

Management of Diabetes during Transition of Care from Paediatrics to Adulthood

“Plan a multidisciplinary approach, communicate, follow-up and research”

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Definition and Epidemiology

- **Transition:** purposeful, planned movement of adolescents and young adults with chronic physical and medical conditions from child-centred to adult-oriented health care systems Blum RW, 2002
- Usually from *multi-disciplinary* care at a public hospital to a public hospital, or private practice or GP; ideally with CDE, dietitian and other health care professional support.
- Usually at 18 – 25 y.o.

- Youth with Type 1 diabetes (T1DM): 15,000 aged <21 yrs. NDDS 2022

Type 2 diabetes (T2DM):

others forms of diabetes: neonatal diabetes, monogenic diabetes,
cystic fibrosis related diabetes

Setting of Transition

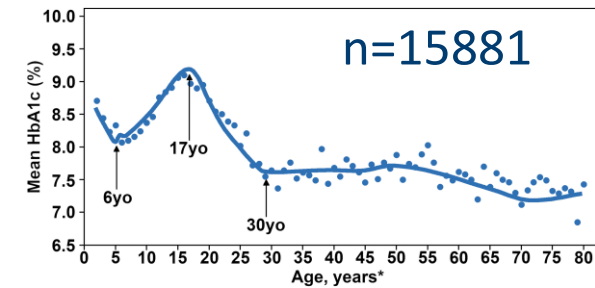
- At age of developing brain and high-risk behaviour
- Often higher HbA1c
- Developing knowledge re their diabetes and the health care system
- Developing self-advocacy and independence
- Many life-changes: school, jobs, moving away, friends, driving, alcohol / drugs,
- Competing priorities

Need for self-care, diabetes medicines and monitoring remains, and may be greater

Most transition well

Some high risk subgroups

- Isolated socially or geographically
- Indigenous or CALD
- Type 2 diabetes
- Poor attendance in youth services
- Multiple co-morbidities
- Mental health issues
- Low health literacy
- High HbA1c



T1D Exchange, K Miller DTT 2020

Common Differences between Youth and Adult Services

Adult vs youth services:

- Less parental participation; youth must attend to scripts, appointments
- Less time per patient in some clinics
- Often new location for the person with diabetes
- May be less allied health care professionals on-site, especially private practice
- More emphasis on other non-glucose risk factors and screening
- Tests often require venepuncture at pathology lab. vs in clinic finger-prick
- May be less technology expertise
- Higher costs of CGM and for private health insurance for an insulin pump

Risks of Transition

- Lost to follow-up
- Less engagement with healthcare

Australian NDSS 2012 data: 24% less engagement, 9% disengaged, some drop out yr 1 - 2 post-transition

White M, Best Prac and Res Clin Endo and Metab 2015; Steinbeck K Paed Diab 2015

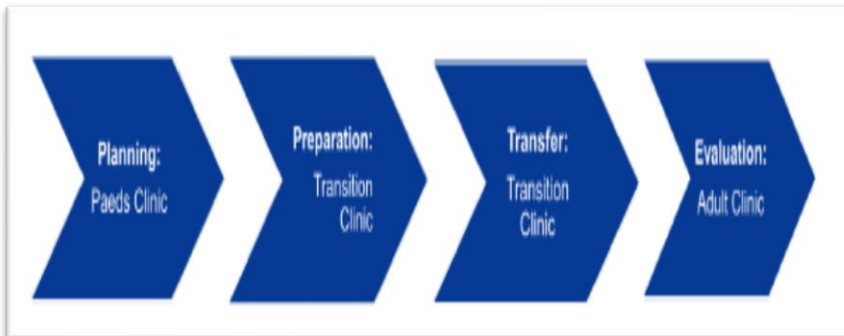
- Worse metabolic control
 - higher HbA1c - risk of cerebral gliosis of developing brain + subtle neurocognitive damage
- Worse mental health

Northam E Diab Care 2009

- More acute complications e.g. hypoglycaemia, DKA
- More emergency department use
- More hospitalisations
- Progression chronic complications
- Premature death

Various Models of Diabetes Transition

- Transition from youth to adult clinic in same hospital e.g. Monash
- Transition to adult service in another hospital
- Adult clinicians attending youth services pre-transfer
- Transition clinics - “Young Adult Diabetes Service (YADS)”
- Transition co-ordinator + / - digital resources



