



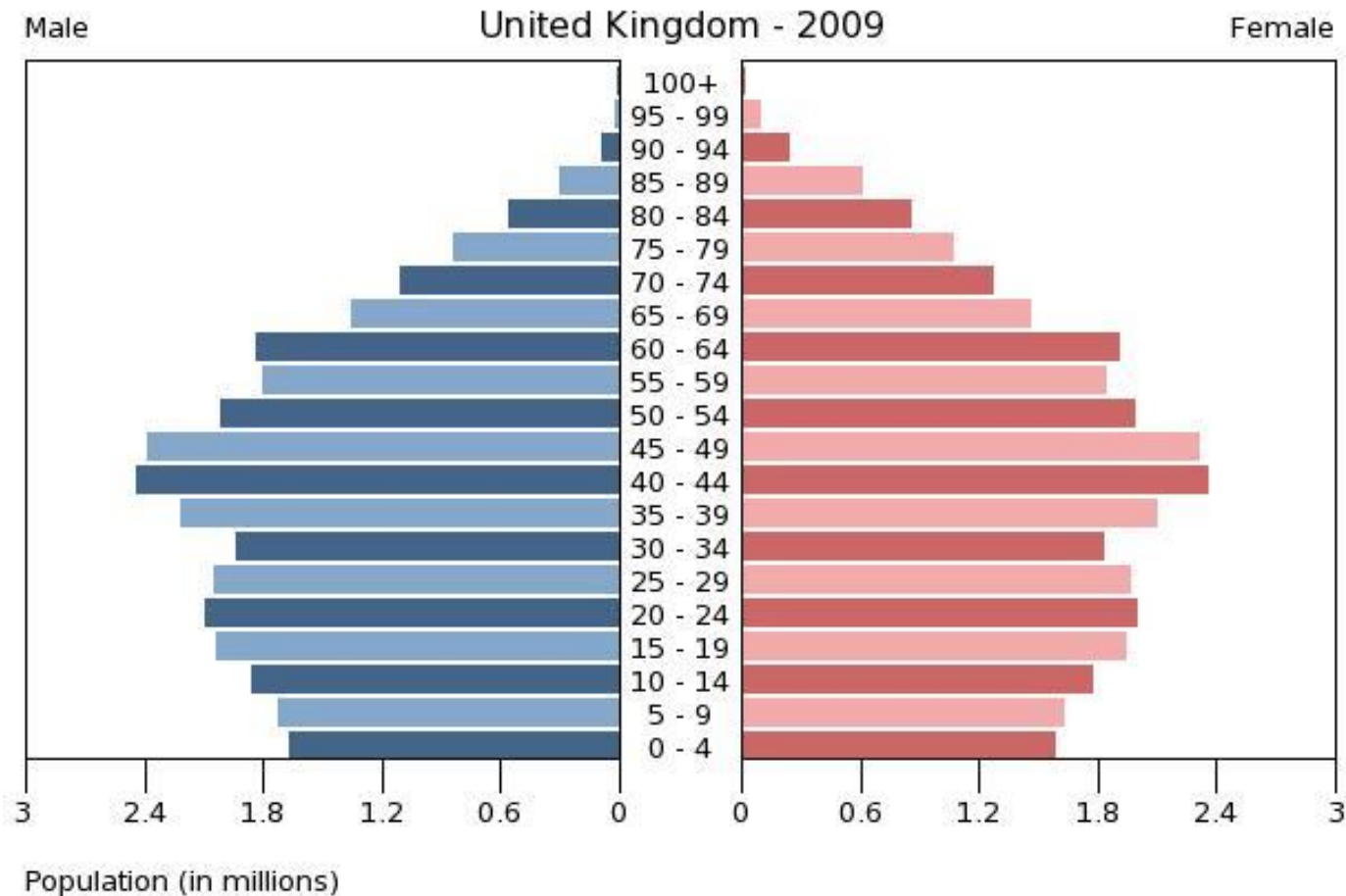
Adolescents and transitional care in diabetes

