

THE ANATOMY OF INDIRECT COSTS OF HEALTH RESEARCH: AN ACAHO MEMBER SURVEY



APRIL 2005



Association of Canadian Academic Healthcare Organizations
Association Canadienne des Institutions de Santé Universitaires



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PURPOSE

The purpose of this report is to highlight how funding for indirect costs of research flows from the Federal Government, through Universities (or degree-granting institutions), to ACAHO member organizations. This report will address only the health research which is funded by the three federal granting councils: the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC) and the Social Sciences and Humanities Research Council of Canada (SSHRC). Results from this survey will be shared amongst ACAHO members for their information.

BACKGROUND

Research is an integral, if not defining role of Canadian Teaching Hospitals and Regional Health Authorities (RHAs). Research has been touted the “oxygen” of an evidence-based health system and the foundation for a sound public policy decision-making process. ACAHO members are distinguished by their support of the health research enterprise. It is estimated that 75-80% of public funding for health research in Canada occurs in ACAHO member institutions. Research and innovation, in conjunction with service provision, and the teaching and education of health professionals, represent the academic mission “trilogy”.

Health research in Canadian teaching hospitals, RHAs and their Research Institutes has been, and continues to be supported by federal granting agencies, provincial agencies, disease specific charities, hospital foundations, direct donations and contracts with pharmaceutical and other private sector companies (e.g. medical devices). The federal government’s decision in 2003 to create the Indirect Costs Program signaled an important milestone for Canadian Universities and Research Hospitals by demonstrating recognition of the true costs of conducting research. Following the 2005 budgetary announcement to increase funding for this national program, federal support for the indirect costs of research will reach \$260.0 million in 2005/2006, and will increase to \$405.0 million by 2009/2010. The Indirect Costs Program sees the federal government transfer money directly to Universities, who in turn apportion funds to Teaching Hospitals, RHAs and their Research Institutes.

SURVEY METHODOLOGY

This report focuses exclusively on the results of a survey of Teaching Hospitals and Regional Health Authorities, conducted via telephone and email.

Respondents were asked to reply to the following questions:

1. Does an MOU exist to address distribution of funding for indirect costs of research?
2. What is the distribution between the University and its affiliated Teaching Hospitals/ RHAs to cover indirect costs of health research?
3. In dollars, how much funding did your Teaching Hospital/ RHA receive to cover indirect costs of health research?
4. What is your Teaching Hospital / RHA’s total health research revenue?
5. What proportion does your health research revenue represent of total health research revenue (University + Teaching Hospital /RHA)?

The following fourteen ACAHO members completed the survey, administered in January 2005:

- *Vancouver Coastal Health Authority*
- *BC Institute for Children's and Women's Health*
- *Capital Health Region (Edmonton)*
- *Saskatoon Health Region*
- *Lawson Health Research Institute*
- *University Health Network*
- *St. Michael's Hospital*
- *Sunnybrook & Women's College Health Sciences Centre*
- *Hospital for Sick Children*
- *Kingston General Hospital*
- *Children's Hospital of Eastern Ontario Research Institute*
- *Centre hospitalier de l'Université de Montréal*
- *Centre hospitalier universitaire de Québec*
- *Capital District Health Authority(Halifax)*

This survey is iterative in nature. That is, ACAHO intends to conduct this survey on an annual basis, so to review and update information from members as required.

PROGRAMME EVALUATION

The terms of reference for the Indirect Costs Program stipulate that a review will occur at the end of the program's third year (2005) in order to: (1) examine the design and the operations of the program, (2) identify any required adjustments, and (3) assess how the program is fulfilling its objectives and the extent to which it has produced any measurable outcomes. An inter-agency Evaluation Steering Committee has commissioned an independent education and evaluation research firm to conduct the design phase of the review. This review will be conducted through to April 2005 via telephone interviews of beneficiaries of the Indirect Cost Program including many ACAHO member organizations.

