



# Tonight's webinar will begin shortly



RACGP

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**2022-23**

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**for quality care**



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# *NACCHO–RACGP* *Resource Hub*

Supporting effective and culturally  
safe primary healthcare

Learn more at  
[www.racgp.org.au/cultural-safety](http://www.racgp.org.au/cultural-safety)

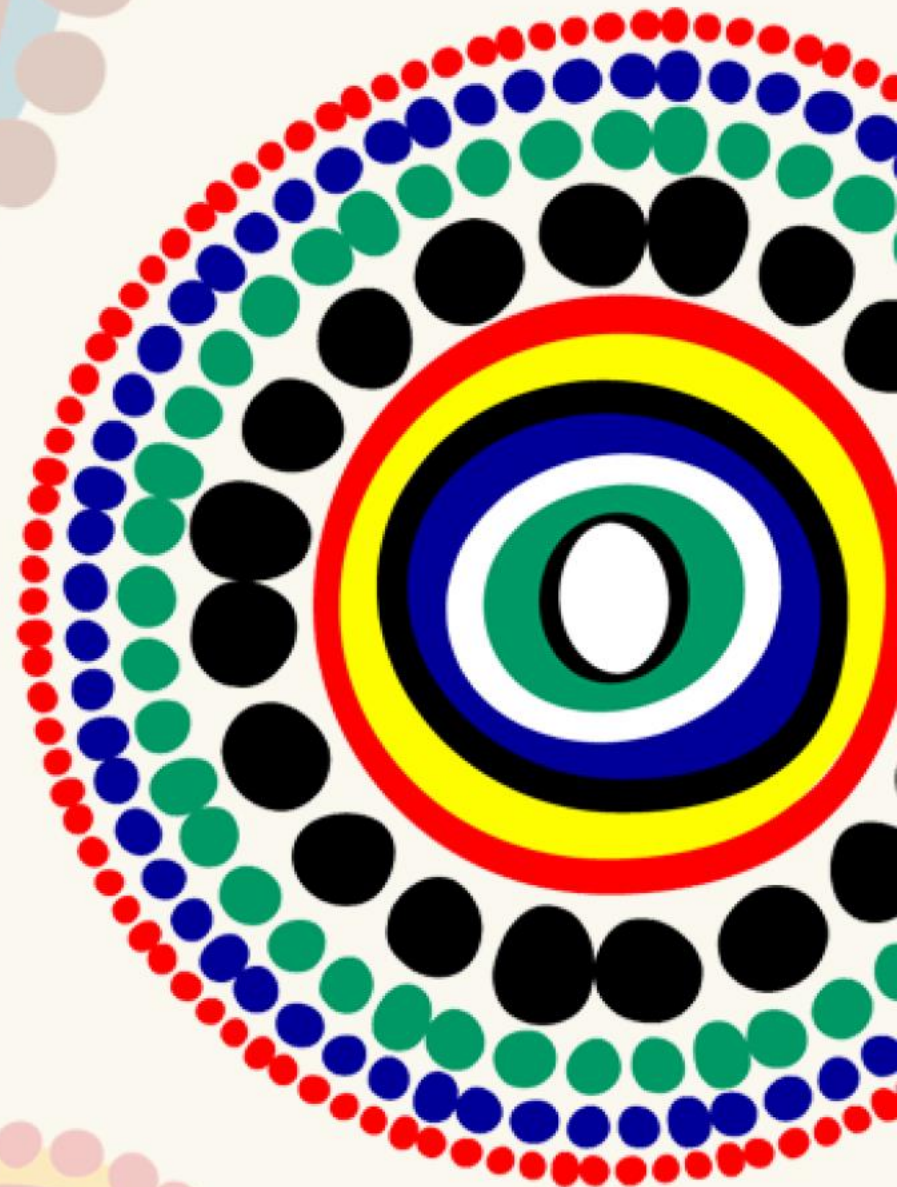


**RACGP**

Royal Australian College of General Practitioners



**NACCHO**



After six years of diabetes  
check-ups, you notice that  
*pigmentation on her cheek.*

You decide to excise the lesion  
and find early melanoma.

General practice – everything  
you've trained for **and more**



become a GP



RACGP



# Wonca 2023

*Sydney, Australia*

26–29 October 2023

Find out more at  
[wonca2023.com.au](http://wonca2023.com.au)





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# Practice Owners National Conference

20–21 May 2023, Adelaide  
**#GPPracticeOwner**

The conference offers opportunities to learn,  
knowledge-share with peers, and generate real  
momentum for managing a more successful practice.

Visit [practiceowners.racgp.org.au](https://practiceowners.racgp.org.au)

# GPBT



# General Practice Business Toolkit

Helping you look after the business side of general practice

Establish, manage and enhance your practice using our new General Practice Business Toolkit.

Build a sustainable business with six easy-to-navigate modules and a brand new set of interactive tools.

- Use the billing calculator to learn how to achieve your financial goals.
- Design your ideal practice layout.
- Set your vision and values and focus on what's important to you as a practice owner.

