) (Statistically significantly differences in proportions are in bold, Pearson Chi-Square < 0.05)

		Number of doctors	Have made changes to their practice	Have made changes to their PDP	Would recommend RPR to their colleagues
English as a	Yes	262	107 (41%)	119 (45%)	138 (53%)
first language No	No	90	53 (59%)	50 (56%)	58 (64%)
Years in	≤10 years	163	79 (48%)	76 (47%)	96 (59%)
practice in New Zealand	11-30 years	146	64 (44%)	73 (50%)	76 (52%)
	30+ years	42	16 (38%)	20 (48%)	23 (55%)
Trained in New Zealand	Yes	122	54 (44%)	63 (52%)	62 (51%)
	No/unknown	230	106 (46%)	106 (46%)	134 (58%)

6.2 Doctors' professional context

Just under three-fifths of doctors (58%) who have participated in the post-RPR survey worked in general practice settings (Table 16). 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, doctors working in general practice were significantly more likely to report making changes to their practice and PDP than doctors working in other settings such as hospitals or clinics specialising in an area of health. Doctors working in general practice were also more likely to positively recommend RPR to colleagues.

²⁰ Years in practice adds to 351 as there is one missing value.

Fewer of the interviewed doctors working in general practice thought the RPR process did not fit them or their practice (one in twenty) than those working in other practice settings (one in six).

	Number of doctors	Have made changes to practice	Have made changes to PDP	Would recommend RPR to colleagues
Working in general practice	205	106 (52%)	106 (52%)	122 (60%)
Not working in general practice	147	54 (37%)	63 (43%)	74 (50%)

Table 16. Influence of the practice setting (Post-RPR survey, n = 352) (Statisticallysignificant differences are in bold)

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 aligned with seeing RPR as a tool for identifying doctors practicing unsafely rather than a tool for ongoing quality improvement.

A number of doctors in hospitals where they are all working together, then they are having regular reviews with each other all the time as they work on the same patients, so it might not be as valuable for them.

The RPR process has been adapted for some medical branches which are not general practice, and where it has not been adapted there is flexibility for the reviewer to ignore certain sections. Some doctors appreciated this level of flexibility but others thought it did not go far enough.

The first reviewer I had, he put lines through some sections of the report and wrote other comments and noted that this section doesn't match this model. So, the forms for people who are a little more rigid in their thinking, the forms need to give them the option for something else.

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

Dr E – Likes idea of RPR but thinks it's more suited for doctors working in isolation

Dr E trained and has worked in New Zealand for more than 20 years. She has completed postgraduate qualifications in her specialty but does not belong to a professional college.

Prior to her current role, Dr E worked in relative isolation and relished the chance to be reviewed by peers and felt it was an important way to continue practising safely. Dr E also thought review 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 fewer 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 E currently works in a large multidisciplinary team surrounded by others in her speciality and believes she is reviewed continuously in her regular working life and RPR would not add anything.

Dr E did not find the RPR visit stressful but her full schedule meant finding time to organise the review was onerous. Dr E's patients had specific characteristics that made gathering patient feedback difficult and time consuming. She did not think the RPR process was appropriate for her 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 E felt her concerns were confirmed after the practice visit as RPR did not identify any areas for further development and she was already aware of the strengths highlighted by the review. Dr E did not create any e-portfolio goals following her review.

Although Dr E believes RPR is good in theory she concluded it does not suit all doctors or practice types.

Insights from Dr E'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 additional review/supervision.

Patient feedback may be more difficult to obtain for doctors in some practice settings. Flexibility in considering ways to obtain feedback may be required, such as reducing the numbers of patients from whom feedback is sought.

6.3 The review process

6.3.1. Doctors' attitudes to reviews and professional development

Doctors' understanding of the purpose of RPR influences their expectations of the programme and their attitudes to feedback:

• 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.

I thought it was a bit ludicrous really, especially as I'm in a non-clinical role, so I can't see any benefit for man or beast. So, it just wasn't appropriate for me.

• **Equity of RPR selection**. Some consider it is unfair vocationally registered doctors are not part of RPR and think all doctors should be reviewed.

