

**Title: Maintaining high quality multidisciplinary pain medicine fellowship programs:
Part II: Innovations in clinical care workflow, clinical supervision, job satisfaction and
postgraduation mentorship for pain fellows during the Covid-19 pandemic**

Abbreviated title: Pain fellows' supervision and post-graduation impact

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Abstract

Background: Pain fellowship programs are facing unique challenges during the COVID-19 pandemic. Restrictions by state governments and the Centers for Disease Control and Prevention have resulted in a rapidly changing and evolving learning environment for today's fellows. Innovative solutions must be sought to maintain proper education and ensure the well-being of our trainees.

Methods: We assembled a panel of pain program directors who serve as officers/board members of the Association of Pain Program Directors, offering guidance and recommendations to pain fellowship directors nationwide. Panel members evaluate best available evidence and expert opinion on use of remote and virtual platforms in clinical care, adaptability to alterations in clinic and referral management, and provide guidance on post-graduate impact.

Conclusions: The country is in the midst of an unprecedented pandemic. The impact on pain management fellowships has been significant and will likely last for months, resulting in extraordinary challenges to the administration of pain fellowship programs and the education of our fellows. Several strategies will help address these challenges, including employing telehealth capabilities to continue clinical experiences, and providing trainees with opportunities to continue their professional growth beyond fellowship completion. Together, we can implement innovative solutions to overcome these challenges.

Key Words

COVID-19

Pandemic

Fellowship program

Pain Management

Telemedicine

Pain fellows' supervision and post-graduate impact

Introduction

The current COVID-19 pandemic has significantly impacted the health system across the nation. In particular, pain management clinical practices, whether academic or private, have been especially challenged. As social distancing occurs as well as the need to preserve personal protective equipment (PPE) for COVID-19 first responders, in-person visits to pain clinics have declined significantly during the pandemic.

Telehealth has emerged as a way for practitioners to continue providing care during these times. But it is essential for fellowship programs to understand the rules and regulations surrounding its use. Similarly, referrals patterns to pain management services have changed, as other clinical specialties have become equally challenged during the pandemic; as such, pain management programs must adapt to integrate these changes into their clinic workflow. As we navigate the current healthcare landscape, we know the pandemic will end eventually. It will be up to individual programs to develop effective structured plans to reintroduce staff and trainees into the clinical environment.

This article provides guidance on training programs and issues related to the use of telehealth, clinical staff management, and post-graduate-related matters. We hope to provide much-needed resources to maintain the quality of pain fellowship education during this unprecedented time.

Section I.

TELEHEALTH DELIVERY OF MEDICAL CARE AND ITS IMPACT ON PAIN FELLOWSHIPS

Telehealth services have been rapidly disseminated and implemented throughout the nation in response to COVID-19, and it is likely that the changes in telehealth regulations and reimbursement may persist beyond the initial response to the pandemic. As a result, this information in this section is relevant to program directors as they continue to refine and further implement telehealth services into fellowship training programs.

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Teleconferencing during the COVID-19 pandemic is an extremely useful way to provide educational content to trainees. Maintenance of clinical exposure for Pain Medicine fellows and residents on Pain Medicine rotations is recommended, if possible, at individual institutions. Because of restrictions surrounding direct patient contact at this time, one way to maintain clinical exposure is via telehealth conferences. Fortunately, as technology has improved, more institutions have adopted virtual delivery platforms. From the 1990s to the 21st century, the ability of health systems to provide and expand this service has increased and by 2012 approximately half of all hospital systems had active telemedicine programs [1]. These encounters can be performed in an array of settings, both inpatient and outpatient, using a variety of platforms.

The Centers for Medicare & Medicaid Services (CMS) and multiple private insurance carriers have agreed to expand access to telehealth services during the pandemic to enable continuation of care. Using an 1135 waiver, CMS expanded access to include a patient's location of residence. However, because specific state laws and regulations can also apply, individual state regulations need to be reviewed [2]. The requirements for telehealth visits include utilizing an interactive audio and/or video communications system that allows real-time exchange of information between the provider and patient or patient surrogate. The Department of Health and Human Services (HHS), which enforces Health Insurance Portability and Accountability Act (HIPAA) regulations, has relaxed many of the rules. HHS is exercising judgment in enforcing these restrictions during the pandemic [3]. Healthcare providers are empowered to use their professional judgment in utilizing telehealth services to treat patients exhibiting symptoms related to COVID-19 and patients requiring care for other medical conditions unrelated to the spread of the virus. In short, regulatory bodies are promoting social distancing to curb the viral spread while maintaining patient access to needed healthcare services.

