Clinical Movement Analysis Society
– UK and Ireland

Clinical Gait Analysis Standards

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Contents

Introduction

CMAS aims to promote quality in the provision of movement analysis services by the development of standards relating to clinical gait analysis services. A longer term aim is to monitor the implementation of these standards by auditing and accrediting clinical gait analysis laboratories.

This document details the standards developed by the Standards Working Group of CMAS. The work was carried out from March 2002 up to February 2004. Standards will be reviewed at regular intervals with revisions being made where needed.

Following the pilot study of implementation of the standards in labs during 2004/2005, minor revisions were made to clarify some areas of the standards.

Conformity to a standard allows accuracy or quality to be judged by auditing the processes against a checklist of key points stated in the standard. Details of the procedures carried out locally will be detailed in a protocol. The protocols should be sufficiently detailed to act as a guideline for all staff performing the stated task.

A clinical gait analysis lab will be required to maintain its own set of written protocols conforming to the associated standards for the procedures relevant to that lab, or as stand alone protocols where indicated in the list in the clinical gait analysis procedure document. Standards contain references to protocols where appropriate. They will also be required to maintain checklists of procedures carried out to ensure compliance with the standard.

Where appropriate, reference will be made to local trust policy e.g. appointments, consent, risk assessment.

Hyperlinks are provided between references to standards and the standard.

NB: the Audit Standard is still under development and thus not included in this document.

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Clinical gait analysis procedure

This section outlines the key procedures of a generic clinical gait analysis (CGA). It will be used to identify the standards and protocols that apply to a particular lab.

Note that the order of processes may vary from this outline.

CGA process stage	Protocol / standard	Details
Lab details	Standard	Environment, Equipment and Staffing standards
Patient Administration	Standard	Administration
Set up of equipment prior to patient arrival	Protocol	Preparation of subject equipment
	Standard	Equipment
Preliminary meeting on arrival at lab	Standard	Environment
Clinical examination	Standard	Clinical Examination
Patient history	Protocol	Patient history protocol
	Standard	Gait Data Collection
Patient preparation	Protocol	Selection of data to be collected: • dependent on referral, compliance of subject, clinical examination results
	Protocol	Marker / electrode placement
	Standard	Gait Data Collection
Statement of system parameters	Protocol	System parameters for subject • marker model, axes orientation, equipment make / model, length of walkway (ref: gait data collection, data processing and equipment standards)
Acquire data	Standard	Gait Data Collection
		Environment (data storage)
Preliminary validity checking	Standard	Data Processing and Verification
Process data	Standard	Data Processing and Verification
Saving / storing data	Protocol	Data storage • identification, traceability and storage / backup of files • maintenance of patient confidentiality • safety of data (i.e. it does not get lost / corrupted) • compliance with future software versions
	Standard	Data Processing and Verification
		Environment (data storage)
Present and interpret results	Standard	Interpretation of Data and Reporting
		Normal Data
Additional general points	Protocol	Risk assessment
	Standard	Staffing
		Auditing