Is AI a threat or benefit to health workers?

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t could revolutionize health care by speeding up referral times, performing menial tasks and giving patients access to their health data, but will artificial intelligence (AI) also take jobs from frontline workers?

The answer was a resounding "No" from the five private-sector leaders on a panel during the recent 2017 Canadian Agency for Drugs and Technologies in Health Symposium.

"Al is about machines making people more effective," said Michael Monteith, the CEO of ThoughtWire, which is introducing smart machines into hospitals.

The panellists explained that AI could, for example, reduce the number of interruptions a nurse endures during a shift, help with diagnosis, and handle mundane tasks such as scheduling and tracking the number of available beds, which they argued would actually give medical professionals more time with patients.

Al is no substitute for professionals, panel

members stressed. "We still need people with intuition and the ability to grab other factors, make decisions," Monteith said.

Patients could benefit by gaining increased access to their data, although privacy and ownership are still areas of concern at this time.

"It will democratize access," said Marc Fiume, the CEO of DNAstack, a cloud-based technology that studies genomic data.

Despite the panellists' assurances, others anticipate that AI will indeed slash jobs. A 2016 report from the University of Toronto's Mowat Centre said Canada could see automation cut 7.5 million jobs across all sectors in the next decade. Reports from the Canadian Chamber of Commerce in 2016 and 2017 raised concerns that AI's success could put low-skill labourers out of jobs. "Canada needs a plan to make sure people have the skills for tomorrow's jobs," stated the 2016 chamber report.

In March, the federal government pledged \$125 million to the Pan-Cana-

dian Artificial Intelligence Strategy, with the aim of increasing job opportunities. It will focus on keeping top academics in the country, increasing the number of students in technology courses and fostering collaboration among Canadians research hubs.

Montieth says retaining Canadian talent and creating more jobs begins with supporting domestic AI companies that are already producing and introducing the latest technology into the medical field. He says the federal government needs to foster revenue growth and national enterprises, to "create an operating model in this country as opposed to a one-time investment."

Panelist Graeme Moffat of Muse advocated for a dedicated strategy to roll out these technologies into health care and other industries. "There's a lot more work that needs to be done."

Caroline O'Neill, CMAJ



AI will make health professionals more effective, say industry experts.