In the Supreme Court of the United States

Donald J. Trump et al.,

Petitioners/Applicants,

International Refugee Assistance Project et al.,
Respondents.

Donald J. Trump et al.,

Applicants,

State of Hawaii et al.,

Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Fourth Circuit and Applications for Stays

MOTION FOR LEAVE TO FILE AND BRIEF FOR THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES AND OTHERS AS AMICI CURIAE SUPPORTING RESPONDENTS

Frank R. Trinity
Amber R. Sterling
Association of American
Medical Colleges
655 K St., N.W.
Washington, D.C. 20001
202.828.0540

Counsel for the Association of American Medical Colleges Joshua David Rogaczewski
Counsel of Record
Jennifer S. Geetter
Charles R. Quigg
Matthew M. Girgenti
McDermott Will & Emery
LLP
500 N. Capitol St., N.W.
Washington, D.C. 20001
202.756.8000
jrogaczewski@mwe.com

Counsel for Amici Curiae

MOTION FOR LEAVE TO FILE AMICUS CURIAE BRIEF IN CONNECTION WITH STAY APPLICATIONS

The federal government has asked the Court for three things related to Executive Order 13,780, 82 Fed. Reg. 13,209 (Mar. 9, 2017): (1) a writ of certiorari to review the Fourth Circuit's en banc affirmance of the District of Maryland's preliminary injunction of section 2 of the Executive Order (No. 16-1436), (2) a stay of the District of Maryland's injunction pending this Court's review of the injunction (No. 16A1190), and (3) a stay of the District of Hawaii's preliminary injunction of sections 2 and 6 of the Executive Order during the review of the injunction by the Ninth Circuit and this Court (No. 16A1911). The Association of American Medical Colleges and twenty-one other healthcare-related organizations (see infra pp. 1a-4a) respectfully move the Court to allow them to file their accompanying amicus curiae brief in connection with the stay applications as well as the petition for a writ of certiorari. All parties consent to the filing of amici's brief.

This Court allows *amici* to file a brief "before the Court's consideration of a petition for a writ of certiorari . . . if accompanied by the written consent of all parties, or if the Court grants leave to file." S. Ct. R. 37.2(a). On June 2, 2017, *amici* notified all parties of their intent to file a brief in connection with the federal government's petition and stay applications and requested consent. The following day, Respondents provided their consent. On June 5, the federal government provided its consent.

Nevertheless, and in an abundance of caution, because *amicus curiae* briefs in connection with stay applications are rare, *amici* are moving for leave. As explained in their brief, *amici* are uniquely qualified to explain the impact of the Executive Order on America's healthcare network, and they underscore the importance of maintaining the status quo while the Court reviews this matter. In short, *amici* present "relevant matter" that will "be of considerable help to the Court" as it considers the stay applications. *Id.* R. 37.1.

Accordingly, and consistent with the parties' consent, the Court should accept *amici*'s brief in connection with the stay applications as well as the petition. See, e.g., Garcia v. Texas (In re Garcia), 564 U.S. 940, 943 n.* (2011) (granting government's motion for leave to file *amicus curiae* brief on application for stay of execution).

Dated: June 9, 2017

Frank R. Trinity Amber R. Sterling Association of American Medical Colleges 655 K St., N.W. Washington, D.C. 20001 202.828.0540

Counsel for the Association of American Medical Colleges Respectfully Submitted,

Joshua David
Rogaczewski
Counsel of Record
Jennifer S. Geetter
Charles R. Quigg
Matthew M. Girgenti
McDermott Will &
Emery LLP
500 N. Capitol St., N.W.
Washington, D.C. 20001
202.756.8000
jrogaczewski@mwe.com

Counsel for Amici Curiae

TABLE OF CONTENTS

MOTION FOR LEAVE TO FILE AMICUS CURIAE BRIEF IN CONNECTION WITH	
TABLE OF AUTHORITIES	
INTEREST OF AMICI CURIAE	
SUMMARY OF THE ARGUMENT	2
ARGUMENT	4
I. Non-U.S. Professionals Are Important to America's Healthcare System	4
A. Non-U.S. Professionals Fill Critical Shortages in the Nation's Healthcare Community	4
1. The United States—Especially in Underserved Communities—Is Experiencing Healthcare Shortages	4
2. Non-U.S. Professionals Comprise a Significant Part of the Nation's Healthcare Workforce, Especially in Underserved Areas	7
B. Beyond Filling Shortages, Non-U.S. Professionals Play Important Roles in the American Healthcare System	9
 Collaboration Between American Health Professionals and Non-U.S. Professionals Maximizes Research 	
Efforts	9

2. Inclusion of Non-U.S. Professionals in the American Healthcare
Community Enhances America's
Health Security12
II. Congress Has Recognized the Importance
of Non-U.S. Professionals to the American
Healthcare System14
A. Congress Established Programs To
Attract Non-U.S. Professionals To Serve
Medically Underserved Communities 14
B. Congress Established Programs for
Non-U.S. Specialists and Others with
Extraordinary Abilities17
III.The Executive Order Threatens To Upset
the Carefully Balanced and Highly
Regulated Immigration Processes Essential
to Maintaining an Adequate Healthcare
Workforce and Promoting Biomedical
Research in the United States
CONCLUSION27

TABLE OF AUTHORITIES

Cases	
Doe v. Mercy Catholic Med. Ctr., 850 F.3d 545 (3d Cir. 2017)	15
Hawai'i v. Trump, CV. NO. 17-00050 DKW-KSC, 2017 WL 1167383 (D. Haw. Mar. 29, 2017), appeal submitted, No. 17- 15589 (9th Cir. May 15, 2017)	3
Int'l Refugee Assistance Project v. Trump, Civ. Action No. TDC-17-0361, 2017 WL 1018235 (D. Md. Mar. 16, 2017), aff'd in relevant part en banc, No. 17- 1351, 2017 WL 2273306 (4th Cir. May 31, 2017)	3
McKeesport Hosp. v. Accreditation Council for Graduate Med. Educ., 24 F.3d 519 (3d Cir. 1994)	15
Statutes and Rules	
20 C.F.R. § 655.736 (2016)	17
20 C.F.R. § 655.737 (2016)	17
20 C.F.R. § 655.738 (2016)	17
20 C.F.R. § 655.739 (2016)	17
Executive Order 13,780, 82 Fed. Reg. 13,209 (Mar. 9, 2017)	1
Immigration and Nationality Act § 212, 8 U.S.C. § 1182 (2012)	17

Immigration and Nationality Act § 214, 8 U.S.C § 1184 (2012)15
S. Ct. R. 37
21st Century Cures Act, Pub. L. No. 114-255, 130 Stat. 1033 (2016)26
15 U.S.C. § 37b (2012)2
Other Authorities
About ECMFG, Educ. Comm'n for Foreign Med. Graduates (last updated Apr. 2, 2013)
Fares Alahdab et al., Syrian Doctors and the American Dream: Practicing Medicine in a New Immigration Landscape, Health Aff. Blog (Feb. 24, 2017)
Stuart Anderson, Immigrants Flooding America with Nobel Prizes, Forbes (Oct. 16, 2016, 10:48 am)28
Stuart Anderson, Nat'l Found. for Am. Policy, The Contributions of Immigrants to Cancer Research in America (Feb. 2013)
Katrina Armstrong et al., Perspective, International Exchange and American Medicine, 376 New Eng. J. Med. e40 (2017)
Fred D. Baldwin, Access to Care: Overcoming the Rural Physician Shortage, Appalachian Reg'l Comm'n (last visited June 9, 2017)

Matthew Basilico & Michael Stepner, The Immigration Ban and the Physician Workforce, Health Aff. Blog (Mar. 6, 2017)
John R. Boulet, et al., The International Medical Graduate Pipeline: Recent Trends in Certification and Residency Training, 25 Health Aff. 469 (2006)
Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education 2011– 2012, 308 JAMA 2264 (2012)22
Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education, 2012– 2013, 310 JAMA 2328 (2013)22
Sarah E. Brotherton & Sylvia I. Etzel, <i>Graduate Medical Education</i> , 2013– 2014, 312 JAMA 2427 (2014)22
Sarah E. Brotherton & Sylvia I. Etzel, <i>Graduate Medical Education</i> , 2014– 2015, 314 JAMA 2436 (2015)22
Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education, 2015– 2016, 316 JAMA 2291 (2016)15, 21, 22
Anthony P. Carnevale et al., Geo. Univ. Ctr. on Educ. & the Workforce, Healthcare (June 2012)
Aaron Carroll, Immigration Reform's Potential Effects on US Health Care, JAMA Forum (Mar. 8, 2017)

