Overview

- Defining the issues
- *Keeping the Body in Mind Programme*
- The international landscape-iphYs & HeAL

The scandal of premature mortality

People experiencing SMI have:
- Life expectancy gap
- Higher rates of:
  - tobacco use
  - obesity
  - hypertension
  - glucose & lipid dysregulation
  - diabetes
  - metabolic syndrome
  - sedentary lifestyle & poor nutrition
- Under-recognition & under-treatment of cardiometabolic risk factors
What do we know? First Episode Psychosis (FEP)

- These changes occur early, are common (Verma et al, 2009; Foley et al, 2011; Correll et al 2014)

- Up to 88% experiencing clinically significant weight-gain within 12 months after AP initiation (Perez-Iglesias, et al. 2008; Kahn et al, 2008; Verma et al, 2009; Foley et al, 2011)

- Tobacco rates at FEP onset 59% (Myles et al 2012)

- Children & adolescents are at risk (Correll et al 2009; Eapen et al, 2013)

Cardiovascular Risk factors

- Tobacco: "Healing is a matter of time, but it is sometimes also a matter of opportunity."

Overview—people with ID

While cardiovascular events are the leading cause of death amongst both the general population and people with ID, certain risk factors for cardiometabolic morbidity and mortality remain more prominent in people with ID.

Cardiometabolic risk factors that people with ID may be particularly vulnerable to include:

- Higher rates of psychotropic prescription
- Higher levels of physical inactivity & obesity
- Increased barriers to accessing quality healthcare
- Certain genetic syndromes
- Increased chance of socioeconomic disadvantage & stigma
Psychotropic medications and cardiometabolic risk

Cardiometabolic ill effects linked to psychotropics include increased risk of central obesity, raised blood pressure, and lipid and glucose dysregulation.

People with ID are more likely to be exposed to these risks due to:
• Higher rates of mental illness than the general population
• Overuse of psychotropics to treat challenging behaviour
• Commencement of psychotropics at a younger age
• Psychotropic polypharmacy
• Inadequate monitoring of psychotropic side effects

Obesity and cardiometabolic risk

Abdominal obesity has been associated with a three to ten-fold risk of hypertension, hyperglycaemia, hyperlipidaemia, and low high-density lipoprotein cholesterol.

Compared to the general population, people with ID are more likely to be overweight or obese:

Reasons for this finding include:
• Lower rates of physical activity
• More people with ID may lack awareness of the health impacts of obesity and therefore may be less motivated towards weight loss/healthy eating
• Social isolation may trigger excessive eating as a compensatory mechanism
• Genetic syndromes linked to ID may impact appetite, fat distribution and/or propensity to wards excessive weight gain

Physical inactivity and cardiometabolic risk

Physical inactivity is strongly associated with the increasing chain of cardiometabolic risks such as obesity, hypertension and glucose dysregulation. It is also independent and has also been identified in recent research as an independent variable for cardiometabolic mortality in its own right.

Children, youth, adults and older adults with ID are less physically active than their typically developing peers.

Reasons for this finding include:
• Higher rates of physical, sensory or cognitive mobility impairments
• Inadequate financial resources to purchase specialised sporting equipment and lack of appropriate and accessible pre-existing facilities
• Lack of confidence of sporting and other exercise related professionals in tailoring exercise programs to meet the specific needs of people with ID
Genetic syndromes and cardiometabolic risk

Genetic syndromes and other physical markers associated with some forms of intellectual disability (i.e. low birthweight, increased infection risk) elevate baseline cardiometabolic risk (Wallace and Schluter 2008).

Genetic syndromes effecting cardiometabolic profile include:

<table>
<thead>
<tr>
<th>Syndrome</th>
<th>Diabetes</th>
<th>Hypertension</th>
<th>Obesity</th>
<th>Hyperlipidemia</th>
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<tbody>
<tr>
<td>Down's</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>Turner</td>
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<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sotos</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Williams</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prader</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marfan's</td>
<td>✓</td>
<td>✓</td>
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<td></td>
</tr>
</tbody>
</table>

Healthcare barriers and cardiometabolic risk

Barriers to quality healthcare encountered by people with ID include:

- Difficulty identifying and/or communicating healthcare needs
- Lack of appropriate and affordable healthcare options
- Clinician lack of confidence in treating people with ID
- Diagnostic overshadowing
- Time restraints in the clinical encounter
- Anxiety or avoidance of procedures such as blood tests

Stigma and cardiometabolic risk

People with ID face higher rates of stigmatisation than the general population including:

- A lack of fulfilling employment options
- Inadequate access to quality healthcare
- Limited educational opportunities
- Weak representation at a policy level
- Ongoing segregation of certain services
- Lack of strong social networks
What do we know? Rx

- Lifestyle interventions in SMI effective
  (Daumit et al 2013; Green et al 2015, Bartels et al 2015)