The benefits of health research extend far beyond the traditional "bench-to-bedside". Health research preserves and enhances individual and collective health status, often improves the means by which care is delivered, and notably, is a significant driver of the Canadian economy. The Indirect Costs Program is integral to the continuing success of the Canadian research enterprise. It is for this reason that your continued support and participation of the Indirect Costs Program review is of paramount importance. ACAHO strongly encourages members to participate in this process as they are approached by the independent research firm.

Should you have any questions or comments regarding the content or methodology of this survey, please contact Emily Gruenwoldt, Senior Advisor, Research and Policy Development by telephone at 613-730-5818 ext. 324, or alternatively, via email at gruenwoldt@acaho.org . For questions or concerns relevant to specific agreements between Teaching Hospitals/RHAs and their affiliated universities, please refer to the contact list in Appendix B.

INDIRECT COSTS OF RESEARCH: FRAMEWORK AGREEMENTS AND HEALTH RESEARCH DATA

Institution / Regional Health Authority (RHA)	Does an MOU exist to address distribution of funding for indirect costs of research?	What is the distribution between the University and its affiliated institutions/RHAs to cover indirect costs of health research?	In dollars, how much funding did your institution /RHA receive to cover indirect costs of health research?	What is your institutions / RHAs total health research revenue?	What proportion does your health research revenue represent of total health research revenue (University + affiliated institutions/RHAs)?
Vancouver Coastal Health Authority Vancouver, BC	Yes	Institution/RHA: 50% University: 50%	\$750,000	\$57.0 Million	33%
BC Institute for Children’s and Women’s Health Vancouver, BC	Yes	Institution/RHA: 50% University: 50% The exception to the rule is with regards to clinical research, whereby the hospitals/RHAs receive 80% of funding, the university 20%.	\$425,000	\$40.0 Million	33%
Capital Health Region Edmonton, ALTA	Yes	Distribution of funding to cover indirect costs of research is based on a formula which identifies where research was conducted, where data was collected and whether the research involved the use of biological specimens from CHA patients.	\$215,000 (2003 figures)	CHA Edmonton does not directly receive grant funding.	Unknown

Institution / Regional Health Authority (RHA)	Does an MOU exist to address distribution of funding for indirect costs of research?	What is the distribution between the University and its affiliated institutions/RHAs to cover indirect costs of health research?	In dollars, how much funding did your institution /RHA receive to cover indirect costs of health research?	What is your institutions / RHAs total health research revenue?	What proportion does your health research revenue represent of total health research revenue (University + affiliated institutions/RHAs)?
Saskatoon Health Region Saskatoon, SA	Yes ¹	Institution/Health Region: 0 University: 100%	<0	Unknown	Unknown
Lawson Health Research Institute London, ON	Yes	Institutions: 80-90% University: 10-20%	\$1.2 Million	Unknown	Affiliated institutions of UWO represent approx. 2/3 of the health research activity.
University Health Network Toronto, ON	Yes	Institutions: 100% University: 0%	\$3.5 Million	\$150.0 Million	25%
St. Michael's Hospital Toronto, ON	Yes	Institutions: 100% ² University: 0%	\$363 000	\$25.2 Million	6.89% (2002-2003)
Sunnybrook and Women's College Health Sciences Centre Toronto, ON	Yes	Institutions: 100% University: 0%	\$1.7 Million	\$80.0 Million	15%

¹ Currently being renegotiated. Federal funding for indirect costs of research flow to the University with no specific amount reallocated to Saskatoon Health for indirect costs of research they incur.

² For CRC grants, St. Michael's receives 94% funding for indirect costs.

