Rethinking psychotropic prescribing practices in people with intellectual disability

Julian Trollor, Carmela Salomon
Department of Developmental Disability Neuropsychiatry
School of Psychiatry, UNSW Australia
j.trollor@unsw.edu.au
Presentation Overview

- Current psychotropic prescribing patterns in people with intellectual disability (ID)

- Policy and safety frameworks informing psychotropic prescribing

- 3DN initiatives which support responsible psychotropic prescribing
What do we know about psychotropic prescribing patterns in people with ID?

Compared to the general population people with ID are more likely to be exposed to psychotropics (and their associated risks and benefits)

- Higher rates of mental illness (Cooper, Smiley et al. 2007)
- Psychotropics as treatment for challenging behaviour (Deb, Unwin et al, 2009)
- Commencement of psychotropics at a younger age (Matson and Mahan. 2010)
- Psychotropic polypharmacy (Deb, Unwin et al. 2014)
- Inadequate monitoring of psychotropic side effects (McGillivray & McCabe 2004)
Recent research

Longitudinal cohort study of psychotropic prescribing to people with ID in UK primary care settings found:

• Antipsychotic prescription rates in people with intellectual disability were double that of the general population.

• In 71% of cases antipsychotics were prescribed to people with no record of severe mental illness (Sheehan, Hassiotis et al, 2015)
Psychotropic prescribing: policy and safety frameworks

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) calls on State parties to

“take immediate steps to .......ensure that persons with disabilities, including psychosocial disabilities, are not subjected to intrusive medical interventions.”(p. 5)

• Ratified by Australia in 2008
The National Framework for Reducing and Eliminating the Use of Restrictive Practices in the Disability Service Sector recognises the use of, “medication or chemical substance for the primary purpose of influencing a person’s behaviour or movement” (p. 5) as a form of chemical restraint in people with an ID.

• Guiding Principle 6: highlights the importance of developing an interdisciplinary approach to reducing restrictive psychotropic prescribing in Australia.

• Guiding Principle 7(a): stresses the importance of raising awareness and providing education around such restrictive practices.

• Endorsed by Commonwealth, State and Territory ministers in 2014
Equality, Capacity and Disability in Commonwealth Laws (The Australian Law Reform Commission) identifies the importance of developing a national cohesive approach towards restrictive practices in people with an ID (proposal 8-1, p. 201)

The National Seclusion and Restraint Project (The National Mental Health Commission), aims to identify best practice in reducing restraint, including chemical restraint, amongst people with mental health issues. Position paper calls for a national reporting framework for all instances of restraint.

NDIS quality and safety framework (as yet to be released), various models of safety scrutiny

State based legislation, e.g. Disability Services Act in NSW, stipulates a monitoring function for the NSW ombudsman

Guardianship legislation, gives consent for psychotropic prescribing in some circumstances when the person lacks capacity
Psychotropic prescribing: are there guides to practice?


- NICE ‘interventions for people who have a learning disability and behaviour that challenges’


Gap between recommendations and practice

- Prescriber
- Individual factors
- Carer and care context
- Service delivery context
- Interdisciplinary practice
  - Primary Care
  - Medical Specialists- psychiatrists, developmental paediatrics
  - Emergency department medical practitioners
  - Other mental health professionals
  - Disability support workers
  - Behaviour support specialists
  - Persons responsible
  - Guardians
Policies and frameworks: Gaps

For people with ID, Australia has no mandatory reporting of:
• prescribing patterns
• health or other outcomes
Improving prescribing practice: 3DN initiatives and research

Characterising current prescribing patterns
• Sage ID
• BEACH

Improving education and training
• IDMH-e-learning modules
• Responsible psychotropic prescribing podcasts

Improving monitoring and safety during periods of psychotropic use
• Positive cardiometabolic health for people with ID: an early intervention framework
• The cardiometabolic toolkit
Characterising prescribing patterns

Sage ID Study
• CNS Medication use in aging people with ID

62% on at least one CNS acting medication
• Significant predictors of CNS medication:
  – diagnosis of psychiatric and/or neurological disorder
  – not age, gender, DBC-A

