Metabolic Monitoring, New Mental Health Clinical Documentation Module


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Distributed to Public Health System, NSW Ambulance Service, Ministry of Health

Audience Administration; medical records and purchasing staff

Secretary, NSW Health
METABOLIC MONITORING, A NEW MENTAL HEALTH CLINICAL DOCUMENTATION MODULE

PURPOSE

To inform staff of public mental health services about

(i) the availability the Metabolic Monitoring Module,

(ii) changes to the Assessment and Physical Examination Modules

KEY INFORMATION

A Metabolic Monitoring Module has been added to the current NSW Mental Health Clinical Documentation suite. It is designed for use by inpatient and community mental health services. It aims to help services monitor for and manage Metabolic Syndrome.

Metabolic Syndrome (MetS) refers to a cluster of cardiovascular risk factors including insulin resistance, hypertension, central obesity and dyslipidaemia, which result in significantly increased risk of cardiovascular disease and mortality. Mental Health consumers, particularly those with diagnoses of schizophrenia, bipolar disorder and major depressive disorders have up to four times greater risk of developing MetS than the general population as a result of lifestyle factors and the side effects of medication treatment regiments.

NSW Health’s Mental Health Clinical Advisory Council recommended the development of the Metabolic Monitoring Clinical Documentation Module in order to consolidate work being undertaken by several LHDs and to standardise the monitoring of MetS across NSW. The module was developed by an Advisory Group comprising experts, representatives from services using metabolic monitoring forms and clinicians from a range of public mental health services. The module, in combination with the Physical Examination module, assists services to meet the requirements of PD2009_027 Provision of Physical Health Care within Mental Health Services and GL2009_007 Physical Health Care of Mental Health Consumers Guidelines.

The Metabolic Monitoring Module can be completed by any suitably qualified and experienced mental health professional. Guidelines for the use of the Metabolic Monitoring Module have been developed and will be available on the NSW MH-OAT Modules site (http://internal.health.nsw.gov.au/policy/cmh/mhoat/protocols.html). Mental Health Programs are also encouraged to develop local protocols for the use of the module at a service or LHD level. The module is targeted at consumers at risk of MetS, including those on antipsychotic medication, a personal or family history of diabetes, obesity, cardiovascular disease or other risk factors.

The Assessment and Physical Examination Modules have also been updated to assist in identification of the risks factors for MetS and indicate where formal assessment with Metabolic Monitoring Module is warranted. Existing supplies of these resources held by services should be exhausted before ordering the new versions. Ordering of the modules will continue to occur through the existing mechanisms of Salmat Electronic Print on Demand (ePOD). The Metabolic Monitoring Form will be available for print on demand in pads of 100 forms at $30.40 per pad (Salmat stock number NH606947).

ATTACHMENTS

1. Metabolic Monitoring Clinical Documentation Module Form
2. Guidelines for Use of the Metabolic Monitoring Module
NSW public mental health services should use this module where clinically appropriate. When monitoring people at risk of metabolic syndrome, measurements should occur at baseline (drug naïve if possible), three monthly and more frequently when abnormalities are identified, or medication or dose is changed. Actual values should be recorded in the appropriate section. This module is intended to be used in conjunction with the Care Plan and Review modules.

<table>
<thead>
<tr>
<th>Date:</th>
<th>Waist (cms)</th>
<th>European men</th>
<th>≥94*</th>
<th>&lt;94</th>
<th>All women</th>
<th>≥80</th>
<th>&lt;80</th>
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<tr>
<th>Weight (kgs)</th>
<th>Medications &amp; daily dose**</th>
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<table>
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<tr>
<th>BMI (kgs/m²)</th>
<th>≥30</th>
<th>25-29.9</th>
<th>18.5-24.9</th>
<th>&lt;18.5</th>
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<th>HDL (mmol/L)</th>
<th>Male</th>
<th>&lt;1.03</th>
<th>≥1.03</th>
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<tr>
<th>Female</th>
<th>&lt;1.29</th>
<th>≥1.29</th>
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<th>LDL (mmol/L)</th>
<th>&gt;4.0</th>
<th>≤4.0</th>
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<tr>
<th>TG (mmol/L)</th>
<th>≥1.7</th>
<th>&lt;1.7</th>
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<tr>
<th>Tot Chol (mmol/L)</th>
<th>≥5.5</th>
<th>&lt;5.5</th>
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<tr>
<th>BSL (fasting) (mmol/L)</th>
<th>&gt;7.0</th>
<th>5.6-7.0</th>
<th>&lt;5.6</th>
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<tr>
<th>BSL (random) (mmol/L)</th>
<th>≥11.1</th>
<th>7.0-11.0</th>
<th>&lt;7.0</th>
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*South Asian, Japanese, South & Central American men are at risk at ≥90cm **Ambulatory settings only, to facilitate continuity of information.
Metabolic Monitoring

