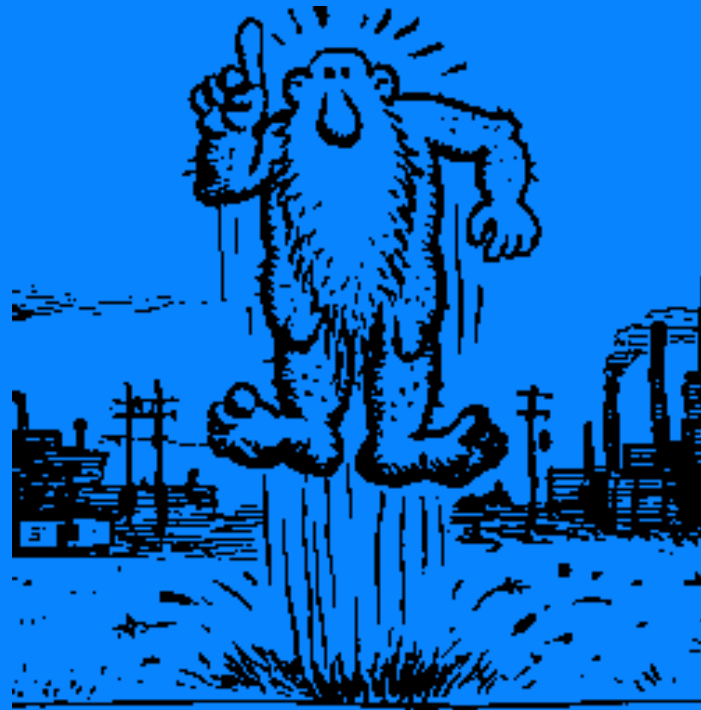


# Integrating cognitive assessment and clinical outcomes into practice

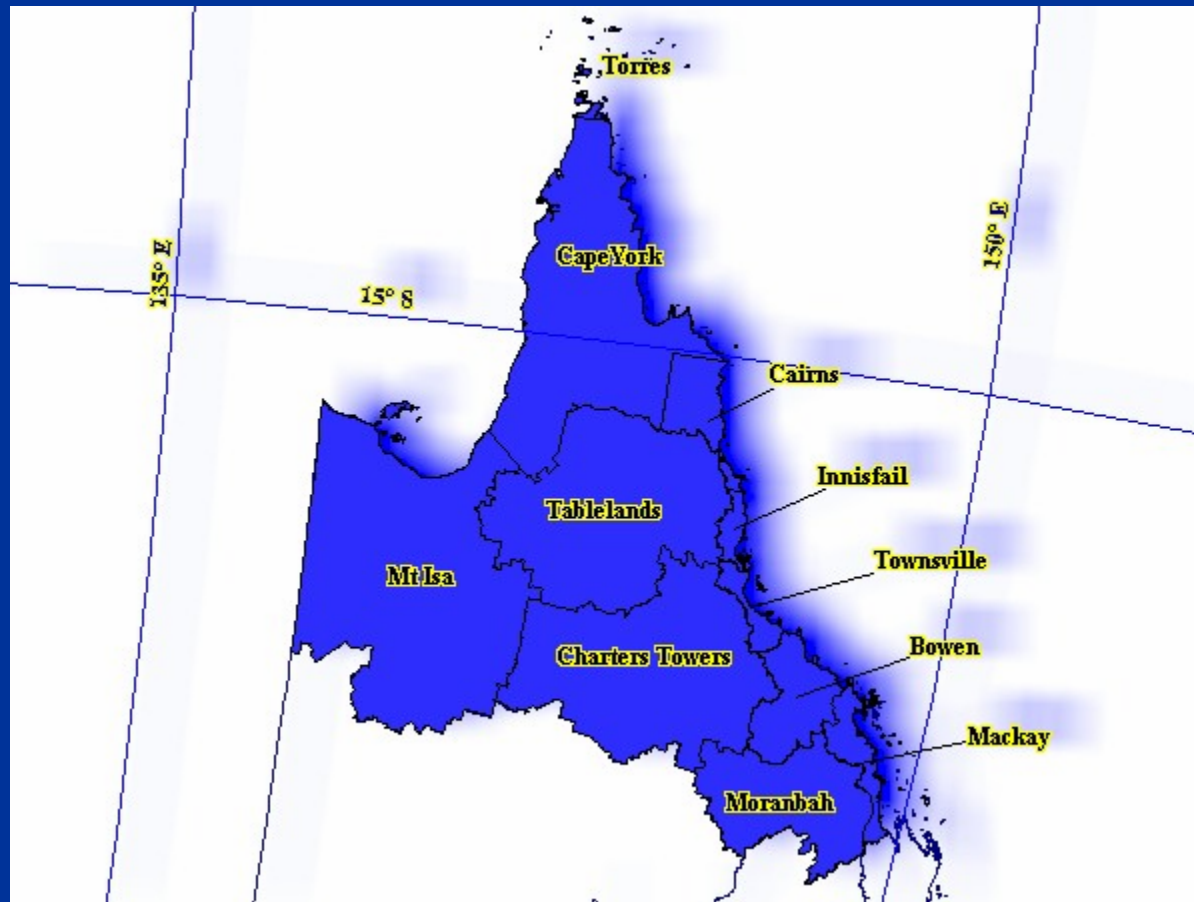


Older Persons Mental Health Service  
Townsville Institute of Mental Health  
Queensland Health 2008

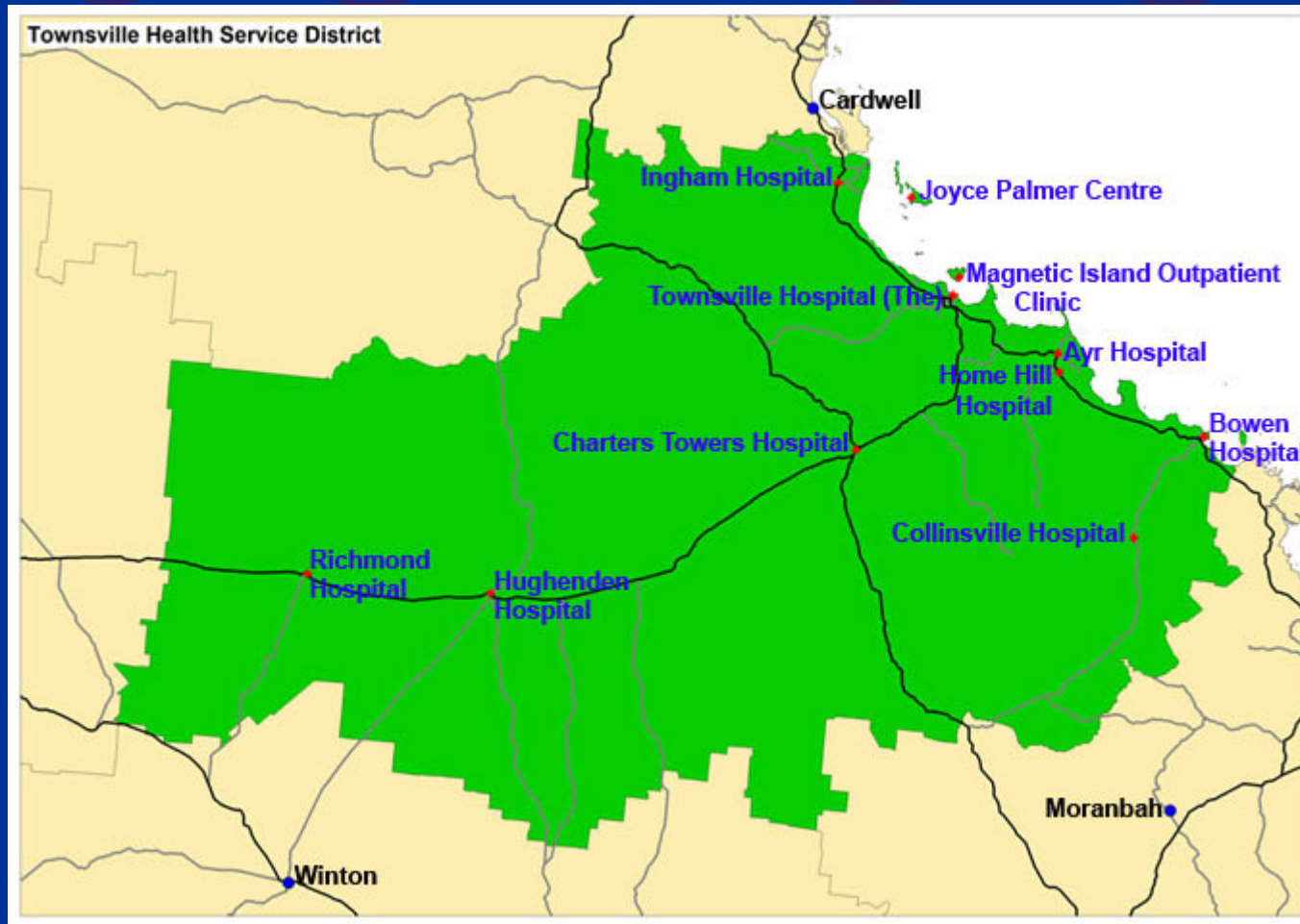
# Older Persons Mental Health Team

- Prof Bernhard Baune, Professor of Psychiatry James Cook University, Clinical Director of Older Persons Mental Health
- Christine McDougall Team Leader
- Tom Ryan CNC
- Kellie Hindom CNC
- Suzanne Fittock CN
- Katie Lambie OT