Anti-convulsants and antipsychotics most commonly used classes
• Documented indications for CNS medication usage were low with no reported indication for:
  • 75% of people treated with movement disorder medications
  • 67% of people treated with anti-psychotics
  • 46% of people treated with anti-depressants
CNS medication polypharmacy

- Of those 67 participants on CNS medication:
  - 72% (48) were on more than one
  - 15% (10) were on four or more CNS medications

<table>
<thead>
<tr>
<th>number of CNS meds</th>
<th>n</th>
<th>% of medicated group (n = 67)</th>
<th>% of sample (n = 107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19</td>
<td>28.4</td>
<td>17.8</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td>28.4</td>
<td>17.8</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
<td>28.4</td>
<td>17.8</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>9.0</td>
<td>8.4</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>4.5</td>
<td>2.8</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1.5</td>
<td>0.9</td>
</tr>
</tbody>
</table>
BEACH: The Bettering the Evaluation and Care of Health program
Exploring primary care prescribing at ID and non-ID encounters

• A continuous, paper-based, national study of GP activity in Australia.

• Patient characteristics, reasons for presentation, problems managed at encounter, doctor and practice characteristics and medications.

• Medication recommendations made at ID encounters (n=542) compared to non-ID encounters (n= 1,004,095)
Key Findings

• Significantly fewer medications were recommended overall at ID encounters compared to non-ID encounters

• Antipsychotics and anticonvulsants were significantly more likely to be prescribed at ID encounters

• Rates of antidepressants and anxiolytics prescription were no higher than at non-ID encounters

• Findings raise questions about the possible over-use of antipsychotics to treat challenging behaviour

• Findings may also indicate an under-detection of depressive and anxiety related conditions in people with ID
Top 10 ID encounter medication subgroups ranked by frequency

<table>
<thead>
<tr>
<th>Medication Subgroup</th>
<th>Rank for ID encounters (age-sex standardised)</th>
<th>Rank for Non-ID encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>Anticonvulsants</td>
<td>2</td>
<td>37</td>
</tr>
<tr>
<td>Broad spectrum penicillins</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Immunization</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td><strong>Antidepressants</strong></td>
<td><strong>5</strong></td>
<td><strong>4</strong></td>
</tr>
<tr>
<td>Simple analgesics</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Penicillins/cephalasporins</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Antiulcerants</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Sex/Anabolic hormones</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Other antihypertensives</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>
Education and training

Improving prescribers knowledge and confidence to work with people with ID

IDMH e-learning modules
- [www.idhealtheducation.edu.au](http://www.idhealtheducation.edu.au)
- Free e-learning modules for health professionals
- Cover diverse topics including:
  - mental disorders in intellectual disability
  - communication adaptations
  - assessment of mental disorders
  - management of mental disorders
  - legal and ethical practice
  - soon: cardiometabolic monitoring and risk management
  - soon: management of challenging behaviour

Upcoming Responsible psychotropic prescribing podcasts
- Diagnosis, prescribing, monitoring and withdrawal considerations
- Child and youth and adult specific versions will be produced
National Guide and Core competencies
Improving psychotropic safety and monitoring

Positive cardiometabolic health for people with ID: an early intervention framework

• Background:
  • Psychotropic medication, along with other lifestyle, genetic and socio-economic factors increase cardiometabolic risk in people with ID

• Outputs:
  • Detailed literature review of cardiometabolic risk in people with ID
  • Cardiometabolic monitoring guideline- adapted to meet the needs of people with ID
  • Toolkit of accessible cardiometabolic resources for people with ID, carers and service providers
Methodology

• Steering committee formed with authors of previously published generalist guideline

• Draft ID cardiometabolic monitoring guideline constructed following extensive literature

• Multiple waves of consultation:
  – 30+ national and international experts
  – multidisciplinary input received: General practitioners, psychiatrists, speech pathologists, exercise physiologists, nurses, dietitians, endocrinologists, intellectual disability specialists

• Once complete, project outputs will be downloadable from the 3ND website
POSITIVE CARDIOMETABOLIC HEALTH FOR ADULTS WITH INTELLECTUAL DISABILITY: an early intervention framework

ADAPT YOUR PRACTICE while addressing STANDARD TARGETS:
Plan for: communication adjustments; engagement with support networks; extra time; consent; teamwork

