

# 供中風患者使用之人工智能認知評估系統 Intelligent Cognitive Assessment System (ICAS) for Stroke Survivors

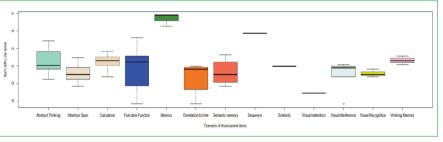
快速、精準的人工智能認知測試 Efficient, accurate and intelligent accurate cognitive test

> 「人工智慧認知評估系統」可快速並準確地測試中風者於認知 範疇整體的表現。中風者常會出現視覺空間認知障礙,以及專 注力、定向力、記憶力和認知上的問題。然而,不同的中風者 在這些範疇也會有不同的表現。

> 此系統能按患者能力及反應自動調整測試的難度;通過Rasch 分析,更可將患者的康復進度與其他病人組群作出比較。



測試用者的認知能力 Testing the cognitive performance of user



十三個認知範疇中不同的難度級別 Level of difficulty in the 13 cognitive domains

"Intelligent Cognitive Assessment System" (ICAS) is efficient and accurate in testing the cognitive performance of stroke survivors. Stroke survivors may suffer from visuospatial deficits and problems in attention, orientation, memory as well as cognitive ability. However, their performances among these domains do varies.

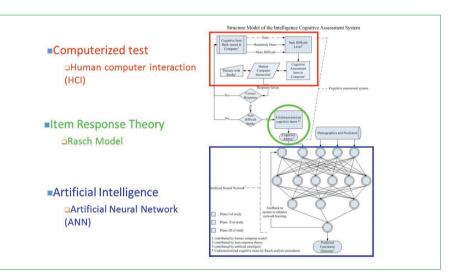
This intelligent system can adjust the difficulty level of the test in accordance with patients' responses automatically. By applying Rasch Analysis, the system can also compare patients' treatment outcomes between patient groups accurately.

## 特色與優點

- 「人工智能認知評估系統」由十三個認知範疇的六十五項 測試所組成
- 快速而精準的全方位認知能力測驗
- 能於短時間內識別問題,縮短測驗時間,減少測試結果誤差和患者因長時間進行測試而感疲累的情況

## 應用

此快速及有效的認知測驗適用於住在康復或老人日間醫院、年齡介乎六十至八十歲的中風者。



人工智能認知評估系統的結構模型 The structure model of ICAS

#### **Special Features and Advantages**

- ICAS consists of 65 test items, broadly covering 13 cognitive domains.
- Comprehensive test with fast and accurate results
- Problems can be detected in a short period of time,
   reducing mental fatigue on participants and errors.

#### **Applications**

 Quick and valid cognitive testing for stroke survivors aged between 60 and 80 in rehabilitation hospitals or geriatric day hospitals.



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