Institution / Regional Health Authority (RHA)	Does an MOU exist to address distribution of funding for indirect costs of research?	What is the distribution between the University and its affiliated institutions/RHAs to cover indirect costs of health research?	In dollars, how much funding did your institution /RHA receive to cover indirect costs of health research?	What is your institutions / RHAs total health research revenue?	What proportion does your health research revenue represent of total health research revenue (University + affiliated institutions/RHAs)?
Hospital for Sick Children Toronto, ON	Yes	Institutions: 100% University: 0%	\$3.4 Million	\$87.4 Million	15%
Kingston General Hospital Kingston, ON	Yes	Departments or Research Groups: 14% Institutions: 43% University: 43%	\$145,000	\$18.0 Million	26%
Children's Hospital of Eastern Ontario Research Institute Ottawa, ON	Yes	Institutions: 80% University: 20%	\$265,000	\$17.0 Million	Unknown
Centre hospitalier de l'Université de Montréal Montreal, QC	Yes	Institutions: 80% University: 20% ³	\$1.3 Million	\$40.0 Million	25%
Centre hospitalier universitaire de Quebec Quebec, QC	Yes	Institutions/RHA: 80% University: 20%	\$2.0 Million	\$59.0 Million	Unknown

³ These are 2004-2005 figures. In 2003-2004, CHUM received 75% and the University retained 25%.

Institution / Regional Health Authority (RHA)	Does an MOU exist to address distribution of funding for indirect costs of research?	What is the distribution between the University and its affiliated institutions/RHAs to cover indirect costs of health research?	In dollars, how much funding did your institution /RHA receive to cover indirect costs of health research?	What is your institutions / RHAs total health research revenue?	What proportion does your health research revenue represent of total health research revenue (University + affiliated institutions/RHAs)?
Capital District Health Authority Halifax, NS	Yes	Variable	\$250,000	\$1.0 Million	Unknown

ORGANIZATION: VANCOUVER COASTAL HEALTH AUTHORITY, VANCOUVER, BC

A Letter of Agreement has been signed between the University of British Columbia and its Academic Health Science Centres. This agreement is renewed on an annual basis.

The distribution of funds received for indirect costs is split 50/50 between the University and the Affiliated Academic Centres (Vancouver Coastal Health Authority, Providence Health Centre, and BC Women and Children's Hospital). This formula was derived based on the fact that both the University of British Columbia and the affiliated institutions share the indirect costs associated with the research enterprise, including library branches at affiliated hospitals, grant accounting, ethics review, operational costs of research space, technology transfer and others.

Funding is distributed to the affiliated academic centres on the basis of volume of research conducted. The use of the funds to cover costs associated with infrastructure, such as renovations, technology transfer, research promotion and public awareness and other areas are all determined by the guidelines established by the federal government for the program.

ORGANIZATION: INSTITUTE FOR CHILDREN'S AND WOMEN'S HEALTH, VANCOUVER, BC

A Memorandum of Understanding (MOU) was signed by the University of British Columbia (UBC) and the Health Authorities outlining how funding for indirect costs associated with research performed in teaching centres is allocated. Teaching centres affiliated with the UBC include BC Institute for Children's and Women's Health, Vancouver Coastal Health (Providence and Vancouver Acute Hospitals) and BC Cancer Agency.

The MOU stipulates that 50% of the indirect costs associated with research are returned to the four teaching centres, while the University keeps the remaining 50%. The allocation to the teaching hospitals is based on grant success. The exception to this rule is clinical research whereby the health centres (who conduct the majority of such research) receive 80% of the funding for indirect costs from the Federal Government, while UBC collects 20%.

The BC Institute for Children's and Women's Health research budget fluctuates from year to year but is estimated at \$40.0 million.

ORGANIZATION: CAPITAL HEALTH REGION, EDMONTON, ALTA

An MOU was signed in 2003 to reflect the understanding between the University of Alberta and Capital Health Authority (CHA) Edmonton regarding the distribution of an Indirect Cost Grant. Researchers affiliated with Capital Health had almost no funding from NSERC or SSHRC so calculation of the CHA portion was based on eligible CIHR and MRC grants awarded to the University of Alberta in fiscal years 1999-00, 2000-01, 2001-02.