**TO FIND OUT HOW YOU CAN GET THE MOST OUT OF THE TOOLKIT, VISIT [www.racgp.org.au/gpbt](http://www.racgp.org.au/gpbt)**





# RACGP Events

## Access RACGP events and on-demand content

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We will begin in 30 seconds





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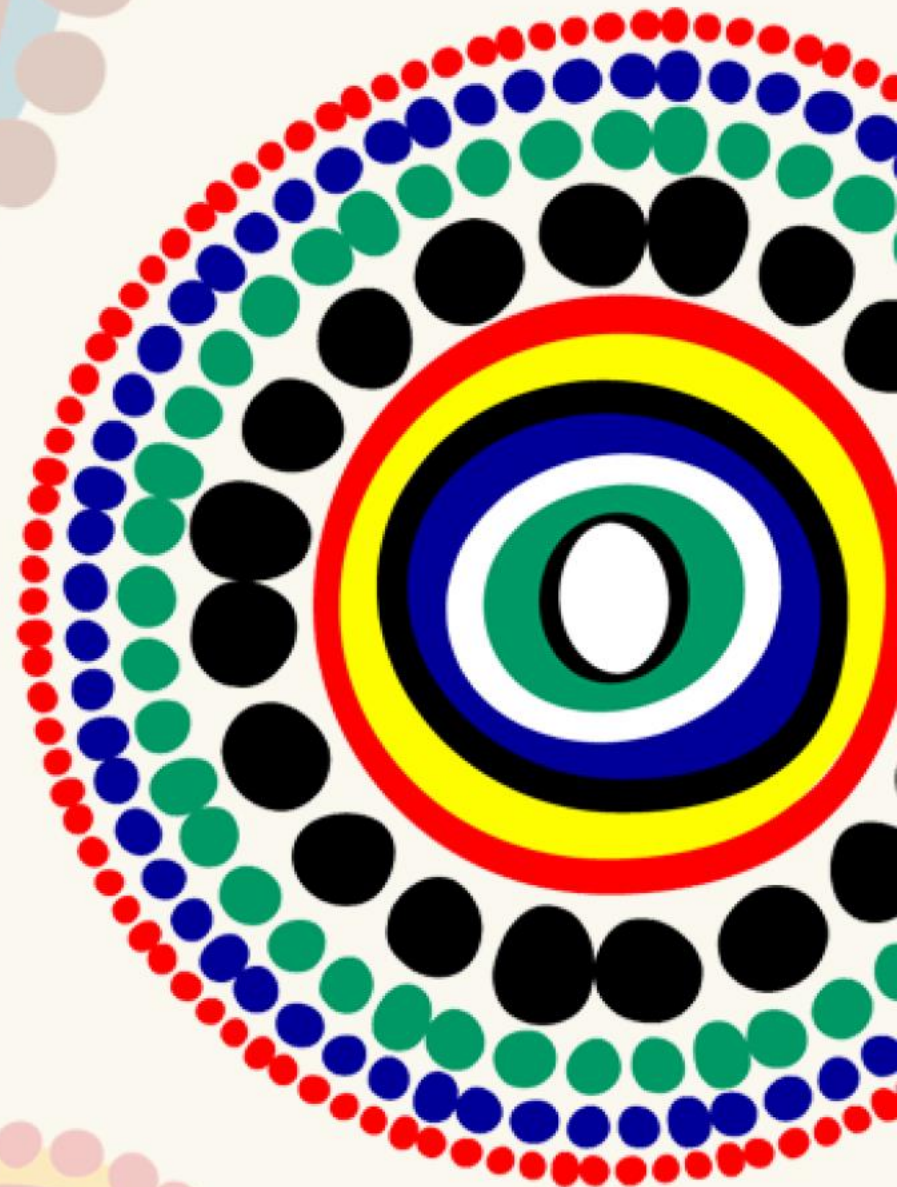


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Royal Australian College of General Practitioners