Russell Viner

Professor of Adolescent Health

UCL Institute of Child Health

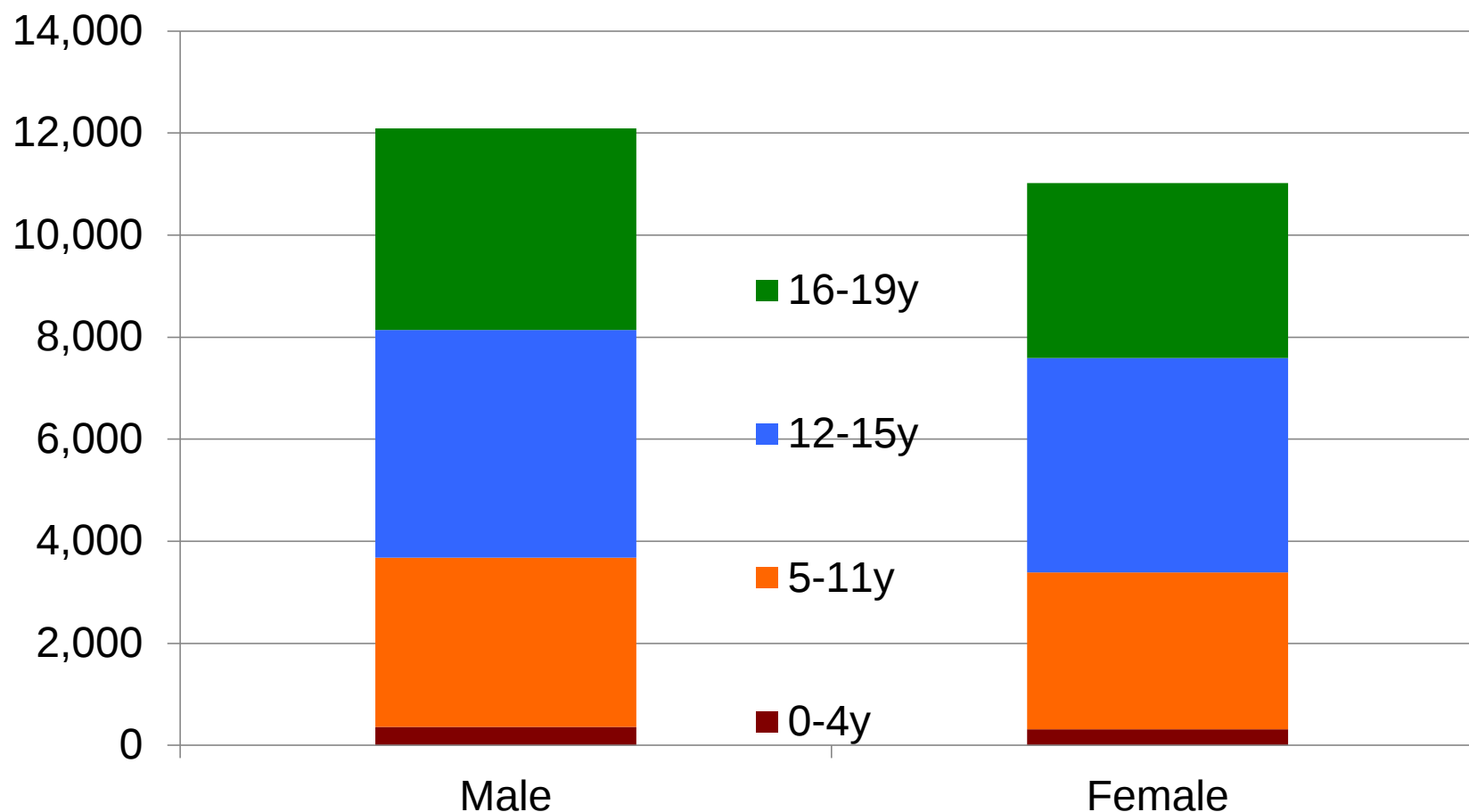
UK population 2009



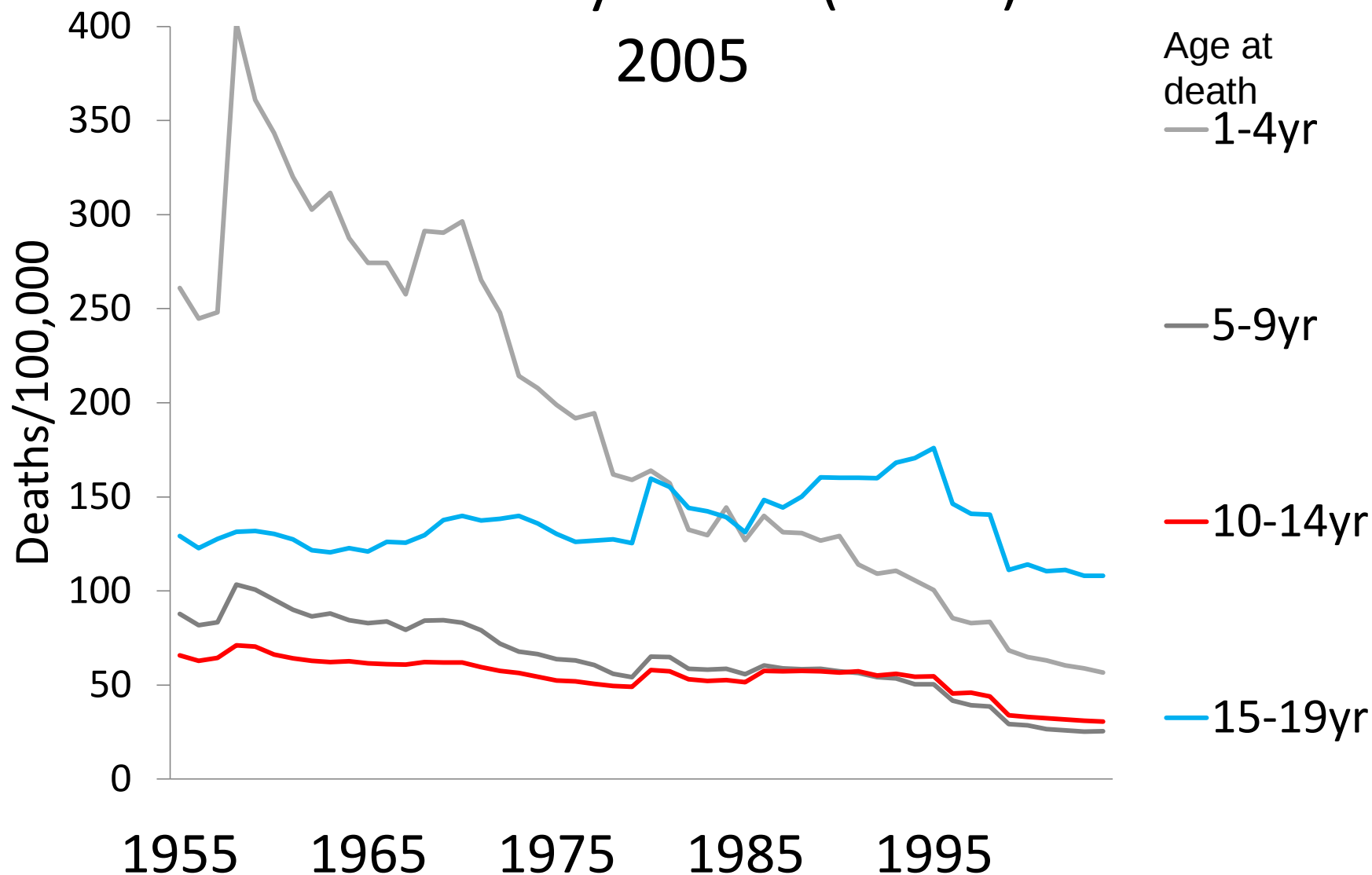