Comm. on Global Health and the Future of the U.S., Nat'l Acads. of Scis., Eng'g & Med., Global Health and the Future Role of the United States (prepubl. copy 2017)	
158 Cong. Rec. (daily ed. Aug. 2, 2012)	15
158 Cong. Rec. (daily ed. Sept. 13, 2012)	15
Michael J. Connor, Jr., et al., Successful Delivery of RRT in Ebola Virus Disease, 26 J. Am. Soc'y Nephrology 31 (2015)	13
Conrad 30 Reauthorization Bill Earns Bipartisan Support, Am. Med. Ass'n (May 18, 2017)	15
Declaration of Michael F. Collins, Louhghalam v. Trump, Civ. Action No. 17-10154-NMG, 2017 WL 479779 (D. Mass. Feb. 3, 2017) (ECF No. 52-2)	27
Declaration of Dierdre Heatwole, Hawai'i v. Trump, CV. NO. 17-00050 DKW-KSC, 2017 WL 1011673 (D. Haw. Mar. 15, 2017) (ECF No. 154 Ex. 1 Ex. C)	20, 27
Declaration of Marc Overbeck, Hawai'i v. Trump, CV. NO. 17-00050 DKW- KSC, 2017 WL 1011673 (D. Haw. Mar. 15, 2017) (ECF No. 154 Ex. 1 Ex. G)	14 94

Declaration of Eric Scherzer, <i>Hawai'i v</i> . <i>Trump</i> , CV. NO. 17-00050 DKW- KSC, 2017 WL 1011673 (D. Haw. Mar. 15, 2017) (ECF No. 154 Ex. 1 Ex. I)	24
Defendants' Memorandum in Opposition to Plaintiffs' Motion for Temporary Restraining Order, Hawai'i v. Trump, CV. NO. 17-00050 DKW-KSC, 2017 WL 1011673 (D. Haw. Mar. 15, 2017) (ECF No. 145)	
Dental Care Health Professional Shortage Areas (HPSAs), Henry J. Kaiser Fam. Found. (last visited June 9, 2017)	.5
Ebola-Affected Countries Receive NIH Support to Strengthen Research Capacity, Nat'l Insts. of Health (Oct. 26, 2016)	11
Educ. Comm'n for Foreign Med. Graduates, ECFMG Fact Sheet for Consular Officials (Mar. 30, 2017)	23
Emerging Pandemic Threats Program: EPT-2, U.S. Agency for Int'l Dev. (last updated Nov. 25, 2014)	11
Employment-Based Immigration: First Preference EB-1, U.S. Citizenship & Immigration Servs. (last updated Oct. 29, 2015)	18
Howard H. Garrison et al., Biomedical Science Postdocs: An End to the Era of Expansion, 30 FASEB J. 41 (2016)	26

Atul Gawande, Why Boston's Hospitals Were Ready, New Yorker (Apr. 17, 2013)	13
Global Health Security Agenda, Advancing the Global Health Security Agenda: Progress and Early Impact from U.S. Investment (n.d.)	12
Global Virus Network, Zika Task Force Members (n.d.)	13
Akash Goel, What Americans Will Lose When They Push Immigrants Away, Time (Apr. 13, 2017, 12:45 pm)	8
Green Card Through a Physician National Interest Waiver (NIW), U.S. Citizenship and Immigration Servs. (last updated Feb. 17, 2016)	17
Esther Hing & Susan M. Schappert, Generalist and Specialty Physicians: Supply and Access, 2009–2010 (NCHS Data Brief No. 105, Sept. 2012)	25
Mike Hixenbaugh, New Travel Ban Could Keep Needed Foreign Docs out of Rural Texas, Hou. Chron. (Mar. 6. 2017, 1:49 pm)	24
IHS Markit, The Complexities of Physician Supply and Demand 2017 Update: Projections from 2015 to 2030 (Feb. 28, 2017)	4

Joint West Africa Research Group To
$Foster\ Biopreparedness\ Collaborative$
Initiative To Focus on Expanding
Research Capabilities in Region, U.S.
Army Med. Res. & Materiel
Command (last updated July 20,
2016)
M. Ihsan Kaadan, I'm a Syrian Doctor
Who Treated Patients in Aleppo. I'm
in the US To Give Back, STAT (Feb.
6, 2017)10
Peter A. Kahn & Tova M. Gardin,
Distribution of Physicians with H-1B
Visas by State and Sponsoring
Employer, 317 JAMA 2235 (2017)17
Darrell G. Kirch & Kate Petelle,
Viewpoint, Addressing the Physician
Shortage: The Peril of Ignoring
Demography, 317 JAMA 1947 (2017)6
Nicole Lurie, U.S. Dep't of Health &
Human Servs., National Health
Security Strategy and
Implementation Plan: 2015–2018
(n.d.)
Crystal Maynard, Experts Delve into
Issue of Wound Infections After Blast
Injuries, U.S. Army (Dec. 7, 2016)10
Kristen McCabe, Foreign-Born Health
Care Workers in the United States,
Migration Info. Source (June 27,
2012)
= v ±=/ ···································

Medical and Dental Education Program, U.S. Dep't of Vets. Affairs (last updated Feb. 28, 2017)	.22
Mental Health Care Health Professional Shortage Areas (HPSAs), Henry J. Kaiser Fam. Found. (last visited June 9, 2017)	5
Lisa Morris, Engineers, Scientists Participate in International Exchange Program, U.S. Army (Oct. 22, 2014)	.11
Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., The Future of the Nursing Workforce: National- and State-Level Projections, 2012–2025 (Dec. 2014)	6
Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., National and Regional Projections of Supply and Demand for Internal Medicine Subspecialty Practitioners: 2013- 2025 (Dec. 2016)	5
Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., State-Level Projections of Supply and Demand for Primary Care Practitioners: 2013-2025 (Nov. 2016)	5

Nat'l Resident Matching Prog., Results and Data: 2017 Main Residency Match (Apr. 2017)20, 21
Scott Neuman, Why Ebola Patients Are Getting Treatment in Nebraska, NPR (Oct. 6, 2014, 12:40 pm)13
Michael Ollove, Changes to Visa Program Put Foreign-Born Doctors in Limbo, PBS NewsHour: The Rundown (May 23, 2017, 3:46 pm)
Charlotte Oslund, Which Industries Need Workers? Exploring Differences in Labor Market Activity, Monthly Lab. Rev., Jan. 2016
P'ship for a New Am. Econ., Patent Pending: How Immigrants Are Reinventing the American Economy (June 2012)
Davis G. Patterson et al., Conrad 30 Waivers for Physicians on J-1 Visas: State Policies, Practices, and Perspectives (WWAMI Rural Health Ctr. Final Rep. No. 157, Mar. 2016)
Press Release, Darrell Issa & Brad Schneider, Reps. Issa and Schneider Introduce Bipartisan Legislation to Help Address Physician Shortages (Apr. 25, 2017)
Padmini D. Ranasinghe, International Medical Graduates in the U.S. Physician Workforce, 115 J. Am. Osteopathic Ass'n 236 (2015)

Rural J-1 Visa Waiver, Rural Health Info. Hub (last updated Feb. 24, 2017)	14
Shortage Areas, Health Res. & Servs. Admin. Data Warehouse (last visited June 9, 2017)	5
Lauren Silverman, Trump Travel Ban Spotlights U.S. Dependence on Foreign-Born Doctors, NPR (Feb. 11, 2017, 5:47 am)	8
Susan Sauer Sloan & Tom Arrison, Nat'l Acad. of Sci., Nat'l Acad. of Med. & Inst. of Med. of the Nat'l Acads., Examining Core Elements of International Research Collaboration: Summary of a Workshop (2011)	25
Teaching Hospitals: Bringing Together Patient Care, Research, and Education, Assoc. of Am. Med. Colls. (Mar. 14, 2017)	12
Cable from Rex W. Tillerson, U.S. Sec'y of State, to all diplomatic and consular posts (Mar. 17, 2017), reprinted in Posting of Cassandra Garrison to live.reuters.com (Mar. 23, 2017, 9:12 am)	19
2016 Physician Specialty Data Report: Number of People per Active Physician by Specialty, 2015, Assoc. of Am. Med. Colls. (last visited June 9, 2017)	21

