R_X FOR STRENGTHENING MASSACHUSETTS' ECONOMY AND HEALTHCARE SYSTEM

A Report by
The Governor's Advisory Council for Refugees and Immigrants
Task Force on
Immigrant Healthcare Professionals in Massachusetts

Presented to Governor Deval L. Patrick

The Commonwealth of Massachusetts
Governor's Advisory Council for Refugees and Immigrants

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The Commonwealth of Massachusetts
Governor's Advisory Council for Refugees and Immigrants

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Dear Governor Patrick:

The Governor's Advisory Council for Refugees and Immigrants (GAC) is pleased to present to you this report, "R_x for Massachusetts' Economy and Healthcare System." The report was developed by a statewide Task Force on Immigrant Healthcare Professionals in Massachusetts, which you requested the GAC convene in order to "explore the support needed for immigrant and refugee medical professionals to attain their full potential in this country" and to report to you on pathways to workforce development for these professionals.

The importance of leveraging the talents of immigrant professionals in Massachusetts was articulated in the "New Americans Agenda" that the GAC developed in response to your July 2008 Executive Order No. 503, directing the Council to provide recommendations for better integrating refugees and immigrants into the economy and the Commonwealth as a whole. A comprehensive vision of immigrant integration in the Commonwealth, the Agenda proposed several strategies to improve access to relicensing for immigrant and refugee professionals. These included a review of licensing regulations, a government web portal with comprehensive relicensing information and centers to share that information, and establishing policies to assist immigrant professionals in completing required coursework and other licensing prerequisites.

This report builds on these strategies, but also considers how to embed such approaches within the state's larger workforce development, higher education, and healthcare systems and strategic planning. It also presents new data on the labor market barriers that immigrant healthcare professionals, particularly those who are foreign-trained, face in Massachusetts, and explores the benefits to the state's economy and healthcare system of addressing these barriers. While focusing on medical professionals, the recommendations here offer a model for policies can support tens of thousands of immigrant professionals in other fields as well, from engineering to teaching, in attaining their full potential in Massachusetts and putting their skills and experience to work for our economy and for all the residents of the Commonwealth.

In closing, the GAC would like to commend and offer our deepest thanks to the members of the Task Force, a diverse group that included leaders from state and local government agencies, healthcare sector employers, academia, community-based groups, licensing boards, and workforce development bodies. We also want to thank members of your administration, including the leadership of the Office for Refugees and Immigrants, the Executive Office of Health and Human Services, and the Office for Access and Opportunity, for their guidance and strong support of this effort. The GAC also extends its appreciation to the Massachusetts Immigrant and Refugee Advocacy (MIRA) Coalition, which has long championed the contributions of immigrant professionals in Massachusetts, and provided research and project oversight of the Task Force initiative, and to the J.M. Kaplan Fund and The Boston Foundation, which have provided generous ongoing support for MIRA's work in this area.

Respectfully,

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Executive Summary

This report presents the findings of the Governor's Advisory Council on Refugees and Immigrants' Task Force on Immigrant Healthcare Professionals in Massachusetts, called for by the Governor to develop recommendations to support the career advancement and professional contributions of immigrant healthcare professionals in Massachusetts, especially those trained abroad. **With healthcare reform driving an increase in statewide demand for clinicians in all fields from 12 to 30 percent by 2020, an aging native-born workforce, and an increasingly diverse state population in need of linguistically and culturally competent healthcare services, the Commonwealth cannot afford to ignore the talent and resources that foreign-trained healthcare professionals can provide**.

More than 820,000 foreign-born residents of the U.S. are trained healthcare professionals—22 percent of all healthcare professionals in the country. This includes more than 12,000 nurses, doctors, dentists, physical therapists, pharmacists, and other health professionals in Massachusetts. *Two-thirds of these individuals received their education outside of the U.S.*[1]

The path to relicensing for internationally trained healthcare professionals is an especially complex and challenging one; most have labored successfully to make the transition and to put their training and skills to work in their new country and their new state. This includes an astonishing *one quarter* of all practicing physicians in the Commonwealth. **Many foreign-trained professionals, however, face significant barriers to re-entering their professions or transitioning to other skilled healthcare careers in the U.S. *More than 1 in 5 foreign-trained healthcare professionals in Massachusetts are unemployed or working in a low wage, low-skilled job*.** The barriers they face can range from limited English proficiency and lack of targeted career services to complex and costly relicensing requirements, or simply the challenge of completing the relicensing process while holding down a low-paying "survival job."

This report examines labor market barriers impacting foreign-trained healthcare professionals in Massachusetts and the U.S. and offers detailed policy and program recommendations to help the Commonwealth capitalize on the opportunity these professionals represent for our economy and our healthcare system. The recommendations include more centralized information on relicensing pathways, improved career supports at workforce development and educational institutions, and a review of healthcare professional licensure regulations. Finally, the report calls for a new position within the Office for Refugees and Immigrants to oversee state immigrant integration policy, and to ensure coordination of those efforts across the state's executive agencies.

The Task Force has brought together representatives of state and local government agencies, healthcare sector employers, academia, community-based groups, licensing boards, and workforce development bodies. Its work has also been informed by consultations with other policy-makers, subject matter experts, and leaders across public, nonprofit, academic and private sectors; by analysis of national and state-level data; and by extensive literature review. **The four strategies offered here seek to leverage existing policies, programs, and funding streams, emphasizing cross-sector collaborations and carefully targeted new public expenditures.** They address both what state government can do, and what can be done by other stakeholders, including nonprofit organizations, academic institutions, and employers, either on their own or in partnership.

The strategies the Task Force proposes include:

1. Improve Informational Resources and Stakeholder Awareness Concerning Career Pathways for Foreign-Trained Healthcare Professionals

What can state government do?

- The Administration should support creation of a new, user friendly, centralized online portal featuring detailed relicensing information and career development resources for foreign-trained immigrants in licensed professions in Massachusetts, with an initial focus on healthcare. This effort should build on and seek to continue the efforts of the Department of Public Health's Division of Health Professions Licensure (DHPL), as it moves forward with the development of its own online portal. The launch of a dedicated online portal for foreign-trained professionals should be broadly publicized and include plans for multiple language support over time.
- Building on efforts within DHPL, the official web pages and customer service systems of individual state boards of healthcare professional licensure should themselves provide more targeted guidance and support for foreign-trained professionals in those fields. This should include clear directions for foreign-trained professionals on contacting each board's licensing support staff for additional information and referrals, and enhanced collection by each board of relevant demographic, educational, and employment data. Other healthcare professional boards, including the Board of Registration in Medicine (under the Executive Office of Health and Human Services) and the Board of Registration in Allied Health Professionals (under the Division of Professional Licensure in the Office of Consumer Affairs and Business Regulation), should be encouraged to adopt similar policies to DHPL. Over the longer term, all boards under the Division of Professional Licensure should explore how to develop similar streamlined information resources.

What can other stakeholders can do?

- Community-based groups, nonprofit workforce development organizations, and healthcare employers should incorporate these resources into their own staff professional development and career advising activities, and actively promote such resources to their constituencies.
- Building on existing workforce diversity initiatives and employee training programs, healthcare employers and medical education programs should support or expand career development services that tap into the potential of foreign-trained professionals, as well as facilitating mentoring relationships with U.S. and foreign-trained immigrant professional staff.

2. Strengthen and Expand Workforce Development and Educational Programs Directly Serving Immigrant Professionals

What can state government do?

- Building on public sector and nonprofit models in Massachusetts and other states, the Executive Office of Labor and Workforce Development and Department of Higher Education should promote pilot programs at One-Stop Career Centers and community colleges that can offer expert career supports for foreign-trained professionals. Programs should also enhance data collection frameworks concerning foreign education and experience and U.S. career outcomes.
- Explore increasing financial and institutional support for the proven service model at the Boston Welcome Back Center (WBC) for internationally trained nurses, and expand WBC services to other professions and to other regions of the state.

- Through One-Stop Career Centers, community colleges, and other workforce development stakeholders, ensure that public sector career pathway programs leading to high-skilled and in-demand healthcare and STEM occupations encourage enrollment by skilled immigrants.

What can other stakeholders can do?

- Building on these tools and resources, community-based and nonprofit workforce development service providers and healthcare employers should strengthen their own capacity to provide career information, counseling, and referrals to high-skilled immigrants who are increasingly accessing their services, including collecting data about foreign credentials and U.S. career outcomes.
- Given the growing population of high-skilled, limited English proficient immigrants, and new federal guidelines for ESOL funding that supports college transition and career pathway initiatives, these organizations should explore expanding ESOL programs that target the needs and career goals of college-educated immigrants and immigrant professionals.

3. Work to Address Financial and Structural Barriers to Professional Relicensing Faced by Foreign-Trained Healthcare Professionals

What can state government do?

- Partnering with professional associations and philanthropies, collaborate to pilot funding tools to help low-income foreign-trained professionals cover the educational, testing and licensing costs of re-entering their fields. These could include a microloan fund (such as New York City's Immigrant Bridge Program), an educational assistance program for foreign-educated healthcare/STEM professionals, and promoting more flexible options for employer tuition reimbursement.
- The Executive Office of Health and Human Services should coordinate with the Division of Professional Licensure, the Division of Health Professions Licensure at the Department of Public Health, and the Boards of Registration in each healthcare profession across state government, to convene a joint working group to *1)* identify state and national licensing requirements that may pose unnecessary barriers to practice for foreign-trained professionals, *2)* develop recommendations for corresponding changes to state licensing requirements, and *3)* identify opportunities to advocate for corresponding changes to national licensing requirements.

What can other stakeholders do?

- The state licensing boards need assistance to address the financial and structural barriers to healthcare professional relicensing. Other stakeholder groups, including professional associations, employers, academic institutions, insurers, community-based groups, and the philanthropic sector have a key role to play in shaping financial support mechanisms, assessing current licensing laws and regulations, and working together to put in place standards that both maintain the highest levels of patient care and ensure that all qualified professionals are able to provide patients with that care.

4. Establish a Staff Position to Oversee Immigrant Integration Policy Including Career Pathways for Foreign-Trained Professions in the Office for Refugees and Immigrants (ORI)

What can state government do?

- Building on ORI's mission to promote the economic, social and civic inclusion of immigrants and refugees in Massachusetts, a management-level position should be created within ORI, hereafter referred to as the Manager of Immigrant Integration Policy, to *1)* coordinate immigrant integration

policy across executive branch agencies; and *2)* work with the GAC, with an Inter-agency Council on Immigrant Economic Integration to be convened by the Governor, and with existing inter-agency bodies, to advance recommendations of this Task Force and the New Americans Agenda as whole, with a focus on workforce and economic development. It is expected that this position will play a critical role in the support of implementation of the above recommendations.

What can other stakeholders do?

- Consistent with its statutory responsibilities to advise the Governor on policy, planning, and priorities for refugees and immigrants in the Commonwealth, GAC should actively engage with the Governor's Office, the Executive Director of ORI, a new ORI Manager of Immigrant Integration Policy, and the inter-agency Council on Immigrant Economic Integration to advance the Task Force recommendations, continuing to serve as a focal point for engagement with the larger immigrant community and other non-governmental stakeholders.

Introduction

I came here from another country, but it feels like I came from another planet. My twelve years as a nurse and all my professional references don't count for anything here. But I won't let that stop me. I love being a nurse, and nothing can stop me from being a nurse in my new home. (Gurea, a nurse from Spain)

Massachusetts' healthcare system is serving an increasingly diverse population. To best meet the needs of all residents of the Commonwealth—including many who are currently underserved—healthcare providers should more closely reflect the diversity of those they will serve. Engaging foreign-trained healthcare professionals is a strategy to accelerate the introduction of a more diverse group of educated and skilled professionals into the healthcare workforce. (David Cedrone, Assistant Commissioner, Massachusetts Department of Higher Education)

In November of 2013, seeking to identify ways to better utilize the Commonwealth's tremendous human capital in addressing healthcare needs, Governor Deval Patrick directed the Governor's Advisory Council for Refugees and Immigrants (GAC) to convene a statewide Task Force charged with developing recommendations to support the career advancement and professional contributions of immigrant healthcare professionals in Massachusetts, particularly those who received their training and credentials outside of the U.S. This report presents the results of the deliberations of the GAC's Task Force on Immigrant Healthcare Professionals in Massachusetts in the summer and fall of 2014. The report presents data on immigrant healthcare professionals and the barriers they face in Massachusetts and the U.S., provides an overview of growing labor market needs in the healthcare professions, and offers detailed policy and program recommendations in this area for state officials, policymakers, educators, workforce development institutions, private and nonprofit healthcare employers, and other system stakeholders.

More than 820,000 foreign-born residents in the U.S. are trained healthcare professionals—one fifth of U.S. residents who hold a bachelor's degree or higher in medical or behavioral health occupations. Two-thirds of them received their professional education outside of the country. At the same time, this sizeable community of practitioners faces a wide range of individual and system-level challenges putting their training and skill to use in the U.S—from limited English proficiency and lack of targeted career services to complex and costly relicensing requirements. This includes many of the more than 12,000 foreign-trained nurses, doctors, dentists, physical therapists, mental health professionals and other healthcare professionals in Massachusetts. **As a result, more than 1 in 5 foreign-trained healthcare professionals in Massachusetts are unemployed or in a low wage, low-skilled job.** With the statewide demand for clinicians in all these fields expected to grow from 12 to 30 percent by 2020,[2] and with an increasingly diverse state population in need of their services, **the Commonwealth cannot afford to ignore the talent and resources that foreign-trained healthcare professionals bring to the state**.

The recommendations presented here–informed by consultations with policymakers, academic experts, and institutional leaders across multiple sectors; by new analysis of national and state-level data; and by an extensive literature review–are aimed at capitalizing on this opportunity, by providing options for immigrant healthcare professionals, and benefitting the state's economy and healthcare system, leveraging existing resources without major new public expenditures.

The report has four sections:

I. Supporting Immigrant Professionals: Healthcare and Economic Gains

This section offers an overview of the population and labor market outcomes of immigrant healthcare professionals in the U.S., and the barriers they confront to full participation in the healthcare workforce. It also looks at the potential economic and healthcare impacts of these professionals given labor market trends marked by an aging population, significant increased demand for clinical professionals, and current challenges in filling positions in underserved areas and meeting state goals for diversity and cultural competency in healthcare professions.

II. How States are Leveraging the Talents of Foreign-Trained Professionals

This section explores the most critical individual and systemic career barriers facing foreign-trained immigrant professionals, and the program and policy models in other states and localities that seek to open up the potential of these skilled workers in healthcare and other fields. These include a wide range of public, nonprofit and public/private initiatives, such as the Welcome Back Initiative, the Welcoming Center for New Pennsylvanians, and public sector programs at the state and local level. This section also looks at what is happening in Massachusetts, including the Boston Welcome Back Center, career pathway programs, and high-skilled ESOL initiatives.

III. Moving Forward: Policy Recommendations for Massachusetts

The third section of the report presents four strategies that Massachusetts state government and other stakeholders can take, individually or in partnership, to tap the potential of foreign-trained healthcare professionals and immigrant professionals in other STEM fields as well. These strategies include:

1. *Improve Informational Resources and Stakeholder Awareness Concerning Career Pathways for Foreign-Trained Healthcare Professionals*
2. *Strengthen and Expand Workforce Development and Educational Programs Serving Immigrant Professionals*
3. *Work to Address Structural and Financial Barriers to Professional Relicensing Faced by Foreign-Trained Healthcare Professionals*
4. *Establish a Staff Position to Oversee Immigrant Integration Policy Including Career Pathways for Foreign-Trained Professions in the Office for Refugees and Immigrants (ORI)*

Under each strategy the report offers detailed program and policy recommendations that the Task Force believes are practical, affordable and achievable, and that leverage both the existing strengths of the state's educational and workforce development system and best practice models from other states and locales. As a whole, they are designed to build on each other, moving from relatively straightforward actions individual stakeholders can address, to more complex and collaborative initiatives. The last of the four strategies

would institutionalize oversight and coordination of immigrant professional integration policy at the executive agency level. Such oversight is key to maintaining a long term, strategic focus on this complex set of issues within state government, and ensuring that the goal of tapping the potential of foreign-trained immigrant professionals remains one the Commonwealth's economic and healthcare priorities.