10-19 years – 13% of population

Diabetes population

NPDA registrations in England & Wales 2010-11

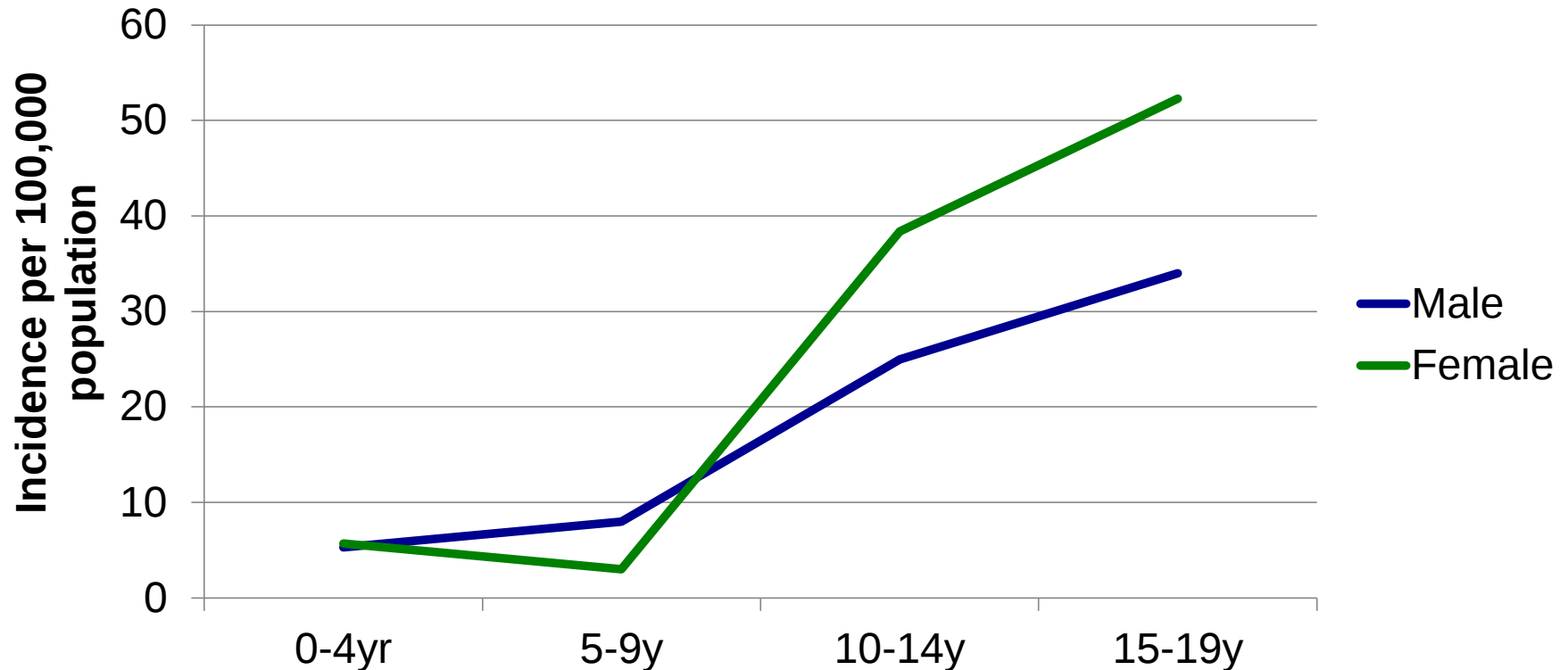


