Reconfiguring a One-Way Street: A Position Paper on Why and How to Improve Equity in Global Physician Training

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Abstract

Large numbers of U.S. physicians and medical trainees engage in hands-on clinical global health experiences abroad, where they gain skills working across cultures with limited resources. Increasingly, these experiences are becoming bidirectional, with providers from low- and middle-income countries traveling to experience health care in the United States, yet the same hands-on experiences afforded stateside physicians are rarely available for foreign medical graduates or postgraduate trainees when they arrive. These physicians are typically limited to observership experiences where they cannot interact with patients in most U.S. institutions. In this article, the authors discuss this inequity in global medical education, highlighting the shortcomings of the observership training model and the legal and regulatory barriers prohibiting foreign physicians from engaging in short-term clinical training experiences. They provide concrete recommendations on regulatory modifications that would allow meaningful short-term clinical training experiences for foreign medical graduates, including the creation of a new visa category, the designation of a specific temporary licensure category by state medical boards, and guidance for U.S. host institutions supporting such experiences. By proposing this framework, the authors hope to improve equity in global health partnerships via improved access to meaningful and productive educational experiences, particularly for foreign medical graduates with commitment to using their new knowledge and training upon return to their home countries.

Foreign medical graduates (FMGs)—here referring to non-U.S. citizens receiving their basic medical degree outside the United States or Canada—who desire formal clinical training in the United States have a clear pathway through residencies certified by the Accreditation Council for Graduate Medical Education (ACGME). FMGs constitute approximately 16% of the U.S. physician workforce, providing critical human resources for our health care system.1,2 Ironically, FMGs who want advanced, short-term clinical training from U.S. institutions so that they can provide better care in their home countries typically can only access “observership” programs while in the United States, so named because such programs allow nothing beyond observation in clinical settings.3 In contrast, increasing numbers of U.S. medical trainees and physicians are traveling to resource-limited settings where they have substantial clinical latitude and minimal regulatory constraints.4,5 Despite a growing call for increased equity within these short-term exchanges,6 the flow of learners remains largely unidirectional, with a disproportionate number of U.S. physicians and trainees visiting partner sites abroad, often with full engagement in clinical care. Although there are some successful models for creating short-term experiences for FMGs at U.S. medical centers,7,8 there are institutional and legal barriers that make it challenging for these learners to have meaningful clinical experiences.

In this article, we address the current imbalance in global health training opportunities, focusing on hosting FMGs for short-term clinical training experiences in the United States. We systematically explore regulatory barriers, discuss the applicable laws, and offer recommendations for the revision of visa categories and licensing laws to improve the educational impact and equity of international partnerships that offer U.S.-based learning opportunities for foreign physicians. We advocate for a legal framework that would allow such FMGs to come to the United States for short-term, structured medical training programs permitting hands-on clinical education, thereby improving their ability to build capacity within their respective health care systems.

Arguments for Equitable Exchanges in Health Education

Before addressing the logistics of providing short-term clinical training for FMGs, it is important to review why U.S. institutions should support equity in their international partnerships.

Equity in professional health education supports international goals for health

Improving care and increasing access to best practices internationally will decrease health disparities.9,10 The world’s richest and poorest countries have a 100-fold gap in national income and a 1,000-fold gap in per capita health care expenditures;
Training physicians from both high- and low-resource areas builds local capacity for improving health and economic stability, and this potentially translates to improved worldwide health and economic security. Although related discussion often focuses on reducing epidemic threats originating in limited-resource areas, patients and systems in resource-rich areas can also benefit directly from clinicians with improved physical exam abilities, confidence in clinical reasoning, and greater knowledge of high-value, low-cost care.

Observerships: Limited Education

Working in tandem, current state and federal laws generally prohibit short-term clinical FMG training programs that allow patient contact. Given these barriers, motivated host institutions have created “observership” programs, which the American Medical Association describes in a guidance document as “not intended to fill gaps in clinical knowledge or training” but only meant to “familiarize and acculturate an international medical graduate to the practice of medicine in an American clinical setting.” Although program design is flexible, observerships are short-term and do not allow

- Taking a patient history and/or doing a patient exam;
- Administering medications or writing orders;
- Documenting in the medical record;
- Dictating lab reports or operative notes; or
- Obtaining patient consent for surgery or research.