Date:

LFTs

- Abnormal
- Normal

BP (mmHg)

- Systolic: >160, 130-160, <130
- Diastolic: ≥85, <85

Other (specify)

- Physical activity (approx mins per week)
- Smoking (per day)

Metabolic syndrome?

- No
- Yes

Intervention required?

- No
- Yes

Staff Name

Signature

Designation

Metabolic Syndrome Diagnosis

- International Diabetes Federation (IDF) consensus definition

Waist: Age 16 and older: Women ≥80 cm, Men (European) ≥94 cm, Men (South Asian, Japanese, South & Central American) ≥90 cm

Age 10 to 15 years: ≥90th percentile or adult cutoff if lower

Age 6 - 9 years: ≥90th percentile (Do not diagnose Metabolic Syndrome)

Plus 2 or more of:

TG ≥1.7 mmol/l, Fasting BSL ≥5.6 mmol/l, HDL <1.03 (Men) <1.29 (Women), BP Syst ≥130, Diast ≥85

Clinical Algorithm for Monitoring

Adapted from Waterreus and Laughame (2009), MJA 19(4), 185-189

Fasting BSL

- <5.6: Repeat 3 monthly
- 5.6-7.0: Do Glucose Tolerance Test. If GTT < 11.1, monitor 3 monthly. If GTT ≥ 11.1, diagnosis Diabetes: treat/refer, review medication
- >7.0: Diagnosis Diabetes: treat/refer, review medication

Waist circumference

- If normal, repeat 3 monthly
- If at risk: review medications, consider switching, treat/advise on weight problem, repeat 3 monthly

TG and HDL

- If normal, repeat 3 monthly
- If at risk: treat/refer and repeat monitoring 3 monthly

Blood Pressure

- If normal, repeat 3 monthly
- If at risk: treat/refer and repeat monitoring 3 monthly
Guidelines for Use of the **METABOLIC MONITORING** module

**Purpose**

The *Metabolic Monitoring* module provides a structured format to support the monitoring of consumers identified as having, or as being at risk of, metabolic syndrome.

**Target services**

All public mental health services providing treatment and intervention.

**Development background**

NSW Health’s Mental Health Clinical Advisory Council recommended the development of the *Metabolic Monitoring Clinical Documentation Module* in order to consolidate work being undertaken by several LHDs and to standardise the monitoring of MetS across NSW. The module was developed by an Advisory Group comprising experts, representatives from services using metabolic monitoring forms and clinicians from a range of public mental health services. [PD2009_027 Provision of Physical Health Care within Mental Health Services](https://www.health.nsw.gov.au/policies/PD2009_027) and [GL2009_007 Physical Health Care of Mental Health Consumers Guidelines](https://www.health.nsw.gov.au/policies/GL2009_007).

**Completion requirements**

Completion of the *Metabolic Monitoring Module* is not mandatory as part of [PD2010_018 Mental Health Clinical Documentation Policy](https://www.health.nsw.gov.au/policies/PD2010_018). However it is the responsibility of NSW Mental health services to monitor physical health status for people under their care ([PD2009_027 Provision of Physical Health Care within Mental Health Services](https://www.health.nsw.gov.au/policies/PD2009_027) and [GL2009_007 Physical Health Care of Mental Health Consumers Guidelines](https://www.health.nsw.gov.au/policies/GL2009_007)). This module, in combination with the *Physical Examination* module, assists services to meet those requirements.

Information for completion of these modules may be obtained directly by the service or from other professionals such as GPs. LHDs should develop local policies regarding which staff record this monitoring or how information is shared with GPs.

**Associated resources**

*Positive Cardiometabolic Health: An early intervention framework for patients on psychotropic medication* ([Curtis, Newall & Samaras, 2010](https://www.ceti.nsw.gov.au/)) is a resource aimed at supporting the management of risk factors associated with metabolic syndrome.