Global mortality trends (males) 1955-2005

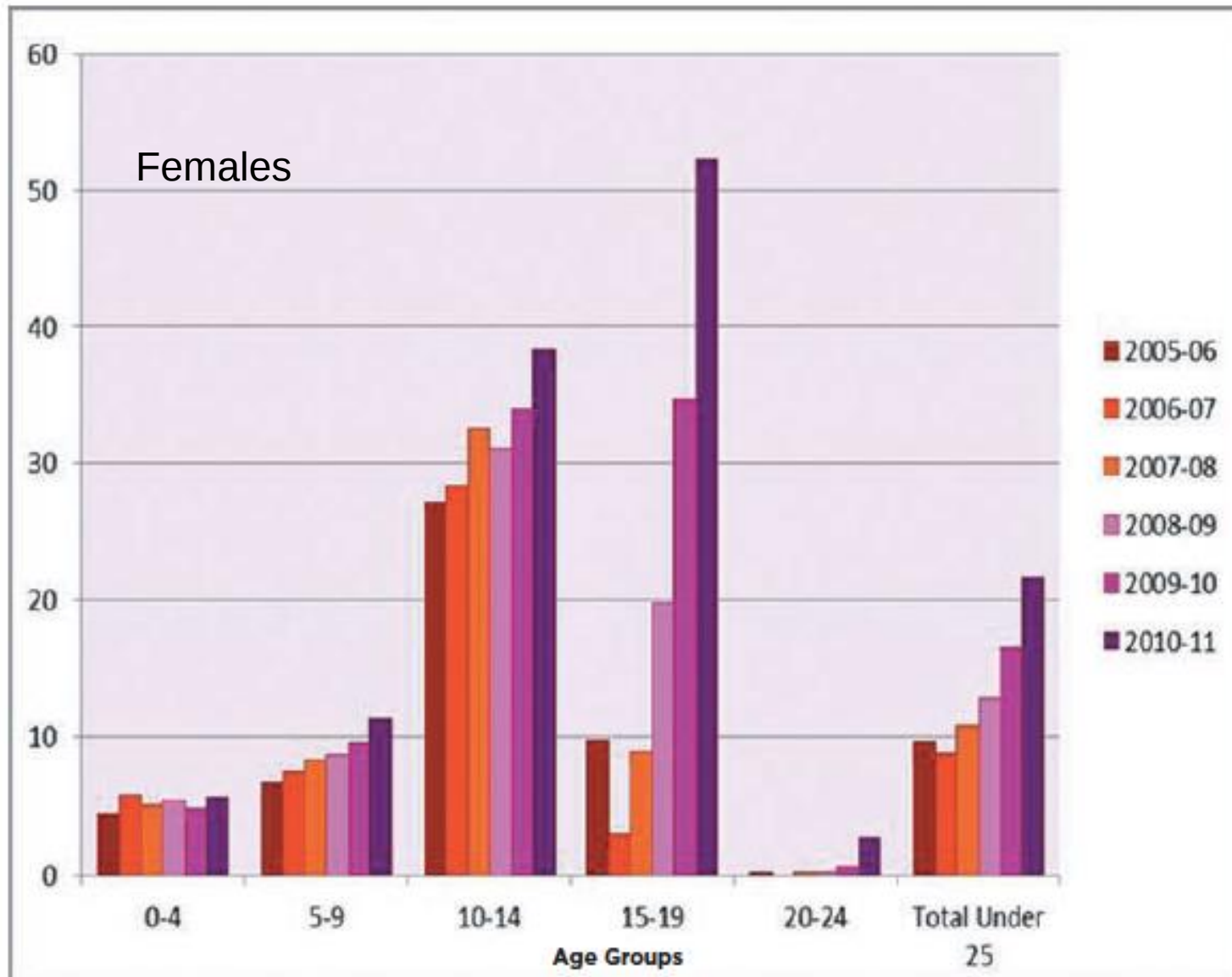


DKA admissions by age

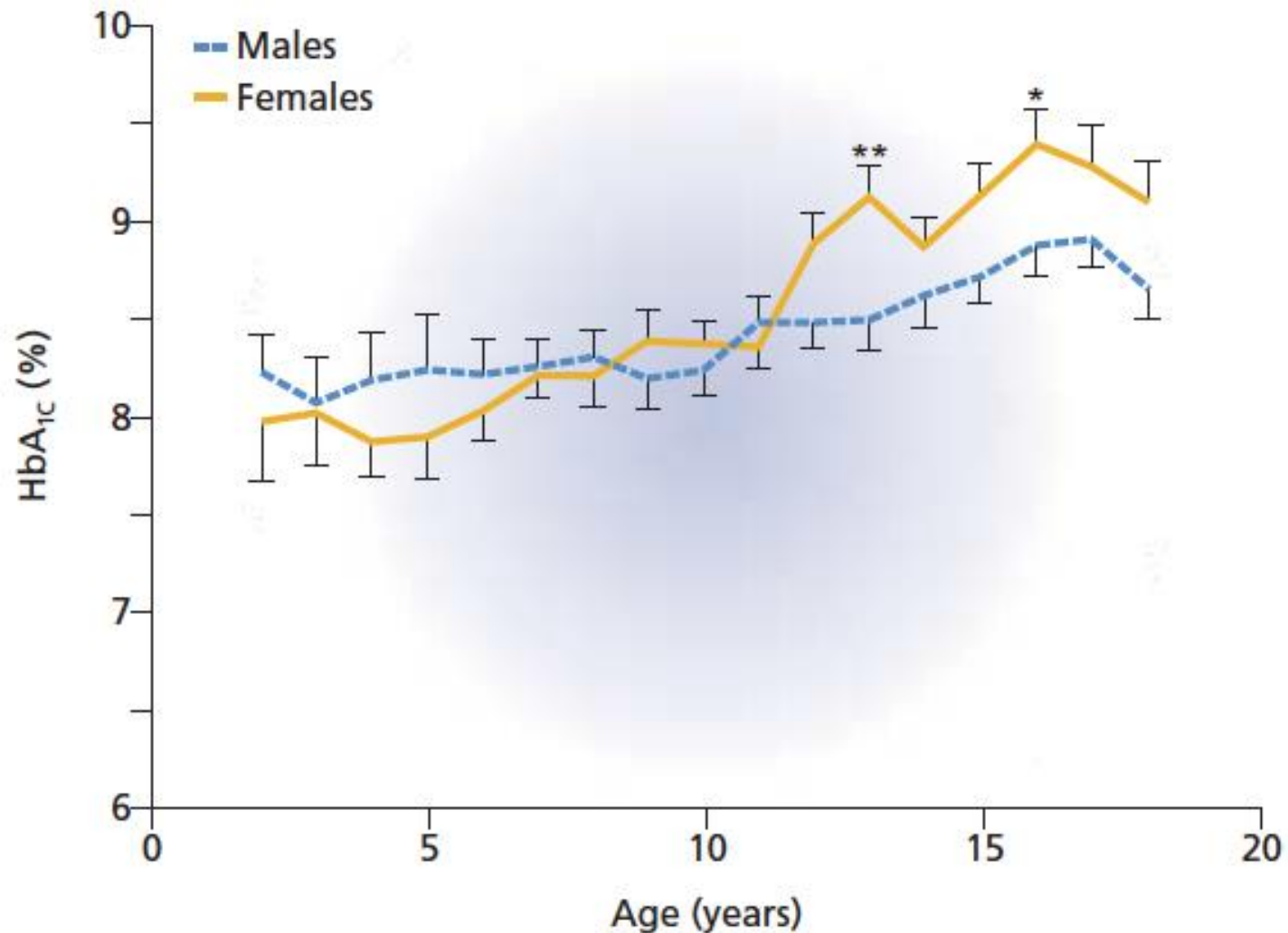
NPDA 2011-12



Trends in DKA admissions '05-11