<table>
<thead>
<tr>
<th>Activity</th>
<th>Diet, Lifestyle</th>
<th>Socio-Economic</th>
<th>Blood Pressure</th>
<th>Glucose Regulation</th>
<th>Fasting Blood</th>
<th>Psychotropic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim for 150 minutes moderate intensity exercise per week (e.g. 30 minutes 5 days per week)</td>
<td>Non-smoker, Balanced diet, Minimise alcohol and other drug use BMI²: 18.5-24.9 kg/m² Waist circumference WC: ≤94cm Males ≤80cm Females</td>
<td>SES is associated with cardiometabolic health</td>
<td>For most: ≤140mmHg Systolic and ≤90 diastolic For people with: Diabetes Chronic Kidney Disease Cardiovascular Disease: &lt;130/80</td>
<td>Fasting blood glucose &lt;5.5mmol/l If Diabetic: HbA1c &lt;7% For aversion to venepuncture see over</td>
<td>TChol ≤5.5 mmol/L LDL ≤4 mmol/L Trig ≤1.6 mmol/L</td>
<td>Prescribed only to treat symptoms of defined mental illness and/or when challenging behaviours are severe and non-responsive to other interventions Minimum effective dose and length of treatment³</td>
</tr>
</tbody>
</table>

Any values outside of target range: DON’T JUST SCREEN- INTERVENE

tailored intervention brochures can be downloaded from [http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability](http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability)

Using a person-centred approach PROVIDE TAILORED LIFESTYLE & NUTRITIONAL INTERVENTIONS:
If arranging multidisciplinary follow-up falls outside your practice scope make appropriate referrals to the persons GP and ensure proactive follow-up.
For physical health interventions create a GP Management Plan (MBS item: 721) and a Team Care Co-ordination plan (MBS item: 723.
For Mental Health interventions consider using a Mental Health Treatment Plan (MBS items: 2700, 2701, 2715 or 2717) and referral to a psychiatrist and/or psychologist

Provide a tailored exercise prescription and account for any co-existing physical impairments* Consider referral to dietitian (MBS item: 10954); exercise physiologist (MBS item: 10953); physiotherapist (MBS item: 10960) occupational therapist (MBS item: 10995);* Referral to smoking or D&A cessation program
Consider referral to dietician (MBS item: 10954); exercise physiologist (MBS item: 10953); physiotherapist (MBS item: 10960) occupational therapist (MBS item: 10995);* Referral to smoking or D&A cessation program
Include social worker in multidisciplinary case conference (MBS items 735-758) If the person has a diagnosed mental illness they can also receive individual social worker sessions (MBS item 80150) Referral to disability support services
Consider antihypertensive therapy if lifestyle intervention alone is insufficient* Limit salt in diet Education about blood pressure management
Tailor diabetes education/intervention (diabetes educator (MBS item: 10951) AT RISK: 5.6-6.9mmol/L - 6 monthly glucose monitoring, consider metformin if lifestyle intervention insufficient DIABETES: ≥7.0mmol/L or ≥7.0mmol/L non-fasting Endocrine review, monitor Hba1c 3 monthly
Consider Statin if lifestyle intervention alone is insufficient* Fibrate for triglycerides
Consider, switching, decreasing or discontinuing if metabolic side effects emerge, Rationalise any polypharmacy; Where possible avoid high metabolic liability medication as first line treatment* (Home medicines review - MBS item: 900); Provide psychotropic education

- [3dn.unsw.edu.au](http://3dn.unsw.edu.au)
- @3DN_UNSW

© UNSW 2023

DEPARTMENT OF DEVELOPMENTAL DISABILITY NEUROPSYCHIATRY
Monitoring: Annual cardiometabolic monitoring should occur for all people with intellectual disability.

If psychotropic medication is commenced please use the following schedule: Note: more frequent monitoring should occur if clinically indicated. Some medications such as clozapine have additional monitoring requirements. Consider ECG/ cardiology review if concern re QT prolongation or cardiovascular risk factors present.