An array of HIPAA compliant telecommunications applications are available to healthcare providers. These should be used, if possible, to maintain compliance and patient privacy. Popular applications with direct video and/or audio communications between provider and patient can be used without risk of HHS imposing penalties for noncompliance based on the good faith provision related to this public health emergency. However, "outward facing" communications

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platforms that can be posted to social media (e.g., Facebook Live, Twitch, and TikTok) should not be used given their overt violation of patient privacy standards [3].

Despite widespread availability of telehealth platforms at medical institutions over the past 30 years, performing clinical assessments and treatments via telehealth have not been widely adopted into residency and fellowship programs. However, in Fall 2019, ACGME suggested integrating telemedicine into internal medicine training as part of the Common Program Requirements. Proposed at the Association of Program Directors in Internal Medicine meeting, ACGME's Board of Directors (BOD) will review the proposal in the Spring of 2020 [4].

The concept of telehealth visits has yet to be formally discussed within the context of Pain Medicine fellowship training. Most telehealth programs focus on addressing rural-urban discrepancies to provide more specialized care to those distant from tertiary care centers. Telehealth encounters are effective in specialized care such as dermatology and psychiatry, where a reasonable amount of information can be gathered without the need for direct patient contact. Telehealth is incorporated into monitoring-type fields such as critical care medicine where remote providers can assess real-time information, including vital signs, ventilator settings, and lab values. The call for social distancing due to the COVID-19 pandemic has forced telemedicine into a larger spectrum of specialties and patient encounters.

Typically, institutions and training programs require telehealth certification prior to offering live video provider-to-patient services. Certification courses focus on proficiency in proper use of equipment and technology, clear and effective communications, adequate documentation, and understanding the delivery service within the scope of practice. Trainees should also understand that patients who require in-person examinations, recording of vital signs, use of diagnostic equipment, or necessitate procedures as part of their care are not appropriate for telehealth visits, and thus they should discuss how to best manage such patients with the supervising provider. Following a telemedicine visit, attending providers should share feedback regarding aspects of the trainee's engagement in the visit. Feedback should be directed both at the substance of providing patient care as well as telehealth specifics such as preparation/set up, technology utilization and troubleshooting, and communications between trainee and supervisor. Assessment

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checklists, shown in Figure 1, can be helpful in determining trainee competence and providing feedback.

Insert Figure 1

Outpatient Visits

Employing telehealth platforms in outpatient settings is useful in providing services to patients in need of treatment for their chronic pain and in maintaining clinical exposure for trainees. Pain Medicine divisions and fellowship programs should work with their institutions to determine suitable platforms to enable these communications, keeping in mind the need to maintain patient privacy and incorporate information from these visits into the medical record. Providers will require some training on how to utilize institution-specific platforms. Patients will require preparation as well, including how to access their visit (e.g., is the platform incorporated into electronic medical record (EMR) or a separate entity?) and the need to complete pre-visit clinical information. A clinic scheduler or representative should designate a visit time and the agreed-upon means of communications. This may involve registering in an institutional healthcare communications account to access the videoconferencing platform and require downloading a specific application. For trainees to be involved in telehealth visits, an attending physician should be available to participate. The definition of “direct supervision” for telemedicine, per ACGME, is as follows: “the supervising physician and/or patient is not physically present with the resident and the supervising physician is concurrently monitoring patient care through appropriate telecommunications technology” [5]. The following recommendations for visit format allow for direct supervision to occur:

- Verify the patient’s location (city and state) to determine if the trainee can conduct the visit, as there are some state-by-state restrictions regarding out-of-state patients.
- Ensure the patient verbally consents to the telehealth visit and discloses if others are present or need to be present to assist with clinical care; this information is also part of the documentation.
- Include the supervising physician in critical points of the visit, either by providing a link to the teleconference or setting up a separate videoconference visit between the patient and the attending; this visit occurs after the trainee has discussed pertinent information

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with the attending. If the supervising physician is to join the video session, confirm that the platform can support more than two users at a time.

As with any telehealth encounter, physical exams are restricted to observation of the patient or performing activities that the provider instructs the patient to do. This may prove more challenging for certain types of encounters or diagnoses, which should be considered when determining the assessment and plan of care. For this reason, telehealth encounters with established patients may be more appropriate than new patient visits depending on the patient's medical issue.

While certain conditions/diagnoses necessitate an in-person evaluation, valuable information can be derived from direct observation or directed instructions that allow for the development of an appropriate assessment and plan. Patients can be given instructions that enables the clinician to assess gait, range of motion, and skin manifestations. Post-operative assessment of surgical wounds and evaluation of skin discoloration and swelling to evaluate a patient with complex regional pain syndrome can occur. Other conditions such as peripheral neuropathy or headaches may be more amenable to audio visits alone. Assessments for procedures may prove to be more difficult in a tele-medicine platform but not prohibitive. Patients may pinpoint areas of pain or a family member could be instructed how to perform certain examination maneuvers (for example a Patrick's examination or a straight leg raise). If a procedure appears indicated based on the virtual assessment, a pre-procedure confirmation examination is recommended at the time of the procedure appointment.

Multi-modal pain care may be enhanced through the use of certain telemedicine platforms. For example, providers from different specialties may "exam" the patient together in a virtual examination room. For example, a spine surgeon and pain physician can jointly evaluate a patient to determine the optimal treatment plan.

Inpatient visits

Telehealth services are used less in inpatient settings compared to outpatient settings. Previously, inpatient use was restricted to services not readily provided by smaller hospitals and required

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tertiary centers or specialty care. However, videoconferencing has proved effective in various hospital settings, providing access by reducing barriers to specialists [6-8]. With the COVID-19 outbreak, Pain Medicine providers and training programs are managing a new barrier to consultative care—assisting patients with their pain concerns while protecting providers from contracting the virus and spreading it to others. Discretion is needed regarding inpatient consultative services and determining if outpatient evaluation is a more appropriate plan. For COVID-19 suspected patients, direct communication with the primary team is important to determine if the consult can be deferred until the COVID-19 test results are in.

For consulting teams, it is both acceptable and encouraged to perform telehealth consults using a portable electronic device. This, of course, depends on such devices being available and appropriate in the clinical context. The hospital unit can provide the device to patients or patients can utilize their own electronic devices. For patients not physically able to manage a device, previously assigned nursing staff or care partners can assist, remembering to minimize the number of providers having contact with patients and conserving personal protective equipment (PPE). Telehealth visits should follow the same recommendations of consult details, consent, and attending supervision as described in the outpatient setting if encounters are billed as inpatient consultations. However, if a hands-on physical exam is required, consultants should minimize the number of in-room providers to limit exposure and use of PPE.

Methods of delivery

Telemedicine clinical services can be delivered using audio and video conferencing or using audio-only services. The benefits of utilizing video platforms include performing a focused physical exam by the provider through inspection and instruction of various maneuvers to assist with diagnosis. Review with trainees the expected depth of the exam that is warranted or even possible during these remote visits. Video physical exams are not as straightforward as in-person physical exams as the typical order of the exam may be disrupted or portions are inadvertently regarded as unnecessary. The addition of video to the telemedicine visit can also improve rapport with the patient and families compared to audio-only platforms, allowing a more natural exchange of information. Billing for telemedicine services, differs based on presence of video. For example, real-time video conferencing visits are billed as typical new patient visits with

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established patient codes, whereas audio-only visits are billed as telephone services (CPR 99441-99443) based on time spent.

Billing and coding for telemedicine

Incorporating telemedicine billing and coding to facilitate patient care in the COVID-19 era is a new challenge for Pain Medicine fellowships that are often better versed in teaching and traditional evaluation and management (E&M) visits. CMS has increased access and payments to Medicare telehealth services. This allows for a wider range of services on a temporary and emergency basis under the 1135 waiver authority and the Coronavirus Preparedness Response Supplemental and Appropriations Act [2]. Medicare, to date, has outlined three types of services shown in figure 2: Medicare telehealth visit, virtual check-in, and E-visits

Insert Figure 2

The following summarizes the proposed Medicare billing structure for telehealth services. Other commercial insurances may follow this template.