# Geographic Location

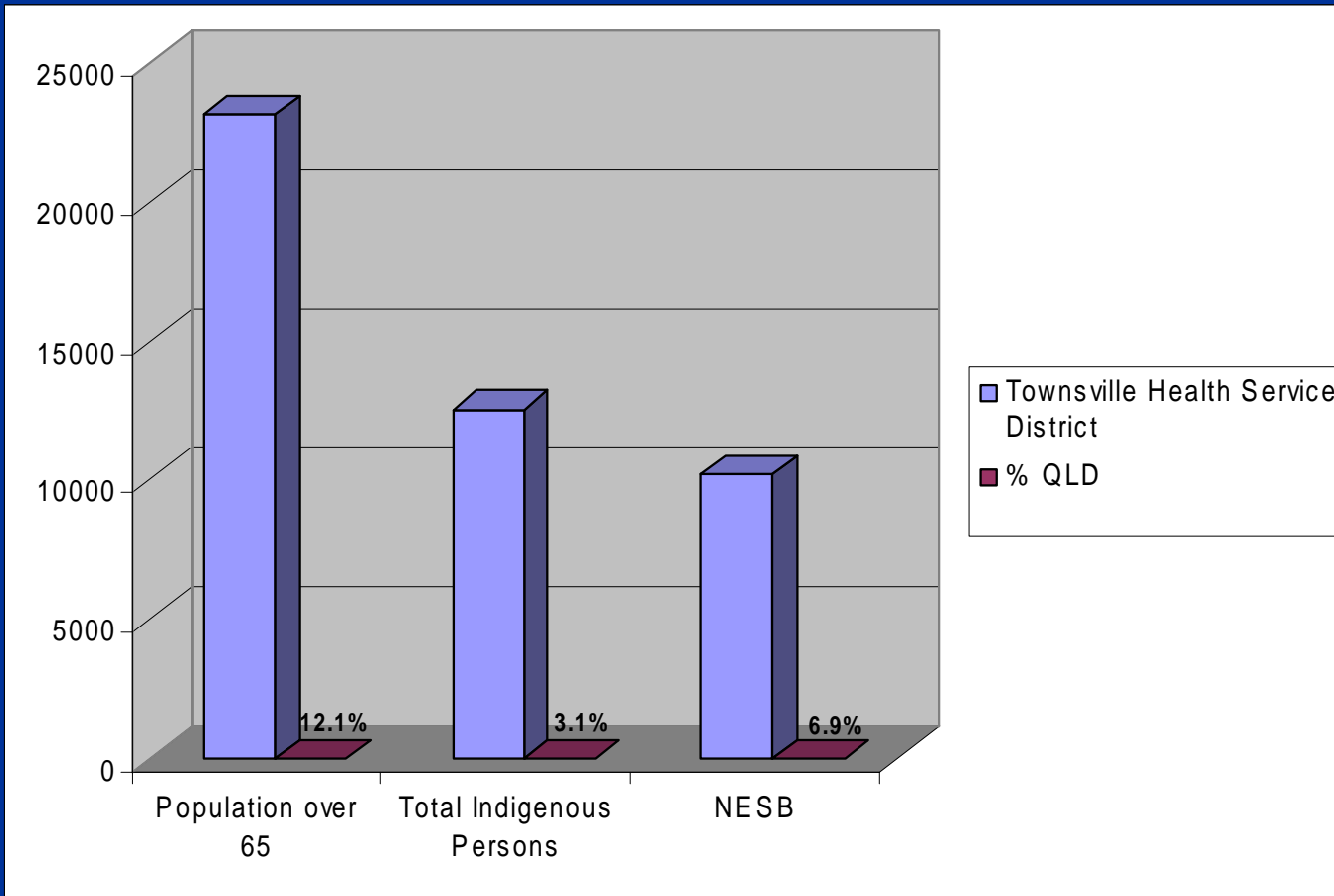


# Townsville Health Service District



# Demographics

221,318 Estimated Resident Population of Townsville 30 June 2005



# Team Role and Functions

- Integrated Multidisciplinary Older Persons Mental Health Service
- Comprehensive standardised assessment suite
- Liaison with other health care providers such as ACAT, GPs, EAC, RACF's, TCP, IHCP, NGO's and Dementia Reference Group.
- Education and training

# Team Role and Function.

- Assessment of BPSD with personalised management interventions.
- Run remote outreach clinics to isolated area
- Provide telemedicine
- Membership in area and statewide Planning
- Research

# Eligibility Criteria

- ❖ Service aimed at people over the age of 65, [55 for indigenous people] with:
  - A mental illness complicating an age related disorder.
  - A mental illness which has arisen for the first time.
  - An age related disorder complicating a pre-existing mental illness.



