Interpretation/Recommendations:

This document has been reviewed and approved by the CMLA

Board of Directors

November 26, 2019

Document Purpose

- Define the CMLA minimum requirements for achieving competency in clinical gait data interpretation and treatment recommendations
- Provide an example of accepted practices from an accredited clinical gait analysis laboratory

Competency
Data Interpretation/Recommendations

- Skills in **data interpretation and treatment recommendations** must be verified through initial competency and ongoing competency procedures with a designated routine frequency (at least yearly).
- The persons verifying initial and ongoing competency in the skills of **data interpretation** must be experienced motion laboratory staff who have had specialized education, training or licensing (if required) and extensive work experience in these skills.
- The persons verifying initial and ongoing competency in **treatment recommendations** must be experienced qualified health professionals who have had specialized education, training and work experience in these skills.

Interpretation Team

- The laboratory demonstrates that the data interpretation team includes at least one licensed clinician with demonstrated knowledge and expertise for treatment of conditions present in the population being served.
- One licensed clinician (physician or physical therapist) must be among the personnel who have data interpretation listed as a clinical job responsibility.
- The interpretation team must make recommendations which are within their scope of practice*

* The Scope of Practice Policy for clinicians participating in treatment recommendations is on the CMLA website.

Examples

- The following slides provide an example method for motion data interpretation and development of treatment recommendations followed at the James R. Gage Center for Gait and Motion Analysis (CGMA) at Gillette Children's Specialty Healthcare, St Paul, MN, USA
- This information was provided by Tom F. Novacheck, MD

Example Process for Data Interpretation

- A description of the data interpretation process using in the gait laboratory is a **CMLA criterion**
- CGMA procedure:
  - The physical therapists (PT) of the CGMA perform the following functions:
    - Physical examination, patient set up (application of equipment such as reflective markers and EMG electrodes), and direct the patients during motion analysis.
    - Gait report generation which summarizes the medical history, goals, physical exam, observational video, EMGs, kinematics and kinetics, and any additional measurements that comprise the test.
  - The PT responsible for the analysis presents all the gait analysis findings at review (meeting), of all clinical staff involved in the gait analysis and at least one of the trained interpreting physicians.
  - The team discusses the final interpretation which includes linking different forms of data and intervention recommendations.
  - The PT includes the treatment recommendations with rationale in the final report.

Example Process for Data Interpretation

- Prior to the interpretation session the physical therapist compiles all necessary information, and creates a problem list report based on the integration of all data to summarize common clinical problem areas
  - bony deformity,
  - soft-tissue tightness,
  - spasticity,
  - motor control,
  - strength deficits.
- Data interpretation for each patient is completed by a team
  - the physical therapist who conducted the study,
  - an engineer, and
  - a physician interpreter.
- At the interpretation session, the integrated problem list is discussed and all data is reviewed. The initial problem list is modified as necessary to include all problems identified by the team and treatment recommendations are generated.

Example Process for Data Interpretation

- Physician interpreters are orthopaedic surgeons.
- All gait study data is reviewed in conjunction with pertinent imaging studies and clinical information. The physician interpreter may or may not be the referring physician.
- The physical therapist dictates a report of the objective data findings in a problem list format.
- The physician interpreter dictates a summary "interpretation" note which includes a brief summary of the data and treatment recommendations.
- Interpretation sessions occur daily.
- Departmental goal is for each study to be interpreted within 48-72 hours of data collection.

Example CGMA Process for Treatment Recommendations

- A description of the data treatment recommendations process using in the gait laboratory is a **CMLA criterion**
- CGMA Procedure:
  - Following discussion in data review (about 30 minutes per patient), the group comes to a consensus on a final interpretation and recommendations which could include surgery, orthotics, drug therapy and/or physical therapy.
  - All recommendations receive final approval by the Medical Directors.
  - Note: Engineers present are only in consultation with the licensed team members as part of the team but do not provide the final say in treatment recommendations.
  - Note: direct evidence of this procedure is not required by the CMLA

Example Process for Treatment Recommendations

- Treatment recommendations occur as a result of the data interpretation process described above. The process begins with the referral question as indicated on the CGMA referral form, the physician clinic note, or both.
- The finalized problem list is organized into four primary categories:
  - Bony deformity
  - Soft-Tissue Tightness, Contracture, & Spasticity
  - Motor Control and Strength
  - Other Issues
    - temporal distance parameters
    - energy expenditure
    - plantar pressures
    - orthotic considerations
    - other pertinent issues

Example Process for Treatment Recommendations

- Once the problem list is finalized, a series of treatment recommendations are generated based on both the referral question(s) and the finalized problem list.
- The treatment recommendations may include (but are not limited to) surgery, orthoses, therapy, oral medications, injectable medications, additional imaging or testing, or other referrals.
- These recommendations are included in the interpretation note dictated by the physician which was described above.

Example Treatment Recommendations

- Treatment recommendations must be consistent with the clinician's licensure guidelines (**CMLA Criterion**).
- Physical therapists' scope of practice at CGMA:
  - ***does include*** the ability to make treatment recommendations regarding exercise programs and orthotics.
  - ***does not include*** treatment recommendations for surgery or medical management.

Note: If a CMLA applicant submits a report that contains surgical or medical recommendations with only a licensed physical therapist, biomechanist, kinesiologist, or engineer signature, credit will not be given for this criterion.

Example Treatment Recommendations

- Signature lines on gait analysis report must also be consistent with the licensure guidelines of the persons signing the report (**CMLA Criterion**)
- Acceptable signatures at the CGMA:
  - Dually signed reports, e.g. physical therapist or physician or both
    - Summary of gait data (with or without recommendations)
    - Interpretive report for surgical treatment or medical management recommendations.
  - Physician must sign interpretive report for surgical treatment or medical management
  - Physical therapist may sign summary reports of gait data with PT and orthotic recommendations only or report with no treatment recommendations

Summary of CMLA Criterion

- Data Interpretation:
  - Documentation of a process of data interpretation is required
  - Direct evidence is not required
- Treatment Recommendations:
  - Documentation of a process for determining treatment recommendations is required
  - Direct evidence is not required
  - Must be consistent with scope of practice of signatory on document that includes treatment recommendations

The new Applicant Manual at the CMLA website provides further details/clarification on the required skills for data interpretation and treatment decision-making.

http://www.cmlainc.org/Portal.html