<table>
<thead>
<tr>
<th>Monitoring Schedule</th>
<th>baseline</th>
<th>weekly for 1st 6 weeks</th>
<th>3 months</th>
<th>6 months</th>
<th>9 months</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Hx (diabetes, obesity, CVD in first degree relatives, kidney disease)</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal and medication Hx (cause of ID, polycystic ovary syndrome, past psychotropic medication use: dose, efficacy and side effects, current medications)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifestyle review (smoking, alcohol physical activity, diet)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Weight / WC</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Other examinations (BMI, BP, Puke)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Investigations (TChol, LDL, HDL, Trig, FINS, BPG, HbA1c)</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Certain genetic causes of intellectual disability may alter the person’s baseline cardiometabolic risk profile. It is important to identify the cause of ID where possible and to proactively manage individuals at risk. Syndromes with cardiometabolic risk factors include:

- Down
- Turner
- Tuberous sclerosis
- Williams
- Angelman
- Sotos
- Prader-Willi


PROBLEM SOLVING FEAR OR REFUSAL OF BLOOD TESTS

- Tailor communication about blood test rationale and procedure. Accessible information can be downloaded here.
- Involve the person’s support networks. Having someone familiar attend the blood test may make the person feel more at ease.
- Behavioural support staff may be able to conduct rehearsal prior to the appointment.
- Have the family or support worker call ahead and explain the situation to the pathologist. Ask if there is a pathologist who has experience working with people with ID.
- Request an anaesthetic cream or patch
- If needed, consider single dose pro benzodiazepam prior to blood test
- If obtaining a fasting sample is too hard, non-fasting samples are satisfactory for most measures excluding triglycerides
- Clarify and obtain consent. If necessary consider requesting a blood test while the person is under general anaesthetic for another procedure.

SPECIFIC PHARMACOLOGICAL INTERVENTIONS

Consider metformin if: Impaired glucose; polycystic ovary syndrome; obesity or rapid weight gain.

Metformin therapy: start at 250mg tablet before breakfast and dinner for two weeks then increase to 500mg bd. Dose can be increased to a maximum of 3g daily in diabetes or pre-diabetes. For off-label use in obesity and pre-diabetes, consent should be obtained. Side effects of nausea, diarrhoea or abdominal cramps should not be tolerated and dose shifted to after meals and/or reduced (or shift to the XR preparation).

Lipid Lowering therapy: use PBS guidelines. Statin initiation for cholesterol lowering: simvastatin 10mg nocte; atorvastatin 10mg nocte; pravastatin 10mg nocte; rosvastatin 10mg nocte

Antihypertensive therapy: Multiple agents available

Vitamin D: Glucose metabolism, bone and muscle health may all be impacted by Vit D deficiency. For people at high risk of Vit D deficiency (for example due to anticonvulsants; residential status – link to NPS medicine wise site) monitor Vit D levels. <50nmol/L: replenish stores: cholecalciferol 400IU per day for one month. Maintenance: 1,000 IU. Target >80nmol/L: 500IU per day for one month. Maintenance: 1,000 IU. Target >80nmol/L

To cite: Authors, 2014. Positive cardiometabolic health for adults with intellectual disability: an early intervention framework. UNSW, Sydney

Adapted with permission from Curtis J, Newall K, Samaras K. ©HEI 2011
Adapting practice while addressing standard cardiometabolic targets

<table>
<thead>
<tr>
<th>Activity</th>
<th>Diet, Lifestyle Weight/Waist</th>
<th>Socio-Economic Resources</th>
<th>Blood Pressure</th>
<th>Glucose Regulation</th>
<th>Fasting Blood Lipids</th>
<th>Psychotropic Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim for 150 minutes moderate intensity exercise per week (e.g. 30 minutes 5 days per week) Reduce sedentary behaviour</td>
<td>Non-smoker, Balanced diet, Minimise alcohol and other drug use BMI: 18.5-24.9 kg/m2 Waist circumference: WC ≤294mm Male ≤308mm Female</td>
<td>SES is associated with cardiometabolic health. Ensure adequate social and economic supports to prevent health disadvantage</td>
<td>For most: ≤130/80 systolic and diastolic For people with: Diabetes Chronic Kidney Disease Cardiovascular Disease: ≤150/90</td>
<td>Fasting blood glucose &lt;5.5 mmol/L If Diabetic: HbA1c &lt;7% For evasion to venupuncture see over</td>
<td>TC ≤5.5 mmol/L LDL ≤4 mmol/L Trig ≤1.6 mmol/L</td>
<td>Prescribed only to treat symptoms of defined mental illness and/or when challenging behaviours are severe and non-responsive to other interventions Minimum effective dose and length of treatment</td>
</tr>
</tbody>
</table>