# Initial Assessment

- History of Presenting Complaint
- Medical History
- Psychiatric History
- Family / Personal History
- Mental State Examination
- Mini Mental State Examination
- Functionality - KATZ ADL / Lawton IADL
- Hamilton Depression / Anxiety scale
- Risk Assessment

# Specialized Assessments

- ❑ RBANS - Repeatable Battery for the Assessment of Neuropsychological Status
  - Looks at domains Immediate memory, visuospatial / Constructional, Language, Attention, Delayed memory.
- ❑ Allen Cognitive Level Test

# The RBANS

The Repeatable Battery for the Assessment of Neuropsychological Status developed by Christopher Randolph a Neuropsychologist in USA, 1998.

- Developed to be a user friendly neuropsychological tool for multidisciplinary health service providers

# Overview



- ❑ Measures attention, language, visuospatial / constructional abilities, immediate memory and delayed memory giving a global score
- ❑ Comprises 12 subtests that can be administered by trained examiners in about 20-30 min
- ❑ Intended for use with ages 20-89 years.

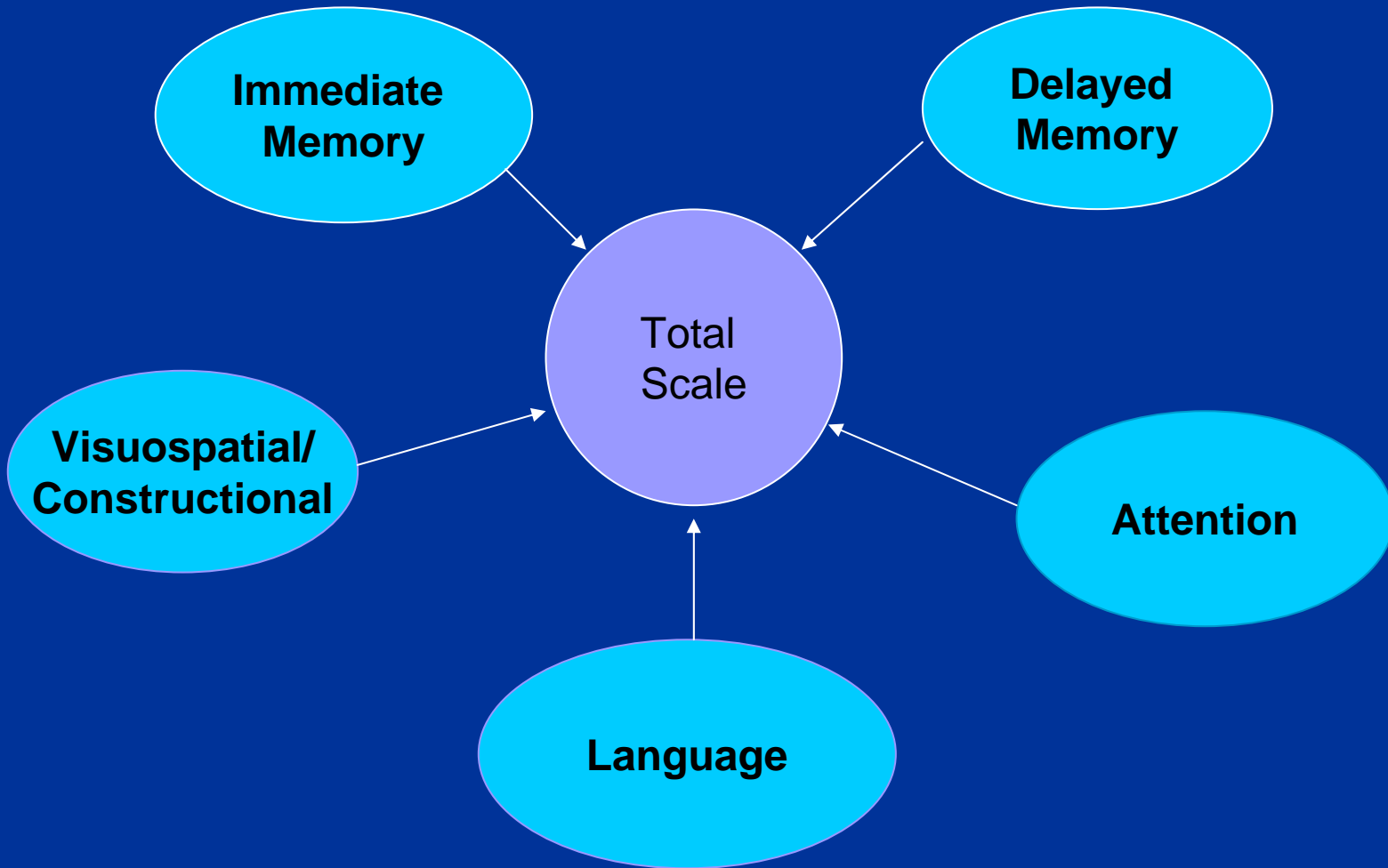
# Validity of the RBANS

- Testing found the RBANS to be a reliable standardized valid repeatable neuropsychological assessment tool
- The content and format of RBANS subtests are similar in nature to tasks in some of the most frequently administered clinical tests such, as WAIS-III, WMS-III, Boston Naming test, Judgement of Line Orientation and Verbal fluency tests.

# Developed with a three-fold purpose

- As a stand-alone “core” battery for the detection and characterization of dementia/cognitive decline
- As a neuropsychological “screening battery” that is less than 30 minutes
- For repeat evaluation

# Organization of the Scale



# 12 Sub tests

## **Immediate Memory**

- List Learning
- Story Memory

## **Attention**

- Digit Span
- Coding

## **Visuospatial/Constructional**

- Figure Copy
- Line Orientation

## **Delayed Memory**

- List recall
- List Recognition
- Story Memory
- Figure Recall

## **Language**

- Picture Naming
- Semantic Fluency

# Why use it?

- Recent studies indicate certain types of neuropsychological tests are particularly effective in the early detection of dementia.
- Serial list-learning tasks (Flicker et al., 1991; Masur et al., Peterson et al., 1994).
- Immediate recall of stories (Eslinger et al., 1985; O'Donnell et al., 1988).
- A timed coding task, such as Digit Symbol from WAIS-R (Masur et al., 1994; Newman et al., 1994).



## ☐ Repeatable

- Track response to cognitive enhancer
- Track response to antidepressant therapy
- Track degenerative diseases
- Track recovery during rehabilitation
- Track clinical interventions

