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Final Report

Summative Evaluation of the Regional Partnerships Program (RPP)

**Canadian Institutes of Health
Research**

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EVALUATION

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Executive Summary

The Regional Partnerships Program (RPP) was initiated in 1997-98 by the Medical Research Council of Canada (MRC) as a response to a decline in funding to medical researchers in four provinces, all of which had medical schools and relatively small populations. In 1999-2000, RPP, now about to be a CIHR program, expanded its focus to include health research, and added two other provinces, both without medical schools and with small populations. The recommendation of this evaluation is that a renewed RPP be authorized. The need to support Advisory Committees to develop research strengths for their jurisdictions remains relevant and not yet satisfied. There are no other CIHR programs of significance that address this need.

RPP was designed as a response to declining funding for health researchers in Saskatchewan (SK), Nova Scotia (NS), Newfoundland (NL) and Manitoba (MN) from the Medical Research Council of Canada. This report addresses the question of whether the Regional Partnerships Program has been successful. As such, the focus is on the program as a whole. Attention is not given in this report to individual regions or provinces with one exception: the central question of the difference between the receipt within a province of CIHR research funds and the province's share of Canada's population (referred to as the "gap" analysis). Extensive Working Papers contain the detailed findings from the evaluation.

In each of the six provinces with RPP Advisory Committees, the gap between the actual amount of CIHR funds obtained and the amount that would be expected if CIHR funds were allocated solely on the basis of population size was examined. A criterion had not been established by which to determine how much of a gap was needed in order to conclude that the difference between actual and expectation was of a magnitude that required special effort such as provided by RPP. If the criterion was 20%, then two of the six provinces (MN and NS) were just at the criterion threshold in 2003. Comparison of the slope of the two lines for actual and expected funding leads to the conclusion that RPP has not yet resulted in a removal of the gap.

As of 1999, the slope of the actuals line takes a noticeable turn upward in all six RPP provinces although this is rather slight for NB. The improvement in the slope of the actuals is attributed to some combination of the influence of RPP and the increased funding levels that became available with the establishment of CIHR. Other evidence, such as post-RPP success rate, project conversion to non-RPP CIHR funding and perceptions within the provinces, suggests that the mechanisms put in place by RPP have, in general, had noticeable success and that progress is being achieved.

Every grant or award funded within RPP was reviewed in terms of annual contributions by CIHR and annual payments by partners. This showed that the RPP allotments were being used by the Advisory Committees. By 2001-2002, the usage of the RPP allotments had begun to approach the maximum available - \$4,400,000 per year – and the usage has stayed close to that level. In almost one-quarter of the projects, partners provided funds in excess of the CIHR contribution. There were a negligible number of cases in which partner funding did not at least match the CIHR contribution.

Fundamental to the theory of RPP is that researchers will move from RPP funding to full CIHR funding. The RPP “graduates” have done very well. The post-RPP success rate for researchers is 72%. Although this appears to be very high, it is not possible to know if this is an unusually high success rate for this success rate spans several competitions. Equally positive, at least 41% of the RPP projects were converted to non-RPP CIHR funding for continued research in the same substantive subject area studied in the RPP project.

In response to survey questions, the Principal Investigators (PIs) revealed that RPP has almost no influence in attracting PIs to a province and only a small influence in retaining PIs in a province. This finding is in contrast to the view of many Advisory Committee members who stated the importance of RPP as a recruitment factor. The majority of RPP researchers are not recent graduates. For 96%, at least five years have passed since their highest degree was obtained. The PIs obtaining RPP projects are, in general, also able to attract other sources of funding.

As a result of RPP funding, many of the PIs were engaging people for their RPP project at more than one level: about 77% engaged technicians, 60% engaged Master’s level students and 50% engaged PhD students. Most (89%) of these PIs said that their RPP involvement led to other research opportunities or benefits and they credited their RPP projects with having a primary influence on scientific presentations (96%), publications (84%) and commercialization opportunities (17%). About half (45%) reported that the RPP grant/award did not affect or change their research path or career plans in any important way.

In summary, RPP is the sole CIHR program focused on the development of health research capacity in lower resourced regions. It has not been in place long enough for substantive development to have occurred and may, by itself, be insufficient to the task. It is very positively rated by the participant researchers, Advisory Committee members, and other stakeholders. This suggests that RPP requires more time to prove itself. Using the experience to date, a more rigorously designed program is now possible.

A renewed program could benefit from a number of significant program design considerations. These include: program partnership; performance measurement; and allotment levels. Consideration of each area is offered in Annex B: Program Design Suggestions at the end of this report. Suggestions for policy direction in a renewed program include:

- CIHR should continue to view a renewed RPP as a partnership program.
- Local Chairs should be asked to establish a consolidated partner fund under the management of the Advisory Committee.
- CIHR should actively support the Chairs of local Advisory Committees.
- A program of performance measurement should be designed at the start of a renewed program and measures should be collected on a cyclic basis to be consolidated at least once a year and examined as trend lines. The reports of the performance measurement should be shared.
- CIHR should consider increasing the allotment for a renewed Regional Partnerships Program.

Preface

The context within which the Regional Partnerships Program was designed had two elements that deserve mention. One is a precedent program and the other is an underlying belief in the relationship between medical research and medical services.

In the latter part of the 1980's, the Medical Research Council implemented a program of Development Grants initially directed to "under-developed" colleges of medicine. This program, which had directed noticeable levels of funds to the medical colleges in four provinces (Newfoundland and Labrador, Nova Scotia, Manitoba and Saskatchewan), ended in the early part of the 1990's. The foundation for the Regional Partnerships Program in 1997 is constructed in the following text by James Wood¹ speaking to the termination of the program of Development Grants.

"The Medical Research Council's long standing policy of providing support for the development of research in "have not" colleges has been discarded, initially by opening up the competition to all colleges, and more recently by the total abolishment of the program. The deleterious effect of this action on the efforts of the "have not" colleges to develop and maintain viable and dynamic research programs cannot be over-emphasized. This situation raises the wider issue as to whether MRC, as a Federal Government Agency, has some social responsibility to ensure that a viable health research base is maintained in the different regions of the country.

Every effort should therefore be made by the involved constituencies to have the Developmental Research program reinstated for the "have not" colleges. Such a reinstated program should have more stringent regulations and a more focused objective than previously, and could well have participation by the appropriate provincial government."

The other context to recognise is the belief that the presence of medical researchers in a region has a direct and positive impact on the quality of medical services available to the population of the region. This belief, extant at the time of the Medical Research Council, has been extended to health research and now serves as an underlying rationale for the Regional Partnerships Program of the Canadian Institutes of Health Research. Given this belief, it follows that some minimal level of funding for health research should be maintained.

One other prefatory concept is appropriate for it underlies many of the arguments for and against the Regional Partnerships Program. The question may be asked: "What is a region?" The Program itself is not prescriptive; it does not define a region. It does recognise that provinces should be involved in such definition and some would suggest that a region is expected to be a province. However, the Program was not established as a partnership with provinces but as a partnership with Advisory Committees initially

¹ James D. Wood, Health Research Funding in Colleges of Medicine Located in provinces with Relatively Small Populations. (undated – either 1994 or 1995). Page 18

linked to medical schools and then expanded to centres of health research. The issue is not moot for there are many more centres of health research (including medical schools) now in the early stages of their development than was the case in 1996. Could Northern Ontario, the Coquitlam Region of British Columbia or Iqaluit, Nunavut be considered to be regions? And how many regions might be recognised within a province if the understanding of region is other than province? These remarks are offered as context. The remainder of the report focuses on the evidence relevant to an evaluation of the Regional Partnerships Program in its current form.

Background

RPP was designed as a response to a decline in funding from the Medical Research Council of Canada (MRC) to health researchers in Saskatchewan (SK), Nova Scotia (NS), Newfoundland (NL) and Manitoba (MN).² These four provinces, all with at least one medical school, were recognized as receiving smaller proportions of MRC funding, relative to their population bases, through the open competition of MRC funding programs.

The Regional Partnerships Program (RPP) was initiated in 1995-1996.³ The first applications to MRC competitions were submitted for the September 1996 deadline and RPP funding began in the 1997-1998 fiscal year. Not all of the four provinces invited to participate during the initial two years of this partnership program accepted the invitation as evidenced by the decision of Saskatchewan not to accept the initial program terms.⁴ The program in its current form began in 1999-2000. At that point, Saskatchewan joined the program.⁵ The program expanded, in June 1999, to include the provinces of New Brunswick (NB) and Prince Edward Island (PEI), neither of which has a medical school but both of which have research capacity in some of the four pillars of health research – Biomedical, Clinical, Health systems and services, and Population and public health. The expansion from medical to health research was coincident with the development of the Canadian Institutes of Health Research (CIHR).⁶

Under the RPP, research funding and personnel support applications that are judged to be of high scientific merit through peer review but are below the funding capacity of CIHR's base budget in CIHR regular competitions, are eligible to receive funding if there is a partner to co-fund the proposal. In its original form (1997-98 and 1998-99), the ratio of co-funding was one MRC dollar to two partner dollars with an annual maximum of \$500,000 in MRC co-funding for each institution. Given the additional resources made available for health research in the 1999 federal budget under the Canadian Institutes of Health Research Initiative, MRC decided at its March 1999 Council meeting to enhance the RPP by increasing the annual maximum of MRC co-funding to \$1M for each of the original four provinces (Manitoba, Newfoundland, Nova Scotia and Saskatchewan) and

² James D. Wood, Health Research Funding in Colleges of Medicine Located in provinces with Relatively Small Populations. (undated – either 1994 or 1995). James D. Wood, Department of Biochemistry, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0

³ Letter of August 11, 1995 from Dr. Henry Friesen announcing the new MRC Regional Partnerships Program.

⁴ Program file notes. Report of the Mid-Term Evaluation of the Sask-CIHR RPP, December 2002

⁵ Saskatchewan was the only province to enter into an agreement with CIHR for participation in this program.

⁶ *The CIHR Act* came into force in June, 2000.

changed the funding ratio to allow for 1:1 partner funding. Funding for the newly admitted provinces (New Brunswick and Prince Edward Island) was set at \$200,000 per annum also with a 1:1 partner funding ratio. CIHR's current commitment to the program is \$4.4M per annum. The allotment to a province is an expenditure limit for a fiscal year. The sum of the authorized fiscal year expenditures to all RPP projects within a province may not exceed the allotment for that province.⁷ The actual expenditures for projects supported by RPP will always be at least double the allotment use since partners must provide at least equal funding to the CIHR contribution and may choose to pay more.

There is a general expectation that a significant proportion of the activity in this program will be directed to the recruitment and retention of promising and/or excellent scientists. These talented individuals should, in turn, be able to generate new sources of peer-reviewed funding through normal competitive programs. However, RPP proposals may also contain initiatives that are provided for in any of CIHR's other programs (e.g., training awards, operating grants, equipment).

The specific guidelines and procedures used in each province vary, sometimes in significant ways. Although all operate within a set of general operational guidelines and financial rules, there remains much scope for each Advisory Committee to design RPP rules and procedures that best serve its own situation. The general RPP process is outlined in Figure 1.

Individual provinces have significant discretion within the guidelines issued for RPP. When the program started, there were few guidelines and even fewer were codified in written form.

Over time, Chairs of local⁸ Advisory committee have met with CIHR managers to discuss the program and share experiences. These in-person and teleconference meetings have yielded RPP Guidelines and individual local Guidelines. Three of the program parameters are mentioned here to show the interplay between RPP Guidelines and local practices.

- Cut-off for eligibility? RPP started with a point rating of 3.0 as the minimum point rating in order for a project to be considered eligible. That was later changed to 3.5 but some Advisory Committees continue to occasionally consider projects lower than the 3.5 threshold.
- Rated points or other criteria? Some Advisory Committees designate funding for projects based on highest point values; others favour projects targeted on other priorities such as a submission from a young researcher or a submission that aim to study a specific health research topic.
- Requirement for advance review of submission to CIHR? All Advisory Committees require a minimal advance review of a submission that is pre-

⁷ There is a recent variation to the use of RPP funds which may allow the amount spent within a province to exceed the stated limit. On March 1st of the year, any unused portions of provincial allotments may be redirected to other provinces which have projects which they wish to fund under RPP but for which they lack sufficient funds within their annual allotment.

⁸ The use of the term "local" is "code" for provincial. RPP is not a federal-provincial program although MCR and later CIHR clearly intended important participation by provincial representatives. RPP began as (and remains) a partnership between CIHR, operating under a federal mandate, and an Advisory Committee, university based, in each of the provinces for which an allotment had been provided.

registered for RPP; others insist on a formal review process that may also include mentoring opportunities.

The main client for this evaluation is CIHR management who must make a decision on renewal of the program. The focus of this summative evaluation is an assessment of the effectiveness of the program in achieving its objectives, describing its impacts, both intended and unintended, judging its continued relevance and identifying alternative ways of achieving the expected results.

Evaluation Methodology

There were four approaches used in this evaluation: document review; data mining; interviews; and Web-based surveys.

Document review. Among the documents read were: MRC Regional Partnerships Program; Announcements of Competition Awards in 2002, 2003 and 2004; Various RPP Policies; RPP Competition and Administration Timelines; Evaluation and Performance Measurement Framework, CIHR, April 2004; Minutes, RPP Meeting, November 29, 1999, Sheraton Hotel (location not given); Teleconference, Advisory Committee Chairs, March 15, 2000; Meeting Minutes and Related Documents, March 23, 2004, Charlottetown, Prince Edward Island; Student Training Workbook, Electronic Information System, Medical Research Council of Canada, April 14, 1999; Organisational Design of CIHR, Process Maps and Profiles (February 20, 2002); regional evaluation reports; a study titled Health Research Funding in Colleges of Medicine Located in Provinces with Relatively Small Populations, James Wood, c.1994; and the many documents collected during visits to the six RPP regions.

Data mining. CIHR made available extensive data from the data bases of MRC/CIHR. They provided spreadsheets on request detailing submissions for funding and the outcomes of those submissions, information on CIHR contributions and partner funds for given RPP projects; information on the history of interactions between individual researchers and CIHR; and listings of project titles, project participants and other descriptive information. To these were added information on populations and gross domestic products from Statistics Canada.