Learning during an observership typically takes place through participating in didactics and observing the delivery of health care. Although evaluations of these programs have revealed a high degree of FMG satisfaction, they cannot substitute for the hands-on clinical training that is the foundation of medical education. Outside of the United States, other high-income countries (e.g., Canada and the United Kingdom) have a more measured approach allowing graded responsibilities for visiting FMG trainees, including those in the surgical subspecialties where a hands-on component is critical for learning.

Visa, State Licensure, and Liability Barriers to Equitable Educational Exchanges

Visa issues

The U.S. State Department supports several visa categories for nonimmigrant travelers who come to the United States for medical training, but none of these existing categories permits a short-term clinical training visit. Table 1 outlines the individual visas potentially available for international physicians or trainees. Simply put, there is no existing visa category allowing an FMG to enter the United States for a short-term clinical program that allows patient contact.

State medical board licensure

The equitable short-term clinical training programs we envision would allow FMGs to engage in the “practice of medicine,” which, although defined by each individual state, generally means “to engage, with or without compensation, in medical diagnosis, healing, treatment, or surgery.” U.S. states and territories regulate physicians who practice medicine within their borders through medical boards that license and discipline physicians.

Within ACGME-accredited residency programs, both U.S.-trained physicians and FMGs are licensed by their state medical boards to practice within the confines of the program, supervised by faculty, and subject to medical board regulation and oversight. If they have completed training outside of the United States, however, FMGs face a steep barrier to practice in the United States. For FMGs to obtain full medical licensure to practice medicine, states generally require graduation from an accredited U.S. medical school or Educational Commission for Foreign Medical Graduates (ECFMG)-verified credentials, completion of the United States Medical Licensing Examination (USMLE) series, at least one year of postgraduate training as an intern or first-year resident, a background check, and knowledge of oral and written English. Therefore, at the current time, obtaining state medical licensure is unrealistic for FMGs participating in short-term clinical visits.

Because disease knows no borders, strong health systems are needed everywhere

Ebola, Zika, influenza, HIV, and other infectious outbreaks make this argument clear, as does the platform of the Global Health Security Agenda, to which the United States belongs.

Equitable exchanges improve the long-term stability of global health training

Bidirectional learning provides mutual gains for U.S. and foreign clinicians, institutions, and patients. Clinicians from both settings stand to benefit from working in new settings with different delivery models, epidemiology, and cultural norms, with U.S. clinicians building clinical abilities in limited-resource care while FMGs learn advanced techniques that may be less prevalent in their setting. These benefits can be negated if clinicians pick up inappropriate practices during exchanges, such as an FMG increasing unnecessary medical testing after a rotation in the United States or a U.S. clinician reducing their use of medically indicated testing after a rotation abroad. Accordingly, attention does have to be paid to the learning objectives in these exchanges, and these concerns should be openly discussed by all parties. Equitable, bidirectional exchange strengthens partnerships and enriches scholarly interactions. Such collaborations were seen as beneficial by 80% of North American academic partners and over 75% of international institutional partners in a 2015 survey.