Next Steps

In the final section of this report, the Task Force recommends next steps for the GAC to take in order to the effort to leverage the economic potential of highly-skilled immigrants and refugees moves forward in the coming years.

It should be emphasized, in closing, that the analysis and recommendations presented in this report are only a starting point, and do not attempt to capture the overall complexity of the healthcare professional landscape in Massachusetts, or even all healthcare professions, where immigrants are concerned. The labor market analysis in Section I includes only medical doctors and dentists, nurses, allied health professionals, and pharmacists. Mental and behavioral health professionals are not included (both due to limits of the available data and the relatively small share of foreign-trained workers in these professions)[3], nor are public health specialists or medical researchers. The educational, licensing and career pathways for each of the professions examined here are unique. Each profession has also been subject to rapidly evolving labor market and practice conditions in the wake of state and federal health reform and other ongoing shifts the healthcare industry, such as provider consolidation, technological change, and the impact of an aging patient population.

At the same time, the set of barriers and professional challenges impacting practitioners with foreign degrees have a great deal in common across all healthcare professions—and in many cases across non-healthcare professions as well. The recommendations here, in turn, propose strategies and structures that are designed to help meet these common challenges, as well as providing for mechanisms to identify and address more occupation-specific barriers as time, resources, and the state's healthcare priorities permit.

I. Supporting Immigrant Professionals: Economic and Healthcare Gains

Massachusetts benefits economically, culturally, and civically from the full inclusion of immigrants. Highly educated immigrants bring technology and science skills that enhance sectors that are vital to the Massachusetts' economy and keep the Commonwealth competitive in the world economy. (Massachusetts New Americans Agenda, 2009)

More than one-third of immigrants in the Massachusetts labor force have a bachelor's degree or higher—including 17.5% with graduate or professional degrees. Half of these immigrants earned their degrees outside the U.S.

The growing number and impact of immigrant professionals in Massachusetts is part of the larger story of immigrants in Massachusetts over the past several decades. The state's immigrant population has grown by 29 percent since 2000 (as compared to the whole country by 31 percent). The over one million foreign-born residents of Massachusetts now make up 15 percent of the state's population and 18 percent of its labor force. This includes 29.5 percent from Asia, 23.3 percent from Europe, 35.6 percent in Latin America, and 8.2 percent in Africa—a much more diverse set of sending regions than the nation as a whole. Strikingly, three in every ten children under 6 in Massachusetts live in families with at least one foreign-born parent.[4]

Along with its size, the educational attainment of the state's foreign-born population has also been increasing in recent decades. **Foreign-born residents age 25 and over now represent one of every six workers in the Commonwealth's college-educated labor force**—a share that has grown by 32 percent since 1990. More than one-third of immigrants in the Massachusetts labor force now have a bachelor's degree or higher—34.3 percent, some 292,300 workers, including 17.5 percent with graduate or professional degrees.[5] This includes 28 percent of physicians, 40 percent of pharmacists, and half of medical scientists.[6] As in the country as a whole, approximately half of all college-educated immigrants in Massachusetts earned their degrees outside the U.S.[7]

These high levels of education conceal, however, strikingly different labor market outcomes for college-educated immigrants depending on where they received their degree. In Massachusetts, 24 percent of immigrants with foreign college degrees work in low-skilled jobs or are unemployed, compared to 17 percent of U.S.-educated immigrants (and 16 percent of native born college graduates).[8] As we will see below, foreign-trained medical professionals are not exempt from such challenges, even in a healthcare labor market with high demand for their skills and a high share of immigrant workers relative to the workforce as a whole.

24% of Massachusetts immigrants with foreign college degrees work in low skilled jobs or are unemployed vs. 17% of immigrants with U.S. degrees.

By the Numbers: Immigrant Healthcare Professionals in the U.S.

The population of immigrant healthcare professionals in Massachusetts and nationally at once reflects and diverges from these larger trends. Based on the 2013 National Survey of College Graduates (NSCG),[9] more than 820,000 foreign-born residents in the U.S. are trained healthcare professionals—almost 22 percent of U.S. residents with a bachelor's degree or higher in healthcare occupations. This includes 29.6 percent of those trained as medical doctors or dentists,[10] 17.6 percent of

registered nurses, 12.1 percent of allied health professionals, and 23 percent of pharmacists.[11] As Table 1 shows, **two-thirds of foreign-born healthcare professionals here (66.6 percent) received their training outside the U.S.**—a much higher rate than when looking at college-educated immigrants as a whole, where the division is half and half. (See Appendix: Data Tables, Table A1 for additional details. Note that since the NSCG only looks at bachelor degree level graduates or higher, a large number of nurses with the equivalent of an associate's degree are not included in these data.)

TABLE 1: Foreign Born Healthcare Professionals with US vs. Foreign Degree (Total of 820,174 foreign-born)

	FB share of US professionals	% FB with US degree	% FB with foreign degree
MD	29.6%	27.8%	72.2%
Nurse	17.6%	37.3%	62.7%
Allied	12.1%	31.6%	68.4%
Pharmacy	23.0%	51.5%	48.5%
ALL	21.9%	33.4%	66.6%

Source: American Institute of Economic Research and MIRA analysis of NSCG 2013 microdata

Having a U.S. vs. a non-U.S. degree makes a big difference in the workforce outcomes of these professionals. As Table 2 shows, foreign-born medical doctors trained in the U.S. are employed in their fields at a rate relatively close to that of doctors born in the U.S.—just 6.7 percent report not being in occupations closely related to their training, vs. a U.S.-born figure of 2.8 percent. And the majority of these professionals, nurses aside, do not suffer from high rates of underemployment. Even for the many U.S.-trained foreign-born professionals not working in their original fields of study, including 25.3 percent of nurses, mean annual salaries are relatively high—from a high of $92,142 for MDs to a low of $52,714 for allied health professionals (see Appendix: Data Tables, Table A2 for additional details).[12]

72% of immigrants with medical degrees are foreign-educated. But foreign degree holders are* 5 times more likely *to be underemployed and* twice as likely *to work in a different field than the U.S.-trained.

TABLE 2: Foreign Born Healthcare Professionals with US Degree – Labor Market Outcomes (Total of 273,989 foreign-born)

	FB w/ US degree	Percent underemployed*	Percent in other occupation**	Mean salary
MD	27.8%	4.6%	6.7%	$92,142
Nurse	37.3%	18.1%	25.3%	$62,682
Allied	31.6%	6.4%	23.3%	$52,714
Pharmacy	51.5%	5.8%	17.2%	$59,143
ALL	33.4%	9.9%	16.6%	

Source: American Institute of Economic Research and MIRA analysis of NSCG 2013 microdata

* Involuntary part time employment, unemployed, out of labor force

** Reports occupation only "somewhat related" or "not related" to training

By comparison, healthcare professionals with foreign degrees face much greater labor market hurdles. Doctors with foreign degrees are five times more likely to be underemployed than those with U.S. degrees (22 percent vs. 4.6 percent), and

TABLE 3: Foreign Born Healthcare Professionals with Foreign Degree – Labor Market Outcomes (Total of 546,185 foreign-born)

FB w/ Foreign Degree	Percent Underemployed*	Percent in other occupation**	Mean salary
MD	72.2%	22.0%	14.7%	$52,197
Nurse	62.7%	17.6%	14.6%	$48,875
Allied	68.4%	15.1%	10.7%	$19,571
Pharmacy	48.5%	54.6%	47.3%	$49,708
ALL	66.6%	22.3%	16.6%	

Source: American Institute of Economic Research and MIRA analysis of NSCG 2013 microdata

* Involuntary part time employment, unemployed, out of labor force

** Reports occupation only "somewhat related" or "not related" to training

more than twice as likely to work in different fields. Those in different occupations, moreover, earn 43.4 percent less than their counterparts with U.S degrees.

Professionals in allied occupations and pharmacy with foreign degrees also have higher levels of underemployment and lower relative salaries when not working in their fields. Foreign-trained nurses with four-year degrees are about as likely to be underemployed than their U.S.-trained equivalents (17.6 percent vs. 18.1 percent), though these nurses may also be working in less-skilled and less well-paid licensed practical nursing positions (which typically require only a one-year certificate or an associate's degree). For foreign trained nurses and allied health professionals not working in their occupation though there is, as with doctors, a large salary differential—22 percent for nurses, and 63 percent for allied health professionals. (See Appendix: Data Tables, Table A3 for details).

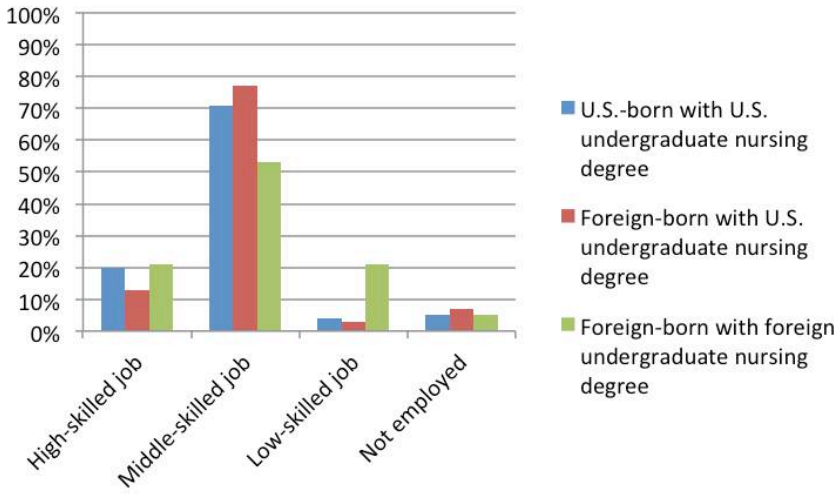
By the Numbers: Immigrant Healthcare Professionals in Massachusetts

An estimated 12,000 residents of Massachusetts are foreign-trained nurses, doctors, physical therapists, pharmacists or other healthcare professionals.[13] State level data from the American Community Survey (ACS) show similar labor market trends to the U.S. as a whole. A recent comparison of U.S. vs. internationally trained nurses in 12 states, for example, shows foreign-born nurses with foreign degrees consistently more likely to be in low-skilled jobs than their U.S.-trained counterparts.[14] Chart 1 below looks at the skill level of jobs held by Massachusetts residents, both native and foreign-born, with U.S. and international undergraduate nursing degrees. Among the 55,000 such individuals in Massachusetts, 7,400 (13 percent) are foreign-born—approximately 3,400 internationally educated and 4,000 educated in the U.S.

Immigrants in Massachusetts with a foreign nursing degree were* seven times more likely *to be employed in low wage jobs than those with a U.S. degree, greater than in any other state where these differences have been studied.

As Chart 1 shows, foreign-educated immigrants in Massachusetts with an international nursing degree are over *seven times more likely* to have a low-skilled job (21 percent) than their U.S.-trained counterparts (3 percent)—the highest disparity in all states studied—though immigrants in Massachusetts with foreign degrees are employed in high-skilled positions at roughly the same rate as U.S.-born nurses (21 percent vs. 20 percent), and at 1.5 times the rate of immigrants with U.S. nursing degrees.

CHART 1: Massachusetts Residents with Nursing Degrees – Relative Labor Market Outcomes by Birth and Place of Degree

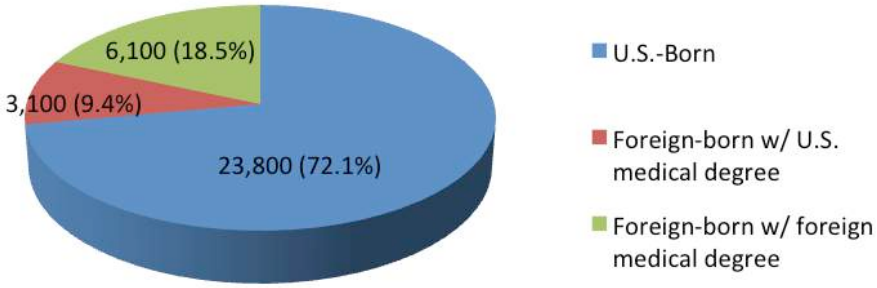


Source: Migration Policy Analysis of American Community Survey 2010-12 3-year estimates

For physicians in Massachusetts comparisons are harder to draw, since state level ACS data only track the subject of four year degrees, not higher level graduate degrees. If we look, however, at U.S. and foreign-born holders of medical degrees in Massachusetts who are *already employed* as physicians and surgeons, we see a similar pattern to the national data. As Chart 2, shows, **28 percent of all Massachusetts physicians are foreign-born—9,200 in all—**close to the 29.6 percent of all U.S. physicians and surgeons who are foreign-born. An estimated 6,100 of employed foreign-born physicians in Massachusetts (66.3 percent) were educated abroad, and 3,100 (or 33.7 percent) were educated in the U.S. Nationally, 72 percent of foreign-born medical doctors hold foreign degrees.

28% of all 33,000 practicing physicians and surgeons in the state are foreign-born—9,200 in all. Two-thirds of them (6,100) were educated abroad, one third (3,100) in the U.S.

CHART 2: Massachusetts Physicians – U.S. vs. Foreign-Born



Source: Migration Policy Analysis of American Community Survey 2010-12 3-year estimates

Since these data only look at individuals *already* employed as doctors, they do not tell us directly whether Massachusetts residents with foreign medical degrees experience the same levels of unemployment or underemployment as in the U.S. as whole. It is worth pointing out, however, that the figure here for foreign-born physicians in Massachusetts with foreign degrees (66.3 percent) is significantly lower than the figure for the U.S. as a whole (see Table 3), which shows that 72.2 percent of U.S. immigrants with medical degrees who were internationally trained. The higher representation in Massachusetts of foreign-born physicians with U.S. degrees may speak to competitive factors in local labor markets that that favor those trained in U.S. institutions. But since the 66.3 percent figure reflects only those internationally-educated doctors currently *employed* as physicians, rather than all those *trained* as physicians, the disparity likely indicates that foreign-trained physicians in Massachusetts suffer from some of the same employment barriers that impact their counterparts in other parts of the country.

Trends in the Massachusetts Labor Market: The Impact of High-Skilled Immigrants

A recent report from the Commonwealth Corporation makes clear that population and in turn economic growth in Massachusetts are driven by immigration and increasing demographic diversity.[15] Without immigration, the state's population would have dropped by more than 2 percent between 2000 and 2010. Other trends also underscore the potential impact of immigrant workers, especially the high-skilled segment, in the future of the state's workforce. In the state as a whole, the largest concentration of educational attainment is in cohorts of workers 45 years and older (44 percent of the labor force). Their looming retirement will pose challenges for an increasingly high-skilled state labor market, with employment opportunities growing almost exclusively for workers with a college degree.

Remarkably for such a center of higher education, Massachusetts also lags the U.S. as a whole in growth in post-secondary degrees in younger workers. From 2000-2010, in Massachusetts the completion of associates degrees grew by just 2.3 percent and bachelor's degrees by 2.1 percent, compared to 4.2 and 4.9 percent respectively for the U.S. From 2000-2010, the share of Massachusetts workers with master's degrees expanded by 2.3 percent and by 2 percent for those with bachelor's degrees; the proportion with associate's degrees increased by barely 1 percent, the proportion with some college grew by 0.7 percent, and the proportion of those whose highest educational attainment is high school grew by 0.6 percent.[16] The largest economic sectors in Massachusetts are also those with the greatest demand for high levels of educational attainment: Health Services, Education, and Professional and Business Services.

The highest levels of educational attainment in Massachusetts are among workers nearing retirement. But Massachusetts lags others states in post-secondary attainment in younger workers—with bachelor's degrees growing by just 2.1% in the past decade, compared to 4.9% for the U.S. as a whole.

