

Pediatric Program Directors Should have an Active Presence on Twitter

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ABSTRACT

For academic pediatricians, social media has become an important avenue for professional development through continuing education, professional networking, and academic collaboration. Pediatric residency program directors have recognized additional benefits of social media engagement via program promotion and resident recruitment. The novel coronavirus disease 2019 (COVID-19) pandemic and subsequent move to virtual interviews for the 2020-2021 residency interview season have created a new urgency for pediatric program directors to establish an active social presence, primarily as a means to engage applicants and provide them with information in lieu of cancelled away rotations and in-person interviews. Twitter is a free microblogging and social networking platform that allows real-time engagement among academic pediatricians. Here, we make the case that all pediatric program directors should have an active presence on Twitter.

Social media (SoMe) has gained traction among many academic pediatricians – including many residency program directors (PDs) – due to its high level of engagement, potential for teaching and advocacy, and effectiveness in residency promotion and recruitment [1]. Many early adopting educators have already benefited professionally from active SoMe use, especially Twitter (Twitter.com, San Francisco, CA) [2]. Twitter is a microblogging and social networking platform through which users can interact in real

time. Twitter can provide value to PDs in several ways: (1) it is a dynamic source for continuing education in pediatrics and other important healthcare domains, (2) it is a helpful tool for residency promotion and recruitment, and (3) it is an effective means by which to network and seek collaboration on academic projects [3, 4, 5]. Yet in spite of these potential benefits, many pediatric residency programs and PDs do not participate in SoMe in general or Twitter in particular. Here, we will highlight the substantial benefits of SoMe and Twitter and argue that all pediatric PDs should have an active professional presence on Twitter.

Twitter is the only SoMe platform discussed in this paper. While other platforms have their own advantages, we believe that Twitter has the most potential benefit for careers in academic medicine. Reserving Twitter strictly for professional use is important to ensure safe and appropriate online engagement, especially with students and trainees. PDs and educators should be familiar with the pitfalls of SoMe, including violation of patient protected health information, accuracy of non-peer-reviewed educational material, and unprofessional behavior [6]. Online harassment is a common negative consequence of SoMe engagement which users should learn to detect and report. Prior to starting a professional SoMe account, physicians should review their institutional policies governing its use. Refer to a published user's guide for tips on getting started [7].

EDUCATION

Twitter is an excellent source for continuing pediatrics education. It has become a popular platform for educators from every subspecialty area of pediatrics to create original

educational content, often referred to as "FOAMpeds", an acronym which means "Free, Open-Access Medical education in pediatrics" [8]. This material tends to be succinctly written and easily organized into curated collections using clickable hashtags [9]. Thus, most PDs find it relatively easy to learn using Twitter, as the learning material is delivered in small packages that require only minutes to review. Educational content provided by pediatric subspecialists helps to keep general pediatricians updated, perhaps most helpful to those practicing in rural or smaller centers that lack broad access to subspecialists.

These same reasons make Twitter an excellent resource with which to supplement the resident educational curriculum. The pace of change in graduate medical education has been swift over the past decade, making it challenging to maintain compliance with new learning curricula and assessment tools mandated by the Accreditation Council for Graduate Medical Education [10, 11]. High-quality educational material currently available on Twitter can augment many areas of the pediatrics curriculum. This kind of learning format may be of particular benefit since adult learning theory indicates that the traditional didactic style leads to low engagement and retention of material [12]. Furthermore, by using Twitter, PDs may get a better understanding of the resources utilized by Millennial learners, an insight which can have many downstream benefits for optimizing learning assignments and filling educational gaps.

Other important healthcare domains, such as patient safety, health policy, and global health, are also routinely discussed on pediatrics Twitter (PedsTwitter), often with direct input from thought leaders in their areas of expertise. Twitter has given rise to new teaching innovations, such as tweetorials, tweetchats, and Twitter lists. Tweetorials are educational threads created by stringing together a series of tweets [13], while tweetchats

are organized discussions on Twitter that focus on predefined topics [14]. The term – and associated hashtag – "Tweetiatrician" is used by thousands of pediatricians to network and pursue advocacy efforts. Twitter lists are curated groups of Twitter accounts whose content can be streamed and shared among list subscribers. The platform is also used by many leading pediatric organizations, journals, and teaching hospitals (Table 1) to share the latest information regarding health policy and published research.