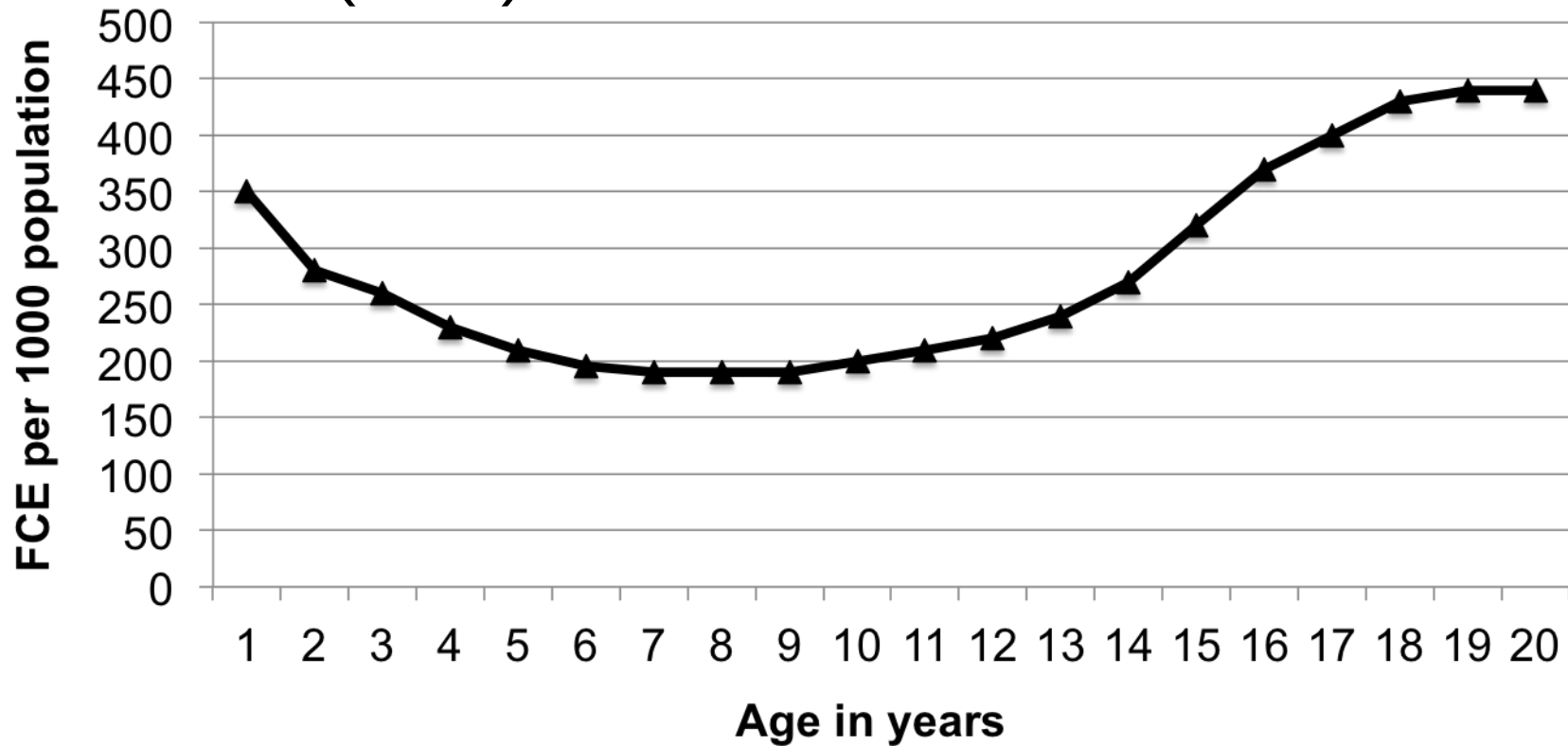


HbA_{1c} by age



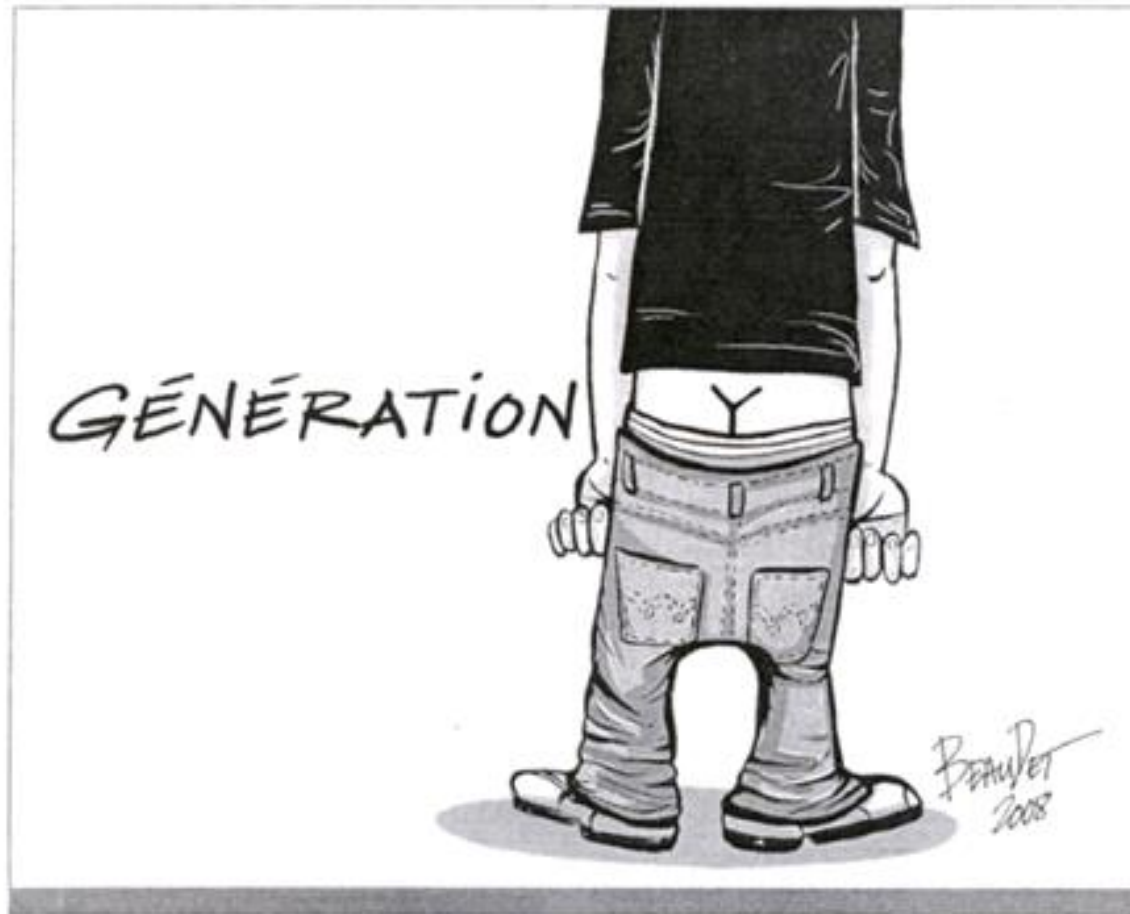
Adapted from Mortensen et al. Diabetes Care 1997; 20(5): 714–20.

