



# Findings of the Conrad 30 J-1 Visa Waiver Physician Survey, 2022

A Report From The Provider Retention & Information System Management Collaborative

Coordinating Organizations:  
3RNET, Cecil G. Sheps Center for Health Services Research



**PRISM**

Provider Retention & Information  
System Management



**3 R N E T**



THE CECIL G. SHEPS CENTER FOR  
HEALTH SERVICES RESEARCH

*January 2023*

# Findings of the Conrad 30 J-1 Visa Waiver Physician Survey, 2022

Report from the Provider Retention & Information System Management  
(PRISM) Collaborative of 3RNET

Thomas Rauner MCRP, Former Director, Primary Care Office, State of Nebraska

Donald Pathman MD MPH, Professor, Cecil G. Sheps Center for Health Services Research and  
Department of Family Medicine, University of North Carolina at Chapel Hill

Jackie Fannell, Director of Operations and PRISM, National Rural Recruitment and Retention  
Network (3RNET)

Mike Shimmens, Executive Director, National Rural Recruitment and Retention Network (3RNET)

J-1 Visa Waiver Physician Survey Advisory Committee

Sara Davenport MS, Chief, Office of Rural Health & Primary Care, Missouri Department of  
Health and Senior Services

Aleesha Jones, Primary Care Manager, Office of Rural Health & Primary Care, Missouri  
Department of Health and Senior Services

Cristie Duric MPH RRT, Primary Care Officer, Division of Public Health, Iowa Department of  
Health and Human Services

Kevin Wooddell, Division of Public Health, Iowa Department of Health and Human Services

Jerry Harrison PhD, Executive Director, New Mexico Health Resources, Inc.

Jasmin Hendrickson, Program Coordinator, New Mexico Office of Primary Care & Rural  
Health

Robert Sewell PhD MA, Health Program Manager, Office of Healthcare Access, Section on  
Rural and Community Health Systems, Alaska Department of Health

## Acknowledgements:

Funding for this survey and report was principally provided by the PRISM-participating States of Iowa, Missouri, New Mexico, Alaska, Arkansas, Delaware and Nebraska. Additional funding was from membership dues paid by all states participating in PRISM.

We are grateful to the experts at IowaComputerGurus, Inc. of Des Moines, Iowa, who built this project's on-line survey and data systems.

## Suggested Report Citation:

Rauner T, Pathman D, Fannell J, Shimmens M, and the J-1 Visa Waiver Physician Survey Advisory Committee. Findings of the Conrad 30 J-1 Visa Waiver Physician Survey, 2022. January 2023.  
<https://3rnet.org/Prism/Resources/J1-22>

## For more information:

Contact Jackie Fannell: [Info@3RNET.org](mailto:Info@3RNET.org); 1-800-787-2512

## Forward

The U.S. has an ongoing need for physicians in many specialties. Many communities with physician shortages have benefitted from the State 30 J-1 visa waiver program, commonly called the Conrad 30 program after its 1994 legislative author, Senator Kent Conrad of North Dakota. The program permits every state every year to sponsor up to 30 international physicians who are completing training in the U.S. on J-1 visas to remain in the U.S. by working in underserved areas. Since the program's inception, it has sponsored approximately 23,000 physicians to address states' pressing needs. States are given flexibility in setting their priority needs through the program, including "flex" positions for 10 of each year's 30 physicians to work in non-primary care shortage areas if their practices serve people from underserved areas. This has allowed states to hire needed specialist physicians for academic medical centers and other tertiary care hospitals with their large service areas encompassing underserved communities. Employers submit sponsorship applications for physicians, demonstrating they have been unable to find U.S. born physicians to meet specific needs. This process is made purposely more challenging than hiring U.S. born physicians to ensure the program's physicians do not compete with them for jobs or draw physicians critical to their home countries.

The Conrad 30 program's history includes only minor legislative changes. Congressional oversight reviews have not found a need for significant changes. Because of this and because states do not receive federal funding for its operation, there has been limited study of the program and its outcomes.

In 2022, member states of the Provider Retention & Information System Management (PRISM) were supported by PRISM's parent organization, the National Rural Recruitment and Retention Network (3RNET), to develop and implement an annual survey of physicians participating in the Conrad 30 J-1 visa waiver program. 3RNET was already annually surveying states for basic descriptive and count data on their J-1 waiver sponsorships (<https://www.3rnet.org/j1-filled>). Since 2013, PRISM Collaborative states have regularly collected questionnaire data from health professionals participating in federal and state loan repayment programs in an effort to strengthen clinicians' experiences and retention across these many programs (<https://3rnet.org/PRISM>)<sup>1</sup>. With this experience, a group of states now sought to undertake a similar survey approach to learn from participants of the Conrad 30 program to strengthen this program in their states. The states of Alaska, Arkansas, Delaware, Iowa, Missouri, Nebraska and New Mexico provided the funding to make this happen and create this initial report.