Perspective
| Visa category | Visa purpose | Medical training/employment use | How visa cannot be used | Required before applying for U.S. visa | Duration of U.S. stay |
|---------------|--------------|---------------------------------|-------------------------|----------------------------------------|----------------------|
| **F-1 Student** | Full-time education | Enrolled in U.S. medical school | • Residency/fellowship  
• Physician employment | • Completion of all standard educational prerequisites  
• Official school acceptance  
• Pay tuition | Completion of medical school program (generally 4 years, plus 60 days)  
• 1 year of F-1 OPT may be possible |
| **J-1 Alien physician** | Educational and cultural exchange | GME (clinical residency and fellowship programs offered at ACGME-accredited institutions) | • Clinical research outside of an approved GME program  
• Clinical fellowships/activities offered by non-ACGME institution  
• Physician employment or moonlighting | • Valid ECFMG certificate (if graduated from international medical school)  
• Completion of USMLE Steps 1, 2CK, and 2CS or previously approved exams  
• Statement of need from ministry of health of the country of citizenship and last legal permanent residence  
• Official GME residency/fellowship contract | Time typically required to complete the U.S. board certification requirements in the medical specialty as defined by American Board of Medical Specialties (not to exceed 7 years) |
| **J-1 Research scholar** | Educational and cultural exchange | Participation in nonclinical programs that involve observation, consultation, teaching, and/or research | • GME residency/fellowship  
• Patient care activities or services  
• Physician employment or moonlighting | • Graduation from medical school  
• Offer letter  
• Certification statement from medical school dean re: incidental or no patient contact | Up to 5 years |
| **B-1 Business visit** | Business visit | • Consultation with business associates  
• Conference attendance  
• Interview  
• Nonclinical observership  
• Short-term medical clerkship for enrolled medical students | • GME residency/fellowship  
• Research  
• Employment  
• Any activity or service for compensation | • Travel plan/itinerary  
• Letter from applicant’s employer indicating purpose and details of trip or letter of invitation/registration or proof of attending a business, educational, or commercial event | 6 months maximum |
| **B-2 Tourism, vacation** | Tourism, vacation | • Travel  
• Visit friends and family  
• Medical treatment  
• Fraternal, social, or service activities | | Travel plan/itinerary | 6 months maximum |
| **H-1B Specialty occupation, sponsored by employer** | Specialty occupation, sponsored by employer | • GME clinical residency and fellowship programs  
• Postdoctoral trainees  
• Faculty  
• Employment | • Unpaid training, research or work activity | • Bachelor’s degree equivalent or higher as required by the specialty occupation and GME  
• Valid ECFMG certification  
• Completion of USMLE Steps 1, 2CK, 2CS, and 3  
• Approved state medical license appropriate for the work activity | • Maximum 6 years (with extension possible)  
• Issued in increments of 3 years or less |
| **H-3 Training or special education visitor** | Training or special education visitor | • Trainee in fields not available in the home country  
• Training in the education of children with disabilities | • GME or training specifically disallowed  
• Physicians not eligible | • U.S. employer or organization sponsor must demonstrate that proposed training is not available in the foreign national’s home country and foreign national will not engage in productive employment. | 2 years maximum |

Abbreviations: GME indicates graduate medical education; ACGME, Accreditation Council for Graduate Medical Education; ECFMG, Educational Commission for Foreign Medical Graduates; OPT, optional practical training (temporary employment related to F-1 visa); USMLE, United States Medical Licensing Examination.

*This visa table is not meant to be comprehensive but, rather, to provide a general snapshot of relevant categories. There are many nuances to each category, and additional qualification requirements not noted.*
Fifteen state medical boards have authorizing language that would allow an FMG to apply for, or obtain, some form of “temporary” or “visiting/courtesy” license to practice medicine without having to meet the requirements for a full license, but only Louisiana, Georgia, Kentucky, Massachusetts, Nevada, and Ohio have licensure categories specifically designed to allow FMGs to practice medicine in short-term clinical training programs. As a model example, in 2012, the Ohio legislature created a Visiting Clinical Professional Development Certificate category that allows non-U.S. physicians to interact directly with patients for up to one year under close supervision by a U.S. physician. This effort was championed by a number of academic medical centers in Ohio to allow visiting physicians the opportunity to learn advanced treatments and technologies, thereby building capacity in their home countries upon their return. Allowable supervised activities include taking medical histories, conducting physician examinations, performing surgical procedures, administering anesthesia, and doing radiologic studies. Physicians in this category cannot write orders or prescribe medicine, bill for services, take a position in a residency program, have training count toward U.S. graduate medical education, or remain in Ohio to practice medicine after completing the program.

The Federation of State Medical Boards (FSMB) encourages state boards to “address the unique and sometimes novel issues that arise in their states” by creating special and/or temporary licenses for such purposes as traveling sports team physicians, patient care during natural or manmade disasters, and special practice such as an “institutional physician.” The latter category, adopted by about 50% of state medical boards, is relevant because it allows FMGs to practice in a state without meeting the USMLE testing and other requirements required for full state licensure. However, as defined by the FSMB, this category typically requires the applicant to have a faculty position and is therefore designed for teaching rather than learning.