UK national hospital use data 2010 (HES)



Thanks to Dougal Hargreaves

JOURNAL DE QUÉBEC | MARDI 22 JANVIER 2008



The paradox of adolescent health

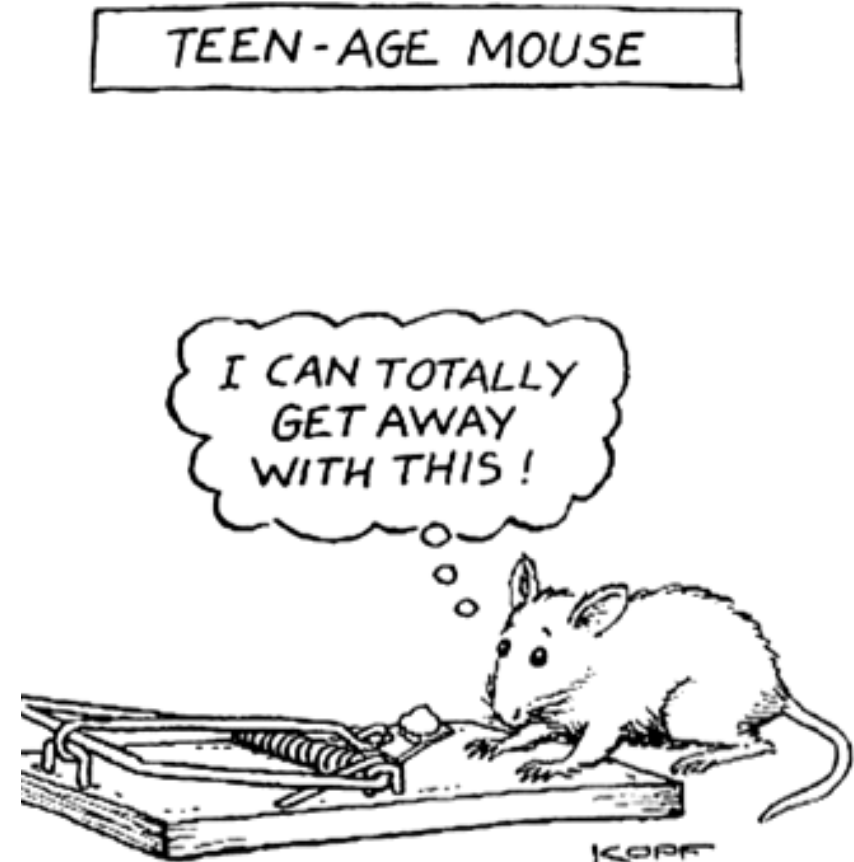
- Healthiest period of life
 - Fastest
 - Strongest
 - Cleverest
- Yet mortality and morbidity rise through adolescence



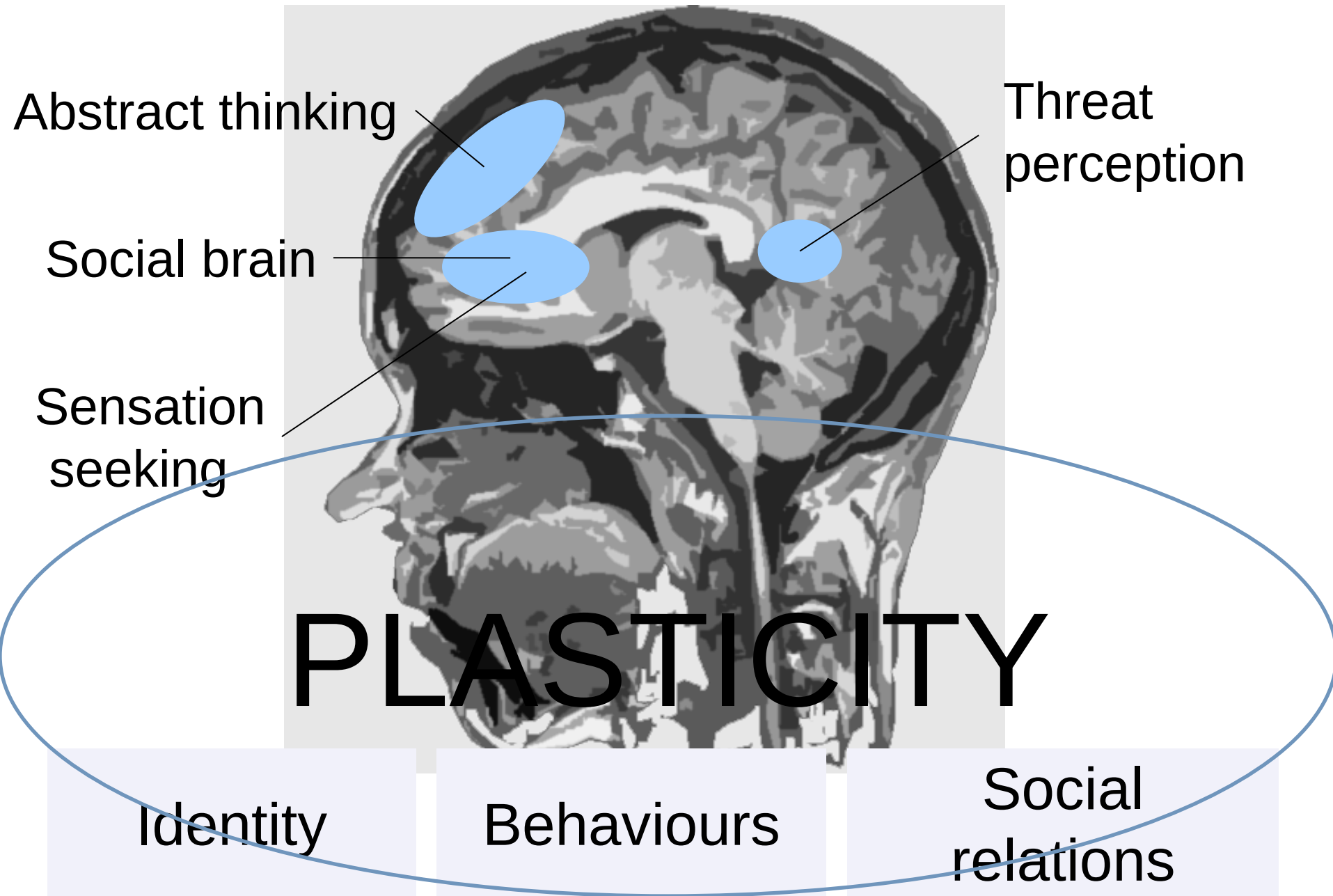
Why?