Why Teaching Hospitals Are Important	
to All Americans, Assoc. of Am. Med.	
Colls. (Mar. 14, 2017)	12, 13
Amy Yurkanin, In Alabama, Doctors	
from Countries on Trump's Banned	
List Fill Medical Gaps, AL.com (Feb.	
4. 2017. 7:02 am)	8

INTEREST OF AMICI CURIAE¹

The Association of American Medical Colleges is a not-for-profit educational association dedicated to transforming healthcare through innovative medical education, cutting-edge patient care, and groundbreaking medical research. Its members comprise all 147 accredited U.S. medical schools, nearly 400 major teaching hospitals and health systems, and more than 80 academic societies. Through these institutions and organizations, the AAMC serves the leaders of America's medical schools and teaching hospitals and their nearly 160,000 faculty members, 83,000 medical students, and 115,000 resident physicians. AAMC's member teaching hospitals rely heavily on non-U.S. health professionals and, therefore, face acute and widespread workforce and patientcare risks attributable to the abrupt and destabilizing changes announced in Executive Order 13,780,2 which courts enjoined before it became effective.3

AAMC is joined in this brief by the American Academy of Family Physicians; the American Academy of Pediatrics; the American Associa-

¹ All parties have consented to the filing of *amici*'s brief. *See* S. Ct. R. 37.2(a). No counsel for a party authored this brief in whole or in part; no such counsel or party made a monetary contribution intended to fund the preparation or submission of this brief; and no person other than *amici*, their members, or their counsel made such a monetary contribution. *See id*. R. 37.6.

² 82 Fed. Reg. 13,209 (Mar. 9, 2017).

 $^{^3}$ *Amici* use the adjective "non-U.S." to refer to individuals born in a country other than the United States.

tion of Colleges of Nursing: the American Association of Colleges of Pharmacy; the American College of Healthcare Executives: the American College of Obstetricians and Gynecologists; the American College of Physicians; the American Dental Education Association: the American Nurses Association; the American Psychiatric Association; the American Public Health Association; the Association of Academic Health Centers; the Association of Schools and Programs of Public Health; the Association of Schools of Allied Health Professions: the Association of University Programs in Health Administration; the Greater New York Hospital Association; Hispanic-Serving Health Professions Schools, Inc.; the National Medical Association; the National Resident Matching Program; the Physician Assistant Education Association; and the Society of General Internal **Medicine**. Additional information regarding these organizations is provided in the Addendum to this brief.

SUMMARY OF THE ARGUMENT

A fair and efficient immigration system strengthens the American healthcare system and advances the nation's health security. Executive Order 13,780 jeopardizes those goals, but two district-court orders

 $^{^4}$ Amici use the term "immigration system" to refer to laws and policies governing foreign-born individuals who wish to live permanently or work or study temporarily in the United States.

have thus far preserved the status quo. ⁵ *Amici* take no position on whether the Court should issue a writ of certiorari to the Fourth Circuit. Regardless of how the Court resolves the petition, however, the federal government's applications to stay enforcement of the injunctions entered by the Districts of Maryland and Hawaii should be denied.

The United States relies upon a significant number of health professionals and scientists who have entered this country through our immigration system. Health professionals who do not hold U.S. citizenship have contributed to the health of our citizens, improved the quality of healthcare, and addressed our nation's health-professional shortages. In addition, global collaboration among scientists and other biomedical researchers contributes to breakthroughs that benefit the United States.

Congress has recognized the importance of non-U.S. professionals to the nation's healthcare system by establishing programs to attract physicians from other countries. Executive Order 13,780 threatens the balance struck by Congress by (1) exacerbating our nation's health-professional workforce shortages, (2) jeopardizing progress in medical innovation and the advancement of consistent standards of care, and (3) inhibiting global research and public-health col-

⁵ Int'l Refugee Assistance Project v. Trump, Civ. Action No. TDC-17-0361, 2017 WL 1018235, at *18 (D. Md. Mar. 16, 2017) (Pet. App. 261a), aff'd in relevant part en banc, No. 17-1351, 2017 WL 2273306 (4th Cir. May 31, 2017) (Pet. App. 1a); Hawai'i v. Trump, CV. NO. 17-00050 DKW-KSC, 2017 WL 1167383, at *8 (D. Haw. Mar. 29, 2017) (16A1911 Appl. Add. 23), appeal submitted, No. 17-15589 (9th Cir. May 15, 2017).

laboration opportunities. All of these consequences will, in the judgment of *amici*, undermine the health security of our nation and weaken our ability to avert and respond to health-related national-security threats.

ARGUMENT

- I. Non-U.S. Professionals Are Important to America's Healthcare System.
 - A. Non-U.S. Professionals Fill Critical Shortages in the Nation's Healthcare Community.
 - 1. The United States—Especially in Underserved Communities—Is Experiencing Healthcare Shortages.

The United States faces a growing shortage of health professionals.⁶ The AAMC estimates that the United States currently faces a shortage of between 13,900 and 25,900 physicians.⁷ The Henry J. Kaiser Family Foundation estimates a nationwide shortage

⁶ Charlotte Oslund, Which Industries Need Workers? Exploring Differences in Labor Market Activity, Monthly Lab. Rev., Jan. 2016, at 5–6, https://www.bls.gov/opub/mlr/2016/article/pdf/which-industries-need-workers-exploring-differences-in-labor-market-activity.pdf.

⁷ IHS Markit, The Complexities of Physician Supply and Demand 2017 Update: Projections from 2015 to 2030, at 50 (Feb. 28, 2017), https://aamc-black.global.ssl.fastly.net/production/media/filer_public/a5/c3/a5c3d565-14ec-48fb-974b-99fafaeecb00/aamc_projections_update_2017.pdf.

of more than 3,000 mental-health professionals and more than 8,000 dental-health professionals.⁸

Most states have hundreds of health-professional shortage areas (or "HPSAs"). Texas, for example, has more than a thousand. Nationwide, the Health Resources and Services Administration has identified 4,741 areas with a shortage of mental-health professionals, and the National Center for Health Workforce Analysis projects that 37 states will have a shortage of primary-care and many other specialty physicians in 2025. The NCHWA also projects an-

⁸ Mental Health Care Health Professional Shortage Areas (HPSAs), Henry J. Kaiser Fam. Found. (last visited June 9, 2017), http://kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/?currentTimeframe= 0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D; Dental Care Health Professional Shortage Areas (HPSAs), Henry J. Kaiser Fam. Found. (last visited June 9, 2017), http://www.kff.org/other/state-indicator/dental-care-health-professional-shortage-areas-hpsas/?current Timeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

⁹ Shortage Areas, Health Res. & Servs. Admin. Data Warehouse (last visited June 9, 2017), https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx. HPSAs are but one category of health-professional shortage areas designated by the U.S. Department of Health and Human Services.

 $^{^{10}}$ Id.

¹¹ Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., State-Level Projections of Supply and Demand for Primary Care Practitioners: 2013-2025, at 5 (Nov. 2016), https://bhw.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/primary-care-state-projections2013-2025.pdf; Nat'l Ctr. for Health Workforce (footnote continues on following page)

nual nursing shortages through 2025 in sixteen states. 12

Medically underserved communities, many of which are in rural areas, will suffer the consequences of the health-professional shortage most severely. Those communities are already experiencing a shortage, ¹³ and restricting the entry of non-U.S. healthcare professionals will only exacerbate it.

There is a direct connection between health-professional shortages and our nation's health security. The National Health Security Strategy and Implementation Plan for 2015 through 2018, prepared by the Assistant Secretary of Health and Human Services for Preparedness and Response, calls for a workforce "large enough to meet both routine and surge demands" but finds that "the public health, healthcare, and emergency management workforces are all currently operating under significant con-

nalysis U.S. Dan't of Health & Human Serve National and

Analysis, U.S. Dep't of Health & Human Servs., National and Regional Projections of Supply and Demand for Internal Medicine Subspecialty Practitioners: 2013-2025, at 4 (Dec. 2016), https://bhw.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/internal-medicine-subspecialty-report.pdf.