All eligible projects were reviewed with the principal investigators (PI), and the following “formula” applied: If the PI had an office in a Capital Health Authority facility **or** data was collected at CHA, 50% of the grant was attributed to CHA. If the PI had an office at CHA **and** the data was collected at CHA, then, 80% of the grant was attributed to CHA. If the project involved only the use of biological specimens from CHA patients, then 20% of the grant was attributed to CHA.

Using this method, it was determined that 4.12% of eligible CIHR and MRC funding for those years was related to research activity conducted at Capital Health. Accordingly, the University of Alberta distributed 4.12% (or approximately \$215,000) of the CIHR and NCE portion of its 2003 indirect costs grant to Capital Health. Capital Health agreed to this same percentage distribution for 2004. It is anticipated that Capital Health will conduct another review of eligible projects in 2005 and, if necessary, renegotiate its portion of the grant.

The University of Alberta receives between \$12.0-14.0 million to fund the indirect costs of research. This money is allocated between the University and its two affiliated teaching centres: Capital Health Authority and the Alberta Cancer Board.

Funds provided from an indirect costs grant must be fully expended in the fiscal year in which they were received. Eligible expenditures are specified by the Indirect Costs Program and must be reported to the CRC Secretariat via the University of Alberta.

Capital Health Authority has no overarching health research budget. However, a number of foundations attached to Capital Health Authority facilities provide funds annually for research competitions.

ORGANIZATION: SASKATOON HEALTH REGION, SASKATOON, SK

The Saskatoon Health Region and the University of Saskatoon have signed a letter of agreement with regards to the funding for indirect costs of research. This funding is applicable only to research grants which have been conferred by the tri-council (CIHR, SSHRC, and NSERC) and for research which occurs in facilities of the Saskatoon Health Region. Currently, there are only three examples of research which would be eligible to receive funding to cover indirect costs according to this letter of agreement (e.g. only three grants in total awarded from the tri-council).

Clinical trial research comprises approximately 80% of all research conducted in the Health Region. The majority of clinical trial research is conducted by Faculty of Medicine from the University of Saskatchewan conducts. The overhead costs associated with these projects are not transferred back to the Region.

In the future, it is anticipated that CIHR may begin to fund more of the clinically based research projects which are conducted at the Region. If more of the Tri-Council funded research grants are undertaken in the Health Region, the Region will need to re-evaluate the distribution of funding for indirect costs between the University and themselves.

Most research which occurs in the Region is funded externally, primarily through pharmaceutical companies; a small proportion is funded by smaller research institutions such as the Saskatchewan Health Research Foundation.

There are approximately 120 research projects approved annually in the Saskatoon Health Region; there are approximately 300 studies (of various kinds), underway at any one time. Of the 120 approved annually, approximately 10 are assumed by employees/researchers of the Health Region who are usually not funded, and often completing graduate work/studies. The remaining projects are conducted by researchers who are either under contract through the University of Saskatchewan (and this can be physicians or other faculty members) or individual physicians.

A proposal is being drafted to see the University, the Health Region and a third organized (existing) research institution at arms length from the University to come together to create a joint office through which to conduct clinical research and allocate responsibility for the indirect costs associated with this research.

ORGANIZATION: LAWSON HEALTH RESEARCH INSTITUTE, LONDON, ON

Federal funding for indirect costs is an ongoing program, with an annual allocation which began in the 2003/04 federal budget. The rate of funding for indirect costs is expressed as a percentage of the average research funding (direct costs) that an institution has received over the three most recent fiscal years for which data is available. A three year agreement exists between the University of Western Ontario and Lawson Health Research Institute regarding sharing of funding for indirect costs.

In London, federal funding for indirect costs recouped by academic health care organizations (such as Lawson) ranges from 80-90% of total funding for indirect costs (e.g. funding for universities + academic healthcare centres). Lawson HRI receives approximately \$1.15 million (net). Some research departments of the teaching hospitals and/or research institutes share this funding with the host hospital to cover indirect cost expenditures.

Lawson HRI also receives provincial funding for indirect costs of research. See Appendix A.