Informed by an Advisory Committee of states' representatives and guided by Dr. Don Pathman of the University of North Carolina's Cecil Sheps Center for Health Services Research, staff of 3RNET and its PRISM Collaborative clarified project goals, designed and tested questionnaires, engaged Iowa Computer Gurus, Inc. to create the on-line survey system, fielded a first survey with physicians in 22 states, and generated this report. This has been a remarkable, collaborative effort, with states voluntarily participating and providing the information needed on their J-1 waiver program physicians.

We believe this report presents a great deal of new information about physicians and their experiences in the J-1 visa waiver program. We believe it will allow states to better understand how participants view their work and lives over the three years they hold J-1 waivers, both the good and the bad. We are pleased to witness states learn from the data and from one another how to improve experiences for participating physicians and thereby outcomes for states. We know that data from this and future

---

<sup>1</sup> Rauner T, et al. Partnering around data to address clinician retention in Loan Repayment Programs: the Multistate/NHSC Retention Collaborative. *Journal of Rural Health*. 2015;31(3):231-234.

surveys and reports will continue to increase understanding of the Conrad 30 J1 visa waiver program for states, participating physicians, their sponsors/employers, immigration attorneys and others working to improve U.S. communities' access to physicians.

Thomas Rauner, MCRP  
*Former Director, Primary Care Office,  
State of Nebraska*

Mike Shimmens,  
*Executive Director, 3RNET*

# Contents

- Study Overview ..... 6
- Narrative Findings Summary..... 7
- List of Key Specific Findings ..... 8
- Locating the J-1 Visa Waiver Practice and How Well it Meets Physicians’ Needs..... 10
  - How physicians found the practice to support them on a J-1 visa waiver .....10
  - Whether physicians previously lived or trained in the state where they practice .....10
  - Finding jobs that met J-1 visa waiver physicians’ needs .....11
- Physicians’ Practice Types, Job Characteristics, and Patients..... 12
  - Types of practices, incomes and weekly work hours .....12
  - Patient characteristics .....13
- Outcomes for Physicians..... 14
  - Work and job satisfaction .....14
  - Sources of stress.....15
  - Burnout .....16
  - Feeling that their practice cares about them and is trustworthy to employees.....17
  - Feeling valued, treated and rewarded the same as others (Equity and Inclusion) .....18
  - Physicians would recommend their practice to others with J-1 visa waivers .....19
  - Community fit and issues for spouses.....20
  - Overall satisfaction with the J-1 Visa Waiver Program Itself .....22
  - Physicians’ anticipated likelihood of leaving their practices, and its correlates .....23
- Appendices..... 29
  - Survey response rates .....29
  - Description of respondent physicians .....31
  - Key survey items and scales used in this report.....35

## Study Overview

International physicians who complete residency and fellowship training programs in the U.S. on J-1 Visas are required to return to their home countries for at least two years before becoming eligible to return to the U.S. to work. The Conrad 30 Visa Waiver Program under section 214(I) of the Immigration Nationality Act allows these international physicians to remain in the U.S. immediately after their training if they work three years in a physician shortage area in a practice that sponsors them on a visa waiver. The designated Interested Governmental Agency in each state provides a letter of support for applicants, with up to 30 participating physicians permitted in each state per year.

Despite the importance of the Conrad 30 Program and J-1 visa waivers to people in physician shortage areas and to the likely tens of thousands of physicians who have held waivers, few evaluations of the program have been carried out. Little is known about the experiences of participating physicians or the program's successes. Some have questioned if many participants remain in the practices where they work while on a visa waiver beyond its three-year obligation term.

In 2022, the National Rural Recruitment and Retention Network (3RNET) and its Provider Retention & Information System Management (PRISM) Collaborative initiated an annual survey of physicians holding Conrad 30 J-1 visa waivers. The survey's principal goal is to help states better understand the experiences, successes and challenges of participating physicians to know how to strengthen the program for physicians as well as the communities where they work. A Survey Advisory Committee comprised of physician workforce leaders in 4 states provided guidance in the survey's development.