¹² Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., The Future of the Nursing Workforce: National- and State-Level Projections, 2012–2025, at 8–9 (Dec. 2014), https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/nursingprojections.pdf.

¹³ See, e.g., Darrell G. Kirch & Kate Petelle, Viewpoint, Addressing the Physician Shortage: The Peril of Ignoring Demography, 317 JAMA 1947, 1947 (2017).

straints, with gaps in coverage in many communities."¹⁴

2. Non-U.S. Professionals Comprise a Significant Part of the Nation's Healthcare Workforce, Especially in Underserved Areas.

Individuals from outside the United States play a critical role in the delivery of healthcare in America. As of 2010, more than one in four physicians practicing in the United States was born in another country. Non-U.S. health professionals hail from around the world, including from the six countries subject to the Executive Order's suspension of entry. Economists estimate that more than seven thousand physicians currently working in the United States received training in the six countries, and that those

¹⁴ Nicole Lurie, U.S. Dep't of Health & Human Servs., National Health Security Strategy and Implementation Plan: 2015–2018, at 26–27 (n.d.), https://www.phe.gov/Preparedness/planning/authority/nhss/Documents/nhss-ip.pdf.

¹⁵ Kristen McCabe, Foreign-Born Health Care Workers in the United States, Migration Info. Source (June 27, 2012), http://www.migrationpolicy.org/article/foreign-born-health-careworkers-united-states; see also Anthony P. Carnevale et al., Geo. Univ. Ctr. on Educ. & the Workforce, Healthcare 102 (June 2012), https://cew.georgetown.edu/wp-content/uploads/2014/11/ Healthcare.FullReport.090712.pdf (as of 2010, 27.56% of physicians and surgeons were foreign born). Individuals from other countries fill a similar number of positions in other healthcare occupations. Id. (reporting that, as of 2010, 21.36% of dentists, 20.44% of pharmacists, 15.18% of registered nurses, and 13.74% of physician assistants were foreign born).

doctors collectively provide fourteen million patient visits each year.¹⁷

Physicians from outside the United States "situate [themselves] on the front lines of medical need," including rural and other underserved communities, Native American communities, and U.S. Department of Veterans Affairs hospitals. ¹⁸ In Alabama, for example, "Syria ranks fourth as a source of doctors for medically-needy areas . . . behind India, Pakistan and the Philippines." ¹⁹ The Executive Order has a

¹⁸ Id. (reporting on professionals trained in the countries subject to the Executive Order); see also Padmini D. Ranasinghe, International Medical Graduates in the U.S. Physician Workforce, 115 J. Am. Osteopathic Ass'n 236, 238 (2015) (reporting that "a higher proportion of [international graduatesl than other graduates socioeconomically disadvantaged populations across the United States" and that they "tend to fill the gaps in workforce demands in rural areas"); Katrina Armstrong et al., Perspective, International Exchange and American Medicine, 376 New Eng. J. Med. e40(1), e40(2) (2017); Akash Goel, What Americans Will Lose When They Push Immigrants Away, Time (Apr. 13, 2017, 12:45 pm), http://time.com/4733567/immigration-doctors-rustbelt/; Lauren Silverman, Trump Travel Ban Spotlights U.S. Dependence on Foreign-Born Doctors, NPR (Feb. 11, 2017, 5:47 am), http://www.npr.org/sections/health-shots/2017/02/11/ 514399475/trump-travel-ban-spotlights-u-s-dependence-onforeign-born-doctors.

¹⁹ Amy Yurkanin, In Alabama, Doctors from Countries on Trump's Banned List Fill Medical Gaps, AL.com (Feb. 4, 2017, (footnote continues on following page)

¹⁶ Matthew Basilico & Michael Stepner, *The Immigration Ban and the Physician Workforce*, Health Aff. Blog (Mar. 6, 2017), http://healthaffairs.org/blog/2017/03/06/the-immigration-ban-and-the-physician-workforce/.

 $^{^{17}}$ *Id*.

direct impact on professionals from Iran, Libya, Somalia, Sudan, Syria, and Yemen, but it could also chill interest in professionals from other nations in practicing in the United States, "exacerbat[ing] already strained areas of health care."²⁰

B. Beyond Filling Shortages, Non-U.S. Professionals Play Important Roles in the American Healthcare System.

Health professionals from other countries make significant contributions to the nation's healthcare system. They facilitate America's participation in the global enterprise of researching health problems and devising solutions for patients. They enhance America's ability to respond to large-scale public-health threats.

Collaboration Between American Health Professionals and Non-U.S. Professionals Maximizes Research Efforts.

"Collaborative international efforts, especially strengthening the capacity of national health systems, are essential to prevent and prepare for an array of threats, from infectious disease pandemics to the silent killers of chronic noncommunicable diseas-

^{7:02} am), http://www.al.com/news/index.ssf/2017/02/in_alabama doctors from countr.html.

²⁰ Aaron Carroll, *Immigration Reform's Potential Effects on US Health Care*, JAMA Forum (Mar. 8, 2017), https://newsatjama.jama.com/2017/03/08/jama-forum-immigration-reforms-potential-effects-on-us-health-care/.

es."²¹ Any constraint on the participation of recognized experts in the free exchange of scientific research and collaboration impairs the collective knowledge of our healthcare community and jeopardizes American lives.²²

Medical research in the United States benefits greatly from the contributions of non-U.S. professionals. A recent study found that more than forty percent of the cancer researchers at America's top cancer institutes are immigrants. ²³ Federal agencies have provided financial support to U.S.-based institutions engaged in international-healthcare-research collaboration. The National Institutes of Health awarded grants in 2016 to Duke, Tulane, Vanderbilt, and Yale to "partner with West African academic centers to

²¹ Comm. on Global Health and the Future of the U.S., Nat'l Acads. of Scis., Eng'g & Med., *Global Health and the Future Role of the United States*, at ix (prepubl. copy 2017).

²² See M. Ihsan Kaadan, I'm a Syrian Doctor Who Treated Patients in Aleppo. I'm in the US To Give Back, STAT (Feb. 6, 2017), https://www.statnews.com/2017/02/06/syria-aleppodoctor-us/ (describing Syrian doctor's development of "novel ways to respond to the Zika epidemic"); see also Crystal Maynard, Experts Delve into Issue of Wound Infections After *Injuries*, U.S. Army (Dec. 7, 2016), www.army.mil/article/179290/experts_delve_into_issue_of_woun d_infections_after_blast_injuries (discussing program developed by the U.S. Department of Defense that gathers international expertise in battlefield injuries and infections and develops health solutions).

²³ Stuart Anderson, Nat'l Found. for Am. Policy, The Contributions of Immigrants to Cancer Research in America 1 (Feb. 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226420.

design training programs for their scientists and health researchers" who study "Ebola, Lassa fever, yellow fever and other emerging viral diseases." Although these grants fund work by American professionals abroad, they complement programs hosting non-U.S. professionals here, 25 and they demonstrate the importance of the cross-border exchange of ideas in healthcare. The government has similarly invested one billion dollars in the Global Health Security Agenda, an international "partnership . . . designed to measurably address global vulnerability to . . . public health threats, strengthen systems, and

²⁴ Ebola-Affected Countries Receive NIH Support to Strengthen Research Capacity, Nat'l Insts. of Health (Oct. 26, 2016), https://www.nih.gov/news-events/news-releases/ebolaaffected-countries-receive-nih-support-strengthen-researchcapacity; see also Joint West Africa Research Group To Foster Biopreparedness Collaborative Initiative To Focus on Expanding Research Capabilities in Region, U.S. Army Med. Res. & Materiel Command (last updated July 20, 2016), http:// mrmc.amedd.army.mil/index.cfm?pageid=media_resources.articl es.biopreparedness collaborative initiative in west africa ("The West African Ebola outbreak in 2014-15 highlighted gaps global public health response and countermeasures.").

²⁵ E.g., Lisa Morris, Engineers, Scientists Participate in International Exchange Program, U.S. Army (Oct. 22, 2014), https://www.army.mil/article/136728 ("Currently, seven foreign engineers and scientists work at the USAMRMC through the [Engineer and Scientist Exchange Program] and one U.S. scientist works abroad.").