Interviews. The bulk of the interviews took place during field visits to each of the six RPP provinces. On-site interviews were conducted with the Chair and members of each region's Advisory Committee, researchers who had participated in the RPP processes, and representatives of involved universities, provincial governments, institutes and foundations. At CIHR headquarters, interviews were conducted with a range of managers including officers with previous and current RPP experience, both policy and operational and with MRC as well as CIHR experience. All interviews followed the standard procedure of being preceded by a Backgrounder to advise the interviewee of the issues and questions to be explored. Building in the Backgrounder, the interviewers were guided by an interview protocol which included attention to the several issues and questions and gave particular attention to the details of strategic planning, including RPP guidelines for the region and operational procedures. Interview notes were prepared after each meeting and these were organised using a predetermined data grid.

Surveys. Three surveys were conducted on the Web using the facilities of Fair Surveys. The three target populations were Principal Investigators, Other Researchers, and Partners. Lists for the first two were developed from CIHR data. A list of Partners was prepared with assistance from the Advisory Committee Chairs or their administrative assistants. Surveys were designed, reviewed with program knowledgeable people, written to html and posted, tested internally, revised as necessary, and tested with RPP Researchers who would not be part of the actual target populations for reasons of the timing of their projects. All survey administration followed the same pattern. An initial e-mail was sent to confirm the validity of the e-mail address and the name of the person who would represent the RPP study on the survey. Lists were corrected as required. The survey was sent and then followed, as needed, by up to two e-mail reminders spaced at intervals of three working days. Finally, a telephone call was made to those who had not yet responded.

Data analysis. The data from all sources was both quantitative and qualitative. It was collected, integrated and applied to the evaluation questions. The key question was whether RPP was successful in reversing the decline in funding observed in the earlier part of the 1990s. This was to be achieved by creating partnerships, by leveraging local funds, and by promoting the recruitment and retention of promising and/or excellent researchers working in areas of local strengths and priority interests. These were the mechanisms intended to increase the success rate of individual researchers in CIHR funding opportunities other than RPP. Additionally, the evaluation sought to understand the program and its implementation in ways that would serve CIHR well should it renew the program either in its current form or in a revised form.

The data lent itself to analysis by descriptive statistics and content analysis. Other than confidence intervals for survey responses, there was no need for inferential statistics. There had been an intention to apply a quasi-experimental design to add meaning to the findings but that intention was not realised.

Quasi-Experimental Design

As noted above, in the planning for this evaluation, it was intended to conduct a quasi-experimental design. In effect, this design would have classified the work of the Advisory Committees and the quality of their strategic plans and, having sorted these into “relatively good”, “average” and “relatively weak”, compared the performance of these groups on the success criteria. It has not been possible to do this because the six situations have sorted themselves into five relatively good plans and one relatively poor plan in their strategic planning.

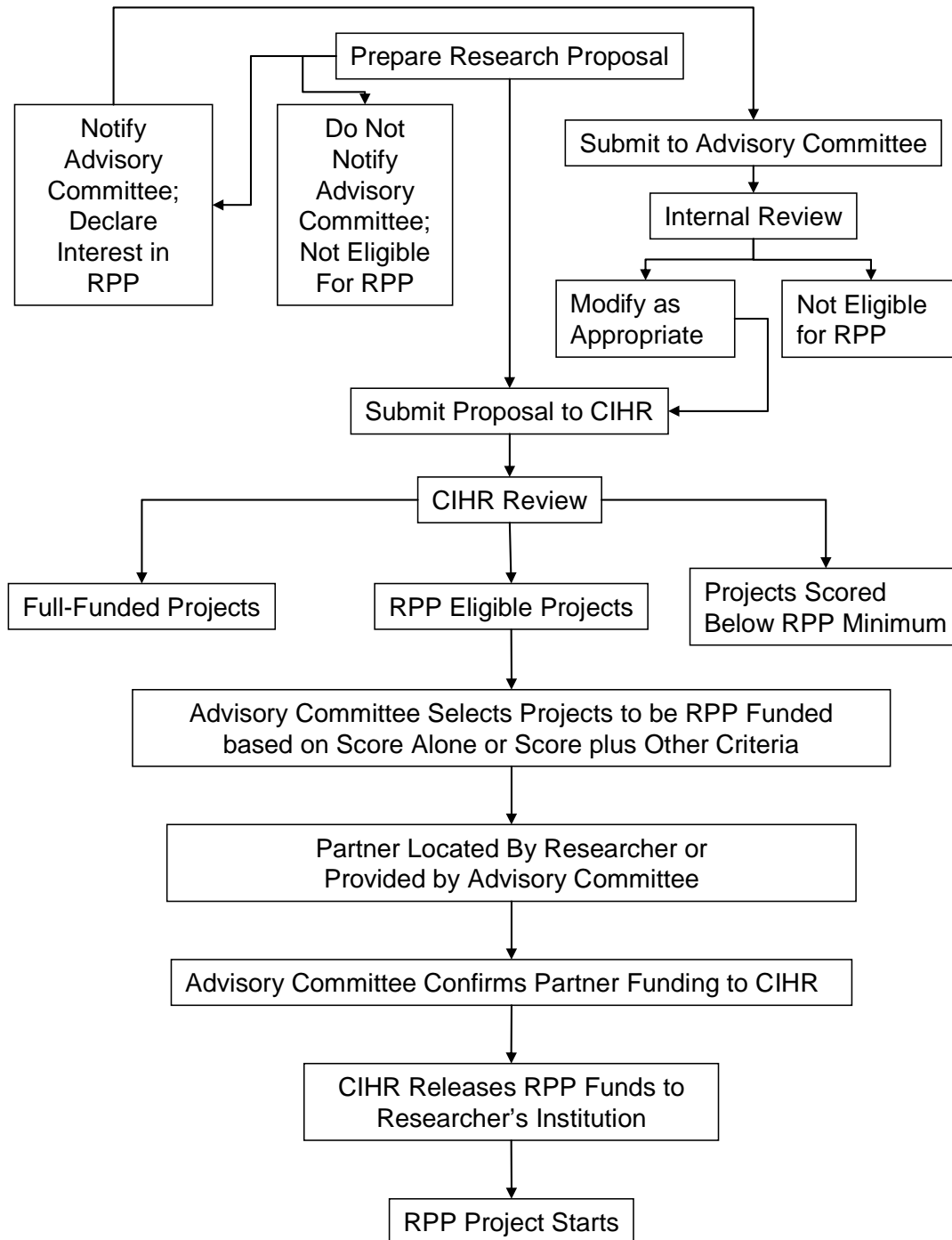
Therefore, this intended feature of the evaluation cannot be carried out.

Focus of Report

An evaluation study is required to reach valid conclusions on the merit, worth or value of the evaluand – in this case the Regional Partnerships Program. The essence of the process is to identify relevant standards, investigate the performance of the evaluand against those standards and, through integration or analysis of the results, arrive at an overall evaluation. For CIHR, RPP is a first stage program. With this evaluation, it completes its first cycle of program design, implementation and feedback on results. The focus of this report is program results with one key results question: Is the distribution of CIHR research funds to the target regions (defined as provinces) proportionate to the populations of the provinces? The standard for this intended result is straightforward. If the difference between the province's share of CIHR research funds and the province's share of Canada's population is zero (or acceptably close to zero), then this intended result has been achieved.

As well, there are very extensive results from three areas: (1) the CIHR data base with information on submissions for funding and the outcomes of those submissions, information on CIHR contributions and partner funds for given RPP projects; information on the history of interactions between individual researchers and CIHR; project titles, project participants and so forth; (2) Web-based surveys of Principal Investigators, of other researchers, and of RPP partners and (3) data collected during on-site visits at each of the six provinces with RPP Advisory Committees during which information was collected on strategic planning, procedures in place for the direction and management of RPP within the region, views on RPP of Advisory Committee members, academics, RPP researchers, representatives of the provincial government, foundations, institutes and so forth.

Figure 1: RPP Flow Chart



The findings from data mining, interviews and surveys are placed in Working Papers. These are very large documents. The Working Paper on the analysis of CIHR data base is about 50 pages. There are three Working papers for the survey results, each with approximately 40 pages of tables and content analyses. There is a Working Paper of about 85 pages that presents six local profiles, one for each province, and an integration across the six. The material in these Working Papers has been studied and has informed the preparation of this Final Report.⁹

This Final Report addresses the question of whether the Regional Partnerships Program is successful and, if renewed, what are the important parameters to consider in the design of a renewed program. As such, the focus is on the program as a whole. Attention will not be given to individual regions or provinces except for the very specific and central question of the difference between the receipt within a province of CIHR research funds and the province's share of Canada's population (what will later be referred to as the "gap" analysis).

RPP Objectives

The program objectives of the Regional Partnerships Program, as presented by CIHR, are to:

- a) create partnerships with the smaller provinces by leveraging local funds;
- b) promote the recruitment and retention of promising and/or excellent researchers by building on local strengths and priority interests of the institutions;
- c) reverse the decline in funding observed in the earlier part of the 1990's.

To these three, a fourth, implicit objective (understood to follow from main objectives 'b' and 'c' taken together¹⁰) has been added:

- d) increase the success rate of individual researchers in CIHR funding opportunities other than RPP.

Has RPP Been Effective?

Two approaches have been used to address this question. One is the analysis of CIHR data bases to examine whether there is a funding gap – a comparison of (a) the actual funding earned within a province with (b) what would have been received within the province if CIHR funds had been distributed strictly on the basis of the population of the province. The other was an analysis of the later success in CIHR competition of those who had received RPP funding.

⁹ The Working Papers will be available upon request.

¹⁰ "d" is also justified by this phrase from the original Program Guidelines: "These talented individuals should, in turn, be able to generate new sources of peer-reviewed funding through normal competitive programs."

PER CAPITA FUNDING GAP ANALYSIS

A central rationale for the establishment of RPP was the argument that four provinces with medical schools (NL, PEI, MN, SK) were obtaining MRC funding at a lower level than would have been expected on the basis of the province's population relative to the population of Canada. The present evaluation pursued this argument in a number of ways including a "gap" analysis in all six of the provinces with RPP allotments. For this analysis, two values were obtained for every year from 1981 to 2003 inclusive. These values are displayed for each of the RPP provinces in Figures 2 through 7.¹¹

Actual CIHR Funds	the funds earned from CIHR competitions in each year. The funds provided by RPP are included in these amounts but not partner funds. The inclusion of the RPP amounts has a progressively more important impact when the base to which it is added is lower.
Expectation	the CIHR funds that would have been received in a province had the funds been apportioned solely on the basis of the province's population as a percentage of the total population of the ten provinces.

A non-statistical interpretation of Figures 2 through 7 suggests the following:

- NL Although very close in 1981, throughout the following years the two lines diverge. Visually, the slope of the actuals line increases as of 1999. This may be viewed as an improvement even though the gap between the two lines continues to increase. There appears to be a levelling of the line in 2002 but it is too soon to know if that has continued to be the case. In 2003, the actual (\$3,517,000) was 37% of the expectation (\$9,447,000).
- PEI The two lines start at different points and, throughout the time period, slowly diverge. Visually, the slope increases for the actuals line as of 1999. This may be viewed as an improvement even though the gap between the two lines continues to increase. In 2003, the actual (\$710,000) was 28% of the expectation (\$2,505,000).
- NS From 1981 to 1991, the two lines are almost the same. The actuals then begin to drop below the expectations until, by 2003, the actual (\$13,776,000) is 81% of the expectation (\$17,019,000).
- NB The actuals line is consistently below the expectation line and the separation increases over time. In 2003, the actual (\$709,000) was 5% of the expectation (\$13,648,000).

¹¹ Dr E. Bruce Waygood is thanked for his suggestion to display these "gap" results in this reader-friendly fashion.

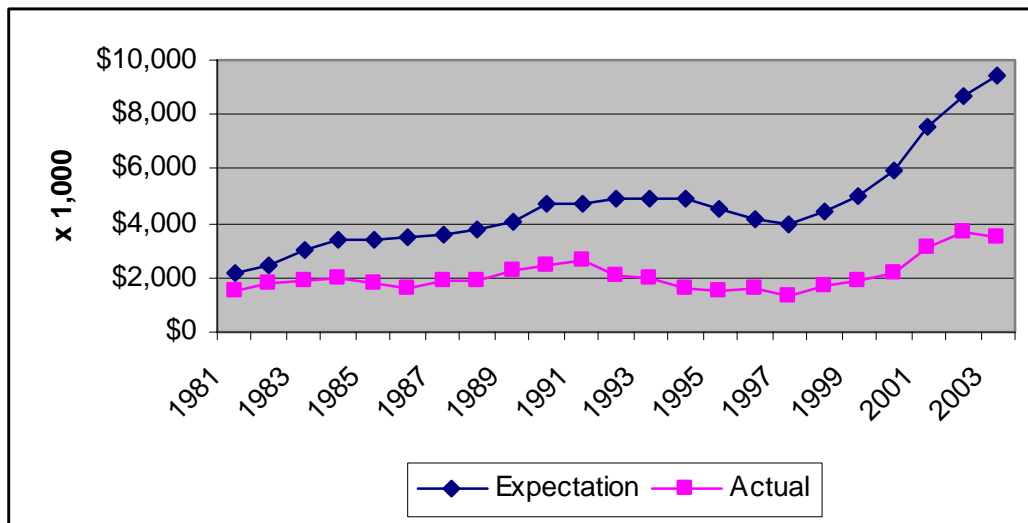
MN This is the one RPP province where the actuals line exceeds the expectations line from 1981 into the mid-1990's. The actual dips below expectation around 1998 and the relatively small gap widens slightly over time. In 2003, the actual (\$16,923,000) was 80% of the expectation (\$21,142,000).

SK The two lines are quite close in 1981 after which they start to diverge and continue to diverge. In 2003, the actual (\$8,649,000) was 48% of the expectation (\$18,089,000).

There had not been established a criterion by which to determine how much of a gap was needed in order to conclude that the difference between actual and expectation is of a magnitude that requires special effort such as provided by RPP. If the criterion was 20%, then two of the six provinces (MN and NS) were just at the criterion threshold in 2003.

As of 1999, the slope of the actual line takes a noticeable turn upward in all RPP provinces although this is rather slight for NB. Of course, a portion of this upturn is simply the addition of the RPP dollars to the other funding obtained within the province from CIHR competitions.¹² It would appear that the influx of RPP funding has had a positive effect upon the slope of the actual line. However, it should be recognised that this increase in actual, from 1999 forward, also coincides with the increased funding that became available with the establishment of CIHR and which also appears in the non-RPP provinces. This is apparent in the gap analysis data for non-RPP provinces included in Annex A.