**NACCHO**



We will begin in 15 seconds





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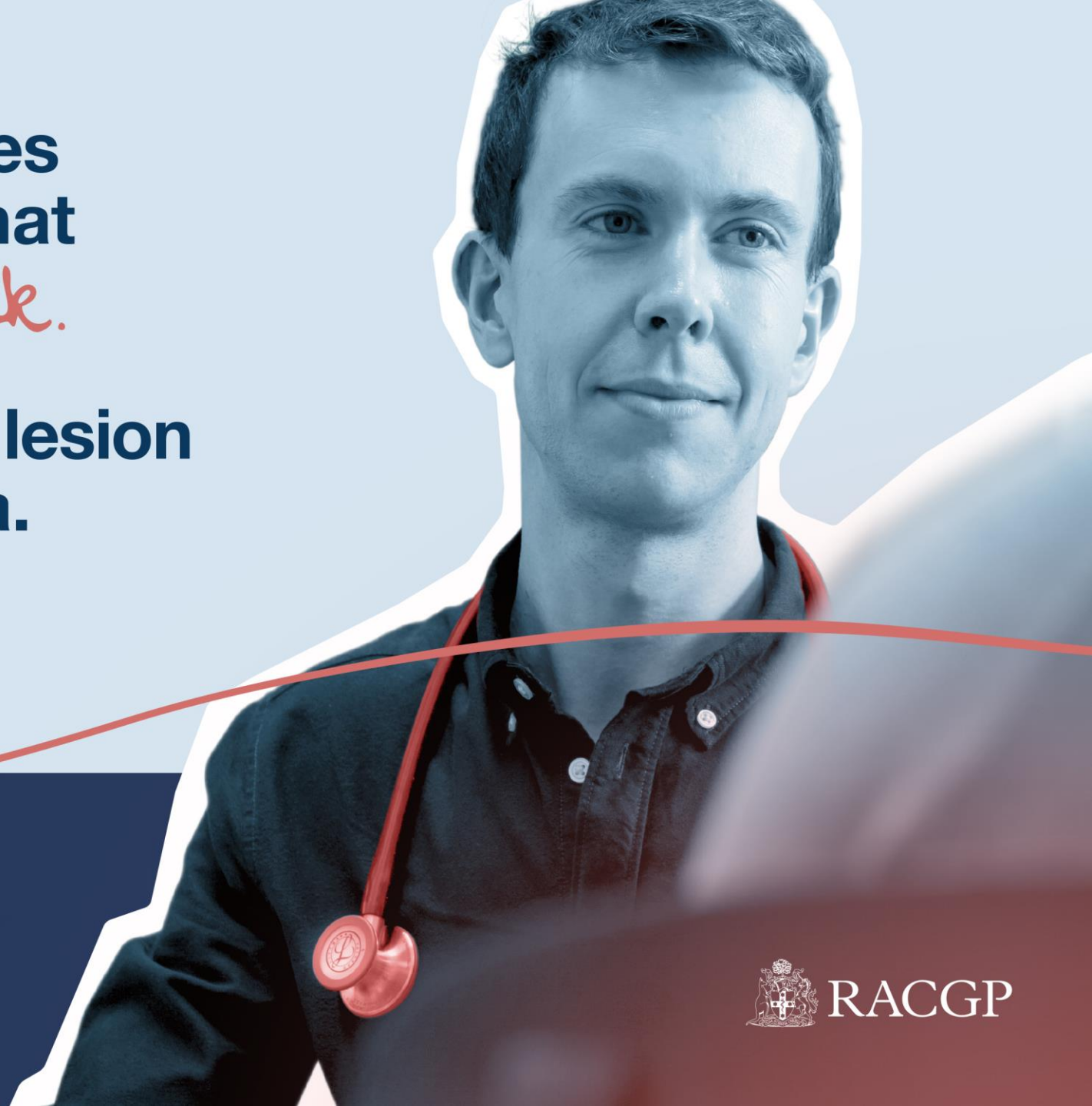
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become a GP



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# Welcome to tonight's webinar





# Paediatric ADHD in general practice



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Specific Interests



RACGP

# Where is my control panel?

Your control panel will appear as a bar at the bottom of the presentation screen

Welcome to tonight's webinar

If you cannot see your control panel, hover your cursor over the bottom of the shared presentation screen and it will appear



Audio Settings ^

Raise Hand

Q&A

Leave Meeting







## A/Prof John Kramer

GP Host

RACGP chair - ADHD, ASD and Neurodiversity



# Acknowledgement of Country

I would like to acknowledge the traditional owners of the lands from where each of us are joining this webinar today.

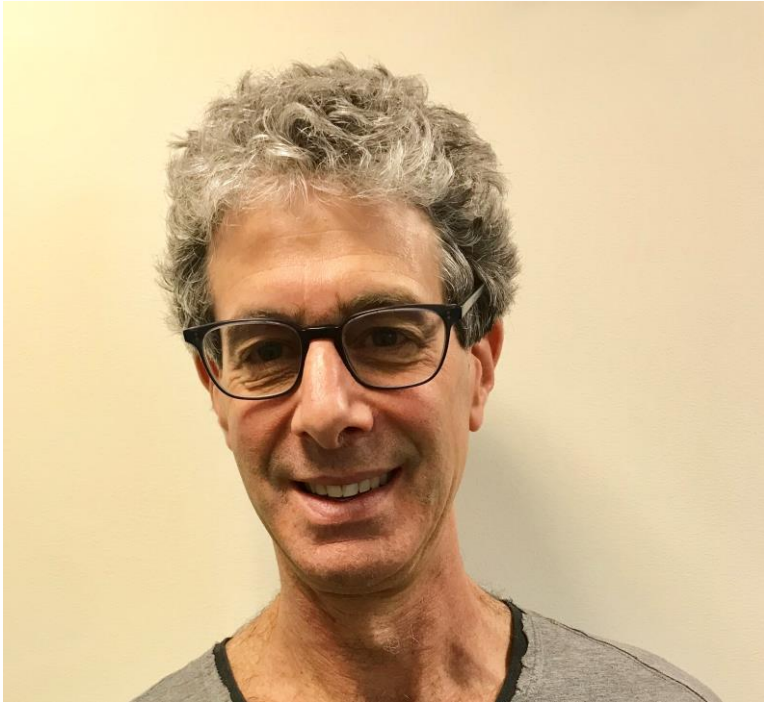
I wish to pay my respects to their Elders past, present and emerging.



