



# Maternal and Child Health – why does it matter?

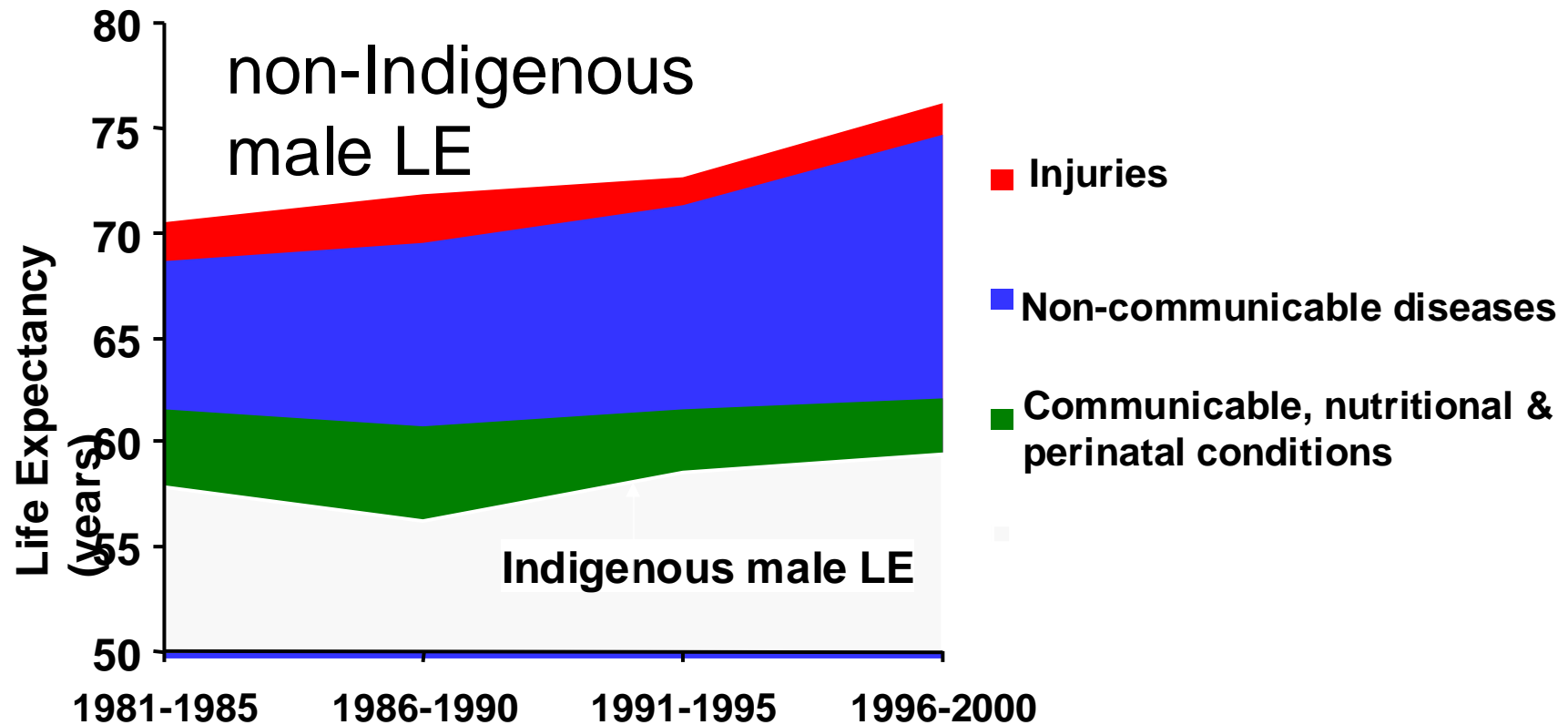
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