I have talked to some people about it who are already part of the college and they said, "why should they be audited, I'm already part of the college" so not everyone would be happy with this. But I told them there is no harm in it. I think it's always good to get a third party look at how you are going.

It should not be targeted at any group, whether rural, older or international doctors.... be it MBChB, College membership exams, or having been grandfathered into NZ Vocational Registration you can't really exempt anyone from benefiting from occasional RPR.

• The cost (time and financial) of RPR compared to the perceived benefit. Doctors either thought their review was a good or poor use of resources, both of their own time and the cost to bpac^{nz}.

It would have cost a lot of money to send this guy to spend four hours with me. We could have done it on the phone. So needless to say, it wasn't a very valuable exercise.

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 may improve a doctor's outlook before they participate.

6.3.2. Aspects of the review

Doctors who learnt new opportunities for development in their report or agreed their reviewer demonstrated the appropriate skills were significantly more likely than those who did not to make changes to their practice, to their PDP, and be more positive about RPR (Table 17).

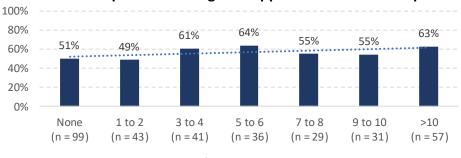
Whether doctors considered the RPR report accurate was associated with whether they made changes and their overall impression of RPR. More doctors who

considered their report was accurate made changes to their practice (53%) than those who did not consider the report to be accurate (24%) (Table 17).

	Have made changes to their practice	Have made changes to their PDP	Would recommend RPR to their colleagues			
Learning new opportunities						
Learnt new opportunities for development (n = 198)	129 (65%)	118 (60%)	145 (73%)			
Learnt no new development opportunities (n = 154)	31 (20%)	51 (33%)	51 (33%)			
Reviewer's skill	Reviewer's skill					
Agree the reviewer had the appropriate skills (n = 286)	148 (52%)	147 (51%)	187 (66%)			
Neutral or disagree the reviewer had the appropriate skills (n = 66)	12 (18%)	22 (33%)	9 (14%)			
Report accuracy						
Agree the report was accurate (n = 258)	137 (53%)	130 (50%)	170 (66%)			
Neutral or disagree the report was accurate (n = 94)	23 (24%)	39 (41%)	26 (28%)			

Table 17. Quality of feedback compared to changes made and overall impression of RPR(Post-RPR survey, n = 352) (Statistically significantly differences in proportions are in bold,Pearson Chi-Square < 0.05)</td>

There was no significant correlation between the number of RPR ratings below seven and learning new opportunities (P =0.079) (Figure 28).



Percent that reported learning new opportunities for development

Number of ratings below seven

Figure 28. Percent of participants who reported learning new opportunities for development by the number of RPR ratings below superior (1-6 out of 9 over 13 RPR categories) (n = 336).

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

Dr F – negative about RPR and made no changes

Dr F has over 30 years' experience and is vocationally registered overseas, although his vocational training is not recognised in New Zealand.

Dr F did not expect to get anything out of RPR and therefore had a somewhat negative attitude. He felt, both before and after his review, that he was a senior doctor with a good record and should not need to be checked. He also considered his collaborative practice environment meant any concerns about competency would be identified. He felt RPR was more suited for isolated doctors.

Dr F found RPR was resource intensive, and organising and participating in it was somewhat *"anxiety inducing"*. He considered the short-term nature of care he provided and low response rates meant patient feedback would not be useful. Dr F also felt embarrassed asking patients to fill in the feedback forms. The doctor felt getting feedback from colleagues would not yield anything that would not come to light without the review.

Dr F considered the reviewer his junior and not experienced in his speciality. He thought the RPR questions were not well suited to his area of practice. Very few patients attended on the day of the review so it was predominantly based on case reviews, which Dr F thought could have been done by phone.

Although Dr F found the practice visit unhelpful, he commented that the reviewer did as good a job as could be done, considering the circumstances and the experience was pleasant and collegial.