An on-line learning package on the metabolic syndrome is available on the [NSW Clinical Education and Training Institute (CETI) site](https://www.ceti.nsw.gov.au/). A range of resources have been developed as part of NSW Health’s ‘Linking physical and mental health...it makes sense’ (LPMH) initiative. These resources are available on the LPMH [website](https://www.health.nsw.gov.au/lpmh) and include information sheets and pamphlets for consumers, carers and clinicians on the responsibilities of public mental health services to consider the physical as well as mental health of consumers. [On-line training](https://www.health.nsw.gov.au/lpmh) is also available that is based on the [GL2009_007 Physical Health Care of Mental Health Consumers Guidelines](https://www.health.nsw.gov.au/policies/GL2009_007). Participants will receive certification after completion of the training.

**Issues for CAMHS**

The diagnostic criteria outlined in the module covers consumers 16 years and over, as well as children and adolescents 10 to ≤16 years and 6 to ≤10 years.

**Issues for SMHSOP services**

Nil.

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Completion tips

- The module targets consumers identified as having, or as being at risk of, metabolic syndrome, including those:
  - on antipsychotic medication
  - with familial physical risk factors (e.g. diabetes, obesity, cardiovascular disease)
  - with personal physical risk factors (e.g. diabetes, obesity, cardiovascular disease)
- The identification of these consumers is supported by the inclusion of screening questions within the Assessment and Physical Examination modules.
- The module includes diagnostic criteria and guidelines for intervention to assist the provision of appropriate care. In the case of waist circumference, there is a separate at risk range identified for European men (≥94cm) compared to South Asian, Japanese, South & Central American men (≥90cm). Where a male consumer belongs to a non-European group that is not specified above (e.g. African, Aboriginal), clinicians are advised to be conservative and use the later criteria.
- While the module targets key metabolic syndrome information domains, it makes provision for the inclusion of other health issues via the use of ‘Other (specify)’. This approach aims to facilitate the use of the one document by all services, versus the development of multiple versions.
- To assist care planning and monitoring, the module is intended to be used at baseline (drug naïve if possible), at three monthly reviews and more frequently when abnormalities are identified, or medication or dose is changed. As a result, it is expected that the module will be used in conjunction with the Care Plan and Review modules.
- Where possible, the module should be completed in collaboration with the consumer’s general practitioner. Where a consumer does not have a nominated general practitioner, the mental health service should make reasonable efforts to link the consumer with an appropriate health care provider.

Relationship to the Assessment and Physical Examination modules
- The Assessment and Physical Examination modules contain screening questions to aid the identification of consumers at risk of metabolic syndrome.
- The Assessment module has supports for the recording of information on the following metabolic syndrome risk factors:
  - Under ‘Family Medical/Mental Health History’ (pg.2), screening questions address familial physical risk factors (e.g. family history of diabetes, obesity, cardiovascular disease).
  - Under ‘Medical History’ (pg.3), personal physical risk factors are addressed (e.g. history of diabetes, obesity, cardiovascular disease).
  - Under ‘Current Treatments’ (pg.3), the documentation of ‘Current medications’ is supported.
  - A ‘yes’ to any of the above may indicate that a more detailed assessment of metabolic syndrome is required.
- The Physical Examination module contains documentation supports for a range of metabolic syndrome risk factors including blood pressure and waist circumference. Diagnostic criteria are also provided to aid interpretation of available information and screening. Supports for the ordering and recording of blood results relevant to the screening of metabolic syndrome are also provided under ‘Immediate Actions’ (pg.2). Where blood results are available in hard copy, these can be attached to the module rather than transcribed. In the event of positive findings, blood results should be recorded in the Metabolic Monitoring module to minimise duplication and facilitate monitoring.

Relationship to the Care Plan and Review modules
- The module is to be used in conjunction with the Care Plan and Review modules to aid the management and monitoring of any identified metabolic syndrome risk factors. Reviews are to be undertaken three monthly and more frequently when abnormalities are identified, or medication or dose is changed. Further information on monitoring requirements is provided in PD2009_027 Provision of Physical Health Care within Mental Health Services and GL2009_007 Physical Health Care of Mental Health Consumers Guidelines.
Further reading

A range of published articles are available on the metabolic syndrome, with these including, but not limited to:


