### Requirement #: I.B.1.a).(1); I.E.2

**Requirement Revision (significant change only):**

Both program directors should together closely monitor the relationship between residency and fellowship education. *(Detail)*

There must be close monitoring of the interface between residency and fellowship education. It is imperative that orthopaedic fellowship education not interfere with the education of residents. Lines of responsibility for the orthopaedic resident and the fellow must be clearly defined. In addition, the Fellows should maintain a close working relationship with orthopaedic residents and other fellows in orthopaedic surgery and in other disciplines, when present. *(Core)*

1. **Describe the Review Committee’s rationale for this revision:**
   - This is not a new requirement. It replaces the deleted wording in PR I.E.2 that required close monitoring of the interface between residency and fellowship education.

2. **How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?**
   - n/a

3. **How will the proposed requirement or revision impact continuity of patient care?**
   - n/a

4. **Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?**
   - n/a

5. **How will the proposed revision impact other accredited programs?**
   - n/a

### Requirement #: II.A.2.a)-II.A.2.b)

**Requirement Revision (significant change only):**

The program director of a program with fewer than five fellows must be provided with the salary support required to devote 10 percent FTE (four hours per week) of non-clinical time to the administration of the program. *(Core)*

The program director of a program with five or more fellows must be provided with the salary support required to devote 20 percent FTE (eight hours per week) of non-clinical time to the administration of the program. *(Core)*

1. **Describe the Review Committee’s rationale for this revision:**
The Review Committee attempted to make a realistic determination of the time needed by program directors for administration of the program balanced by the goal of not creating a burden that would adversely affect clinical and teaching time.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? This will help to ensure timely completion of the administrative needs of the program.

3. How will the proposed requirement or revision impact continuity of patient care? n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?

   For programs that currently provide no protected time, this may create the need for additional funding support. The Committee reviewed the approved complement for the currently-accredited programs and noted that only two of 24 are at or above five fellows. Therefore, most program directors will require support for 10 percent FTE of non-clinical time for administration of the program.

5. How will the proposed revision impact other accredited programs? n/a

Requirement #: II.A.3.a).(1)-II.A.3.a).(1).(d)

Requirement Revision (significant change only):

Prior to appointment, the program director must demonstrate the following:

- completion of an adult reconstructive orthopaedic surgery fellowship; (Core)
- at least three years of clinical practice experience in adult reconstructive orthopaedic surgery; (Core)
- at least two years as an associate program director or three years as a faculty member in an ACGME- or AOA-accredited orthopaedic surgery residency or an adult reconstructive orthopaedic surgery fellowship program; and, (Core)
- evidence of periodic updates of knowledge and skills to discharge the roles and responsibilities for teaching, supervision, and formal evaluation of fellows. (Core)

1. Describe the Review Committee’s rationale for this revision:

   These requirements are intended to ensure that the program director is prepared as both an educator and experienced clinician in the subspecialty to mentor both faculty members and fellows, act as a role model, and discharge all administrative functions needed for an ACGME-accredited program.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
The Review Committee believes that strong role models and mentorship are essential for the education of orthopaedic surgeon subspecialists who are prepared to provide safe and high quality patient care.

3. How will the proposed requirement or revision impact continuity of patient care?
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   Some institutions that have no in-house options for faculty development in education-related topics [PR II.A.3.a.(1).(d)] may need to develop these or provide time and/or resources for the program director to periodically access such resources outside of the institution.

5. How will the proposed revision impact other accredited programs?
   n/a

Requirement #: II.A.3.b).(1)

Requirement Revision (significant change only):

All program directors appointed after the effective date of these requirements must have current ABOS or AOBOS certification in orthopaedic surgery. (Core)

1. Describe the Review Committee’s rationale for this revision:
   The Review Committee wishes to communicate that no current program director will be disqualified by the new requirements for program director qualifications. However, because the Committee believes that certification is one important objective metric for future preparation as a program director and there is no certification for this subspecialty, all newly appointed program directors need to have achieved certification in the core specialty of orthopaedic surgery prior to appointment as a fellowship program director.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Board certification is one important metric for highly competent, up-to-date surgeons who operate with safety and quality in mind. Therefore board-certified orthopaedic surgeons are better prepared to serve as role models and mentors for fellows and provide high quality, safe patient care.

3. How will the proposed requirement or revision impact continuity of patient care?
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   n/a

5. How will the proposed revision impact other accredited programs?
   n/a
### Requirement #: II.B.3.b).(1).(a)

**Requirement Revision (significant change only):**

Physician faculty members who are orthopaedic surgeons must have current ABOS or AOBOS certification in orthopaedic surgery or be on a pathway towards achieving such certification. *(Core)*

1. **Describe the Review Committee’s rationale for this revision:**
   - The Committee believes that board certification is one important and objective metric for preparation of faculty to supervise and mentor fellow education.

