

Canada's Top 40 Research Hospitals List 2012 Analysis

Hospital Research Income Slows Dramatically

Canada's Top 40 Research Hospitals reported \$2.195 billion in research income in Fiscal 2011, up from \$2.179 billion in Fiscal 2010 – a meagre 0.7% year-over-year increase.

Toronto's University Health Network remains the country's largest destination for research funding, garnering \$253.2 million of research income. Hospital for Sick Children was next on the list (\$167.8 million) and McGill University Health Centre (\$153.0 million) rounded out the top 3 institutions in the country. These leaders were followed by Hamilton Health Sciences (\$152.5 million) and B.C.'s Provincial Health Services Authority (\$138.7 million). Four of these top 5 research hospitals reported declines in research income from Fiscal 2010. Overall, 23 research hospitals posted increases in research income in Fiscal 2011, compared with 17 hospitals where income declined or was flat.

The \$100 Million Club

In Fiscal 2011, 9 hospitals reported research income of \$100 million or more, thereby gaining admission to RESEARCH Infosource's prestigious \$100 Million Club. Research income of these top research hospitals accounted for 61% of the total (\$1.340 billion), but combined research income dropped -2.0% over the period. Additions to the Club were Provincial Health Services Authority (\$138.7 million), Vancouver Coastal Health Authority (\$120.3 million) and London Health Sciences Centre/St. Joseph's Health Care London (\$102.0 million).

2011 Rank	The \$100 Million Club	Research Income \$000
	Research Hospital	
1	University Health Network	\$253,245
2	Hospital for Sick Children	\$167,815
3	McGill University Health Centre (MUHC)	\$153,008
4	Hamilton Health Sciences	\$152,545
5	Provincial Health Services Authority	\$138,722
6	Ottawa Hospital	\$129,929
7	Sunnybrook Health Sciences Centre	\$122,100
8	Vancouver Coastal Health Authority	\$120,261
9	London Health Sciences Centre/St. Joseph's Health Care London	\$102,000

Provincial Performance

In Fiscal 2011, Ontario's 19 research hospitals accounted for 58% of all research income (\$1.266 billion), the same share as in Fiscal 2010. Quebec's 15 research hospitals garnered 27% of the national total (\$593.97 million), up from 26% in Fiscal 2010. British Columbia attracted 12% of the total, accounting for \$258.98 million of research income.

Research income gains in Fiscal 2011 were strongest Nova Scotia, where the province's 2 research hospitals expanded their combined research income by 10.0%. The other province where research income increased over the period was Quebec, posting combined research income growth of 4.8%. However, research income dropped in Ontario (-0.3%), British Columbia (-2.9%) and Manitoba (-8.5%).

Top 40 – By Province	
Province¹	% of Total
Ontario (19)	58
Quebec (15)	27
British Columbia (2)	12
Nova Scotia (2)	2
Manitoba (2)	2

Again this year Ontario research hospitals led the list on the basis of research income received per capita (per provincial resident). Ontario hospitals attracted an average of \$95 research dollars per capita, followed by Quebec hospitals (\$74), British Columbia (\$57), Nova Scotia (\$44) and Manitoba (\$28).

Top 40 – Research Income Per Capita	
Province¹	Research Income Per Capita \$
Ontario (19)	\$95
Quebec (15)	\$74
British Columbia (2)	\$57
Nova Scotia (2)	\$44
Manitoba (2)	\$28

Research Intensity

In Fiscal 2011, average research intensity – research income per researcher² – was \$267,200. Eighteen hospitals posted intensity levels in excess of the average. Leading this group of high intensity hospitals was Mount Sinai Hospital, Joseph and Wolf Lebovic Health Complex with \$1,584,900 per researcher.

¹ Information for Alberta was not available.

² Head count of researchers/scientists/investigators/clinician-researchers. (Not included were research fellows/post docs, technicians, students or support staff.)