In this inaugural year, all 28 states of the PRISM Collaborative were invited to participate in this survey of their Conrad 30 Program participants, and 22 states agreed to do so. States' J-1 Visa Waiver coordinators provided information on their current participants drawn principally from visa waiver application form DS-3035. Participating physicians were invited by email to complete the voluntary, online survey. The survey was open from August 31 through October 25, 2022. A total of 281 physicians completed questionnaires, for a 25.0% response rate. [see Appendices for details]

Some questionnaire items were posed to physicians in all three years of the program, including information on physicians' work hours, some aspects of their work satisfaction and their demographics. Other questions were posed only to first-year participants (e.g., information on backgrounds, families, and the processes of locating a practice to work on a J-1 visa waiver), second-year participants (e.g., their sense of acceptance in the practice and community, equity and inclusion issues), or third-year participants (e.g., sources of stress, level of burnout). Physicians' responses to items appearing on questionnaires completed by participants' of more than one year did not differ significantly; therefore, these findings are combined for all years in this report's tables and graphs. Responses based on items appearing in just one or two of the three questionnaire versions are noted in footnotes.

All studies have strengths and limitations. Key strengths of this study are that it involves Conrad 30 participants from nearly half of states, and it employs detailed questionnaires with items derived from prior physician workforce studies and validated scales. Key study limitations are its somewhat low response rate that creates the possibility of response bias, and its relatively small subgroup numbers that limit the depth of analyses possible and the reliability of findings for smaller groups. Future reports will be able to pool physician response data from more than one year and thus will provide more detailed subgroup analyses as well as statistical modeling to better identify correlates of key outcomes.

## Narrative Findings Summary

This study's 281 physicians holding J-1 visa waivers through the Conrad 30 program while working in 22 states hold citizenship in 50 countries from around the world. Most are males under 35 years of age and married. One-third practice in primary care specialties—predominantly internal medicine—or in other recognized rural shortage specialties, one-third practice in the various subspecialties of internal medicine, and the other one-third are widely distributed across other specialties and subspecialties.

Based on survey responses, most were challenged to find a practice that would support them on a J-1 visa waiver that met their professional and especially their personal and community needs. Eighty percent are working in states where they had not previously lived or trained.

As a whole, physicians are satisfied with all aspects of their work and jobs. They are most often satisfied with their relationships with patients and colleagues, and least often satisfied with their practices' administration and work's encroachment on their personal time. Half feel that their practice cares about them as people and considers their best interests. In terms of equity and inclusion, as a whole these physicians feel valued and treated the same as others in their practices. Three-quarters would recommend their practices to others holding J-1 visa waivers.

The job situations for about one-in-five physicians are reported to be problematic in one or more ways. They can feel dissatisfied with their jobs overall, feel that their practice does not care about their wellbeing, or feel they are treated differently because of their race/ethnicity, religion or other demographics or because of their visa status. One-quarter would not recommend their practices to others on a J-1 visa waiver or are uncertain if they would.

Psychologically, these physicians holding J-1 visa waivers most often report significant stress in their lives from their visa and immigration issues and from their work. Three-quarters report high or medium levels of burnout.

Roughly three-quarters of these physicians feel their communities offer them and their families access to the things important to them. However, spouse employment is an issue for many: only half of spouses who reportedly want to work are said to be happily employed. One-in-five spouses live apart from the physician, evidently often because of their employment needs.

Half of these physicians anticipate that they will remain in their practices at least 24 months beyond their three-year visa waiver term. Those anticipating they will leave within those 24 months more often sacrificed professional or personal needs when initially choosing their practice, are dissatisfied with various aspects of their practices or jobs, and/or find their communities do not offer the things important to them and their families.

## List of Key Specific Findings

1. J-1 visa waiver-holding physicians in these 22 states hold citizenship in 50 countries in all regions of the world. One-third are in primary care specialties or other recognized rural shortage specialties, one-third are in subspecialties of internal medicine, and one-third in a broad range of other specialties. Two-thirds are under 35 years of age, two-thirds are male, 70% are married and 44% have children. [see Appendix for details]
2. These physicians holding J-1 visa waivers found their practices through a variety of often informal sources, although half did so via either PracticeLink.com or by word of mouth.
3. Four out of five physicians work in states where they had not previously lived or trained. In choosing their practices, two-thirds sacrificed some of their professional needs and three-quarters sacrificed personal or community needs. After working there for a year, most physicians found their jobs to be what they expected when they had agreed to work there, but one-third found their incomes and number of work hours were not what they expected.
4. One-third of physicians work in academic settings and 12% work in various types of safety net practices, with the others presumably working in community-based hospitals and practices. Half report incomes of \$300,000 or more from their practices. Physicians report an average of 46 hours of clinical work and 56 total work hours per week.
5. Physicians as a group estimate that 40% of their patients have a race/ethnicity other than non-Hispanic White, and they estimate that only 14% are covered under private health insurance.
6. As a group, physicians' report greatest satisfaction with their relationships with patients and with the other physicians and staff of their practices. They report least satisfaction with the administration of their practices and having adequate time away from work.
7. More than four out of five physicians report moderate or severe stress from their work and from visa and immigration issues. The next areas most often reported to be stressful are the COVID-19 pandemic and issues related to their extended families abroad.
8. About one-quarter of physicians report low levels or no burnout, half report mid-levels of burnout, and one-quarter report high levels.
9. Half of physicians feel their practice cares about their wellbeing, considers their best interests, and creates a high degree of trust among employees. The other half of physicians feel otherwise.
10. Physicians generally perceive that they are treated, valued and rewarded the same as others in their practices. However, some perceive they are treated and compensated differently because of their visa status and/or their race, sex, religion or other demographics.
11. Almost three-quarters (72.8%) of physicians would recommend their practices to others with J-1 visa waivers, 12.8% would not recommend their practices, and 14% are uncertain.
12. Most physicians report that their communities provide them and their families with the things that are important to them, good friends, and safety. But only half report that their community meets the needs of their spouses, and only half of spouses who want to work are said to be happily employed. Further, one-in-five married physicians lives apart from their spouses, evidently often related to spouses' employment needs.
13. With regards to feelings about the J-1 Visa Waiver Program itself, 36% of physicians are satisfied overall with the program, 38% were neutral, and 26% were dissatisfied.