Dr F reported not receiving any suggestions about ways to improve. He said that while it was nice to have your practice affirmed with positive feedback, he was already aware of everything raised. There were no new goals created in his e-portfolio following his review.

Insights from Dr F's feedback

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

Reviewer match: There has been an increased focus on matching participants and reviewers since Dr F's review. However, doctors continue to emphasise the need for a reviewer with experience in the same practice area.

Reviewer feedback: Reviewer feedback and suggestions about how to improve their practice are very important to participants.

6.3.3. Variation in response to reviewers

Linking post-RPR and 12-month survey responses from doctors to their reviewers highlights some differences between reviewers. Reviewers at the top of Table 18 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 18. Cells show the percentage of doctors with positive results in each area for each reviewer. Only reviewers who reviewed at least five survey respondents and reviewed a doctor in the last eight months are included in the table. (n values are based only on those who completed the post-RPR survey, doctor n = 193, reviewer n = 12) (bpac^{nz} data matched to post-RPR survey)

Reviewer	Have made changes to practice	Have made changes to PDP	learnt new development opportunities	Visit was a positive experience	Would recommend RPR	Positive about reviewer
1	68%	79%	68%	89%	79%	89%
2	33%	67%	67%	100%	83%	100%
3	39%	30%	52%	87%	65%	91%
4	47%	67%	47%	80%	47%	73%
5	55%	59%	68%	55%	41%	68%
6	38%	63%	50%	63%	56%	69%
7	33%	33%	50%	67%	67%	83%
8	47%	29%	65%	65%	59%	65%
9	36%	27%	50%	77%	45%	91%
10	29%	43%	43%	57%	43%	100%
11	39%	30%	52%	57%	48%	74%
12	18%	29%	47%	53%	24%	53%
Average	40%	46%	55%	71%	55%	80%

The number of reviews completed by a reviewer did not appear to be a factor in differences between reviewers. Differences may result from:

- Non-random allocation of doctors to reviewers. Some reviewers may consistently be allocated more challenging doctors.
- 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 10 made changes to their PDP compared to other reviewers. This may indicate reviewer 10 could put more emphasis on encouraging PDP changes. Higher percentages of doctors reviewed by reviewer 1 had a positive experience and were positive about the skills of the reviewer.

7. Overview

7.1 RPR processes are well established

RPR was introduced in 2013 as a quality improvement process. There have been 744 reviews to the end of July 2017, including 63 doctors who have been reviewed twice. The first years of the review focussed on doctors working in general practice settings and these doctors account for 59% of all reviews.

Information about the demographic profile of reviewed doctors responding to the post-RPR survey shows:

- Most have been in practice for less than 10 years (46%) or between 11 and 30 years (42%) with few (10%) in practice for more than 30 years
- Most trained in New Zealand (35%) or the United Kingdom (24%)
- English was not the first language for approximately a quarter (26%).

7.2 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 RPR report ratings
- Nearly all doctors were rated by their colleagues between four or five (out of highest positive score of five) in all categories
- Nearly all doctors were rated by their patients between four or five (out of highest positive score of five) in all categories.

There were a group of approximately one quarter of reviewed doctors who received 'superior' ratings across all RPR categories. There was a very small group of doctors who received lower RPR ratings across up to 10 categories.

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

An analysis of systematic reviews by Bloom 2005 found changing practice through review and professional development was possible. Many of the reviewed doctors said they had made changes to their practice and their PDPs. While these were selfreported changes, they provide evidence that RPR is achieving its aims for many of the participating doctors.

Importantly, changes were being reported by a higher proportion of doctors with lower RPR ratings than those with consistently 'superior' ratings. Although doctors with higher ratings were slightly less likely to make changes, the primary purpose of RPR is to help maintain and improve the standards of the profession²¹. Even if doctors are not making changes, RPR is likely to be helping to maintain their skills.

7.4 Changes are more likely if they are made close to the time of feedback.

Twelve-months after their review, just under half of the participating doctors continued to report changes in practice. The majority of those who intended to make changes in the post-RPR survey but had not yet done so did not report any changes at 12-months.

At 12-months, learning about new opportunities for development from the RPR process appeared to be closely linked to the likelihood of making changes.

Time series analysis of key outcomes did not show improvement over time. This aspect of the evaluation will continue to be developed as more doctors are reviewed.

7.5 Changes in practice and professional development plans are likely to be improving patient outcomes

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. Small improvements are relatively easy for doctors to make with minimal ongoing support, and may therefore be more likely to be made and maintained compared to more substantive changes

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. The changes doctors described following their RPR aligned with improvements in 'best practice' and suggest improved outcomes for patients.

7.6 The extent RPR leads to changes is influenced by doctor and practice characteristics and aspects of the review process

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

²¹ Council's policy on regular practice review:

https://www.mcnz.org.nz/assets/Policies/Policy-on-regular-practice-review.pdf

A review of thirteen papers found years of practice, age of the physician, gender, race, and practice setting made no difference to the response to an educational intervention (Appendix One). The evaluation of changes following RPR identified a higher proportion of doctors in general practice settings reported making changes and a higher proportion of doctors for whom English was not their first language.

Those doctors who are negative about the review process were less likely to make changes and utilise the opportunity of RPR, whereas those who had a positive experience were more likely to make changes. The ease of organisation, how well the RPR process fitted the individual doctor and how well the practice visit went can influence doctors' experiences of the process and contribute towards their response to their review.

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. The reviewer has a crucial role in influencing the perceived value of RPR and the extent doctors make changes following their review. Systematic reviews by Miller 2010 and Veloski 2006 found changes to practice were more likely when feedback was from a credible source and feedback was likely to be more effective when it was from a supervisor or senior colleague.

Respect for the reviewer is influenced by the match between the reviewer's experience and the reviewed doctor's practice setting. 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 characteristics of their practice into account and why the reviewer is qualified to undertake the review.

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.

 Identifying opportunities for development and ensuring that feedback is given in an effective manner. The content and delivery of feedback has been shown to influence whether changes are made to practice (Pelgrim 2013 and Ivers 2012). The Ivers 2012 review found feedback may be more effective when both verbal and written feedback are provided, and when it includes measurable targets and a plan to achieve them.

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). 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.

Doctors who had been reviewed a second time were very positive when the reviewers built on the feedback from their first review and discussed changes the doctor had made.

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.

• Capturing development opportunities in professional development plans -Feedback should be incorporated into the learning process by relating it to learning goals and plans for improvement (Archer, 2010). Explaining how feedback can be incorporated into professional development plans is an important role for reviewers and CRP.

7.7 The reviewer perspective

Reviewers were generally positive about RPR. Reviewers were confident their feedback could enable changes in practice that would improve care for patients. However, they were uncertain if changes took place because they did not have follow-up contact with the doctors they reviewed.

Some reviewers liked reviewing doctors outside of their speciality and considered they could review professionalism and standards of practice without specific content knowledge. However for other reviewers, reviewing a doctor in a different field posed a challenge when they did not have enough knowledge to fully understand the reviewed doctor's role and clinical competence.

Giving feedback in any context is a skilled role. Developing the reviewers' ability to provide feedback on opportunities to develop the reviewed doctor's practice has been a focus of bpac^{nz} investment in training sessions. Continued training and support 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 somewhat 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.

7.8 Strengthening RPR

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

- Providing more clarity about the purpose of the review. There are opportunities to influence doctors' personal views about RPR through the communication sent to doctors selected to participate in RPR. For example, emphasising RPR's focus on quality improvement may improve doctors' expectations of RPR before they participate and reduce their anxiety.
- Considering the potential to strengthen multi-source feedback. Some doctors described not being sure who they could or should ask to provide colleague feedback. Such issues may reflect a wider problem of lack of professional contact. However, at a practical level it may be worth considering changing the instructions in the 'who should fill these in' section to provide clearer guidance for reviewed doctors.

Although it provided some doctors with reassurance, the uniformly positive patient feedback did not provide an effective mechanism to identify opportunities for quality improvement. There may be potential to review the patient feedback questionnaire to improve the extent it identifies opportunities for development.