# Learning outcomes

1. Identify screening, investigation, diagnosis, and management tools for treating paediatric ADHD to support patients and their families
2. Outline resources available for patients, families and GPs whilst treating paediatric ADHD



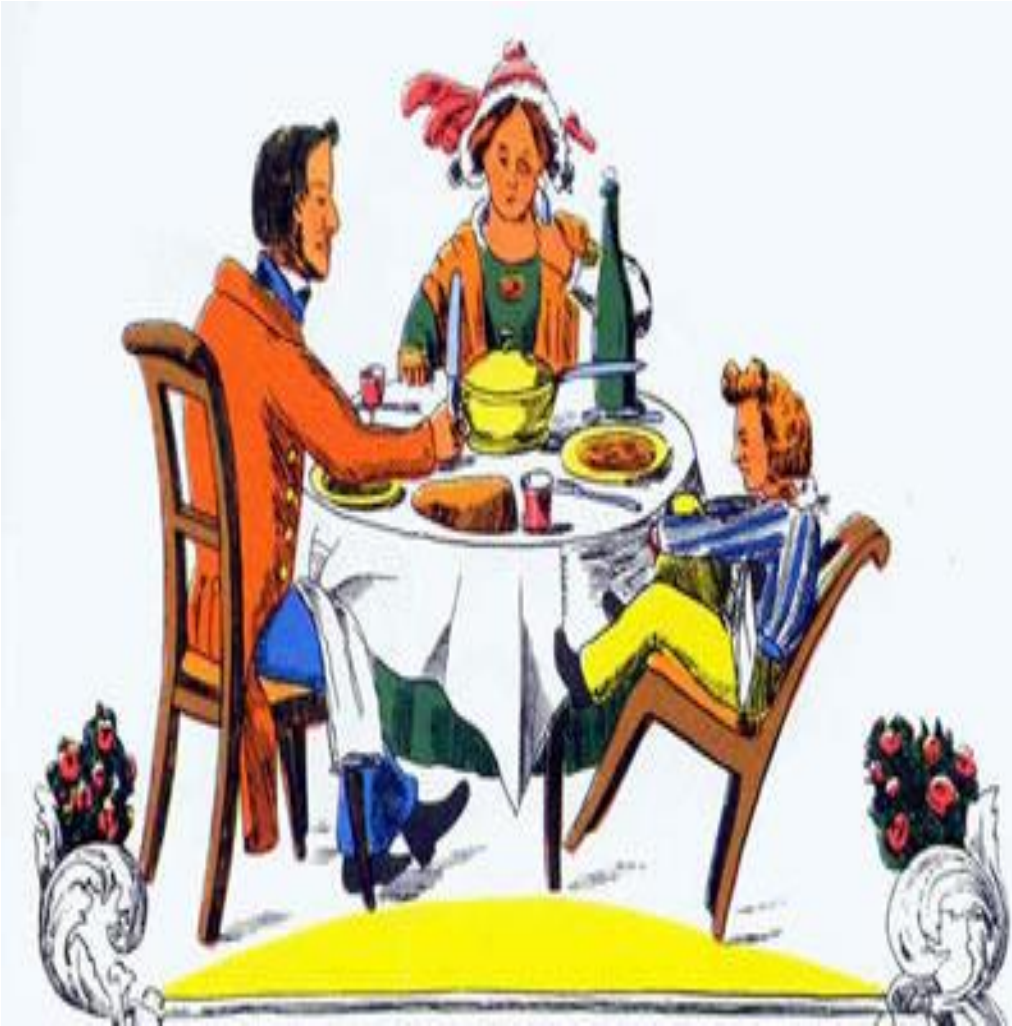


## A/Prof Daryl Efron

Paediatrician

Royal Children's hospital, Melbourne

1865  
Dr Heinrich Hoffmann



Let me see if Philip can  
Be a little gentleman;  
Let me see if he is able  
To sit still for once at  
table:"

Thus Papa bade Phil  
behave;  
And Mamma looked very  
grave.

But fidgety Phil,  
He won't sit still;  
He wriggles,  
And giggles,  
And then, I declare,  
Swings backwards and  
forwards,  
And tilts up his chair,  
Just like any rocking-horse-  
"Philip! I am getting cross!"



# 20<sup>th</sup> century

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1920's-30's	Post-encephalitic behaviour disorder (Spanish flu pandemic 1917-28)
1937	Charles Bradley - <b>benzedrine</b>
1950's	Minimal brain damage
1954	<b>Ritalin</b> (Ciba-Geigy) - Leandro Panizzon, wife Margeurite ("Rita")
1960's	Minimal brain dysfunction
1960's-70's	Hyperactivity
1980's	<b>Attention deficit disorder</b> (Douglas 1972) - 1980 DSM-III
1994	DSM-IV: ADHD

# Working definition

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Developmentally inappropriate degrees of:

- inattention
- impulsivity
- and often hyperactivity

*(Poor self-regulation)*



# 1798 Sir Alexander Crichton



AN INQUIRY  
INTO THE  
NATURE AND ORIGIN  
OF  
MENTAL DERANGEMENT.  
COMPREHENDING  
A CONCISE SYSTEM  
OF THE  
PHYSIOLOGY AND PATHOLOGY  
OF THE  
HUMAN MIND.  
AND A  
HISTORY OF THE PASSIONS AND THEIR EFFECTS.  
BY ALEXANDER CRICHTON, M.D.  
PHYSICIAN TO THE WESTMINSTER HOSPITAL, AND PUBLIC  
LECTURER ON THE THEORY AND PRACTICE OF  
PHYSIC, AND ON CHEMISTRY.  
VOLUME I.  
LONDON:  
PRINTED FOR T. CADELL, JUNIOR, AND W. DAVIES,  
IN THE STRAND.  
1798.