The Commonwealth Corporation is one of many bodies, including the Department of Higher Education and the Governor's Economic Development Planning Council, that have called for coordinated and comprehensive workforce development and career pathway strategies to address the increasing demand for skilled workers in key growth sectors of the state economy. Such strategies are already underway in

many parts of the state, with support from federal and state government and the coordinated efforts of workforce development, academic, nonprofit and philanthropic stakeholders.[17] The Commonwealth's large population of high-skilled immigrants, especially the many

foreign-trained immigrant professionals employed well below their educational level, should be an important component of such a plan—especially in high demand healthcare and STEM professions. Relatively modest investments in addressing their challenges have the potential to yield substantial benefits to our state. The gains here will accrue to all workers, native- and foreign-born alike, and to the Commonwealth as whole. Recent studies have shown that **immigrants in the high-skilled workforce *complement* rather than displace their U.S. counterparts, filling shortages not met by native born workers while also increasing employment growth**.[18]

As the following discussion indicates, there may be no more critical area in this respect than healthcare professions, both for the strength of state's economy and the well-being of all residents of the Commonwealth. We look at the case to be made in three areas: increasing supply, increasing diversity, and return on investment.

The Massachusetts Healthcare Professional Workforce: Demand Outpacing Supply

By 2020, the demand for physicians in Massachusetts will grow 12%, for nurses 30%, and for allied health professionals 28%.

In Massachusetts, as in the country as a whole, a combination of factors including the Affordable Care Act, the consolidation of hospital systems, an aging baby boomer demographic, and accelerated population growth, is expanding needs for primary care providers and clinical staff at all levels.[19] In Massachusetts, a 2012 report projected a 22 percent growth in demand for clinical professionals by 2020, including 12 percent for physicians, 30 percent for registered nurses, and 28 percent for allied health professionals.[20]

At the same time due to a variety of factors, including the lack of physicians entering primary care and internal medicine specialties, there are currently significant shortfalls in the supply of primary care professionals, and growing shortfalls are projected for the future. Even in Massachusetts, a state with the highest number of patient care physicians per capita,[21] the Massachusetts Medical Society's 2013 yearly survey shows severe to critical shortages across several medical specialties in Massachusetts, including internal medicine and family medicine, especially in community health centers and safety net hospitals that serve low income and minority communities. These trends have been consistent since 2006.[22]

One study predicts that by 2030 the U.S. will experience a deficit of 918,232 registered nurses by (including 9690 in Massachusetts). Another report forecasts a U.S. shortage of 130,000 doctors by 2025.

Looking to the future, the Association of American Medical Colleges' Center for Workforce Studies predicts that the United States will face a physician shortage of more than 130,000 physicians by 2025 (51 percent in primary care specialties).[23] A 2012 research study forecast that the U.S. will experience a deficit of 918,232 registered nursing jobs by 2030 (including a deficit of 9,690 in Massachusetts).[24] Dentist-to-population ratios have been dropping for the past decade and are expected

to decline further by 2020, with dentist shortages particularly acute for children, low-income and minority communities. Even in Massachusetts, 5-10 percent of children lack regular access to dental care.[25] Studies also project significant shortages in pharmacists, mental health professionals, and public health professionals.[26]

There are of course a wide range of labor market forces, public policies, and institutional factors that are driving these gaps and can also help to fill them over time, and federal and state governments, licensing boards, professional associations, academic institutions and other stakeholder groups need to work together to meet this need.[27] Massachusetts already has in place a wide variety of state-based and federal programs to improve recruitment and retention of physicians, nurses, and dentists to work in high need areas, primarily through loan repayment and scholarship programs.[28] Given the significant numbers of foreign-trained nurses, doctors, physical therapists, pharmacists and other healthcare professionals who are working outside their fields of study, however, programs and policies that accelerate the re-entry of these experienced clinicians into the U.S. healthcare workforce—whether in their original professions or in a related area—can play significant role in filling national and regional shortages.

Closing the Diversity Gap

A 2014 national study showed that minority and nonwhite physicians served a disproportionate share of underserved populations, including a majority of patients who were racial and ethnic minorities and limited English proficient.

As noted, low-income and minority populations—including a disproportionate share of immigrant communities—experience such primary care gaps most acutely. But these gaps go beyond the economics of professional supply and demand. They point to another challenge that accompanies the increasing diversity of Massachusetts' and the nation's patient population: the need for a more racially and ethnically diverse, and more linguistically and culturally competent, healthcare workforce. **A wealth of evidence exists that diversity in healthcare providers is associated with improved access to care for racial and ethnic minority patients, and with greater patient choice and satisfaction.**[29] A comprehensive 2014 national study of federal patient data, for example, showed that minority and nonwhite physicians served a disproportionate share of underserved populations, including a majority of patients who were racial and ethnic minorities and limited English proficient (LEP).[30] Along with U.S. minority practitioners, **foreign-trained medical graduates are also more likely to provide primary care in underserved areas**.[31]

As a state that has been at the forefront of healthcare reform and improving healthcare access, Massachusetts is no stranger to these concerns. A 2008 report by the Department of Public Health's Healthcare Workforce Center emphasized the challenge of developing a linguistically and culturally competent workforce to meet the needs of an increasingly diverse population.[32] In the nursing field, by far the largest professional area in terms of numbers, the Massachusetts Action Coalition—a partnership of the Department of Higher Education, the Board of Registration in Nursing, nurses professional associations, hospitals, educational institutions, and others—is working to advance state and regional strategies to build both a better educated and more diverse nursing workforce.[33] State agencies, professional bodies, healthcare employers and other stakeholders are looking to address this challenge in

other professions as well, including physicians and allied health professions.[34] Advancing relicensing and career opportunities for thousands of experienced foreign-educated healthcare professionals in Massachusetts can contribute significantly towards meeting these goals.

Return on Investment

The final and perhaps most compelling argument for supporting policies to assist foreign-trained doctors, nurses, dentists and other healthcare professionals re-enter their professions in the U.S. may lie in the potential return on investment. While detailed cost/benefit studies are lacking, extremely suggestive data are available from the nationwide Welcome Back Initiative (WBI) and the Boston Welcome Back Center (WBC) for internationally trained nurses. WBI, which began in 2001, has grown to a network of 10 centers in eight states that assist foreign trained health professionals in the U.S. who are either not working or are underemployed in the health sector. The state's WBI affiliate, the Boston WBC, a partnership of Bunker Hill Community College, Roxbury Community College, and MassBay Community College, was started in 2005 (see Section II for more about WBI and Boston WBC).

The Boston Welcome Back Center has graduated 276 nurses since 2005 Just 42% were employed when they started, earning an average of $25,000. After graduating 87% found jobs as nurses, at an average salary of $46,000 for LPNs and $60,000 for RNs—a six-fold increase in total earnings.

The Boston WBC, for example, has graduated 276 nurses since its founding in 2005—61 Licensed Practical Nurses (LPNs), 144 Registered Nurses (RNs) with associates degrees, and 71 RNs with bachelor's degrees. Of these, only 42 percent were employed when they entered the program, earning an average annual salary of $25,000 at time of intake. **After the completion of the program, 239 graduates (87 percent) found employment, at an average base salary of $46,000 for LPNs and $60,000 for RNs—a six-fold increase in total earnings**.[35]

Nationally, as of 2013 the Welcome Back Initiative has worked with 121 foreign trained physicians to validate foreign degrees, help them prepare for and complete the U.S. Medical Licensure Exam (USMLE), and secure residencies. The Welcome Back Centers—and the public sector and philanthropic investments that support them—bear the cost of coaching, case management, most preparatory coursework, and related services, and the client bears the cost of exams and licensing fees. But the costs of adding these 121 physicians to the workforce by this pathway is modest compared to the overall costs to individuals and the public of putting the same number of individuals through medical education here. The average cost of medical school in the U.S. ranges between $197,192 at public schools to $267,936 for private schools—an average of $232,564. The average cost of sending 121 individuals to medical school in the U.S. would, in that case, have been over $28 million.[36]

Evidence shows that helping foreign-trained healthcare professionals rejoin the workforce doesn't reduce opportunity for U.S.-trained professionals--and can fill primary care gaps in underserved regions.

As mentioned above, it is important to stress that **supporting foreign-trained doctors, nurses, pharmacists, allied health professionals and others to become relicensed to practice here does not result in less opportunity for professionals trained in the U.S**. Rather, evidence shows that these professionals help to fill gaps in primary care services for underserved populations and regions, and could play an important role in filling projected national and regional shortages in healthcare professions and in increasing the diversity of the primary care workforce.

What do foreign-trained medical professionals need to do to practice in Massachusetts?[37]

Physician

Credentials review: Obtain certification of medical school transcript from the Educational Commission for Foreign Medical Graduates (multi-step process; fee = $65)

Pre-retraining testing: Steps 1, 2-CK (clinical knowledge) & 2-CS (clinical skills) of the U.S. Medical Licensing Examination (fees = $3,180; estimated travel and accommodations costs for Step 2-CS = $400 - $500; optional test prep courses = $3,500 - $14,000)

Retraining: 3-year minimum paid residency/fellowship vs. 2 years for graduates of U.S./Canadian medical schools; approximate residency program interview-related expenses = $3,000 - $10,000). ***Fewer than half of graduates of foreign medical schools secure a residency in the U.S.,*** *vs. 95% of graduates of U.S. and Canadian medical schools.*

Post-retraining testing: Step 3 of the U.S. Medical Licensing Examination (fees = $815; optional test prep course = $1,800 - $2,800)

Licensing: Application fee = $600

Minimum timeline:	**Approximate total cost:**
4 years	**$8,000-$32,000**

Dentist (Full License)

Credentials review & pre-retraining testing: Not required by Board of Registration in Dentistry for dentists who complete a 2-year "Advanced Standing" DDS/DMD degree.

Retraining: A 2-year "Advanced Standing" DDS/DMD degree program is required for foreign-trained dentists seeking full licensure (tuition & fees = approx. $150,000; *does not include living expenses*)

Post-retraining testing: As for US-trained dentists, Parts 1-2 of the National Board Dental Examinations (fees = $605; optional preparatory materials = $500+; optional test prep courses = $1,400 - $1,700); American Dental Licensing Examination (ADEX/ADLEX) test (fees = $2,015; optional review materials = approx. $100)

Licensing: Application fee = $660

NOTE: Foreign-trained dentists can also practice in Massachusetts on one-year "limited practice" licenses under the supervision of a fully licensed dentist. *See p. 38 below for more details.*

Minimum timeline:	**Approximate total cost:**
3 years	**>$150,000**

Registered Nurse

Credentials review or certification: Obtain review or certification of academic credentials from the Commission on Graduates of Foreign Nursing Schools or CGFNS (fee = $350); obtain certification of academic credentials from Professional Credentialing Services, Inc. (fee = $50)

Retraining: After reviewing an applicant's Credential Evaluation Report from CGFNS, ***the MA Board sometimes requires additional coursework before the applicant can take the NCLEX***, typically a portion of a nursing class (most often in one or some of these core areas: psychiatric nursing, maternal/infant nursing, pediatric or geriatric) in a Board approved Nursing school**.**

Testing / Licensing: The MA Board now allows an RN candidate (not educated in English) to take the TOEFL or IELTS. Taking the TOEFL=$185, IELTS=$210 (optional test prep materials and/or course = $20 - $1,300); NCLEX-RN: application fee = $200; optional review course $50-$1000; Pearson VUE Testing platform = $230)

**NOTE: Total cost range takes into account ESOL, test prep, possible required classes, and repeat tests*

Minimum timeline:	**Approximate total cost:**
1.5 years (if English-educated)	**$1,250 – 5,000***

Pharmacist

Credentials certification: Obtain Foreign Pharmacy Graduate Examination Committee (FPGEC) certification of academic and professional credentials from the National Association of Boards of Pharmacy (fee = $450.00); Obtain certification of academic credentials from Educational Credential Evaluators, Inc. (fee = $85.00). *Those who graduated in 2003 or later must have completed a 5 year program to qualify for FPGEC certification.* ***Many foreign pharmacy programs are 4 years and don't qualify.***

Retraining: Complete 1,500 hours (approx. 9 months of full-time work) as a pharmacy intern under supervision of MA pharmacist (Internship registration fee = $95)

Testing: Foreign Pharmacy Graduate Equivalency Examination (FPGEE, fee = $750; optional review materials/course = $300 - $600); North American Pharmacist Licensure Examination (NAPLEX, fee = $505; optional review materials/course = $200 - $500); Multistate Pharmacy Jurisprudence Examination (MPJE, fee = $210; optional test prep course = approx. $100); TOEFL (fee = $160 - $250; optional test prep materials and/or course = $20 - $1,300)

Licensing: Application fee = $421

Minimum timeline:	**Approximate total cost:**
2 years	**$2,700 - $5,300**

II. How States are Leveraging the Talents of Foreign-Trained Professionals

"As our nation becomes increasingly diverse, improving cultural and linguistic competency across public health and our health system can be one of our most powerful levers of advancing health equality." (J. Nadine Gracia, MD, MSCE, Deputy Assistant Secretary for Minority Health, HHS)

"Our many foreign-trained health professionals are valued and hard-working employees who greatly aid our ability to serve our diverse population. Some have been recredentialed in the US and now hold clinical roles in our health center. Others are not recredentialed and serve in other roles such as medical interpreters." (CEO of a community health center in Central Massachusetts)

Healthcare Professional Recredentialing: Aspirations and Obstacles

Many highly skilled immigrants have to take low skill and low paid "survival jobs" when starting out in the U.S.

As the trends discussed in Section I indicate, professionals trained abroad in healthcare and other fields often face considerable challenges re-entering their fields in the U.S. or in accessing other employment options that leverage their advanced training and skills. The factors impacting the immigrant labor force in Massachusetts are complex, and labor market outcomes for immigrants at all skill levels vary widely. Adjusting to a new labor market is not an easy process, regardless of education. Many highly skilled immigrants experience a significant drop in occupational status when they arrive in the U.S., and many have to take low skill and low paid "survival jobs" when starting out.[38] How quickly and how well they adjust depends on a variety of factors.

The decentralized system of healthcare professional credentialing and licensing in the U.S. is overseen by a mix of federal, state and nongovernmental bureaucracies—creating a particularly daunting maze for foreign-trained professionals looking to relicense.

The most obvious challenge immigrant healthcare professionals in the U.S. face—at least those who want to continue practicing in their occupations—is the professional relicensing process itself. Compared to many countries, the U.S. has a very decentralized framework for licensing in healthcare and other professions. Standards for evaluating and recognizing international educational credentials are overseen by a mix of national-level and state-level governmental and nongovernmental bureaucracies, with state requirements under the jurisdiction of independent boards of licensure. While state licensing boards play a critical role in maintaining professional standards, the complexity of the licensing process as a whole, the variation state to state, and the additional steps required for foreign degree-holders, can create a daunting maze for foreign-trained healthcare professionals looking to re-enter the professions for which they have been trained or to enter a related field.

Relicensing pathways—and the time, effort and costs involved—also of course vary considerably from profession to profession.[39] In most cases, however, the process calls for some combination of the following steps: a) securing evaluation of foreign credentials; b) completing additional coursework; c) improving English language proficiency (including technical language specific to a professional field) passing English language proficiency tests at a required level; d) passing professional licensure exams; e) gaining supervised work/practice experience; f) obtaining new

Barriers to Career Re-Entry Facing Foreign-Trained Professionals

- **Immediate survival needs conflict with career aspirations**
  Many foreign-trained immigrant professionals come to Massachusetts with limited assets and many have family obligations. These circumstances put a premium on paying for day-to-day needs rather than investing time and money in securing credential evaluation, taking new coursework, passing professional exams, and navigating the systems needed to obtain a new professional license.

- **Lack of information on the relicensing process**
  One of the most difficult challenges facing foreign-trained professionals is simply finding out requirements for obtaining required certifications and licenses. Finding such information can involve navigating a tangle of government agencies, test administration authorities, professional associations, accrediting authorities and graduate programs. These challenges are compounded by the inexperience of many services providers in serving foreign-trained applicants.

- **Limited English proficiency**
  Limited proficiency in English, including professional level language skills, is a major barrier to integration for many foreign-trained professionals. Publically funded ESOL classes in Massachusetts are in short supply, however, and routinely have 20,000 people on 1 to 2 year waitlists.[40] Federal rules also restrict the use of public workforce funds for higher-level classes or prep for language proficiency tests like the TOEFL—the gateway to licensing exams in many healthcare professions.