A **Medicare telehealth visit** is currently defined as a visit with a provider that uses telecommunication systems between a provider and a patient. These may be done for office, hospital visits, and other in-person services. Providers are required to use an interactive audio and video communication platform in real-time between the provider and patient at home. Practitioners who can provide and receive payment for these services (subject to state law) are as follows: physicians, nurse practitioners, physician assistants, nurse midwives, certified nurse anesthetists, clinical psychologists, clinical social workers, registered dietitians, and nutrition professionals [2]. Per CMS, these telehealth visits are considered the same as in-person visits and are reimbursed at the same rate [2]. For these visits, it is recommended to use standard E&M and appropriate E&M codes and/or other approved CPT codes. These rates apply to all areas of the country and all settings, including services from a provider's home. Previously, HHS required that a prior relationship be in place before initiating telemedicine (section 1135(g)(3) of the Act). HHS has since announced that it does not conduct audits regarding this relationship,

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thereby allowing new patients to be evaluated during today's public health emergency [2]. Additionally, the HHS Office of the Inspector General (OIG) will provide more flexibility for providers to reduce or waive cost-sharing visits paid by federal healthcare programs [2]. Under a telehealth visit, it is assumed that all billing is comparable to regular in-person evaluation and management with respect to management of trainees. Essentially, billing will still include a -GC modifier to indicate resident/fellow participation and to consider billing at a lower level given the inability to do a full physical exam. To supplement the exam portion of a telehealth visit, billing can be based on time spent with the patient. For example, to appropriately bill for a Level 3 New Patient Visit (99203) based on time spent, the provider has to document that at least 30 minutes elapsed with the patient and more than 50% of the visit was spent on counseling and coordination of care. Also included is the provider's attestation statement and a detailed summary of the individualized care discussed. E&M guidelines, while outside the scope of this article, can be found on the CMS website [9].

CMS now defines a **virtual check-in** as a visit type applicable to all areas (not just rural) whereby Medicare patients in their homes may have a brief communication with their provider through several modalities whereby a real-time discussion can occur [2]. This type of visit may include a video or image, is likely initiated and agreed to by the patient, is paid by Medicare, and requires a pre-established relationship with the patient and provider. Table 1 defines the requirements and codes for each virtual check-in [2].

Insert Table 1

Virtual check-ins allow for more variety of communication as such visits do not require real-time audio and visual communication. Please note: As of 13 April 2020, residents can provide telehealth services for the duration of the public health emergency under direct supervision of the teaching physician when provided by interactive telecommunications technology [10].

An **E-Visit** is defined by CMS as follows: a visit that may occur in all locations and settings, is only reported when the billing practice has an established relationship with the patient, may

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involve patient/provider online portals, is initiated by the patient (note practitioners may educate beneficiaries of these services), is restricted to communications over a seven-day period, and requires verbal consent from the patient [2]. Table 2, from CMS, highlights the codes and framework an independent billing practitioner can submit for services rendered.

Insert Table 2

Also, under recent CMS updates, it is possible to bill and code for **telephone only** services (non-video) for medical discussions. The codes 99441, 99442, and 99443 can be used but total time of discussion must be documented, problems and recommendations must be discussed with the patient, and consent for service must be obtained and documented prior to initiating the call. Table 3 defines the amount of time for each level.

Insert Table 3

Currently evidence on the use of telemedicine in pain medicine is limited. To date there has been no published literature examining the efficacy or quality of care provided in the pain management setting. The guidance offered is based on the expertise and experience of the authors. Thus, please note that the aforementioned information is subject to change.

Section II CLINIC MANAGEMENT

The COVID-19 pandemic impact on healthcare reaches beyond the inpatient and intensive care units, which are inundated with infected patients. The impact is also felt in outpatient academic pain centers (APCs). In large academic institutional settings, many outpatient APCs have been closed or are extremely limited in staffing. The procedural suites or ambulatory surgery centers associated with some APCs, have been repurposed into intensive care units that have intubated coronavirus patients [11]. Therefore, outpatient APCs must adapt to these changes, many of which are direct mandates from state and local governments. However, even without a direct influence from political authorities, APCs will likely undergo major restructurings. APCs are a

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necessary setting for managing pain as they expand the clinical resources required to treat the COVID-19 crisis. Therefore, it is essential for pain practitioners to understand the organizational restructuring needed to treat patients in pain during the pandemic. Restructuring should encompass plans for 3 stages: normal clinical flow prior to or at the start of the COVID-10 pandemic; changes to referral patterns, staff and clinician re-deployments during the COVID-19 pandemic; and a plan for re-establishing baseline conditions following the COVID-19 pandemic [Figure 3]. These stages are outlined below.

