



# VOXNEURO

UNLOCKING THE BRAIN

VoxNeuro's Cognitive Health Assessment™ is the first assessment in the world that provides insight into the brain's functional performance through quantitative, objective data. Our breakthrough assessment differentiates true cognitive decline and perceived decline caused by temporary lifestyle behaviour, such as stress, general fatigue or mood.

• OBJECTIVE • QUANTITATIVE • COGNITIVE HEALTH ASSESSMENTS

# SCIENTIFIC BREAKTHROUGH IN BRAIN HEALTH MANAGEMENT

- World-renowned Chief Science Officer
- With 40+ years of functional brain research, 300+ peer-reviewed scientific reports
- And 25+ years of globally funded research to develop and refine solution
- First validated in severe traumatic brain injury (1999)
- Groundbreaking study on concussions & living ex-football players (2016)
- Validation in concussion and general cognitive health + commercialization (2017)



# REVOLUTIONIZING BRAIN HEALTH MANAGEMENT

- Breakthrough application of EEG-based neuroimaging
- Quantitative and objective data on patient's cognitive brain function
- Pinpoint functional deficits enabling tailored treatment
- Only neuroimaging assessment in the world that can inform cognitive rehabilitation
- Eliminating subjectivity and "trial & error" concussion treatment
- Differentiating between true cognitive decline and perceived decline due to issues such as stress, general fatigue or mood

# THE PROBLEM VOXNEURO IS ADDRESSING

- Subjective assessments tools are heavily relied on
- Objective tools stop at diagnosis and don't inform treatment
- No objective measurement of cognitive brain function
- Baselines are often required
- Clinicians rely on best practices driven by trial-and-error

# LACK OF OBJECTIVE & QUANTITATIVE DATA

- Incidence of diagnostic & treatment errors above acceptable thresholds
- Unpredictable patient outcomes
- Inefficient treatment & healthcare resource management
- Lengthy and expensive treatment, even when successful

**“\$243B societal burden in 2017 (US)”**

- American Neurological Association



# COMPETITION

- Majority of objective solutions only support diagnosis
- Rehabilitation is unreliably informed by subjective solutions



# OBJECTIVE SOLUTION

## *45-minute Cognitive Health Assessment™*

- EEG-based neuroimaging + computerized neuropsych assessment
- Real-time measurement of cognitive brain function
- Proprietary algorithms produce precise objective data
- No baselines required



# EMPOWERING CLINICIANS WITH OBJECTIVE DATA TO:

- Proactively detect cognitive decline
- Develop customized rehabilitation plans
- Accelerate treatment and track recovery
- Improve predictability & patient outcomes
- Streamline healthcare resources

**“VoxNeuro’s  
Cognitive Health  
Assessment  
assisted me with  
tailoring my  
client’s cognitive  
treatment in the  
early stages of her  
concussion”**

- Lindsay Mustill,  
Manager, Bayshore Therapy  
& Rehab



# A PROACTIVE APPROACH TO BRAIN HEALTH AND PERFORMANCE

VoxNeuro's General Cognitive Health Assessments™

- Proactively assess brain performance to detect early cognitive decline
- Separate issues such as stress, fatigue or mood from true "cognitive decline"
- Empower development of tailored workout plans to reinforce areas of weak cognitive performance

# CORE COGNITIVE FUNCTIONS

*measured by VoxNeuro's Cognitive Health Assessment™*

- executive function
- language comprehension
- working memory
- automatic attention
- visual processing
- reactive attention
- concentration
- information processing
- auditory processing



