Residency Match in the Virtual World

The year 2020 has and will continue to be historical because of the economic and social upheaval in our country as a result of the coronavirus disease 2019 (COVID-19) pandemic. Once the pandemic was declared in March 2020, the regulatory bodies for undergraduate and graduate medical education implemented COVID-19 policies for the protection of learners and modification of processes to minimize the effect of the pandemic circumstances on the progress of students and trainees. On May 11, 2020, the Coalition for Physician Accountability’s Work Group on Medical Students in the Class of 2021, Moving Across Institutions for Post Graduate Training, and a body of medical training stakeholders from the American Association of Colleges of Osteopathic Medicine, American Association of Medical Colleges, Accreditation Council for Graduate Medical Education, Assembly of Osteopathic Graduate Medical Educators, American Medical Association, Council of Medical Specialty Societies, Educational Commission for Foreign Medical Graduates, and the National Residency Match Program published recommendations to ensure an equitable residency selection process for medical students. The recommendations endorsed by the coalition members included (1) discouraging travel rotations except in instances where the students have a specialty interest where a clinical experience is not available in their school's system or an away rotation was needed to meet institution graduation requirements; (2) all residency programs commit to virtual interview processes; and (3) the Electronic Residency Application Service opening and release of Medical Student Performance Evaluations be delayed and done on the same day. These recommendations along with local institutional travel and visitor prohibitions quickly transformed the residency recruitment landscape to a virtual world that presents challenges to programs and student applicants.

Students are faced with making specialty choices based only on their third-year medical school clerkship experience and for students pursuing neurology, possibly deciding without a clinical experience if they attend schools without required neurology clinical experiences. The absence of visiting electives along with virtual interviewing significantly affects student decision-making regarding the ranking of programs for the Match. These in-person experiences allow students to observe interactions between residents and faculty, along with getting a feel for the culture of a program. Assessing these relationships is a challenge in the virtual space.

The benefits of the virtual interview for students include the ability to apply to more programs without regard to travel costs or time. This so-called unlimited opportunity may be double edged as there is likely an opportunity cost with limited interview time and the challenge of ranking a large number of programs. To address these issues, student-led online organizations have been created (eg, #NeuroTwitter, @NMatch2021, @BlackinNeuro) to increase student applicant access to program information, and long-established organizations (eg, American Academy of Neurology, Student National Medical Association, Latino Medical Student Association) have sponsored virtual specialty panels to increase information access for their members.

International medical graduates are poised to benefit from the virtual space this season, particularly those not currently in the US. The challenge for those applicants will be the possible lack of experience within the US health care system if opportunities to work within our systems did not occur prior to the pandemic. Another challenge has been the alteration of United States Medical Licensing Examination (USMLE) testing schedules for both Steps 1, 2 (clinical knowledge and clinical skills), and 3. Many dates were canceled in spring 2020, additional dates were added in a phased fashion through summer 2020 at medical schools, and the remaining schedule is uncertain owing to shifting testing site pandemic circumstances. Those delays prevent international medical graduates from receiving Educational Commission for Foreign Medical Graduates certification, necessary for application to US training programs.

Programs have been challenged to change long-established recruitment and interview practices. In summer 2020, most programs reviewed, revamped, and/or created online personas through websites including videos, webinars, virtual happy hours, and open houses. An anticipated increase in applications has occurred for many programs with my own program receiving a 15% increase more than expected. The illumination of health care disparities by the pandemic and the pursuit of social justice by the Black Lives Matter movement have motivated many departments, and by extension residency training programs, to commit to increasing the numbers of residents from underrepresented groups in neurology within their programs. The mitigation of financial barriers to the interview process may enhance those efforts along with a growing awareness of neuroscience among students from those groups. An additional benefit of the virtual space to residency programs is the cost savings from hosting in-person visits. Usual program criterion for application review and evaluation has seen less complete applicant data from delayed USMLE Step 2 scores, limited letters of recommendation, and grading changes to pandemic affected clerkships.

