



# MAC Dev Requirements

## Professional Development Activities and their Values Approved by the NBCR/NA



# MAC Dev Requirements

## What is MAC Dev credit?

### Any activity that:

- enhances the nurse anesthetist's foundational knowledge of nurse anesthesia practice
- supports patient safety
- fosters the nurse anesthetist's understanding of the broader healthcare environment

### MAC Dev activities:

- do **NOT** require prior approval
- are **NOT** required to have an assessment
- are **NOT** required to undergo a non-prior approval process.

Nurse anesthetists may select from any of the listed MAC Dev activity categories in the table below to claim credits.

## How many MAC Dev credits are required?

- 40 credits of MAC Dev activity are required for each four-year cycle. All activities that are reported must have occurred during the corresponding reporting program cycle.
- Any MAC Ed credits earned in excess of the 60 required (per four-year cycle) may be used to meet MAC Dev requirements in that same cycle where one MAC Ed credit = one MAC Dev credit. However, MAC Dev credits cannot be used towards meeting MAC Ed requirements.
- MAC Dev values do not necessarily relate directly to time expended on the activity. Each activity or category of activity has a predetermined MAC Dev reporting value.

## Retain Records

- It is important to retain adequate evidence of your participation to substantiate your involvement in all MAC Dev activities. These records should be retained by each CRNA (**not sent to the NBCRNA**) for one year beyond the end of the period in which you use the credits for continued certification.
- The AANA provides a location for all members to upload and store any supporting documentation. For more information about this service, please contact the AANA.
- If audited by the NBCRNA, individuals will be required to submit the documentation listed in the fourth column.

## Things to know:

- If a type of activity is of interest to you, and you are concerned it does not/would not fit under any of the categories on this table, you can contact the NBCRNA at [support@nbcrna.com](mailto:support@nbcrna.com) and request more information.
- As new topics emerge, they will be added to this table and the date at the top will be revised.
- No single activity can be used for (duplicate) credit in more than one category.

The following is a list of current MAC Dev activities. However, the listings and the examples within this table should not be considered all-inclusive. Click on an activity to view additional information. AANA members can record their MAC Dev activities in the [MAC Dev portal](#) located on the AANA website.

- [MAC Ed: Assessed Continuing Education \(CE\)](#)
- [Non-Prior Approved and/or Non- Assessed CE](#)
- [Academic Credits](#)
- [Presentations](#)
- [Publication – Book](#)
- [Publication – Chapter](#)
- [Publication – Peer Reviewed](#)
- [Publication – Grant](#)
- [Teaching in the Clinical Setting](#)
- [Clinical Administrative](#)
- [Subspecialty or Austere Clinical Practice Role](#)
- [Integration of a New Clinical Practice Technique](#)
- [Service – Seated or Elected Activity](#)
- [Service – Mission or Diplomacy Activity](#)
- [Service – Advocacy or Public Relations Activity](#)
- [Research or Practice Inquiry Project – Member of Committee or Team](#)
- [Research or Practice Inquiry Project – Principal Investigator or Individual Completion of Dissertation, Thesis or DNP/DNAP Project](#)
- [Life Support Courses](#)
- [Quality Improvement Initiatives](#)
- [Discovery](#)
- [Peer Reviewer](#)
- [Participation in an Accreditation Review](#)
- [Podcast Participation \(Educational – Non-Assessed\)](#)

Activity Category	Description	Value	Required Audit Documentation and/or Information
MAC Ed: Assessed Continuing Education (CE)	<p>Any assessed CEs that meet the criteria for MAC Ed requirements (i.e., must be prior approved, include an assessment, and be relevant to anesthesia care).</p> <p>May only be reported as MAC Dev after all MAC Ed requirements have been met. A single CE offering fitting this description may be reported only once in a cycle. Repeated claims for the same CE course are not allowed.</p>	1 CE = 1 credit	<ul style="list-style-type: none"> <li>• Program provider</li> <li>• Program name</li> <li>• Number of CEs awarded</li> <li>• Certificate of attendance or completion</li> </ul>
Non-Prior Approved and/or Non- Assessed CE	<p>CEs that have not been prior-approved and/or are not assessed may be counted as MAC Dev. CEs fitting this description such as hospital-required or state board of nursing-required CEs will qualify for MAC Dev.</p> <p>Other examples of content which, if not Prior Approved or Assessed, could qualify for MAC Dev credit include: Grand Rounds presentations, departmental Morbidity &amp; Mortality (M &amp; M) meetings (with presentation, clinical case review &amp; discussion), anesthesia-related podcasts, and/or Journal Club.</p> <p>A single CE offering fitting this description may be reported only once in a cycle. Repeated claims for the same CE course are not allowed.</p>	60 minutes or 1 CE = 1 credit	<ul style="list-style-type: none"> <li>• Program provider</li> <li>• Program name</li> <li>• Number of CEs or number of contact hours awarded</li> <li>• Certificate of attendance or completion</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Academic Credits	<p>Must be delivered by an institution that is accredited by an agency recognized by the US Department of Education.</p> <p>Must have received a minimum grade of "C" or a "pass" on a pass/fail scale. MAC Dev value is calculated based on the number of academic credit hours earned. A course may be reported only once in a cycle.</p> <p>At the nurse anesthetist's discretion, academic course credits may be reported as MAC Ed credit provided the AANA has reviewed and granted approval for the course.</p>	<p>1 credit academic course = 3 credits</p> <p>2 credit academic course = 6 credits</p> <p>3 credit academic course = 9 credits</p>	<ul style="list-style-type: none"> <li>• Course syllabus that includes a course description and the method(s) of evaluation used for the course</li> <li>• Institution transcript showing academic institution, grade and number of academic credits earned</li> </ul>
Presentations	<p>Content development for educational purposes (e.g., didactic/clinical faculty; journal clubs; seminars; M&amp;M conferences; CE activities).</p> <p>Presentations on a given topic may be counted up to four times in a given cycle, provided that the content has been updated prior to each delivery.</p>	<p>1 hour of delivered presentation = 3 credits</p>	<ul style="list-style-type: none"> <li>• Presentation materials (e.g., PowerPoint, handouts)</li> <li>• Presentation date and location Length of presentation description of the presentation audience</li> <li>• Contact email of person organizing presentation and who can verify presentation was delivered (e.g., State association director, nurse anesthesia program administrator, chief nurse anesthetist, CE provider program director)</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Publication – Book	<p>Author (any position) or editor (any position) of any anesthesia- or healthcare-related book. Credits may be claimed when the book is published. The same book may not be reported twice in the same cycle.</p>	1 book = 10 credits	<ul style="list-style-type: none"> <li>• Book title page listing authors(s) or editors(s)</li> <li>• Book page showing publisher and year of publication</li> </ul>
Publication – Chapter	<p>Author (any position) or editor (any position) of any anesthesia- or healthcare-related book chapter.</p> <p>The same chapter may not be reported twice in the same cycle. Credits may be claimed when the chapter is published.</p>	1 chapter = 7 credits	<ul style="list-style-type: none"> <li>• Book title page showing author(s) or editor(s)</li> <li>• Chapter title page showing author(s) or editor(s)</li> <li>• Book page showing publisher and year of publication</li> </ul>
Publication – Peer Reviewed	<p>Any peer-reviewed publication for which the nurse anesthetist is the author (any position) or editor (any position). The same peer-reviewed publication may not be reported twice in the same cycle.</p> <p>Credits may be claimed when the article is published.</p>	1 article = 5 credits	<ul style="list-style-type: none"> <li>• Article citation and copy of published article</li> </ul>
Publication – Grant	<p>Any grant that the nurse anesthetist is the primary grant writer. The same grant publication may not be reported twice in the same cycle. Credits may be claimed when the grant is submitted.</p>	1 grant = 5 credits	<ul style="list-style-type: none"> <li>• Grant documents that show individual with primary grant responsibility and a description of study or project</li> <li>• Date of grant submission</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Teaching in the Clinical Setting	<p>Any role that involves direct clinical supervision or teaching behaviors for learners of any level or type.</p> <p>As examples, this includes, but is not limited to, student nurse anesthetists, medical students, or registered nurses gaining airway management experience.</p>	1 day = 1 credit	<ul style="list-style-type: none"> <li>• Date(s) of activity(s)</li> <li>• Learner category (e.g., nurse anesthesia student, RN, medical student)</li> <li>• Contact email for individual capable of verification (e.g., nurse anesthesia program administrator, chief nurse anesthetist)</li> </ul>
Clinical Administrative	Clinical administrative role similar to a chief nurse anesthetist, student clinical coordinator, or subspecialty leader.	1 year = 5 credits	<ul style="list-style-type: none"> <li>• Contact email for employer or supervisor capable of verifying role and duration in role</li> </ul>
Subspecialty or Austere Clinical Practice Role	Subspecialty clinical practice roles and/or clinical practice in an austere setting, which are beyond routinely assigned shifts, call schedules or practice environments (e.g., highly specialized and/or atypical clinical environment, liver transplant call team, practice in nonsurgical pain management, military deployment in combat or combat support role).	1 year in subspecialty clinical practice role or one engagement in an austere clinical practice environment = 5 credits	<ul style="list-style-type: none"> <li>• Contact email for employer or supervisor capable of verifying role and duration in role</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Integration of a New Clinical Practice Technique	Integration of a new clinical practice technique that has become available within the past five years and was not included in the nurse anesthetist's primary nurse anesthesia education.	Integration of one new clinical practice technique = 3 credits	<ul style="list-style-type: none"> <li>• Contact email for employer or supervisor capable of verifying integration of new practice technique</li> <li>• Evidence of continuing education specific to new practice technique</li> <li>• List of reference material reviewed prior to use of the new technique</li> <li>• List of return demonstrations prior to use with patients</li> <li>• Number of cases performed using the new technique</li> <li>• Written description of how the new technique will be incorporated into the nurse anesthetist's practice</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Service – Seated or Elected Activity	<p>International, national, state, or facility/institution volunteer or elected service that may include, but is not limited to:</p> <ul style="list-style-type: none"> <li>• board of directors;</li> <li>• committees;</li> <li>• editorial boards;</li> <li>• review boards;</li> <li>• task forces.</li> </ul> <p>Examples of activities that would be classified using this category:</p> <ul style="list-style-type: none"> <li>• serve on the AANA, COA, NBCRNA, or state nurse anesthetist Board of Directors;</li> <li>• serve on an AANA, COA, NBCRNA, or state nurse anesthetist committee or taskforce;</li> <li>• serve on a university or college committee (e.g., admissions, program evaluation, university senate);</li> <li>• serve on a hospital committee (e.g., infection control, quality improvement, risk management)</li> </ul>	One year of service for seated/elected roles = 5 credits	<ul style="list-style-type: none"> <li>• Published material to serve as supporting evidence of role (e.g., copy of committee listing or letter of selection, email/letter from chief nurse anesthetist indicating seated to QI committee)</li> <li>• Contact email for employer/individual capable of verifying role and duration in position</li> </ul>
Service – Mission or Diplomacy Activity	A medical mission or diplomacy (not public relations) activity.	One mission or Diplomacy activity = 5 credits	<ul style="list-style-type: none"> <li>• Letter from group organizing the mission describing your role in healthcare related activities</li> </ul>
Service – Advocacy or Public Relations Activity	Advocacy or public relations activities that educate members of the public regarding the nurse anesthesia specialty. As examples, a state legislative day or career day.	One advocacy or public relations activity = 1 credit	<ul style="list-style-type: none"> <li>• Copy of published material listing activity date and location</li> <li>• Contact email for individual capable of verifying participation in activity</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Research or Practice Inquiry Project – Member of Committee or Team	Any project where the nurse anesthetist serves in one of the following roles: <ul style="list-style-type: none"> <li>• Content reviewer on a dissertation, thesis, or DNP/DNAP scholarly project committee</li> <li>• Member of research team beyond regular scope of role</li> </ul>	One project = 5 credits	<ul style="list-style-type: none"> <li>• Email or letter from employer or supervisor indicating project</li> <li>• Contact email for individual capable of verifying project</li> </ul>
Research or Practice Inquiry Project - Principal Investigator or Individual Completion of Dissertation, Thesis or DNP/DNAP Project	Any project where the nurse anesthetist serves in one of the following roles: <ul style="list-style-type: none"> <li>• Principal investigator</li> <li>• Individual completion of dissertation, thesis, or DNP/DNAP practice inquiry project in the year completed</li> </ul>	One project = 10 credits	<ul style="list-style-type: none"> <li>• Title page of dissertation/thesis/DNP or DNAP practice inquiry project indicating defense date</li> <li>• IRB page listing individual as principal investigator and title of research</li> <li>• Contact email for individual capable of verifying completion</li> </ul>
Life Support Courses	Any initial or renewal life support course may be reported. Total of 20 credits may be claimed for life support courses as MAC Dev or MAC Ed (if meets MAC Ed criteria).	60 minutes or 1 CE = 1 credit	<ul style="list-style-type: none"> <li>• Program provider</li> <li>• Program name</li> <li>• Number of CEs awarded or hourly agenda</li> <li>• Certificate of attendance</li> </ul>
Quality Improvement Initiatives	Participate in Quality Improvement (QI) initiatives, or QI team efforts designed to improve health care and/or patient safety.	One initiative (or 1 year of service) = 5 credits	<ul style="list-style-type: none"> <li>• Description of QI objectives</li> <li>• Documentation of QI project or published materials</li> <li>• Description of patient outcomes or process improvement</li> <li>• Contact e-mail of individual capable of verifying your involvement</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Discovery	Contributions of time and expertise that result in a tangible product that positively influences (or has the potential to positively influence) nurse anesthesia or the greater health care environment.	Each completed tangible product = 10 credits	<ul style="list-style-type: none"> <li>• Description of the product that has been developed</li> <li>• Identification how the product positively influences nurse anesthesia or greater health care</li> <li>• Information demonstrating the individual's role or ownership of the intellectual property/devise/product</li> </ul>
Peer Reviewer	<p>Formal peer review of scholarly, clinical, educational, quality improvement, or patient safety-related submissions relevant to nurse anesthesia, advanced practice nursing, healthcare education, or health systems.</p> <p>Peer review activities may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Manuscripts submitted to peer-reviewed journals</li> <li>• Abstracts, posters, or podium presentations</li> <li>• Educational or assessment materials</li> <li>• Quality improvement or patient safety submissions</li> </ul> <p>Activities must be conducted outside of routine employment responsibilities.</p>	<p>1 completed peer review = 2 MAC Dev credits</p> <p>Maximum of 10 credits per four-year cycle</p>	<ul style="list-style-type: none"> <li>• Name of journal, organization, or sponsoring body</li> <li>• General description of material reviewed (title or topic; may be redacted if confidential)</li> <li>• Date(s) the review was completed</li> <li>• Confirmation of reviewer role (e.g., email confirmation, reviewer acknowledgment letter, submission portal screenshot)</li> <li>• Contact email for an individual or organization capable of verifying participation</li> </ul>

