Federal Optometric Residency in Brain Injury Rehabilitation - Milestones Assessment Plan

A Joint Initiative of the Vision Center of Excellence and the Uniformed Services University

USU
Uniformed Services University

DHA
Defense Health Agency ®

Federal Brain Injury Vision Rehabilitation Optometric Residency Brain Injury Vision Rehabilitation Milestone Assessment Plan

Mission Statement

To provide clinical education and training of graduate optometrists that enables them to obtain advanced clinical competencies in the diagnosis, treatment, management, and rehabilitation of patients with vision dysfunctions and other vision sequelae due to brain injury, with emphasis on return to duty and/or resumption of activities of daily living.

Milestones are an initiative that has been adopted in medicine to allow assessment of learners in graduate medical education. This project is modeled after the collaboration of three medical disciplines central to brain injury. These Milestones are designed only for use in evaluation of the resident in the context of their participation in Accreditation Council on Optometric Education (ACOE)-accredited residency programs. The Milestones provide a framework for assessment of the development of the resident in key dimensions of the elements of clinical competency in brain injury vision rehabilitation. They do not represent the entirety of clinical competency for optometrists, nor are they designed to be relevant in any other context.

Brain Injury Medicine Milestones

Federal Brain Injury Vision Rehabilitation Optometric Residency Brain Injury Vision Rehabilitation Milestones

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Milestone Reporting

This document presents Milestones designed to be used in the quarterly review of the residents' performance and for reporting purposes for the residency program. Milestones are knowledge, skills, attitudes, and other attributes for each of the clinical competencies organized in a developmental framework, from less to more advanced. They are descriptors and targets for performance as a resident progresses from entry into the program toward graduation from an ACOE-accredited residency program. In the initial months of implementation, the Review Committee will examine Milestone performance data for each program's resident(s) to determine whether resident(s) are progressing in the program.

For each period, review and reporting will involve selecting milestone levels that best describe a resident's current performance and attributes. Milestones are arranged in numbered levels. Tracking from Level 1 to Level 5 is synonymous with progressing from novice to expert in the specialty.

Selection of a level implies that the resident substantially demonstrates the milestones in that level, as well as those in lower levels (see diagram on page vi).

Level 1: The resident demonstrates milestones expected of an incoming trainee, working under direct supervision of the attending clinician.

Level 2: The resident is advancing and demonstrates additional milestones but is not yet performing at a mid-residency level; resident is functioning independently with support as needed from the attending clinician.

Level 3: The resident continues to advance and to demonstrate additional milestones, including the majority of milestones targeted for the residency, and begins to mentor other providers and/or optometric externs.

Level 4: The resident has advanced so that they demonstrate the milestones targeted for residency completion and no longer require supervision; this level is designed as the graduation target.

Level 5: The resident has advanced beyond performance targets set for the residency program and is demonstrating "aspirational" goals, which might describe the performance of someone who has been in practice for several years; it is expected that only a few exceptional residents will reach this level.

Additional Notes

Level 4 is designed as the graduation target, and does not represent a graduation requirement. Making decisions about readiness for graduation is the responsibility of the residency program director.

Examples are provided with some milestones. Please note that the examples are not the required element or outcome; they are provided as a means to share the intent of the element.

Some milestone descriptions include statements about performing independently. These activities must occur in conformity to the ACOE supervision guidelines, as well as institutional, departmental and program policies. For example, a resident who performs a procedure independently must, at a minimum, be supervised through oversight.

The diagram below presents an example set of milestones for one sub-competency in the same format as the Accreditation Council for Graduate Medical Education (ACGME) Report Worksheet[1]. For each reporting period, a resident's performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes the trainee's performance in relation to those milestones.