Figure 2: NL Funds “Gap” from Population Expectation



¹² Not included in these calculations are the matching funds which, for two provinces (NB and PEI) are significant additions.

Figure 3: PEI Funds “Gap” from Population Expectation

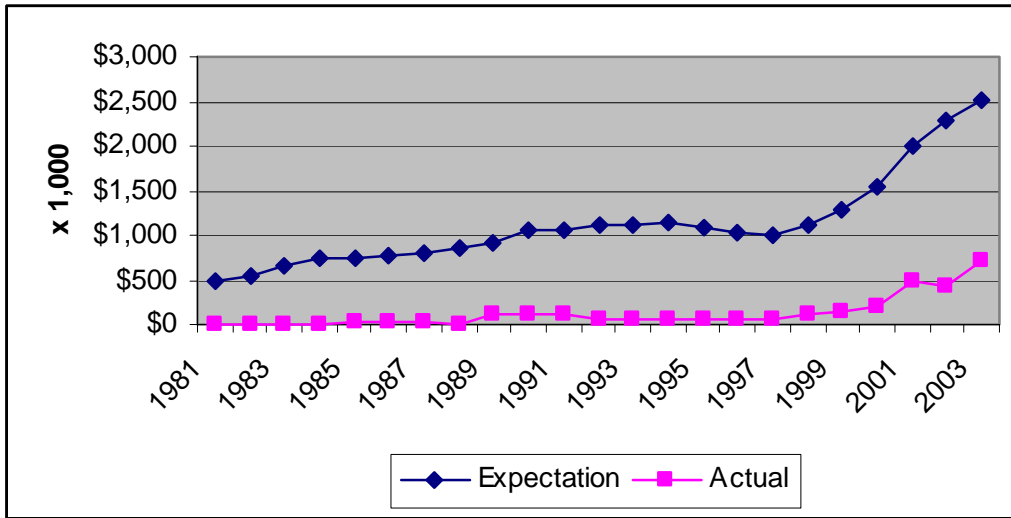


Figure 4: NS Funds “Gap” from Population Expectation

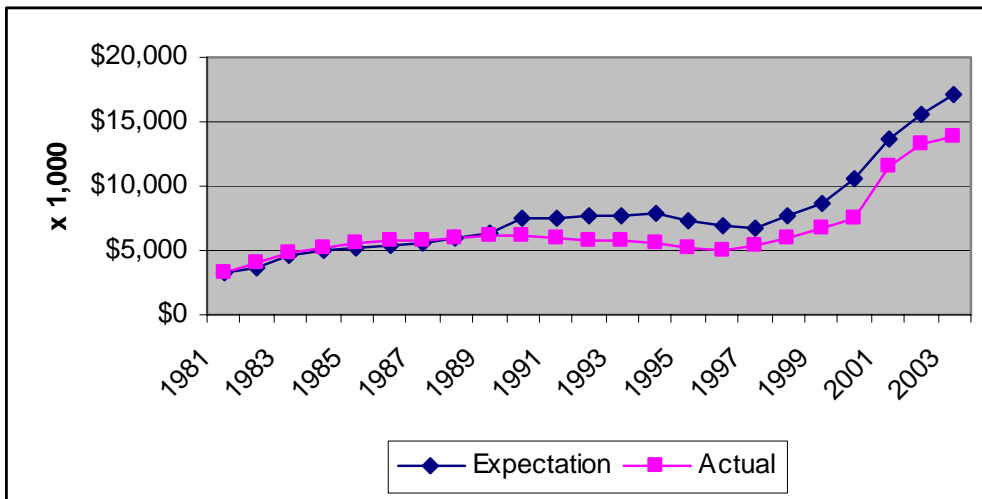


Figure 5: NB Funds “Gap” from Population Expectation

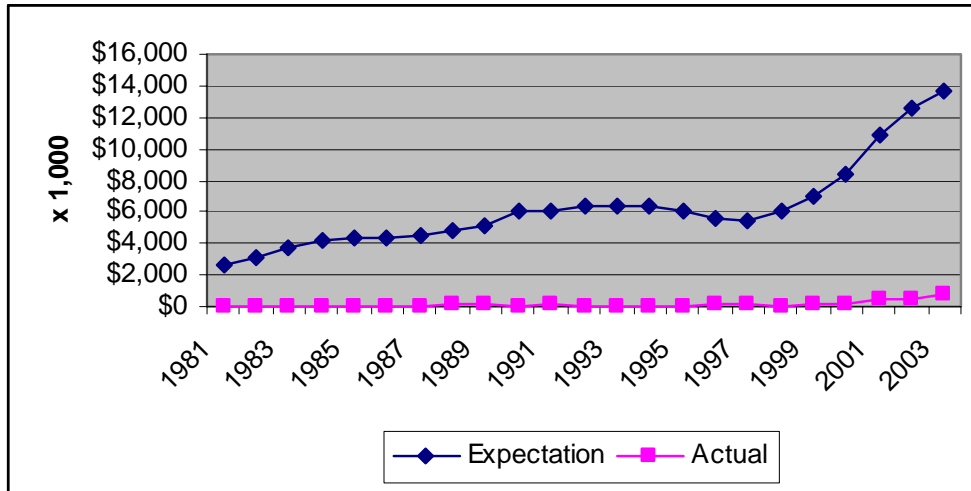


Figure 6: MN Funds “Gap” from Population Expectation

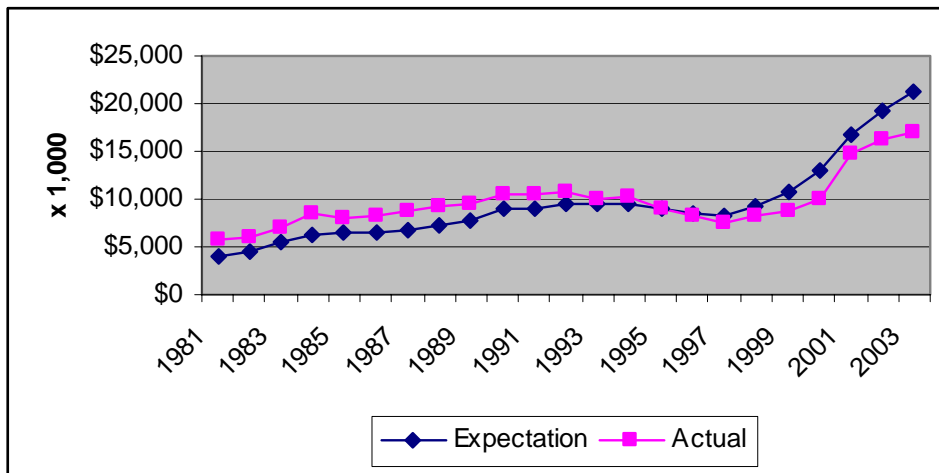
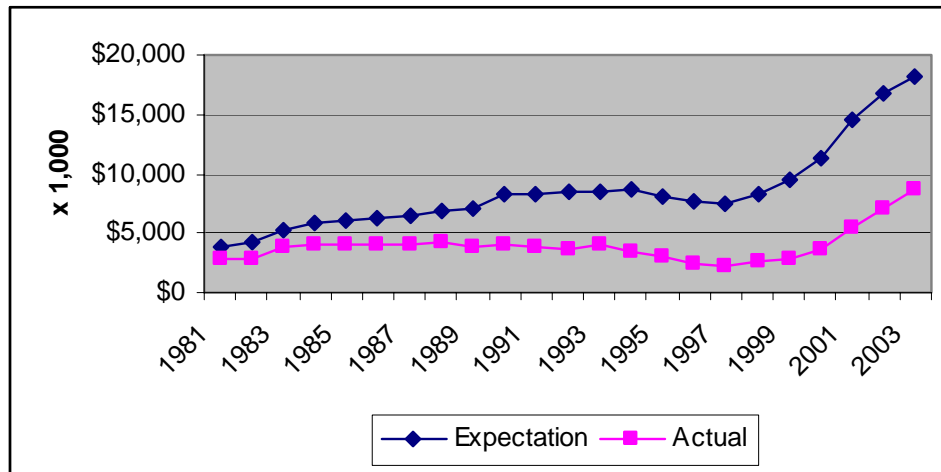


Figure 7: SK Funds “Gap” from Population Expectation



PER CAPITA EXPENDITURES

Figure 9, below, displays the CIHR dollar expenditures per capita for all years beginning with 1981. It was calculated by taking the number of MRC/CIHR dollars for a given province and year and dividing by the population for that province and year as well as the totals for all provinces.

Table 1 is an interpretation from a portion of Figure 9 for the year 2003. It shows that, for that year, CIHR expenditures were the equivalent of \$18.12 per person across all of the provinces. The per capita spending in each province is shown and the variance calculated by taking the difference between spending in a province and spending for Canada. The differences are very apparent.

Figure 9 is based on per-person CIHR expenditures. This is a different approach than was used for the gap analyses displayed in Figures 2 to 7. Although the two are different approaches to the data, both are in agreement with each other and reveal the same trends over time.

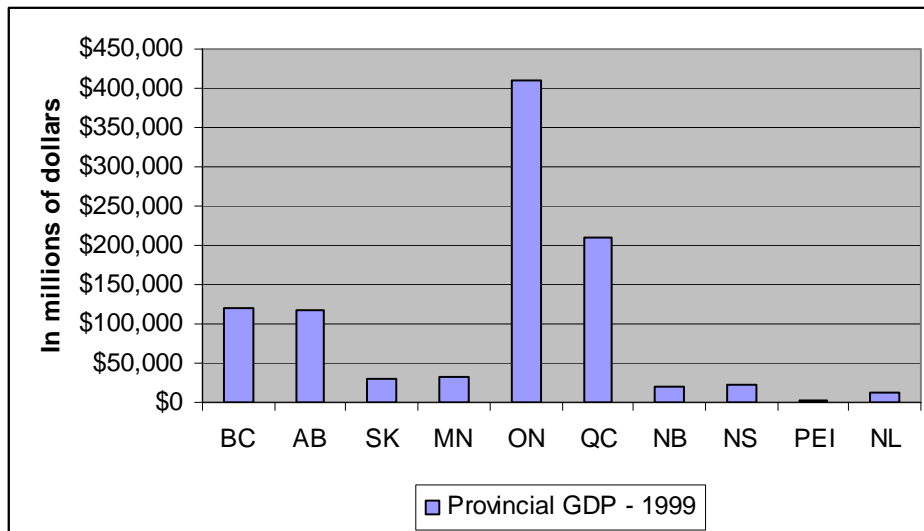
Table 1: Variance in Per Capita CIHR\$ - 2003

2003	\$/capita	Variance
Quebec	\$23.12	+\$ 4.99
Alberta	\$21.93	+\$ 3.81
Ontario	\$18.71	+\$ 0.59
Canada	\$18.12	\$ 0.00
Nova Scotia	\$14.72	-\$ 3.41
Manitoba	\$14.55	-\$ 3.57
British Columbia	\$13.91	-\$ 4.21
Saskatchewan	\$ 8.69	-\$ 9.43
Newfoundland	\$ 6.77	-\$11.35
Prince Edward Island	\$ 5.15	-\$12.97
New Brunswick	\$ 0.94	-\$17.18

PROVINCIAL WEALTH

Provincial wealth is a very approximate index of the capability of a province to support health research. The relative wealth of all ten provinces is shown in the following histogram. As expected, the GDPs of the six provinces with RPP are relatively smaller than the other four provinces. There are also important differences within the six provinces hosting RPP. There are many who believe that the level of provincial wealth influences the infrastructure for health research and the numbers of health researchers. That hypothesis was not studied in this evaluation. However it is obvious that the four non-RPP provinces have significantly larger GDPs than the RPP provinces. It is also apparent that there is a close agreement on the rank order of the provinces whether for wealth, as measured by GDP, or by CIHR funding, as measured by actual funds received within the province.

Figure 8: Provincial GDP - 1999



COMPETITION SUCCESS

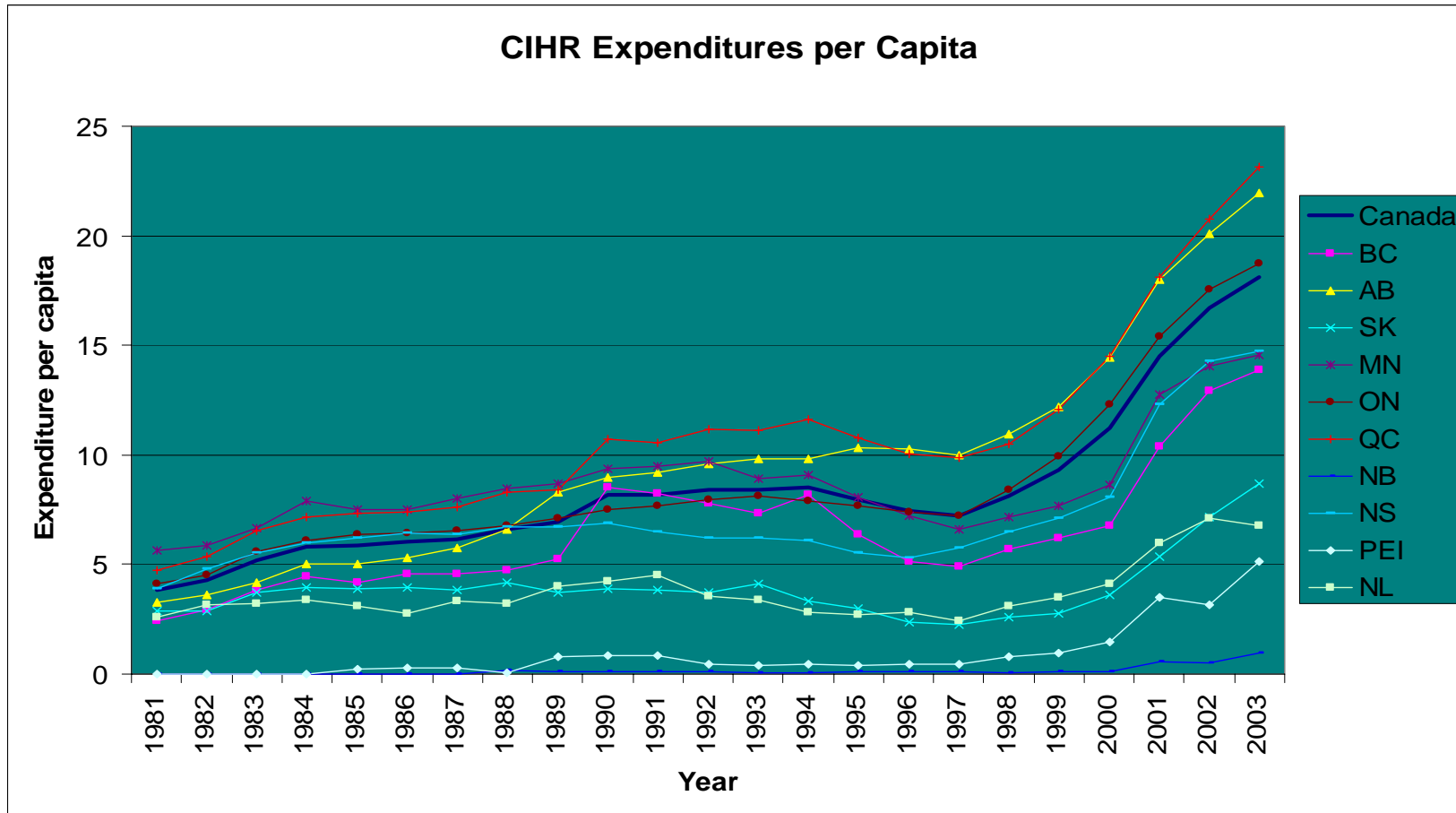
It is generally accepted that a key indicator of success for the RPP is the performance of researchers in the open competitions of CIHR for operating grants following the receipt of support from RPP funding. To investigate the performance of “RPP-graduates”, the records of RPP Principal Researchers in successive CIHR competitions were examined.