For some, however, the greatest educational benefit of PedsTwitter is the cognitive diversity of the community itself. By bringing together participants with such varied life experiences and values, even ordinary discussions include substantial diversity of thought. Perhaps no other pediatrics educational resource can offer so many viewpoints on so many granular topics. In this way, Twitter is a strong tool for facilitating personal growth.

PROMOTION AND RECRUITMENT

PDs can also use Twitter to promote their residents and training programs. Periodically tweeting the accomplishments of residents, faculty, and the pediatrics department is the primary strategy by which PDs effectively promote on Twitter. Examples of achievements advertised by PDs include departmental innovations, trainee- and facultyheld leadership positions and committee assignments, presentations given at scientific meetings, papers published in the literature, and announcements of grants and awards. The regular advertisement of accomplishments, as well as other program highlights such as diversity and inclusion metrics, helps to build a program's brand of excellence [15]. By

promoting such material, PDs can create a "virtual department culture" that provides important information for students as they seek information about programs.

For PDs, a SoMe presence can be an important way to help make up for the loss of away rotations and in-person interviews in the 2020-2021 residency interview season. PDs value in-person visits for the opportunities to meet and interact with applicants, present their programs in a positive light, and stand out from other programs by showcasing their residents and development opportunities. Many department chairs have viewed the residency interview process as a means of advertising the hospital and its resources that may pay future dividends for patient referrals, institutional reputation, and faculty recruitment. Twitter may give PDs a chance to fill this void by providing a virtual platform to accomplish these very goals.

From the applicant's perspective, while interaction with residents and faculty during an in-person interview may allow a snapshot of the program's atmosphere, the digital history available on a program's affiliated Twitter accounts provides a broader lens with which to evaluate the fit of a program. In fact, meaningful engagement on Twitter may provide students with a better sense of program culture, and programs with a better measure of student leadership and commitment, than a half-day in-person interview ever could. Many PDs are preparing for the 2020-2021 virtual interview season by creating informational tweets (some including short videos) that discuss pertinent topics for applicants such as how to construct a successful personal statement [16] and how to utilize a letter of intent [17]. Others are using Twitter to advertise informational webinars and zoom social events designed to inform students about their programs [18].

NETWORKING

Perhaps Twitter's greatest benefit to PDs is the ease with which it facilitates new relationships. The vast number and diversity of users on the platform itself helps to promote new connections [19]. Positive feedback achieved by liking or commenting on others' tweets is an easy and effective method of building relationships. Additionally, Twitter features an integrated direct messaging platform that allows for private discussions among two or more users, greatly enhancing communication.

Networking on Twitter can be less stressful than in person. Some people find it easier to introduce themselves, provide their opinions, and challenge conventional wisdom via SoMe than they do in traditional arenas. If desired, Twitter can provide a degree of anonymity that allows users to more easily interact with one another, eliminating anxiety that many feel when trying to network in-person. Additionally, the platform manages to "flatten the hierarchy" of users when it comes to routine interaction and networking, encouraging thoughtful discourse among medical students, residents, and physician leaders in pediatrics. This year, applicants may leverage this by engaging in discussion with residents and faculty to better understand the educational curricula, opportunities, and learning environments of their programs.

With the kickoff of the 2020-2021 virtual interview season, new resources have been created on Twitter for medical students interested in pediatrics, including the @FuturePedsRes account. This account provides guidance and mentorship to students entering the pediatrics match, helping to bridge the gap left by cancelled away rotations

and in-person interviews. Residents and PDs from all over the country have been instrumental in providing content for students through this account. By following the discussion, other PDs and residency leaders can stay up to date with regard to anticipated problems in the virtual interview season, key student concerns, and the sharing of best practices as programs discuss their solutions to major issues.