²⁶ See, e.g., Emerging Pandemic Threats Program: EPT-2, U.S. Agency for Int'l Dev. (last updated Nov. 25, 2014), https://www.usaid.gov/ept2 (recognizing the importance of global networks to prevent and control pandemic threats).

ensure that a trained workforce has the tools needed to prevent, detect, and respond rapidly and effectively to infectious disease threats."²⁷

Global collaboration among health professionals provides opportunities to share medical knowledge and cross-train the clinical skills necessary to address global medical challenges. The Executive Order's impact on other nations' abilities to collaborate with the United States will likely make such collaboration less robust.

2. Inclusion of Non-U.S. Professionals in the American Healthcare Community Enhances America's Health Security.

The integration of health professionals from outside the United States into the nation's healthcare network improves more than global health security. It strengthens our domestic health security, advancing the express purpose of the Executive Order to protect Americans.

Teaching hospitals are critical to the healthsecurity infrastructure of the United States.²⁸ They

²⁷ Global Health Security Agenda, Advancing the Global Health Security Agenda: Progress and Early Impact from U.S. Investment 1, 2 (n.d.), https://www.ghsagenda.org/docs/default-source/default-document-library/ghsa-legacy-report.pdf?sfvrsn= 12.

²⁸ Why Teaching Hospitals Are Important to All Americans, Assoc. of Am. Med. Colls. (Mar. 14, 2017), https://news.aamc.org/for-the-media/article/teaching-hospitals-important-americans/; Teaching Hospitals: Bringing Together Patient Care, Research, and Education, Assoc. of Am. Med. Colls. (Mar. 14, 2017), https://news.aamc.org/for-the-media/article/teaching-hospitals/.

are often on the front lines when America experiences terrorist attacks and large-scale health threats, as evidenced by the roles they played in the response to the 2013 Boston Marathon bombing,²⁹ the treatment of Ebola in teaching hospitals in Nebraska and Atlanta,³⁰ and the locations of the members of the Global Virus Network's Zika Task Force.³¹

For decades, teaching hospitals have benefitted from the diverse training and skills of health professionals from other nations.³² The reliance of teaching hospitals on health professionals from outside the

²⁹ See, e.g., Atul Gawande, Why Boston's Hospitals Were Ready, New Yorker (Apr. 17, 2013), http://www.newyorker.com/news/news-desk/why-bostons-hospitals-were-ready.

³⁰ See Michael J. Connor, Jr., et al., Successful Delivery of RRT in Ebola Virus Disease, 26 J. Am. Soc'y Nephrology 31, 31 (2015) (describing treatment of Ebola patient in Atlanta); Scott Neuman, Why Ebola Patients Are Getting Treatment in Nebraska, NPR (Oct. 6, 2014, 12:40 pm), http://www.npr.org/sections/thetwo-way/2014/10/06/354083214/why-ebola-patients-aregetting-treatment-in-nebraska (reporting treatment of a Liberian man in Nebraska because of a government-commissioned biocontainment facility at a teaching hospital there); see also Why Teaching Hospitals Are Important to All Americans, supra note 28.

 $^{^{31}}$ Global Virus Network, Zika Task Force Members 1–19 (n.d.), http://gvn.org/wp-content/uploads/2016/03/GVN-ZTF-Bios.pdf.

 $^{^{32}}$ *E.g.*, Declaration of Eric Scherzer ¶ 12, *Hawai'i v. Trump*, CV. NO. 17-00050 DKW-KSC, 2017 WL 1011673 (D. Haw. Mar. 15, 2017) (ECF No. 154 Ex. 1 Ex. I) (detailing that of a New York hospital's 91 internal-medicine residents, 43 are on H-1B visas, 12 are on J-1 visas, and 20 have green cards).

United States makes such hospitals acutely vulnerable to disruptions in the immigration system.

II. Congress Has Recognized the Importance of Non-U.S. Professionals to the American Healthcare System.

A. Congress Established Programs To Attract Non-U.S. Professionals To Serve Medically Underserved Communities.

"[R]ural areas often experience difficulties in the recruitment and retention of physicians" and, "[d]ue to these difficulties, many communities turn to the recruitment of non-U.S. citizen international medical graduates . . . who trained on a J-1 visa to fill their physician vacancies." Congress responds to this in part through the Conrad 30 waiver program, which enjoys broad bipartisan support. 4

³³ Rural J-1 Visa Waiver, Rural Health Info. Hub (last updated Feb. 24, 2017), https://www.ruralhealthinfo.org/topics/j-1-visa-waiver; see also Fred D. Baldwin, Access to Care: Overcoming the Rural Physician Shortage, Appalachian Reg'l Comm'n (last visited June 9, 2017), https://www.arc.gov/magazine/articles.asp?ARTICLE_ID=98; Declaration of Marc Overbeck ¶¶ 3, 5, Hawai'i, 2017 WL 1011673 (ECF No. 154 Ex. 1 Ex. G) (describing J-1 visa program and its role in ensuring an adequate supply of healthcare providers in rural and other underserved areas).

³⁴ Press Release, Darrell Issa & Brad Schneider, Reps. Issa and Schneider Introduce Bipartisan Legislation to Help Address Physician Shortages (Apr. 25, 2017), https://issa.house.gov/news-room/press-releases/reps-schneider-and-issa-introduce-bipartisan-legislation-help-address. The most recent reauthorization of the Conrad 30 waiver program (that was not included within an appropriations measure) passed on (footnote continues on following page)

The majority of physicians from other countries who serve their medical residency³⁵ in the United States do so as "exchange visitors" under a J-1 visa.³⁶ Through the Conrad 30 program, up to thirty physicians per state per year can obtain a service-based waiver of the J-1 visa's requirement that the holders return to their home countries if they agree to be employed full-time for at least three years serving patients in medically underserved communities.³⁷ More than fifteen thousand physicians from other countries have participated in the Conrad 30 program since it was first authorized in 1994.³⁸

unanimous consent in the Senate, 158 Cong. Rec. S6007 (daily ed. Aug. 2, 2012), and a 412–3 vote in the House, *id.* at H5972 (daily ed. Sept. 13, 2012).

- ³⁵ Medical residencies are a "vital component of American medical education," *McKeesport Hosp. v. Accreditation Council for Graduate Med. Educ.*, 24 F.3d 519, 525 (3d Cir. 1994), that provide new physicians "a supervised transition between the pure academics of medical school and the realities of practice," *Doe v. Mercy Catholic Med. Ctr.*, 850 F.3d 545, 549 (3d Cir. 2017).
- 36 See Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education, 2015–2016, 316 JAMA 2291, 2302 (2016).
- 37 See Immigration and Nationality Act § 214(l), 8 U.S.C § 1184(l) (2012); Conrad 30 Waiver Program, U.S. Citizenship & Immigration Servs. (last updated May 5, 2014), https://www.uscis.gov/working-united-states/students-and-exchange-visitors/conrad-30-waiver-program.
- ³⁸ Conrad 30 Reauthorization Bill Earns Bipartisan Support, Am. Med. Ass'n (May 18, 2017), https://wire.ama-assn.org/ama-news/conrad-30-reauthorization-bill-earns-bipartisan-support.

Although the Conrad 30 waiver program is decentralized, many of the program's oversight and approval responsibilities remain with the federal government. ³⁹ For example, the U.S. Department of State Waiver Review Division must review and recommend each Conrad 30 waiver forwarded by a state health department before the waiver may be considered by the U.S. Citizenship and Immigration Services, an agency within the Department of Homeland Security. In turn, USCIS has exclusive jurisdiction to approve or deny each such waiver. USCIS is also the sole agency responsible for approving petitions for H-1B status, a precondition for employment authorization to fulfill the three-year-service commitment under the Conrad 30 waiver program. ⁴⁰

Some physicians from other countries continue to serve beyond the required three years in a medically underserved area, often in connection with the Physician National Interest Waiver Program. This program provides a path for physicians to obtain lawful-permanent-resident status. Under the program, a physician agrees to work full-time for five years in an area designated by HHS as having a physician shortage or at a healthcare facility under the jurisdiction of the Secretary of the Veterans Administra-

³⁹ Davis G. Patterson et al., Conrad 30 Waivers for Physicians on J-1 Visas: State Policies, Practices, and Perspectives 2 (WWAMI Rural Health Ctr. Final Rep. No. 157, Mar. 2016), http://depts.washington.edu/fammed/rhrc/wpcontent/uploads/sites/4/2016/03/RHRC_FR157_Patterson.pdf.