2. **How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?**
   - Board certification is one important metric for highly competent, up-to-date surgeons who operate with safety and quality in mind. Therefore board-certified orthopaedic surgeons are better prepared to serve as role models and mentors for fellows and provide high quality, safe patient care. This requirement communicates the expectation that orthopaedic surgeon faculty members should be actively seeking board certification.

3. **How will the proposed requirement or revision impact continuity of patient care?**
   - n/a

4. **Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?**
   - Institutions that have not previously required faculty members to be board certified or be tracking towards board certification may need to add faculty members. At this time, the Review Committee is not aware of any program that is deficient in this area.

5. **How will the proposed revision impact other accredited programs?**
   - n/a

### Requirement #: II.B.4.c)

**Requirement Revision (significant change only):**

There must be at least two core physician faculty members who are orthopaedic surgeons with experience in adult reconstruction, including the program director, who have ABOS or AOBOS certification in orthopaedic surgery, have completed a fellowship in adult reconstructive orthopaedic surgery, and are actively involved in the instruction, education and supervision of fellows during the 12 months of accredited education. *(Core)*

1. **Describe the Review Committee’s rationale for this revision:**
   - This requirement will ensure there are at least two board-certified core faculty members who have completed a fellowship in this subspecialty and who will be available as role models and mentors for fellows.

2. **How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?**
Faculty members who have completed a fellowship program in this subspecialty will have a better understanding of the requirements and should be prepared to provide the expected supervision and mentoring. At least two faculty members with experience in the subspecialty has been a long-standing requirement. These two faculty members will now need to have completed the board certification process. Programs may have additional faculty members who are actively seeking board certification.

3. How will the proposed requirement or revision impact continuity of patient care? 
n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? 
Institutions that have not previously required at least one faculty member in addition to the program director to have completed a fellowship in this subspecialty and attained board certification will need to add faculty members.

5. How will the proposed revision impact other accredited programs? 
n/a

Requirement #: IV.B.1.b).(2).(a)-IV.B.1.b).(2).(b).(ii).(h)

Requirement Revision (significant change only):

Fellows must demonstrate the ability to perform skillfully the competence in performing non-operative procedures required for practice of the subspecialty adult and reconstructive orthopaedic surgery. (Core)

Fellows must demonstrate competent operative skills competence in performing reconstructive orthopaedic surgery operative procedures, including soft-tissue procedures, osteotomy, bone grafting, excisional arthroplasty, arthrodesis, and prosthetic arthroplasty. (Core)

For programs focusing on hip and knee this must include: (Core)

- primary total knee arthroplasty; (Core)
- revision total knee arthroplasty; (Core)
- unicompartmental knee arthroplasty; (Core)
- removal of prosthesis due to infection (hip or knee); (Core)
- primary total hip arthroplasty; (Core)
- revision total hip arthroplasty; (Core)
- knee osteotomy; and, (Core)
- hip osteotomy. (Core)
For programs focusing on shoulder, elbow, and upper limb this must include: (Core)

primary shoulder arthroplasty; (Core)
revision shoulder arthroplasty; (Core)
rotator cuff repair (open and arthroscopic); (Core)
bony procedures for shoulder instability; (Core)
soft tissue procedures for shoulder instability; (Core)
open acromioplasty; (Core)
other upper limb arthroscopic procedures; and, (Core)
shoulder arthrodesis. (Core)

1. Describe the Review Committee’s rationale for this revision:
These new requirements reflect the defined case categories for this subspecialty that were published in 2015 and incorporated into the Case Log System. Program Case Log reports are reviewed annually as one important indicator of the quality of each program’s educational curriculum.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
Subspecialty-specific defined case categories help to ensure that all ACGME-accredited programs graduate subspecialty surgeons who have had experience in those defined procedures and are better prepared to provide safe, high quality patient care in those areas.

3. How will the proposed requirement or revision impact continuity of patient care?
n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
Because these defined case categories have been used for annual program reviews since 2016, programs have received feedback when needed on any noted areas for improvement. On investigation, some programs may determine that resources are deficient. More often, programs report that fellows are deficient in recording cases. The incorporation of the defined case categories as requirements is expected to reinforce the importance of fellows recording all of their cases in the ACGME Case Log System.

