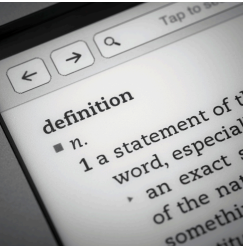
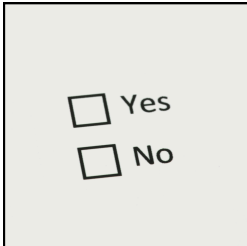





CPME Guidance Document

Biomechanical Examinations 2025

BME Definition	Appropriate Indications for a BME	Documentation Required for a BME	Supervision	Logging
				

CPME Document 320 requires that residents participate in the performance of lower extremity biomechanical examinations or cases, which are defined in **Appendix A : B. Definitions, 3 Required Case Activity** as:

d. Biomechanical cases. *This activity includes direct participation of the resident in the diagnosis, evaluation, and treatment of diseases, disorders, and injuries of the foot, ankle, and their governing and related structures by biomechanical means. These experiences include, but are not limited to, performing lower extremity biomechanical examinations and gait analyses, comprehending the processes related to these examinations, and understanding the techniques and interpretations of gait evaluations of neurologic and patho-mechanical disorders.*

Intent and Background: *Biomechanical cases should be performed in a variety of settings (surgical and non-surgical) and should include diverse pathology and treatment methods. Biomechanical exams should be a representation of the learning experiences of the residents.*

*The RRC considers that biomechanics is the study of how musculoskeletal structures interact with each other and the ground while functioning. Therefore, biomechanical examinations logged as resident patient experiences (*BME) must be aimed at assessing and treating musculoskeletal issues. The RRC also expects that resident education linked to BMEs includes the complete assessment, treatment and documentation of the patient visit from start to finish, as CPME Document 320 also requires the resident to demonstrate appropriate medical record documentation.*

The following guidelines document the elements necessary for a patient experience to be counted towards a loggable Biomechanical Case (or Exam):

APPROPRIATE INDICATIONS FOR A BME:

1. A BME may only be logged for a complaint or problem in which the structure, position or function of the lower extremity musculoskeletal system is chronically impaired, altered or is leading to pain or deformity, or in which an alteration of structure, position or function of the lower extremity musculoskeletal system is known to predispose the patient to future pain or deformity.
2. A BME may only be logged for a complaint or problem for which the physical biomechanical exam influences the treatment plan or management of the patient.
 - i. Acute trauma is generally not considered a suitable indication for logging a BME, as the treatment generally involves restoration of the pre-injury condition.
 - ii. Chronic conditions related to prior trauma are considered a suitable indication, as these more often require biomechanical treatment, rather than simple restoration of pre injury condition.
 - iii. A BME generally may not be logged for patients being seen for infectious or dermatological processes, including routine foot care, unless the examination identifies a musculoskeletal issue causing the dermatological condition and the medical record specifically connects the two. Specific examples include:
 - a. A complaint of corn or calluses w/ debridement alone is not appropriate for a BME, but if there is an underlying musculoskeletal pathology causing the corn/callus, it is appropriate to assess that in a BME. The underlying musculoskeletal pathology and its specific treatment must be documented and addressed, and used as the logging diagnosis rather than the corn or callus.
 - b. Incurvated nails and their treatment alone are not appropriate, but if there is an underlying musculoskeletal pathology causing the incurvated nail, it can be appropriate to assess that in a BME. The underlying musculoskeletal pathology and its specific treatment must be documented and addressed and used as the logging diagnosis rather than the incurvated nail.

DOCUMENTATION REQUIRED FOR BME:

- Appropriate documentation of a BME is best accomplished in the form of a standard medical record SOAP note. Structured forms or templates may be used so long as the completed documentation includes all elements in a SOAP style note, or the form is used to complement a SOAP note. If templates or forms are utilized, information provided in the templated area must be specific to the patient being examined and must match findings and diagnoses elsewhere in the medical record.
1. SUBJECTIVE FINDINGS:
 - The history of a complaint is important to consider when making diagnoses, and documentation of that history is considered an integral part of resident education. Each BME must include an appropriate history relevant to the complaint or problem, including factors such as NLDOCAT or similar information. The BME cannot simply state “Foot pain” or “Heel pain”.
 2. OBJECTIVE EXAMINATION:
 - i. A BME must include static and dynamic off weightbearing musculoskeletal examination of the affected lower extremity and include pertinent manual muscle testing and examination of ROM and

position of affected joints. It is not necessary to include all joints of the lower extremity, but it is necessary to include those pertinent to the biomechanical problem.

- ii. A BME should include standing / weightbearing static position examination, in patients able to stand
- iii. A BME should include dynamic gait analysis, in patients able to ambulate

3. ASSESSMENT:

- Each BME must include a diagnosis or differential diagnosis directly related to the complaint or problem in which the structure, position or function of the lower extremity musculoskeletal system is chronically impaired, altered or is leading to pain or deformity, and which was derived from analysis of the history, biomechanical examination and any other pertinent testing performed.

4. TREATMENT PLAN:

- i. A BME must include a treatment plan that specifically addresses the musculoskeletal complaint , diagnosis and BME findings. It is not necessary for the patient to proceed with the treatment plan; a consultative discussion of appropriate options directed at the biomechanical issue is sufficient.
- ii. The treatment plan must be specific enough to show thought process linking the BME and plan.
 - a. Generic terms such as “orthotics”, “bracing” or “stretching” are not descriptive enough. The specific orthotic modifications, the specific type of brace and/or the specific stretch should be included in the treatment plan.
 - b. Generic terms such as “Surgery” are not descriptive enough, the treatment plan should include specifics of the surgical correction suggested, relative to the BME.

SUPERVISION:

- Biomechanical examinations logged as resident patient experiences must be supervised experiences and all documentation should be signed by the resident and attending involved.

LOGGING:

- Logging of the BME should not include the entire exam. Logging should be simple, and MUST include:
 - 1. A complaint or diagnosis related to the BME.
 - 2. Simple description of the treatment related to the BME and associated diagnosis or complaint.
- Examples of acceptable logging web based log “procedure note” entries are:
 - 1. Dx – R plantar fasciitis. RX- stretching, inserts, injection.
 - 2. C/o R heel pain. RX - stretching, inserts, injection, PT
 - 3. **Diagnosis-** ankle varus, **Treatment-** supramalleolar osteotomy
 - 4. Dx-rigid forefoot valgus and pes cavus Tx- orthotics w/ depression under 1st mpj

*“BME” in this document refers to biomechanical examinations logged as resident patient

Council on Podiatric Medical Education

Address: 11400 Rockville Pike, Suite 220, Rockville, MD 20852

Email: cpmestaff@cpme.org

Website: [🌐 Council on Podiatric Medical Education](https://www.cpmestaff.org)