Patient Care - Spasticity interventions (e.g., chemodenervation, neurolytic procedure, intrathecal baclofen pump)				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Complies with safety protocols regarding procedures Provides basic education to patients and families regarding procedure-specific information and treatment options	Demonstrates basic understanding of which spasticity intervention should be used to treat specific conditions Obtains informed consent, confirming patient and family understanding and inviting questions Performs procedures with direct supervision; may need attending intervention during procedure	Makes appropriate choices regarding medication options, dosing, and guidance methods (e.g., baclofen pump programming, botulinum toxin injection) Modifies procedure to accommodate the patient's impairment and minimize discomfort (e.g., sedation)	Assesses outcomes of spasticity interventions and manages complications Independently performs procedures	Skillfully performs a wide variety of procedures and safe performance of these

Comments: Not yet achieved Level 1

Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated.

Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as some milestones in the higher level(s).

PC1 - Patient Care – History and Physical Examination of Individuals with Brain Injury				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Acquires a basic history, including medical, optometric, functional, and psychosocial elements. Performs a basic optometric and neurologic exam that identifies impairments and functional abilities. Performs a basic refraction and dry eye evaluation.	Utilizes knowledge of brain injury medicine to acquire a history and perform an optometric exam and functional evaluation. Interprets the optometric exam to accurately assess brain injury and its functional and visual sequelae. Orders appropriate specialty testing and interprets them correctly. Performs TBI specific refraction and dry eye evaluation.	Acquires a history, and performs an optometric examination and visual performance evaluation in patients with complex conditions and comorbidities, including psychiatric. Modifies history and exam to accommodate the patient's impairments, to optimize assessment, to minimize discomfort, and to preserve patient dignity.	Efficiently acquires a relevant history and performs a targeted optometric exam across a spectrum of ages, impairments, occupations, and clinical settings. Elicits subtleties and information that may not be readily volunteered by the patient. Identifies and correctly interprets subtle or atypical physical and neurologic findings from the brain injury.	Serves as a role model for gathering subtle and difficult information. Serves as a role model for physical exam skills in complex brain injury patients.
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Comments:

Not yet achieved Level 1 ⬭

PC2 - Patient Care – Procedural Intervention				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Complies with safety protocols regarding procedures. Provides basic education to patients and families regarding procedure-specific information and treatment options.	Demonstrates basic understanding of which optometric vision rehabilitation intervention should be used to treat specific conditions. Obtains informed consent, confirms patient and family understanding, and invites questions. Performs procedures with direct supervision; may need attending intervention during procedures.	Makes appropriate choices regarding medication and therapy options, dosing, and guidance methods. Modifies procedure to accommodate the patient's impairment and to minimize discomfort. Independently performs procedures.	Assesses outcomes of optometric interventions, vision rehabilitation, and manages complications.	Skillfully performs a wide variety of procedures and teaches others in the safe performance of these procedures.

Comments: Not yet achieved Level 1

PC3 - Patient Care – Evaluation and Diagnosis of Individuals with Brain Injury across the Spectrum of Severity				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Produces a differential diagnosis for common presentations. Orders appropriate diagnostic studies for common presentations.	Generates a differential diagnosis that considers atypical presentations and conditions commonly seen in brain injury. Orders appropriate diagnostic studies for conditions commonly seen in brain injury.	Develops a comprehensive differential diagnosis, including for less common conditions. Appropriately prioritizes the sequence and urgency of diagnostic testing. Correctly interprets diagnostic study results, and appropriately pursues further testing or specialist input.	Synthesizes clinical information and results of diagnostic studies in the development of a comprehensive, differential diagnosis. Orders diagnostic testing based on cost- effectiveness and likelihood that results will influence clinical management.	Efficiently produces a focused and prioritized differential diagnosis, accounting for rare conditions. Streamlines diagnostic evaluation for maximal cost-effectiveness and minimal patient burden.