ORGANIZATION: UNIVERSITY HEALTH NETWORK, TORONTO, ON

The University Health Network (UHN) has signed a Memorandum of Understanding with the University of Toronto, regarding the distribution of funding to cover the indirect costs of research. The agreement stipulates that 100% of the funding received through the Indirect Costs Program is allocated to the University of Toronto's affiliated teaching centres. As a result, the UHN received \$3.5 million to cover the indirect costs of research in 2003-2004.

The UHN health research budget is \$150.0 million annually, which represents approximately 25% of the total research budget of the University of Toronto and its affiliated teaching centres.

ORGANIZATION: ST. MICHAEL'S HOSPITAL, TORONTO, ON

A formal memorandum of understanding between St. Michael's Hospital and the University of Toronto has been established. As a result, St. Michael's receives 100% of indirect costs for Tri-Council grants. On top of this funding, they also receive 94% for Canada Research Chairs grants.

In 2003-2004, federal funding in support of indirect costs of research at St. Michael's totaled just over \$363,000; provincial support amounted to \$172,000. Total research revenue at St. Michael's for this same time was over \$25.0 million.

Latest available figures (2002-2003) reveal that St. Michael's represents 6.89% of total health research, where total health research represents that of the University of Toronto and all its affiliated hospitals.

ORGANIZATION: SUNNYBROOK AND WOMEN'S COLLEGE RESEARCH INSTITUTE, TORONTO, ON

A memorandum of understanding between the University of Toronto and its affiliated Academic Health Science Centres dictates that 100% of federal funding for indirect costs of research will flow to institutes performing health research. The University of Toronto is responsible for ensuring accountability and transparency with respect to the distribution of funding for indirect costs of research.

In real terms, approximately \$1.7 million (2004) flows from the University to Sunnybrook and Women's Research Institute (SWRI) to cover the indirect costs associated with health research.

It is estimated that SWRI spends \$80.0 million on health research annually. Overhead costs associated with the Research Institute are approximately \$10.0 million per year; the remaining \$70.0 million is leveraged in health research grants from national granting agencies, the province, charities, etc.

Significantly, greater than 50% of health research occurs in hospitals-based research institutes affiliated with the University of Toronto (versus on grounds of the University campus itself) using external grant income as the metric. Further, almost 70% of graduate students within the Faculty of Medicine at University of Toronto are trained and execute their research at these hospital based research institutions.

ORGANIZATION: HOSPITAL FOR SICK CHILDREN, TORONTO, ON

Indirect costs which flow from the University of Toronto are split between each of the affiliated teaching centres. There are sub-grant agreements with the University for the Indirect Costs Program with each teaching centre. The total dollar amount received by Sick Kids for the 2003-2004 fiscal year was \$3.4 million. For the 2004-2005 fiscal year, Sick Kids expects a payment from the University in the amount of \$3.6 million.

Total external research revenue received in 2003/04 was \$87.4 million. The forecast for 2004/05 is \$95.0 million.

Sick Kids receives approximately 15% of the total health research revenue (research performed at the University of Toronto and all affiliated teaching centres).

ORGANIZATION: KINGSTON GENERAL HOSPITAL, KINGSTON, ON

Queen's University, the Hotel Dieux and Kingston General Hospital have signed a memorandum of understanding regarding the distribution of indirect costs of research performed in academic health centres. This agreement is renewed on an annual basis.

A formula has been developed by which to divide funds for indirect costs of research. This formula distributes 14% of funding to offset indirect cost expenditures incurred by the University/Hospital Departments or Research Groups (negotiated agreement exists between the two as to distribution). The remaining 86% is allocated 50/50 between Queen's University and its teaching centres (KGH and Hotel Dieux). The teaching centres split funds based on the actual volume of research conducted in each institution (the number of research grants acquired). Accordingly, for 2004, KGH will receive 82% of the 50% share allotted to academic health centres. This equates to approximately \$145,770 for KGH, \$31,820 for Hotel Dieux.