- Lifestyle interventions in FEP are effective
  (Alvarez-Jimenez et al., 2006; 2010; Abdel-Baki et al., 2013; Curtis et al., 2015, EIP)

- Metformin attenuates antipsychotic-induced weight gain
  (Newall et al., 2012; Curtis et al., 2012)

Clinically Significant weight loss is possible in SMI

- STRIDE 47% AT 18/12 (Green et al., 2015, APF)
- ACHIEVE 37.8% (Green et al., 2015, NCEA)
- IN SHAPE 63% (Bartels et al., 2015, Royal Canadian)
- IN SHAPE 51% (12/12) & 48% (18/12)
  (Implications-Bartels 2015, APF)

The greatest current barrier to increasing the life expectancy of persons with serious mental illness is no longer a knowledge gap—it is an implementation gap.
Why not Intervene Early
For the Mind AND Body?

Screening & Monitoring

Don’t just screen, Intervene!

Prescribing in FEP-Practice Guidelines

- Low dose AP treatment
- Minimise SE's especially metabolic ones
- Olanzapine now a second line AP Rx
  (EPPIC Medical Management in EP, 2014; PORT Guidelines)
- Lifestyle intervention at time of AP initiation

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Keeping the Body in Mind

A structured 12-week intervention program for positive cardiometabolic health in youth with first-episode psychosis

Jackie Curtis1,2, Andrew Watkins1, Simon Rosenbaum3, Scott Teasdale1, Megan Kalucy1,2, Katherine Samaras3,4, Philip B. Ward2,5

1 Bondi Early Psychosis Programme, SESLHD; 2 School of Psychiatry, UNSW; 3 Department of Endocrinology, St Vincent’s Hospital, and 4 Diabetes and Obesity Program, Garvan Institute, Sydney; 5 Schizophrenia Research Unit, SWSLHD.

St Vincent’s Hospital

KBIM Project

- Clients aged 15-25 yrs
- <4/52 of commencing meds
- 12 week lifestyle intervention
- Funded by the NSW Mental Health Drug & Alcohol Office


Weight Baseline and 12-week follow-up

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>KBIM</td>
<td>90</td>
<td>85</td>
</tr>
<tr>
<td>Standard care</td>
<td>92</td>
<td>88</td>
</tr>
</tbody>
</table>

Waist circumference Baseline and 12-week follow-up

<table>
<thead>
<tr>
<th>Waist circumference (cm)</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>KBIM</td>
<td>92</td>
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Keeping the Body in Mind
Working Group
HeAL core working group

- David Shiers & Jackie Curtis (co-chairs)
- Mario Alvarez Jimenez
- Debra Foley
- Helen Lester
- Eoin Killackey
- Katherine Samaras
- Philip Ward
- Stephanie Webster

Expert international advisory panel

- Jonathan Camion
- Christoph Correll
- Marc De Hert
- Richard Holt
- Alex Mitchell
- Davy Vancampfort

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Within the next 5 years:

- 90% users understand their risks for future obesity, diabetes and CVD
- 75% maintain blood glucose, lipid profile and BP within normal range two years after initiating antipsychotic
- 75% gain <7% of pre-illness weight two years after initiating antipsychotic Rx
- 90% health promotion advice
- <30% smoke tobacco
- >50% age-approp. physical activity

Where medicines are used to treat psychosis, these are regularly reviewed according to recommended prescribing standards that minimise risks for obesity, CVD and diabetes.

Within the next 5 years:

- www.iphs.org.au
• Algorithm NSW, Australia 2011
• UK Lester Adaptation 2012
• Ontario cardiometabolic risk tool 2014
• UK Lester Adaptation update 2014
• NICE guidelines 2013 (CG155) & 2014 (CG178)
• Investment 2014 NSW
• International translations of HeAL
• Lester User postcard 2014
• NSW Adolescent algorithm 2014
• Japanese Algorithm 2014
• Norwegian Algorithm 2015
Regular physical health check-ups matter
Ask for support from your GP or mental health team

Implementing the HeAL Targets
Living Well: A Strategic Plan for Mental Health in NSW 2014-2024

Your Experience of Service

NSW Specific Questions

- Based on HeAL (Healthy Active Lives)
  - In the last 3 months has the service advised you about the following:
    - Healthy eating and diet
    - Smoking
    - Alcohol and drug use
    - Sexual health
    - Exercise and physical activity
    - Possible physical side effects of some medications (such as weight gain, diabetes or heart disease)
In Summary....

Given the potentially modifiable nature of many of these risk factors, thoughtful and tailored interventions in each area would be expected to dramatically improve cardiometabolic outcomes in this population.

Clinicians should:
• Proactively monitor each of these risk areas
• Provide evidence based interventions as necessary

Adequate funding and policy leadership will be required to ensure timely and appropriate interventions can be implemented

THANK YOU

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The Bondi Early Psychosis Programme, SESLHD, Liverpool MHS, SWILHD

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