To enable this examination, the CIHR data bases were searched by CIHR personnel¹³ and a list of all post-RPP competition activity was developed for each of the RPP Principal Investigators. These lists were then modified in the following ways:

¹³ The evaluation team is most grateful to the careful work conducted by Caroline Shewchuk for this analysis as well as for a number of other analyses dependent upon extractions from the CIHR databases.

- RPP awards prior to 1999 were removed.
- Projects not successful in CIHR competition and eligible for RPP (a second time) but not funded within a province's allotment were removed.
- Submissions to very recent competitions, for which outcomes have not yet been announced, were removed.

Figure 9: CIHR Expenditure Per Person



Note the sharp rise after 1999 when research funding increased. The dark thick line is the average for Canada. It can be seen that only QC is consistently above the Canadian average, AB is above average after 1988; NB, PEI, NL and SK are consistently below the Canadian average.

The review of the list for each Principal Investigator sought to identify the first instance of a successful outcome (as a PI or as a Co-applicant) in an operating grant application; that is, full funding¹⁴ of the submission. That instance was then rated as described below.

Depending on the date of a RPP award, the opportunity window for full funding was from five years to six months. For each researcher who had received an RPP award, all post-RPP competitions were searched and a list was made of those which showed activity from that researcher as well as the outcome of that activity.

Three members of the evaluation team¹⁵ assessed the activity record for each researcher and assessed the level of funding performance by addressing the following questions. Was the researcher successful in obtaining full funding and, if “Yes”, was the success in an open competition or a strategic competition? If neither, was the researcher deemed eligible within his province for an RPP award and was such an award given? This last point required cross-checking against another data base to ensure that partner funding had been provided to support the RPP award.

The evaluation team also made judgments, based on the titles of the projects, of whether the post-RPP award was for the same substantive subject area as had been the RPP project. The judgment reached for each was one of converted (same subject area), not converted (different subject areas) or not clear (evaluators unable to decide). These judgments are subjective; given the use of the “not clear” category, there is reasonable confidence that the ratings are reliable.

Only the aggregates across the six provinces are reported in Tables 2, 3, 4 and 5.

Table 2: Success Rates Over Multiple Competitions

Category of Activity	All Post-RPP Activity	
	Number	Per Cent
No post-RPP CIHR activity	36	24%
Open Competition Approved	80	54%
Strategic Competition Approved	26	18%
Funded for second RPP	6	4%
Totals	148	100%

The post-RPP success rate (obtaining non-RPP funding after having had RPP funding) for these 148 researchers is 72% (54% plus 18%). It is, unfortunately, not possible to know if this is an unusually high success rate, for the statistics span several competitions. A researcher could, theoretically, have entered up to 10 competitions in the period of time since obtaining an RPP grant or award (the ‘opportunity window’ for full funding post-RPP being from six months to five years) and succeeded only on the tenth try to be counted a success. We know of no such case but it must be considered as setting the context for understanding success rate over multiple competitions. From

¹⁴ The term “full funding”, even though not exactly correct, will be used throughout this report to refer to those projects which are above the cut-off threshold established by the peer-rated competitions managed by CIHR. The grant or award may not be for the full amount requested but it will be for an amount approved through the review process and accepted by CIHR budgetary requirements. The full funded projects, of course, do not come to an RPP Advisory Committee to be considered for RPP funding.

¹⁵ Gavin Lemieux and Mathieu Cyr of CIHR and Gerald Halpern of Fair Findings.

the point of view of the RPP objective, which includes supporting researchers seeking to be increasingly successful in CIHR competitions, a 72% success level is certainly encouraging.¹⁶

CONVERSION RATE

An examination of those submissions approved in open competition shows that at least 41% had converted; that is the researcher has gone on to obtain full funding for the continued research in the same substantive subject area studied in the RPP project. If one was to set aside the projects for which a clear decision on converted / not converted could be made, then 46% (33 of 71) would be considered to be conversions to full funding.

Table 3: Success Rate in Open Competitions

Open Competition Conversions	Open Competition Approved	
	Number	Per Cent
Converted	33	41%
Not Converted	38	48%
Unclear	9	11%
Totals	80	100%

An examination of those submissions approved in strategic competition shows that at least 41% had converted; that is the researcher has gone on to obtain full funding for the continued research in the same substantive subject area studied in the RPP project. If one was to set aside the projects for which a clear decision on converted / not converted could be made, then 36% (8 of 22) would be considered to be conversions to full funding.

Table 4: Success Rate in Strategic Competitions

Strategic Competition Conversions	Strategic Competition Approved	
	Number	Per Cent
Converted	8	31%
Not Converted	14	54%
Unclear	4	15%
Totals	26	100%

The rules of RPP allow the award of a second RPP under either of two circumstances: the first RPP was provided as a training award and/or there is at least a six month hiatus from the completion of one RPP and the start of a successive RPP. Of the six provinces, only two made use of this provision. Of the six such uses of a second RPP, five were in one province and the sixth was in another second province. A seventh person eligible for a second RPP did not receive RPP funding and he is not part of the group in the Table 5.

¹⁶ Based on information from CIHR, this rate is certainly higher than the typical success rates of initial awards or the success rates for renewals in CIHR competitions.

Table 5: Second RPP Projects

Second RPP Conversion	Funded for Second RPP	
	Number	Per Cent
Converted	3	50%
Not Converted	2	33%
Unclear	1	17%
Totals	6	100%

RPP Usage

RPP makes available to each RPP Advisory Committee an annual allotment within which authorized expenditures in a target year may be used for approved projects. The two key factors that will influence the number of projects in a given year are project size and project length. As the project size rises, the number of projects funded will decrease. As the project length increases, the number of projects will decrease. Two categories of projects are recognised: awards (generally these are training awards) and grants (generally, these are operational grants).

The rules of RPP do not permit the carry-forward of an unused portion of an allotment from one year to the next.¹⁷ It will be recalled that, as of 1999, the allotments to each Advisory Committee were either \$200,000 per year (PEI, NB) or \$1M per year (NL, NS, MN, SK).

Of the many different approaches that are available for the use of an allotment of \$1M, two extreme examples will be described. One approach is to fund one project of \$1M/year for three years. Another approach is to fund 100 projects at \$10,000/year and for three years each. Both of these approaches will consume all of the allotment for three years. After the first year, and for the next two years, no additional researchers would be funded (“recruited and/or retained”). Another approach would be to restrict projects selected to those of small budget and one year duration. This third approach would maximize the numbers of researchers supported but would restrict support to small projects able to be completed in one year. There are, of course, many other variations of these approaches. Table 6, for awards, and Table 7, for grants, describe the results of the several approaches that were applied by the six Advisory Committees.

The following tables show the usage of the allotments each year for all six Advisory Committees combined. The maximum that may be spent each year, for awards and grants combined, is \$4,400,000. The benefit in terms of health research expenditures will be at least double the CIHR contribution given the requirement of partner dollars to at least match CIHR dollars.

¹⁷ At the start of RPP, there had been an expectation that such carry forward would be permitted but a mechanism was not found by which to achieve this.

As Table 8 shows, by 2001-2002 the usage had begun to approach the maximum available. Table 8 also shows that 80% of the dollars were used for grants in 1999-2000 and this decreased gradually to 67% by 2004-2005.

Table 6: Number and Size of Awards by Year – All RPP Provinces

AWARDS	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Total CIHR Award-\$ in Year	\$295,194	\$820,074	\$1,054,020	\$1,159,189	\$1,268,062	\$1,297,169
# of Awards in Year	17	34	40	42	45	55
Avg. CIHR Contribution per Award per Year	\$17,364	\$24,120	\$26,351	\$27,600	\$28,179	\$23,585

Table 7: Number and Size of Grants by Year – All RPP Provinces

GRANTS	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Total CIHR Grant-\$ in Year	\$1,182,958	\$2,111,893	\$2,652,779	\$2,571,588	\$2,282,594	\$2,682,087
# of Grants in Year	56	83	86	93	74	81
Avg. CIHR Contribution per Grant per Year	\$21,124	\$25,444	\$30,846	\$27,651	\$30,846	\$33,112

Table 8: Number and Size of Projects by Year – All RPP Provinces

AWARDS + GRANTS	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Total CIHR Award & Grant \$ in Year	\$1,478,152	\$2,931,967	\$3,706,799	\$3,730,777	\$3,550,656	\$3,979,256
Percentage of \$ Used for Grants	80%	72%	72%	69%	64%	67%

Tables 9, 10 and 11 present analyses of the amount of partner funding per project in relation to the amount of CIHR contributions of the same project. The column headings in these two tables use abbreviations for column labels and these have the meanings as shown in the following table:

P < C	P/C=1.00	P/C=1.01-.10	P/C=1.11-.25	P/C=1.26-2.	P/C>2.00
Partner < CIHR	Partner / CIHR = 1.00	Partner / CIHR = 1.01 - 1.10	Partner / CIHR = 1.11 - 1.25	Partner / CIHR = 1.26 - 2.00	Partner / CIHR > 2.00
The Partner funding is less than the CIHR contribution	The Partner funding divided by the CIHR contributions is equal to 1.00	The Partner funding divided by the CIHR contributions equals between 1.01 and 1.10	The Partner funding divided by the CIHR contributions equals between 1.11 and 1.25	The Partner funding divided by the CIHR contributions equals between 1.26 and 2.00	The Partner funding divided by the CIHR contributions is greater than 2.00

Table 9: Comparison of Partner and CIHR Funding of Awards – All RPP Provinces

Awards	P < C	P/C=1.00	P/C=1.01-.10	P/C=1.11-.25	P/C=1.26-2.	P/C>2.00	Total
Number	10	47	4	0	10	2	73
Per Cent	14%	64%	5%	0%	14%	3%	100%

Fully 22% of the awards received partner funding in amounts larger than the CIHR contributions.

Of the 10 awards in which the Partner funding is less than the CIHR contribution, one essentially had proper partner funding since the shortfall was only 1%; four were terminated due to partner shortfall and five are in progress with time remaining in which the partner may fulfil his obligation:

- One project had a partner shortfall of only 1%

Insufficient partner funds

- Two projects are complete; partners under-funded
- One project ended in 2002-2003 with partner shortfall
- One project (2000-2001 to 2003-2004) did not receive any partner funds

Partner funds lag CIHR contributions

- Five projects started in 2004-2005; partners have time to contribute

Table 10: Comparison of Partner and CIHR Funding of Grants – All RPP Provinces

Grants	P < C	P/C=1.00	P/C=1.01-.10	P/C=1.11-.25	P/C=1.26-2.00	P/C>2.00	Total
Number	25	144	3	4	6	41	223
Per Cent	11%	65%	1%	2%	3%	18%	100%

Fully 24% of the grants received partner funding in amounts larger than the CIHR contributions.

Of the 25 grants in which the Partner funding is less than the CIHR contribution, 12 were terminated with insufficient partner funding and 13 are in progress with time remaining in which the partner may fulfil his obligation:

Insufficient partner funds

- Two projects ended in 2000-2001 with partner shortfalls
- Five projects ended in 2002-2003 with partner shortfalls
- Five projects started in 2002-2003; each of the 5 have received approximately \$5,000 from CIHR; none have received partner funds; all stopped after the year

Partner funds lag CIHR contributions

- Two are projects that span 2002-2003 to 2004-2005; there remains time for partners to complete funding;
- One project is for the years 2002-03 to 2005-06; the partner has lagged by one year with the CIHR contribution
- 10 projects started in 2004-2005; they are all within the time frame for partner funding

Table 11: Comparison of Partner and CIHR Funding of Projects – All RPP Provinces

Awards+ Grants	P<C	P/C=1.00	P/C=1.01-.10	P/C=1.11-.25	P/C=1.26-2.	P/C>2.00	Total
Number	35	191	7	4	16	43	296
Per Cent	12%	65%	2%	1%	5%	15%	100%

Only 16 projects (4 awards –Table 9 and 12 grants –Table 10), from a total of 296 projects, have a confirmed partner shortfall. Given the complexity of the arrangements for partner funding, this is not an unreasonable occurrence.

Views of the “Local” Programs

In each of the RPP regions, in-person discussions took place with Advisory Committee members, researchers, government officials and managers with experience directing, managing, administering and conducting research. Their views are brought together here under three headings: within region impact, strengths and weaknesses; building research capacity; and views on RPP continuation.