Comments: Not yet achieved Level 1

PC4 - Patient Care – Optometric Vision Rehabilitation/Medical/Neuropsychiatric Management of Individuals with Brain Injury. This includes outpatient, and consultative management of: · Current comorbidities · Secondary conditions · Potential complications				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Evaluates uncomplicated optometric problems, and initiates treatment. Identifies common functional and neurobehavioral consequences of brain injury.	Identifies and manages common comorbidities and secondary conditions associated with brain injury. Identifies level of medical acuity, and triages appropriately. Uses appropriate consultations to guide treatment plan. Understands pharmaceutical side effects that can complicate brain injury diagnosis and treatment.	Manages patients with complex comorbidities and secondary conditions. Identifies individual risk factors for complications, and institutes preventive care. Provides consultations to patients under the care of other services. Works collaboratively with behavioral health, to improve brain injury related outcomes.	Develops and implements a comprehensive treatment plan that identifies and addresses all pertinent comorbidities, secondary conditions, and potential complications. Counsels patients regarding treatment risks and benefits, outcomes, and prognosis. Adjusts management appropriate to the care setting.	Evaluates and appropriately applies emerging treatments in individual patients. Critically evaluates emerging treatments for efficacy and scientific validity.
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Comments:

Not yet achieved Level 1 ⬭

PC5 - Patient Care – Optometric Vision Rehabilitation Management of Individuals with Brain Injury				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Prescribes commonly used optical, prism, tint and adaptive devices.	Prescribes common rehabilitation therapies by discipline, based on visual performance, visual rehabilitation, neuromuscular re-education, or sensorimotor reintegration.	Works with patient and team to establish short- and long-term rehabilitation goals. Evaluates and adjusts basic rehabilitation treatment plans to tailor to short- and long-term patient-specific rehabilitation goals. Titrates required maintenance therapy for patient at end of care plan.	Provides detailed complex therapy prescription for constellation of conditions. Recommends assistive technologies and mobility devices, in partnership with the inter-professional team. Guides rehabilitation therapists on application of therapy.	Serves as a resource to physiatrists, therapists, and other health care professionals for problem- solving for unusual clinical and functional challenges, and is an expert at performing vision rehabilitation therapy Serves as an expert resource to other stakeholders (e.g., insurance companies) for the appropriateness of durable medical equipment and assistive technologies.
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Comments:

Not yet achieved Level 1 ⬭

MK1 - Medical Knowledge –Traumatic and Non-traumatic Brain Injury including:

- **Epidemiology and etiology**
- **Anatomy and pathophysiology**
- **Secondary conditions and complications**
- **Therapeutic and diagnostic options**

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates competency in ocular disease. Describes basic brain anatomy and the effects of insult to specific brain regions. Demonstrates basic knowledge of common brain injuries. Describes comorbidities and complications of brain injury.	Demonstrates knowledge of pathophysiology, risk factors, secondary conditions, treatment options, and complications across a spectrum of impairments. Demonstrates knowledge of different levels of consciousness after a brain injury. Demonstrates knowledge of neuroanatomy, neurophysiology, and the specific effects of insult to brain regions.	Describes prevention and management of secondary conditions and complications, including expected effects, side effects, and contraindications of treatment. Demonstrates knowledge of the continuum of brain injury care. Demonstrates knowledge of the objective measures for evaluating visual system function after brain injury.	Demonstrates the knowledge required to successfully diagnose and treat complex brain injury conditions and complications. Delineates a brain injury vision rehabilitation, specific health maintenance, and management program across the lifespan. Demonstrates knowledge of the key prognostic indicators in different levels of consciousness.	Serves as an expert resource to health care professionals regarding brain injury.

