



Clinical Movement Analysis Society
– UK and Ireland

Clinical Gait Analysis Standards

GUIDE TO CMAS CERTIFICATION

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1. Introduction

This guide provides introductory information for laboratories that are considering applying for CMAS certification. It is based on Version 18 of the CMAS standards (May 2024). The standards are updated annually so some requirements may change in future versions.

2. Overview of the standards

The CMAS standards aim to promote quality in the provision of clinical movement analysis services in laboratories across the UK and Ireland. The standards have seven key areas:

- Resources and facilities
- Referral management
- Data collection
- Data & report management
- Document control
- Audit
- Certification

CMAS certification requires movement analysis laboratories to implement their own procedures, processes and records in accordance with the CMAS standards. A statement of purpose form clearly defines the scope of work. Facilities, equipment, staffing, testing and reporting capabilities must be consistent with those aims.

Certified laboratories are subject to external audits conducted by representatives from other laboratories to check for compliance. Issues identified during audits are raised as non-conformances with agreed action plans for resolution. CMAS does not expect laboratories to be perfect but they must demonstrate non-conformances are being addressed with continual improvement.

The standards are freely available on request from CMAS at standards@cmasuki.org.

3. Minimum requirements

The minimum requirements to comply with the CMAS standards are:

- A statement of purpose form
- Logs containing details of
 - Staff members and internal auditors
 - Equipment
- For each test performed:
 - Data collection, data processing and reporting protocols
 - Data collection and processing recording methods (i.e. forms)
 - Staff repeatability records if the test requires clinical or technical judgement
 - Normative data if appropriate
- Patient records (providing evidence of completed recording methods and reports)
 - In order for external audits to be completed in full, it is required that the lab have assessed at least 6 patients before the 1st external audit (Note: up to 6 randomly selected sets of patients records can be required during one audit and must be in place before an audit can be conducted).
- Calibration or inspection records for key equipment
- Internal and external audit records

- A master list of all protocols and forms

Certification requires successful completion of two external audits. To re-iterate, success does not mean a perfect pass with no non-conformances, rather that non-conformances are being appropriately resolved.

4. Choosing your tests

Choosing appropriate tests is important since it influences the quantity and complexity of protocols as well as repeatability and normative data requirements. Our advice is to focus on the laboratory's primary purpose and start with one or two core tests. Don't try to cover everything at the first go. It is easier to introduce new tests once you are certified and familiar with requirements.

A common approach is to start with a clinical examination test together with a core gait analysis test covering 3D motion analysis, video capture and force plates. Other tests such as EMG can be introduced later.

5. Timescales

A realistic timescale for attaining certification starting from scratch is probably around 12 months. This is based on an initial 6 month period to establish and implement working practices. Important and time-consuming activities include setting up normal databases and staff repeatability testing. There should also be evidence of an effective internal audit cycle that covers all aspects of the standards. Any pre-established working practices that meet the standards might shorten this implementation period. It is also required that the lab complete at least one full internal audit to be reviewed by CMAS before an external audit can be scheduled (see point 8 below).

Once a laboratory is ready they can request their first external audit by contacting standards@cmasuki.org. At this point the certification fee is payable (see below). The first external audit is usually conducted with two auditors and covers the entire standards.

A laboratory should be reasonably well prepared for their first external audit with a credible implementation that covers most areas of the standards. However there may be a few obvious and significant gaps such as incomplete normal data or a missing protocol. This is acceptable provided the laboratory has a realistic plan to address the resulting non-conformances in time for their second audit.

The laboratory then has up to 18 months to address non-conformances and other issues raised at the 1st audit before receiving their 2nd external audit. The minimum time period between 1st and 2nd external audits is 6 months (as defined in the standards). Since it would be prudent to undertake an internal audit as well it is more likely to be around 9 - 12 months. If no major issues are raised at the second audit, the laboratory can then be awarded their **certification** at the next AGM.

6. Certification fees

The certification fee is currently £500. This covers the cost for two external audits. Certification of laboratories will take place at the next AGM following completion of a successful second audit. The period from the AGM to the next round of invoicing will be covered by the £500 fee already paid. This will allow all labs to be brought into line with

invoicing. Once this first period is complete, the annual certification fee becomes due (currently £300 per annum).

7. Internal auditors

Laboratories are required to undertake periodic internal audits to monitor and improve their work. Laboratories are responsible for appointing their own internal auditors and sending their details to CMAS.

Ideally internal auditors should have experience in auditing and be familiar but not directly involved in the work undertaken in the laboratory. Before starting to act as an auditor three training steps are required:

a. The CMAS standards

The auditor must have read the CMAS standards document thoroughly, in order to be familiar with the content and requirements.

b. The CMAS audit manual

The auditor will need to have access to these guidelines and have read them before commencing as an auditor.

c. Audit Shadowing

Auditors should shadow an established auditor before they start to work independently. For new internal auditors shadowing an internal or external audit taking place at nearby accredited site would be helpful. Contact standards@cmasuki.org to set this up.

Laboratories, once certified, are required to contribute to the pool of external auditors. Laboratories supplying an auditor receive a discount on their annual certification fee.

8. Requirement for Internal Audit (before certification process begins)

In order for CMAS to assess whether a lab has sufficient procedures and protocols in place to warrant their 1st external audit, labs will need to have completed one full internal audit (to cover all areas of the standards). The lab will be encouraged to use the checklists supplied by CMAS. The results of this internal audit will then be sent to CMAS where results can be assessed by the CMAS Standards and Audit committee. At this point, the 1st external audit can be arranged. Please contact standards@cmasuki.org for further information.

9. Partner laboratories – Buddy Arrangement

CMAS strongly promotes new labs undergoing the certification process to form a “Buddy” arrangement with an existing CMAS certified lab. This may involve visiting the lab to get a feel for the structure of protocols/ procedures/ clinical records or for general advice regarding the CMAS process. It is recommended that before new labs undertake the process of certification, that they contact the standards committee at the following email address to arrange this (standards@cmasuki.org).

10. Contact information

The address for the current CMAS audit co-ordinator is:

CMAS c/o Hannah Shepherd
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School of Health and Sport Sciences
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Hope Park
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