The Ohio Visiting Clinical Professional Development Certificate and a sample of other limited licensure categories created by states are set forth in Table 2. These examples demonstrate the authority and ability of state medical boards to create licensure categories to meet new circumstances if the board is convinced that patient safety will be maintained by those practicing in the new category.

Professional liability insurance

Allowing FMGs to engage in clinical care during a short-term training program raises the specter of medical malpractice liability and the question of who is responsible for the clinical practice of an FMG participant. As a preliminary point, we were unable to find any legal case or settlement related to medical malpractice by an FMG in a short-term training program, either clinical or in observation only. Second, professional liability insurance coverage for short-term clinical visitors is readily available on the commercial market, via the categories used for locum tenens and similar short-term physician employees. Although ideally university or affiliated hospitals would extend their professional liability insurance programs to cover FMGs for these experiences, commercial policies provide a feasible approach for the moment, albeit at some cost to either the participant or the host institution.

Recommendations: Turning Toward Equity

To promote equity in medical training opportunities and support meaningful health care capacity development worldwide, specific legal and regulatory changes must be made at the federal and state levels to allow U.S. universities and affiliated hospitals to create effective short-term clinical training programs for non-U.S. learners. Immigration and medical licensure laws are interdependent (i.e., getting a state license depends on visa status, and getting a visa depends on licensure status) and therefore impose what we feel are presently the most significant barriers. Accordingly, we recommend that state medical boards create a temporary licensure category that allows full participation for FMGs in short-term clinical training activities, under guidelines outlined in Box 1.

We recommend that the Department of State should authorize a new J-1 visa category that allows FMGs to enter the United States for short-term clinical training. In 2014, the ECFCMG convened a working group, including representation from the ACGME, that addressed many of the visa issues we discuss in this article and also concluded that a new visa category was appropriate. The ECFCMG could be the sponsoring agency and verify the applicant’s credentials, or this could be undertaken by the host institution. The visa program should require that short-term clinical activity will not be creditable toward the requirements of an ACGME-accredited program and/or certification by a member board of the American Board of Medical Specialties. Because one of the top priorities of medical training equity initiatives is limiting brain drain, visa applicants should assert (via personal statement or other instrument) that they understand the requirement that they return to their home country upon completion of the short-term clinical training activity.

According to its unpublished 2014 report, the ECFCMG working group suggested requiring that applicants for the new visa category present evidence “of an approved license, permit or other authorization from the appropriate U.S. state medical licensing board verifying the applicant’s eligibility to participate in the proposed short-term clinical training activity.” This language is a signal that the ECFCMG understands the importance of resolving the state licensure issue as a precondition for the new visa category to function as intended. Many state medical boards will not issue a license until a visa is obtained. We support this language, particularly the “other authorization” clause that would allow state licensing boards to provide letters to the ECFCMG stating that a license will be forthcoming once the applicant has a visa.
### Table 2
Examples of Special Licensure Categories That Apply to Foreign Medical Graduates