- Reassuring doctors about the reviewer's role and expertise. Some doctors, particularly in atypical practices, were concerned about how RPR would work for their practice. The skill of the reviewer and the extent the reviewed doctor respects the reviewer's experience and knowledge of their practice type are very influential in whether the doctor makes changes. The challenge of finding reviewers for the small number of more unusual practice settings is ongoing. The reviewer's attitudes and training are important in overcoming the reviewed doctor's reservations.
- Providing adequate feedback to doctors who rate very highly. Learning about new opportunities for development contributes to satisfaction with the review process. As approximately one-quarter of doctors received 'superior' RPR ratings across all categories it may be difficult to provide new opportunities for development for these doctors. While some welcomed confirmation they were providing a high standard of practice, others felt the process was not worthwhile. Exploring options for information to include for these doctors would strengthen the value of the RPR process. Options to be explored might include generic information about how to improve self-audit processes, ways to explore new opportunities for innovative practice and/or linkages to ways these doctors could mentor and support their colleagues.

- Following-up after the review. Some reviewers were positive about having some follow-up with the doctors they reviewed, potentially in the form of a phone call to support practice changes and hear about the result of their work.
- Involving the CRP. CRPs give the doctors feedback on a more regular basis than RPR occurs. The CRP was the person with whom reviewed doctors most commonly discussed their professional development plans. CRPs could be further encouraged to concentrate on addressing feedback from the RPR report and discussing what type of professional development could best address the feedback. This could help to reaffirm/consolidate the feedback and provide encouragement from multiple sources. However, comments from RPR doctors and their CRPs highlighted variation in the quality of the collegial relationships. It is important to consider the extra time commitment if more RPR follow-up is expected whether from CRPs or reviewers.
- Considering the timing between reviews for doctors. There is merit given the costs of the practice visit in considering differential timing of subsequent reviews based on the proportions of superior and consistently low RPR ratings. Attitudes may become more negative when highly rated doctors who were not provided with suggestions for improvement are invited to complete a second review in three years. In contrast, tracking the progress of the small proportion who had consistently low ratings across all domains has the potential to improve practice and patient outcomes.

7.9 Evaluation next steps

The evaluation will continue to collect data from RPR participants as they receive their reports and 12-months after they receive their reports. Additional completions will facilitate further time-series analysis. More doctors will complete their second reviews, which will allow comparison between results three years apart.

Appendix One: Evidence Summary

For a more in-depth evidence summary please see the Council's publication of: Recertification – evidence to support change. From the Council website: <u>https://www.mcnz.org.nz/assets/News-and-Publications/Recertification-Literature-Review-evidence-for-change.pdf</u>.

Area	Evidence
CME's impact on performance	• Widely used CME delivery methods such as conferences have little direct impact on improving professional practice. (Davis 1995)
	• 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, Cervero 2015, O'Brian 2007, Davis et al., 1995, Johnson and May 2015, Mostofian et al., 2015), but effectiveness is linked to baseline performance and how feedback is delivered.
	• The established adult education principles that are most likely to lead to behaviour change in GPs' practices, are offering multifaceted, multiprofessional and interactive learning opportunities (Kadlec et al, 2015).
	• 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).
	 Formal continuing medical education (CME) and distributing educational materials do not effectively change primary care providers' behaviors. (Sohn 2004).
Outreach and appraisal	• 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).
	 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).
	 Audit and feedback, when optimally-designed and used in the right context, can play an important role in improving professional practice. (Ivers 2012)