Comments:

Not yet achieved Level 1

MK2 - Medical Knowledge – Functional Outcomes and Assessment of Brain Injury Severity				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Demonstrates basic knowledge of optometric and other functional impairment associated with brain injury.	Demonstrates advanced knowledge of optometric and functional impairment associated with brain injury. Demonstrates knowledge of commonly used assessment tools in brain injury medicine. Demonstrates knowledge of functional outcome and prognosis, based on impairment.	Demonstrates knowledge of appropriate use and interpretation of assessment tools. Integrates knowledge of functional goals and prognosis into an individualized treatment plan.	Demonstrates knowledge of limitations of assessment tools. Demonstrates knowledge of controversial evidence based, emerging evaluations, and interventions for optometric and visual performance proficiency.	Serves as an expert resource regarding optometric and functional outcomes and interventions in brain injury.
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Comments:

Not yet achieved Level 1 ⬭

SBP1 - Systems-based Practice – Systems Thinking, including Cost- and Risk-effective Practice				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Describes basic cost and risk implications of care.	Describes cost- and risk- benefit ratios in patient care.	Makes clinical decisions that balance cost- and risk- benefit ratios.	Consistently makes clinical decisions that balance cost- and risk-benefit ratios.	Engages in scholarly ac-tivity regarding cost- and risk-effective practice in brain injury health care delivery.

Comments: Not yet achieved Level 1

SBP2 - Systems-based Practice – Work In Inter-professional Teams to Enhance Patient Safety and Patient Care				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Identifies and reports errors and near-misses.	Describes team members' roles in maintaining patient safety. Understands the role of the inter-professional care team for patients with brain injury.	Describes potential sources of system failure in clinical care such as minor, major, and sentinel events. Participates in the inter-professional care team for patients with brain injury.	Participates in a team-based approach to medical error analysis. Demonstrates knowledge of the institutional and national quality measures used by members of the inter-professional care team.	Engages in scholarly activity regarding error analysis and patient safety in brain injury health care delivery. Leads an inter-professional care team for patients with brain injury.

Comments: Not yet achieved Level 1

SBP3 - Systems-based Practice – Coordination and Transitions in Care				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Describes and differentiates between the various settings and systems of care.	Coordinates care within health care systems (e.g., inpatient, outpatient, consultative). Demonstrates knowledge of commonly-used community resources and governmental programs available that provide support and services (e.g., Supplemental Security Income [SSI], Department of Veteran Affairs [VA], vocational rehabilitation). Demonstrates knowledge of national and community-based advocacy groups relevant to brain injury. Attends multi-disciplinary care and management meetings.	Demonstrates knowledge of eligibility criteria and mechanisms to access commonly-used community and governmental programs. Engages in consultations and provides appropriate referrals to facilitate effective, safe, well-coordinated, patient- centered care, within and across health care systems. Participates actively and meaningfully in multi-disciplinary care and management meetings.	Efficiently manages and coordinates safe and effective patient transitions between various settings. Demonstrates knowledge of regulatory compliance, including accurate coding and billing. Organizes appeals for coverage, and advocates for patients in complex situations.	Serves as an expert resource in care coordination and advocacy for improved systems of care. Actively participates in national and community-based advocacy groups relevant to brain injury.

Comments: Not yet achieved Level 1

PBL1 - Practice-based Learning and Improvement – Self-directed Learning

- **Identify strengths, deficiencies, and limits in one's knowledge and expertise**
- **Set learning and improvement goals**
- **Identify and perform appropriate learning activities**
- **Use information technology to optimize learning**

Level 1	Level 2	Level 3	Level 4	Level 5
Acknowledges gaps in knowledge and expertise in brain injury medicine.	Elicits feedback from other members of the Inter-professional team. Participates in educational activities, such as seminars, lectures, and journal club discussions.	Develops an appropriate learning plan based upon clinical experience and feedback. Prepares and presents research posters. Participates in grand rounds. Prepares and presents continuing education lectures on brain injury.	Completes an appropriate learning plan based upon clinical experience and feedback. Contributes in the development of research papers.	Engages in scholarly activity regarding practice-based learning and improvement in brain injury health care delivery.

