

# PROVINCIAL VARIATIONS IN ACCESS TO IMPLANTABLE CARDIOVERTER DEFIBRILLATORS (ICDs)

*"This important work by the Canadian Heart Rhythm Task Force demonstrates clearly that, while we are making great strides, regional disparities in access to life-enhancing and life-saving device technologies continue to be a problem. The Canadian Heart Rhythm Society is committed to working closely with the medical community, government, industry, hospitals, patients and regulatory authorities to develop mechanisms and processes to enhance access to timely and appropriate care for all Canadians."*

Chris Simpson, MD

President, Canadian Heart Rhythm Society



*"The CHRTF is committed to working with the stakeholders across Canada including patients, physicians, hospitals and Ministries of Health, to foster a better understanding of the role that cardiac device therapies play in reducing mortality and improving the quality of life for cardiac patients."*

Scott Kadwell

Chair, CHRTF

## MEDEC CANADIAN HEART RHYTHM TASK FORCE

GUIDANT CANADA CORPORATION

MEDTRONIC OF CANADA LTD.

ST. JUDE MEDICAL CANADA, INC.

**SUMMARY OF RESULTS: THERE ARE MARKED PROVINCIAL VARIATIONS IN THE HISTORICAL UTILIZATION OF ICDs ACROSS CANADA. THE GEOGRAPHICAL RATE SCORE MAY BE USED AS PLANNING METRIC FOR FUTURE RESOURCE ALLOCATIONS AND TO ASSESS THE ADOPTION OF THE 2005 ICD IMPLANT GUIDELINES.**

New Canadian Heart Rhythm Society guidelines for Implantable Cardioverter Defibrillator (ICD) implantations were published in May of 2005. The new guidelines were necessary based on a number of newly published clinical trials. These included new Class I and Class IIa recommendations for consideration of ICDs in patients without a prior history of sustained ventricular tachycardia (primary prevention). It is expected that the utilization of ICDs should increase substantially.

A scoring system has been developed by the MEDEC Canadian Heart Rhythm Task Force (CHRTF) to benchmark the uptake of ICD technology across Canada. The table below outlines the results of a national utilization study following ICD implant rates provincially over the period of 2002-2004.<sup>1</sup> Results were derived from Canadian manufacturers' patient registration databases analyzing patients' home postal codes and the sites of care delivery.

The geographical rate score is based on implant rates per million and is age adjusted to  $\geq 55$  years to account for the demographic of the target patient populations. Since ICD replacement rates are increasing (from 16.4% to 21.5% in 2003 and 2004 respectively), only new implants are used in the rate score to assess the treatment of the prevalence of the patient populations. The rate scores are calculated over a 24-month rolling calendar time frame and provinces are indexed to the Canadian average. A score of less than 100% indicates utilization less than the Canadian average. Total implants per million is a global metric that includes new and replacement ICDs and is not age-adjusted.

	Population > 55 Yrs - 2004	Rate Score		Total Implants Per Million		
		2003/2004	2002/2003	2004	2003	2002
Canada	7,527,697	100%	100%	104	84	67
BC	1,034,277	68%	79%	71	66	57
AB	622,930	108%	108%	99	76	60
SK	242,116	47%	45%	50	33	37
MB	275,104	66%	72%	60	58	45
ON	2,845,746	105%	107%	105	89	72
PQ	1,899,319	118%	109%	133	100	73
NB	190,111	90%	77%	125	51	71
NS	241,661	90%	91%	97	83	67
NF	124,991	173%	165%	182	134	94
PEI	34,968	45%	61%	44	29	51
Territories	12,451	101%	68%	68	10	40

<sup>1</sup> Data analysis conducted by John Cryster Inc., using MEDEC CHRTF 2004 data.