

## Blood Pressure Awareness Scale and Insight Scale (BASIS)

### Market Need

Metabolic Syndrome (MetS) is a group of metabolic conditions, such as hypertension, diabetes, and excess body fat, that raise an individual's risk for heart disease and stroke. MetS is highly prevalent in individuals with psychotic disorders and can contribute to significant morbidity and premature mortality. Mortality rates from MetS are estimated to be 2-3 times higher than the general population and a 20% shorter life expectancy. HTN is common in psychiatric patients but is often not detected. Approximately 50% of patients with psychiatric disorders and HTN are not aware they have this comorbidity. Diagnosis of HTN may be missed by professionals as some symptoms of uncontrolled hypertension are also associated with many psychiatric disorders. Patients with psychiatric disorders are also less likely to seek treatment, further delaying the detection of any comorbidity. Impaired illness awareness in MetS and HTN are under-recognized and contribute to medication nonadherence and poor clinical outcomes. Improving illness awareness among individuals may facilitate medication adherence, reduce morbidity, and re-hospitalization rates, thereby improving the quality of life for patients and their families. A number of scales have been developed to measure illness perceptions in metabolic disorders and diabetes; however, these measures are not specific to the quantitative assessment of illness awareness or illness denial in these conditions. Further, most are cumbersome and are difficult to use and interpret.

### Technology Description

BASIS is a novel and easy to administer measure of insight into illness scale in metabolic syndrome, as related to hypertension. The measure assesses the core domains of insight into illness, including awareness of need for treatment. Each item comprises a 10-point Likert scale, enabling BASIS users to detect minute changes in insight into illness and need for adjusting treatment scores. The measure is designed to assess the multi-dimensional factor structure of insight into illnesses underlying hypertension. This is particularly useful in monitoring treatment outcomes, as a valuable addition to comprehensive clinical trial protocols.

### Stage of Development

- Investigators have clinically validated this scale in 100 participants. BASIS showed good concurrent ( $r(98) = .65, P < 0.001$ ) and discriminant validity, internal consistency (Cronbach's  $\alpha = .75$ ), and 1-month test-retest reliability (ICC = 0.77). BASIS may be used in research studies and clinical practice to assess the impact of HTN awareness on treatment adherence and clinical outcomes. An electronic version is under development, which will facilitate data storage for research studies and clinical use.

### Advantages

- Specific to the quantitative assessment of impaired illness awareness or illness denial
- User friendly tool with the capacity to detect small changes in insight scores with the use of 10-point Likert scales for each item
- Offers a screening mechanism to determine which patients are most suitable for medication adherence programs or interventions to enhance medication adherence.
- Superior to self-reporting by patients, objective and comparable.

### Notable Publication(s)

Gerretsen et al., J Clin Hypertens (Greenwich) (2018), DOI: 10.1111/jch.13248

<http://illnessawarenessscales.com/>

### FOR MORE INFORMATION CONTACT

Dr. Klara Vichnevetski  
Director, Industry Partnerships & Technology Transfer  
klara.vichnevetski@camh.ca  
416 595-6056

Centre for Addiction and Mental Health  
33 Ursula Franklin Street, Suite 4039  
Toronto, Ontario, Canada M5A 2S1  
[www.camh.ca](http://www.camh.ca)