human puberty is a unique & universal event

- 4-5 year variability
- pubertal growth spurt
- Adrenarche
- major CNS development



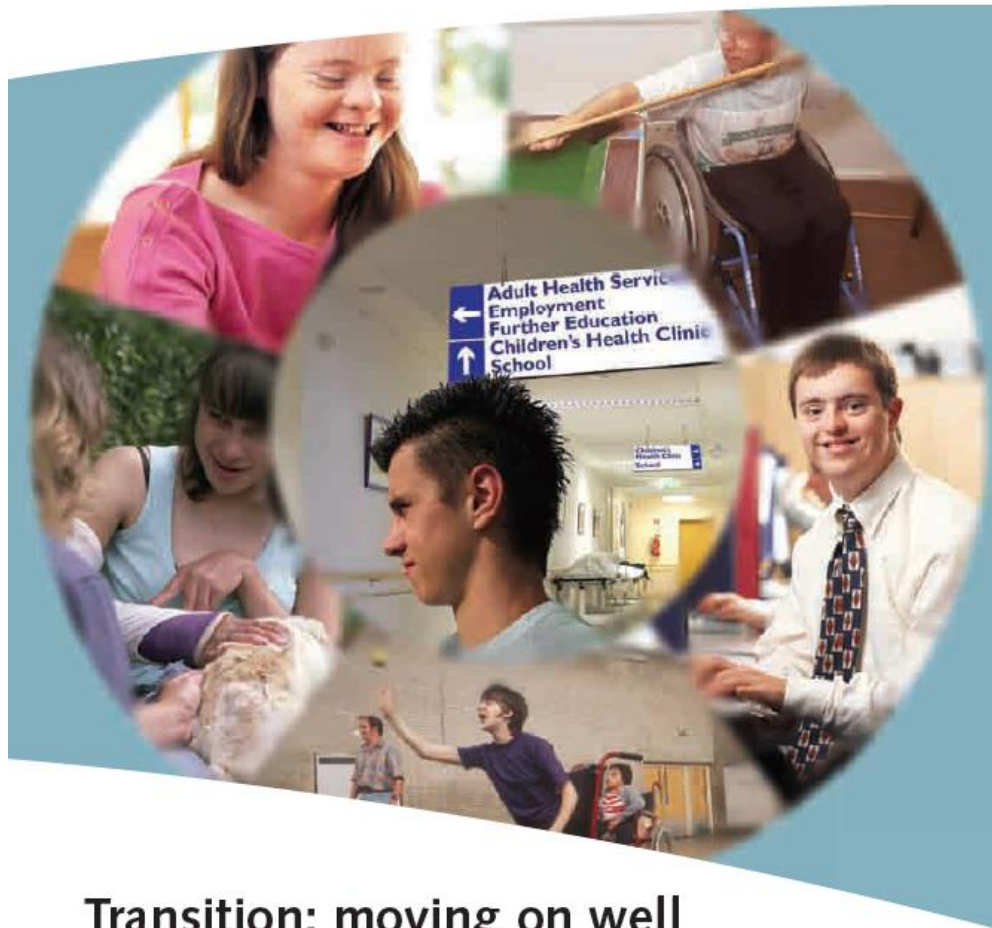
Asthma	Early puberty increases risk of persistence into adulthood
Constipation	Encopresis / chronic constipation suggested to resolve with puberty
Enuresis	May resolve with puberty
Type 1 diabetes	Peak incidence in puberty. Worsening control during adolescence.
Auto-immune conditions	Marked rise in prevalence and shift towards female predominance in puberty.
Seizures	Seizure control changes during adolescence. Rare forms of epilepsy present in adolescence.
Orthopaedic conditions	Limited to adolescence and linked with growth spurt. Eg. adolescent idiopathic scoliosis, slipped capital femoral epiphysis, Osgood Schlatters disease, osteochondritis dissecans
Headache	Increased incidence of migraine and tension headaches after puberty.
Metabolic syndrome and PCOS	The metabolic syndrome increases markedly in puberty due to pubertal insulin resistance