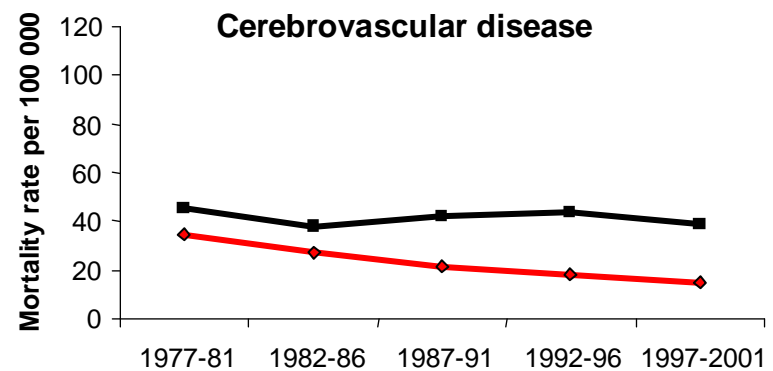
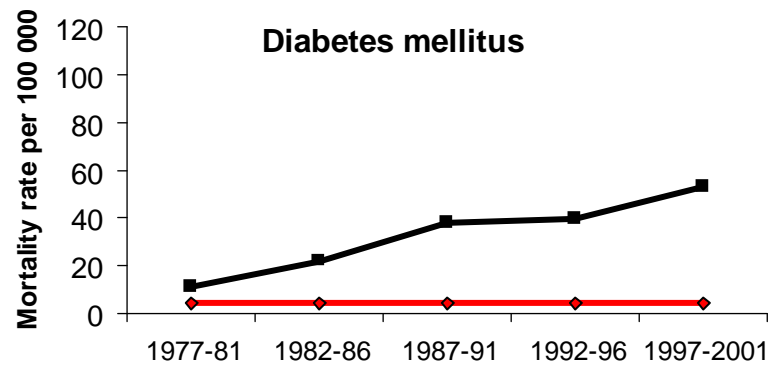
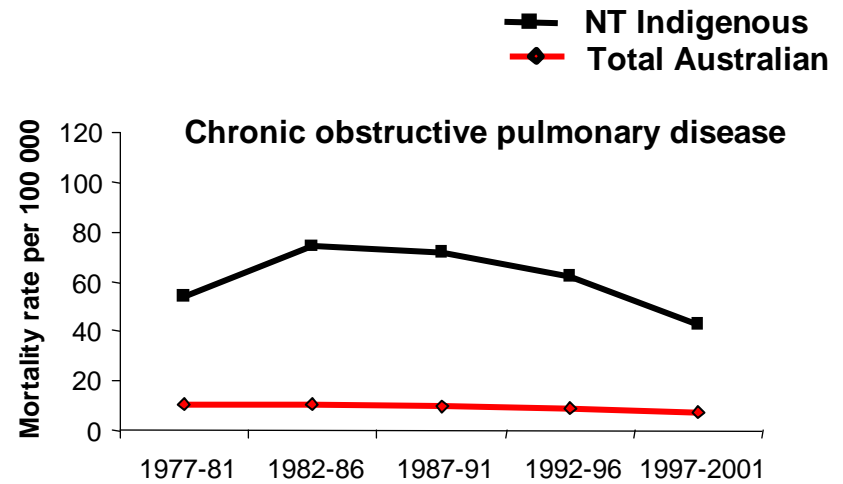
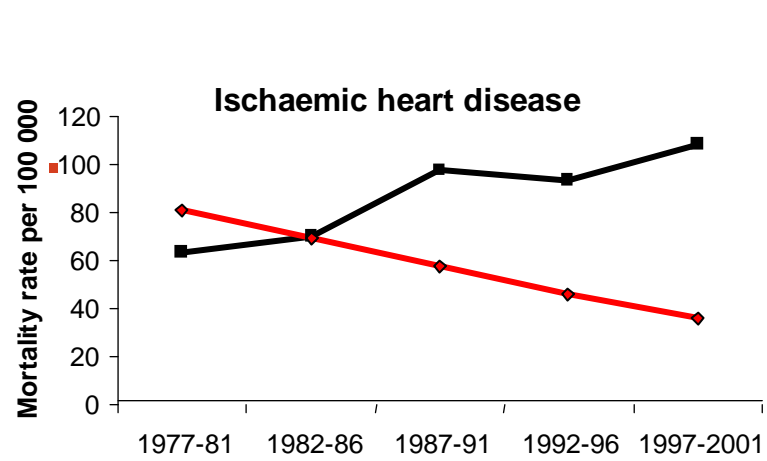
# Outline