- **Difficulty documenting and evaluating foreign credentials**
  Many foreign-trained professionals, particularly refugees and asylees, face difficulty obtaining transcripts and other documents needed to get their educational credentials evaluated. Even if such documents are available, each profession has its own approved credential evaluation services. Foreign-trained applicants can waste time and money on unapproved credential evaluations.

- **Unfamiliarity with the U.S. job search process**
  Even for those immigrant professionals who do navigate the licensing process, successful re-entry into a career is not guaranteed. Unless he or she is familiar with U.S. job search tools, can network successfully, and can write effective cover letters and interview effectively in English, then all of the degrees, training, work experience, certifications, exams and licensing may have limited value.

- **Lack of targeted employment services**
  The limits of the public workforce development system exacerbate immigrants' own lack of knowledge about the recredentialing process. Employment services available at One-Stop Career Centers largely focus on immediate employment needs, not long-term professional options and career trade-offs. Career center staff must also struggle with the same complex, unclear sources of information about relicensing as immigrant professionals themselves. The same is true for staff at community-based organizations and ESOL providers that work closely with immigrants.

- **Managing expectations**
  The lack of targeted services highlights another challenge: for many foreign-trained professionals one of the biggest barriers to making practical career choices can be the grief and confusion associated with the loss of their professional identity. Many do find their way back into their original professions in the US. But many others struggle for years, at great financial and emotional cost, to attain what may be an unrealistic goal. It takes skilled, experienced career advisors to help these professionals move from the realization that re-entering their profession may not be realistic, to opening up new and rewarding opportunities in the healthcare sector or related fields.

professional licenses; and g) navigating an unfamiliar job search and application process.

It is a long journey at best—and there can be complications at each stage. Otherwise qualified foreign-trained physical therapists, for example, may be ineligible to take the national licensing exam if they lack required general education credits in subjects like psychology or sociology. Internationally trained physicians who pass three required U.S. board exams are still required to repeat their residencies here, contending at the same time with a tight limit on federally-funded residency placements even for U.S. graduates; the requirement (set at the state level) of a minimum of three years of in residency vs. two for U.S. graduates; and the expectation that foreign-trained job applicants have acquired U.S. clinical experience that most almost by definition lack.

There is a lack of clear information, unfamiliarity with the U.S. job market and lack of targeted employment services to help navigate these challenges.

These complexities create a particularly daunting challenge for immigrants who have not gone through the U.S. educational system, or who have entered the country on other than employment visas and without an academic or employer sponsor.[41] Navigating the above steps also requires substantial amounts of time, money and effort—a challenge for anyone, but particularly for immigrants adjusting to a new community and a new language, and struggling to support a family on the wages of a low-skilled job. Given this, it is striking that so many, indeed a majority of foreign-trained professionals in healthcare and other fields, are resourceful and persistent enough to reach the goal of practicing again as nurses, doctors, teachers, and engineers, or working in a related field. A large minority though, as we have seen, remain stuck in low-skilled, low wage jobs. Even for those who do succeed in re-entering their home country occupations, the road can be long, frustrating and uncertain, marked by missteps, unproductive detours, and wasted time and resources.

The challenges of navigating of the relicensing process are exacerbated by other structural factors. The most glaring, perhaps, is the lack of easily accessible, comprehensive, and authoritative information on licensing pathways and practice requirements (such as insurance) in each profession, as well as about academic programs that can provide the required additional coursework. This is especially true in an area as tightly and as complexly regulated as healthcare. This information gap impacts not just foreign-trained professionals themselves but job advisors at One-Stop Career Centers, community-based groups, refugee-serving organizations, and employers that would seek to assist these professionals.[42]

Obstacles like these are heightened by the lack of targeted services for high-skilled immigrants at One-Stop Career Centers and other employment services providers, as well as the limited availability of publicly supported ESOL programs tailored to the needs of these job seekers. And almost all newly arrived professionals, English proficient or not, lack the kind of peer networks and professional mentors that can help them navigate complex relicensing and career pathways as well as the U.S. job search process in general. Underlying all these challenges, for many, is grief and uncertainty that comes with the loss of professional identity. This burden can be particularly heavy over time for medical doctors and dentists, professions that face

the steepest barriers to relicensing to practice in the U.S. Helping these medical professionals manage expectations and explore the full range of career opportunities available to them, in health-related and other fields, requires a level of engagement and expertise that many service providers are not equipped to offer.

Healthcare Professional Recredentialing: The Employer Perspective

Healthcare employers can also be stymied by the barriers to relicensing that impact foreign-trained health professionals.

It is important to emphasize that foreign-trained professionals are not the only ones struggling with these relicensing challenges. Employers are impacted by these obstacles as well. A survey that the Task Force conducted of community health centers in Massachusetts showed many were frustrated in their efforts to hire foreign-trained clinicians to fill gaps in their primary care staff and work with the diverse, low income immigrant and minority clients these centers serve. While the survey sample is small, the results are consistent with studies cited in Section I regarding the challenges community health centers and safety net hospitals face in attracting and retaining staff clinical staff and serving a diverse community of patients.[43]

The survey found, for example, that two-thirds of organizations surveyed (10 out of 14) had either hired or tried to hire foreign-trained professionals—particularly dentists and physicians but also nurses—in both medical and (where not licensed) non-medical roles, including as administrators and interpreters. Several respondents noted they relied on foreign-trained clinicians, both with and without U.S. licenses, to serve their diverse patient populations. More than one third of respondents (36 percent) noted that "lack of culturally and linguistically competent clinical staff" was a "major concern" in serving low income, ethnic minority, and foreign-born clients.

At the same time, nine respondents (70 percent of those who answered the question, including all who said they hired these professionals) said that "unnecessarily complex and/or rigid practice requirements for licensing" of foreign-trained professionals were a "major concern." One respondent commented on the "time-intensive, costly and energy consuming" process involved; another on the long delay in hiring a foreign-trained physician even when no U.S. clinicians were interested in the position being filled; and another on the impact of losing of foreign-trained doctors who couldn't obtain a residency and left to work in other fields.

How States and Localities are Meeting the Challenge

In recent years a wide range of public and nonprofit initiatives at state and local levels have sought to address these complex workforce challenges—and meet the demands of a skills-driven modern economy.

While foreign-trained professionals and the challenges they face still fly "under the radar" to a great extent, there is a growing awareness in the U.S. of the need for targeted resources and support systems for skilled immigrants seeking to resume their careers. In part this is due to the increased numbers of high-skilled immigrants themselves—which has grown nationally by 38 percent as a share of all immigrants since 1990[44]—and to demographic and economic changes that place a premium on both advanced job skills and on the need for diversity in the workforce. In recent years, a number of public sector and nonprofit initiatives and cross-sector partnerships have been launched at the state, regional, and local levels, to help create

and institutionalize tools and systems that can address these complex workforce issues, and to share knowledge and best practice across the field. All of these projects have elements that could be developed in Massachusetts, in many cases building on existing Massachusetts workforce and economic development programs.

- **State government initiatives**. A number of state governments are working directly and with partners to better connect immigrants with the workforce system, ease pathways to relicensing for immigrant professionals, and fill regional skill gaps.

  - **Michigan**'s Department of Licensing and Regulatory Affairs (LARA) has partnered with the nonprofit employment services organization Upwardly Global (see below) to create an online guide for skilled immigrants on how to become licensed in Michigan in ten professions (including physician, dentist, nurse, physical therapist and pharmacist), as well as a dedicated telephone help line to state professional licensing specialists.[45] In addition, with funding from LARA and Michigan's Office of New Americans, Upwardly Global has opened an Office for Skilled Immigrants in Detroit, and is working locally to advise skilled immigrant job seekers and secure employment partners for Global Engineers in Residence (GEIR) internships for experienced engineers.[46]

  - The **Minnesota** Office of Refugee Resettlement—leveraging funds from its Professional Refugee Resettlement Program—helps support a Foreign Trained Professional Recertification Program operated by the nonprofit Women's Initiative for Self Empowerment in partnership with other community-based groups. The program provides information, education, resources, mentorship and advocacy to new immigrants and refugees who are foreign-trained professionals needing recertification to work in the US.[47]

  - In **Washington State**, the Legislature—working with the statewide immigrant advocacy group OneAmerica and other partners—has recently enacted legislation to create a statewide task force to promote career ladders for bilingual para-educators with foreign teaching degrees and foreign-educated immigrants in other fields (engineers, doctors, nurses, accountants, etc.) to become credentialed teachers.[48]

  - **New York State** through its Office for New Americans has established a statewide network of 27 Opportunity Centers hosted within community-based organizations. ONA Opportunity Centers assist with access to ESOL programs; job skills training through One-Stop Career Centers; consolidated information on licensed professions in the state; credential evaluation services (through World Education Services Global Talent Bridge); career counseling and training for high-skilled immigrants (through Upwardly Global); a re-training program for immigrant engineers, computer programmers and scientists (through The Cooper Union and B'nai Zion Foundation); and assistance with starting or expanding a business.[49]

- **Regional public/nonprofit workforce partnerships:** In the last decade and more, a number of creative nonprofit initiatives, partnering with state and local public agencies, higher education institutions, and local employers, and leveraging both public workforce dollars and foundation funding, have begun to remake the way workforce development services for immigrant professionals and immigrants at all skill levels are delivered. These include the Welcome Back Initiative and the Welcoming Center for New Pennsylvanians.

- ***The Welcome Back Initiative*.** Founded in San Francisco in 2001 by a physician from Mexico who wanted other foreign-trained healthcare professionals to benefit from his experience, the Welcome Back Initiative (www.welcomebackinitiative.org) has grown to a network of 10 programs in eight states that work to help internationally-trained health professionals restart their careers in the U.S. and increase the diversity of local healthcare workforces. The Massachusetts Welcome Back Center (www.bhcc.mass.edu/welcomeback), which was founded in 2005, and is a partnership of Bunker Hill Community College, Roxbury Community College, and MassBay Community College, works exclusively with foreign-trained nurses.

  Often partnering with community colleges and nonprofit service providers, as well as state government agencies, state licensing boards, and foundations, Welcome Back Centers serve as an information and resource center for immigrant healthcare professionals, providing orientation, counseling, and intensive case management and support. Participants are also assisted in exploring relevant educational programs, job and volunteer opportunities, and alternative career options. **The Boston WBC, for example, has to date served more than 1,000 clients, 276 of whom have passed their licensing exams and 239 of whom have obtained employment as nurses (80 percent as RNs)**.[50] Even the many WBI clients who don't manage to return to their original professions still find their place in the U.S. health system at public health departments, community based health centers, or nonprofit organizations (e.g., Planned Parenthood, the American Lung Association), serving their communities as health educators, epidemiologists, counselors, case managers, community health workers, and medical interpreters. **Participants on average saw an annual income increment of 255 percent from initial contact to completion of their goals.**[51]

- ***Welcoming Center for New Pennsylvanians***. The Welcoming Center for New Pennsylvanians (www.welcomingcenter.org) embodies a broader approach to meeting employment challenges facing the fast-growing population of immigrants in northern Pennsylvania. Founded in 2003 by an immigrant physical therapist who had experienced first-hand the barriers to recredentialing and licensing faced by foreign-trained professionals, the Welcoming Center draws on federal workforce development funding and foundation dollars to offer employment preparation and placement services to immigrants at all skill levels (of more than 400 employment clients served yearly, 38 percent have a bachelor's degree or higher). In addition, the organization has published five Career Guides for immigrant professionals. The Welcoming Center also works closely with state and local public officials, business leaders, and local media to share economic data and projections for the region. In fall 2014 the Center launched an Immigrant Professional Career Pathways Program to assist skilled immigrants in Philadelphia find training and jobs in their fields. The program operates through a cohort model, and the first cohort served will be healthcare professionals.

- **Local Government Initiatives**: Recognizing the potential economic contributions of foreign-trained immigrant professionals, a growing number of local governments (including New York City, Dayton, Detroit, St. Louis, and other cities, often in "rust belt" regions of the U.S.) have partnered with community-based groups, educational institutions, local employers, and national nonprofits to launch programs to tap into the talents and education of skilled immigrants and immigrant professionals, as well as attract new immigrants to the region. Typically part of

broader immigrant integration and economic development initiatives—which also focus on middle skill job growth and immigrant entrepreneurship—such efforts include New York City's Immigrant Bridge Program (www.nycedc.com/program/immigrant-bridge), Welcome Dayton (www.welcomedayton.org), Global Detroit (www.globaldetroit.com), and the St. Louis Mosaic Project (www.stlmosaicproject.org). Like some states, local initiatives like the NYC Immigrant Bridge Program have also partnered with Upwardly Global to provide sector-specific career services.

- **National Nonprofit Initiatives:** Finally, the past decade has seen the emergence of sophisticated and highly effective employment-focused nonprofit organizations that work with skilled immigrants to overcome career barriers and connect foreign-trained talent with employers. These organizations have also begun to partner with state and local initiatives to provide technical support and tools for recredentialing and professional licensing. These include Upwardly Global and World Education Services Global Talent Bridge.

    - ***Upwardly Global.*** Upwardly Global (www.upwardlyglobal.com) is a national nonprofit that works to eliminate employment barriers for recently arrived high-skilled immigrants (no more than five years in the U.S.) and help match them with skilled positions at a wide range of employer partners. They currently have offices in Chicago, New York and San Francisco, as well as satellite sites in Detroit and Silver Springs through local partnerships. In addition to offering a six month program of intensive job readiness coaching and support at local offices, the company has launched an online training platform to provide workshops, discussion forums and coaching support nationwide. **A recent Upwardly Global study of 561 clients in their on-site programs from 2010-2011 showed employment levels increasing from 20 percent at entry to 85 percent in 2012, and average annual earnings growing from $3,500 to $35,000.**[52]

      Working with state and nonprofit partners, Upwardly Global has also developed online licensing guides for five states (California, Michigan, Illinois, New York and New Hampshire) that provide detailed licensing and professional information and career guidance for up to ten professions in each state. The organization also offers sector-specific career training and program development assistance in partnership with state and local workforce initiatives, including the Immigrant Bridge program in New York City and Michigan's Department of Licensing and Regulatory Affairs.

    - ***World Education Services (WES) Global Talent Bridge***. An arm of World Education Services, an international nonprofit credential evaluation company operating in the U.S. and Canada, WES Global Talent Bridge (www.globaltalentbridge.org) provides extensive online informational resources for skilled immigrants in a wide range of professions. It also offers training and professional development on relicensing, credential evaluation, and related topics for immigrant service providers (including ESOL programs, career advisors, community colleges and others) through workshops in locations around the country as well as online webinars. In 2013 Global Talent Bridge partnered with the Massachusetts Immigrant and Refugee Advocacy (MIRA) Coalition and English for New Bostonians to offer two regional workshops to scores of ESOL providers and career services staff from public sector, academic and community-based organizations.

Foreign-Trained Healthcare Professionals: Case Examples

Elena was a physician in Venezuela. She worked as an emergency room physician and as a family physician/surgeon in the military. She came to the United States in 2003 with her husband and two children through the green card lottery to escape political instability and deteriorating economic conditions.

Elena raised her children in central Massachusetts and took English classes, with the goal of relicensing as a physician, but could not find the time or money to study as much as she wanted. She took the first of three U.S. Medical Licensing Exams (USMLE) twice, and came close to passing, but has not tried a third time. She has by now exceeded the state's 7 year limit after arrival for passing step 3 of the USMLE. She gained certificates and held jobs in phlebotomy and medical administration. Eventually she found contract work as an interpreter at UMass Medical Center, even without an interpreter's certificate, also teaching classes on language skills for medical students, until her hours were cut due to budget constraints. She resisted spending $600 for a six-week certification course, reluctant to commit to an occupation with such low average salaries.

A realistic person, Elena understands the dream of relicensing as a physician is no longer viable. In all her jobs in the U.S., however, she knows her professional background has helped her to go beyond her limited responsibilities, to assist diverse communities of patients, provide support for U.S. clinicians and students, and streamline administrative processes. And she still looks for ways to expand her career opportunities. She considered enrolling in a bioengineering certificate program, but the commute to Boston was a barrier. She was close to getting an interpreter coordinator position at a large community health network, but the funding for that position was cut. She has recently been able to find a full-time interpreter job, and continues to explore job options where her medical, linguistic, and organizational skills can be maximized.