# INTUITIVE PATIENT REPORT EMPOWERS SEAMLESS INTEGRATION INTO EXISTING PROTOCOLS

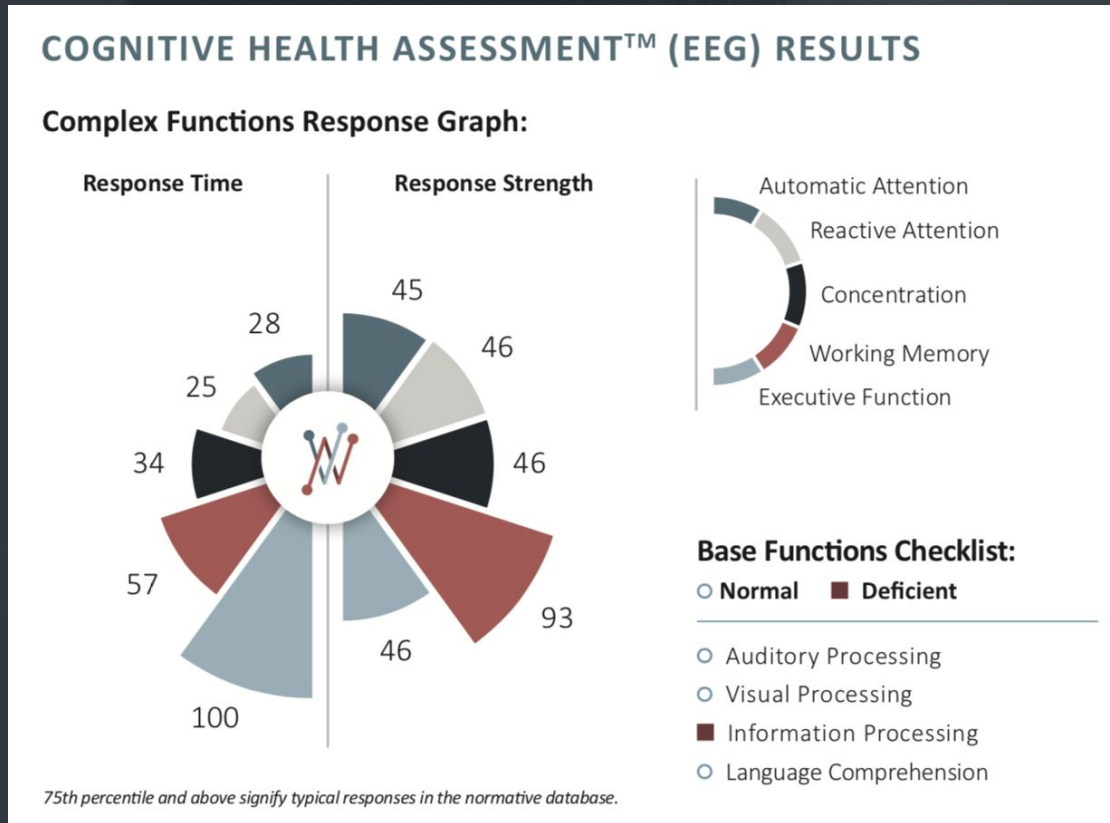


Figure 1. Sample of VoxNeuro's Cognitive Health Assessment summary results tab (CDN).



## COGNITIVE HEALTH ASSESSMENT™ REPORT

**Patient Name:** Jane Doe  
**Patient Contact:** 123.456.7892  
**Report Authority:** Dr. John Connolly

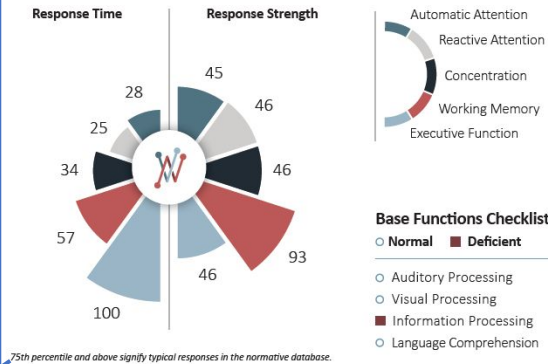
**Assessment Number:** 2 (mid-rehabilitation)  
**Assessment Date (MM/DD/YYYY):** 02/14/2019  
**Assessment Location:** VoxNeuro Assessment Centre  
LRW Hall McMaster University, 1280 Main St W Hamilton ON

### MEDICAL DETAILS

**Date of birth:** 09/05/1977  
**Sex:** Female  
**ABI History:** Clinically diagnosed concussion  
**Date of Injury:** 18/03/2018  
**Comorbid Health Concerns:** NA  
**Medications:**  
Lorazepam 0.5mg (1-2 tab/twice a day);  
Sertraline 25mg 2 capsule daily;  
Topiramate 25mg 1 tab twice daily

### 1. COGNITIVE HEALTH ASSESSMENT™ (EEG) RESULTS

#### Complex Functions Response Graph:



### RESULTS SUMMARY

This is a quick reference summary of each of the numbered, detailed results sections of the report.

**1. Cognitive Health Assessment™ (EEG) results:** Overall, patient results conveyed moderate cognitive deficits.\*\*

Patient's brain responses in the following complex functions performed as/with:

NORMAL	MODERATE DEFICIENCY	SEVERE DEFICIENCY
• None	• Automatic Attention • Reactive Attention • Concentration • Working Memory • Executive Function	• None

**2. Functional progress:** See pages 2-3 for details.

Overall, the patient's brain responses showed the following changes from their previous assessment:

REMAINED CONSISTENT	IMPROVED	DECLINED
• None	• Automatic Attention • Reactive Attention • Concentration • Working Memory	• Executive Function

**3. Behavioural results:** For a summary of the patient's self-reported assessments, see page 4.

**Next steps:** If treatment or rehabilitation is recommended by the patient's healthcare provider, VoxNeuro recommends follow up assessments to track the patient's reception to the intervention through their functional progress.