A wider focus on transition

department for
children, schools and families

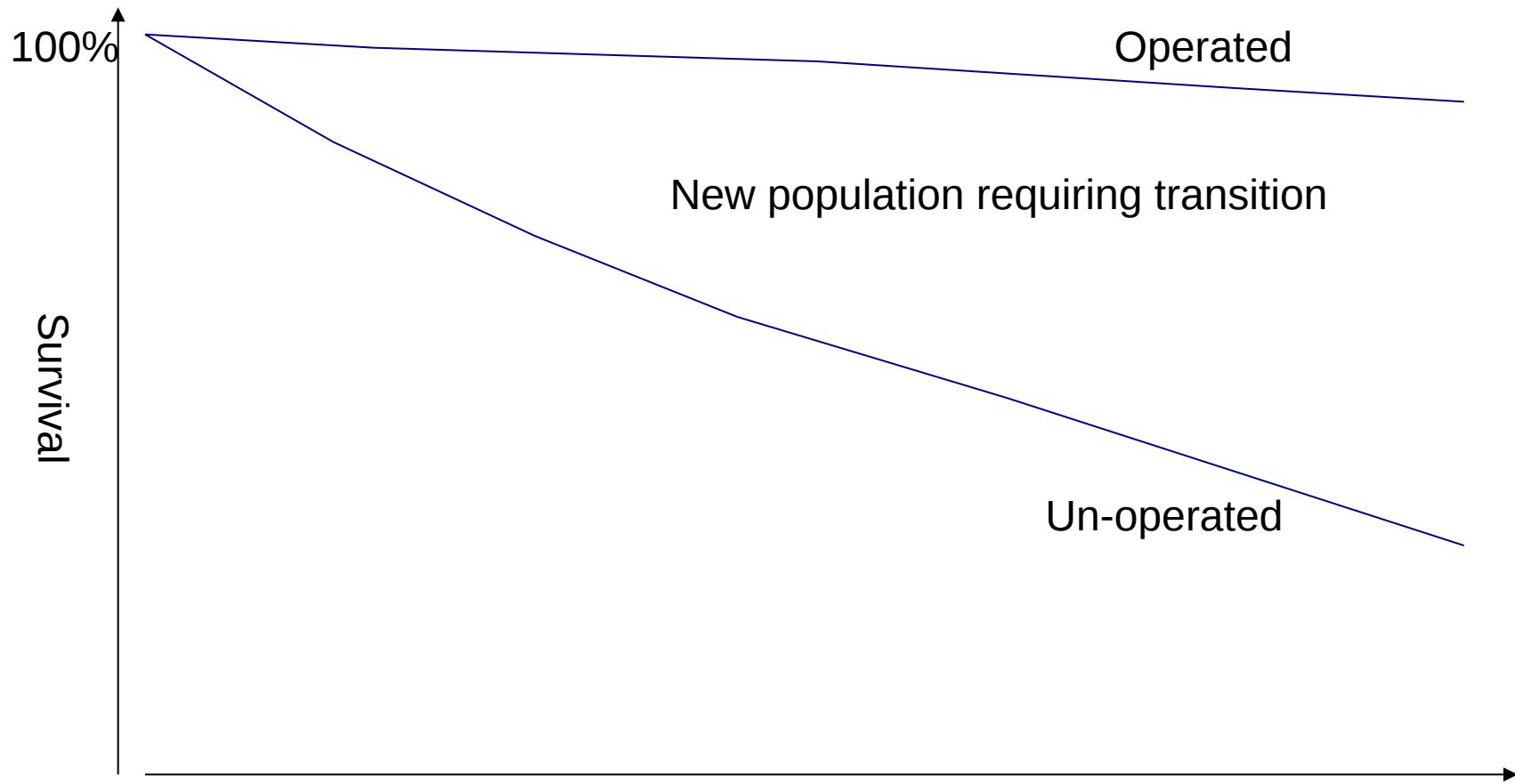
DH Department
of Health



Transition: moving on well

A good practice guide for health professionals and their partners

New populations: e.g. survival from Congenital heart disease



diabetes and transition

- Peak onset in adolescence age 12-13yrs
- Puberty and insulin insensitivity
- Poorer HbA1c during adolescence
- Initiated in adolescence
 - Smoking
 - Diabetes self-management behaviours
 - Physical activity behaviours

Diabetes Care for Emerging Adults: Recommendations for Transition From Pediatric to Adult Diabetes Care Systems

A position statement of the American Diabetes Association, with representation by the American College of Osteopathic Family Physicians, the American Academy of Pediatrics, the American Association of Clinical Endocrinologists, the American Osteopathic Association, the Centers for Disease Control and Prevention, Children with Diabetes, The Endocrine Society, the International Society for Pediatric and Adolescent Diabetes, Juvenile Diabetes Research Foundation International, the National Diabetes Education Program, and the Pediatric Endocrine Society (formerly Lawson Wilkins Pediatric Endocrine Society)

Diabetes Care 2011

Focus on emerging adulthood – to age 30 years - “a critical time” for diabetes care

Challenges

1. Lack of evidence on best approach
2. Fundamental differences between child- and adult-centred care
3. Lack of criteria to determine transition readiness
4. Rapid change in social circumstances
5. Development differences in learning styles for AYA
6. Deficiencies in training for most health professionals

ADA/ISPAD guidance

- Preparation >1 year in advance
 - Focus on self-management and transfer of responsibility to young person
 - Education around workings of adult health services
 - Provide good summary including competencies
- Support with transfer
 - e.g. first appointment etc.
- Evaluate for depressed mood and disordered eating
- Continuity of complication screening
- Provide health promotion around tobacco, alcohol and contraception
- Ensure continued primary care links

evidence

Systematic review (Archives, 2011)

- 6 studies of diabetes with outcomes measured: 3 case-control, 3 pre-post studies
 - Improved HbA1c at 6-12 months in 5 studies
 - Around 0.5 to 1.1% fall
 - 1 study with 3 year follow-up – no difference HbA1c
 - Increased knowledge and skills
 - improved clinic attendance
 - Reduction in DKA episodes

Making it work

A. Transitional clinics

Best = Adolescent clinic 12- 18 years

Transition track: series of joint clinics

Next to worst = single handover clinic

Preparation of young people

- Start early
- Annual review
- Competencies needed to transfer?

Key issues to get right

A. Adolescent communication issues

- Get used to seeing doctor alone
- Explain confidentiality
- Developmental change
- Health promotions - Sex, drugs, alcohol
- Careers, driving, etc

B. Information transfer

- Medical information transfer generally good
- Other information?
- Patient held records

How to find information

▶ Education

▶ Employment

▶ Health

▶ Housing

Adaptations and Access

Housing Options

A Home of My Own

Disabled young adults

Get Moving

Housing Options

Housing and Support Partnership

Leaving home, moving on

MacIntyre

National Centre for Independent Living

Shelter

The views of young black disabled people on independent living

▶ Money

▶ Participation

▶ Policy and Guidance

▶ Positive Activities

▶ Relationships

▶ Support

Housing Options

A Home of My Own

Research by Dimensions into disabled young people's experiences of moving into their own home.

Disabled young adults and the parental home

An examination of young disabled people's views and experiences of getting a home of their own.

Get Moving

This booklet is for people with learning disabilities who are thinking about leaving home and moving to new accommodation.

Housing Options

An independent advice and information service to assist people with learning disabilities with housing and support choices.

Housing and Support Partnership

Provides consultancy, training, development and research in housing for vulnerable people.

Leaving home, moving on

Guide for parents on what support can be provided when they start planning with their child about leaving home.

MacIntyre

A national charity supporting children and adults with learning disabilities by providing a range of services including housing and employment.

National Centre for Independent Living

A national support, advice and consultancy organisation that aims to enable disabled people to be equal citizens with choice, control, rights and full economic, social and cultural lives.

Shelter

Shelter is a charity that works to alleviate the distress caused by homelessness and bad housing.

The views of young black disabled people on independent living

A study on the views of young black disabled people on independent living.

(Page last updated: 21 June 2010)