# Ease of Use

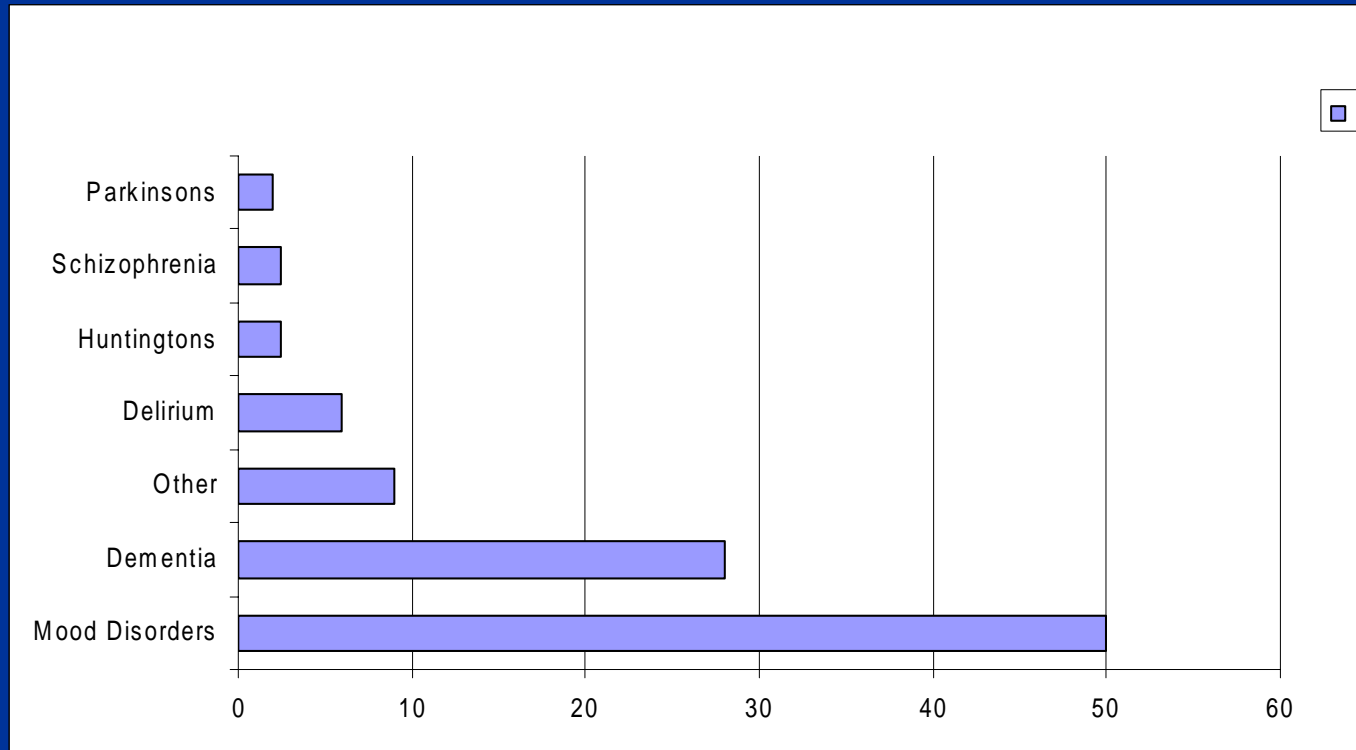


- Portable easily used at the bed side
- Able to be used by multidisciplinary Non-neuropsychologists, it is easily administered and scored by all health practitioners.

# Interpretation

- Interpretation must be by professionals appropriately trained in neuropsychological assessment
- Screening tool for cognitive impairment
- Interpretation in a clinical setting needs to be done with consideration of standardized tools.

# Current percentages of patients



# Mood Disorders n=87

- 21% Moderate depressive episode
- 17% Mixed anxiety/depression
- 14% Mild depressive episode
- 11% Recurrent depressive disorder - severe
- 10% Bipolar affective disorder
- 8% Severe depressive episode without psychotic features
- 8% Adjustment disorder
- 5% Recurrent depressive disorder - mild
- 3% Recurrent depressive disorder – moderate
- 3% Affective mood disorder