Twitter is a convenient platform for connecting and sharing ideas at this crucial time, which highlights the simple truth that social media is today's preferred space for people to gather and discuss important issues. As an educator, refusing to use Twitter for networking and professional development is analogous to refusing to attend national professional meetings two decades ago: Twitter is where today's pediatricians meet, exchange ideas, and conduct meaningful mentorship and sponsorship. A PD's active participation in social media should be considered part of a 'new normal,' a fact underscored in an era of social distancing.

COLLABORATION

Opportunities for academic collaboration tend to arise organically through networking and idea exchange on the platform [20]. As a user's professional network enlarges with educators and trainees of similar research interest, finding ideas and potential collaborators for projects becomes easier. Twitter users who have worked hard to build personal brands and establish themselves as subject experts often receive more unsolicited offers to collaborate. In fact, a strong presence on SoMe may be just as effective

in establishing oneself as a content expert and improving one's prospects for academic collaboration as was publishing in peer-reviewed journals 20 years ago.

Connections made on SoMe have provided many members of the PedsTwitter community with opportunities to speak at national meetings, serve on society committees, and coauthor papers. In this regard, Twitter can provide PDs important alternative routes to career advancement, particularly those from programs in financial hardship or with nonuniversity affiliation [21]. This strategy is also employed by early-career pediatricians who wish to work in private practice but still enjoy career development opportunities once reserved for traditional academic pediatricians. SoMe has indeed transformed what an academic pediatrics career can look like and just how quickly it can be realized [22].

Twitter has become a vital conduit for networking and collaboration between many academic pediatricians and medical students during the COVID-19 pandemic, which has restricted most away rotation opportunities for students this application cycle. Many medical students and pediatric faculty have leveraged the networking power of the platform to connect and collaborate. This manuscript, in fact, is the product of virtual collaboration enabled by Twitter, connecting two fourth year medical students and two faculty located in three different states.

CONCLUSION

There are many reasons why pediatric PDs should establish an active professional presence on Twitter: (1) it is a primary source for continuing education in pediatrics; (2) it is a helpful tool for residency promotion and recruitment, and (3) it is a powerful means by

which to network and seek academic collaboration. While department websites have served as official information portals over the past two decades, social media is serving a vital adjunct role in providing personalized information today. Pediatrics departments whose trainee recruitment has suffered over the past two decades due to outdated or poorly designed websites should serve as a cautionary tale for today: social media is to be embraced and fully leveraged, lest programs risk losing out on the best qualified applicants in the match. The potential benefits of SoMe engagement are substantial and growing, and may soon be so great that PDs without a presence may be putting themselves and their programs at a disadvantage. This may be particularly true in the 2020-2021 virtual interview season. As the technology available to pediatric educators continues to evolve, it seems prudent for today's PDs to consider the benefits of maintaining a professional presence on Twitter.

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McCottVernaglia. We're excited to host our first @mghfc informational webinar
 TOMORROW 9/2. Are you a future #PedsRes #Tweetiatrician? Register here:
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Table 1. Examples of Twitter accounts of major pediatric organizations, pediatric journals, and children's hospitals.

Pediatric Organizations

American Academy of Pediatrics	@AmerAcadPeds
American Board of Pediatrics	@ab_peds
Academic Pediatric Association	@AcademicPeds
American Pediatric Society	@AmerPedSociety
Society for Pediatric Research	@SocPedResearch
Council on Medical Student Education in Pediatrics	@COMSEPediatrics

Pediatric Journals

Elsevier Pediatrics	@ELSpediatrics
American Academy of Pediatrics Journals	@AAPJournals
Journal of American Medical Association Pediatr	ics @JAMAPediatrics
Journal of Pediatrics	@JPediatr
The Lancet Child and Adolescent Health	@LancetChildAdol
Pediatric Critical Care Medicine	@PedCritCareMed

Children's Hospitals

Boston Children's Hospital	@BostonChildrens
Children's Hospital of Philadelphia	@ChildrensPhila
Cincinnati Children's Hospital	@CincyChildrens
Texas Children's	@TexasChildrens
Children's Hospital of Los Angeles	@ChildrensLA
Children's National Hospital	@ChildrensNatl