Institut de Cardiologie de Montréal (\$606,100), Baycrest (\$585,200), Hamilton Health Sciences (\$533,400) and Sunnybrook Health Sciences Centre (\$517,400) rounded out the top 5.

Top 10 Research Intensive Hospitals			
2011 Rank		Research Hospital	Research Intensity (\$ per researcher) \$000
Research Intensity	Overall		
1	10	Mount Sinai Hospital, Joseph and Wolf Lebovic Health Complex	\$1,584.9
2	16	Institut de Cardiologie de Montréal	\$606.1
3	26	Baycrest	\$585.2
4	4	Hamilton Health Sciences	\$533.4
5	7	Sunnybrook Health Sciences Centre	\$517.4
6	13	Centre for Addiction and Mental Health	\$494.5
7	1	University Health Network	\$469.8
8	6	Ottawa Hospital	\$426.0
9	34	Holland Bloorview Kids Rehabilitation Hospital	\$388.9
10	32	St. Boniface Hospital	\$381.3

Gainers and Losers

Between Fiscal 2010 and Fiscal 2011, strong gains in research income were reported at Toronto Rehabilitation Institute (42.3%), Kingston General Hospital (36.1%), Thunder Bay Regional Health Sciences Centre (33.5%), Centre for Addiction and Mental Health (26.7%) and Children's Hospital of Eastern Ontario (25.2%). IWK Health Centre, McGill University Health Centre, Hôpital du Sacré Coeur de Montréal, Sunnybrook Health Sciences Centre and Baycrest also posted double-digit gains in research income over the period.

Top 10 Research Hospitals by Growth			
2011 Rank		Research Hospital	% Change 2010-2011
Income Growth	Overall		
1	24	Toronto Rehabilitation Institute	42.3
2	23	Kingston General Hospital	36.1
3	37	Thunder Bay Regional Health Sciences Centre	33.5
4	13	Centre for Addiction and Mental Health	26.7
5	27	Children's Hospital of Eastern Ontario	25.2
6	21	IWK Health Centre	17.9
7	3	McGill University Health Centre (MUHC)	16.7
8	35	Hôpital du Sacré-Coeur de Montréal	15.3
9	7	Sunnybrook Health Sciences Centre	15.2
10	26	Baycrest	12.8

A number of other institutions were not as fortunate, reporting declines in research income in Fiscal 2011.

Bottom 5 Research Hospitals by Growth			
2011 Rank		Research Hospital	% Change 2010-2011
Income Growth	Overall		
1	4	Hamilton Health Sciences	-15.5
2	30	Centre hospitalier affilié universitaire de Québec (CHA)	-10.5
3	22	Winnipeg Regional Health Authority	-9.9
4	36	The Royal	-8.6
5	5	Provincial Health Services Authority	-8.5

This Year and Next

Fiscal 2011 was not kind to Canada's research hospitals. In real terms (constant dollars) the 0.7% overall gain in research income represented an actual decline in spending ability. Given the important role that Canada's Top 40 Research Hospitals play in the national system of health research and innovation, the 2011 result are disappointing. Research hospitals are important players; many of the leading institutions conduct as much or more research as our leading universities.

Because research costs – salaries, supplies, operating expenses – are essentially fixed, the flat hospital research income growth in Fiscal 2011 (0.7%), will inevitably translate into less research being conducted. In normal times this might be expected to lead to a brain drain to better-funded jurisdictions. Fortunately for Canada, health jurisdictions in the US and Europe are equally or more distressed, which will minimize the actual migration of researchers.

Last year we reported that *“Economic headwinds will make 2011 and beyond a difficult environment in which to attract research income. Government funders in particular will be looking to rein in deficits. The bottom line is that hospitals’ research funding situation is clouded. The research community is anxiously awaiting forthcoming federal and provincial budgets for clues about research support”*. That prognostication indeed seems to have come true. And the situation could become more difficult in 2012 and beyond. The private sector is in no shape – or no mood – to significantly increase its support for public sector research and government sources are tapped out. The coming years look to be difficult ones for the hospital research community.