*“a history of the passions  
and their effects”*

## Mental restlessness:

- Deficits in attention
- Occurring across situations (e.g. home & school)
- Begins early in life
- Causes impairment in learning

# ADHD - DSM-5 criteria (2013)

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## **Neurodevelopmental**

*(DSM-IV: Disruptive Behaviour Disorders)*

1. Age of onset: lifted from 7 to 12 (during childhood)
2. Adults (age > 17 yrs)
  - fewer symptoms required
    - 5/9 from either / both lists
  - alternative item wording
    - feels restless
    - loses mobile phone
3. PDD exclusion removed

# Effects

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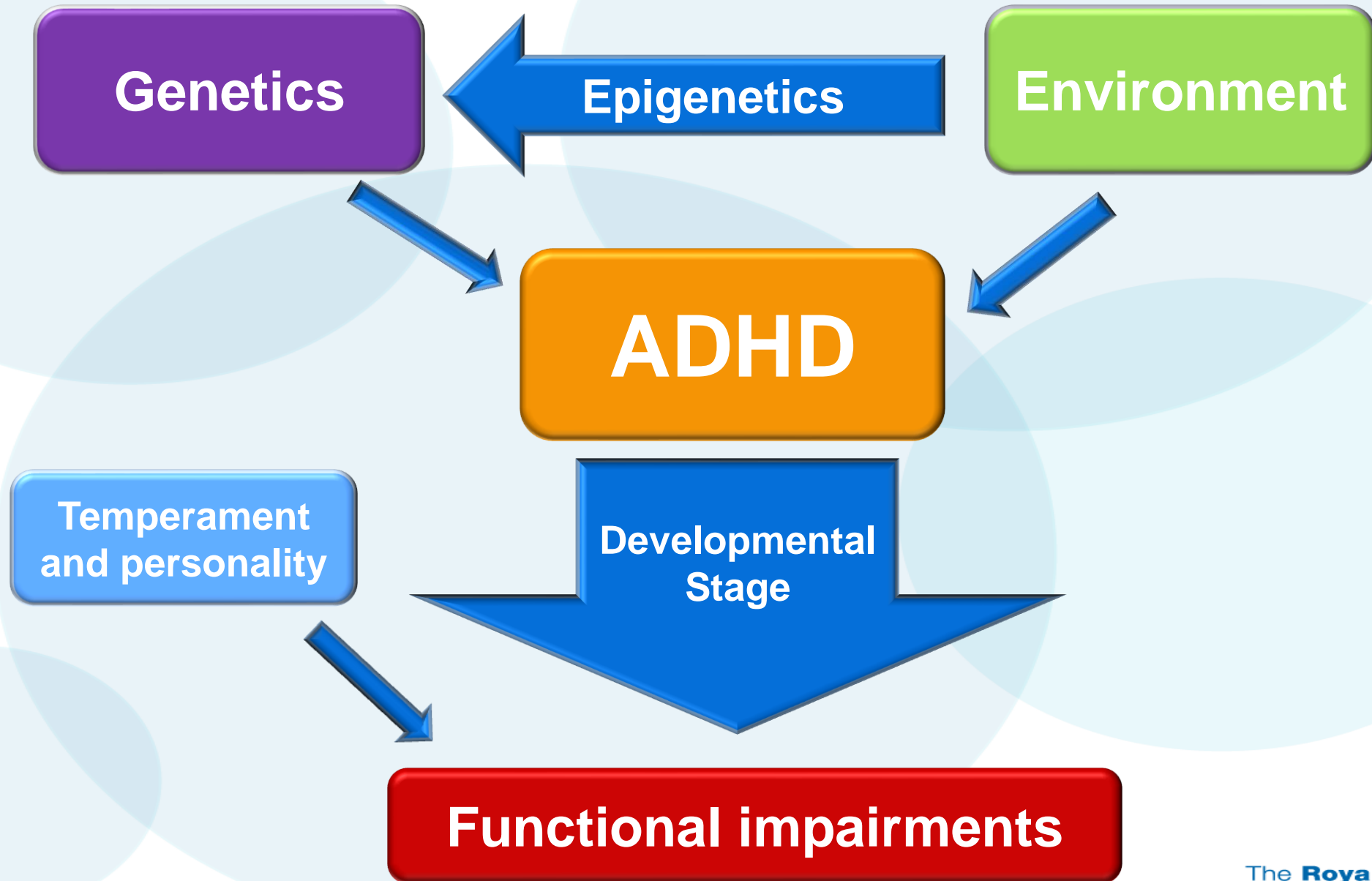
- Individual
  - reduced quality of life
  - underachievement
  - social isolation
- Flow-on effects
  - Family stress
  - Impact on schools, workplaces, broader community