Plan for: communication adjustments; engagement with support networks; extra time; consent; teamwork
## First line interventions: diet and lifestyle

### Any values outside of target range: DON’T JUST SCREEN- INTERVENE

Tailored intervention brochures can be downloaded from [http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability](http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability)

Using a person-centred approach **PROVIDE TAILORED LIFESTYLE & NUTRITIONAL INTERVENTIONS:**

- If arranging multidisciplinary follow-up falls outside your practice scope make appropriate referrals to the person’s GP and ensure proactive follow-up.
- For physical health interventions create a [GP Management Plan](http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability) (MBS item: 721) and a [Team Care Coordination plan](http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability) (MBS item: 723).
- For Mental Health interventions consider using a [Mental Health Treatment Plan](http://3dn.unsw.edu.au/content/positive-cardiometabolic-health-adults-intellectual-disability) (MBS items: 2700, 2701, 2715 or 2717) and referral to a psychiatrist and/or psychologist.

---

<table>
<thead>
<tr>
<th>Provide a tailored exercise prescription and account for any co-existing physical impairments*</th>
<th>Consider referral to dietitian (MBS item: 10954): exercise physiologist (MBS item: 10953); physiotherapist (MBS item: 10960)</th>
<th>Include social worker in multidisciplinary case conference (MBS items 735-758). If the person has a diagnosed mental illness they can also receive individual social worker sessions (MBS item 80150)</th>
<th>Consider antihypertensive therapy if lifestyle intervention alone is insufficient*</th>
<th>Tailor diabetes education/intervention (diabetes educator: MBS item: 10951) AT RISK: 5.6-6.9mmol/L- 0 monthly glucose monitoring; consider metformin if lifestyle intervention insufficient DIABETES: ≥7.8mmol/L or ≤11.1 mmol/L fast-Endocrine review, monitor HbA1c 3 monthly</th>
<th>Consider Statin if lifestyle intervention alone is insufficient*</th>
<th>Fibrates for triglycerides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider referral to exercise physiologist (MBS item: 10953) or physiotherapist (MBS item: 10960)</td>
<td>Referral to smoking or B&amp;I cessation program</td>
<td>Referral to disability support services</td>
<td></td>
<td>Tailor diabetes education/intervention (diabetes educator: MBS item: 10951) AT RISK: 5.6-6.9mmol/L- 0 monthly glucose monitoring; consider metformin if lifestyle intervention insufficient DIABETES: ≥7.8mmol/L or ≤11.1 mmol/L fast-Endocrine review, monitor HbA1c 3 monthly</td>
<td>Consider Statin if lifestyle intervention alone is insufficient*</td>
<td>Fibrates for triglycerides</td>
</tr>
<tr>
<td>Education about blood pressure management</td>
<td>Limit salt in diet</td>
<td></td>
<td></td>
<td>Consider smoking cessation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Monitoring schedule if commencing psychotropic medication

**Monitoring:** Annual cardiometabolic monitoring should occur for all people with intellectual disability.

*If psychotropic medication is commenced please use the following schedule:* Note: more frequent monitoring should occur if clinically indicated. Some medications such as clozapine have additional monitoring requirements. Consider ECG/cardiology review if concern re QT prolongation or cardiovascular risk factors present.

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Weekly for 1st 6 weeks</th>
<th>3 months</th>
<th>6 months</th>
<th>9 months</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Hx (diabetes, obesity, CVD in first degree relatives, kidney disease)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal and medication Hx (cause of ID, polycystic ovary syndrome, past psychotropic medication use, dose, efficacy and side effects, current medications)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifestyle review (smoking, alcohol, physical activity, diet)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Weight / WC</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other examinations (BMI, BP, Pulse)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigations (TC, LDL, HDL, Trig, FPG, RPG, HbaA1c)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Cardiometabolic monitoring requires regular blood tests. Fear of blood tests may result in avoidance and failure to detect emerging risks.