Marie was a nurse in Haiti. Knowing other Haitian nurses in the U.S., Marie assumed that she could continue the career she loved here in Massachusetts. She got unclear information from colleagues, not realizing she required a credential evaluation by the Commission on Graduates of Foreign Nursing Schools (CGFNS) to submit for review to the MA Board of Registration in Nursing, and that she couldn't take the National Council Licensure Examination for Registered Nurses (NCLEX-RN) exam without a passing score on the Test of English for Speakers of Foreign Languages (TOEFL). Over nine years Marie took the TOEFL exam six times, sometimes missing a passing grade by one point, before she finally passed.

Fortunately, midway through this process Marie was able to connect with the Boston Welcome Back Center. WBC provided Marie with TOEFL prep assistance, worked with her to assess and fill gaps in her educational background, and provided intensive coaching on the NCLEX-RN and professional expectations in the U.S. The WBC case managers were also able to offer informed, proactive, and supportive guidance through the entire process, including connecting Marie with a network of other foreign-trained WBC nursing graduates who had successfully made the transition back to their home country professions.

With assistance from her WBC case manager and much searching on her own, Marie obtained a job as a CNA at a hospital and rehabilitation center in Cambridge, MA, while working to complete the process of relicensing as a registered nurse. She still works there, but now as an RN, happy to be able to practicing the profession she loves and to more effectively serve a diverse community of patients. She is currently studying to complete her BSN in a local college nursing program.

III. Moving Forward: Policy Recommendations for Massachusetts

"Massachusetts has long been a leader in healthcare reform—expanding primary care access for all residents of the Commonwealth and creating a world-renowned destination for healthcare education that attracts talented students and professionals from around the world. Creating policies that can better tap the dedication, talent and experience of the many foreign-trained health professionals in Massachusetts is an obvious next step in this process." (Kathleen Betts, Assistant Secretary for Children, Youth and Families, Massachusetts Executive Office of Health and Human Services).

"The Welcome Back program is simple, the model is replicable, and the timing is right. There has been tremendous support from many sectors, from education, to employers, to policymakers, to regulators. It has been almost like a perfect storm of need and supply" (José Ramón Fernández-Peña, MD, MPA, Director, Welcome Back Initiative)

Expanding opportunities for foreign-trained healthcare professionals in Massachusetts is something that state government can support through a variety of strategies—through executive action at the agency level and through coordinated efforts with other stakeholder groups, including employers, academic institutions, licensing boards, professional associations, community-based groups, and others. These strategies range from better and more widely shared information on licensing and career pathways, to expansion of workforce development and educational services supporting immigrant professionals, to a review of licensing guidelines to identify unnecessary barriers to relicensing, to a new executive agency role overseeing immigrant integration policy.

Such efforts need not require significant new costs; the greatest potential impact, ultimately, will come through better coordination of existing systems, services, and institutions. The program and policy recommendations presented below largely seek to leverage existing funding streams, and to create new frameworks for raising resources through public/private partnerships. A modest public investment in the skills and experience that foreign-trained medical professionals already possess would have a significant return to the state both in economic and healthcare terms.

This need for action, as the report makes clear, is all the more immediate given the growing demand for clinicians in all fields who can serve an increasingly diverse state population, and the vital role of the healthcare industry of Massachusetts' economy. These efforts can also build on a wide range of successful program and policy models in states and localities across the country, and on the strengths and the strategic direction of workforce and educational systems within Massachusetts itself. The proposals here, moreover, can impact immigrant professionals in other fields as well—and indeed how the state's workforce development system serves all the Commonwealth's foreign-born workers, who now make up 17 percent of the state's labor force, across all skill levels.

The recommendations below are organized around four broad strategies:

1. Improve Informational Resources and Stakeholder Awareness Concerning Career Pathways for Foreign-Trained Healthcare Professionals
2. Strengthen and Expand Educational and Workforce Development Systems Serving Immigrant Professionals

3. Work to Address Structural and Financial Barriers to Professional Relicensing Faced by Foreign-Trained Healthcare Professionals
4. Provide for Executive Agency Oversight of Immigrant Integration Policy, Including Career Pathways for Foreign-Trained Professionals, in the Office for Refugees and Immigrants (ORI).

Within each strategy, we first identify actions that state government and public sector institutions can initiate—working either on their own or in coordination with other stakeholder groups; then we look at actions where non-governmental stakeholders can and should take the lead. The four strategies here move from short-term, relatively direct actions to longer-term policy and system changes that will require broader and more sustained collaborations across multiple sectors. While in principle each strategy can be addressed independently of the other, successive strategies are also intended to build on and reinforce the recommendations in previous ones.

1. Improve Informational Resources and Stakeholder Awareness Concerning Career Pathways for Foreign-Trained Healthcare Professionals

As discussed, the lack of readily available, trusted, and comprehensive relicensing and career development information represents the most immediate practical barrier for immigrant professionals working to restart their careers in the U.S., and to avoid expensive, time-consuming and frustrating dead-end paths. This gap poses just as significant an obstacle for workforce development institutions, community-based groups, or employers that seek to assist these professionals in re-entering their fields. There are several straightforward steps that state government and other stakeholders can undertake to address this issue, building on work already underway in the nonprofit sector and following successful models in other states and localities.

What can state government do?

- *The Administration should support creation of a new, user friendly, centralized online portal including detailed relicensing information and career development resources for foreign-trained immigrants in licensed professions in Massachusetts, with an initial focus on healthcare. This effort should build on and seek to continue the efforts of the Department of Public Health's Division of Health Professions Licensure (DHPL) as it moves forward with the development of its own online portal. The launch of a dedicated online portal for foreign-trained professionals should be broadly publicized and include plans for multiple language support over time.*

  The Division of Health Professions Licensure (DHPL), the Board of Registration in Medicine, and the Board of Registration in Allied Health Professionals should follow the model of public sector agencies in five states—California, New York, Illinois, Michigan, and New Hampshire—that have worked with the nonprofit organization Upwardly Global to develop online licensing guides for licensed professions in those states.[53] These efforts can build on work already underway within DPHL and expand upon the information currently available on its board websites. DHPL has expressed a willingness to work with an organization such as Upwardly Global to develop additional healthcare professional licensing guides for Massachusetts. In Massachusetts, this effort can also leverage work already done by the Massachusetts Immigrant and Refugee Advocacy (MIRA) Coalition to document relicensing pathways in healthcare and engineering professions.[54] The Massachusetts portal should initially address healthcare

professions, including doctor, dentist, nurse, pharmacist, allied health professional, and mental health professional. The online portal for foreign-trained healthcare professionals should explain the structure of each profession in the state, and offer comprehensive, clearly delineated explanations of the steps, cost and time for professional recredentialing and obtaining state licenses in these professions. It will also explore alternative educational and career options for those unable pursue complex and costly relicensing pathways.

Once a portal with licensing information for foreign-trained professionals is available, DHPL, DPL, the Office for Refugees and Immigrants and other state agency partners should broadly promote the use of this online resource, beginning with a public launch event that will draw attention to the potential impact of foreign-trained professionals on the state's economy and healthcare system. The portal's existence should also be promoted through inter-agency communications and through trainings and webinars offered to staff at state licensing boards, as well as at One-Stop Career Centers and community colleges. Longer term plans should include making this resource available in multiple languages, per the Commonwealth's Language Access Policy for state executive agencies.[55]

- *Building on efforts within DHPL, the official state web pages and customer service systems of state boards of healthcare professional licensure should themselves provide more targeted guidance and support for foreign-trained professionals in those fields. This should include clear directions for foreign-trained professionals on contacting each board's licensing support staff for additional information and referrals, and enhanced collection by each board of relevant demographic, educational, and employment data. Other healthcare professional boards, including the Board of Registration in Medicine (under the Executive Office of Health and Human Services) and the Board of Registration in Allied Health Professionals (under the Division of Professional Licensure in the Office of Consumer Affairs and Business Regulation), should be encouraged to adopt similar policies to DHPL. Over the longer term, all boards under the Division of Professional Licensure should explore how to develop similar streamlined information resources.*

  Links to the dedicated online portal for foreign-trained professionals should be prominently displayed on the web pages of boards of professional licensure on Mass.gov, and integrated into sitemaps, online directories, and FAQ pages. The web pages of those boards should also offer user-friendly guidance for foreign-trained professionals who want to practice in Massachusetts on contacting each board's licensing support staff. Support staff themselves should receive training on the use of the online portal and on other available workforce development resources for foreign-trained professionals (see Recommendation 2). These efforts should be coordinated across licensing boards to ensure consistency and sharing of resources.

  Currently seven of the nine DHPL Boards offer some information for foreign-trained applicants on their web pages. However, of the three boards most relevant for foreign-trained professionals—Nursing, Pharmacy, and Dentistry—only Nursing and Pharmacy provide explicit relicensing information, and do so with significant differences in format and scope:[56]

  - The Board of Registration in Dentistry is currently revising applicant information for foreign-trained applicants and the web page directs applicants to contact the Board directly with questions until the revisions are completed.[57]

- On behalf of the Board of Registration in Nursing (BORN), Professional Credential Services (PCS), maintains a web page and link specifically for non-US educated nurses to access step-by-step information about the nurse licensure application process including educational (MGL c. 112, §§ 74, 74A and 76B) and English proficiency requirements (the BORN currently recognizes five tests of English proficiency), and an affidavit which such applicants can complete in the event they do not hold a U.S. Social Security Number (SSN) at the time of license application. The affidavit allows applicants to proceed through the initial licensure process in order to obtain an SSN.

  Additionally, the Board of Registration in Nursing maintains a list of Massachusetts nursing schools that have indicated they will enroll into specific courses nurses educated outside the U.S. who have had their educational credentials evaluated by the Commission on Graduates of Foreign Nursing School and who are identified as deficient in a particular content area.

- The Board of Registration in Pharmacy maintains an FAQ page (http://www.mass.gov/eohhs/docs/dph/quality/boards/pharmacy/pharmacy-faq.pdf) and FAQ 18 addresses foreign-trained applicants, referring such applicants to the National Association of Boards of Pharmacy (NABP).

Licensing boards should also be enabled to collect demographic, educational, and employment data on foreign-trained professionals, to inform policy decisions in this area and track the potential impact of these efforts. Currently the DHPL licensing boards collect limited information of this kind on licensees at initial application, beyond information required by statute, and additional resources would be needed to undertake such a significant administrative task in DHPL and other state offices. Chapter 224 legislation regarding the Department of Public Health's Health Care Workforce Center already supports such data collection with regard to healthcare professions, however. The individual boards and the DHPL have already begun this coordination[58] to make sure that these data are collected in a form consistent with the recommendations of the Health Care Workforce Center and the Health Workforce Advisory Council in the form of the *Health Professions Data Series.* These reports should be integrated into the state's long-term healthcare workforce development plans.

What can other stakeholders can do?

- *Community-based groups, nonprofit workforce development organizations, and healthcare employers should incorporate these resources into their own staff professional development and career advising activities, and actively promote such resources to their constituencies.*

  As with public sector workforce development bodies, nonprofit stakeholders including immigrant and refugee-serving organizations, ESOL providers, and job training organizations, are also increasingly working with a foreign-trained immigrant clientele.[59] Such organizations should seek to strengthen establish professional development opportunities for front-line staff to build their skills and capacity to serve this population. This is a trend we are already seeing in many organizations, especially immigrant and refugee serving groups. The creation of the online resources and support systems described above will advance this process. As with public sector stakeholders, community-based organizations should also work to enhance client intake and case management systems to include relevant demographic, education, and professional data.

The MIRA Coalition, for example, with funding from the J.M. Kaplan Fund, has promoted policy research, community outreach, and stakeholder trainings to improve career opportunities for foreign-trained immigrant professionals.[60] This includes workshops for ESOL providers and workforce development practitioners, offered in partnership with WES Global Talent Bridge. Well-established community-based service providers like Jewish Vocational Services and the Asian-American Civic Association have also strengthened staff expertise in this area in the context of new ESOL and career pathway initiatives that serve a high-skilled immigrant population (see Recommendation 2).

- *Building on existing workforce diversity initiatives and employee training programs, healthcare employers and medical education programs should support or expand career development services that tap into the potential of foreign-trained professionals, as well as facilitating mentoring relationships with U.S. and foreign-trained immigrant professional staff.*

  Healthcare employers, including academic medical centers and community health centers, are perhaps best equipped to both value and support the talents of foreign-trained healthcare professionals, many of whom have found work at these institutions in non-professional roles. Many large hospitals already have in place well-developed career development and workplace training programs for their employees—including high level ESOL instruction—that can connect foreign-trained professionals with resources for relicensing or lead to new healthcare career opportunities. Notable leaders in this area are Beth Israel Deaconess Medical Center, Massachusetts General Hospital, and Brigham and Women's Hospital.[61] Another model is the Volunteer Health Advisor program at Cambridge Health Alliance, a large community health network, which recruits foreign-trained professionals to provide community outreach, health education, and health screenings to the network's diverse patient base, and helps volunteer advisors themselves gain valuable healthcare experience and credentials.[62]

  The absence of their own peer networks and professional social capital in the U.S. is also a significant hurdle for many foreign-trained professionals seeking to re-enter their fields. The large numbers of immigrant doctors, nurses, dentists, pharmacists and others already working and thriving in the state's healthcare industry—including the majority of those who hold foreign degrees—represent a largely untapped potential resource for more informal career advice and peer mentoring, especially in partnership with existing employee career development and workplace diversity programs. Healthcare employers, especially academic medical centers and community health centers, can support the development of such networks as part of community outreach events, job fairs, and staff enrichment activities.

2. Strengthen and Expand Targeted Workforce Development and Educational Programs Serving Immigrant Professionals

The best informational resources are only a starting point, of course, in helping foreign-trained medical professionals navigate the complex web of professional and life choices involved in the relicensing process or in accessing alternative career options. Foreign-trained professionals embarking down this road need expert career advisors who are familiar with the licensing process and educational and career pathways in each profession, and have the training and tools to assist clients in managing expectations, triaging options, and connecting with available resources.

Staff at One-Stop Career Centers, community colleges, and community-based ESOL and employment services providers in Massachusetts are, as noted, encountering these professionals with increasing frequency, and often make considerable efforts to assist them. But lack of centralized information and trained expertise in working with this population limits the level of assistance that can provide. This is especially true of One-Stop Centers, given their mandated focus on immediate job placements rather than a commitment to long-term career planning—especially in professional occupations—as well as declines in federal workforce development funding over the past decade.

Drawing on models both in other states and in Massachusetts, there are several steps that public sector institutions and other stakeholders can take to increase the capacity of the state's workforce development system to advance the careers and contributions of these professionals.

What can state government do?

- *Building on public sector and nonprofit models in Massachusetts and other states, the Executive Office of Labor and Workforce Development and Department of Higher Education should promote pilot programs at One-Stop Career Centers and community colleges that can offer expert career supports for foreign-trained professionals. Programs should also enhance data collection frameworks concerning foreign education and experience and U.S. career outcomes.*

  Building on the state's existing inter-agency collaborations in the workforce development and educational arenas, the Executive Office of Labor and Workforce Development (EOLWD), the Department of Higher Education (DHE) and the Director of Education and Workforce Development should work with One-Stop Career centers and community colleges to pilot programs that target the needs and assets of skilled immigrants and foreign-trained immigrant professionals. Focusing first on One-Stops in workforce investment regions like Boston and Metro North with strong existing healthcare and STEM initiatives, such programs should connect clients with expert career advisors who can help them weigh options and support them through the relicensing process or pathways to other careers in health or STEM occupations. These initiatives can also leverage the recent Congressional reauthorization of the Workforce Opportunity and Investment Act (WOIA), which restores flexibility for the Governor's 15 percent set-asides "to support and encourage innovative and evidence-based approaches to workforce development."[63] Finally, such programs can also leverage resources already available at One-Stop Career Centers in community-based settings—such as The Work Place at Jewish Vocational Services in Boston—that serve a large immigrant client base and already host relevant services such as ESOL, bridge-to-college, and high-skilled career pathway programs.