# Aust Clinical Practice Guideline 2022

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- 23 member guideline development group
  - psychiatrists, paediatricians, GPs, psychologists, speech pathologists, OTs, educators, Indigenous psychologists, people with lived experience
- two independent chairs
- a methodologist
  
- Where appropriate, evidence reviews from the National Institute for Health and Care Excellence (NICE) 2018 were updated



# **Australian Evidence- Based Clinical Practice Guideline For Attention Deficit Hyperactivity Disorder (ADHD)**

**1<sup>ST</sup> EDITION - 2022**





# Clinical assessment

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- **History**
- Examination
- **Behaviour rating scales (parent & teacher)**
- Professional assessments
  - psychology, speech pathology, occupational therapy, special education etc

# Effects of stimulants

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- Improved sustained attention / effortful behaviour
- Reduced emotional reactions to frustration (impulsiveness)
- Reduced extraneous motor activity
  
- Increased compliance
- Improved parenting style
- Improved peer interactions / social standing

# Aust Clinical Practice Guideline 2022

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- 111 clinical recommendations
  - 12 evidenced-based, 32 clinical consensus, 67 clinical practice points
- apply to preschool children (5 years and under), children, adolescents and adults

## 1. *Identification, screening, diagnosis*

- including high risk groups, differential diagnosis, co-occurring conditions

## 2. *Multimodal treatment and support*

- incl information needs after diagnosis, secondary outcomes e.g. parent self-efficacy, family functioning

## 3. *Interventions*

- pharmacological
- non-pharmacological



# Practical tips

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- Start low and titrate up weekly
- Start 7 days
- Document scripts written
  - calculate time tabs will last
- Tight titration and monitoring may improve adherence, effectiveness
  - tools eg. symptom and SE charts

# Management - general

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- Lifestyle
  - sleep, nutrition, exercise, media use
- General health
- School
  - fit
  - learning disorders
  - bullying
- Creative social opportunities
- Family dynamics / parenting

# Long-term outcomes

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## Increased risk:

- Academic failure / school drop-out
- Smoking, alcohol, substance abuse
- Mental health problems eg. mood, ASPD
- Unemployment / low occupational status / job retention
- Injuries e.g. MCA
- Delinquency / crime & incarceration
- Relationship difficulties
- Obesity
- Early parenthood / problems with parenting



# Classroom adaptations

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- Position in classroom
  - reduce clutter, natural lighting
- Instructions
- Written schedules
- Allow time, help pacing
- Fidget toys
- Breaks
- Frequent positive reinforcement
- Clear graded consequences

# Medications

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- **Stimulants**
  - methylphenidate (Ritalin, Concerta)
  - dexamphetamine (Vyvanse)
- Atomoxetine (Strattera)
- Alpha agonists
  - clonidine (Catapres), guanfacine (Intiuniv)

# Attention Deficit Hyperactivity Disorder

*Assoc Prof Daryl Efron*

RACGP March 2023

Melbourne  
Children's

Excellence in  
clinical care,  
research and  
education





# Non-pharmacological interventions

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- Lifestyle changes
  - Parent / family training
  - Cognitive behaviour therapy \*
- 
- Cognitive training
  - Neurofeedback
  - School-based interventions
  - ADHD coaching
  - Peer support workers

***recommended***

*\* adults, adolescents*

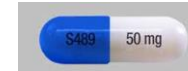
# Side-effects of stimulants

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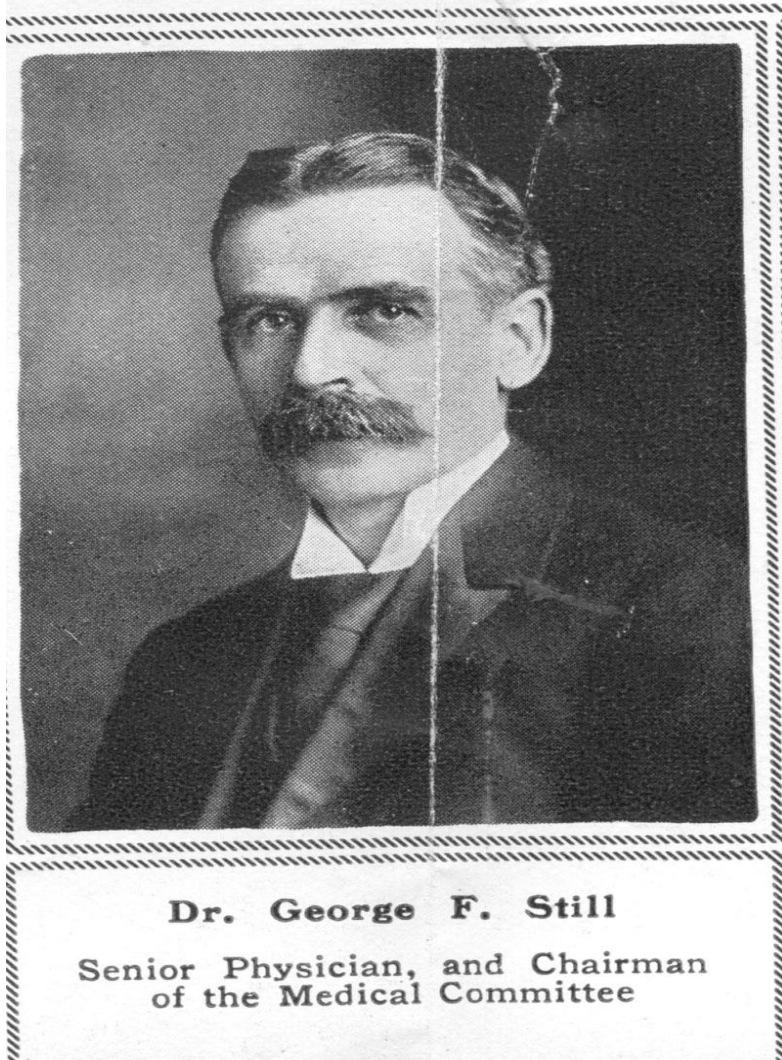
- Appetite suppression
- Dysphoria / irritability / depression
- Emotional blunting - 5-10%?
- Anxiety
- Tics
- Initial insomnia
- Psychosis, mania

