




**Health assessments in people with intellectual disability – a review**


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**Scope of presentation**


- History of health assessment research
- Evidence about health assessments in people with intellectual disability
- Limitations of current research
- The future of health assessment process






**Background**

- Poverty, communication, devaluing & access
- high levels of unmet health need
  - undiagnosed or when diagnosed, poorly treated.
  - often have not received health screening or promotion interventions
- health assessment process has potential





**History of health assessments**

**Health assessment - Elderly**

- Early 1900s - life insurance companies
- 1950s UK undisclosed morbidity - elderly
- 1960s preventative clinics
- 1970s specialist geriatric services  
(Tulloch & Moore 1979; Vetter, Jones & Victor 1984)
- 1990 UK NHS regulations
- 2007 Four systemic reviews or meta-analysis – included - 49 RCTs  
(Stuck et al. 1993 ; van Haastregt et al. 2000; Elkan et al. 2001; Stuck 2002)





**Health assessments and adults with intellectual disability**

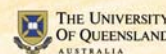
### Health assessments in adults with ID

- 1988 & 1994 Two n=10 & 28 NY and New Jersey  
(Gambert, Crimmins & Cameron et al. 1988) (Carlsen et al. 1994).
- 1996 Cardiff health check - Wales UK  
conference abstract (Kerr et al. 1996)
- 1997-1998 New Zealand (Webb & Rogers JIDR 1999)  
– N=1311 adults → 1,798 health actions
- 1996/7 Australia - Pilot  
(Lennox et al. 2001, Lennox, Diggins & Ugoni 1997).



### Studies identified

- Seven observational studies (n=10 to 201)
- Two randomised controlled trials (n=483, n=272)



### Summary of studies 1

When & where	Population	Findings	Intervention
1988 New York State, USA	10 elderly (mean 65.5 yrs)	51 prob.-hearing, dental & cardiovasc.	multi-professional assessment
1994 New Jersey USA	24 people aged 55 years or more	2.2 new diagnoses/patient	multi-professional assessment
1997 Queensland Australia	38 adults by 15 GPs	CHAP appeared to produce most change	Two self evaluation & synopsis, case note audits + CHAP
1999 New Zealand	1311 adults screened	1,798 health actions in 957 persons (73%)	Multi component & Cardiff Health check



### Limitations of research

- All observational studies
- Limitations - No control group, most small sample size & selection and/or measurement bias
- No assessment of views of those involved

### Summary of studies 2

When & Where	Population	Findings	Intervention
2005 California, USA	201 Adults with mild or moderate ID and DD	APNI – mean 5.2; (1-14) in 70 adults & 1007 recommendation or referral - only 50% f/u HRA - reduced health risk, increased life satisfaction, increase health strengths, decreased falls, self reported pain and use of the ED	Geriatric health risk assessment (HRA) tool & an advanced nurse practitioner intervention (ANPI).
2006 Tasmania, Australia	23 adults - 1 <sup>st</sup> consult with GP upon deinstitutionalisation	89 actions, mean 39 actions/person (1-9) including 21 referrals ~ one per person. (Ten to medical specialists)	CHAP completed



### Summary of studies in adults with ID 3

When & where	Population	Findings	Intervention
2006 Glasgow, Scotland	50 adults with ID first introduced & matched to control group from another area	unmet need in health promotion (~3/person), health monitoring (~1/person) & new health needs (new diagnoses or findings)	Primary care nurse 1. review GP notes & did health asses. & physical exam, 2. discussed/summary to GP 3. Outcome data at 1 year (intervention & control.)



### Summary of studies 4

When & where	Population	Findings	Intervention
2007 Qld, Aust.	n = 453	Compared to controls - • 6.6X ↑ vision impairment (CI 1.9–40) • 30X ↑ in hearing testing (CI 4.0–230) • Increase immunization updates e.g. - 9X ↑ tetanus/diphtheria (CI 4.2–19) - 8X ↑ Papanicolaou smears (CI 1.8–35) • ↑1.6X find new disease by 1.6X (CI 0.9–2.8) Consistent trend & evidence under estimate of effect	Clustered RCT of CHAP
Unpublished Qld, Aust.	n = 272	Compared to controls - 7.9X ↑ influenza vaccination (CI 1.7-37.5), 6.3X ↑ hearing testing (CI 2.3-17.6), 4.9X ↑ Hepatitis A vaccinations (CI 1.5-15.6), 3.9X ↑ vision testing (CI 1.6-9.4), 3.4X ↑ weight management (CI 1.6-7.2)	Clustered RCT CHAP and Ask Health Diary

### Interpretation

- **ALL** indicate ongoing unmet health need
- Observational studies **ALL** demonstrate unmet health need but without specific comparators are unable to demonstrate true benefit from the process

#### CHAP RCTs

- Added most precise quantification of the likely
- Largest RCTs & only ones demonstrate health benefit



### Further interpretation

- **Benefit across settings** – 24 hour supported accommodation, deinstitutionalised population, register population & community living (including independent)
- **Highest** level of evidence for CHAP
- Best studies limited to one year post intervention
- **No** indication decreased mortality or sustained increase in identification of unrecognised morbidity



### Future directions

- Confirmatory RCTs
- Prospective cohort studies
- Cost analysis
- Frequency of use
- Acceptability of process
- Syndrome specific assessments
- Augmented by other approaches
  - Ask health diary
  - Complex systems analysis



### Conclusion

- There is sufficient evidence for widespread implementation **BUT** more work needs to be done
- In Australia – CHAP used in most states
  - Medicare funded over 7000 health assessments between July 2007 and May 2008

