

Recommendations for the Effective Orientation of Clinical Fellows

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Introduction

Clinical fellowships, which often follow residency training (or a training pause), require a different approach for program orientation and thus present different challenges. Unlike many residency programs, fellowships typically lack the same degree of structured curricula. As fellowship training is usually shorter in duration and occurs immediately before independent practice, it is imperative for the fellow to adapt efficiently to their new environment and responsibilities. Additionally, trainees entering fellowship outside their home center will need to learn local health care standards and/or unique institutional cultures.¹ Easing trainees through this process can be achieved through orientation, a concept shown to reduce anxiety, alleviate burnout, and increase confidence.²

Ellaway et al have described 3 domains of medical school orientation.³ *Cultural orientation* introduces learners to the institutional philosophies of their program. *Social orientation* binds them together as a collegial unit. *Practical orientation* provides pragmatic information and learning objectives of the program. While these principles are universal to learners at any stage of training, there are certain aspects of this model that warrant emphasis and discussion tailored to the unique milieu of clinical fellowship. Given the paucity of formal guidance in this area, we aim to describe a similar, preliminary framework with practical considerations for graduate medical educators. In addition to reviewing the literature and extrapolating from the model described in Ellaway et al, we have drawn upon a broad range of our own experience as fellowship program directors and Master Teacher program co-directors (over 30 years combined), and as fellowship trainees (current and prospective). Our recommendations are therefore a blend of evidence and expertise; when applying evidence, we have provided references. We highlight these perspectives under 4 central themes: *planning*, *practicality*, *community*, and *foresight* (BOX).

Theme 1: Planning

Strategically Involve the Right People

Program administrators, program directors, specialty-specific health professionals (eg, operating room nurses), and relevant faculty are important members to include in orientation planning. Graduates with up-to-date insight into the program should also be involved to provide a complementary perspective for the fellows.⁴ At this stage, consideration can also be given to curriculum design principles and a targeted needs assessment for orientation content.

Avoid Information Overload

Information overload is a difficult trap to avoid. There is no recommended length of fellowship orientation.² With remote learning becoming commonplace during the COVID-19 pandemic, leveraging technology (eg, online modules) as part of a “flipped classroom” approach may provide a more flexible alternative for fellows.⁵ This well-received method correlates with an increase in skill attainment and has been shown to be effective for international medical graduates transitioning to a Canadian fellowship program in palliative care.^{1,6}

Theme 2: Practicality

Acquaint the Trainee to the Environment

A change in the work environment can naturally lead to stress. Dedicated time should be allotted during the orientation to provide a tour of common facilities (eg, clinical environment, administrative offices, simulation centers, call rooms, cafeterias). Additionally, delineation of wellness offices, ombudsmen, and fellowship advocates should be accessible resources for the fellows.

Develop a “Bootcamp”

A dedicated “bootcamp” is an immersive experience for trainees prior to embarking on clinical service. Engaging in high-yield topics and practical skills

BOX Summary of Recommendations**Theme 1: Planning**

Strategically Involve the Right People
Avoid Information Overload

Theme 2: Practicality

Acquaint the Trainee to the Environment
Develop a “Bootcamp”

Theme 3: Community

Culturally Integrate the Fellows
Socially Integrate the Fellows

Theme 4: Foresight

Inspire Success and Post-Fellowship Opportunities
Establish Ongoing Mentorship

have the potential to increase confidence, knowledge, and procedural familiarity—all of which are key for fellowship.^{7,8} These intensive bootcamps have also been shown to increase fellows’ self-assessed readiness with the potential to objectively yield clinical benefit.^{2,8,9} Although mostly used in surgery, orientation bootcamps have also gained popularity among nonsurgical trainees.^{10,11}

Theme 3: Community**Culturally Integrate the Fellows**

Cultural orientation reflects the program’s values and mission. Given that fellowships generally have specific training goals, small cohorts, and close-knit trainee-supervisor relationships, defining this concept early during orientation can be mutually beneficial. While medical school orientations accentuate their culture by hosting large-scale traditional proceedings (eg, white coat ceremony), fellowship orientation can accomplish this through more informal yet intimate social avenues with the faculty during a program dinner, for example.

While it is also essential to convey the program’s culture through adherence to ethical and safety standards, avoid reiterating institution-wide policies common to all graduate medical education programs. Instead, ensure that relevant resources are made readily available for reference. These include protocols on learner mistreatment, physician wellness, social media, and infection control.

Socially Integrate the Fellows

Program directors have identified social orientation—a concept in which trainees and staff are brought together as a cohesive unit—as being central to residency orientation.⁷ Early interaction with other trainees and faculty role models through extracurricular initiatives can instill a sense of belonging, growth

potential, and flexibility. As many clinical fellowship programs are small (eg, 1 or 2 fellows per year in a 1-year program), efforts should especially be made to organize inter- or intra-departmental events with other fellowships such as lunch outings or casual sporting events. These initiatives would not only spark a strong sense of community—especially for fellows coming from other institutions—but also emphasize trainee well-being as part of the program’s wellness plan.

Theme 4: Foresight**Inspire Success and Post-Fellowship Opportunities**

While usually premature for residency orientation, identifying focused career paths can be worthwhile during clinical fellowship orientation. This discussion can be initiated by highlighting career directions of program alumni and asking new fellows to highlight their specific fellowship goals. Inspiration and initial consideration for collaboration can start in orientation and then be executed throughout fellowship with support, challenge, and a vision for the trainee’s future.¹² Early appreciation of potential career trajectories can seamlessly facilitate conversations throughout the fellowship regarding attending appointments and/or graduate studies. When initiated early during the orientation stage, an enduring spirit of honesty, transparency, and collegiality can be fostered in the program.

Establish Ongoing Mentorship

As fellowship is usually one of the final steps taken before independent practice, connecting trainees with an appropriate mentor during orientation can potentiate smooth integration into the specialty. Faculty should be assigned based on common academic interests to further mutual growth in their fields. If the fellowship program is longer than 1 year and has multiple fellows, consideration should also be given to senior trainee mentors (“near-peer mentors”), as they are shown to have a greater understanding of the learner’s perspective without negatively affecting learning outcomes.⁴

Conclusions

Orientation is an essential component of clinical fellowship. Commitment to an effective orientation can create a valuable opportunity for incoming fellows to address uncertainties and acclimatize to a new training environment. Allowing for expected program-specific variability, we have highlighted 8 recommendations within 4 underlying themes for program directors to consider when developing their orientation: *planning*, *practicality*, *community*, and *foresight*. Despite its incredible potential to have a positive impact on

fellows' novel and often final training year(s), orientation to clinical fellowship remains an underinvestigated component of medical education. Further study in this domain is especially warranted to determine the optimal content and duration of an effective orientation to clinical fellowship.

References

1. Al-Mohawes H, Amante M, Hannon B, Zimmermann C, Kaya E, Al-Awamer A. Online bridging program for new international palliative medicine fellows: development and evaluation [published online ahead of print March 18, 2021]. *BMJ Support Palliat Care*. doi:10.1136/bmjspcare-2020-002797
2. Kaur P, Grushko MJ, Kim D, Lee E, Motivala A, Ostfeld RJ. Impact of an intensive cardiology orientation program on confidence of new fellows. *EJBM*. 2016;29:15-19.
3. Ellaway RH, Cooper G, Al-Idrissi T, Dubé T, Graves L. Discourses of student orientation to medical education programs. *Med Educ Online*. 2014;19:23714. doi:10.3402/meo.v19.23714
4. Rees EL, Quinn PJ, Davies B, Fotheringham V. How does peer teaching compare to faculty teaching? A systematic review and meta-analysis. *Med Teach*. 2016;38(8):829-837. doi:10.3109/0142159X.2015.1112888
5. Andolsek KM, Murphy G, Pinheiro Brennan N, et al. The transition from medical student to junior doctor: today's experiences of tomorrow's doctors. *Med Educ*. 2010;44(5):449-458. doi:10.1111/j.1365-2923.2009.03604.x
6. King AM, Gottlieb M, Mitzman J, Dulani T, Schulte SJ, Way DP. Flipping the classroom in graduate medical education: a systematic review. *J Grad Med Educ*. 2019;11(1):18-29. doi:10.4300/JGME-D-18-00350.2
7. Grover M, Puczynski S. Residency orientation: what we present and its effect on our residents. *Fam Med*. 1999;31(10):697-702.
8. Lucarelli MR, Lucey CR, Mastronarde JG. Survey of current practices in fellowship orientation. *Respiration*. 2007;74(4):382-386. doi:10.1159/000092546
9. Pandya JS, Bhagwat SM, Kini SL. Lessons learnt from evaluation of the orientation program for new surgical residents using objective structured clinical examination-based assessment. *J Postgrad Med*. 2012;58(1):85. doi:10.4103/0022-3859.93263
10. Okusanya OT, Kornfield ZN, Reinke CE, et al. The effect and durability of a pregraduation boot camp on the confidence of senior medical student entering surgical residencies. *J Surg Educ*. 2012;69(4):536-543. doi:10.1016/j.jsurg.2012.04.001
11. Ceresnak SR, Axelrod DM, Sacks LD, Motonaga KS, Johnson ER, Krawczeski CD. Advances in pediatric cardiology boot camp: boot camp training promotes fellowship readiness and enables retention of knowledge. *Pediatr Cardiol*. 2017;38(3):631-640. doi:10.1007/s00246-016-1560-y
12. Daloz LA. *Effective Teaching and Mentorship: Realizing the Transformational Power of Adult Learning Experiences*. 1986; Jossey-Bass: 209-235.



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