5. How will the proposed revision impact other accredited programs?

n/a

Requirement #: IV.B.1.c).(1).(d)-IV.B.1.c).(1).(d).(ii).(c)
Requirement Revision (significant change only):
[Fellows must demonstrate competence in their knowledge of:

major disorders and conditions. (Core)

For programs focusing on hip and knee this must include: (Core)

knee arthritis; (Core)

knee revision; (Core)

hip arthritis; and, (Core)

hip revision. (Core)

For programs focusing on shoulder, elbow, and upper limb this must include: (Core)

shoulder arthritis; (Core)

shoulder revision; and, (Core)

elbow arthritis. (Core)

1. Describe the Review Committee’s rationale for this revision:
   These requirements reflect the subspecialty milestones for medical knowledge that have been in use since 2015. The Milestones were developed by subspecialists outside of the Review Committee and represent their best thinking regarding the essential areas of knowledge fellows should develop during their fellowship.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   The addition of requirements connected to the milestone expectations will help to ensure these areas are included in the curriculum and reinforce the importance of monitoring each fellow’s progressive development of competence in these key areas.

3. How will the proposed requirement or revision impact continuity of patient care?
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   n/a

5. How will the proposed revision impact other accredited programs?
   n/a

Requirement #: IV.C.1.a)

Requirement Revision (significant change only):
Each fellow must continue to provide care for his or her post-operative patients until discharge or until the patients’ post-operative conditions are stable and only non-surgical issues remain.

(Core)

1. Describe the Review Committee’s rationale for this revision:
   This requirement will reinforce the importance of ensuring that all fellows regularly participate in comprehensive patient management.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   The Review Committee believes that surgeons should manage their patients post-operatively and ensure that all surgical issues are appropriately addressed before handing responsibility for their patients to others to manage. This practice is associated with high quality patient care.

3. How will the proposed requirement or revision impact continuity of patient care?
   Fellows may increase the time they provide for post-operative patient care of some patients.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   n/a

5. How will the proposed revision impact other accredited programs?
   n/a

Requirement #: IV.C.2.a)

Requirement Revision (significant change only):

This must include instruction and experience in multimodal pain treatment, including non-narcotic pain medications and alternative pain reducing modalities. (Core)

1. Describe the Review Committee’s rationale for this revision:
   This requirement identifies expected instruction and experiences related to pain management.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   Surgical procedures cause pain, and fellows must learn a variety of methods for pain management that includes those not typically associated with addiction.

3. How will the proposed requirement or revision impact continuity of patient care?
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   n/a

5. How will the proposed revision impact other accredited programs?
Requirement #: IV.C.4.a)-IV.C.4.b)

Requirement Revision (significant change only):

The program must regularly hold scheduled and held subspecialty conferences with active participation of faculty members and fellows participation, including at least: (Core) [Moved from IV.C.5.c)]

one weekly teaching conference; (Detail)

one monthly morbidity and mortality conference; and, (Detail)

one monthly journal club in adult reconstructive orthopaedic surgery. (Detail)

Didactic activity should include the evaluation of practices that ensure and improve patient safety as well as instruction in established patient safety measures. (Core) [Moved from IV.C.5.d)]

1. Describe the Review Committee’s rationale for this revision:
   These requirements are intended to ensure that each program has a structured didactic curriculum. A subspecialty-specific teaching conference will reinforce development of required medical knowledge. Morbidity and mortality conferences will provide a formal venue for case-based learning related to patient safety and patient care quality. The journal club will help fellows to keep up with the latest advances in the subspecialty. The deleted requirement is redundant with other requirements related to patient safety.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   An expectation for a structured didactic curriculum will help to increase consistency in the education of fellows in ACGME-accredited programs. Fellows will have a formal venue for case-based learning related to patient safety and patient care quality.

3. How will the proposed requirement or revision impact continuity of patient care?
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   n/a

5. How will the proposed revision impact other accredited programs?
   n/a

Requirement #: IV.C.6

Requirement Revision (significant change only):

The fellow must keep a record of the diagnosis and procedure for each operation in which he
1. Describe the Review Committee’s rationale for this revision: This requirement clarifies that the record of procedures must be maintained by logging the cases in the ACGME Case Log System.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? A complete and accurate record of fellow cases will provide important information to the Review Committee on program quality.

3. How will the proposed requirement or revision impact continuity of patient care? n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? n/a

5. How will the proposed revision impact other accredited programs? n/a

Requirement #: IV.C.7

Requirement Revision (significant change only):

Programs should evaluate fellows within six weeks following entry into the program for expected entry-level skills so that additional education and training can be provided in a timely manner to address identified deficiencies. (Core)

1. Describe the Review Committee’s rationale for this revision: Because orthopaedic surgery fellowship programs are only 12 months in length, it is important to identify any deficiencies early so that sufficient time is available for these to be successfully addressed prior to initiating formal subspecialty education and training.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? Early identification and correction of deficiencies is a well-recognized educational principle that will lead to better educational outcomes.