Key groups: endo, GP, diabetes education, psychology, dietitian

https://www.health.qld.gov.au/__data/assets/pdf_file/0029/1417619/transition-moc-consolidated.pdf

Systematic Review

14 studies; 3 models of care

- Structured transition education program, n = 6
- Multidisciplinary team transfer support, n = 5
- Telehealth / Virtual Clinics, n = 3

*Mixed results for all models
No model superior*

Zurynski BMC Health Services Res. 2023



NATIONAL MEDICINES
SYMPOSIUM 2025

Key Team and Resources

- **Person with diabetes and their family / caregivers**
- Tertiary referral youth and adult diabetes care teams
- Private practitioners: endos, CDEs, dietitians
- GPs
- Nurses: CDE, practice nurses, community nurses
- Mental health care professionals / social workers
- **Pharmacists**
- **NDSS**
- Emergency Departments (EDs), virtual EDs
- Urgent Care clinics
- Nurse-on-call
- Ambulance services
- Other first responders e.g. police
- Communications: SMS, phone, emails
- Support systems for vulnerable / homeless
- **Youth peer support**



Urgent Care Services
Victoria

medicare
Urgent Care Clinic

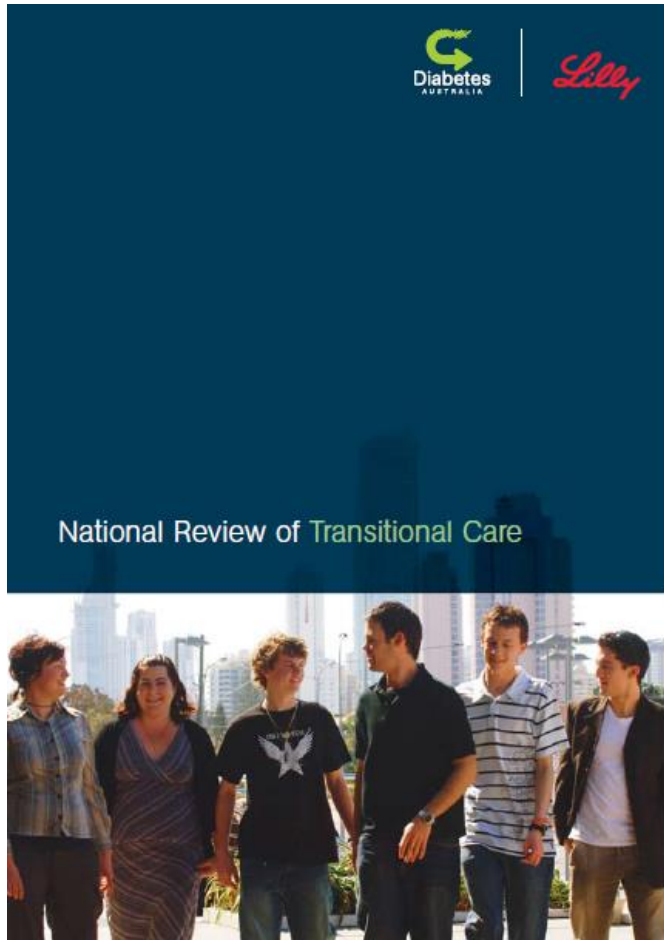


Some Recommendations

- Early start to prepare key persons
- Educate person with diabetes re differences of adult care
- Positive collaborations between pediatric and adult diabetes teams
- Keep GP involved
- A transition coordinator - can improve transition rates, HbA1c, ↓ acute complications
- Transfer detailed medical records **to next intended service and to GP**
- Written documents: e.g. making appointments, out of hour contacts, what to expect
- Digital means of communication and education

Need for More Research and Translatable Findings

2007



- **Updated national review desirable**
 - Include youth with T2D, Indigenous and CALD groups and rural and remote / very remote areas
- **Broad range of stake-holders: co-design**
- **Broad range of outcomes**
 - transition rates, metabolic control, mental health, service usage,
 - long enough follow-up as many disengage
 - control groups
 - health economics

Summary



- Most youth with diabetes will transition well
 - Major adverse consequences for those who do not
- Medicines and monitoring (e.g. glucose and ideally ketones) essential
- Start transition process early: education and connection with adult service
- Maintain some contact with the person with diabetes and their GP ± family
- Flexible patient-acceptable means of contact
- Know a range of resources: GP, ED, pharmacists, digital scripts, other services
- More research needed

***“The effort of diabetes care is great,
but the reward is also great, for the prize is life itself”***

E.P. Joslin 1928



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