⁴⁰ About ECMFG, Educ. Comm'n for Foreign Med. Graduates (last updated Apr. 2, 2013), http://www.ecfmg.org/about/.

tion. This increases patient access to care by retaining physicians from other countries in medically underserved U.S. communities and in VA hospitals.⁴¹

B. Congress Established Programs for Non-U.S. Specialists and Others with Extraordinary Abilities.

Physicians from other countries are also eligible for USCIS-issued H-1B visas for specialty occupations under the sponsorship of a U.S. employer. In general, a physician from another country may obtain H-1B status for up to six years.⁴² In 2016, the federal government approved certifications for more than ten thousand physicians to work under an H-1B visa.⁴³

⁴¹ Green Card Through a Physician National Interest Waiver (NIW), U.S. Citizenship and Immigration Servs. (last updated Feb. 17, 2016), https://www.uscis.gov/green-card/other-ways-get-green-card/green-card-through-physician-national-interest-waiver-niw.

 $^{^{42}}$ Immigration and Nationality Act § 212(n)(1)(E)–(n)(1)(G), (n)(3), 8 U.S.C. § 1182(n)(1)(E)–(n)(1)(G), (n)(3) (2012); 20 C.F.R. §§ 655.736–.739 (2016).

⁴³ Peter A. Kahn & Tova M. Gardin, *Distribution of Physicians with H-1B Visas by State and Sponsoring Employer*, 317 JAMA 2235, 2235 (2017); see also Michael Ollove, *Changes to Visa Program Put Foreign-Born Doctors in Limbo*, PBS NewsHour: The Rundown (May 23, 2017, 3:46 pm), http://www.pbs.org/newshour/rundown/changes-visa-program-put-foreign-born-doctors-limbo/ (reporting that University of Arkansas for Medical Sciences "had 86 slots for H-1B visa holders in 2016" and "used the visa program to recruit pioneering researchers from around the world").

In addition, physicians and other health professionals from other countries may submit an immigrant petition on the basis of extraordinary ability reflected in national or international acclaim, or recognition as an outstanding professor or researcher with an offer of tenure or a tenure-track position at a U.S. institution of higher education.⁴⁴

III. The Executive Order Threatens To Upset the Carefully Balanced and Highly Regulated Immigration Processes Essential to Maintaining an Adequate Healthcare Workforce and Promoting Biomedical Research in the United States.

The Executive Order threatens to upset the carefully balanced and highly regulated immigration processes essential to the delivery of healthcare in the United States and the conduct of vital biomedical research. The changes contemplated by the Executive Order—nationality-based suspension of entry with an undefined waiver process and projected system backlogs—put patient care at risk. For example, a consular cable transmitted by the Secretary of State shortly after the Executive Order was issued recognizes that limiting visa interviews in connection with heightened scrutiny and vetting "may cause inter-

⁴⁴ Employment-Based Immigration: First Preference EB-1, U.S. Citizenship & Immigration Servs. (last updated Oct. 29, 2015), https://www.uscis.gov/working-united-states/permanent-workers/employment-based-immigration-first-preference-eb-1.

view backlogs to rise."⁴⁵ While the government's attorneys have stated that the Executive Order "includes a comprehensive waiver process to mitigate any undue hardship,"⁴⁶ no guidance has been issued. Key questions relating to the waiver process remain unanswered:

- (1) Will signed, mutually binding contractual obligations between physicians and their graduate-medical-education programs and related participation in those programs be considered presumptive grounds for a waiver?
- (2) May a physician leave the United States temporarily to visit family members or otherwise tend to personal or professional matters such as conferences or charity work without jeopardizing reentry?
- (3) Will deadlines associated with the U.S. graduate-medical-education postgraduate year (July 1 through June 30), such as residency-position start dates, which are outside the control of the physician, be accommodated through the waiver process?

⁴⁵ Cable from Rex W. Tillerson, U.S. Sec'y of State, to all diplomatic and consular posts ¶ 13 (Mar. 17, 2017), reprinted in Posting of Cassandra Garrison to live.reuters.com (Mar. 23, 2017, 9:12 am), http://live.reuters.com/Event/Live_US_Politics/791255396.

⁴⁶ Defendants' Memorandum in Opposition to Plaintiffs' Motion for Temporary Restraining Order at 1–2, *Hawai'i*, 2017 WL 1011673 (ECF No. 145).

(4) Will the cognizant agencies confirm the specific documentation from host graduate-medical-education programs, sponsoring employers, and host research organizations that they will deem probative in connection with a waiver application?⁴⁷

In the absence of transparent criteria and timely decision making, *amici* believe there is a risk that U.S. healthcare institutions will be passed over by highly qualified health professionals from other countries, to the detriment of our nation's patients.

Sudden changes in immigration processes and widespread backlogs present a significant complication for the "Match," the annual process that matches the preferences of individuals seeking a slot in a graduate-medical-education program to the preferences of the training program, resulting in assignments of residents and fellows. The 2017 Match included more than 43,000 applicants for graduate-medical-education training programs, including more than 10,000 non-U.S. citizens.⁴⁸

According to Congress, the Match "ha[s] been an integral part of an educational system that has pro-

⁴⁷ See Declaration of Dierdre Heatwole ¶ 12, Hawai'i, 2017 WL 1011673 (ECF No. 154 Ex. 1 Ex. C) (stating that Executive Order's waiver process does not meaningfully diminish uncertainty related to approvals needed for entry and continued stay); Declaration of Eric Scherzer, supra note 32, ¶ 12 (same).

⁴⁸ Nat'l Resident Matching Prog., Results and Data: 2017 Main Residency Match 1 (Apr. 2017), http://www.nrmp.org/wp-content/uploads/2017/04/Main-Match-Results-and-Data-2017. pdf.

duced the finest physicians and medical researchers in the world." ⁴⁹ Congress also acknowledged the country's teaching hospitals and medical schools' "crucial missions of patient care, physician training, and medical research." ⁵⁰

In 2017, medical-school graduates from countries other than the United States and Canada matched to more than 2,000 of the internal-medicine residencies in the United States.⁵¹ Graduates from other countries matched to 337 first-year family-medicine-residency positions and 253 first-year pediatrics-residency positions, providing much needed care in the types of practices where physician shortages are growing.⁵²

Medical residents comprise roughly twelve percent of all active physicians in the United States.⁵³ Of the 120,000 residents and fellows who served in graduate-medical-education programs in 2015, more than 18,000 were neither U.S. citizens nor lawful permanent residents.⁵⁴ In each year from 2011 through 2015, eight to nine percent of resident physi-

⁴⁹ 15 U.S.C. § 37b(a)(1)(A) (2012).

⁵⁰ *Id.* § 37b(a)(1)(E).

⁵¹ Nat'l Resident Matching Prog., *supra* note 48, at 8.

⁵² *Id.* at 7.

⁵³ Brotherton & Etzel, supra note 36, at 2302; 2016 Physician Specialty Data Report: Number of People per Active Physician by Specialty, 2015, Assoc. of Am. Med. Colls. (last visited June 9, 2017), https://www.aamc.org/data/workforce/reports/458490/1-2-chart.html.

⁵⁴ See Brotherton & Etzel, supra note 36, at 2302.

cians held temporary visas.⁵⁵ This demonstrates that, despite the recent opening of several new medical schools, there are insufficient graduates of U.S. medical schools to meet the needs of U.S. medical-residency programs and the nation's overall need for physicians. Professionals from other countries fill these gaps serving as physician-trainees in accredited programs.

Medical residents, which include a significant percentage of non-U.S. physicians, are essential to the delivery by the VA of healthcare to our nation's veterans. In 2014, more than 40,000 medical residents, including those holding temporary visas, completed some or all of their clinical training in VA hospitals and other medical centers. Given the VA's reliance on non-U.S. physicians, *amici* are concerned that any reduction in their numbers will likely result in longer waits for veterans seeking healthcare.