# Stimulants: Duration of action

■ Ritalin 10	tablets	3-4 hrs
■ Ritalin LA	capsules	4-8 hrs
■ Concerta	tablets	8-12 hrs
■ Dex	tablets	4-6 hrs
■ Vyvanse	capsules	8-14 hrs



# 1902 Sir George Still

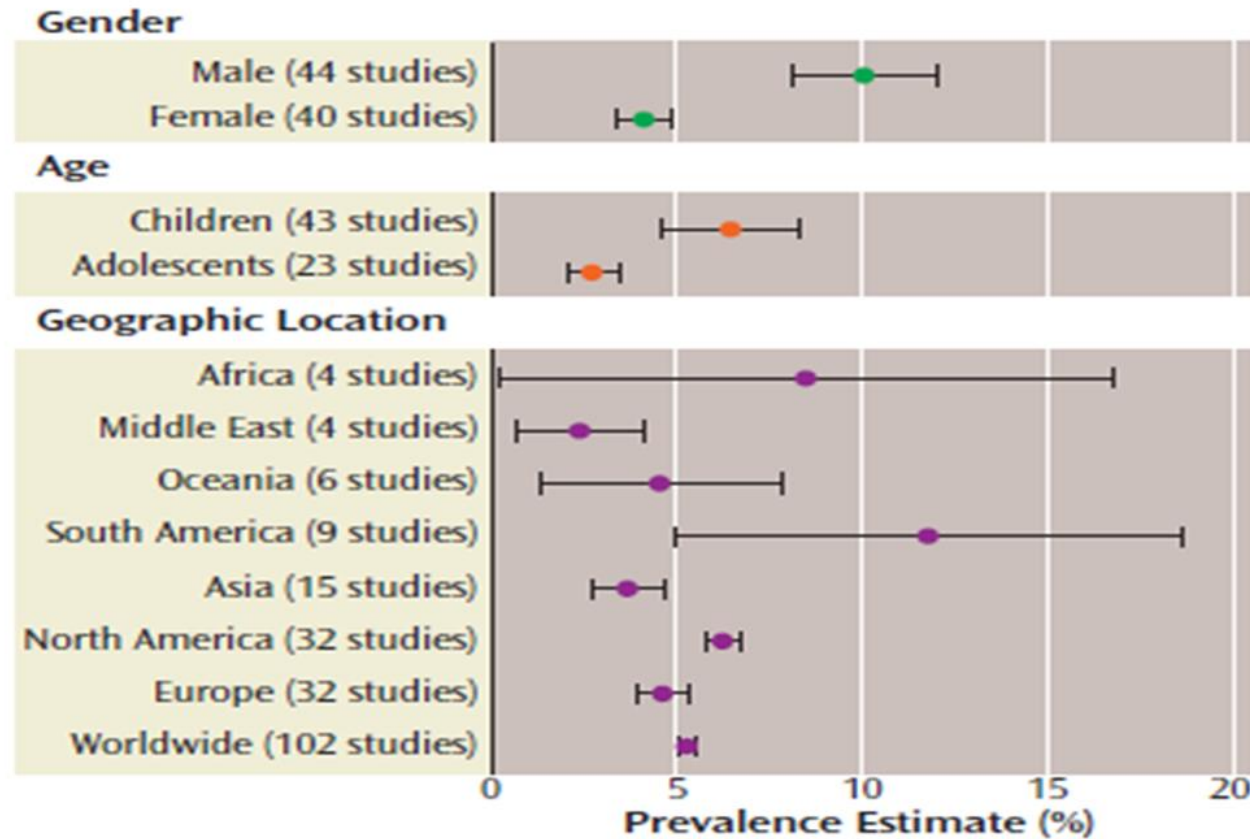


## RCP lectures

- 43 children
- inattentive, impulsive, defiant and overly emotional
- “defective moral conduct”