The presentations under these headings span the full program. There are differences from one region to another, both with respect to the characteristics of the regions and the views of the professionals in those regions. These may be examined in detail in the working paper that presents a profile for each of the six regions.¹⁸

WITHIN REGION IMPACT, STRENGTHS AND WEAKNESSES

The summary position from the regions is that RPP has been a success. In all regions it is viewed as contributing to the building of health research capacity. Many secondary benefits are identified as well as the direct impacts of helping researchers start or continue their work as excellent scientists in smaller-population provinces. The Program design is judged to be very good. Singled out as particular strengths are the peer-review system, the stimulus to multi-stakeholder collaboration and the flexibility to tailor the program to the province. The major disappointment is level of funding.

The nature of RPP is that of an “antibiotic,” a corrective that should cease to be needed at a certain point. It is not a “nutritional supplement” that ought to be administered indefinitely. Nor is it a “narcotic” that creates a habit that cannot be broken. (The program criteria prevents researchers from holding successive RPP grants to insure against a ‘narcotic’ effect.)

¹⁸ Available as a separate document from CIHR. Scheduled for completion in June 2005.

RPP interviewees are very positive about RPP's impact. They say that:

- RPP is a needed source of funding; in some cases it has saved labs and projects from disappearing.
- RPP motivates new researchers to come to the province.
- RPP helps newer researchers to build confidence that they can succeed in major competitions; some need to learn the 'CIHR culture'.
- RPP motivates seasoned researchers to continue (it is a morale booster for them as well).
- RPP allows young researchers to get started before they have substantial data and impressive CVs.
- RPP allows multi-year projects to finish or to bridge to the next full-funding success.
- RPP allows each region to pursue its own priorities for health research.
- RPP supports a teaching climate that keeps medical students in the province, making it more likely for them to remain as practitioners in the province.
- RPP motivates funding partners who take note of the CIHR investment.
- RPP stimulates collaboration among health research and other stakeholders, including the provincial government and foundations.
- RPP has spawned special offices and new research infrastructure in several provinces.
- the numbers of health researchers in RPP provinces are growing.
- the success rate in all CIHR competitions is rising, reflecting rising average scores from provincial researchers.

Perceived strengths of the RPP:

- An essential feature of RPP is its utilisation of the same peer-review system as all other aspects of CIHR. While there are some inadequacies, RPP is the best possible system for estimating scientific excellence. This was seen to have two important consequences: RPP funds highly regarded science and RPP-supported researchers safeguard their reputations as excellent scientists.
- The planning and other requirements of RPP have encouraged health research planning, collaboration and integration on the provincial level. A variety of stakeholders come to the table for collaborative discussions. They benefit from the synergy in other ways besides the focus on RPP.
- There is no barrier to integrating RPP into the other provincial efforts to support health research.
- The creation of provincial foundations has served to strengthen the links between the provincial government and health research activities.
- The national meetings of Chairs are useful when they occur.
- RPP processes have encouraged the development of services such as internal peer review, inclusion of RPP in faculty orientation programs, mentoring, proposal preparation assistance and other supports.
- RPP flexibility is appreciated because it permits for funding, such as a lower-scored proposal to build capacity in a priority area or the setting of a cap on the funding for individual projects in order to draw more individuals into health research.

Perceived limitations of the RPP:

- The level of RPP funds is inadequate. The funding is insufficient to support strategic projects, which are becoming increasingly important (especially for Pillars 3 and 4 research that is of particular interest to some provincial authorities).
- Researchers who have to find matching funds themselves can find RPP very challenging, given that RPP provinces have less wealth available. It can take until the last possible moment to find the match, creating stress for investigators and disrupting employment plans.
- There should be a way within budgetary rules to allow for flexibility across years – ability to move funds across years.
- RPP province proposals suffer competitive disadvantages compared with those from elsewhere because they automatically lose points for “research environment.” Some researchers also think they detect a decision bias.
- The allegation is made that reviewers sometimes rank proposals from RPP provinces just below comparable proposals from the four non-RPP provinces on the basis of an estimate on where the cut-off for full funding will appear. Given two comparable proposals, the one from the non-RPP province proposals will be rated higher and get full funding leaving the RPP-province proposal to be funded through RPP plus partner money. This approach by reviewers is said to neglect two fundamental issues: the larger provinces have locally controlled and focussed alternative sources that are well endowed; and finding the matching funds in some RPP provinces has been difficult.

BUILDING RESEARCH CAPACITY

RPP provinces see themselves at a general disadvantage because of smaller health research capacity than the four larger provinces. The two major factors that RPP has been ameliorating are (1) generous provincial funding sources in the larger provinces and (2) disadvantages that proposals by researchers in RPP provinces face in CIHR competitions. Interviewees appreciate the need to specify targets for what would constitute “sufficient health research capacity” – which, once attained would mean that RPP is no longer needed – and have suggestions for defining it.

None of the RPP provinces consider themselves to yet have sufficient and sustainable health research capacity. Both “sustainable capacity” and “critical mass” emerged as key concepts during the evaluation for justifying the program and characterizing its concrete goals.

Health research capacity includes the following features:

- The number of researchers, age distribution of researchers and turnover are such that there is a stable research population. Actual numbers of researchers may be more important than percentages (e.g. proportion of researchers in the entire provincial population) because capacity is seen to be at risk where the numbers of researchers is small.
- Sophisticated equipment and services in close proximity.
- Stable funding is available from sources dedicated to that province.

- Research groups comprised of three or more investigators (or groups of researchers) are working in the same subject area.
- Development support to researchers such as mentoring and help in the preparation of proposals is available.
- Relationships exist with colleagues within and beyond the province even though this puts a major strain on travel budgets.
- Appropriate laboratories exist.
- There is a provincial Health Research Foundation or other concrete provincial involvement.

The common perception is that researchers in the non-RPP provinces have recourse to very well endowed funding sources such as major provincial foundations and large hospital research foundations. Until the RPP provinces find themselves in the same position – which means a combination of provincial wealth accumulation and policy decisions (both public and private) to dedicate part of that wealth to stable funding of health research – researchers in the RPP provinces feel they require assistance to compensate for the low levels of in-province funding.

Interviewees in RPP provinces feel that their relatively lesser research capacity results in research proposals from the four non-RPP provinces receiving higher scores in peer reviews than do proposals of equal scientific merit from a RPP province. The following factors are cited:

- points for research environment – having colleagues close by with whom to consult, having sophisticated equipment and services in close proximity;
- familiarity – more reviewers come from larger provinces and they are more confident in the people and research environments with which they are familiar;
- limited budgets – if CIHR fully-funded all excellent research, according to its own definitions of excellence, then excellent proposals from all locations would be funded and review panels would not have to make the sorts of fine distinctions that are required in the current circumstances.

Advisory Committees may opt to steer funding so as to favour capacity building explicitly, for instance, a small proportion of RPP set aside for doctoral and post-doctoral students, and a focus on research groups.

VIEWS ON RPP CONTINUATION

The RPP should definitely continue. The RPP provinces depend on it to attract new researchers and get them started. However, the Advisory Committee Chairs wish to participate as true partners in deliberations about any changes. The key points to discuss are the goal, how to reach it, and how to recognize that the goal has been achieved. The major changes suggested, besides consultations, are increasing the funding allotment and improving communications.

CIHR is asked to look at RPP as a strategic tool towards fulfilling its country-wide mandate. Terminating RPP would be a major blow to new researchers who benefit from RPP when getting started and who lack the alternative funding sources that are available in the non-RPP provinces. If RPP was to end, the action would also cast doubt on CIHR's intention to support health and health research across the country.

The following suggestions were offered during the visits to the RPP provinces:

- Keep the basic features of RPP – the peer review system, the emphasis on excellence, the matching funding, and no successive RPP grants. Continue to allow for local flexibility within the general rules in order to respect regional differences.
- The present 50:50 match is widely accepted with a minority view that CIHR provide full funding to RPP research projects.
- Consult with local stakeholders when designing the next phase of the program. Several Chairs noted that the national RPP meeting in Charlottetown, March 2004, struck the right collaborative note.

There is agreement that the following issues should be included in the agenda for planning for a continuation of RPP:

- The wording by which to define the central objective for RPP – currently understood to be the development of sustainable capacity for health research.
- The selection and definition of indicators by which to measure progress toward the objective.
- Means for assuring the engagement of provincial governments in support of the RPP objective.
- The size of the allotment to each region. The general view is that doubling the budget would have a significant positive effect and can be matched locally. Health research dollars in a smaller province, with a smaller initial base, can have a much greater impact than in one of the four larger provinces. Since excellence requires support, there would be significant growth of excellence in these provinces. Among the justifications for increasing the RPP allotment were:
 - ◆ the increasing costs of doing science generally;
 - ◆ the move towards larger operating projects and larger research teams;
 - ◆ the increases in other CIHR programs;
 - ◆ the desire to include some strategic grants
- Methods for improving communications:
 - ◆ There was agreement that the annual meetings of the chairs of Advisory Committees and other key individuals should be re-instituted, to foster the sharing of experience.
 - ◆ There was a desire to improve processes for communicating results and public announcements. CIHR should work more closely with its partners to coordinate communications. Announcement processes are too complicated or too driven by intentions to have specific people present rather than just represented or are not designed to give equal prominence to both the regional and the federal roles.

Views of the Beneficiaries

Three Web-based surveys were undertaken. At this time only the views of the Principal Investigators, with an 83% response rate, have been analyzed. The response rates for the Other Researchers and for the Project Partners are about 50% and are less representative of their respective target populations. They will be reported separately.

SUMMARY OF SURVEY FINDINGS

The following findings are based on the views of a representative sample of the population of Principal Investigators.

Migration

- According to the PIs, RPP had not attracted them to their province. For 96% of the PIs, their current province was their province of residence for at least six months prior to their grant application submission. Ninety-eight per cent of the PIs received the grant or the award at their "home" institution – and have remained in the same job.
- RPP has had almost no influence in attracting PIs to a province and only a small influence in retaining PIs in a province. Only five have recently moved to the province and of these five, only three said that RPP funding had even a partial influence on their move.
- About one-quarter, 27 out of 116, of the PIs said that they had considered leaving the province and that RPP had an influence in keeping them from leaving. Of these 27, 21 said the RPP grant or award somewhat influenced their decision and four said that the RPP was very influential in the decision not to leave. Fifty-nine per cent say that they plan to stay in their province regardless of success or non-success in obtaining grants and/or awards; however 27% plan to stay only if successful in obtaining grants and/or awards.

Career Stage

- These PIs are not recent graduates. For 96%, at least five years have passed since their highest degree was obtained: more than 20 years for 42%; from 10 to 15 years for 38% and from 5 to 10 years for 16% of these researchers.
- The PIs obtaining RPP projects are not, in general, researchers without experience in obtaining grants and awards. Sixty-two per cent had obtained a national research grant or salary award within the year before receiving their RPP grant/award and many had obtained two or more awards.
- Since their RPP, 80% received other awards which, in two-thirds of the cases, were of three or more years duration.
- RPP requires partner funding; 75% did not have to search for a partner. The majority of PIs were provided with a partner, the rest had an existing relationship with a partner, which was maintained on this project as well. Slightly more than one-fifth (22%) had to search for a partner – the majority (17%) did so using their own resources and (5%) searched for a partner from among choices offered to them.

Impacts

- The very strong opinion was that the RPP grant/award had a positive impact upon enhancing or sustaining their research. They rated the impact as 4.8 on a scale with a maximum value of 5.0.
- As a result of the RPP grant, about 77% engaged technicians, 60% engaged Master's level students and 50% engaged PhD students. Obviously, many of the PIs were engaging people for their RPP project at more than one level.
- Although 89% of these PIs said that their involvement on their RPP grant/award led to research opportunities or benefits that might not have occurred without it, 45% said that involvement on their RPP grant/award did not affect or change their research or career plans in any important way.
- The PIs credited their RPP projects with having a primary influence on scientific presentations (96%), publications (84%) and commercialization opportunities (17%).

Assessment of RPP

- The PIs considered RPP, as a whole, to be a very positive influence on the enhancement of health research in their province; they rated this dimension as 3.8, average, on a scale with a maximum value of 4.0.
- They gave an average rating of 3.5 out of a maximum of 4.0 when they rated the impact of the RPP program as a whole in encouraging health researchers to stay in the province. However, when asked how they rated the impact of the RPP grant and/or award in encouraging themselves to stay in this province, their average rating dropped to 2.7 on the same scale with a maximum of 4.0.
- When asked if RPP played a “bridge” role in maintaining research programs that otherwise would likely have wound down, 78% said Yes.
- A clear majority (94%) think that the RPP is successful in building a critical mass of health researchers within their province such that they can successfully compete for grants and awards from CIHR.
- Two-thirds (65%) say that the operation of the RPP program could be improved within the province. The two most important areas for improvement are ‘easier access to partners with matching funds’ and bringing individual project funding from CIHR to ‘a level sufficient for project objectives’.

Recommendation

Renew RPP for another five years.

Progress has been made relative to the RPP intention of supporting Advisory Committees to develop research strengths in their jurisdictions. This objective would be achieved once the researchers of these provinces are able to sustain success in CIHR competitions proportionate to the expectations for that province. That has not yet happened. However the need continues to be relevant.¹⁹ There are no other CIHR programs of significance that address this need. Therefore RPP, with some design modifications, is recommended for continuation.

Management's Response

CIHR Management agrees to renew the Regional Partnerships Program in its current form for two years with the expectation that a renewed program design, resulting from detailed discussions with stakeholders and analysis of desired program objectives and mechanisms, will be drafted within one year.

¹⁹ Two of the objectives mandated in Section 4 of Bill C-13 (the CIHR Act) are relevant to RPP. Neither specifically mandates working with provinces, or within provinces, to develop or enhance health research capacity. Both may be understood to support such activity.

(d) (iii) work in collaboration with the provinces to advance health research and to promote the dissemination and application of new research knowledge to improve health and health services;

and

(j) building the capacity of the Canadian health research community through the development of researchers and the provision of sustained support for scientific careers in health research.

Appendix A: Additional Data on Provincial Funding

Annex A provides additional data on provincial funding patterns not included in the final evaluation report: the percentage of CIHR Grants and Awards budget by province; additional per-capita funding gap analysis for the four non-RPP provinces; and, data on the change in CIHR investment relative to provincial population.