⁵⁵ Id. J-1 or J-2 exchange-visitor visas were held by 6,568 residents; 3,167 residents held H-1, H-1B, H-2, or H-3 temporary-worker visas; and 403 residents held F-1 student visas, and approximately 60 residents held B-1 or B-2 temporary-visitor visas. Id.; see also Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education, 2014–2015, 314 JAMA 2436, 2446 (2015); Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education, 2013–2014, 312 JAMA 2427, 2437 (2014); Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education, 2012–2013, 310 JAMA 2328, 2338 (2013); Sarah E. Brotherton & Sylvia I. Etzel, Graduate Medical Education 2011–2012, 308 JAMA 2264, 2273 (2012).

⁵⁶ Medical and Dental Education Program, U.S. Dep't of Vets. Affairs (last updated Feb. 28, 2017), https://www.va.gov/oaa/gme_default.asp.

The State Department has designated the Educational Commission for Foreign Medical Graduates as the visa sponsor for all J-1 exchange-visitor physicians who participate in clinical-training programs in the United States. To participate in graduate-medical-education programs, graduates from medical schools in countries other than the United States and Canada must achieve certification through the ECFMG. Certification involves verification of identity, verification of graduation from a recognized medical school, successful performance on professional knowledge and skills examinations, and screening against the U.S. Department of Treasury Office of Foreign Assets Control Specially Designated Nationals List.⁵⁷

A destabilized and further backlogged immigration system will interfere with the ability of medical-residency programs to select the applicants deemed best qualified for their programs, patients, and communities, and it will disrupt the staffing of training programs. This harms both the hospitals and the patients they serve by reducing the number of qualified physicians available to provide necessary care to patients throughout the United States. Further, a reduction in the number of qualified medical-school graduates who participate in medical-residency programs will exacerbate the already growing physician-

⁵⁷ John R. Boulet, et al., *The International Medical Graduate Pipeline: Recent Trends in Certification and Residency Training*, 25 Health Aff. 469, 473–74 (2006); Educ. Comm'n for Foreign Med. Graduates, ECFMG Fact Sheet for Consular Officials 1–2 (Mar. 30, 2017), http://www.ecfmg.org/annc/fact-sheet-consular-officials.pdf.

workforce shortage—a shortage felt most acutely in rural and urban underserved communities.⁵⁸

Backlogged immigration processes will disrupt the orderly transition between medical residency program years, which occur on or about July 1. If visa-related processing delays prevent a physician from reporting on July 1, even if the delays are short term, the adverse effect on patients will be immediate and potentially irreparable, beginning with strains on coverage in critical care, surgical, and outpatient settings. Delays also threaten the viability of the Conrad 30 waiver program and other widely used pathways that rely on timely decisions on petitions for initial approval or changes in immigration status. As a result, highly skilled medical graduates from other countries are likely to pursue residencies outside the United States.⁵⁹

The absence of even one physician can have a significant impact. ⁶⁰ This harm is more than hypothet-

 $^{^{58}}$ See Declaration of Marc Overbeck, supra note 33, ¶¶ 4, 6 (discussing hardship to state and harm to patients if J-1 visas are not available to doctors from affected countries); Declaration of Eric Scherzer, supra note 32, ¶¶ 12–13 ("As a result of the . . . Executive Order, physicians from the affected countries may not pursue entry to the U.S. in J-1 status and will thereby deprive underserved rural communities of the benefit of their service under a J-1 waiver after their training.").

⁵⁹ Declaration of Eric Scherzer, *supra* note 32, ¶ 10.

⁶⁰ Id. ¶ 14; see also Mike Hixenbaugh, New Travel Ban Could Keep Needed Foreign Docs out of Rural Texas, Hou. Chron. (Mar. 6. 2017, 1:49 pm), http://www.houstonchronicle.com/local/prognosis/article/Rural-Texansrely-on-foreign-doctors-Trump-s-new-10980251.php (discussing importance of foreign physicians to rural and urban healthcare); (footnote continues on following page)

ical. Although the predecessor Executive Order was in effect for only a short period of time, it prevented licensed physicians from entering the United States, where they had responsibilities for patient care.⁶¹

The Executive Order also has the potential to adversely affect patient care by constraining medical research and innovation. ⁶² In 2016, all six American winners of the Nobel Prize in economics and scientific fields were immigrants. Moreover, since 2000, immigrants have been awarded 40%—or 31 of 78—of the Nobel Prizes won by Americans in chemistry, medicine, and physics. ⁶³ An analysis of the U.S. Pa-

Esther Hing & Susan M. Schappert, Generalist and Specialty Physicians: Supply and Access, 2009–2010, at 2 (NCHS Data Brief No. 105, Sept. 2012), https://www.cdc.gov/nchs/data/databriefs/db105.pdf (on average, a specialty physician provides 2,704 patient visits annually and a generalist physician provides 3,521 patient visits annually).

⁶¹ See, e.g., Fares Alahdab et al., Syrian Doctors and the American Dream: Practicing Medicine in a New Immigration Landscape, Health Aff. Blog (Feb. 24, 2017), http://healthaffairs.org/blog/2017/02/24/syrian-doctors-and-the-american-dream-practicing-medicine-in-a-new-immigration-landscape/.

⁶² See Susan Sauer Sloan & Tom Arrison, Nat'l Acad. of Sci., Nat'l Acad. of Med. & Inst. of Med. of the Nat'l Acads., Examining Core Elements of International Research Collaboration: Summary of a Workshop 1 (2011) (noting that "[t]he globalization of science, engineering, and medical research is proceeding rapidly" as governments recognize that "research and development . . . leads to economic growth, employment, and overall social well-being of their citizens").

63 Stuart Anderson, Immigrants Flooding America with Nobel Prizes, Forbes (Oct. 16, 2016, 10:48 am), https:// (footnote continues on following page) tent and Trademark Office's online database shows that 76% of patents awarded to the top ten patent-producing U.S. universities in 2011 listed at least one inventor who had been born in another country. 64 During that same period, 56% of all patents were awarded to inventors who were students, postdoctoral fellows, or staff researchers from another country. 65 Because non-U.S. postdoctorate students are increasingly relied upon to counter a decrease in U.S. students pursuing biomedical research in this nation, chilling their participation could adversely affect biomedical research and our health security. 66

Finally, it is widely recognized in scientific fields that travel and global collaboration are essential incubators of research and innovation. Indeed, Congress has specifically recognized the importance of international collaboration in fields such as biomedical research.⁶⁷ The Executive Order inhibits such in-

www.forbes.com/sites/stuartanderson/2016/10/16/immigrants-flooding-america-with-nobel-prizes/#57237ef06cb6.

⁶⁴ P'ship for a New Am. Econ., Patent Pending: How Immigrants Are Reinventing the American Economy 1 (June 2012), http://www.newamericaneconomy.org/wp-content/uploads/2013/07/patent-pending.pdf.

 $^{^{65}}$ Id.

⁶⁶ Howard H. Garrison et al., *Biomedical Science Postdocs:* An End to the Era of Expansion, 30 FASEB J. 41, 41, 43 (2016).

⁶⁷ E.g., 21st Century Cures Act, Pub. L. No. 114-255, § 2072, 130 Stat. 1033, 1083 (2016) (expressing sense of Congress that it should "encourage a global pediatric clinical study network by providing grants, contracts, or cooperative agreements to support new and early stage investigators who participate in the global pediatric clinical study network" and that the (footnote continues on following page)

novation. For example, the probability that some non-U.S. physicians currently working inside the United States will not be able to return if they travel to a conference abroad could have a chilling effect on this type of collaboration.⁶⁸

CONCLUSION

The organizations submitting this brief have a long history of collaborating with a diverse and highly skilled workforce of U.S. and non-U.S. health professionals to treat hundreds of millions of patients annually and to conduct groundbreaking research leading to medical breakthroughs. Health professionals and scientific experts from other countries are rigorously screened, must satisfy strict standards of qualification set by our government, and are addressing compelling needs in our communities.

Secretary of Health and Human Services "should engage with clinical investigators and appropriate authorities outside of the United States, including authorities in the European Union, during the formation of the global pediatric clinical study network to encourage the participation of such investigator and authorities").