Comments: Not yet achieved Level 1

PBL2 - Practice-based Learning and Improvement – Location, Appraisal, and Assimilation of Evidence from Scientific Studies related to the Patient's Health Problems

Level 1	Level 2	Level 3	Level 4	Level 5
Uses information technology to search and access relevant medical information.	Uses scholarly articles and guidelines to answer patient care issues.	Critically evaluates scientific literature.	Incorporates appropriate evidence-based information into patient care. Understands the limits of evidence-based medicine in patient care.	Engages in scholarly activity regarding evidence-based care in brain injury health care delivery and evidence-based practice. Mentors others in brain injury optometric care.

Comments: Not yet achieved Level 1

P1 - Professionalism – Compassion, Integrity, Accountability, and Respect for Self and Others				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Demonstrates compassion, sensitivity, empathy, and responsiveness to patients and families. Demonstrates non-discriminatory behavior in all interactions, including with diverse and vulnerable populations. Consistently demonstrates professional behavior, including appropriate attire and timeliness.	Describes effects of sleep deprivation and substance abuse on a practitioner's performance. Demonstrates knowledge of appropriate steps to address impairment in self. Advocates for quality patient care and coordination of care.	Demonstrates compassionate practice of optometry, even in the context of disagreement with patient beliefs. Incorporates patients' sociocultural needs and beliefs into patient care. Demonstrates knowledge of appropriate steps to address impairment in colleagues.	Mentors others in the compassionate practice of optometry, even in the context of disagreement with patient beliefs. Mentors others in sensitivity and responsiveness to diverse and vulnerable populations.	Engages in scholarly activity regarding professionalism in brain injury health care delivery.
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Comments:			Not yet achieved Level 1 ⬭	

P2 - Professionalism – Medical Ethics				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Describes basic ethical principles.	Determines presence of ethical issues in practice.	Analyzes and manages ethical issues in straightforward clinical situations.	Analyzes and manages ethical issues in complex clinical situations.	Demonstrates leadership and mentorship in applying ethical principles in brain injury health care settings.
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Comments:			Not yet achieved Level 1 ⬭	

IPCS1 - Interpersonal and Communication Skills – Relationship Development, Teamwork, and Managing Conflict				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Develops an empathic relationship with patients. Actively participates in team-based care.	Manages simple patient-/family-related conflicts. Engages patients in shared decision-making. Establishes compromise in areas of difference.	Manages conflict in complex situations. Uses easy-to-understand language in all phases of communication.	Manages conflict across systems of care. Leads team-based patient care activities.	Engages in scholarly activity regarding teamwork and conflict management.

Comments:

Not yet achieved Level 1

IPCS2 - Interpersonal and Communication Skills – Information Sharing, Gathering, and Technology				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Completes documentation in a timely fashion	Educates patients about diseases and their management, including risks and benefits of treatment options Completes all documentation accurately, including use of electronic health records (EHR), to promote patient safety Participates in family and team meetings addressing continuum of care for patients with brain injury Demonstrates knowledge of adaptive communication techniques for use with patients with brain injury	Effectively communicates the results of a brain injury consultation in a timely manner Effectively gathers information from collateral sources Demonstrates synthesis, formulation, and thought process in documentation Demonstrates knowledge of adaptive communication techniques with patients with brain injury and associated perceptual deficits.	Effectively and ethically uses all forms of communication Mentors colleagues in timely, accurate, and efficient documentation Leads family and team meetings, addressing continuum of care for patients with brain injury	Develops patient and caregiver education regarding brain injury health care delivery Proactively engages in public outreach related to brain injury Engages in scholarly activity regarding interpersonal communication in brain injury health care delivery
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Comments: Not yet achieved Level 1 ⬭

References:

1. The Brain Injury Medicine Milestone Project: A Joint Initiative of The Accreditation Council for Graduate Medical Education, The American Board of Physical Medicine and Rehabilitation, and The American Board of Psychiatry and Neurology. July 2015. https://www.acgme.org/Portals/0/PDFs/Milestones/BrainInjuryMedicineMilestones.pdf?ver=2015-11-06-120534-217. Accessed 15Feb20.