Most APCs have a team of clinical staff—including attending physicians, fellows, residents, medical students, nurse practitioners, physician assistants, nurses, medical assistants and fluoroscopy technicians (**Figure 3a**). Non-clinical support staff includes managers, secretarial staff, front desk staff, billers, and coders. All team members are important. The ability to perform all aspects of patient care is limited when team members are deployed to other roles to help with the COVID-19 crisis.

A change in patient volume and practice organization occurs when clinical and non-clinical staff is repurposed to perform other tasks within the institution (**Figure 3b**). Understanding potential staff deployment sequence and volume prior to actual changes in workforce may make the transition smoother. This allows for a preemptive orchestration of a care plan for maintaining an effective and efficient pain practice despite the significant loss of manpower. In the academic setting, trainees and nurses are often the first group of citizens to be recruited to staff COVID-19 floors, thereby leaving a void of clinical practitioners available for direct patient care. Front end staff are recruited to manage COVID-19 testing stations within the community and also to assist with registration and discharges in emergency department and COVID-19 floors. The attending staff is removed from pain practice duties in order to perform care in the COVID-19 units. Attending and trainee deployment will likely depend on the primary specialty training of the physician being deployed. Anesthesiology trained pain physicians may be pulled to the intensive care environment or the ED. Physical medicine and rehabilitation trained pain physicians may be diverted to medicine floors or to overflowed COVID-19 inpatient rehabilitation facilities; neurologists and psychiatrists may be repurposed to overflow medical units within the institution or to support the mental health of grieving family members or help deal with the stress of other

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hospital employees. Obviously, this breadth of labor dissemination depletes an outpatient APC, to where there is very little manpower left to continue management.

However, the loss of staff can be anticipated and scheduling adjusted as soon as possible to account for this, including decreasing or stopping interventional procedures. In addition, administrators should have a discussion with pain practitioners not redeployed to understand the limitations of their clinical practice, including prescribing during the course of practice reformatting [12]. Managerial staff and administrators will find it beneficial to make patients aware of the change in staffing and to alert patients that their primary pain practitioner may be unavailable for some time. Patients need to be notified and understand that the ability to deliver the breadth of pre-COVID-19 care is unlikely to be met. Managing expectations of patients and clinical staff is valuable in maintaining a mutual appreciation for changes in organizational and care structures while managing the COVID-19 crisis. In some instances, a pain practitioner may not be able to refer to colleagues—such as neurosurgery, orthopedics, neurology, urology, or psychology—because they are dealing with the same issues. In addition, outpatient physical therapy and other institutional services may be deemed elective and “nonessential” by the institution and shut down. Laboratory and imaging capabilities may also be reduced, as these services are redeployed to inpatient units. Procedure suites may also be closed, limiting the pain practitioner’s ability to perform image-guided injections [11, 12]. Pain practitioners will likely have to call upon their own knowledge of their referral sources' information to guide their patients through home exercise education and cognitive behavioral education; among resources available that pain physicians can introduce to many of their patients are web-based and phone applications emphasizing chronic pain therapies (**Figure 3c**).

Some urgent pain concerns may arise and should be communicated directly to consultant specialty physicians as necessary. If the consultant deems the referral as urgent, and the procedure is warranted, then they may choose to perform the procedure. Often, in academic institutions, this decision must be vetted through higher administration, as urgent surgeries will require an on-call nursing staff and anesthesiology that are removed from staffed COVID-19 sites. In these cases, clinical suspicion and evidence-based medicine is needed to ascertain the best possible clinical judgment.

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The significance of telemedicine in clinical practice, as discussed earlier in this manuscript, cannot be underestimated [13]. Clinical visits by video communication are important, and HIPAA guidelines have been relaxed to allow this tool to be used during the crisis [12, 13, 14]. Proper billing of both strategies may mean the difference between survival or failure in this financially fragile time of COVID-19 medical care. Administrators and front desk staff should be educated on proper scheduling of these visits, as some institutions may have to enter these visits in a different way from a normal live visit in order to access them in EMR. The remaining finance staff and clinical administrative staff should seek guidance from their medical directors to ascertain proper scheduling of these patients within their institutional guidelines.

While we know the COVID-19 crisis will end, we do not yet know to what degree our medical system will be affected by the stressors endured over these many months. And while Pain Medicine staffing will return, we do not fully understand which staff members will return, or when the practice will return to full capacity. As with deployment of physicians and ancillary staff to combat COVID-19, there will be a redeployment back to the APCs. This will likely occur in a staggered fashion. The cycling of medical professionals back to pain practices and other elective sites, may depend on which national regions are able to decrease their COVID-19 patient volumes while protecting staff from burnout and infection. Another source of speculation is the degree to which referring providers will be willing to refer back to pain practices for elective procedures and treatments without an effective treatment or vaccine for COVID-19 at this time. The availability of referring practitioners may also be a concern, as main referral sources for Pain Medicine groups, such as orthopedic surgery and neurosurgery may not be immediately active after COVID-19. While there may be a backlog of follow-ups waiting for pain management services, a large portion of the population may not want elective treatments for fear of contracting COVID-19 either within the institution or in route to their visits if public transportation is used for their medical appointments, which is common at urban APCs. We suspect that new patient visits will decline even after mandated social distancing is relaxed (Figure 3c). Therefore, the authors believe that telemedicine will continue to be an important means of patient education and treatment even after the surge. Eventually, the clinical practice of APCs will begin to return to baseline, however the authors suggest the possibility of a

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reduction in pain procedure volume and new office visits until there is an effective treatment or vaccine for COVID-19.

Section III.

COVID-19: IMPACT ON JOB PERSPECTIVES FOR CURRENT FELLOWS

This pandemic, like any major life disruption, comes with significant uncertainties. Many people feel derailed from their plans. Graduating fellows may not find suitable job positions. After a decade of training, fellows who felt safe are being confronted with exit clauses in contracts as employers (hospitals and private practices) struggle to preserve financial stability. Healthcare delivery will change as a result of COVID-19 and some elements, such as telemedicine, will continue [15]. The number of independent practices is likely to decline due to COVID-19 and the associated financial pressures, a trend noted prior to the pandemic. In addition, the “scope of practice” discussion will continue as providers without qualifications, expertise, or experience enter the field and negatively impact patient care [16]. Yet, the good news is that the pandemic and the public emergency will be managed and ultimately disappear. Until then, graduating fellows should use the same approaches as in the past when making decisions about residency and fellowship: evaluate current personal and family needs regarding income, job compensation, and health insurance; consider personal value to a job, job duties, work-lifestyle balance, job/practice perspectives, and location. It is most important to remain flexible and maintain realistic expectations. Graduating fellows have options to bridge a temporary job crisis. These options include working in the core specialty (eg. Anesthesiology, physical medicine and rehabilitation, neurology, psychiatry) if no suitable position in Pain Medicine is available, as well as flexibility regarding salaries, contracts, and locum work. As always, and especially in a crisis, networks are helpful. These include previous training programs, colleagues, and the job portals and forums maintained by pain societies. While it may take longer to reach their ultimate goal, our graduating fellows are smart, well-versed, and resilient.

SECTION IV.

POSTGRADUATION MENTORSHIP PROGRAM (PMP) AND LIFELONG LEARNING

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As the global pandemic quietly developed in the first quarter of 2020, almost all outpatient pain management clinics in academic institutions decreased their volume significantly. Moreover, as hospitals focused on care of COVID-19 patients, by mid-March 2020 operating rooms were generally reserved for urgent or time-sensitive cases. This contributed to a steep decline in both outpatient pain procedures and implantable devices.

Academic pain clinics are essentially at a standstill. With a few rare exceptions—procedures related to cancer pain treatments (intrathecal pump refills, neurolytic celiac plexus block, kyphoplasty, etc.) or interventions necessary to stop a patient visiting the emergency department (acute zoster, acute radiculitis, etc.)—APCs are primarily conducting remote visits with minimal direct patient contact.

As such, pain fellows expecting to perfect their technical and diagnostic skills during the last months of their fellowships, now face completing their year-long fellowship in a little more than eight months. To further complicate matters, pain medicine is a multidisciplinary program with rotations required to physical medicine and rehabilitation, psychiatry, and neurology. Depending on the academic center, some fellows will have completed less than six months within the subspecialty of pain medicine. In addition to anxiety generated by difficulties finding a suitable job upon graduation, especially in the dire economic landscape given the COVID-19 pandemic, pain fellows become worried with self-doubt regarding their competence after an abruptly ending fellowship.

In a period of worry and uncertainty for the individuals enrolled in Pain Medicine fellowship programs, it is largely the responsibility of the pain fellowship program director to convey calm and constructive solutions so fellows feel secure and confident in their futures.