68 Declaration of Michael F. Collins ¶¶ 5, 10, 13, 15, Louhghalam v. Trump, Civ. Action No. 17-10154-NMG, 2017 WL 479779 (D. Mass. Feb. 3, 2017) (ECF No. 52-2); see also Declaration of Dierdre Heatwole, supra note 47, ¶ 12 (describing adverse effects on faculty, researchers, post-docs, graduate teaching assistants, and medical residents, including disruption of recruitment schedule; interference with plans to attend conferences, exchange programs, seminars, and symposia in other countries; with prospect of losing prospective students and faculties to other countries).

Amici believe that their work to ensure our nation's health security—through critically needed patient care and cutting-edge biomedical research—contributes to our national security. In doing so, amici rely upon immigration processes to operate fairly and efficiently. Amici are deeply concerned that the Executive Order, and similar actions barring or discouraging health professionals and scientists from coming to the United States, will reduce patient access to care, inhibit medical innovation and biomedical research, and set back efforts to prevent pandemics and other public-health threats to Americans.

For the reasons provided above, whether it decides to review the Fourth Circuit's judgment or not, this Court should deny the federal government's applications to stay enforcement of the injunctions against Executive Order 13,780.

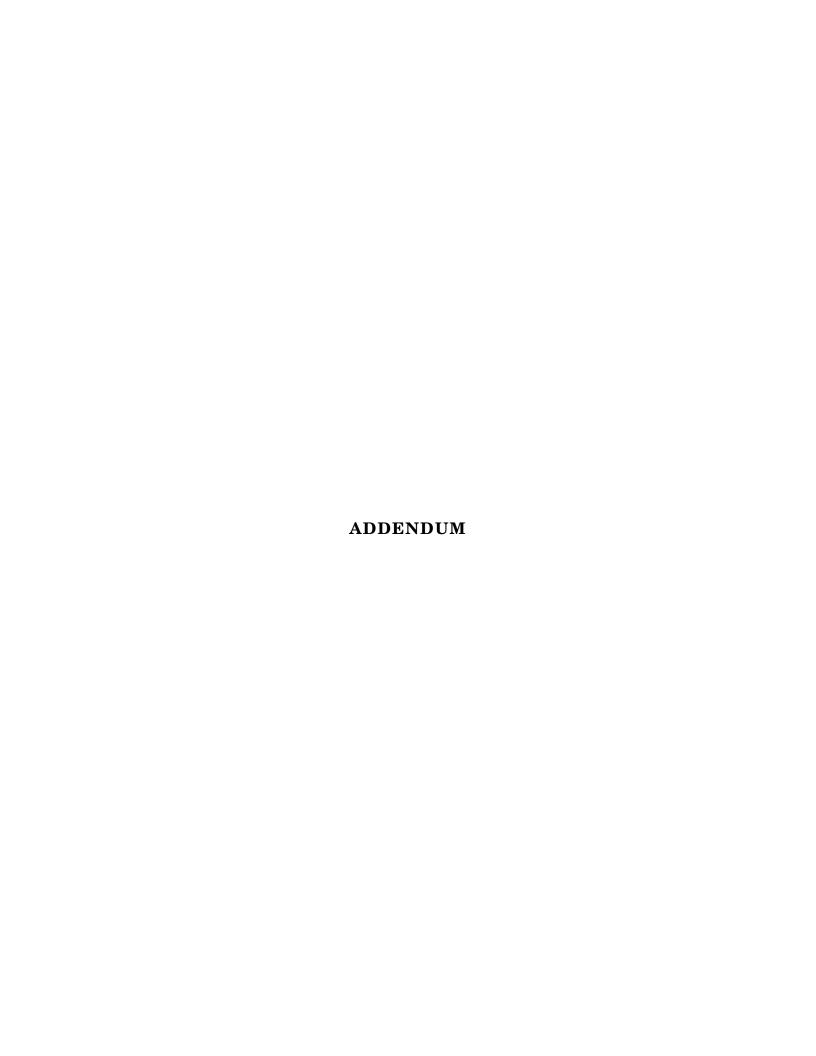
Dated: June 9, 2017

Respectfully Submitted,

Frank R. Trinity Amber R. Sterling Association of American Medical Colleges 655 K St., N.W. Washington, D.C. 20001 202.828.0540

Counsel for the Association of American Medical Colleges Joshua David
Rogaczewski
Counsel of Record
Jennifer S. Geetter
Charles R. Quigg
Matthew M. Girgenti
McDermott Will &
Emery LLP
500 N. Capitol St., N.W.
Washington, D.C. 20001
202.756.8000
jrogaczewski@mwe.com

Counsel for Amici Curiae



AMICI CURIAE

Association of American Medical Colleges—represents all 147 accredited U.S. medical schools, nearly 400 major teaching hospitals and health systems, and more than 80 academic and scientific societies.

American Academy of Family Physicians—represents more than 129,000 family physicians, family-medicine residents, and medical students from all fifty states, the District of Columbia, Guam, Puerto Rico, the Virgin Islands, and the Uniformed Services of the United States.

American Academy of Pediatrics—a not-forprofit professional organization of 66,000 primarycare pediatricians, pediatric-medical subspecialists, and pediatric-surgical specialists dedicated to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults.

American Association of Colleges of Nursing—represents 810 member schools offering baccalaureate and graduate programs in nursing at public and private universities nationwide.

American Association of Colleges of Pharmacy—represents pharmacy education in the United States, advancing pharmacy education, research, scholarship, practice, and service to improve societal health.

American College of Healthcare Executives—an international professional society of 40,000 healthcare executives who lead hospitals,

healthcare systems, and other healthcare organizations.

American College of Obstetricians and Gynecologists—is a not-for-profit educational and professional organization with more than 58,000 members dedicated to the healthcare of women.

American College of Physicians—represents 148,000 internal-medicine physicians (internists), related subspecialists, and medical students.

American Dental Education Association—the "Voice of Dental Education," with members that include all 66 U.S. dental schools, over 800 allied and advanced dental-education programs, 66 corporations, and more than 20,000 individuals.

American Nurses Association—represents the interests of 3.6 million registered nurses, has more than 179,000 members through both state associations and individual membership, and has 35 national organizational affiliates that collectively represent approximately 420,000 registered nurses in specialty areas.

American Psychiatric Association—represents more than 37,000 members involved in psychiatric practice, research, and academia representing the diversity of the patients for whom they care. As the leading psychiatric organization in the world, APA now encompasses members practicing in more than 100 countries.

American Public Health Association—champions the health of all people and all communities, strengthens the profession of public health, shares the latest research and information, promotes

best practices, and advocates for public-health issues and policies grounded in research.

Association of Academic Health Centers—a not-for-profit association dedicated to advancing the nation's health and well-being through the vigorous leadership of academic health centers.

Association of Schools and Programs of Public Health—represents more than 100 schools and programs accredited by the Council on Education for Public Health.

Association of Schools of Allied Health Professions—a national association comprised of 115 not-for-profit universities focused on issues impacting allied-health education.

Association of University Programs in Health Administration—a global network of colleges, universities, faculty, individuals, and organizations dedicated to the improvement of health and healthcare delivery through excellence in healthcare management and policy education and scholarship, by promoting the value of university-based management education for leadership roles in the health sector.

Greater New York Hospital Association—represents more than 160 hospitals and health systems located throughout New York, New Jersey, Connecticut, Pennsylvania, and Rhode Island. All of GNYHA's members are either not-for-profit entities, charitable organizations, or publicly sponsored institutions that provide services that range from state-of-the-art, acute tertiary services to basic primary care, and, with their related medical schools, provide

medical education and training and undertake cutting-edge medical research.

Hispanic-Serving Health Professions Schools, Inc.—represents 44 schools of medicine, public health, nursing, pharmacy, and dentistry that strive to strengthen the nation's capacity to increase the Hispanic health workforce and advance the health of Hispanics.

National Medical Association—represents and promotes the interests of physicians and patients of African descent.

National Resident Matching Program—a private, not-for-profit organization established in 1952 to provide an orderly and fair mechanism for matching the preferences of applicants for U.S. residency positions with the preferences of residency-program directors.

Physician Assistant Education Association—represents over 200 physician-assistant programs across the nation.

Society of General Internal Medicine—represents more than 3,600 of the world's leading academic general internists, who are dedicated to improving access to care for vulnerable populations, eliminating healthcare disparities, and enhancing medical education.