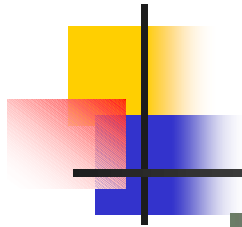
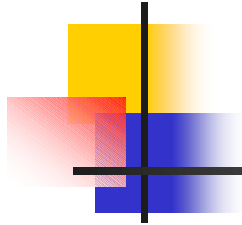
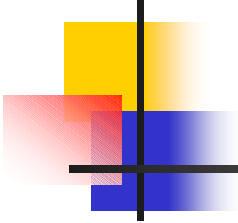


Premis as Adolescents

David Bouchier

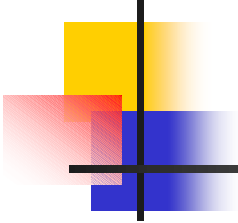






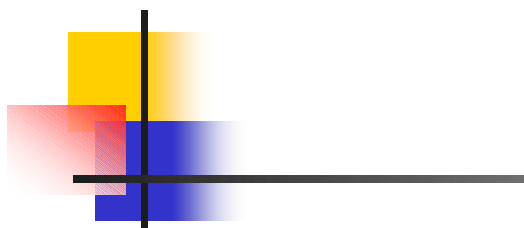
History

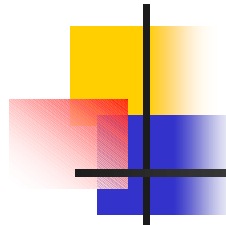
- 1960s
 - Head box O2
 - Tube feeds
 - Exchange transfusion
- 1970s
 - Umbilical catheters
 - TPN
 - Ventilators
 - Antenatal steroids



History

- 1980s
 - Surfactant
 - Cranial Ultrasound
- 2008
 - Bwt <1500g 88% survival (cf 75% 1980)
 - Bwt <1000g 79% survival (cf 25% 1980)





Followup Cohorts

1977-82 Canada

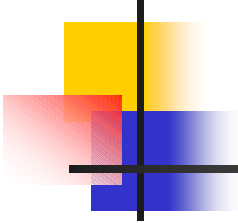
1979-81 UK

1977-80 Australia

1967-83 Norway

1983 Holland

1973-79 Sweden



Overview of Outcomes

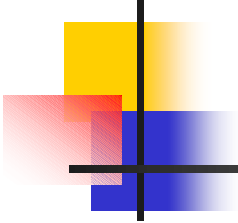
Preschool psychometric test results are poorly predictive of adolescent school performance

Males have poorer outcomes than females

Poorer outcomes at lower gestations

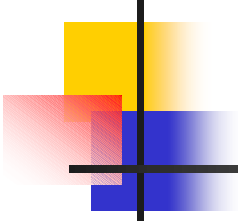
Intensive intervention programmes have resulted in no long term benefits

Family factors important



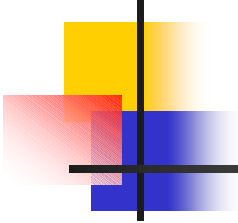
General Health

- Increased:
 - Respiratory illnesses(asthma,bronchitis)
 - Reading glasses (slightly increased at 1.9%)
 - Hearing problems (double at 1.8%)
 - Epilepsy
 - Autistic spectrum



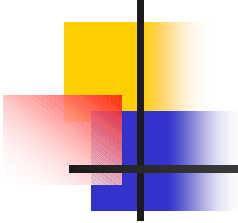
Growth

- Age 23yrs(bwt<1000g)
 - 7kg lighter
 - 7cm shorter
 - 1.5cm smaller head circumference
 - Similar BMI
- Significant catchup during late childhood and adolescence – a pattern that may increase the risk for insulin resistance and coronary artery disease in later life



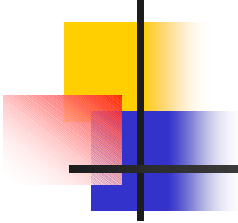
Motor Outcomes

- At age 15yrs -0.5 to -0.8 SD
- Evident in:
 - Balance
 - Ball skills
 - Manual dexterity



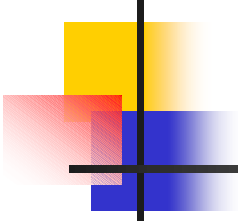
Schooling

- 20% have minor developmental/behavioural problems
- IQ reduced by 7-15pts(0.5-1 SD)
- Problems(even if normal IQ):
 - verbal expression,academic achievement,social competence,emotional maturity



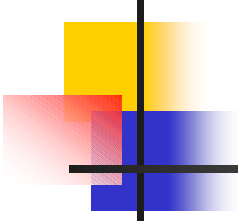
Employment

- Less likely to complete High School or obtain University degree
- Lower job related income
- More likely to receive social security benefits
- Increased unemployment (2-3 fold)



Personality

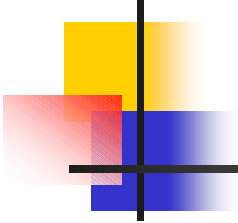
- Less sociable (more introverted)
- Lower self esteem and more anxious
- No increase in psychoticism
(coldness, aggression, anti-social behaviour)
- Less risk taking (fewer pregnancies, drug offences and Police contacts)
- Differences most pronounced in girls



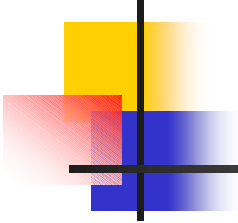
Social

- Less likely to be married,cohabiting or divorced at age 20 – 36yrs
- Less likely to have been convicted for violence,criminal damage or a drug offence

Quality of Life



- Similar or lower health related quality of life than peers (self reported).
- Adolescents more positive than their parents



Conclusions

Preterm birth is associated with significant long term adverse effects.

The extent of which is related to gestation, sex and family environment

The majority of ex prems do well