| State          | License type                                      | Notes                                                                                                                                                                                                 |
|----------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| California     | Special Faculty Permit<sup>36</sup>               | • Academic medical center dean must certify that physician has faculty appointment  
• FMG must be “recognized as academically eminent” in their field by Medical Board of California  
• Authorizes FMG to practice only in the sponsoring medical school/affiliated hospitals |
|                | Section 2111 Guest Physician<sup>37</sup>        | • Designed for postgraduate study (fellowship) in approved California medical school for FMGs with current medical license in other state or country  
• FMG will return to country of origin to provide improved or enhanced medical care  
• For training/fellowship that does not meet postgraduate training requirements needed for medical licensure in California  
• Clinical activity limited by visa type (e.g., if FMG holds a J-1 Research scholar visa, limited to incidental patient contact) |
| Florida        | Temporary Certificate<sup>38</sup>               | • Allows training at cancer centers and plastic surgery programs  
• Faculty must be “internationally respected and highly qualified physician” |
| Louisiana      | Short-Term International Medical Graduate (IMG) Training Permit<sup>39</sup> | • State board may issue for the purpose of participating in a short-term (< 90 days) residency or other postgraduate training program  
• Permit holder “shall not assume independent responsibility for patient care” |
| Massachusetts  | Temporary Faculty Appointment<sup>40</sup>        | • License for temporary faculty appointment (instructor, associate professor, assistant professor or higher)  
• Certified by the dean of a medical school  
• 12 months with renewal up to 3 years allowed  
• Licensee can practice medicine only in designated settings under supervision of a registered physician |
|                | Certificate of Registration for Enrollment in Medical Education Course<sup>40</sup> | • Temporary license allows FMGs (and others not licensed in Massachusetts) to attend continuing medical education for up to 3 months  
• Registrant can practice medicine only in designated settings under supervision of a registered physician |
| Michigan       | Clinical Academic Limited License<sup>41</sup>    | • Requires certification of appointment to a Michigan academic institution of a teaching or research appointment  
• Licensee may practice medicine at the academic institution under the supervision of a fully licensed physician |
| North Carolina | Medical School Faculty License<sup>42</sup>       | • Intended to allow North Carolina medical schools to benefit from the expertise, specialized knowledge, or unique skills of physicians who are not otherwise eligible for full licensure in North Carolina  
• 1-year limit |
|                | Special Purpose License<sup>42</sup>             | • For physicians who wish to come to North Carolina for a limited time, scope, and purpose, such as to demonstrate or learn a new technique, procedure, or piece of equipment, or to educate physicians or medical students about an emerging disease or public health issue  
• Verification to board needed from a North Carolina facility where procedure will take place, how long the physician will participate, the type of procedure, and the name of the North Carolina physician responsible for overseeing the procedure  
• 1 year |
| Ohio           | Visiting Clinical Professional Development Certificate<sup>43</sup> | • Physicians must participate in a clinical professional development program of a medical school in Ohio  
• Must have practiced medicine and surgery for at least 5 years after completing graduate medical education  
• Agrees to return to home country at conclusion of program  
• Must have professional liability insurance  
• May practice medicine and surgery only as part of the clinical professional development program |

Abbreviation: FMG indicates foreign medical graduate.

Finally, we recommend that U.S. host institutions should have memoranda of understanding with the partnering institutions in the FMGs’ home countries. Although the ECFMG recommended a limit of six months for training programs, we suggest a one-year limit, as a longer period may be necessary to achieve specific learning objectives, especially in procedural or research work, whereas shorter periods may suffice for focused education on systems or educational approaches. A longer period also respects the time necessary for FMGs to adapt to a new clinical setting, as onboarding will
ultimately improves global health and ultimately improves global health and

Goals, strengthens health systems, and international clinical capacity, works international partnerships, builds countries. This approach strengthens to improve the health of their home opportunities for FMGs determined American trainees abroad, and to meaningful clinical experiences to has long been focused on providing education and partnership model, which

It is time for U.S. institutions to take longer if FMGs are actively involved in clinical care.

Concluding Remarks

It is time for U.S. institutions to reevaluate the current global health education and partnership model, which has long been focused on providing meaningful clinical experiences to American trainees abroad, and to provide more equitable educational opportunities for FMGs determined to improve the health of their home countries. This approach strengthens international partnerships, builds international clinical capacity, works toward the UN Sustainable Development Goals, strengthens health systems, and ultimately improves global health and economic security. These goals cannot be met until legal and regulatory barriers to short-term clinical training and professional development programs for international physicians are addressed. In this era of geopolitical tension surrounding immigration policy, moving forward with the proposals in this paper will require significant political backing at the national and state levels, combined with evidence to support the underlying goals of the proposals. Therefore, we recommend that global health organizations and universities with existing international partnerships consider conducting feasibility studies, focus groups, and surveys of university international student and scholar offices to gather data surrounding the proposals. As a next step, the Consortium of Universities for Global Health intends to convene a meeting of various stakeholders, including university and nongovernmental global health organizations from high-, middle-, and low-income countries; state medical board representatives; leaders from national physician organizations; and medical education leaders, hopefully including representation from the Association of American Medical Colleges and the ACGME. This group will develop both national- and state-level advocacy plans to enact the proposals in this article. Of note, we believe that the various elements of this proposal can be implemented in parallel and to some degree piecemeal. Although the greatest benefit would be to enact all of the changes, institution- and state-level advocacy as seen in Ohio can lead to local progress. We welcome further data on these and related proposals, and look forward to a national dialogue that moves us toward equity.