Percent of Grants and Awards Budget

Figures 10 and 11 provide data on the percent allocation of CIHR's total Grants and Awards budget by province. Due to the wide gap in the size of funding, the RPP and non-RPP provinces are presented in two separate tables (note, the range of the y axis on figure 10 is 0% to 7%, compared to Figure 11 which has a range 0% to 45%). A non-statistical interpretation of the data in Figure 10 (which includes RPP funding) suggest that there has been a slight increase in the percentage of CIHR grants and awards funding for Saskatchewan and P.E.I., but generally the trend for the six RPP provinces is either stable or declining.

Figure 10: Percentage of CIHR Grants and Awards Expenditures by RPP Province

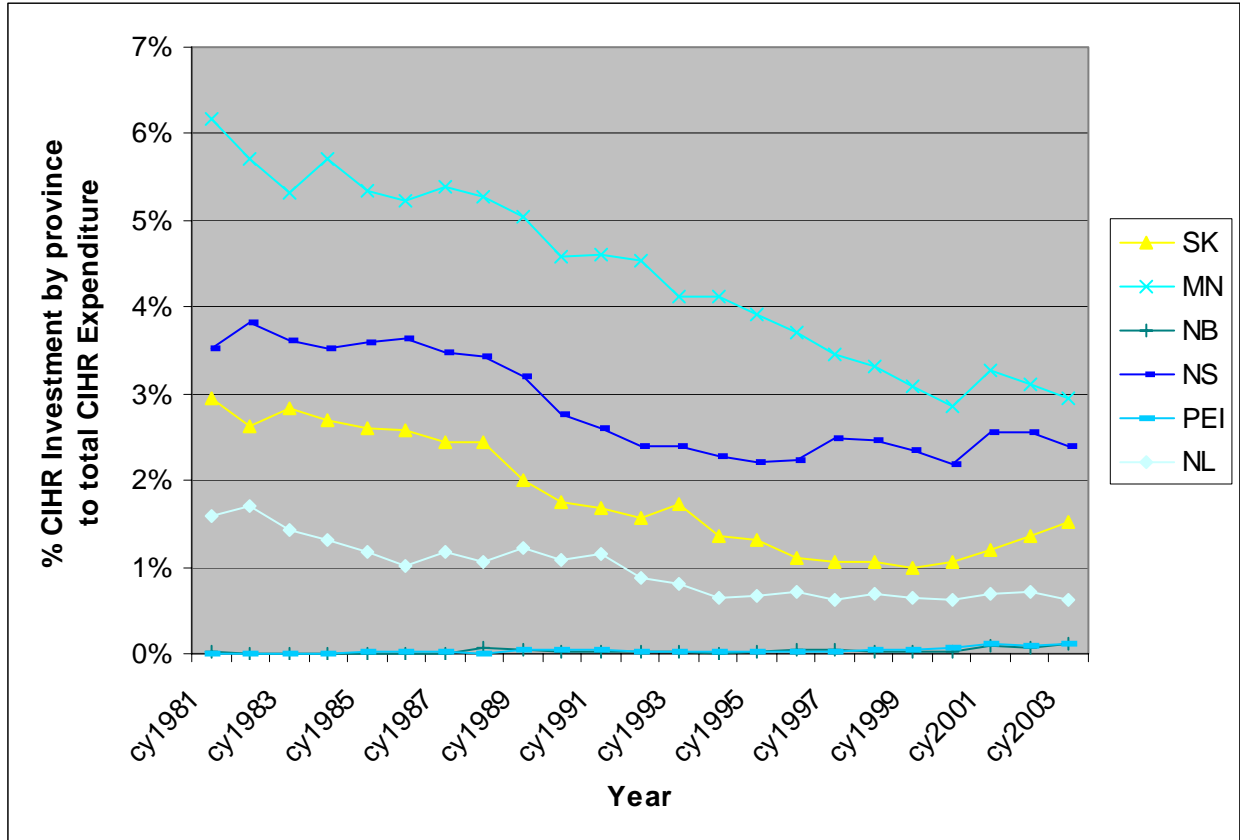
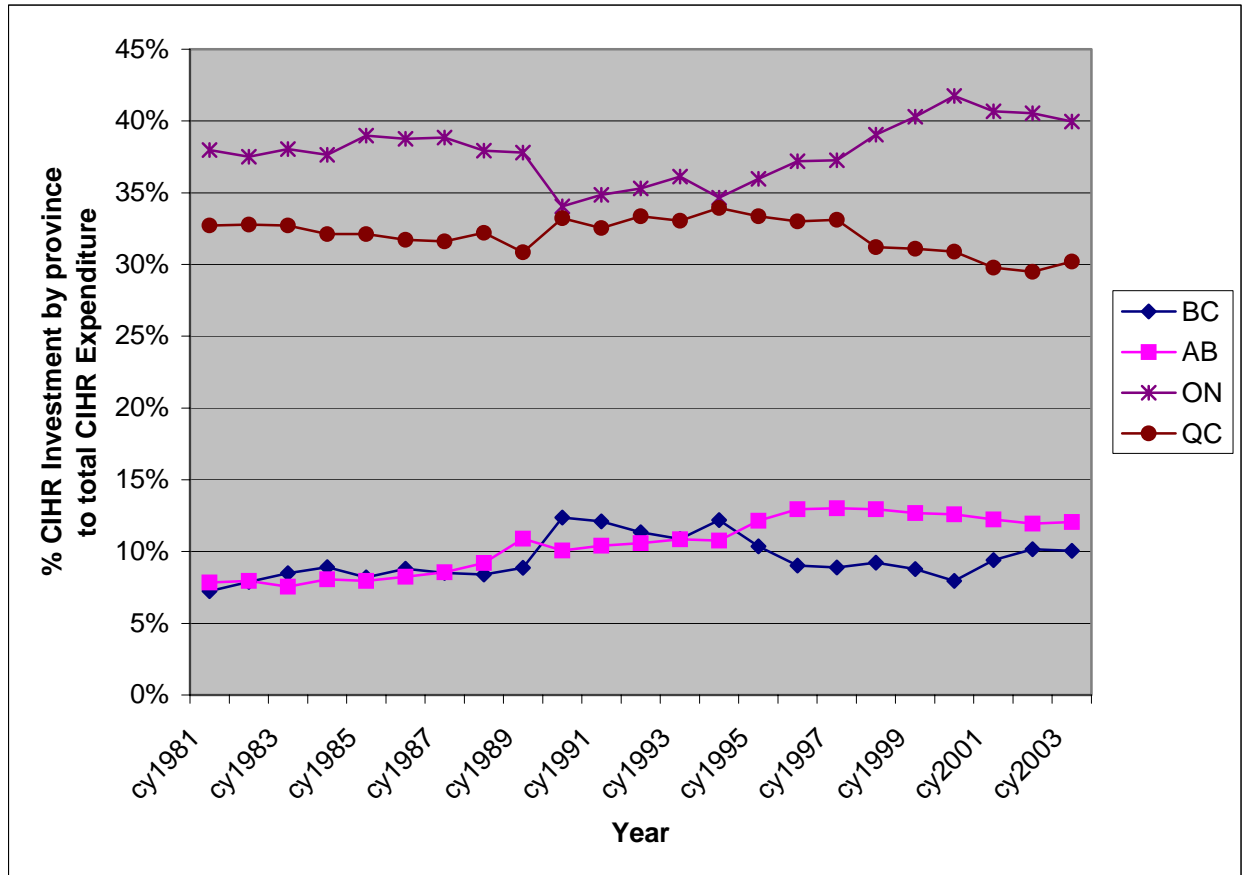


Figure 11: Percentage of CIHR Grants and Awards Expenditures by non-RPP Province



**Per Capita Funding Gap Analysis
Non-RPP Provinces**

The funding gap analysis which was performed for the RPP provinces (Figures 2 through 7 in the main report) is repeated here for the non-RPP provinces: British Columbia (BC), Alberta (AB), Ontario (ON), Quebec (QC). For this analysis, two values were obtained for every year from 1981 to 2003 inclusive. These values are displayed for each of the non-RPP provinces in Figures 12 through 15.

Actual CIHR Funds the funds earned from CIHR competitions in each year.

Expectation the CIHR funds that would have been received in a province had the funds been apportioned solely on the basis of the province’s population as a percentage of the total population of the ten provinces.

The four non-RPP provinces were not part of the evaluation design. Nevertheless, non-statistical interpretations of the charts suggest the following:

- B.C.: While British Columbia remained close to expected level of funding between 1981 and 1995, the gap widened somewhat in the late mid to late 1990’s. Although funding to British Columbia climbed after CIHR’s inception in 2000, the gap between actual and expected remained relatively constant.
- AB: There is evidence of a slight positive funding gap for Alberta, beginning in 1995 and continuing to present.
- ON: Ontario is consistently at the expected level of funding
- QC: Quebec’s trend line is somewhat similar to Alberta in that a positive funding gap begins in the mid-1990’s and continues to present.

