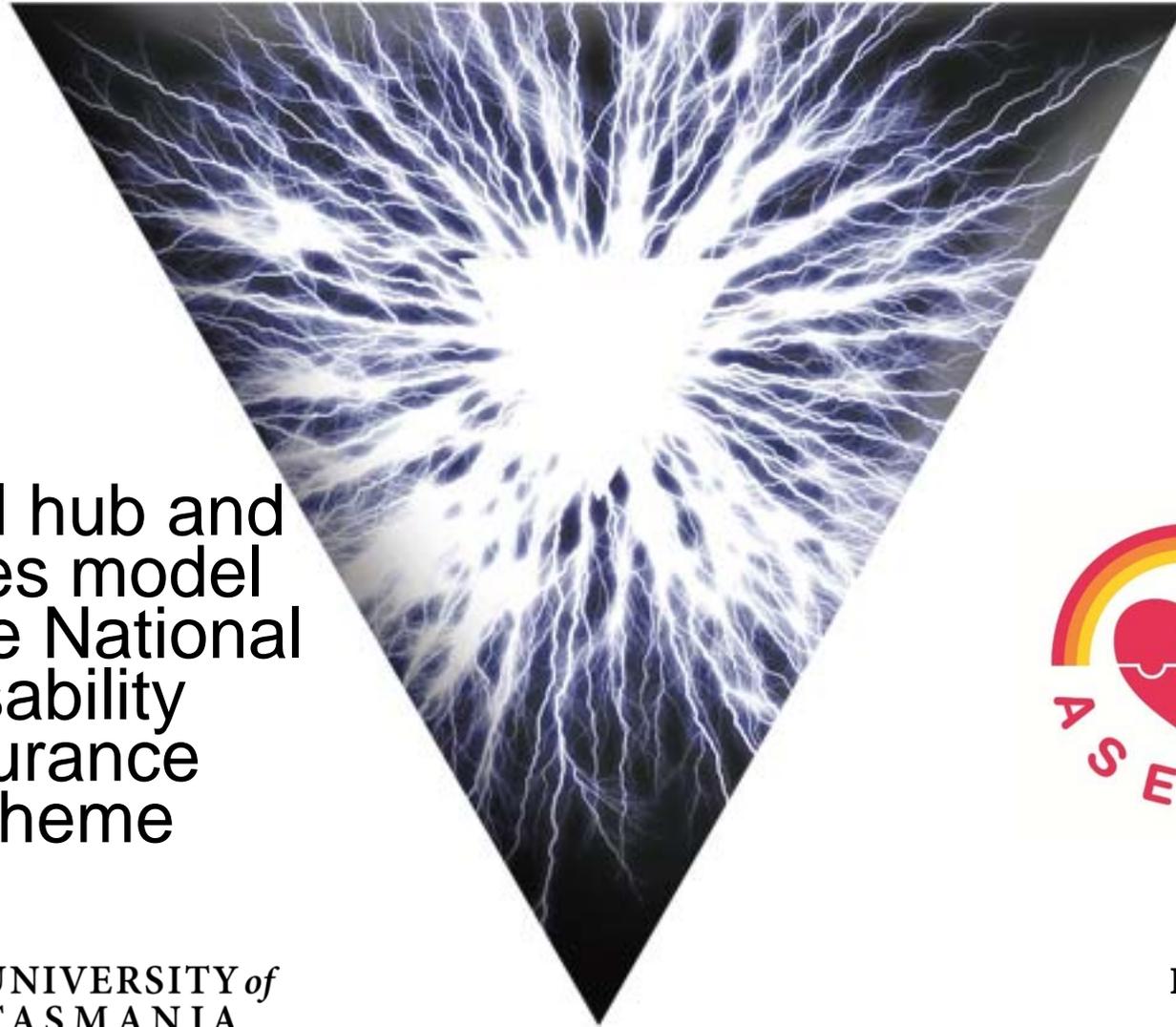


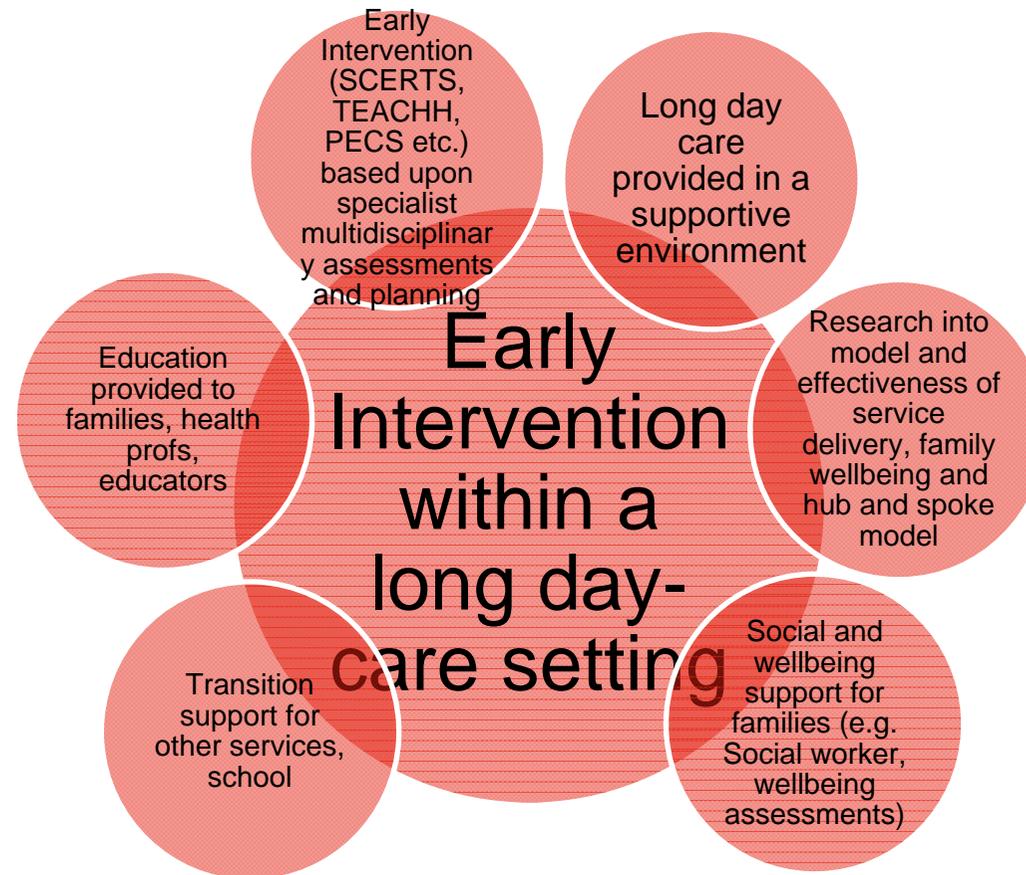
# Early Intervention for children with Autism Spectrum Disorder



A rural hub and  
spokes model  
and the National  
Disability  
Insurance  
Scheme