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Lauren screamed. One second … two seconds … three seconds passed. A nearby patient, stretching his legs with green resistance bands, turned towards the commotion.

For the first time in years, Lauren’s 19-year-old feet were supporting her body weight, and only by yelling could she endure the pain of her progress. She was strapped in a harness that helped bear some of her weight; her electric wheelchair was off to the side, abandoned. Born with arthrogryposis, her mobility had been severely limited. After a life-changing surgery to straighten her ankles, she was finally ready to strengthen her feet. Three weeks into my physical medicine and rehabilitation rotation, I was there for her journey and tasked with monitoring the stopwatch tracking her progress.

I stood in the middle of a large physical therapy room. Santa Claus Is Coming to Town played in the background, a gentle reminder that Thanksgiving was officially over. A whisper of aloe-scented cleaning solution lingered. One patient was using a machine with electrical sensors that moved his arms around as if they were pedaling a bicycle. Another patient took meticulous steps, his hands resting on balance beams for support, with trainers trailing behind.

Lauren slumped into the harness, inhaling a much-deserved breath of air. I paused the stopwatch. “How long was that?” she asked, lifting her head up. “Six seconds!” I replied, showing her the flashing digits on the screen.

Lauren seemed uneasy. “So, do you think I will be able to walk again?” I hesitated. More than anything, I wanted to tell her yes, to give her hope, to validate her progress.

I thought of Chris, formerly a soccer player, now a paraplegic. He walked using a futuristic exoskeleton, which used sensors to free him from the confines of his wheelchair. I wanted to give that same feeling of independence to every patient. I wanted to assure Lauren that she too would get stronger, that one day she could stand as tall as she wanted. I imagined her standing on tippy toes, arms outstretched, reaching for the box of spaghetti hibernating in the back of the pantry. She was looking to me for a response. What if I told her the wrong answer?

“It’s hard to say,” I finally replied. “But the team thinks that this therapy will help you walk. We’ll be here for you.” At that moment in the physical therapy room, it was the best I could offer. Lauren smiled off silently—it was probably not what she wanted to hear. I imagined her telling herself she could become anything she wanted if only she could walk. Maybe she wanted to work for the U.S. Postal Service delivering mail like I once did.

My encounter with Lauren taught me that one of the challenges in medicine is finding the right balance between being realistic and being hopeful. Like many patients, Lauren’s path to recovery was not straightforward. It was difficult to know whether she would be able to walk in the future. Nevertheless, I felt it was important to let her know that she was not alone on her journey.

What Lauren said next stuck with me: “Let’s do that again.” Maybe offering emotional support struck the right balance for her. Perhaps empowering patients with realistic short-term goals can create the hope they need to overcome moments of setback and disappointment. As a future physician, I aspire to bridge the gap between honesty and hope to give patients like Lauren the fortitude to recover.

In the meantime, the stopwatch in my hand read 00:00, ready for Lauren’s feet to touch the ground again.

Teaching and Learning Moments
Standing Up Tall

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Author’s Note: The names and identifying information in this essay have been changed to protect the identity of the individuals described.

Conan So, MPH

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Perspective

Teaching and Learning Moments
Standing Up Tall

Lauren screamed. One second … two seconds … three seconds passed. A nearby patient, stretching his legs with green resistance bands, turned towards the commotion.

For the first time in years, Lauren’s 19-year-old feet were supporting her body weight, and only by yelling could she endure the pain of her progress. She was strapped in a harness that helped bear some of her weight; her electric wheelchair was off to the side, abandoned. Born with arthrogryposis, her mobility had been severely limited. After a life-changing surgery to straighten her ankles, she was finally ready to strengthen her feet. Three weeks into my physical medicine and rehabilitation rotation, I was there for her journey and tasked with monitoring the stopwatch tracking her progress.

I stood in the middle of a large physical therapy room. Santa Claus Is Coming to Town played in the background, a gentle reminder that Thanksgiving was officially over. A whisper of aloe-scented cleaning solution lingered. One patient was using a machine with electrical sensors that moved his arms around as if they were pedaling a bicycle. Another patient took meticulous steps, his hands resting on balance beams for support, with trainers trailing behind.

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