Figure 12: BC Funds “Gap” from Population Expectation

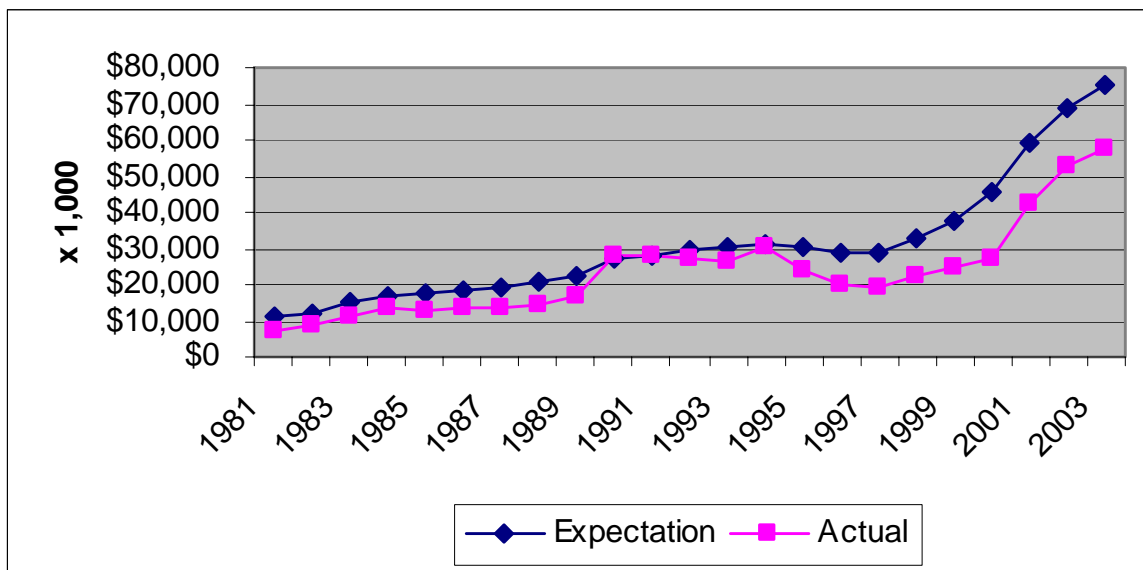


Figure 13: AB Funds “Gap” from Population Expectation

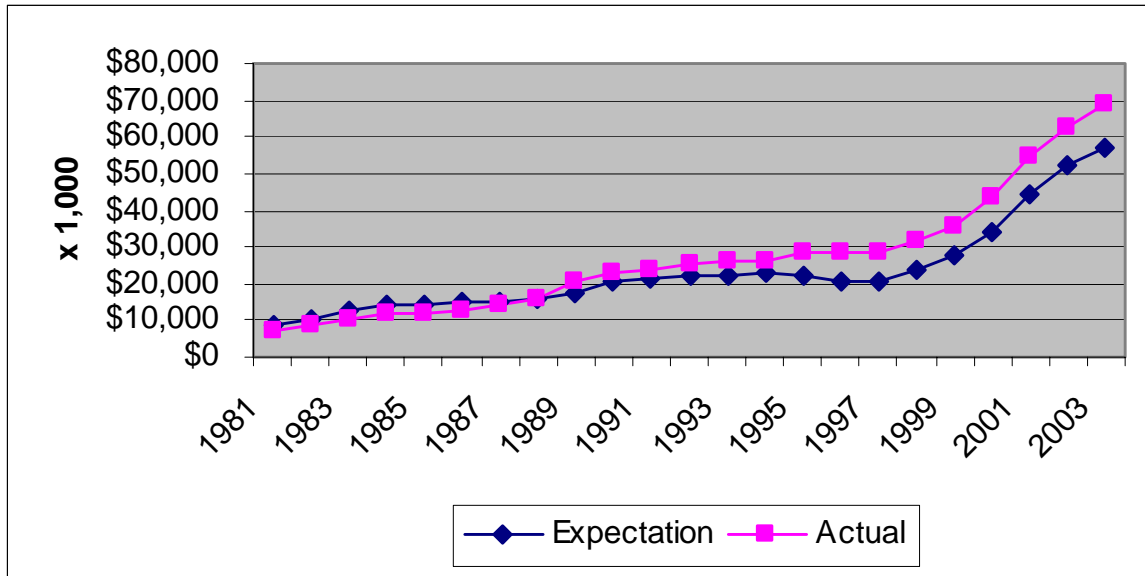


Figure 14: ON Funds “Gap” from Population Expectation

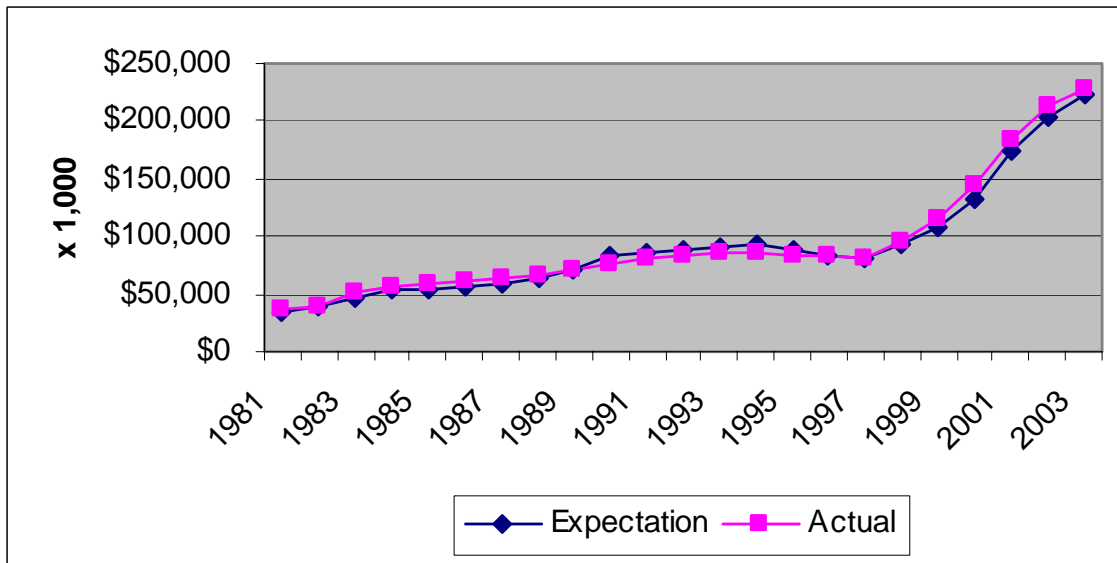
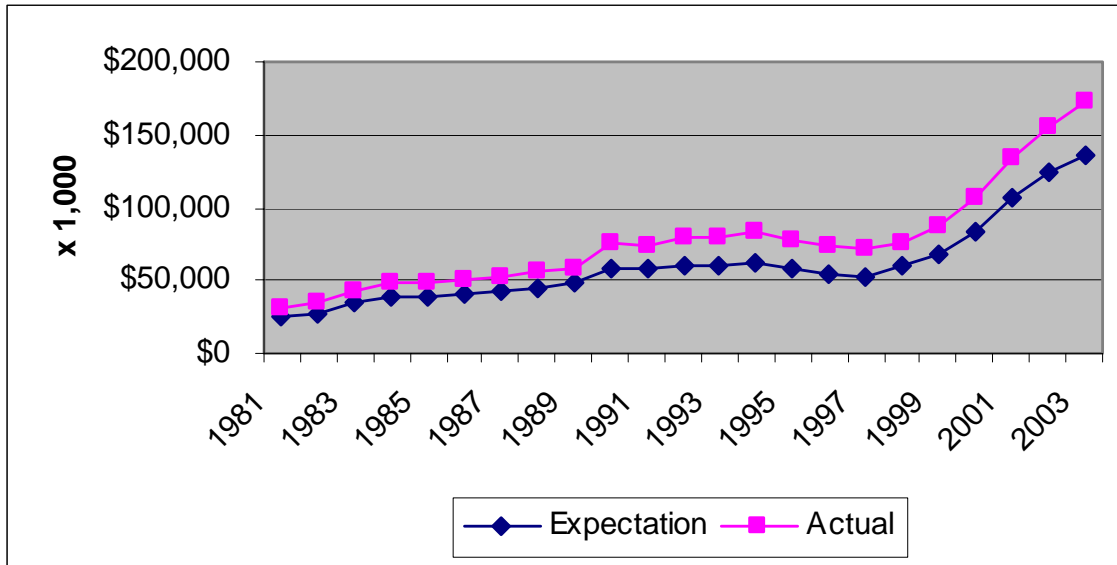


Figure 15: QC Funds “Gap” from Population Expectation



CIHR Investment relative to percent of total population

Figures 16, 17 and 18 show the relationship between (a) the actual CIHR funds earned from CIHR competitions and (b) the expectation if the funds were to be distributed solely on the basis of the province’s population. The data is expressed graphically as the percentage that (a) is of (b). The “actual” divided by the “expectation”, expressed as a percentage, indicates the relative size of the two amounts. “1” indicates that the percentage is 100%, or that the “actual” amount of funding is equal to the population-based “expectation” of funding. If more than 100%, then the “actual” is greater than the “expectation”, and the value rises above 1. If less than 100%, then the “actual” is less than the “expectation”, and the values falls below 1. Figure 16 includes this data for all provinces. Figure 17 isolates the six RPP provinces. Figure 18 isolates the four non-RPP provinces. While not part of the evaluation study, the information in Figure 18 may be of interest.

Figure 16: Percent “Actual” in Relation to “Expectation”: All Provinces

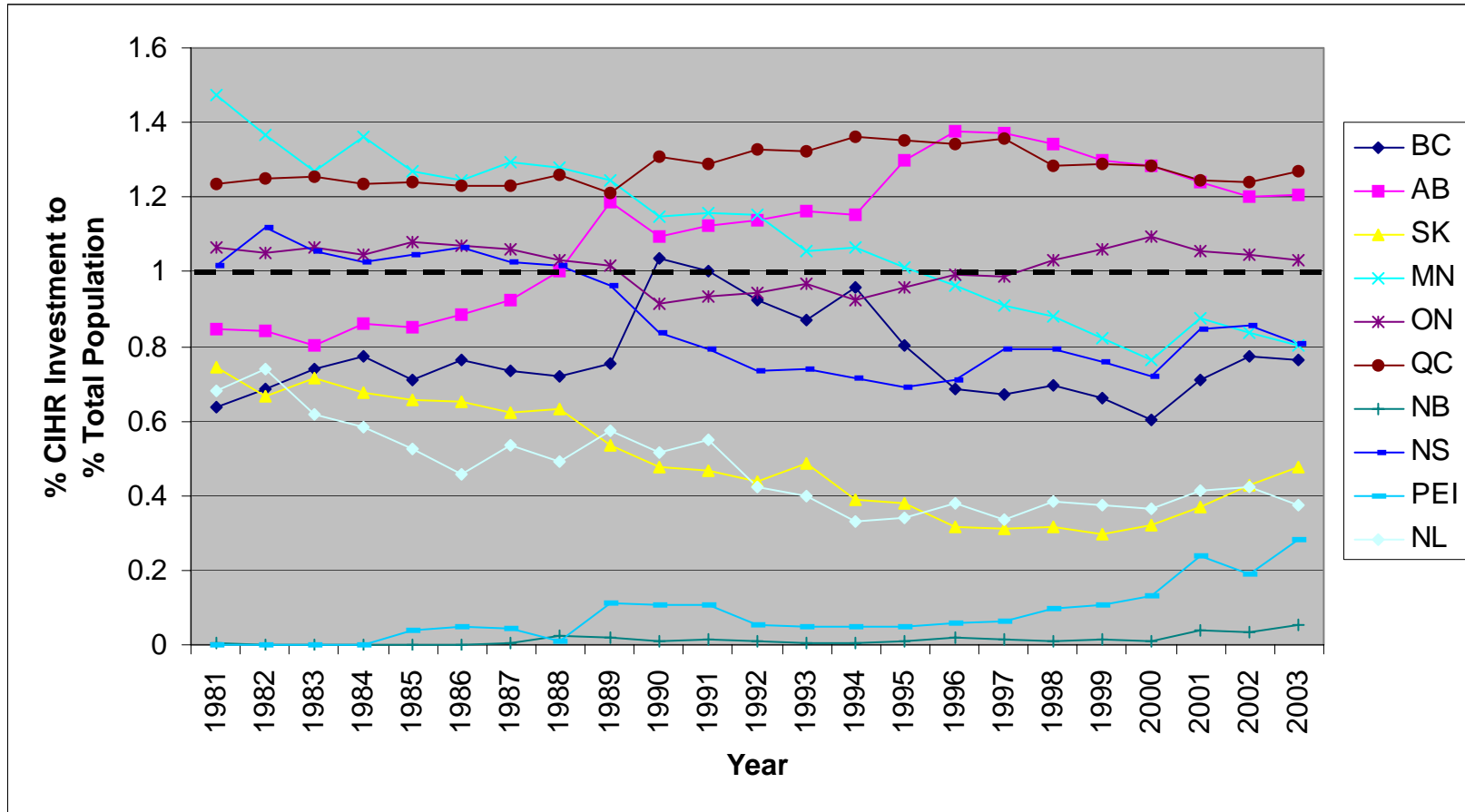


Figure 17: Percent “Actual” in Relation to “Expectation”: RPP Provinces

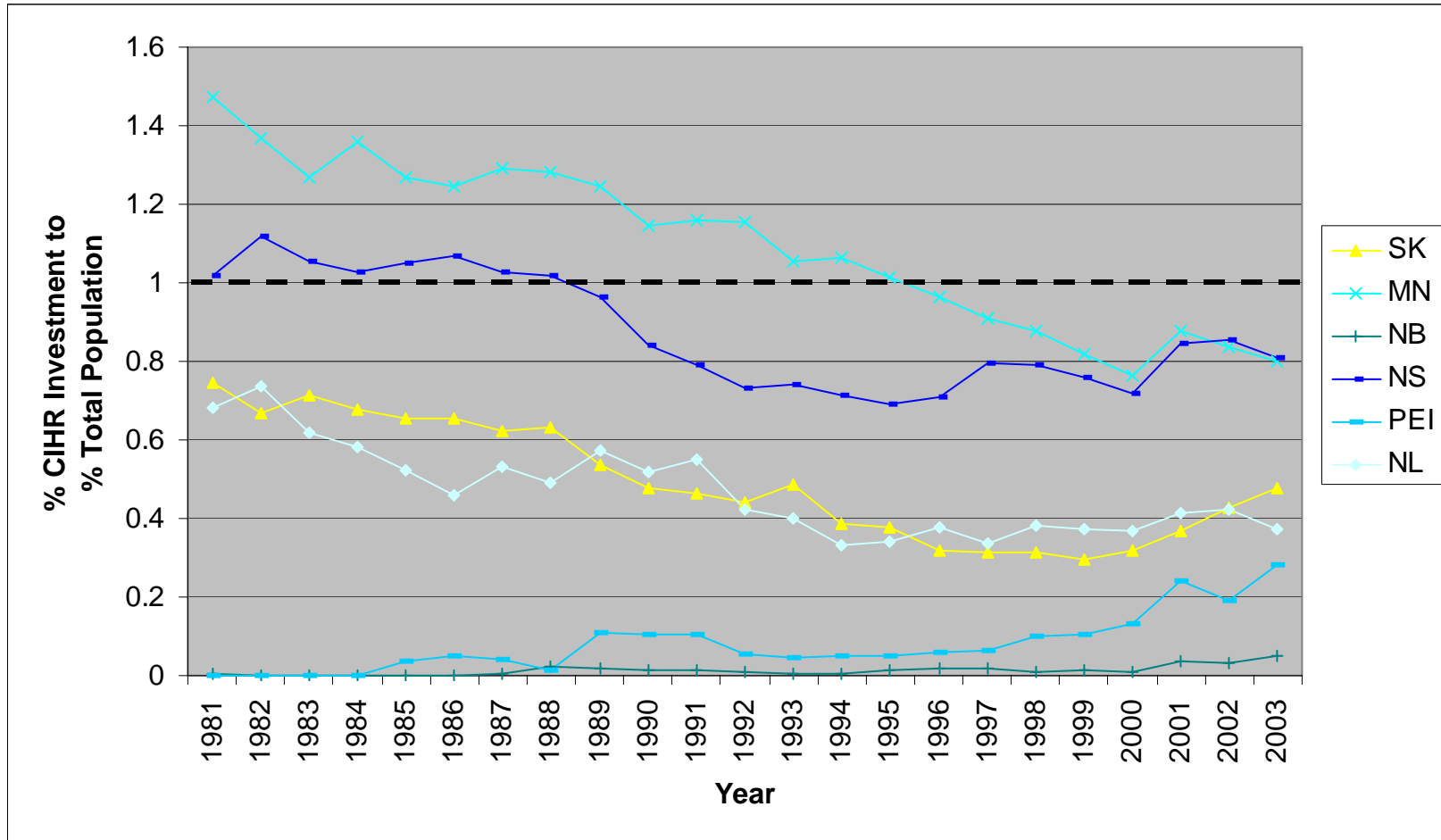
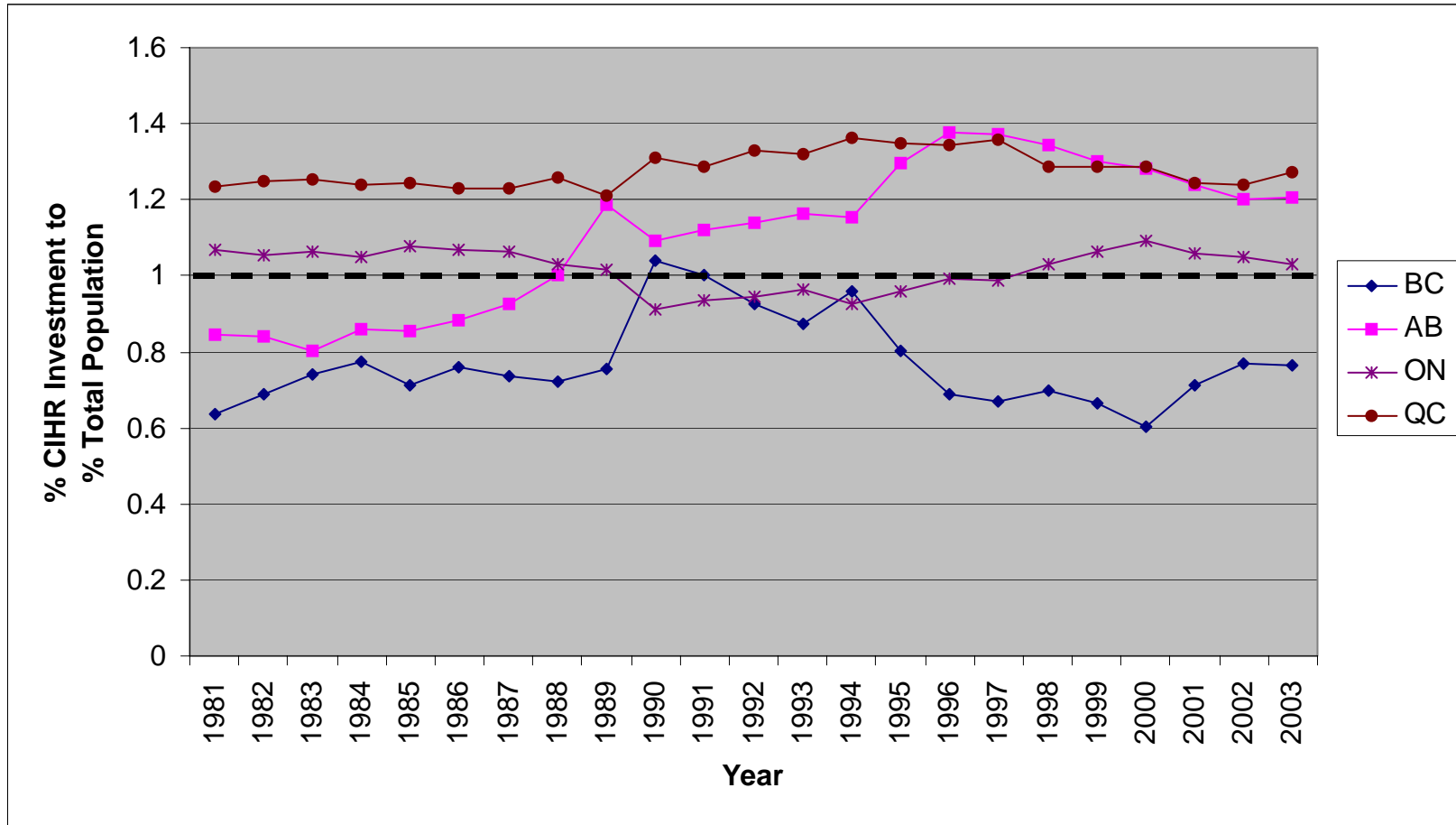


Figure 18: Percent “Actual” in Relation to “Expectation”: Non-RPP Provinces



The following Tables present the raw data used for Figure 18.

