

EXECUTIVE SUMMARY

This report prepared by Harry Cummings and Associates Inc. (HCA) for the Ontario College of Pharmacists (OCP) describes the Impacts of the Practice Review Program. It is the first of a number of evaluations that the OCP is commissioning of its Quality Assurance Program (QAP). These evaluations are being done after more than 5 years of formal implementation of the program as part of the requirements of the Regulated Health Protections Act. The surveys carried out for this evaluation were done in the fall of 2003 and this report was prepared in the period from January to April of 2004.

With the introduction of the Regulated Health Professions Act (RHPA) in 1993, the OCP began developing a Quality Assurance Program, which is designed to help ensure the competency of all members. The QAP for OCP now consists of the following elements: Professional Learning Development Activities, Learning Portfolio, Self Assessment Survey, Practice Review and a Peer Review Weekend. The Quality Assurance Regulations for OCP also refer to two other QA components: a two-part register for pharmacists and, remediation for behaviour and remarks of a sexual nature.

The major work reported on here included a telephone survey of 136 pharmacists who completed the Practice Review (PR) in 2002, 67 who completed the PR in 1997/98 and 322 who completed the Self Assessment (SA) in 2002 but did not complete the PR. In the research design, the SA group serves as a comparison group to the two PR groups. The choice of the 97/98 PR group allowed us to look at impacts after 5 years and the PR 2002 group allowed us to see recent impacts. The report builds on initial work done by HCA in focus groups and interviews with pharmacists on the Impacts of the Practice Review and reported on elsewhere (HCA, 2003).

The results show that the Quality Assurance Program in general and the PR in particular are having a positive impact.

The questionnaires were designed to examine the impact of the PR:

- 1) knowledge acquisition approaches of pharmacists;
- 2) attitude of pharmacists towards patients;
- 3) the practise of pharmacists; and
- 4) Quality Assurance as a whole.

Open-ended questions allowed pharmacists to add comments that were coded and counted by category.

It should be noted that the area of changes in practice is the one most closely associated with the main question of impacts of the PR.

Section 1: Practice Review 2002

Some key results for the pharmacists who took the PR in 2002 are as follows:

Knowledge Improvement Activities (KIA) PR 2002

Pharmacists:

- were encouraged to reflect on their practice focus (72.1%)¹
- were encouraged to believe in lifelong learning (68.4%)
- identified gaps in their general knowledge (65.7%)
- made a conscious effort to update their learning portfolio (65.0%)
- increased attendance at continuing education activities (32.8%)

In the area of KIA, the PR 2002 group was more likely to agree than disagree² with 7 out of 15 statements in the questionnaire. In the area of KIA, the PR 2002 group had a low level of agreement with the following five statements:

- have accessed more in-services by drug representatives (26.7%)
- pursued more certification in areas of interest through short courses
- took university correspondence courses or home study programs (22.6%)
- have more interest in functioning as a preceptor (21.2%)
- have attended disease state clinics (19.1%)
- participated in more OPA Committees (3.0%)

Attitude and Approach to Patients PR 2002

Pharmacists agreed that they:

- increased their awareness of the importance of communicating with patients (81.6%)
- validated their pharmacy practice (70.6%)
- improved their overall communication with patients (63.2%)
- increased their communication and interaction with patients through follow-up calls (45.9%)

In the area of attitude and approach to patients, the PR2002 participants agreed more than they disagreed with all 4 statements on the questionnaire. There was a low level of agreement with the following negative statement:

- The PR has decreased my self-confidence as a pharmacist (11.0%)

Changes in Pharmacy Practice PR 2002

Pharmacists agreed that they:

- identified areas of strength in their practice (74.3%)

¹ The percentages refer to those pharmacists who agreed or strongly agreed with the statements unless otherwise indicated.

² Disagree refers to pharmacists who disagree or strongly disagree with the statement.

- reported the PR helped to identify weaknesses (67.4%)
- were encouraged to seek ways to improve patient care (64.0%)
- reported that the existence of the PR motivated them to improve their practice (57.6%)
- increased communication with health care providers (34.6%)

In the area of changes in practice, pharmacists who took the PR2002 agreed more than they disagreed with 6 out of 10 statements. The four statements where there was a low level of agreement were:

- increased my communication with health care providers (34.6%)
- have increased the use of computer technology in my practice (33.8%)
- have dedicated my time and efforts to improving the practice of others through supervisory positions and promoting staff training (30.9%)
- have experienced increased interaction with doctors (28.7%)

Finally, pharmacists who took the PR in 2002 were asked to comment on their perceptions of the QAP as a whole.

Quality Assurance as a Whole PR2002

Pharmacists agreed that they:

- believe quality assurance as a whole is positive for the profession (91.9%)
- believe QAP contributed to improved communication skills for pharmacists (78.5%)
- believe that the QAP contributes to pharmacists being more responsible to the public (77.8%)

Pharmacists strongly agreed with all statements in this area of the questionnaire.

A number of the key outcome variables in each of the sections of the questionnaire were correlated with selected variables reflecting the profile/characteristics of pharmacists who had answered the questionnaire. The profile variables selected included age, years of practice, type of pharmacy practice (community/retail or hospital long-term care), place of education and type of position (staff or manager/owner/director) in pharmacy. The correlations were done initially using Pearson's correlation coefficient and subsequently using stepwise multiple regressions.

In the PR 2002 group, it was found that pharmacists educated outside of Canada were more likely than others to feel that the PR had influenced them to attend more workshops, conferences and seminars. In the section of questions on attitude/approach towards patients, pharmacists who work in retail/community facilities were more likely than others to feel the PR improved their approach to patients. Similarly, in the next section of the questionnaire on changes in practice, we found that pharmacists who worked in retail/community pharmacies were more likely to have identified strengths in their practice as a result of the PR.

When all profile variables were used together in multiple regressions to measure their influence on outcomes we found that in the KIA, country of graduation was the only useful explanatory profile variable, with internationally trained specialists experiencing a greater

impact on their workshop and seminar activities as a result of the PR. Country of graduation also proved to be the only significant explanatory variable influencing overall communication with patients

A variety of qualitative statements were also given to HCA interviewers during the survey. These have been recorded and analyzed in the report. They show that many of the PR2002 group who indicated that the PR had little influence, said this because they were already doing good things and did not need the PR to remind them. Many of the negative comments made related to the stress caused by the intensive daylong exam. It was suggested that waiting for the exam was the worst part of the PR. There were also critical comments about exam content and the examination process. Open positive support for the PR came in comments about the importance of QA and continuing improvement in the pharmacy profession. People also referred to the changes in practice and communications with patients and the learning that had occurred as a result of the PR. There was balance between the negative and positive qualitative comments in most sections, except for the comments on changes in practice as a result of the PR, where positive statements outweighed negative six to one.

In summary, for the PR 2002 group the PR is a positive experience. Quantitative scaled responses show this and the positive comments provided (balanced with negative) also reflects this. Community/retail and internationally trained pharmacists felt a greater impact from the PR than others. The PR 2002 group also felt very positive about QA as a whole.

Section 2: Practice Review 1997/98

Some key results for the pharmacists who took the PR in 1997/98 are as follows:

Knowledge Improvement Activities (KIA) PR 1997/98

Pharmacists agreed that:

- they have realized that lifelong learning is important (74.7%)
- identified gaps in their general knowledge (62.7%)
- made a conscious effort to update their learning portfolio (67.2%)
- the PR encouraged me to apply my knowledge to patient practice (55.2%)
- they increased attendance at continuing education activities (35.8%)

In the area of KIA, the PR97/98 group was more likely to agree than disagree with 8 out of 11 statements in the questionnaire. There were low levels of agreement with respect to:

- pursuing certification in areas of special interest (34.3%)
- attending more workshops (31.4%)
- the role of PR in promoting increased Ontario Pharmacy Association activity (6.6%)

Attitude and Approach to Patients PR 1997/98

Pharmacists agreed that they:

- validated their practice as a result of the PR (71.7%)
- improved their overall communication approach to patients (53.7%)

- treat the patient as a whole, not as a set of symptoms (50.7%)

In the area of attitude and approach to patients, the PR 1997/98 participants agreed more than they disagreed with 4 statements on the questionnaire. There was a relatively low level of agreement with the following negative statement:

- The Practice Review has decreased my self-confidence as a pharmacist (6.0%)

Changes in Pharmacy Practice PR 1997/98

Pharmacists agreed that they:

- identified areas requiring improvement in my practice (76.1%)
- identified weaknesses and made changes to accommodate these issues (70.1%)
- identified areas of strength in my practice (68.6%)
- are more likely to use their learning portfolio to keep track of continuing education activities (58.2%)
- were encouraged to seek ways to improve patient care (55.2%)

In the area of changes in practice, pharmacists who took the PR97/98 agreed more than they disagreed with all 8 statements.

It should be noted that the area of changes in practice is the one most closely associated with the main question of impact of the PR.

Finally, pharmacists who took the PR in 1997/98 were asked to comment on their perceptions of the QAP as a whole.