Pain Medicine is a dynamic and rapidly advancing field. The medical knowledge and technical skills acquired during the first year of training are by no means the end of learning. Instead, upon completion of the multidisciplinary Pain Medicine fellowship program, fellows engage in lifelong learning opportunities, meant to keep them abreast of the newest advances within their specialty. Therefore, within the current abbreviated fellowship, additional measures may help

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fellows regain their confidence and graduate with piece of mind. For example, a post-graduation mentorship program may help fill the void. Mentorship programs are often used for healthcare and education delivery in remote areas. One program, the Extension for Community Healthcare Outcomes (ECHO), uses videoconferencing and case-based learning to provide specialty training and mentoring to primary care clinicians working in underserved rural and urban areas. [17].

For graduating Pain Medicine fellows, a similar program could structure first steps of the lifelong learning that freshly minted pain physicians need to embark on. With the advent of video-conferencing, a series of lectures and problem-based learning activities should be the mainstay of the first six months after graduation. We propose the following schedule:

1. **First contact.** Program director conducts end-of-fellowship discussions with each fellow and establishes goals and objectives of the post-graduate mentorship program for the first six months on the job. The discussion includes, but is not limited to, number and types of procedures and new consults optimally scheduled per day for the first six months of practice; discussions may also include subjects that graduating fellows may be less comfortable with but will be the focus of mentorship programs
2. **Regular check-ins.** Within the first month as an attending, the graduating fellow will contact the program director (PD) to discuss a plan (e.g., a regular schedule) for future check-ins
3. **Telephone conferences.** The program director and graduated fellow will set up a schedule of ongoing calls for the first six months on the job. Discussions may occur weekly or monthly depending on the comfort level of the program director and fellow.
 - a. PD checks with the fellow based on the commonly agreed upon schedule
 - b. PD cannot advise former fellow on treating specific patients, but can conduct various problem-based learning activities on subjects most important to the fellow
 - c. Graduated fellows may participate remotely in lectures offered as part of didactics for the academic institution
4. **Ongoing availability.** The PD will remain available and in contact with the graduated fellow beyond the six months as needed; however, a fellow's participation in directed learning and lectures ends one year after graduation

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5. **Board exams.** Fellows can discuss board exams with the PD and, if needed, the PD will direct the fellow to others to increase the his/her chances in passing the pain board

Insert Table 4

Ideally, informal mentoring programs will materialize in many Pain Medicine fellowship programs. However, establishing a formal 6- to 12-month program is the ideal—allowing fellows to grow their fund of knowledge and skill sets, and to become independent lifelong learners and accomplished pain management specialists. A formal program is a chance to overcome the temporary set-back of the COVID-19 pandemic.

Conclusion

The COVID-19 pandemic has deeply impacted numerous aspects of our pain fellowship programs, including clinical experience and future employment opportunities. While few of us have faced such challenges, there are resources to help navigate these challenging times. Telehealth is a valuable resource that will allow fellows to continue performing their clinical duties while gaining practice experience. Clinics have adjusted their workflows to accommodate use of telehealth and to change referral patterns. Many of our fellows are anxious about employment opportunities and the deterioration of skills within the context of a shortened training year. Program directors can help guide fellows through these and other challenges by following mentorship guidelines and employing the many resources mentioned in this review. Clearly, the right people are here at the right time to help guide our fellows through these unprecedented times.

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Figure legends

Figure 1. Criteria for assessing competency for trainees

Figure 2 Summary of Centers for Medicare Services commonly used codes in telemedicine during COVID 19 pandemic

<https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet>

Figure 3a: Baseline patient, staff, and healthcare practitioner volume with available resources for patient treatments described

Figure 3b: COVID staff restructuring demonstrating staff repurposing and limited resources available for patient treatment

Figure 3c: Re-establishing baseline post-COVID with staggered reloading of staff and healthcare practitioners. The stress loads of care on the APC will be dependent upon patient and referral normalization. * patient volume low due to high social anxiety and/or slow referral staff renormalization. Telemedicine likely necessary to care for patients not amenable to office visits. **patients without pain treatment during crisis seek individualized treatment; this cross-sectional high demand can tax the APC because the ratio of patients to practitioners may remain high until a new volume baseline is established.

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Table 1 Center for Medicare services: common codes for virtual check-in visits

HCPCS code G2012	“Brief communication technology-based service, e.g., virtual check-in by a physician or other qualified healthcare professional who can report evaluation and management services, provided to an established patient, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion.”
HCPCS code G2010	“Remote evaluation of recorded video and/or images submitted by an established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment.”