# Dementia n=51



45% Alzheimer's disease unspecified

25% Dementia unspecified

8% Alzheimer's disease with late onset

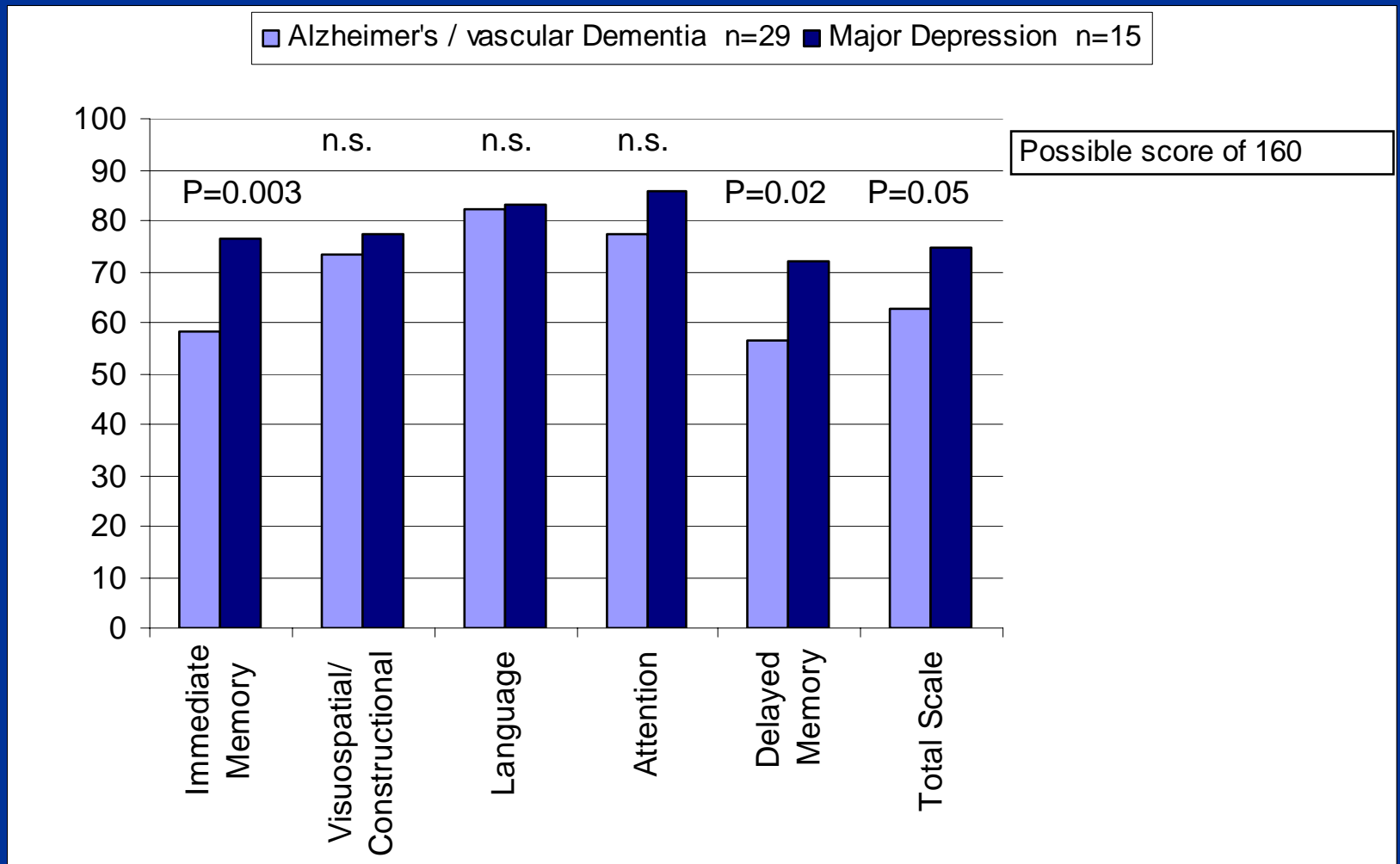
8% Delirium superimposed on dementia

6% Multi-infarct dementia

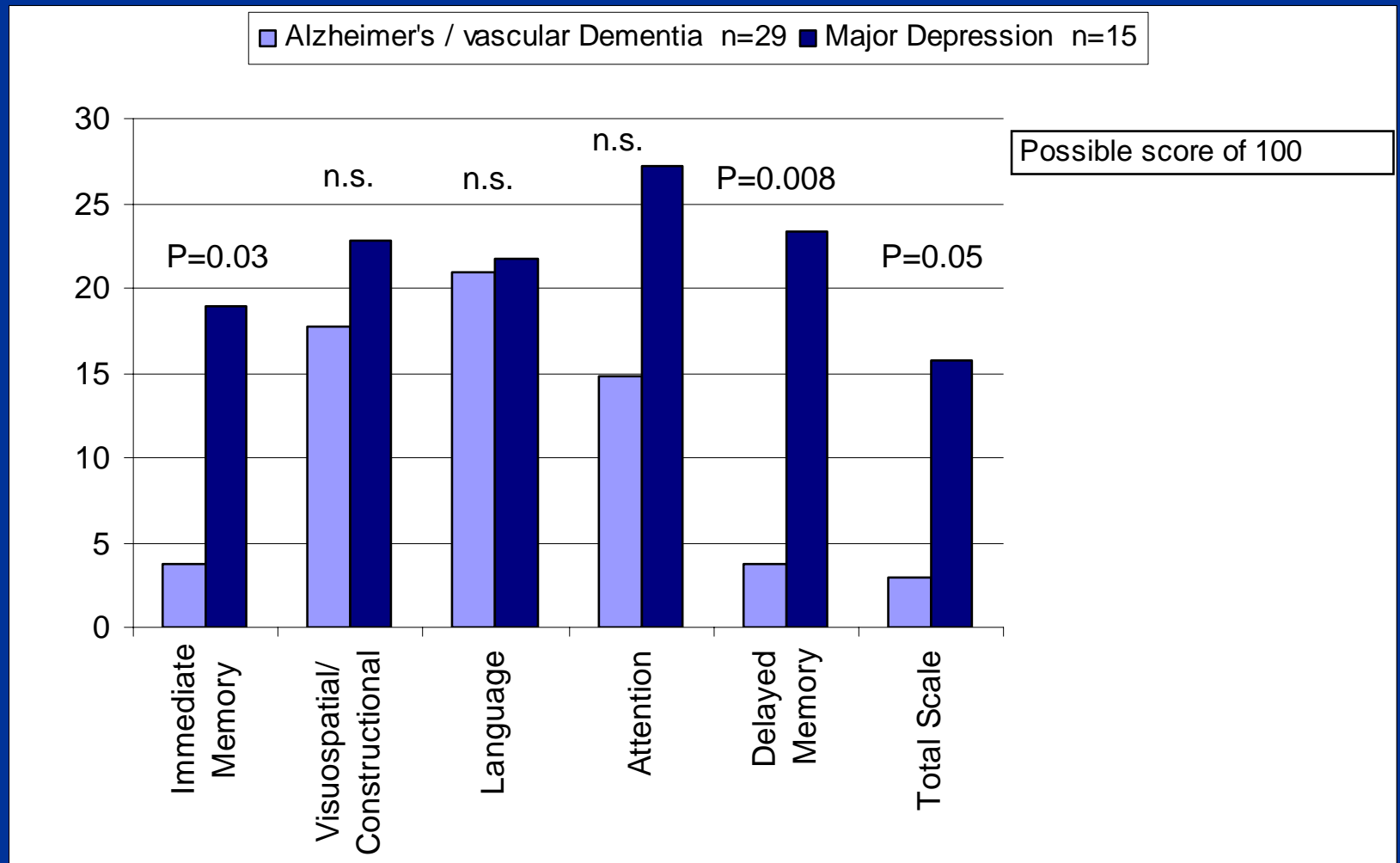
4% Dementia in Huntington's disease