Quality Assurance as a Whole PR 1997/98

Pharmacists agreed that they:

- believe quality assurance as a whole is positive for the profession (94.1%)
- believe that the QAP contributes to pharmacists being more responsible to the public (88.1%)
- believe QAP contributed to improved communication skills for pharmacists (83.6%)

Pharmacists strongly agreed with all statements in this area of the questionnaire.

A number of the key outcome variables in each of the sections of the questionnaire were correlated with selected variables reflecting the profile/characteristics of pharmacists who had answered the questionnaire. The profile variables included age, years of practice, type of pharmacy practice (retail, institutional) and place of education (Canadian trained, other) and position in pharmacy (staff, manager/owner). The correlations were done initially using Pearson's correlation coefficient and subsequently using stepwise multiple regressions.

In the PR 1997/98 group, it was found that pharmacists who were older were more likely to identify gaps in their knowledge as a part of the PR compared to pharmacists who are younger. Similarly, pharmacists who worked in retail were more likely to be encouraged to apply their knowledge to their practice as a result of the PR compared to other pharmacists

outside of retail. In the section of questions on attitude/approach toward patients, two profile variables (place of graduation and type of work environment) were correlated with the PR's influence on the overall communication approach to patients. Pharmacists who graduated outside of Canada and pharmacists who work in community/retail pharmacies were more likely than others to feel that the PR improved their overall approach to patients.

Similarly, in the next section of the questionnaire on changes in practice, we found two statistically significant correlations.

“As a result of the PR, I have identified areas of strength in my practice.” This statement correlated significantly with the country of graduation.

- Pharmacists who graduated with a degree in pharmacy from outside of Canada agree more with this statement ($r = .340$; significance = .005)

“As a result of the PR, I have identified areas requiring improvement in my practice.” This statement correlated significantly with the country of graduation and the years in pharmacy practice.

- Pharmacists who graduated with a degree in pharmacy from outside of Canada agree more with this statement ($r = .299$; significance = .015;)
- Pharmacists who have practiced for a greater period of time agree more with this statement ($r = -.243$; significance = .047)

When all profile variables were used together in multiple regressions to measure their influence on outcomes, a number of profile variables emerged as key. Type of practice was significant and pharmacists who worked in community retail settings were more likely to change their practice than others. This same explanatory relationship emerged with respect to improving the overall communication approach with patients. Finally, two changes in practice outcomes had one common significant independent variable influencing them in the regression model. Changes identified within the statements, “I identified strengths in my practice” and, “I identified areas requiring improvements in my practice” were explained by one dominant independent variable namely internationally trained pharmacists.

A variety of qualitative statements were also given to HCA interviewers during the survey. These have been recorded and analyzed in the report.

In the KIA area, general comments suggested largely positive support for the PR because they reinforced positive things pharmacists were already doing. There were no comments in the attitude and approach to patients, and changes in practice section. In the QA as a whole section, negative comments were in the minority but suggested that not all the change could be attributed to QA. In addition people often referred to the feeling of fear and intimidation surrounding the PR. Positively-coded comments referred to the whole process as having a positive influence and the importance of continuous improvement in the profession. There were also positive comments on the overall validating role of the PR in pharmacy practice. Finally, some of the respondents did not feel the PR exam was realistic and suggested change.

The strongest statements of support for PR came in the changes in practise session. This group (97/98 PR) was more likely to agree with statements on changes in practice on average than the PR2002 group or the SA2002 group. This group also had very strong support for PR as a whole compared to the other surveyed groups

Section 3: Self Assessment 2002

Some key results for the pharmacists who had not taken the PR but had done the Self Assessment (SA) survey in 2002 are as follows: Once they were selected to do the SA they became part of the pool that could have been selected at random for the PR. However, this group was not selected.

This group was mailed a questionnaire while the PR groups were interviewed via telephone. In total, we analyzed 322 mailed questionnaires, a much larger sample than in the case of the PR. The mailed questionnaire was longer than the phone questionnaire. The pharmacists were asked to indicate the influence of the QA Program. This acts as a comparison group for the impact of the QAP without the PR.

Knowledge Improvement Activities (KIA) SA2002

Pharmacists agreed that they:

- made a conscious effort to update their learning portfolio (81.9%)
- had researched and read from various source including pharmaceutical journals (77.9%)
- increased attendance at continuing education activities (77.9%)
- identified gaps in their general knowledge (76.5%)
- had identified areas of practice that had been neglected (69.7%)

In the area of KIA, the SA2002 group was more likely to agree than disagree with 12 out of 19 statements in the questionnaire. The areas of disagreement were strongest in respect to the role of SA in promoting more certification, attending more disease state clinics, using palm pilots etc.