\*\*Patient was very anxious during assessment causing some recording difficulties with potential minimal effects on results.

# INTELLECTUAL PROPERTY

- Protected by: patent pending & encrypted black box
- Based on peer-reviewed research & real patient outcomes
- Covering: Algorithms, software, and assessment methodology
- Constant progress e.g. M.L./A.I.



# VALIDATED IN 1999, INCORPORATED IN 2017

- Health Canada-cleared (2018)
- Financial support by NRC-IRAP (2019/2020)
- “Top 25 Up and Coming Tech Companies of 2019” -Branham300
- “Best in Class - Health Sciences” -NYC Venture Summit 2019
- SaaS Product development + BETA completed
- Lead Clients: Bayshore Healthcare, St. Joseph’s Healthcare  
Hamilton



# 1st Half of 2020

- Launched Certified Clinics in Burlington & Toronto
- Insurance coverage secured: OCF-18, WSIB, Extended Benefits
- Toronto Rehabilitation Institute
- Department of National Defense
- COVID-19: CanCOVID integration
- US: Lead US-market client + partners secured



National Research  
Council Canada

Conseil national de  
recherches Canada



IBM Watson

St. Joseph's  
Healthcare Hamilton



COMPUMEDICS  
Neuroscan™



Hamilton  
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UHN Toronto  
Rehabilitation  
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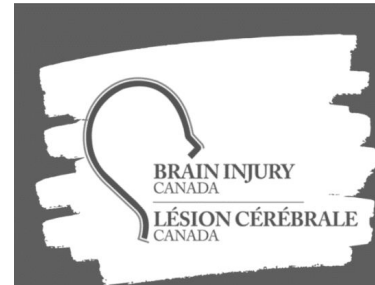


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# HOW YOU CAN GET INVOLVED

- Follow @voxneuro and grow our exposure online (e.g. LinkedIn)
- Clinicians:
  - Become a referral partner
  - Optimizing OCF-18, WSIB, Extended benefits funnels
- Investors:
  - \$1M bridge round (ongoing)
  - Series A (2021)



National Research  
Council Canada

Conseil national de  
recherches Canada



IBM Watson

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Healthcare Hamilton



COMPUMEDICS  
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Ontario  
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Innovation Organization



UHN Toronto  
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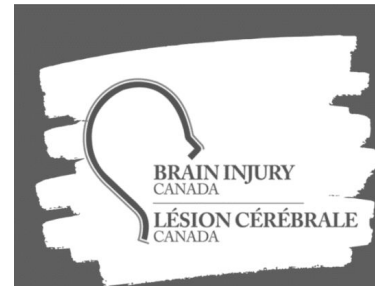
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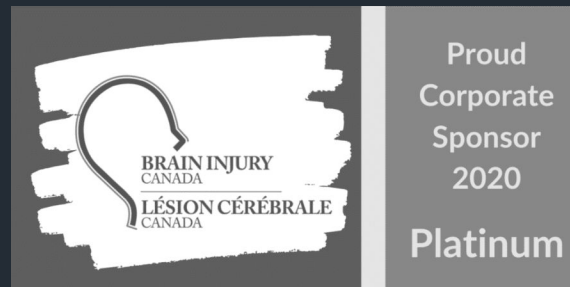
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# Thank you for your attention.

VoxNeuro's Cognitive Health Assessments™ are a platform technology that provide objective measurement of human brain function, unlocking the full potential of brain performance, recovery, and understanding.

