

Highmark Interactive Inc. Announces Collaboration with Renal Research Institute to Identify Potential Biomarkers of Brain Injury in Hemodialysis Patients

The Renal Research Institute will include the Highmark digital assessment suite into its clinical research of people receiving in-center hemodialysis treatment.

Toronto, ON - June 20, 2022: Highmark Interactive Inc. (TSXV:HMRK), a global leader in digital health technologies, announces plans for a collaboration with the Renal Research Institute (RRI), a wholly owned subsidiary of Fresenius Medical Care (NYSE:FMS). Under the planned collaboration, which is in the process of being finalized, a research study will seek to identify potential biomarkers of brain injury, including digital biomarkers from Highmark's digital assessment platform, in maintenance in-center hemodialysis patients with the goal to improve patient care and outcomes.

According to numerous peer-reviewed studies, it is estimated that up to 70% of hemodialysis patients aged 55 years and older can have cognitive impairment that largely goes undiagnosed¹. In addition, undiagnosed depression in people with chronic kidney disease can increase the cost of care by 50-80%^{2,3} and increase the risk of premature death by up to 30%^{5,6}. Highmark's digital platform includes assessments of brain and mental health that are administered by trained professionals as well as remotely completed by patients between point of care visits.

"We are excited to collaborate with the Renal Research Institute on an important clinical care management issue that if successful, may help improve the quality of life for a lot of people globally," says Dr. Sanjeev Sharma, CEO of Highmark. "Our digital assessment platform collects unique digital biomarkers in a manner that is easy and engaging for patients while also providing important insights about their neurofunction to health providers. We hope that this collaboration will help better determine the relationship between hemodialysis and the brain in order to hopefully optimize clinical decision making and improve patient outcomes."

Digital biomarkers are defined as objective, quantifiable, physiological and behavioral data that are collected and measured by means of digital devices, whereas traditional biomarkers include genes, molecules, or cells. Alongside traditional biomarkers including blood and advanced neuroimaging, the Highmark software suite will provide digital assessments at the start and end of

study as well as longitudinally throughout the study leveraging its remote monitoring assessments.

If digital biomarkers from Highmark's assessment platform are associated with brain injury in hemodialysis patients, these could be measured routinely with the aim to improve clinical management. At any given time, there are approximately two million patients receiving maintenance in-center hemodialysis globally with ~500,000 in the United States alone.

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1. Murray AM et al, Cognitive Impairment in the Aging Dialysis and chronic kidney disease populations, an occult burden, *Advanced Chronic Kidney Disease*, 2008.
 2. Melek S, Norris D. *Chronic Conditions and Comorbid Psychological Disorders*. Seattle, WA: Milliman; 2008.
 3. Melek SP, Norris DT, Paulus J. *Economic Impact of Integrated Medical-Behavioral Healthcare*. Seattle, WA: Milliman; 2014.
 4. Hedayati et al, *JAMA*, May 19, 2010—Vol 303, No. 19.
 5. Hedayati et al, *Kidney International* (2012) 81, 247–255.
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About Highmark Interactive

Highmark Interactive was created to change the paradigm of testing and management for brain and mental health. Highmark's approach is focused on providing real-time data to health providers to support proactive, preventative interventions and targeted care planning to improve health outcomes.

In addition to a growing network of virtual, in-person and hybrid clinics, Highmark Interactive offers the world's first gamified, FDA cleared patient-led assessments as well as digital clinician-led assessments of neurofunction and balance. Together, the technology is used in more than 350 health organizations globally.

By unlocking insights, Highmark's platform enables precision medicine and creates a more contemporary model for delivering better outcomes in medical, mental health and rehabilitation services.

Learn more: <https://www.highmark.tech/>

For further information:

Highmark Interactive Inc.

Cautionary Note Regarding Forward-Looking Information

This News Release contains forward-looking statements that relate to the current expectations and views of future events of the Corporation.

In some cases, but not necessarily in all cases, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, predictions, indications, projections or other characterizations of future events or circumstances contain forward-looking information. Statements containing forward-looking information are not historical facts but instead represent management's expectations, estimates and projections regarding future events.

Forward-looking statements in this news release include, among other things, statements relating to plans for collaboration with the Renal Research Institute, the prevalence of undiagnosed cognitive impairment, the costs and increased risk of premature death associated with undiagnosed depression in people with chronic kidney disease, and the Corporation's business generally.

These statements and other forward-looking information are based on opinions, assumptions and estimates made by the Corporation in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors that Highmark believes are appropriate and reasonable in the circumstances, as of the date of this press release, including, without limitation, available third party statistical information.

Forward-looking information is subject to known and unknown risks, uncertainties, assumptions and other factors that may cause the actual results that are the subject of any forward-looking statement to be materially different from those expressed or implied by such forward-looking information, including those referenced above. Although Highmark has attempted to identify important factors that could cause actual actions, events, conditions, results, performance or achievements to differ materially from those described in forward-looking information, there may be other factors that cause actions, events, conditions, results, performance or achievements to differ from those anticipated, estimated or intended. Also see the section entitled "Risk Factors" in the Corporation's filing statement dated November 4, 2021 and the sections entitled "Financial Risk Management" and "Risk Management" in the Corporation's most recent management discussion and analysis for a discussion of certain factors that could cause actual results to be materially different than any forward-looking statements presented herein.

The Corporation does not undertake, and assumes no obligation, to update or revise any such forward looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law.