Attitude and Approach to Patients SA2002

Pharmacists agreed that they:

- improved their general awareness of the importance of communicating with patients increased (69.0%)
- improved their overall communication approach to patients (68.0%)
- increased communication and interaction with patients (64.6%)

In the area of attitude and approach to patients, the SA2002 participants agreed more than they disagreed with all 6 statements on the questionnaire.

Changes in Pharmacy Practice SA2002

Pharmacists agreed that they:

- developed a priority for life long learning (82.8%)
- identified areas requiring improvement in their practice (79.6%)

- identified areas of strength in their practice (77.1%)

In the area of changes in practice, pharmacists who took the SA2002 agreed more than they disagreed with all 16 of 17 statements.

It should be noted that the area of changes in practice is the one most closely associated with the main question of impact of the QAP.

Finally, pharmacists who took the SA in 2002 were asked to comment on their perceptions of the QAP as a whole.

Quality Assurance as a Whole SA2002

Pharmacists agreed that they:

- believe quality assurance as a whole is positive for the profession (82.2%)
- believe that the QAP contributes to pharmacists being more responsible to the public (68.8%)
- believe QAP contributes to improved communication skills for pharmacists (67.5%)

Pharmacists strongly agreed with all statements in this area of the questionnaire.

Influences of the PR: SA 2002

Even though this group did not take the PR they were asked if it influenced them. In summary it had, as it motivated them to update their learning portfolio (80.9%), identify areas requiring development in their practice (78.9%), and identify areas to focus their professional development (70.8%).

A number of the key outcome variables in each of the sections of the questionnaire were correlated with selected variables reflecting the profile/characteristics of pharmacists who had answered the questionnaire. The selected profile variables included age, years of practice, type of pharmacy practice (community/retail or hospital/long-term care), place of education (Canadian trained, other) and position in pharmacy (staff pharmacist or director/manager/owner). The correlations were done initially using Pearson's correlation coefficient and, subsequently, using stepwise multiple regressions. Since level of significance is strongly influenced by sample size, and this was a larger group, there is more statistical significance.

In the SA2002 group, the following profile variables were significant:

- It was found that age was a significant factor with older pharmacists benefiting more from QA.
- Years of practice had a similar influence.
- Pharmacists educated outside of Canada experience more impact than others.
- Respondents working in community/retail pharmacies experienced more impact
- Owners, directors, managers experienced more influence than others

When all these profile variables were combined in a multiple regression, the most significant independent variable influencing outcomes was age with older pharmacists and they were more likely to agree with the QAP. Country of graduation played a secondary role with internationally trained respondents experiencing more impact. In the areas of communications with patients and changes in practice, community/retail practice pharmacists also were more impacted by the QAP than hospital/long term care pharmacists.

A variety of qualitative statements were also written. Many comments suggested there was little change as a result of the QAP because people already had a high quality of practice. In addition, many people noted that the profession was changing and pushing them to change independently of the College's influence. Negative comments related to the stress caused by the QAP and the PR. Positive comments often referred to the support for pharmacists provided by the QAP. General comments suggested largely positive support for the PR because they reinforced positive activities that pharmacists were already doing. In the QA as a whole section, negative comments were in the minority but suggested that not all the change could be attributed to QA. In addition people often referred to the feeling of fear/intimidation surrounding the PR. Positive comments referred to the whole process as being positive and the importance of continuous improvement in the profession. There were also positive comments on the overall validating role of the PR in pharmacy practice. Finally some of the respondents did not feel the PR exam was realistic and suggested change.

Summary of SA2002

This group experienced a strong influence from the QAP as a whole without doing the PR. They made changes as a result of QA in general and because of their knowledge of PR as a possible future activity for them.

Overall Summary

In summary, the PR had the greatest impact on the PR97/98 group. They were quite positive about practice changes influenced by the PR. Similar results were gathered in the focus group with the PR97/98 group (HCA, 2003). Several profile characteristics were also excellent explanatory variables for the impacts identified. Internationally trained and community based retail pharmacists experienced a greater impact than others from the PR. In general the impacts reported are significantly greater than the impacts reported on the PR2002 group. It is possible that the timing of this evaluation (5 years after the PR exam) allowed people to become more accepting of PR and to experience more impact.

However, the greatest impact of the PR seems to be the strong support for Quality Assurance as a whole that emerges from groups that have taken the PR. The two PR groups had 10 percentage points of additional support for QAP as a whole when compared to the SA2002 group.

There is also strong support for QA among the SA2002 group. They seem to be positively impacted by the QAP and support it. They are also very aware of PR and have made changes in response to it.