# Autism Specific Early Learning and Care Centres (ASELCC's)



# **The North West Tasmanian ASELCC**

## **A rural and regional service**

### **Points of difference:**

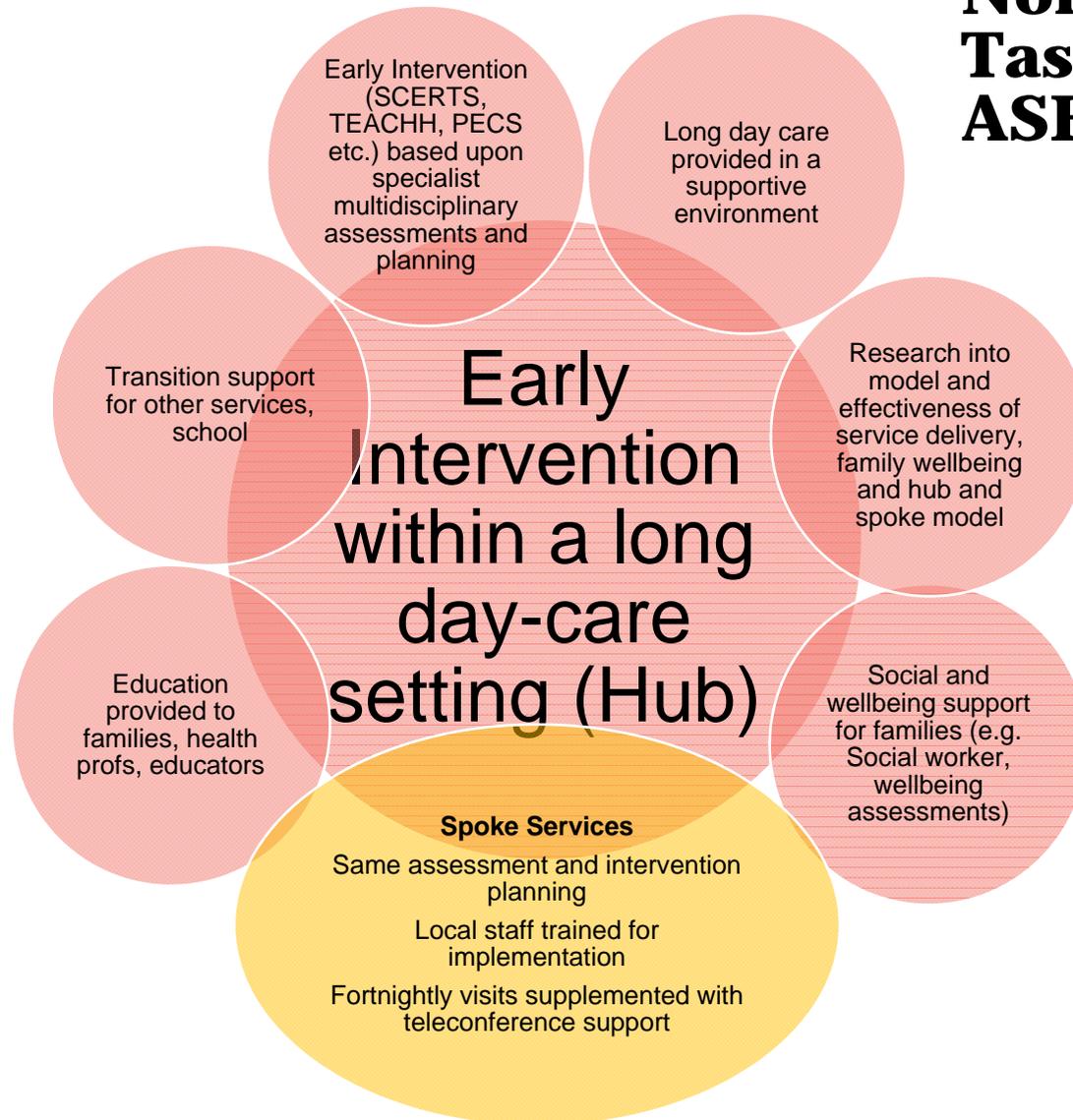
Located in a rural and regional area

Accepts children with ASD like symptoms prior to a diagnosis

Flexible hours (no set hours)

Hub and spoke model

# North West Tasmanian ASELCC



# Barriers to rural service provision

Barriers often found in rural areas	Addressed in the hub and spoke model
Access to local services (travel and transport) early intervention	Services provided at the local child care centre
Inclusive childcare	Staff are training and supported
Specialist services (rural recruitment issues, integration of care providers)	Hub staff are specialists, trained and supported in the hub service and offer consultative expertise to childcare centres and other service providers
Flexible services	In part - Families may be offered flexible care according to family capacity and child needs e.g spend time at both hub and spoke if hub accessible, allows parent to take child out at holiday time to spend time with siblings, and not lose place/charged (as opposed to mainstream childcare)
IT services to provide access to support	Increasing access to better internet connections has enhanced capacity to provide videoconferencing support (e.g. Smithton NBN)

# How effective is an Australian early intervention service within a long day care setting?

Research from other Australian ASELCC's has found:

- Significant gains in cognitive, verbal/preverbal skills, fine motor and visual-motor imitation, motor skills and social reciprocity as well as receptive and expressive language
- Significant decreases in maladaptive behaviours
- Significant decreases in autism symptoms

(Paynter et al, 2012; Eapen et al, 2013; Fulton et al, 2014)

# Effectiveness of an ASELCC in a rural and regional area

Preliminary (in manuscript) outcomes of the NWTas ASELCC have found similar results to other ASELCC's:

- Statistically significant decreases from baseline to follow up in ASD specific features (SCQ).
- Improvements in areas of language (receptive and expressive), visual reception and fine motor skills (MSEL).
- Improvements in domains of communication and socialisation (VABS).

Hub vs Spoke: Early indications suggest no difference in outcomes between hub vs spokes. *However low numbers and possible influence of staff recommending which service might suit the child best.*

# What parents think:

Qualitative research with parents/carers (in manuscript) found four themes:

1. **Outcomes for child** (Communication, Socialisation, Coping, Preparation for mainstream school)
2. **Outcomes for parents** (Acceptance, Reassurance, Self Worth, Confidence, Less isolation, Hope for the future)
3. **Qualities of the ASELCC** (Non-judgemental, Reliable, Consistent, Understanding, Provide information and education, Extensive expertise, Multi-disciplinary, Flexible, Facilitate integration into community)
4. **Difficulties parenting a child with ASD** (Stigma, Difficulties fitting into mainstream services without support, Travel to access services, Attending multiple specialist appointments, Limits to employment, home duties, leisure, family activities, and self-care, Worry about the future)

# Transition to the National Disability Insurance Scheme

Intentions of the NDIS	How this hub and spoke model addresses these
Flexible service delivery	<ul style="list-style-type: none"> <li>• Hub vs spoke care offers options for less remote families</li> <li>• Remote families, children and providers receive a level of care through visiting services, phone and video set ups</li> <li>• The input of specialised multi-disciplinary team offers individualised tailored care</li> </ul>
Early Intervention should: increase functional capacity, reduce the impact of disability, help maintain independence, increase opportunity for social, economic and community participation, utilise evidence based interventions	<ul style="list-style-type: none"> <li>• Outcomes from other ASELCC's and preliminary from NWTas indicate that interventions decrease ASD symptoms and increase functionality significantly</li> <li>• Capacity building activities enhance participation</li> <li>• Current federal funding of ASELCC's ensures the use of evidence based interventions</li> </ul>
Strengthen informal supports	<ul style="list-style-type: none"> <li>• Role as a "Centre for excellence" in the region enables community capacity building activities</li> <li>• Support and education provided to families</li> </ul>
Be cost effective	

# Transition to the NDIS

Concerns regarding transition and implementation in rural areas	How this Hub and Spoke model address these
Flexibility and choices for families	Support provided to the local childcare service and tailored to the individual needs of the child to enhance options and accessibility
Registration difficulties and competency issues for individual practitioners	The “centre of excellence” ensures specialist services and “manages” registration for practitioners
Protection for clients to ensure quality services	Specialist teams through a Hub model enable this but dependent on funding arrangement
Financial sustainability in a market driven model in rural areas	Expensive service to operate as a hub. Outreach services are expensive
Reduced capacity for collaboration in a fee for service environment	Centre of excellence model provides collaboration funding dependent

Early results from investigations hint that ASELCC's may have merit as a Centre of Excellence with provision of outreach services in a Hub and Spoke model

## **Further research is required in order to:**

continue to evaluate the effectiveness of this hub and spoke model of early intervention

- with greater numbers
- in regards to whether degree of disability affects effectiveness in hub or spoke
- to examine the mechanisms of supporting mainstream child care centres to provide effective services to children and families, and
- consideration of wider applicability of this model)

*Evaluation of cost effectiveness and modelling of service provision is required*

*The crisis of our time relates not to technical competence, but to a loss of the social and historical perspective, to the disastrous divorce of competence from conscience*  
*(Boyer, 1990)*

## **Research Team**

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