

# Medical Devices

Canada is an outstanding destination for medical device development and manufacturing, with strengths in medical imaging, in vitro diagnostics, health information technology and cardiovascular devices. The bedrock of this \$7.1-billion medical devices industry (2007) is leading-edge innovations in Canada's biotechnology, advanced materials, microelectronics, telecommunications, software, informatics and other associated sectors.

Among the G7 countries, Canada offers the lowest costs for establishing and operating a medical device manufacturing facility. Our homegrown successes in exporting our world-leading digital radiography systems, magnetic resonance imaging equipment, rapid diagnostic tests, e-health technology and other high-tech health solutions have put Canada on the map as a global leader in medical devices.

## In Vitro Diagnostics

In 2010, Massachusetts-based **Inverness Medical** inked a \$255-million deal with Ottawa's **Epocal Inc.** to distribute their rapid point-of-care blood analysis platform. Another recent deal in the diagnostics space is an order for half a million HIV tests received by Halifax-based **Medmira Inc.**, one of the first and largest orders of rapid HIV diagnostics tests in the world.

## Medical Imaging and Analysis

Ontario's Centre for Probe Development and Commercialization is the world's first facility that focuses on all areas related to molecular imaging probes, which provide non-invasive means of diagnosing diseases in their earliest stages.

Western Canada is a leading global centre in this vertical. Winnipeg-based **IMRIS Inc.** is a global leader in fully integrated intraoperative imaging systems, with its IMRISneuro product offering a unique surgical MR imaging solution, which provides near-real-time, high-field MR images in combination with an integrated data management and display system. The award-winning firm **Imaging Dynamics Company Ltd.** in Calgary is a worldwide leader in digital radiography (DR), with its imaging system used in nearly 40 countries worldwide. Its state-of-the-art patented DR technology not only provides high-resolution X-ray images, but does so with a much lower radiation dose than that used in conventional radiography or other available DR technologies.

In 2009, Belgium's **Agfa Healthcare** of the **Agfa-Gevaert Group** invested \$200 million to support the growth of two

R&D centres in Ontario, to meet the company's growing need for IT-enabled workflow and diagnostic imaging solutions.

## Other Medical Devices

In 2009, the American multinational **Baxter International Inc.** entered into a \$25-million licencing agreement that gave it rights to Vancouver-based **Angiotech's** new synthetic sealing agent for surgical use.

In 2009, Dallas-based **Kimberly-Clark Corporation** acquired **Baylis Medical Company's** pain management business in Montréal, which includes a number of innovative, minimally-invasive radio-frequency pain management products.

In 2008, **Roche Diagnostics** of Swiss-based **Hoffmann-La Roche Ltd.** entered into an agreement that gave it rights to market Vancouver-based **Response Biomedical's** cardiovascular point-of-care diagnostic tests worldwide.

In 2008, Minneapolis-based **Medtronic Inc.** acquired Montréal's **CryoCath**, the world leader in cryotherapy products to treat cardiac arrhythmias, in a \$400-million deal.

In 2007, the Canadian subsidiary of Danish-based **Widex**, one of the world's leading producers of digital hearing aids, invested over \$5 million to expand its Ontario manufacturing facilities.

Other major investors in the medical devices sector in Canada include: **Abbott Laboratories**, **General Electric Company**, **Johnson & Johnson Services Inc.**, **Koninklijke Philips Electronics N.V.**, **Siemens AG**, **Smith & Nephew** and **St. Jude Medical Inc.**

## KEY VALUE-CHAIN STRENGTHS

- Product development and design
- Production and manufacturing
- Engineering services
- Software development
- Supply and distribution

## KEY SEGMENT STRENGTHS

- In vitro diagnostics
- Medical imaging and analysis
- Health information technology
- Nuclear medicine
- Surgical and implant devices
- Advanced materials and nanotechnology
- Cardiovascular devices