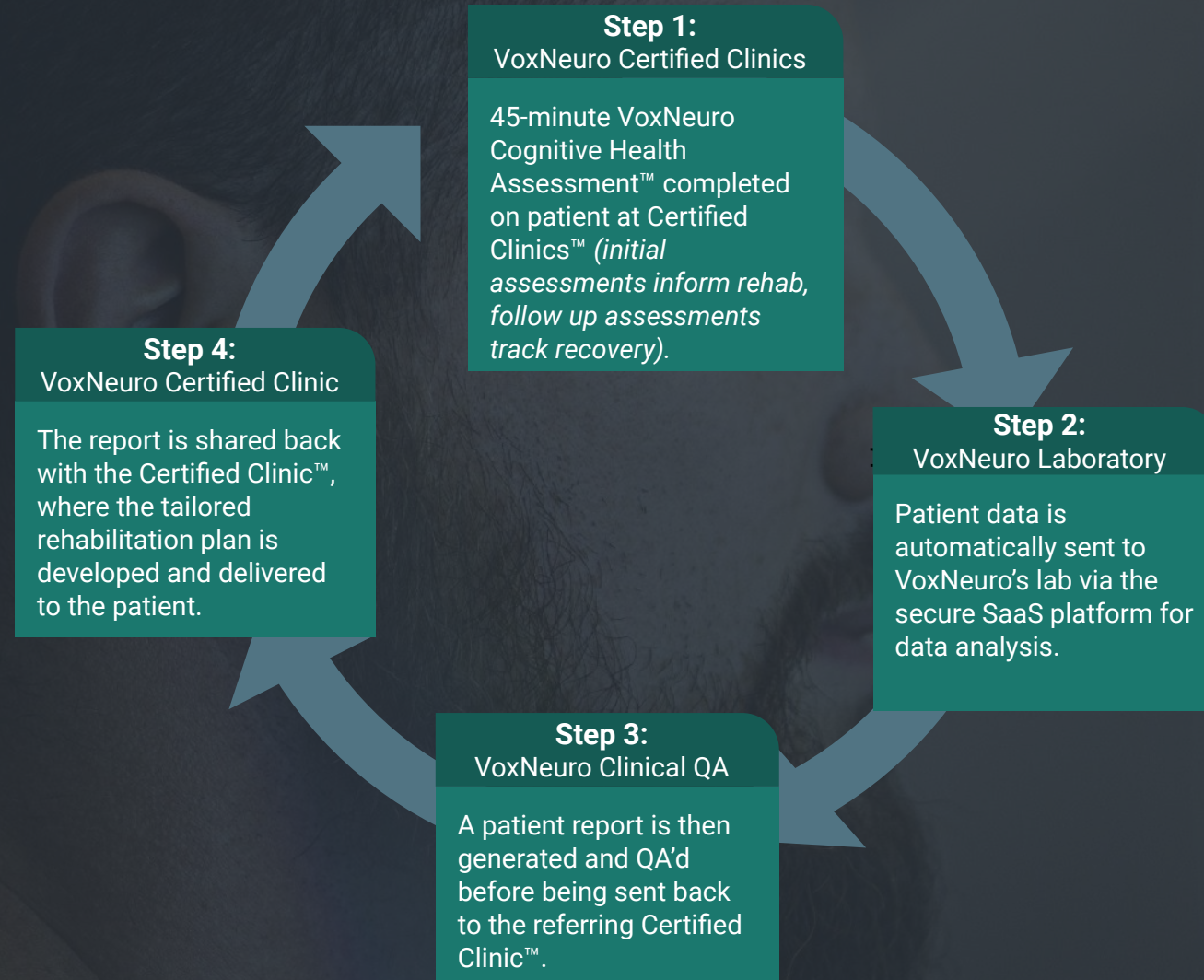
- Clinical Partnership Inquiries: [info@voxneuro.com](mailto:info@voxneuro.com)
- Media Inquires: [Kimberly@voxneuro.com](mailto:Kimberly@voxneuro.com)
- Investment & Corporate Partnership Inquiries: [James@voxneuro.com](mailto:James@voxneuro.com)

Learn more at [www.voxneuro.com](http://www.voxneuro.com)





# VOXNEURO ECOSYSTEM EXPLAINED



# TESTIMONIAL

"We are proud to announce our partnership with VoxNeuro. With over 15 years of experience in brain injury rehabilitation, Pillars of Wellness will continue to support the community for concussion management utilizing the VoxNeuro assessment technology. This innovative and evidence-based approach is revolutionary and without a doubt, will help many people suffering from brain trauma. Being an integrated care clinic, it is very important for us to work with such organizations in order to share and deliver best practices."

- Lori Desjardine,  
Co-Owner & Occupational Therapist  
at Pillars of Wellness & Desjardine Rehabilitation, a VoxNeuro Certified  
Clinic™

Learn more:





# OUR MISSION:

## *The Global Cognitive Revolution*

Enhance subjective assessment of human brain function with objective measurement, unlocking the full potential of brain performance, recovery, and understanding:

1. Performance: Tailored workout plans for your brain's function.
2. Recovery: Eliminate the guesswork associated with assessing brain injuries.
3. Understanding: Optimize global collective efforts to accelerate integration of new technologies and interventions while reducing stakeholder risks.