Beyond pandemic times, the process of residency selection by students and resident selection by programs will be forever changed. My program has been challenged in our holistic application review process by the increased application numbers this season. We have hosted 1 virtual interview session and were pleasantly surprised by the ease of engagement with the appli-
cants, their use of preinterview materials, and convenience for fac-
ulty. Notable changes made to our process include half vs whole day 
interviewing, more structured interviews, greater access for appli-
cants to faculty sharing their interests, and continued opportunity for
virtual engagement with applicants beyond their interview day. We will
maintain many of these practices beyond current circumstances.

In the future, to some extent, the use of online platforms for re-
cruitment, social media presence, and virtual interviewing will re-
main part of every program’s selection process. When in-person
interviewing resumes, there will be a need to level the field between
those who choose in-person vs virtual meetings. Continuing the vir-
tual interview option will serve to increase applicant access and knowl-
edge of programs along with economizing the process for both appli-
cants and programs. It is unknown if the costs savings for applicants
from a virtual interview outweighs the disadvantage of not having the
in-person experience of a program, institution, or city, particularly one
located in a region the applicant has never visited. Once the pan-
demic is over, for programs, the value of interviews will only increase
as use of class rank of students by medical schools continues to de-
crease and USMLE Step I converts to pass/fail–only reporting. Hope-
fully, our current environment will encourage further innovation and
reform as suggested by others.3 The selection of residents is an im-
portant step in the medical education continuum, particularly in neu-
rology where there is and will be an ever-increasing demand by the
public for our clinical skill and research discoveries.4 Changes to the in-
terview process will be informed by our postpandemic desire for in-
person interaction, quest for equity and diversity, and the increasing
demand for neurologists to the benefit of all stakeholders.

ARTICLE INFORMATION
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The Impact of Stuttering—Hiding in Plain Sight

While the grandeur of the US presidency has histori-
cally been accompanied by eloquent speeches and a con-
fident demeanor, President Joe Biden has the potential
to shatter this guise of perfection. Often criticized as “hid-
ing in plain sight,” Biden’s mental stamina and intellec-
tual fortitude have also been questioned. Less atten-
tion has been given to his long-standing issue with
stuttering and the substantial stigma associated with the
condition. Stuttering is a communication disorder that
poses difficulty in the processes of speech for millions
of people living in the US and is now part of the core
of President Biden’s journey as a man who is perceived by
many as the most powerful person in the world. With that
power comes significant responsibility and criticism that
will ultimately revitalize interest in this multifaceted
disorder.

Common symptoms of stuttering, as experienced
by listeners, include part or whole word repetitions, pro-
longations of sounds, and/or the inability to move for-
ward with speech, resulting in what is observed as a si-
lent or audible block. The motoric disruptions that are
causal to stuttering result in discrepancies between lis-
tener and speaker experiences. While listeners are lim-
ited to those observable symptoms of stuttering, people
who stutter (PWS) experience stuttering well before the
execution of speech. Learned consequences of stutter-
ing behaviors, generated through past experiences, may
contribute to what is commonly experienced by PWS as
anticipation of stuttering.1 Anticipation of stuttering in-
volves a heightened awareness that occurs both online
and offline in PWS, resulting in the constant evaluation
and detection of potential errors.2 Anticipation of stut-
tering can be strongly associated with anxiety and can
result in motoric adjustments to the communication pro-
cess or avoidance behaviors. While many PWS respond
to anticipation of stuttering through switching words or
adjusting speech patterns, many opt to remain silent
rather than attempt a process that is inconsistently
successful.

The speech system, which includes respiration, pho-
nation, and articulation, is guided by neuronal net-
works that are susceptible to varying levels of impair-
ment ranging from severe, observable disruptions in the
forward flow of speech to minimally subtle deviations.
These deviations are potentially caused by neuronal backbreakdown occurring at the initiation of phonation. Such
breakdowns can translate into abnormal processes of
speech production even in the absence of measurable
disruption in traditionally measured motor and sen-
sory change. A simplified analogy to highlight the unique-
ness of stuttering would be individuals running a race and
tripping over the same wire. In this scenario, the sys-