REHABILITATION ROBOTICS LAB
TELE-REHAB 2.0: Increasing Access to Rehabilitation Services in Remote Communities

For patients living in remote and rural Alberta, access to rehabilitation assessment and treatment is challenging. Most community-based services receive limited funding from the public health system, even in urban settings. In rural areas, this challenge is even greater due to the lack of available specialists. Those in remote and rural locations have to travel long distances to access the same services that urban residents have in their own backyards. Not only do they have to pay for travel expenses, but they also lose out on the support of their community, experience diminished productivity and work wages and often have to arrange for child care.

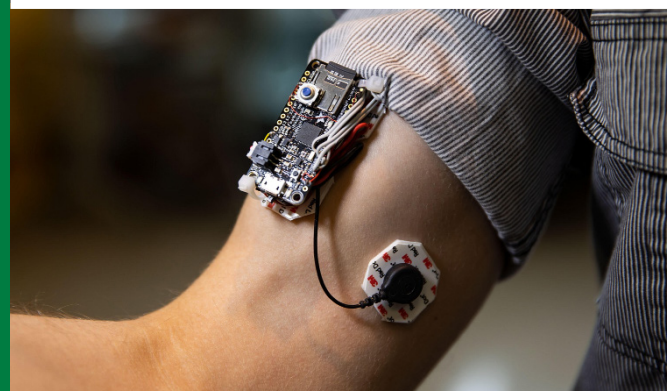**But with Tele-Rehab 2.0, we can help.**

The Tele-Rehab 2.0 program uses technology to mediate communication between remote patients/clinicians and urban specialists. This system will not only allow for better access to care, but will also provide opportunities for data collection to support the development of improved evidence-based clinical pathways.

How does it work?
Our idea hinges on the development of a Virtual Rehabilitation Platform (VRP), designed to use novel sensor technologies for patient measurements. Our newly developed software integrates data collected from Kinetisense (a markerless motion capture system), sensors, camera equipment and more. The remote clinical assessment process will be guided by a set of clinical 'storyboards,' which have been generated by specialists at the University of Alberta.

What treatments and assessments will be provided?
The four areas of focus in the pilot project are shoulder pain, hip and knee replacements, vertigo and balance and wheelchair special seating assessment. The program will provide patients with access to thorough assessments and communication with a specialist, as well as at-home exercises and individualized training programs.

Want to learn more about Tele-Rehab 2.0? Visit uab.ca/rrl

UNIVERSITY OF ALBERTA
FACULTY OF REHABILITATION MEDICINE

SMART NETWORK Sensory Motor Adaptive Rehabilitation Technology

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