- The importance of child development
- The evidence
  - Maternal and child health
  - Education and health
  - Welfare and health
- Intervention points
  - Opportunities for primary health care
- The reform challenge
  - Implications for primary health care practice
  - An integrated model
- Demographic transition

# Aboriginal health – causes of mortality



# A foot on the accelerator...



# A foot on the brake...

Disease	Per cent average annual change (95% CI)		<i>p value</i>
	1977-1989	1990-2001	
Ischaemic heart disease	+5.7	+1.1	< 0.05
Chronic obstructive pulmonary disease	+3.5	-5.7	<0.001
Cerebrovascular disease	+0.3	-1.3	0.5
Diabetes mellitus	+13.5	+3.2	<0.01
Rheumatic heart disease	+5.9	+1.6	0.3

# Why early childhood matters

- Management of chronic disease improving: “A foot on the accelerator: a foot on the brake”
- “Best buy” in primary prevention
- Barker hypothesis: impact of birth weight on heart disease ... chronic disease
- Headline measure in health of developing populations
- Neurons to neighbourhoods: interaction of neural, health and social outcomes

# The Evidence: Maternal and Child Health

- Maternal smoking, alcohol, poor nutrition, maternal stress, illness, young maternal age and infection → low birth weight
- Low birth weight → chronic disease in adult life
- Poor brain development → mental health and emotional problems throughout life
- Ability to ameliorate early disadvantage mediated by socioeconomic status

# The Evidence: Education and Health

- **Early childhood development →**
  - literacy and success at school
- **Education →**
  - better socioeconomic status and better health
  - better social-emotional health and resilience
  - individuals better able to access health services
- **Educational attainment of parents →**
  - child health outcomes

# The Evidence: Child Welfare and Health

- **Abuse / neglect →**
  - direct health consequences
  - impacts on developing brain and physiology
  - adult disease (ischemic heart disease, cancer, chronic lung disease and liver disease)
  - reduced cognitive functioning, ADHD, lower school achievement
- **Child sexual abuse →**
  - adolescent pregnancy
  - contact with criminal justice system

# Maternal and Child Health: Key Areas for Intervention

- **Focus on mother:**
  - Tobacco; alcohol; infections; antenatal care; gestational diabetes; birth control; nutrition and folate; pre-parenting education & support
- **Focus on child:**
  - Breastfeeding and nutrition; weight monitoring; immunisation; infections; developmental screening and referral services; early metabolic disease
- **Nurse home visiting:**
  - Focus on both; one standout example with RCT results in no. of MCH factors

# Education and Health: Key Areas for Intervention

- From outside primary health care:
  - school readiness programs
  - family support and parenting
  - early intervention with both elements
- Opportunities for primary health care:
  - Nutrition
  - Hearing health
  - Developmental screening
  - PHC services as site for early learning interventions

# Child Welfare and Health: Key Areas for Intervention

- **From outside primary health care:**
  - Primary (parenting programs, child education programs, welfare reform)
  - Secondary (home visiting or parent training)
  - Tertiary (therapeutic support, education or counselling for parents, support for foster parents or family of origin)
- **Opportunities for primary health care:**
  - family welfare services in non-stigmatized settings
  - nurse home visiting
  - family support programs
  - community mental health and alcohol and drug services
  - screening and follow up for developmental delay
  - governance and partnership links with education welfare

# The reform challenge

- **Two possibilities:**
  - an ‘incremental’ change model
  - a model for interaction of services into a single broader family-centred service
- **These two approaches are not mutually exclusive!**
- **Political environment:**
  - Both the Government (Indigenous Child Care Services Plan) and Opposition (A new start for Indigenous Children) clearly interested
  - Wild and Anderson recommended multipurpose family centres

# Ways forward?

- **Coordination, linkage or combining streams?**
- **Examples:**
  - International - Headstart, Aboriginal Headstart, Sure Start, First Duty, Every Child Matters
  - Congress , NT Strong Women, Strong Culture, Strong Babies, Nerang QLD,
- **Issues:**
  - Australian health and welfare systems unique?
  - Which infrastructure to start with?
  - Workforce – always the elephant in the room!

# Neurons to neighbourhoods

Shonkoff and Phillips 2000 p339

“Early intervention is a collection of service systems whose roots extend deeply into a variety of professional domains, including health, education, and social services ... It is a field whose knowledge base has been shaped by a diversity of theoretical frameworks and scientific traditions, from the instruction-oriented approach of education ... to the psychodynamic approach of mental health services ... and from the conceptual models of developmental therapies ... to the randomized control trials of clinical medicine ...”

“At its best, early intervention embodies a rich and dynamic example of multidisciplinary collaboration. Less constructively, it can reflect narrow parochial interests that invest more energy in the protection of professional turf than in serving the best interests of children and families”



## Incremental model – the levers

- Implications of development literature on sustainability:
  - Map existing services & fill gaps
  - Workforce development
  - Referral networks and protocols
  - Standard setting
  - Changing expectations of primary health care
  - Community engagement
  - Evaluation strategy

## Integrated model – a proposal

- Resourcing new child development centres without losing existing capacity
- Community engagement
- Site selection
- Workforce – professional and industrial issues
- Community engagement
- Research and evaluation – trial duration

# Demographic transition

- Non-indigenous epidemic post chronic disease – neurodegenerative conditions
- While % over 60 Indig popn stable 20 years; absolute no increased by 200%, vs 50%
- Kimberley – 4 X RR for dementias among Aboriginal aged
- Implications
  - Aged care services
  - Prevention – MCH - growing healthy brains

# Some reference material

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