Table 12: MRC/CIHR Actual Expenditures in non-RPP Provinces (Dollars x 1000)

	BC	AB	ON	QC
1981	\$6,881	\$7,445	\$36,086	\$31,082
1982	\$8,450	\$8,514	\$40,177	\$35,132
1983	\$11,227	\$10,015	\$50,369	\$43,299
1984	\$13,213	\$11,938	\$55,758	\$47,586
1985	\$12,484	\$12,119	\$59,351	\$48,917
1986	\$13,801	\$12,947	\$60,819	\$49,777
1987	\$13,890	\$13,952	\$63,379	\$51,583
1988	\$14,797	\$16,202	\$66,852	\$56,740
1989	\$16,802	\$20,657	\$71,616	\$58,417
1990	\$27,976	\$22,787	\$77,008	\$75,143
1991	\$27,770	\$23,905	\$80,005	\$74,665
1992	\$27,025	\$25,245	\$84,141	\$79,532
1993	\$26,197	\$26,124	\$86,970	\$79,612
1994	\$30,018	\$26,533	\$85,366	\$83,619
1995	\$24,150	\$28,256	\$83,761	\$77,699
1996	\$19,915	\$28,575	\$82,125	\$72,869
1997	\$19,293	\$28,225	\$80,825	\$71,818
1998	\$22,618	\$31,741	\$95,782	\$76,525
1999	\$24,936	\$35,991	\$114,407	\$88,261
2000	\$27,407	\$43,401	\$143,896	\$106,495
2001	\$42,258	\$55,045	\$183,008	\$133,958
2002	\$53,151	\$62,578	\$212,195	\$154,387
2003	\$57,681	\$69,165	\$229,029	\$173,091

Table 13: MRC/CIHR Population Expectation Expenditures in non-RPP Provinces (Dollars x 1000)

	BC	AB	ON	QC
1981	\$10,841	\$8,807	\$33,826	\$25,136
1982	\$12,290	\$10,131	\$38,168	\$28,145
1983	\$15,207	\$12,511	\$47,323	\$34,555
1984	\$17,090	\$13,867	\$53,213	\$38,473
1985	\$17,579	\$14,202	\$54,951	\$39,396
1986	\$18,118	\$14,662	\$56,924	\$40,460
1987	\$18,876	\$15,071	\$59,685	\$41,975
1988	\$20,548	\$16,189	\$64,917	\$45,109
1989	\$22,271	\$17,378	\$70,393	\$48,254
1990	\$26,950	\$20,860	\$84,333	\$57,357
1991	\$27,706	\$21,293	\$85,644	\$58,020
1992	\$29,240	\$22,196	\$89,106	\$59,922
1993	\$30,048	\$22,467	\$90,026	\$60,267
1994	\$31,332	\$23,021	\$92,217	\$61,305
1995	\$30,110	\$21,799	\$87,292	\$57,552
1996	\$28,984	\$20,761	\$82,914	\$54,215
1997	\$28,727	\$20,590	\$81,690	\$52,926
1998	\$32,508	\$23,664	\$92,771	\$59,546
1999	\$37,580	\$27,667	\$107,795	\$68,607
2000	\$45,522	\$33,866	\$131,694	\$82,913
2001	\$59,326	\$44,464	\$173,065	\$107,598
2002	\$68,912	\$52,156	\$202,578	\$124,654
2003	\$75,396	\$57,343	\$222,525	\$136,137

Table 14: Per Cent “Actual” in Relation to “Expectation”

The percentage obtained by dividing the actual CIHR dollars to a province by the calculation of dollars to a province if CIHR funds were allocated solely on the basis of population.

Cell entries are expressed as a proportion, rather than as a percentage in order to save space.

Provinces have been ordered in terms of their cell value in 2003.

The data in Table 14 is repeated in the following Table 15.

The data is exactly the same but transposed to allow larger size font and the presentation as percentages.

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
QC	1.24	1.25	1.25	1.24	1.24	1.23	1.23	1.26	1.21	1.31	1.29	1.33	1.32	1.36	1.35	1.34	1.36	1.29	1.29	1.28	1.24	1.24	1.27
AB	0.85	0.84	0.80	0.86	0.85	0.88	0.93	1.00	1.19	1.09	1.12	1.14	1.16	1.15	1.30	1.38	1.37	1.34	1.30	1.28	1.24	1.20	1.21
ON	1.07	1.05	1.06	1.05	1.08	1.07	1.06	1.03	1.02	0.91	0.93	0.94	0.97	0.93	0.96	0.99	0.99	1.03	1.06	1.09	1.06	1.05	1.03
NS	1.02	1.12	1.05	1.03	1.05	1.07	1.03	1.02	0.97	0.84	0.79	0.73	0.74	0.71	0.69	0.71	0.79	0.79	0.76	0.72	0.85	0.85	0.81
MN	1.47	1.37	1.27	1.36	1.27	1.24	1.29	1.28	1.24	1.15	1.16	1.15	1.06	1.06	1.01	0.96	0.91	0.88	0.82	0.76	0.88	0.84	0.80
BC	0.63	0.69	0.74	0.77	0.71	0.76	0.74	0.72	0.75	1.04	1.00	0.92	0.87	0.96	0.80	0.69	0.67	0.70	0.66	0.60	0.71	0.77	0.77
SK	0.75	0.67	0.72	0.68	0.66	0.65	0.62	0.63	0.53	0.48	0.47	0.44	0.49	0.39	0.38	0.32	0.31	0.32	0.29	0.32	0.37	0.43	0.48
NL	0.68	0.74	0.62	0.58	0.52	0.46	0.53	0.49	0.57	0.52	0.55	0.42	0.40	0.33	0.34	0.38	0.33	0.38	0.37	0.37	0.41	0.42	0.37
PEI	0.00	0.00	0.00	0.00	0.04	0.05	0.04	0.01	0.11	0.10	0.10	0.06	0.05	0.05	0.05	0.06	0.06	0.10	0.11	0.13	0.24	0.19	0.28
NB	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.02	0.02	0.01	0.01	0.01	0.04	0.03	0.05

Table 15: Per Cent “Actual” in Relation to “Expectation”

	QC	AB	ON	NS	MN	BC	SK	NL	PEI	NB
1981	124%	85%	107%	102%	147%	63%	75%	68%	0%	1%
1982	125%	84%	105%	112%	137%	69%	67%	74%	0%	0%
1983	125%	80%	106%	105%	127%	74%	72%	62%	0%	0%
1984	124%	86%	105%	103%	136%	77%	68%	58%	0%	0%
1985	124%	85%	108%	105%	127%	71%	66%	52%	4%	0%
1986	123%	88%	107%	107%	124%	76%	65%	46%	5%	0%
1987	123%	93%	106%	103%	129%	74%	62%	53%	4%	0%
1988	126%	100%	103%	102%	128%	72%	63%	49%	1%	2%
1989	121%	119%	102%	97%	124%	75%	53%	57%	11%	2%
1990	131%	109%	91%	84%	115%	104%	48%	52%	10%	1%
1991	129%	112%	93%	79%	116%	100%	47%	55%	10%	1%
1992	133%	114%	94%	73%	115%	92%	44%	42%	6%	1%
1993	132%	116%	97%	74%	106%	87%	49%	40%	5%	1%
1994	136%	115%	93%	71%	106%	96%	39%	33%	5%	0%
1995	135%	130%	96%	69%	101%	80%	38%	34%	5%	1%
1996	134%	138%	99%	71%	96%	69%	32%	38%	6%	2%
1997	136%	137%	99%	79%	91%	67%	31%	33%	6%	2%
1998	129%	134%	103%	79%	88%	70%	32%	38%	10%	1%
1999	129%	130%	106%	76%	82%	66%	29%	37%	11%	1%
2000	128%	128%	109%	72%	76%	60%	32%	37%	13%	1%
2001	124%	124%	106%	85%	88%	71%	37%	41%	24%	4%
2002	124%	120%	105%	85%	84%	77%	43%	42%	19%	3%
2003	127%	121%	103%	81%	80%	77%	48%	37%	28%	5%

Appendix B: Program Design

Suggestions

The following five suggestions are offered for consideration in the design of a renewed program if the recommendation of this evaluation is accepted. They are fairly detailed in an attempt to give attention to all significant aspects of planning for a renewed program.

These suggestions are based on the summative evaluation regarding whether or not to renew RPP. On the question of renewal, the recommendation is to renew the program. This still leaves open the design of a renewed program. Lessons learned during the evaluation have been used to develop the following suggestions that CIHR may consider in designing a renewed program.

Program Partnerships

- S1. CIHR should continue to view a renewed RPP as a partnership program.
- CIHR should manage a national partnership between CIHR and Advisory Committees within provinces. Terms and conditions should be influenced by a consensus of the Chairs.
 - Consideration should be given to having areas within a province recognised as regions with the possibility of having more than one region in a province.
 - The formal involvement of each province's government is highly desirable regardless of how many regions there may be within a province.
 - Advisory Committees should develop partnerships between itself and partner contributors.
- S2. Advisory Committee Chairs should be asked to establish a consolidated partner fund under the management of the Advisory Committee.
- Funds from partners would be sought, banked and allocated to projects by the Advisory Committee. Partner funds would be disbursed by the Advisory Committee within the province.
 - Conditions of eligibility within a province would continue to be set by the Committee with the guidance of the Chair who should also be a member of the research communities. The intent is to have a Chair who is representative of, and responsive to, existing and intended research strengths. There is no implication that the incumbent should be selected by vote among researchers.
 - Senior funding partners, those who contribute at least one-third of the total annual requirement, should be invited to join the Advisory Committee along with representatives of the health research communities. This suggestion does not imply a minimum contribution level is needed in order to be invited to the Committee; only that major contributors should also be invited.

S3. CIHR should actively support the Chairs of Advisory Committees.

- Keep the flexibility of the current program design within which Advisory Committees have the freedom to set their own guidelines insofar as these do not subvert the program framework of CIHR guidelines.
- Create a mechanism for sharing lessons learned among the Advisory Committee Chairs. One such possibility would be face-to-face meetings of Chairs on an annual basis. Restrain the use of teleconferences to additional meetings on matters of time-urgency.
- CIHR/RPP management should provide a secretariat to, and should chair the meetings of, the Chairs of the Advisory Committees.

Performance Measurement

S4. Once the policy and design details for a renewed program have been established, it will be important to also design a program of performance measurement. To be effective, performance measurement is best initiated at the start of a renewed program. Data collection for the performance measures is required on a cyclic basis. The findings should be consolidated at least once a year and examined as trend lines. The reports of the performance measurement should be shared among the primary stakeholders.

- The precipitating situation for RPP was the disproportionate allocation between funds received and population size. In this evaluation, this was examined through a “gap” analysis. CIHR and the Chairs should consider whether this “gap” remains a key measure of success in a renewed program. Even if it is not, consideration should be given to maintaining the gap measure as one indicator of progress.

Among the concepts to be defined, and for which key indicators can then be sought, are:

- success rate
- conversion rate
- recruitment
- retention
- promising researcher
- excellent researcher
- recent entrant to health research

- Additional concepts which could usefully be defined, and for which key indicators can then be sought, are:
 - ◆ critical mass for health research (both the criteria for recognising when critical mass has been achieved for a defined area of health research and the time frame for the achievement of capacity development in each area); and
 - ◆ minimal funds necessary to sustain a research presence (consideration should be given to defining a minimum level of funding to a region without which any funding is not likely to be effective).
- Advance consideration should be given to the criteria by which to judge if an objective has been achieved (both in terms of variance from a standard and in

- terms of how long a period of being at the standard will be deemed to be a stable condition).
- Consider the desirability of asking each region to state, a priori, its operational intention for training grants and for operations awards. This is not a suggestion to partition the funding across the two; it is a suggestion that each province develop, as part of its strategic planning, the partitioning that it will use and, as well, the targets for its objectives in each area.

Allotment Levels

- S5. CIHR should consider increasing the allotment for a renewed RPP.
- The RPP allotment in 1999 was 1.5% of MRC/CIHR research funding. By 2003, this had been reduced to 0.8% of the increased CIHR funding for health research. In that same time interval, the CIHR funding for health research had slightly more than doubled.
 - The size of projects is increasing with the result that the current allotment accommodates fewer projects.
 - Consider the use of a formula by which there would be an uneven distribution of allotment to the several regions. The total allotment could be partitioned among the regions in accordance with need as determined by a formula. The following factors may be considered in the construction of such a formula. The intention in this list is to be inclusive. Following additional policy research, it may be decided to remove some factors and perhaps add others.
 - ◆ provincial wealth level.
 - ◆ the numbers of medical school faculty (which is still a major determinant of demand but will likely be of diminishing weight as Pillars 3 and 4 increase in prominence).
 - ◆ the inclusion of Pillar 3 (health systems and services) and Pillar 4 (population and public health) is relatively recent and may be of particular importance to the development of capacity in regions without medical faculties.
 - ◆ the base level of funding judged necessary if even a minimal presence of health research is to be maintained in a region.
 - ◆ the relative number of participating new researchers who may require some priority within the framework of a development program. Currently, significant amounts of RPP funds are being used by scientists who are well into their career paths. Priority decisions may be required to balance the needs of entry scientists with those seeking bridge funding to maintain an existing health research program.