Activity Category	Description	Value	Required Audit Documentation and/or Information
Participation in an Accreditation Review	<p>Active participation as a reviewer, evaluator, site visitor, or committee member in a formal accreditation or reaccreditation review process for healthcare education programs, clinical training programs, or healthcare organizations.</p> <p>This includes participation on behalf of a recognized accrediting or oversight body and involves substantive evaluation, reporting, or recommendation responsibilities.</p> <p>Routine internal quality reviews conducted solely as part of one's employment responsibilities do not qualify.</p>	<p>One completed accreditation review engagement = 5 MAC Dev credits</p> <p>Maximum of 10 credits per four-year cycle</p>	<ul style="list-style-type: none"> <li>Name of accrediting or oversight body</li> <li>Program, institution, or entity reviewed (may be redacted if confidentiality applies)</li> <li>Date(s) of participation</li> <li>Description of reviewer role and responsibilities</li> <li>Confirmation of participation (e.g., appointment letter, completion letter, email confirmation)</li> <li>Contact email for accrediting body or individual capable of verification</li> </ul>
Podcast Participation (Educational – Non-Assessed)	<p>Participation in anesthesia-, healthcare-, or patient safety-related podcasts that contribute to professional knowledge, public education, or understanding of the broader healthcare environment.</p> <p>Qualifying activities may include:</p> <ul style="list-style-type: none"> <li>Hosting or co-hosting an educational podcast</li> <li>Serving as an invited guest speaker on an educational podcast</li> <li>Developing original podcast content focused on clinical practice, education, quality improvement, leadership, policy, or professional issues relevant to nurse anesthesia or healthcare</li> </ul> <p>Podcast activities must be educational in nature and not promotional-only content.</p>	<p>Podcast host or co-host: 1 published episode = 2 credits</p> <p>Podcast guest participation: 1 published episode = 1 credit</p> <p>Maximum of 10 credits per four-year cycle under this category.</p>	<ul style="list-style-type: none"> <li>Podcast title and episode title</li> <li>Episode publication date</li> <li>Description of episode topic and educational relevance</li> <li>Confirmation of role (host, co-host, or guest)</li> <li>Link to the published episode or screenshot confirming publication</li> <li>Contact email for individual or organization capable of verification</li> </ul>