  These efforts should also ensure that client intake and program data track clients' foreign training and experience, as well as their progress here in navigating the relicensing process and accessing employment opportunities. Currently, the state's MOSES (Massachusetts One-Stop Employment System) database only tracks foreign-born status; it does not indicate when an individual entered the U.S. or the level or subject of any foreign degrees.[64] MOSES also does not currently integrate longitudinal information on U.S. education and employment outcomes—though adding this support is part of the state's Workforce Data Quality Initiative, funded by the U.S. Department of Labor.[65] Ongoing system enhancements should also include relevant details about immigration status and foreign credentials.

One model here is WorkSource Portland Metro-SE Center, a One-Stop Career Center in Portland, Oregon, whose Professional Immigrant Credential Program provides case professional credentialing assessment, licensing assistance and case management support.[66] An example of a statewide program of targeted workforce development services for immigrant job-seekers is the Immigrant Workforce Project of the New York State Department of Labor, described in Section II, whose aim is to connect immigrant job seekers with the One-Stop Career Center system and improve how that system serves immigrants. A third model is the Welcoming Center for New Pennsylvanians, also described above, which leverages federal workforce development funding as well as philanthropic sources to provide employment services tailored to immigrant workers at all skill levels, and has recently launched an Immigrant Professional Career Pathways Program.[67]

Similar efforts should be promoted or expanded at state colleges and universities, especially community colleges. These efforts can leverage existing cross-sector workforce initiatives, including DHE plans to strengthen the pipeline for nursing and allied health professionals,[68] and the coordinated programming, student advising, and data systems that are part of the Massachusetts Community Colleges and Workforce Development Transformation Agenda (MCCWDTA), with its emphasis on healthcare and life sciences occupations.[69] The network of community-college based College and Career Navigators developed under the Transformation Agenda are also well-positioned to provide expert advising and referrals to foreign-trained professionals looking to re-enter their fields or access new skilled employment opportunities.

Building on such frameworks, the Department of Higher Education can also influence state colleges and universities to take a stronger role in supporting foreign-trained professionals, for example though developing bridge programs to help licensing candidates fill gaps in their training or train for alternative healthcare professions—especially where these universities already have programs that prepare US-trained candidates, and therefore have credibility with the licensing boards. Welcome Back Centers, which are often embedded in public higher education systems and work closely with local boards, have pioneered this model, identifying specific course offerings within state systems—and sometimes only parts of those courses—that meet the most common educational requirements for relicensing.[70]

- *Explore increasing financial and institutional support for the proven service model at the Boston Welcome Back Center (WBC) for internationally trained nurses, and expand WBC services to other healthcare professions and to other regions of the state.*

  The Welcome Back Initiative, and individual Welcome Back Centers around the country, have proved to be a successful and cost-effective way to assist foreign-trained doctors, nurses, physical therapists, mental health workers, and others relicense in their professions or find pathways to other skilled, well-paid work in healthcare or other fields. As the evidence presented above shows, the Boston Welcome Back Center for internationally trained nurses is no exception. The strong institutional relationships and knowledge base the Center has built, working with the Board of Registration in Nursing, academic nursing programs, and healthcare employers, allow the Center to serve as a resource not just for foreign-trained nurses but for those organizations as well. The state's Department of Health Professions Licensure has expressed its support of expanding the Welcome Back Center to other health professions and regions of the state. The Nursing Board was among the state partners including the Department of Higher Education involved in the establishment of the Welcome Back Center in 2005. Since

that time, it frequently provides consultation to the WBC staff. Also, the Nursing Board regularly refers non-US educated nurses to the WBC for support.

Despite this impact, funding for the Center remains limited and largely contingent on support from individual community college leaders, especially in the wake of recent state cuts in state grants to community colleges. In addition to its small size, other structural factors limit the visibility and potential contributions of the program as part of the state's healthcare workforce system. For example, the state Board of Registration in Nursing does not count graduates of WBC who have applied to take the NCLEX among the graduates of state nursing programs.[71] Securing and expanding the impact of the WBC will require a commitment at the state executive level, as well as better integration of this program with the state's workforce development system and long-term healthcare workforce development strategies. The Massachusetts Department of Higher Education, in partnership with the Organization of Nurse Leaders, is the recipient of Robert Wood Johnson Foundation grant funding to support the Massachusetts Action Coalition's Academic Progression in Nursing II initiative which includes strategies related to increasing diversity in the nursing workforce. The Nursing Board is a Coalition member.

As part of proposed inter-agency efforts to strengthen targeted services for immigrant healthcare professionals, and following the model of most other Welcome Back Centers around the U.S., the focus of the Boston WBC should be expanded to include healthcare occupations other than nursing. Given, moreover, that the needs it fills are not limited to Boston, Welcome Back sites should also be piloted in Western and Central Massachusetts, regions that experience some of the biggest gaps in primary care services.[72] Executive agencies should work closely here with the current Boston WBC sponsors, including Bunker Hill Community College, Roxbury Community College and MassBay Community College.

- *Through One-Stop Career Centers, community colleges, and other workforce development stakeholders, ensure that public sector career pathway programs leading to high-skilled and in-demand healthcare and STEM occupations encourage enrollment by skilled immigrants.*

  For many immigrant healthcare professionals, obtaining training and credentials to enter another healthcare or STEM occupation can either be a step towards relicensing in their original profession or the start of an alternative, in-demand career pathway that leverages their technical skills and experience. Although hard data is limited, anecdotal evidence suggests that immigrant professionals, in healthcare and other fields, are finding opportunity in the growing number of career pathways programs across the state that offer training and work experience in high-skilled medical and life sciences occupations (from nursing to pharmacy technician to bioengineering).[73]

  Career pathway programs—involving partnerships between workforce investment boards, community colleges, local employers, and nonprofits—have become the accepted standard for publically funded workforce development initiatives in Massachusetts and other states that seek a skilled labor force aligned with needs of regional employers. Besides providing stackable credentials for in-demand occupations, such programs have other features that address the barriers that many immigrant professionals—and many immigrant workers in general—face. These include wrap-around support services, employer internships, and contextualized English language instruction that accelerates proficiency in both English and the field of study.

Given the sizeable public investment in such initiatives, EOLWD and DHE should make sure these programs are designed and promoted in a way taps into the potential of the large numbers of unemployed and under-employed immigrant professionals in the state, exploring ways to overcome the educational and career obstacles these professionals face and leverage the advanced skills they bring. Helping foreign-trained professionals move out of low skill occupations into higher-skilled work will, moreover, help create new openings for upward mobility by less-educated workers, both foreign and native born.

What can other stakeholders can do?

- *Building on these tools and resources, community-based and nonprofit workforce development service providers and healthcare employers should strengthen their capacity to provide career information, counseling, and referrals to high-skilled immigrants who are increasingly accessing their services, including collecting data about foreign credentials and U.S. career outcomes.*

  Nonprofit workforce development providers can certainly benefit from, and should work to leverage, the above changes in public workforce systems. At the same time, community-based and nonprofit organizations—with their more relatively greater nimbleness in exploring new program strategies, and strong institutional commitment to serving immigrant community members—are also positioned to take the lead in serving foreign-trained professionals. The MIRA Coalition's "Back to the Office" initiative, for example, is working to strengthen MIRA's informational resources and staff expertise in this area, and provide tools, training and technical support for both skilled immigrants and community-based partners.[74] Nonprofit stakeholders also have access to important service data that is outside the public workforce system; opportunity exists, for example, for the philanthropic sector to fund a pilot research effort that aggregates data from various service delivery programs, public and nonprofit alike.

- *Given the growing population of high-skilled, limited English proficient immigrants, and new federal guidelines for ESOL funding that support college transition and career pathway initiatives, these organizations should also explore expanding ESOL programs that target the needs and career goals of college-educated immigrants and immigrant professionals.*

  Limited English proficiency is among the biggest career obstacles that immigrant professionals—like all immigrants—face in the U.S. Even in lower level ESOL classes, however, college-educated students benefit from approaches that target their learning styles and professional goals.[75] Such approaches are beginning to gain attention in Massachusetts. For example, the Asian American Civic Association (AACA) is piloting an innovative program for high intermediate students with a bachelors degree or higher, including a flexible online learning component;[76] the program is funded by English for New Bostonians (ENB), which uses both city and foundation funding to support innovative ESOL programs throughout the city. But more work is needed.

  Recent changes in federal workforce development funding guidelines may help advance such efforts. Until recently, federal grants for Adult Basic Education/ESOL programs under the Adult Education and Family Literacy Act—which provides the majority of funding for state ESOL programs—have prioritized support for lower literacy learners without high school degrees over higher level programming. This funding also does not cover preparatory classes for standardized

English proficiency exams. Such prep classes would be particularly valuable for foreign-trained professionals, since obtaining a high score on exams such as TOEFL, TOEIC or IELTS is a prerequisite for many professional licensing exams in Massachusetts and most parts of the U.S.

The recently reauthorized Workforce Opportunity and Innovations Act (WOIA) of 2014, however, includes an increased emphasis on postsecondary transitions and career pathway programs, while not diminishing the needs of low literacy learners.[77] These changes should encourage state ABE/ESOL systems and ESOL providers to develop coursework aimed at the increasing share of the limited English proficient population that is college educated, including contextualized ESOL instruction focusing on specific professional language skills. In addition to AACA, program models in Massachusetts include the Intensive English Institute at Worcester State University,[78] college bridge programs at Jewish Vocational Services, and TOEFL prep workshops offered by the Boston Welcome Back Center.

3. Work to Address Financial and Structural Barriers to Professional Relicensing Faced by Foreign-Trained Healthcare Professionals

Strategies 1 and 2 seek to overcome individual and systemic career barriers facing foreign-trained healthcare professionals in Massachusetts, through improved information sources and stakeholder awareness; better aligned state, academic and nonprofit sector workforce development programming; and stronger public sector and institutional commitments to supporting the skills and aspirations of these professionals and their potential contributions to the state as whole. Other tools and policies are needed to address the financial and structural challenges of the professional relicensure process itself. Advancing these policies also calls for strong executive branch leadership in coordination with action by stakeholder groups, including advocacy at the national level.

What can state government do?

- *Partnering with professional associations and philanthropies, collaborate to pilot funding tools to help low-income foreign-trained professionals cover the educational, testing and licensing costs of re-entering their fields. These could include a microloan fund (such as New York City's Immigrant Bridge Program), an educational assistance program for foreign-educated healthcare/STEM professionals, and promoting more flexible options for employer tuition reimbursement.*

  Sometimes the only thing standing in the way of a foreign-trained doctor, nurse, or other professional is lack of from a few hundred dollars to a few thousand dollars to pay for documentation of credentials, coursework, professional exams, or licensing fees. With the state's leadership, partners including business and industry groups, professional associations and unions representing healthcare professionals, and the philanthropic sector should come together to seed a microloan fund for foreign-trained individuals in healthcare and other eventually other fields who are seeking to re-enter their profession or to enter a related field. Once fully operational, the fund would be self-perpetuating via the repayment of past loans.

  For many other foreign-trained healthcare professionals, in Massachusetts, re-entry into their profession or into a related field requires substantial new educational investments that are beyond their financial means. By exploring the establishment of a state-sponsored scholarship

program to fund further education through grants and loans, stakeholders, including business and industry groups, professional associations and unions, higher education institutions, and the philanthropic sector, could facilitate these educational investments, which will benefit employers and help immigrant professionals to maximize their contributions to the Massachusetts economy. Employers with employee tuition reimbursement programs, especially those in the healthcare sector, should also explore more flexible policies regarding coursework needed to meet educational requirements for relicensing or to prepare for licensing exams.

- *The Executive Office of Health and Human Services should coordinate with the Division of Professional Licensure, the Division of Health Professions Licensure at the Department of Public Health, and the Boards of Registration in each healthcare profession across state government, to convene a joint working group to 1) identify state and national licensing requirements that may pose unnecessary barriers to practice for foreign-trained professionals, 2) develop recommendations for corresponding changes to state licensing requirements, and 3) identify opportunities to advocate for corresponding changes to federal licensing requirements.*

  Many of the licensing requirements for healthcare professions are set and overseen by national bodies outside state control (e.g., for physicians the Educational Commission for Foreign Medical Graduates, or for nurses the Commission on Graduates of Foreign Nursing Schools). Other policies and regulations, however, are set at the state level, and boards of licensure in healthcare professions as well as other state government entities may in practice exercise considerable discretion in adapting the application of federal law or national credentialing bodies.

  For example, states may follow different standards in regulating limited practice options for foreign-trained dentists and physicians in federally defined healthcare shortage areas, where foreign-trained clinicians work in restricted roles and time frames under the supervision of a U.S. licensed professional.[79] Massachusetts offers limited practice licenses only for dentists. These licenses are granted for a year at a time, but only in a public health setting such as a public hospital, dental school, or community health center, and under the supervision of a fully licensed dentist. Typically the foreign-trained dentist must first obtain certification of his or her dental school transcript from Educational Credential Evaluators, Inc. or a comparable agency, though the Board of Registration in Dentistry does not require this in all cases. If the dentist's course of study has not been in English, he or she must complete the TOEFL or similar exam before receiving a limited practice license. The dentist cannot be granted the license, moreover, until they have received an offer of employment, and the license itself is actually issued in the name of the supervising dentist. The license must be renewed each year; after a five year period, the limited practice dentist must take a clinical exam (ADEX/ADLEX) to be relicensed for a sixth year.[80]

  Limited practice dentists in Massachusetts play a key role in treating low income and minority populations, including most MassHealth clients. Foreign-trained physicians in other states fill similar critical gaps in primary care services in those locales. The Federation of State Medical Boards has recommended increasing the flexibility of state medical boards in extending limited practice licenses for various purposes, including providing medical services to underserved populations.[81] In addition, such limited practice options can afford foreign-trained practitioners

the U.S. clinical experience necessary to advance in their careers here, especially for physicians applying to U.S. residency programs.

Educational or practice requirements set at the national level can also create artificial barriers to licensing or practice that state boards may be able to interpret flexibly or even waive. For example, the Federation of State Boards of Physical Therapy (FSBPT), which oversees licensing exams for PTs in all 50 states, requires otherwise qualified foreign-trained physical therapists to have completed general education credits in subjects like psychology or sociology before being eligible for licensure.[82] Foreign-trained physicians in residency programs in Massachusetts, unlike U.S.-trained doctors in such programs, are not awarded a license that makes them eligible to apply for medical positions until their residency is complete. This restriction also delays the ability to be credentialed by insurance companies and receive insurance reimbursement when they start work. In New York and California, by contrast, foreign-trained residents operate under the same norms in this respect as their U.S.-trained counterparts.[83]

The Task Force calls on EOHHS to work with the Division of Professional Licensure, the Division of Health Professions Licensure, and the state Boards of Registration in each healthcare profession to convene stakeholder working groups to 1) review laws and regulations at the state and national levels for licensure in healthcare professions, including applicable insurance requirements, to determine whether they impose artificial and unnecessary barriers on foreign-trained professionals in completing the process of relicensing and practicing in their professions; and 2) develop recommendations to adapt regulations or streamline processes in order to reduce or overcome these barriers, including changes to state licensure regulations or new state legislation, and ways to facilitate completion of educational requirements (including the use of prior learning assessment to map foreign training and experience to state or national standards). In addition to representatives of each Board, these working groups should include representatives of executive agencies, healthcare employers, professional associations, institutions of higher education, and the insurance industry. The Division of Health Professions Licensure has already expressed its interest in participating in a joint working group.

Such deliberations can also offer an opportunity for state licensure boards and other stakeholder groups to advocate for policy change at the federal level that will expand opportunities for foreign-trained healthcare professionals to practice and contribute in Massachusetts. One ongoing area of attention, impacting foreign and U.S.-trained physicians alike, is expanding the current tight limits—and tight federal funding—for residency slots, a change that many healthcare advocates and professional associations see as crucial to meeting current and future shortages of physicians.[84] Another important opportunity for federal advocacy is the Health Equity and Accountability Act of 2014 (H.R. 5294), a far-reaching effort to address health disparities for racial and ethnic minorities. One section of the bill would authorize the Department of Health and Human Services to provide grants to health services organization, community groups, academic institutions, government entities, and other groups to provide services to help internationally educated health professionals "enter into the American health workforce with employment matching their health professional skills and education, and advance in employment to positions that better match their health professional education and expertise."[85]

What can other stakeholders do?