**PROBLEM SOLVING FEAR OR REFUSAL OF BLOOD TESTS**

- Tailor communication about blood test rationale and procedure. Accessible information can be downloaded [here](#).
- Involve the person’s support networks. Having someone familiar attend the blood test may make the person feel more at ease.
- Behavioural support staff may be able to conduct rehearsal prior to the appointment.
- Have the family or support worker call ahead and explain the situation to the pathologist. Ask if there is a pathologist who has experience working with people with ID.
- Request an anaesthetic cream or patch.
- If needed, consider single dose pm benzodiazepam prior to blood test.
- If obtaining a fasting sample is too hard, non-fasting samples are satisfactory for most measures excluding triglycerides.
- Clarify and obtain consent. If necessary consider requesting a blood test while the person is under general anaesthetic for another procedure.
Account for genetic syndromes that may alter the persons baseline cardiometabolic risk profile

<table>
<thead>
<tr>
<th>Syndrome</th>
<th>Diabetes mellitus</th>
<th>Hypertension</th>
<th>Hypotension</th>
<th>Obesity</th>
<th>Dyslipidaemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Turner</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Tuberous sclerosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Williams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angelman</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sotos</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prader-Willi</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pharmacotherapeutic management of cardiometabolic risk

**SPECIFIC PHARMACOLOGICAL INTERVENTIONS**

Consider metformin if: Impaired glucose; polycystic ovary syndrome; obesity or rapid weight gain.

Metformin therapy: start at 250mg tablet before breakfast and dinner for two weeks then increase to 500mg bd. Dose can be increased to a maximum of 3g daily in diabetes or pre-diabetes. For off-label use in obesity and pre-diabetes, consent should be obtained. Side effects of nausea, diarrhoea or abdominal cramps should not be tolerated and dose shifted to after meals and/or reduced (or shift to the XR preparation).

Lipid lowering therapy: use PBS guidelines. Statin initiation for cholesterol lowering: simvastatin 10mg nocte; atorvastatin 10mg nocte; pravastatin 10mg nocte; rosuvastatin 10mg nocte.

Antihypertensive therapy: Multiple agents available

Vitamin D: Glucose metabolism, bone and muscle health may all be impacted by Vit D deficiency. For people at high risk of Vit D deficiency (for example due to anticonvulsants, residential status – link to NPS medicine wise site) monitor Vit D levels. <50nmol/L: replenish stores: cholecalciferol 4000IU per day for one month. Maintenance: 1,000 IU. Target >80nmol/L. <50nmol/L: replenish stores: cholecalciferol 4000IU per day for one month. Maintenance: 1,000 IU. Target >80nmol/L.
Summary & Conclusions

• Change in practice is slow
• Positive cardiometabolic monitoring in people with an ID requires:
  – A proactive and preventative approach
  – Thoughtful adaptations to practice and tailored communication resources
  – Multidisciplinary collaboration, care co-ordination and engagement with support networks
  – A holistic understanding of cardiometabolic risks including socio-economic status and social inclusion
  – A revision of problematic psychotropic prescribing practices in this population including the overuse of psychotropics to treat challenging behaviour
Future directions in 3DNs prescribing work

• Treatment pathway for primary care providers thinking about prescribing psychotropics for challenging behaviour

• Healthy lifestyle intervention to address cardiometabolic risk in aging people with ID

• Potential for future data linkage
  – Adding PBS and MBS data to linkage
  – Linking NDIS and electronic health records to improve medicine use reporting
Acknowledgements
Funding Sources

**Funding: Core**
- Ageing Disability and Home Care | Family and Community Services NSW
- UNSW Medicine

**Funding: Research and Projects**
- NSW Ministry of Health & Related Organisations
  - MHDAO, MH Kids, HETI, ACI ID Network
- Australian Government Department of Health and Ageing
- Australian Research Council (ARC)
- National Health and Medical Research Council (NHMRC)
- NSW Institute of Psychiatry
- Autism CRC
References

Title of Presentation: Rethinking psychotropic prescribing practices in people with ID

- Presenter: Julian Trollor
- Other Authors: Carmela Salomon

- Date of Presentation: November 2015
- Name of Conference or Forum: ASID
- Where was it held: Melbourne, Australia
- Who was the audience:
- Was it invited/keynote etc: oral presentation