4% Dementia in Parkinson's disease

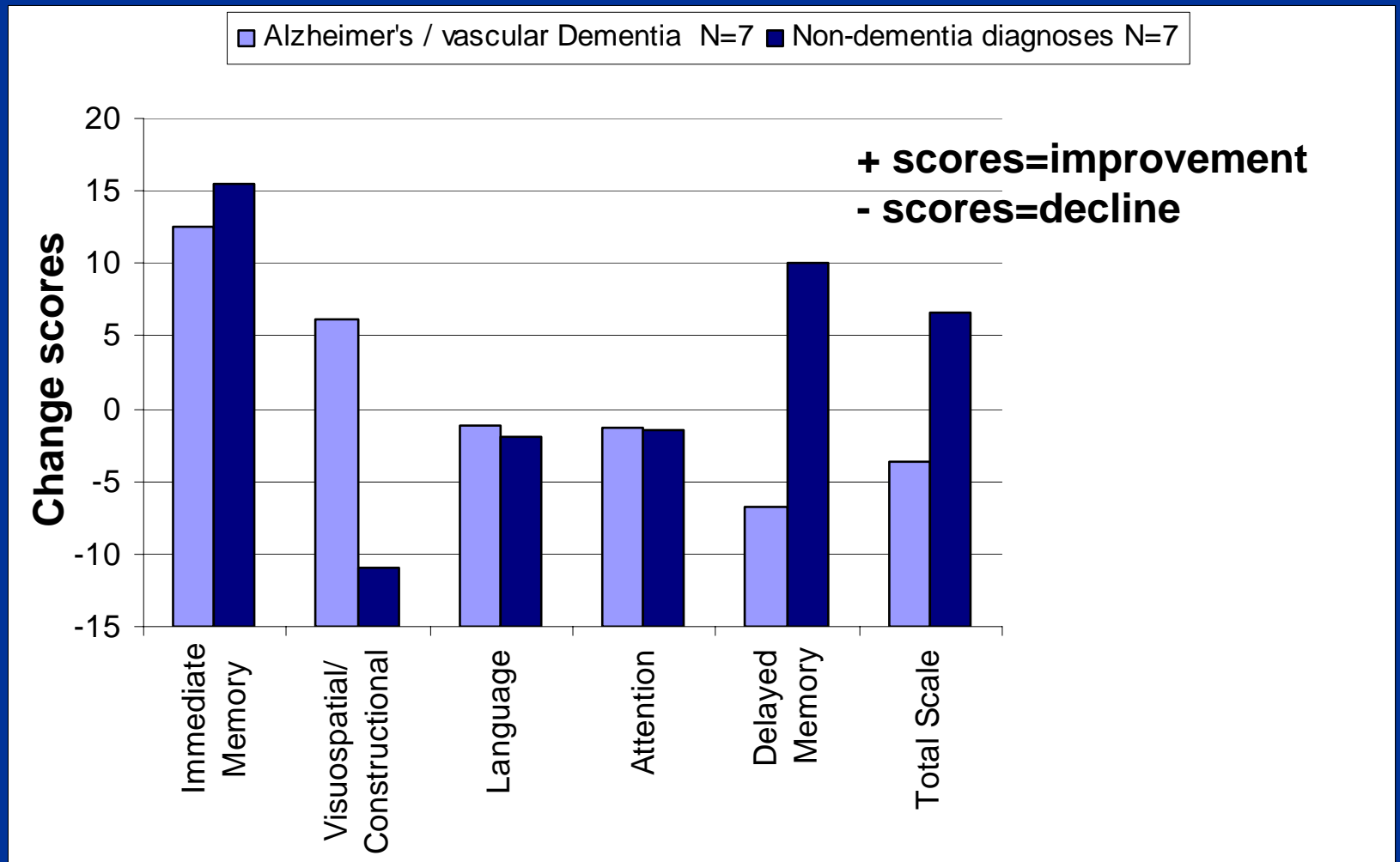
# RBANS Scores: Diagnosis specific



# RBANS Percentiles: Diagnosis specific



# RBANS change scores: Repeat after ~6 months (Version A and B (N=14))



# RBANS: Conclusions

- Reliable standardized valid repeatable neuropsychological assessment tool
- Easy to use, portable, 30 min to perform
- Can be applied by members of multidisciplinary teams
- Repeatable, thus it can be used to track improvement and decline.

# References

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