The state licensing boards need assistance to address the financial and structural barriers to healthcare professional relicensing. Other stakeholder groups, including professional associations, employers, academic institutions, insurers, community-based groups, and the philanthropic sector have a key role to play in shaping financial support mechanisms, assessing current licensing laws and regulations, and working together to put in place standards that both maintain the highest levels of patient care and ensure that all qualified professionals are able to provide patients with that care.

National and state bodies that oversee licensing standards for healthcare professionals do not do their work in a vacuum. Non-governmental stakeholders, especially healthcare employers, professional organizations, educational institutions, and insurers ultimately have the greatest professional and economic stake in these complex and sometimes contentious areas. Addressing this challenge will require collaborative efforts across sometimes siloed constituencies. Encouraging such collaboration among stakeholder groups, with the goal of improving patient care, increasing healthcare access, and reducing healthcare costs, is a principle enshrined in both Massachusetts health care reform and the Affordable Care Act. Along with patients, these stakeholder groups stand to gain the most, ultimately, by the increased economic opportunity and improved healthcare access for all residents of the Commonwealth and the U.S. that come with reducing unnecessary barriers to relicensing for foreign-trained healthcare professionals.

4. Establish a Staff Position to Oversee Immigrant Integration Policy Including Career Pathways for Foreign-Trained Professions in the Office for Refugees and Immigrants (ORI)

The above strategies represent what the Task Force believes are practical and achievable policy frameworks that will bring with them broad, long-lasting benefits for thousands of foreign-trained professionals in healthcare and other fields and for all residents of the Commonwealth. While calling for action across state government as well as by stakeholders outside the public sector, they also seek to leverage existing policies, programs, and funding streams, emphasizing cross-sector collaborations and carefully targeted new public expenditures that build on the strengths of the current system and successful program models in Massachusetts and other states. Implementing and institutionalizing these recommendations will call, at the same time, for a sustained commitment from the Governor, from executive branch agencies, and from other stakeholder organizations. This process will also require a dedicated role within state government to coordinate, champion and shine a light on these ongoing efforts, as well as a new framework for inter-agency collaboration within the executive branch.

What can state government do?

Building on ORI's mission to promote the economic, social and civic inclusion of immigrants and refugees in Massachusetts, a management-level position should be created within ORI, hereafter referred to as the Manager of Immigrant Integration Policy, to 1) coordinate immigrant integration policy across executive branch agencies; and 2) work with the GAC, with an Inter-agency Council on Immigrant Economic Integration to be convened by the Governor, and with existing inter-agency bodies, to advance recommendations of this Task Force and the New Americans Agenda as whole, with a focus on workforce and economic development. It is

expected that this position will play a critical role in the support of implementation of the above recommendations.

ORI's statutory authority calls for the Office to serve as a coordinating agency for all state policy regarding immigrants. Currently ORI manages key programs focused on the economic, social and civic integration of refugees and immigrants, including a recredentialing program for refugee professionals, comprehensive refugee employment services (CRES), and the Citizenship for New Americans Program (CNAP). ORI works closely with other executive branch agencies and immigrant and refugee serving organizations across the state to implement and oversee these programs.

Reflecting this role, the Executive Director of ORI served as the Co-Chair of this Task Force, along with the Assistant Secretary for Children, Youth and Families in the Executive Office of Health and Human Services, the executive agency that houses ORI. ORI is also the most appropriate place within the executive branch to establish a dedicated role for coordinating state immigrant integration policy, both with regard to the recommendations in this report and broader policy areas. Together with the Executive Director of ORI, a Manager of Immigrant Integration Policy would also need to engage with the GAC to leverage their cross-sector responsibilities in advising the executive branch on the interests of the state's immigrant communities and state policies impacting those communities.

An ORI Manager of Immigrant Integration Policy should also play a leading role in inter-agency collaborations focused on education and workforce development, economic development, and healthcare policy—efforts that will be key to the successful and sustained implementation of the policy strategies advanced in this report. To drive engagement with across state executive agencies, we also call on the Governor to establish an inter-agency Council on Immigrant Economic Integration charged with leading the Commonwealth's efforts to foster and leverage the economic potential and contributions of immigrants and refugees.

What can other stakeholders do?

Consistent with its statutory responsibilities to advise the Governor on policy, planning, and priorities for refugees and immigrants in the Commonwealth, the GAC should actively engage with the Governor's Office, the Executive Director of ORI, a new ORI Manager of Immigrant Integration Policy, and the inter-agency Council on Immigrant Economic Integration to advance the Task Force recommendations, continuing to serve as a focal point for engagement with the larger immigrant community and other non-governmental stakeholders.

The ongoing partnership between state government, the state's foreign-born communities, and the GAC is embodied in the New Americans Agenda initiative. This initiative was called for by the Governor and led by the GAC, with input from immigrant and refugee community members and community-based groups across the Commonwealth; the GAC continues to bear primary responsibility for overseeing the progress of the Agenda recommendations across state government. GAC must continue to play an active role in advancing the strategies presented here, engaging with the Governor and state executive agency partners, the immigrant and refugee community, and other stakeholder groups to support the talents and contributions of foreign-trained professionals in healthcare and other fields.

Next Steps

The upcoming transition to a new administration in Massachusetts presents the Commonwealth with an opportunity to continue the vital work of supporting the full economic integration of our state's immigrants and refugees. With this transition in mind, the Task Force on Immigrant Healthcare Professionals in Massachusetts recommends that the Governor's Advisory Council for Refugees and Immigrants (GAC) take the following steps:

1. Present this report and recommendations to Governor Patrick;
2. Distribute copies of this report and recommendations to the Senate President, the Speaker of the House, the Chairs and members of the House and Senate Committees on Ways and Means, the House and Senate Chairs and members of the Joint Committee on Economic Development and Emerging Technologies, the House and Senate Chairs and members of the Joint Committee on Labor and Workforce Development, the House and Senate Chairs and members of the Joint Committee on Consumer Protection and Professional Licensure, and other legislators as appropriate;
3. Advocate for funding in FY2016 to establish a Manager of Immigrant Integration Policy position within the Office for Refugees and Immigrants; and
4. Invite the Governor Elect to meet with the GAC for a briefing on its work, and to discuss the recommendations set forth in this report.

By taking these steps, the GAC can ensure that the effort to leverage the economic potential of highly-skilled immigrants and refugees moves forward in the coming years.

Appendix: Tables

Table A1: Foreign Born Healthcare Professionals by Location of Degree

	Foreign Born		US Degree		Foreign Degree	
	#	%	#	%	#	%
MD	415,792	29.6%	115,710	27.8%	300,082	72.2%
Nurse	273,741	17.6%	102,079	37.3%	171,662	62.7%
Allied	55,494	12.1%	17,521	31.6%	37,973	68.4%
Pharmacy	75,147	23.0%	38,679	51.5%	36,468	48.5%
TOTAL	820,174	21.9%	273,989	33.4%	546,185	66.6%

Source: American Institute of Economic Research and and MIRA analysis of NSCG 2013 microdata

Table A2: Foreign Born Healthcare Professionals with US Degree: Labor Market Outcomes

	Foreign Born w/ US Degree		Underemployed*		Other occupation**		Other occupation,
	#	%	#	%	#	%	mean salary
MD	115,710	27.8%	5,282	4.6%	7,708	6.7%	$92,142
Nurse	102,079	37.3%	18,486	18.1%	25,846	25.3%	$62,682
Allied	17,521	31.6%	1,120	6.4%	4,080	23.3%	$52,714
Pharmacy	38,679	51.5%	2,244	5.8%	6,642	17.2%	$59,143
TOTAL	273,989	33.4%	27,132	9.9%	44,276	16.2%	

Source: American Institute of Economic Research and and MIRA analysis of NSCG 2013 microdata

* Involuntary part time employment, unemployed, out of labor force

** Reports occupation only "somewhat related" or "not related" to training

Table A3: Foreign Born Healthcare Professionals with Foreign Degree: Labor Market Outcomes

	FB w/ Foreign Degree		Underemployed*		Other occupation**		Other occupation,	Foreign vs. US
	#	%	#	%	#	%	mean salary	degree salary
MD	300,082	72.2%	65,901	22.0%	44,147	14.7%	$52,197	-43.4%
Nurse	171,662	62.7%	30,238	17.6%	25,011	14.6%	$48,875	-22.0%
Allied	37,973	68.4%	5,718	15.1%	4,048	10.7%	$19,571	-62.9%
Pharmacy	36,468	48.5%	19,927	54.6%	17,246	47.3%	$49,708	-16.0%
TOTAL	546,185	66.6%	121,784	22.3%	90,452	16.6%		

Source: American Institute of Economic Research and and MIRA analysis of NSCG 2013 Microdata

* Involuntary part time employment, unemployed, out of labor force

** Reports occupation only "somewhat related" or "not related" to training

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Notes

[1] National Survey of College Graduates (NSCG), 2013 release; and American Community Survey, 2010-12 3-year estimates. For more details on these estimates, see Section I of this report.

[2] Georgetown University Center on Education and the Workforce (2012), *Healthcare: States Analysis*. Washington, DC: Georgetown University Center on Education and the Workforce. Retrieved from https://georgetown.box.com/s/c8xqd81dcq8hzd53blqh. In this paper the terms "immigrant" and "foreign-born" are used interchangeably. "High-skilled" refers to individuals with a bachelor's degree or higher.

[3] The 2013 release of the National Survey of College Graduates (NSCG), the main source of the national statistics presented in this report, does include data on mental/behavioral health professionals with four year degrees or higher, including psychologists and social workers. Given the relatively smaller share of immigrant and foreign-trained practitioners in these occupations, however, we do not present data about these populations here. For example, the NSCG shows just 20 percent of all foreign-born psychologists hold degrees from outside the U.S., compared to 68 percent of foreign-born allied health professionals, 63 percent of foreign-born nurses, 72 percent of foreign-born medical doctors, and 48 percent of pharmacists. See fn8 for more information on the use of NSCG data in this report.

[4] Migration Policy Institute (MPI), Massachusetts Fact Sheet, http://www.migrationpolicy.org/data/state-profiles/state/demographics/MA Based on MPI analysis of 2012 American Community Survey (ACS) data.

[5] *Ibid.* Though immigration reform legislation in 1990 expanded the number and type of skilled immigrant visas, the large majority of foreign-born residents of the U.S., high-skilled and otherwise, still arrive on family or diversity visas or as refugees. Of 1 million new lawful permanent residents in 2011, for example, 43 percent were an immediate relative of a U.S. citizen, 22 percent entered through a family-sponsored preference, and 13 percent through an employment-based preference. Another 16 percent adjusted from a refugee or asylee status, and 5 percent were diversity lottery winners. See Emma Britz and Jeanne Batalova, "Frequently Requested Statistics on Immigrants and Immigration in the United States" at MPI's Migration Information Source website, http://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states.

[6] Ramon Borges-Mendez, et al. (2009). *Immigrant Workers in the Massachusetts Health Care Industry: A Report on Status and Future Prospects*. Malden, MA: Immigrant Learning Center, Inc. Retrieved from http://www.ilctr.org/wp-content/uploads/2009/09/immigrant_workers_healthcare_full.pdf.

[7] Because the ACS does not report where respondents received their education, researchers use a proxy measure for whether an immigrant's degree was earned outside the United States. The measure defines "foreign-educated" immigrants as those with at least a bachelor's degree who entered the U.S. at age 25 or older. "U.S.-educated" immigrants are defined as those with a bachelor's degree or higher who entered the U.S. before age 25. See Jeanne Batalova and Michael Fix (2008). *Uneven Progress: The Employment Pathways of Skilled Immigrants in the United States.* Washington, DC: Migration Policy Institute, p. 11. Retrieved from http://www.migrationpolicy.org/sites/default/files/publications/BrainWasteOct08.pdf. The NSCG, the

source of national statistics in this report, *does* explicitly indicate source of degree (U.S. vs. non-U.S.) as well as the subject of highest level of degree attained. The ACS only indicates the subject of four-year degrees, limiting its value as a source of information about post-graduate professional credentials.

[8] Margie McHugh, Jeanne Batalova, and Madeleine Morawski (2014). Brain Waste in the Massachusetts Workforce: Select Labor Force Characteristics of College-Educated Native-Born and Foreign-Born Adults (State Fact Sheet). Washington, DC: Migration Policy Institute. Retrieved from http://www.migrationpolicy.org/sites/default/files/publications/MPI_BrainWaste_MA-FINAL.pdf. For an analysis of college-educated immigrants in the full range of employment sectors and occupations in Massachusetts, based on ACS data, see the 2014 presentation by the Boston Redevelopment Authority, "High-skilled Immigrants in the Massachusetts Civilian Labor Force: U.S./Foreign Degree," retrieved from http://www.bostonredevelopmentauthority.org/getattachment/d1eaaed3-0bf8-46f4-93dd-4b3adb46874b/

[9] The National Survey of College Graduates is conducted every 10 years by the National Science Foundation. The survey samples individuals living in the U.S. with at least a bachelor's degree and under the age of 76. It includes occupation, work activities, salary, the relationship of degree field and occupation, and demographic information. The analysis of NSCG data presented here was developed with the assistance of Nicole Kreisberg, Senior Research Analyst, American Institute of Economic Research (AIER). For more information about the NSCG see http://www.nsf.gov/statistics/srvygrads.

[10] The NSCG's variable for medical degrees does not distinguish between doctors of medicine, doctors of dentistry, and doctors of osteopathy.

[11] The NSCG defines allied health professions as including "Physical therapy and other rehabilitation/therapeutic services." Detailed survey data at the state level for the full range of medical occupations are unfortunately not available. The U.S. Census' American Community Survey (ACS), for example, only looks at fields of study for four year degrees (e.g., nursing), not graduate degrees.

[12] Relicensing is not the only way for foreign trained medical doctors to practice in the U.S. Another is the Alien Physician Program, under which foreign-trained physicians can obtain a J-1 exchange visitor visa to receive graduate medical training in the U.S. under very strict guidelines. The J-1 visa holder in this case is typically ineligible to apply for a Green Card or other nonimmigrant visa without returning to a home country for at least two years after completing the J-1 program. However, this requirement may be waived if the physician undertakes to serve a certain amount of time in a designated U.S. medical facility or area of medical need. Under the Conrad-30 J-1 Waiver program, each state is eligible for 30 waivers per year. More information on the Alien Physician Program is available on the U.S. State Department website at http://j1visa.state.gov/programs/physician.

[13] This figure includes the total numbers of foreign-trained nurses in Tables 4 and 5, and estimates for foreign-trained allied health professionals and pharmacists in proportion to the national share of foreign-trained individuals in those professions shown in Table 1.

[14] McHugh, Batalova, and Morawski (2014), *op. cit*.

[15] Commonwealth Corporation (2013). *Closing the Massachusetts Skills Gap: Recommendations and Action Steps*. Boston, MA: Commonwealth Corporation. Retrieved from http://commcorp.org/resources/documents/statewide%20final_4-22.pdf.

[16] *Ibid.*

[17] *Ibid.* Also see Economic Development Planning Council (2011). *Choosing to Compete in the 21st Century: An Economic Development Policy and Strategic Plan for the Commonwealth of Massachusetts*. Boston, MA: Massachusetts Executive Office of Housing and Economic Development. Retrieved from http://www.mass.gov/hed/docs/eohed/economicdevpolicystrategy.pdf.s In 2011 Massachusetts' 15 community colleges were awarded a $20 million, three-year grant from the U.S. Department of Labor to implement the Massachusetts Community Colleges and Workforce Development Transformation Agenda (MCCWDTA). The Agenda is a collaborative effort of the community colleges, regional workforce development boards, government agencies, and private sector employers to develop industry-aligned career pathway programs in six high demand sectors of the economy, including healthcare and life sciences. See http://www.masscc.org/partnerships-initiatives/redesigning-community-college-education-and-training.