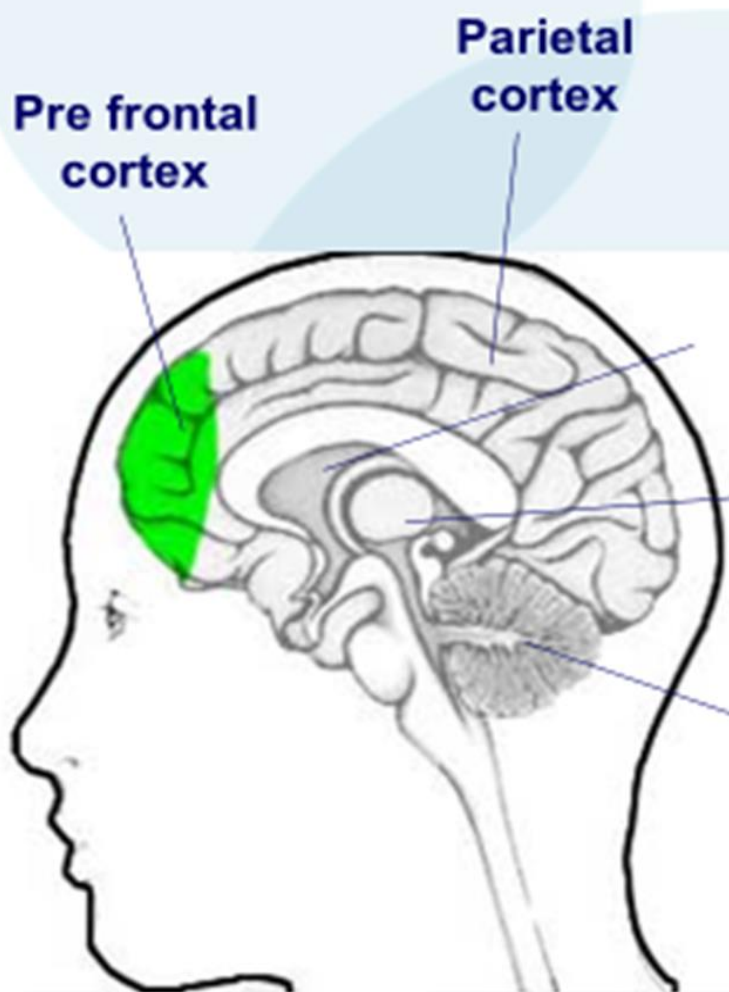


# Epidemiology



# Brain structures involved

(Castellanos & Tannock Nature 2002)



**Limbic System** (amygdala, hippocampus, anterior cingulate)

**Deep grey matter**  
(caudate, putamen)

**Cerebellum**



# Resources

Australian Evidence-Based ADHD Clinical Guideline

<https://adhdguideline.aadpa.com.au/>

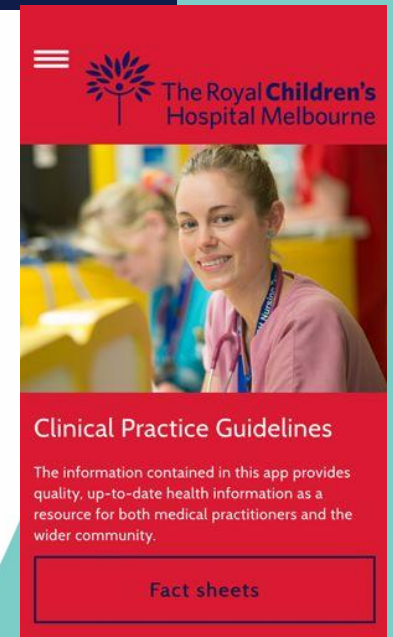
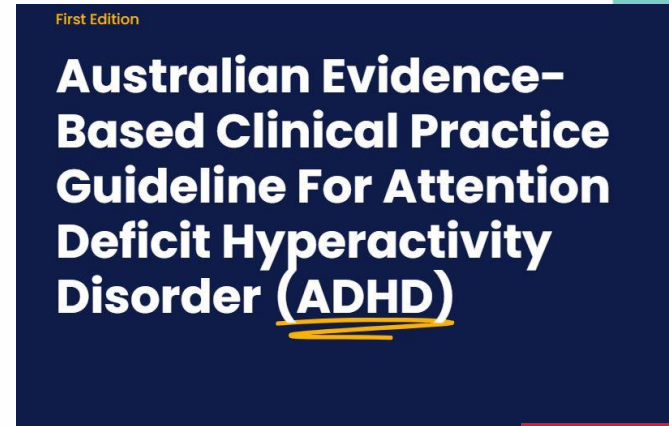
Recognising ADHD across the lifespan (Australian Journal of General Practice)

Clinical Practice Guidelines app (Royal Childrens Hospital, Melbourne)

<https://www.rch.org.au/cpgapp/>

AADPA Language guideline and terms - <https://aadpa.com.au/talking-about-adhd/>

Raising Children Network- Attention deficit hyperactivity disorder (ADHD): children and teenagers



# Q&A