Multi-source feedback	• 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).
Source of feedback	 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). 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).
Linking learnings to goals	• 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).
Safe environment for feedback	 The development of an external validation system conducted by credible, informal peer review in a safe environment is essential. Clinicians must be able to access practice and patient data without concerns about accuracy, timeliness, confidentiality, attribution, or unintended consequences. (Bellande 2010)
Types of feedback	 Interactive techniques (audit/feedback, academic detailing/outreach, and reminders) are the most effective at simultaneously changing physician care and patient outcomes. (Bloom 2005) The quality of CPD is inextricably linked to any improvements in the quality of the professional practices required for service delivery. There needs to be a move away from tick boxes to the in-depth identification of learning needs and how these can be met both within and external to the work place, with learning being adequately enabled and assessed in all locations. Hays 2002 concluded that 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. (Hays 2002)
Limited evidence on changing clinical outcomes	 Most published quality improvement curricula apply sound adult learning principles and demonstrate improvement in learners' knowledge or confidence to perform quality improvement. Additional studies are needed to determine whether educational methods have meaningful clinical benefits. (Boonyasai 2007)

	• There are few published articles exploring workplace based assessments impact on doctors' education and performance. (Miller 2010)
The reviewer	• Reviewers/Raters' information processing seems to be affected by differences in rater expertise (Govaerts 2012).
Impact of remedial education	• Lillis 2014 found that Seventy-five percent of doctors who entered remedial education were considered to be practicing at an acceptable standard at the end of remediation. This accords well with international data. A small number of doctors appear to be unresponsive to remediation. (Lillis 2014)
List of General Physician Competencies	 The Association of American Medical Colleges made a list of general physician competencies. It consists of 58 competencies in eight domains (Patient Care = 11; Practice-Based Learning and Improvement = 10; ICS = 7; Knowledge for Practice, Professionalism, and Systems-Based Practice = 6 each; Interprofessional Collaboration = 4; Personal and Professional Development = 8) (Englander 2013).
Practice management has an impact on care delivered	• Crossland et al. 2016 and 2014 discuss how the management and environment of a practice can impact on the care delivered, especially in terms of its IT systems and internal quality improvement programmes.

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Appendix Two: Logic Model and Evaluation Framework

Long-term outcomes

- Patients have confidence that they will be provided with effective clinical care
- RPR improves and assures the standards of New Zealand doctors

Medium-term outcomes

- Use of RPR becomes more widespread amongst medical professional organisations
- Changes made by doctors contribute to improved patient outcomes

Short-term outcomes

- Doctors select PDP activities that address identified learning areas and align with 'best practice'
- Participating doctors use information in RPR reports to inform PDP planning
- RPR is effective in identifying aspects of practice that can be improved
- Doctors recognise that RPR is a formative process and assess involvement as supportive and collegial
- Participating doctors engage with RPR



Outputs

- A continuous improvement process is in place for RPR
- General scope of practice doctors participate in RPR every three years
- Doctors maintain a CPD portfolio which includes a meaningful PDP



Activities (inputs)

- · Processes are put in place to support doctors to develop CPD and to make positive changes
- Processes are put in place for remedial action if required
- RPR is implemented with general scope of practice doctors
- RPR is developed and pilot tested
- Reviewers are appointed and trained
- A RPR provider is commissioned

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

Appendix Three: RPR ratings summary

Doctors who participate in a RPR are numerically rated in thirteen areas on a scale from one to nine. One to three is unsatisfactory, four to six is satisfactory and seven to nine is superior. The areas rated are shown below

Domain	Areas rated
Records/ requirements	 Ability to competently navigate and use PMS Notes facilitate continuity of care Records show appropriate standard of care Record is clear, accurate, has required information
Doctor/patient relationship	 Engaging the patient Responding to the patient Listening to patient
Clinical reasoning	 Clinical reasoning for their management Clinical reasoning for investigation Clinical reasoning for diagnosis
Clinical practice	Clinical practice managementClinical practice historyClinical practice examination

Appendix Four: 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 exp	eriences 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 multi-source 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	 bpac^{nz} data – e-portfolio completion rates at anniversary (a potential insensitive measure) Interviews with doctors 		

	 Doctors report that the RPR helps them identify areas for improvement 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 o	f 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	• Reviewers report the RPR tools are effective – 90% of reviewers consider the tools provide an accurate or very accurate	 Review of RPR data for completeness Interviews with reviewers

quality of the doctors	representation of doctors they review	• Online survey of reviewers		
they review? 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 	 Interviewers 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' expen	iences 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