ORGANIZATION: CHILDREN'S HOSPITAL OF EASTERN ONTARIO RESEARCH INSTITUTE, OTTAWA, ON

The Children's Hospital of Eastern Ontario (CHEO) Research Institute and the University of Ottawa have signed a memorandum of understanding with respect to the funding of indirect costs of research. Funding is currently allocated on an 80/20 basis between the University and the Children's Hospital.

The CHEO Research Institute received \$265,720 as a result of federal funding via the Indirect Costs Program in 2004/2005. CHEO RI also receives provincial funding in the amount of \$69,330 (2002/2003).

Total funding for all research at the CHEO RI is approximately \$17.0 million.

ORGANIZATION: CENTRE HOSPITALIER DE L'UNIVERSITÉ DE MONTRÉAL, MONTRÉAL, QC

A Memorandum of Understanding exists between CHUM and the Université de Montréal. As of 2004-2005, CHUM collects 80% of indirect costs for the Tri-Council grants. In 2003-2004, this figure was 75%. As a result, federal funding is expected to rise from \$980 532 in 2003-2004, to \$1.3 million in 2004-2005.

In 2003-2004, health research at CHUM grew to just under \$40.0 million. This represents 25% of total health research as conducted by the Université de Montréal and its affiliated institutions.

ORGANIZATION: CENTRE HOSPITALIER UNIVERSITAIRE DE QUÉBEC, QUÉBEC, QC

A Memorandum of Understanding has been signed between CHUQ and L'Université Laval. This MOU specifies that CHUQ receives 80% of indirect costs for Tri-Council grants.

In 2003-2004, CHUQ received approximately \$2.0 million total, to cover indirect costs associated with research. Over this same period, the research budget of CHUQ totaled \$59.0 million.

ORGANIZATION: CAPITAL DISTRICT HEALTH AUTHORITY, HALIFAX, NS

A Memorandum of Understanding exists between Dalhousie University and its affiliated institutions, including Capital District Health Authority (CDHA) regarding the distribution of funding for indirect costs associated with research. Capital District Health Authority receives \$250,000 from the Indirect Costs Program via Dalhousie University. Health research generates approximately \$1M in revenue for CDHA. There are three primary sources of income for the region: overhead revenue associated with clinical research (approximately \$650,000 projected for 2006 with respect to contracted research); research fund investment income (\$320,000 projected for 2004); and miscellaneous research income estimated to amount to \$50,000-\$100,000.

**-APPENDIX A -
PROVINCIAL FUNDING FOR INDIRECT COSTS IN ONTARIO**

Funding by the Province of Ontario for indirect costs is complex. There are two unique streams of funding, one relates to the Ontario Research and Development Challenge Fund (ORDCF) and the other relates to all other research. The Ontario Research Performance Fund (ORPF) provides \$40M a year to colleges, universities and research institutes to cover indirect costs associated with Ontario funded research not included in awards. These funds are awarded to Universities and ordinarily there is a sharing agreement between the University and the teaching hospitals and research institutes. The Fund supports the difference between indirect costs in the awards and a maximum of 40% of the total direct costs provided through government-sponsored research programs such as the ORDCF.

In order to be eligible for ORPF, the amount of overhead support provided for a program (funded by the ORDCF) must be less than 40% of the funding for direct research costs. Once a program is deemed eligible, the amount of overhead paid in the awards during the previous fiscal year is determined. For programs where overhead payments are less than 40%, the top-up amount required is calculated.

For Ontario research supported by Ontario ministries (not the ORDCF), the Ontario Research Performance Fund is applied directly as a percentage of the direct costs. Because the ORPF is capped, the percentage is usually less than 40% and is lessening each year reflecting a greater amount of research funded by Ontario ministries (Health, Economic Development and Trade, Agriculture, etc).

The Fund is administered by the Ministry of Economic Development and Trade. Health research comprises approximately 65% of the total research conducted.

**-APPENDIX B-
ACAHO MEMBER INDIRECT COST CONTACT LIST**

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