[18] Information Technology Industry Council, the Partnership for a New American Economy, and the U.S. Chamber of Commerce (2012). *Help Wanted: The Role of Foreign Workers in the Innovation Economy*. New York, NY: Partnership for a New American Economy. Retrieved from http://www.renewoureconomy.org/wp-content/uploads/2013/07/stem-report.pdf.

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[20] Georgetown University Center on Education and the Workforce (2012), *op. cit.*

[21] 324.1 per 100,000 population; see AAMC Center for Workforce Studies (2013), *State Physicians Workforce Data Book*, Washington, DC: American Association of Medical Colleges, p. 11. Retrieved from https://members.aamc.org/eweb/upload/State%20Physician%20Workforce%20Data%20Book%202013%20(PDF).pdf.

[22] Massachusetts Medical Society (2013), *op. cit.*

[23] AAMC Center for Workforce Studies (2010), *op. cit.*

[24] S.P. Juraschek, X. Zhang, V. Ranganathan, V.W. Lin (2012), United States Registered Nurse Workforce Report Care and Shortage Forecast, *American Journal of Medical Quality*, vol. 27(3): 241-249.

[25] The Pew Charitable Trust (2013), In Search of Dental Care: Two Types of Dentist Shortages Limit Children's Access to Care," Issue Brief, June 2013. Retrieved from http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs_assets/2013/Insearchofdentalcarepdf.pdf.

[26] See U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, "The Adequacy of Pharmacist Supply: 2004 to 2030," December 2008, retrieved from http://bhpr.hrsa.gov/healthworkforce/reports/pharmsupply20042030.pdf; U.S. Department of Labor, Bureau of Labor Statistics, "Occupational Outlook Handbook," 2012-2013 Edition, Psychologists, retrieved from http://www.bls.gov/ooh/Life-Physical-and-Social-Science/Psychologists.htm#tab-1;

and Teddi Dineley Johnson (2008), Shortage of U.S. Public Health Workers Projected to Worsen: About 250,000 New Workers Needed, *The Nation's Health* 38(4).

[27] See Association of Academic Health Centers (2013), *Out of Order, Out of Time: The State of the Nation's Health Workforce, 2013.* Washington, DC: AAAC. Retrieved from http://www.aahcdc.org/Portals/0/Resources/AAHC_OutofTimeFramework_final.pdf.

[28] See the Health Care Workforce Development reports compiled by the MA Department of Public Health, at http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/healthcare-workforce-center/health-care-workforce-development-reports.html.

[29] See the wide-ranging set of studies in Brian D. Smedley, Adrienne Stith Butler, Lonnie R. Bristow, eds. (2014), *In the Nation's Compelling Interest: Ensuring Diversity in the Health-Care Workforce.* Washington, DC: The Institute of Medicine of the National Academies. Retrieved from http://www.nap.edu/openbook.php?record_id=10885&page=R1

[30] Lyndonna M. Marrast, Leah Zallman, Steffie Woolhandler, David H. Bor, Danny McCormick (2014), Minority Physicians' Role in the Care of Underserved Patients: Diversifying the Physician Workforce May Be Key in Addressing Health Disparities *JAMA Internal Medicine* 2014 Feb 1;174(2):289-91. Retrieved from http://org.salsalabs.com/o/307/images/JAMA_Int_Med_Marrast.pdf.

[31] M. Renee Zerehi (2008). The Role of International Medical Graduates in the U.S. Physician Workforce. Philadelphia, PA: American College of Physicians. Retrieved from http://www.acponline.org/advocacy/where_we_stand/policy/img_paper.pdf,

[32] Massachusetts Department of Public Health, Healthcare Workforce Center (2008). *Report: Health Care Workforce Assessment and Planning Efforts in Ten States.* Boston, MA: Massachusetts Department of Public Health. Retrieved from http://www.mass.gov/eohhs/docs/dph/com-health/workforce-assessment-and-planning.pdf.

[33] See http://campaignforaction.org/state/massachusetts

[34] See e.g., Massachusetts Department of Higher Education (2012), *Nursing and Allied Health Workforce Development: A Strategic Workforce Plan for Massachusetts's Healthcare Sector*, retrieved from http://www.mass.edu/currentinit/documents/Nursing/NAHIStrategicPlanFinalVersion1.1.pdf; employer/educator initiatives like the Multicultural Affairs Office at Massachusetts General Hospital (http://www.mgh.harvard.edu/mao); and minority student recruitment programs at Tufts University School of Medicine (http://medicine.tufts.edu/About-Us/Administrative-Offices/Office-of-Multicultural-Affairs/Pipeline-Programs).

[35] Boston Welcome Back Center. Thanks to Allison Cohn, Educational Case Manager, for this information.

[36] Welcome Back Initiative. Thanks to José Ramón Fernandez-Pena, MD, MPA, Director of the Welcome Back Initiative, for this information.

[37] The requirements described here are based on information in a 2012 MIRA Coalition white paper by Brad Kramer, Shannon Erwin and Eva Millona, *Tapping the Potential of Engineering and Healthcare Professionals in Massachusetts*, retrieved from http://miracoalition.org/images/stories/pdf/tapping%20the%20potential_final.pdf; and the *Appendices* to this study, retrieved from http://miracoalition.org/images/stories/pdf/tapping%20the%20potential_final_appendices.pdf. This study presents in detail the licensing

requirements in Massachusetts for physicians, dentists, physician assistants, registered nurses, and pharmacists, including estimated time and costs for relicensing by foreign-trained professionals. The study draws on the Massachusetts Code of Regulations, publications by federal and state boards of healthcare professional licensure and other certification and testing bodies, and direct communications with the state boards. Additional information for this report regarding requirements for nurse licensure was provided by Allison Cohn, Educational Case Manager, Boston Welcome Back Center, and regarding the requirements for dentist licensure by James G. Lavery, Director, Division of Health Professions Licensure.

[38] See Batalova and Fix (2008), *op. cit.*

[39] See Kramer, Erwin and Millona (2012), *op. cit*.

[40] Massachusetts Department of Elementary and Secondary Education, Adult and Community Learning Services (2013), Massachusetts Guidelines for Effective Adult Basic Education. Retrieved from http://www.doe.mass.edu/acls/abeprogram/GuidelinesCI.doc.

[41] Though immigration reform legislation in 1990 expanded the number and type of skilled immigrant visas, the large majority of foreign-born U.S. residents, skilled an otherwise, still arrive on family or diversity visas or as refugees. Of one million new lawful permanent residents in 2011, for example, 43 percent were an immediate relative of a U.S. citizen, 22 percent entered through a family-sponsored preference, and 13 percent through an employment-based preference. Another 16 percent adjusted from a refugee or asylee status, and 5 percent were diversity lottery winners. See Emma Britz and Jeanne Batalova, "Frequently Requested Statistics on Immigrants and Immigration in the United States" at MPI Migration Information Source website, http://www.migrationpolicy.org/article/frequently-requested-statistics-immigrants-and-immigration-united-states.

[42] Peter A. Creticos, Michael Fix, Jeanne Batalova, and Rob Paral (2007). *Employing Foreign Educated Immigrants*. Chicago, IL: The Joyce Foundation. Retrieved from http://www.robparal.com/downloads/Employing_Internationally_Educated_Final.pdf.

[43] The survey was sent in September 2014 to the 50 members of the Massachusetts League of Community Health Centers (http://massleague.org), a statewide nonprofit association representing the state's community health center organizations, with more than 285 total access sites. Fourteen of the 50 organizations (28 percent) responded to the request, including four in Boston, three in Western Massachusetts, three in Central Massachusetts, two in Southeast Massachusetts, and two on Cape Cod. The full set of survey questions and responses is available here: https://www.surveymonkey.com/results/SM-JSQJHRDL. Thanks to the Massachusetts League of Community Health Centers, especially Leslie Bailey, Provider Workforce Manager; Joan Pernice, Clinical Health Affairs Director; and Patricia Edraos, Health Resources/Policy Director, for generous assistance in developing and fielding the survey.

[44] See Migration Policy Institute analysis of 2012 ACS 1 year estimates in their U.S. Fact Sheet (http://www.migrationpolicy.org/data/state-profiles/state/language/US).

[45] See the LARA website at http://www.michigan.gov/skilledimmigrantguides.

[46] See https://www.upwardlyglobal.org/images/mich-press-release.

[47] See http://www.womenofwise.org/programs/foreign-trained.

[48] See Migration Policy Institute Webinar, May 14, 2014, "State-Level Initiatives to Address Brain Waste Among Highly Educated Immigrants and Refugees: Special Focus on Nurses, Engineers, and Teachers." Retrieved from http://www.migrationpolicy.org/sites/default/files/powerpoints/EVENTPP-2014.5.14%20HSIRI%20Webinar%20FINAL.pdf.

[49] See http://www.newamericans.ny.gov/opportunity/opportunity.html.

[50] Thanks to Allison Cohn, Educational Case Manager, Boston Welcome Back Center, for this information.

[51] See http://www.welcomebackinitiative.org/wb/outcomes/WBI-Presentation.pdf. Since 2001, the Welcome Back Initiative nationwide has served more than 14,000 professionals (35 percent physicians, 42 percent nurses, 9 percent dentists, and 13 percent other professions), two-thirds of whom were not working in healthcare at the time of contact. Nationally, 3,852 validated their credentials, 2,260 passed licensing exams, 1,318 obtained a license in their original professions, and 1,942 obtained employment in the U.S. healthcare sector for the first time.

[52] Upwardly Global, April 2013, A Look at Skilled Immigrant Workers in the U.S. Retrieved from http://www.upwardlyglobal.org/UpwardlyGlobalEconomicImpactReportApril2013.pdf.

[53] See http://www.upwardlyglobal.org/job-seekers/american-licensed-professions.

[54] The Commonwealth's language access policy requires that programs, services and activities that an executive branch agency normally provides in English also be accessible to non-English speakers and LEP individuals. See http://www.mass.gov/anf/budget-taxes-and-procurement/admin-bulletins/language-access-policy-and-guidelines-anf-16.html. For the Department of Professional Licensing's Language Access Plan see http://www.mass.gov/anf/docs/anf/oao/dpl-lap-2013.pdf.

[55] Five other boards under DHPL (including those for genetic counselors, nursing home administrators, physician assistants, perfusionists, respiratory care workers) provide more limited guidance concerning licensing by foreign-trained professionals. (One other newly established Board, for community health workers, has yet to promulgate regulations, so has no licensing directions available.) The lack of information here is perhaps not surprising, since these professions are only formally recognized in the United States. However, since foreign-trained healthcare professionals in other fields may be well-equipped to obtain licensure and make contributions in these high-demand occupations as well, additional narrative should be added to relevant sections of these boards' websites to give foreign-trained applicants clearer direction.

[56] Thanks to James G. Lavery, Director, Division of Health Professions Licensure, Massachusetts Department of Public Health, this information.

[57] See http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/primary-care.html and http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/healthcare-workforce-center/workforce-advisory-council.

[58] In a 2013 survey that the MIRA Coalition conducted of its community-based membership, 60 percent of respondents said they had "Some" (30 percent) or a "A Lot" (30 percent) of experience working with foreign-trained professionals. The biggest career obstacles reported were limited English proficiency (100 percent of respondents) and licensing or regulatory barriers (80 percent of respondents). The sample included 30 respondents out of 135 member organizations contacted.

[59] In a 2013 survey that the MIRA Coalition conducted of its community-based membership, 60 percent of respondents said they had "Some" (30 percent) or a "A Lot" (30 percent) of experience working with foreign-trained professionals. The biggest career obstacles reported were limited English proficiency (100 percent of respondents) and licensing or regulatory barriers (80 percent of respondents). The sample included 30 respondents out of 135 member organizations contacted. The detailed results of the survey can be viewed here: https://www.surveymonkey.com/results/SM-QQR9V6JV.

[60] See http://miracoalition.org/en/workforce-dev/back-to-the-office.

[61] See http://www.bidmc.org/CentersandDepartments/Departments/CommunityInitiatives/CommunityBenefits/CaringforaDiverseCommunityatBIDMC/ADiverseandCulturallyResponsiveWorkforce.aspx; http://www.massgeneral.org/careers/careerdevelopment.aspx; and http://www.brighamandwomens.org/about_bwh/humanresources/workforcedevelopment.aspx.

[62] See http://www.challiance.org/IntheCommunity/VolunteerHealthAdvisorProgram1.aspx.

[63] See WOIA FAQ from the Department of Labor, retrieved from http://www.doleta.gov/wioa/pdf/WIOA_FAQs_Acc.pdf.

[64] Thanks to Susan Buckey, Director, Healthcare Industry Initiative, Jewish Vocational Services, for this information.

[65] See http://www.doleta.gov/performance/pfdocs/Massachusetts.pdf

[66] See http://seworks.org/job-seekers/education-training/professional-immigrant-credential-program.

[67] See http://welcomingcenter.org.

[68] See Massachusetts Department of Higher Education (2012), *op. cit.*

[69] See http://www.masscc.org/content/mccwdta.

[70] The physician assistant profession, an occupation specific to the U.S. healthcare system, represents a particularly attractive alternative career pathway for foreign-trained healthcare professionals, especially foreign-trained physicians. PA programs in Massachusetts typically require at least a bachelor's prior to admission, and are 2-3 years in length. Foreign-trained physicians would have a higher than normal chance of acceptance at such programs. Both PA programs and the DHE should encourage qualified foreign-trained professionals to take advantage of such opportunities, which will benefit both those professionals and communities increasingly served by PAs. Thanks to Dipu-Patel Junaker, PA-C, Chair, Board of Registration of Physician Assistants for this information.

[71] Thanks to Allison Cohn, Educational Case Manager, Boston Welcome Back Center, for this information.

[72] See Massachusetts Medical Society (2013), *ibid*.

[73] Thanks to Susan Buckey, Program Director, Skilled Careers in Life Sciences (SCILS) Initiative, and Kelly Aiken, Director of Labor and Workforce Development, Massachusetts Senior Care Foundation, for their suggestions here.

[74] See http://miracoalition.org/en/workforce-dev/back-to-the-office.

[75] See Commonwealth Corporation (2012), *Breaking the Language Barrier: A Report on English Language Services in Greater Boston*. Boston, MA: Commonwealth Corporation. Retrieved from http://www.commcorp.org/resources/detail.cfm?ID=819; and World Education Services Global Talent Bridge (2011), *Supporting Skilled Immigrants: A Toolkit for ESL Practitioners.* New York, NY: World Education Services. Retrieved from http://www.globaltalentbridge.org/toolkit/pdf/SupportingSkilledImmigrantsToolkit.pdf.

[76] See http://www.englishfornewbostonians.org/fundedprogram.

[77] See WOIA FAQ from the Department of Labor, retrieved from http://www.doleta.gov/wioa/pdf/WIOA_FAQs_Acc.pdf.

[78] See http://ieli.worcester.edu.

[79] See American Dental Association (2013), *ADA Practical Guide for International Dentists: The State Licensure Process*, retrieved from http://ebusiness.ada.org/productcatalog/1554/Reference/The-ADA-Guide-for-the-International-Dentist-eBook/P801; and Federation of State Medical Licensing Boards (2014), *Report of the FSMB Workgroup on Innovations in State Based Licensure*, retrieved from http://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/report_of_state_innovations_adopted.pdf.

[80] Thanks to Barbara A. Young, RDH, Executive Director, Board of Registration in Dentistry, Division of Health Professions Licensure, for providing this information.

[81] See Federation of State Licensing Boards (2014), *ibid.*

[82] Thanks to James Zachazewski, PT, ATC, Chair, Board of Registration in Allied Health Professionals, for this example.

[83] Thanks to William Ryder, Esq., Legislative and Regulatory Counsel, Massachusetts Medical Society, for this example.

[84] See AAMC Center for Workforce Studies (2010), *op. cit.*

[85] H.R. 5294, Title IV, Sec. 313; see https://www.congress.gov/bill/113th-congress/house-bill/5294.