3. How will the proposed requirement or revision impact continuity of patient care? n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? n/a

5. How will the proposed revision impact other accredited programs?
Requirement #: IV.D.1.b)(1)

Requirement Revision (significant change only):

Protected time for fellow research activities should be a minimum of two days per month, averaged over the 12-month program. (Detail)

1. Describe the Review Committee’s rationale for this revision:
   
   The requirement to provide protected time and facilities is not a new one (current PR IV.D.1.b)). The new requirement is intended to communicate a minimum expectation for such time to ensure that research activities are not minimized or overlooked. The requirement is worded to provide maximum flexibility to programs for scheduling this time. For example, time could be provided in one or more blocks of time, a day or half-days during some rotations, etc.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   
   Fellows may choose to focus on patient safety/patient care quality as research topics.

3. How will the proposed requirement or revision impact continuity of patient care?
   
   A research topic could be to study opportunities in the subspecialty to define and/or improve continuity of patient care.

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   
   n/a

5. How will the proposed revision impact other accredited programs?
   
   n/a

Requirement #: IV.D.2.a)

Requirement Revision (significant change only):

The members of the program faculty must demonstrate dissemination of scholarly activity through peer-reviewed publications, chapters and/or grant leadership. (Core)

1. Describe the Review Committee’s rationale for this revision:
   
   The Review Committee believes that faculty members must be role models for expected outcomes. Scholarly activity is an important fellow outcome and therefore it is important for faculty members to demonstrate scholarship, and through that activity provide opportunities for fellow involvement. The requirement is worded to not be overly prescriptive. That is, there is no minimum number or percent of the faculty specified, and the Committee reviews three-year aggregate reports rather than annual reports of faculty scholarly activity.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

n/a
The expectation for dissemination of scholarly activity by faculty members will help to ensure that faculty members serve as role models for fellows in this area.

3. How will the proposed requirement or revision impact continuity of patient care?  
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?  
   n/a

5. How will the proposed revision impact other accredited programs?  
   n/a

Requirement #: IV.D.3.b)-c)

Requirement Revision (significant change only):

Each fellow should demonstrate scholarship during the program through one or more of the following: peer-reviewed publications; abstracts; posters or presentations at international, national, or regional meetings; publication of book chapters; or lectures or formal presentations (such as grand rounds or case presentations).  

Fellows must learn to design, implement, and interpret research studies under supervision by qualified faculty members.  

1. Describe the Review Committee’s rationale for this revision:  
   The Review Committee wishes to communicate to all programs that at this time, the data collection methods for orthopaedic fellowship programs are very limited since publication of fellow scholarly activity most often occurs after the fellows graduate and so is not reported. Therefore, the most common (and acceptable) form of dissemination is presentations.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?  
   The expectation for dissemination of scholarly activity by fellows will provide the Review Committee an important indicator of program quality.

3. How will the proposed requirement or revision impact continuity of patient care?  
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?  
   n/a

5. How will the proposed revision impact other accredited programs?  
   n/a

Requirement #: IV.E.-IV.E.1
Requirement Revision (significant change only):

*Fellowship programs may assign fellows to engage in the independent practice of their core specialty during their fellowship program.*

[The Review Committee’s proposal to allow the independent practice option is part of the focused revision and is subject to public comment.]

*If programs permit their fellows to utilize the independent practice option, it must not exceed 20 percent of their time per week or 10 weeks of an academic year. (Core)*

1. Describe the Review Committee’s rationale for this revision:
   - The Review Committee agrees with the task force that developed this common program requirement: “This option is designed to enhance fellows’ maturation and competence in their core specialty. This enables fellows to occupy a dual role in the health system: as learners in their subspecialty, and as credentialed practitioners in their core specialty.”

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?
   - Fellows who are able to take advantage of this option will be able to maintain their core skills in orthopaedic surgery and advance their progressive autonomy.

3. How will the proposed requirement or revision impact continuity of patient care?
   - n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   - Since this is an optional requirement, programs that wish to offer it will need to work with their institutions to determine if additional resources are needed and can be provided.

5. How will the proposed revision impact other accredited programs?
   - Fellowship programs that use sites that are also used by orthopaedic surgery residency program(s) will need to carefully monitor fellow independent practice activities to ensure that residents’ access to cases is not negatively affected either in number or in the appropriate level of resident participation in cases.

Requirement #: V.A.1.a).(1)

Requirement Revision (significant change only):

[Common Program Requirement V.A.1.a) Faculty members must directly observe, evaluate, and frequently provide feedback on fellow performance during each rotation or similar educational assignment. (Core)]

This must include review of fellow cases logged in the ACGME Case Log System. (Core)

1. Describe the Review Committee’s rationale for this revision:
   - This requirement reinforces the need to ensure that fellows are regularly and accurately logging their cases.
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality?

   Timely faculty member feedback on surgical performance is an established educational principle correlated with better educational outcomes.

3. How will the proposed requirement or revision impact continuity of patient care?
   n/a

4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how?
   n/a

5. How will the proposed revision impact other accredited programs?
   n/a