Table 2 Center for Medicare services: common codes for e-visits

99421	“Online digital evaluation and management service, for an established patient, for up to 7 days, cumulative time during the 7 days; 5–10 minutes”
99422	“Online digital evaluation and management service, for an established patient, for up to 7 days cumulative time during the 7 days; 11– 20 minutes”
99423	“Online digital evaluation and management service, for an established patient, for up to 7 days, cumulative time during the 7 days; 21 or more minutes”

Table 3 Center for Medicare services: common codes for telephone-only visits

99441	5-10 minutes of medical discussion
99442	11-20 minutes of medical discussion
99443	21-30 minutes of medical discussion

Table 4. Postgraduation Mentorship Program (PMP) for Multidisciplinary Pain Medicine Fellows Timeline Schemata

Postgraduation Mentorsip Program	Upon graduation	0-6 mths on job	6-12 mths on job	Beyond 12 mths
First contact fellow-PD	X			
Regular check ins fellow-PD		X		
Telephone/zoom conferences		X		
Ongoing availability			X	X
Board exam preparation	X	X	X	(X)

Competency Assessment Checklist for Residents

Name:		Date:	
Profession:			
No.	Teleprovider Checklist Item	Yes, No N/A	Comments
Provider-Side Set Up			
1	Ensures provider-side environment is secure and private		
2	Ensures the video equipment is working and can restart it if needed.		
3	Ensures the provider has the contact list of the clinic team, the facility telehealth coordination team, and the national telehealth help desk.		
Patient Engagement			
4	Determines the provider and patient can see and hear each other adequately.		
5	Discusses environmental privacy with patient and recommends remedial action if needed.		
6	Obtains the number to contact patient in case of disconnection for telehealth to home. (Telehealth to clinic: the number is provided)		
7	Patient is part of the shared decision making and understands the plan.		
Teleprovider Behaviors			
8	Looks directly at the camera, approximately every 30 seconds, to simulate eye contact with the patient.		
9	Positions self wholly and gestures within the camera frame		
10	Balances attention appropriately between patient and documentation.		
11	Speaks naturally (does not raise voice if not needed)		
12	Avoids extraneous noise near the mic (tapping, shuffling papers).		
13	Maintains professional demeanor throughout.		
14	Places, ends, accepts, and rejects a video call.		
15	Adds a video call to an existing video call. (Warm handoff)		
16	Pans, zooms, and tilts the camera on the patient side.		
17	Toggles the volume and uses mutes as needed. Applies headset and adjusts volume for patient and caregiver if needed		
18	Shares screen to presentation mode.		
Telepresenters (If applicable)			
19	Directs the examination in a clear language and a logical order that is understood by the telepresenter and/or the patient.		
20	Clarifies any findings that require telepresenter interpretation within the telepresenter's skill set		
Encounter			
21	Completes the encounter on the patient side		
22	Completes the encounter on the provider side adding the telehealth modifier (95). (Add all diagnosis that apply, the first must match to patient side note)		

Telehealth Faculty

Boise VISN 20 Clinical Resource Hub in TelePrimary Care and Center of Education and Interprofessional Collaboration

TYPE OF SERVICE	WHAT IS THE SERVICE?	HCPCS/CPT CODE	Patient Relationship with Provider
MEDICARE TELEHEALTH VISITS	A visit with a provider that uses telecommunication systems between a provider and a patient.	Common telehealth services include: <ul style="list-style-type: none"> • 99201-99215 (Office or other outpatient visits) • G0425-G0427 (Telehealth consultations, emergency department or initial inpatient) • G0406-G0408 (Follow-up inpatient telehealth consultations furnished to beneficiaries in hospitals or SNFs) For a complete list: https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes	For new* or established patients. *To the extent the 1135 waiver requires an established relationship, HHS will not conduct audits to ensure that such a prior relationship existed for claims submitted during this public health emergency
VIRTUAL CHECK-IN	A brief (5-10 minutes) check in with your practitioner via telephone or other telecommunications device to decide whether an office visit or other service is needed. A remote evaluation of recorded video and/or images submitted by an established patient.	<ul style="list-style-type: none"> • HCPCS code G2012 • HCPCS code G2010 	For established patients.
E-VISITS	A communication between a patient and their provider through an online patient portal.	<ul style="list-style-type: none"> • 99421 • 99422 • 99423 • G2061 • G2062 • G2063 	For established patients.