14. Half of physicians anticipate they will remain in their practices at least 24 months beyond the three-year visa waiver term, and half anticipate they will leave within those 24 months. Rates of anticipated retention for 24 months do not differ across physician demographic groups, specialty groups, or those working in different types of practice. But anticipated retention is substantially (and statistically) lower among physicians who report that they sacrificed professional, personal or community needs in their original choice of practices; physicians who do not feel equally valued and rewarded within their practices; physicians who are less satisfied than others with various aspects of their work and jobs; physicians who report greater burnout; and physicians in communities that do not provide them and their families with the things important to them, friends, and a sense of safety.

## Locating the J-1 Visa Waiver Practice and How Well it Meets Physicians' Needs

### How physicians found the practice to support them on a J-1 visa waiver

**SUMMARY:** *Physicians learned about the practice that would support them on a J-1 visa waiver through a variety of sources, including half through PracticeLink.com or word of mouth.*

	Number **	Percent
PracticeLink.com website	34	26.4%
Through word of mouth	31	24.0%
I first found this practice and asked about J-1 waiver participants	27	20.9%
I did part of my formal training here	16	12.4%
Practice recruiter	4	3.1%
Other online source (Gasworks website; professional society website (2); HRSA website; Google search)	4	3.1%
Through contacts met during my training	4	3.1%
Visa Waiver for Physicians Facebook group	3	2.3%
The practice reached out to me	2	1.6%
Professional conferences	2	1.6%
<a href="http://www.3RNET.org">www.3RNET.org</a> website	1	0.8%
Career fair	1	0.8%

\* Data for first-year participants only

\*\* Counts total less than 281 due to item non-response

### Whether physicians previously lived or trained in the state where they practice

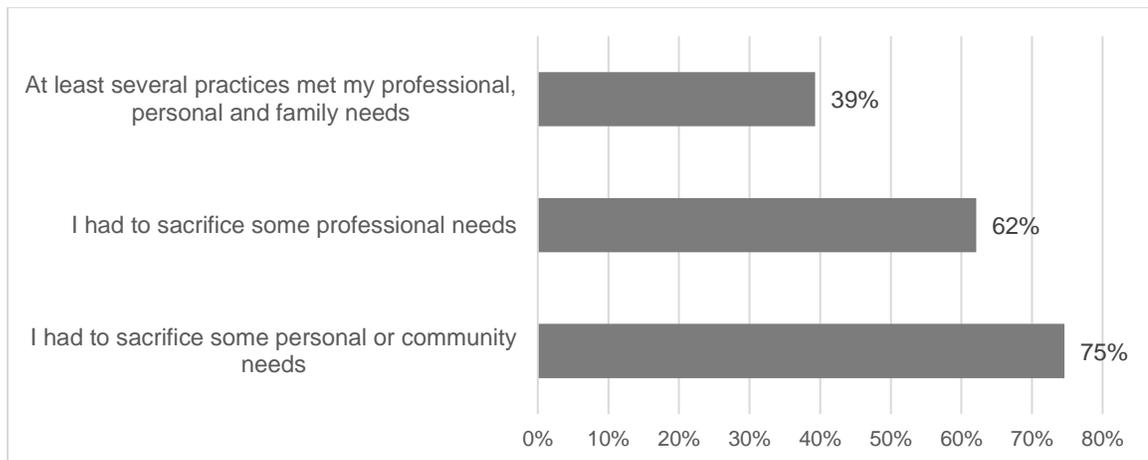
**SUMMARY:** *Four out of five physicians had not previously lived or trained in the state where they now work while on a J-1 visa waiver.*

	Number	Percent
Yes	27	19.9%
No	109	80.1%

\* Data for first-year participants only

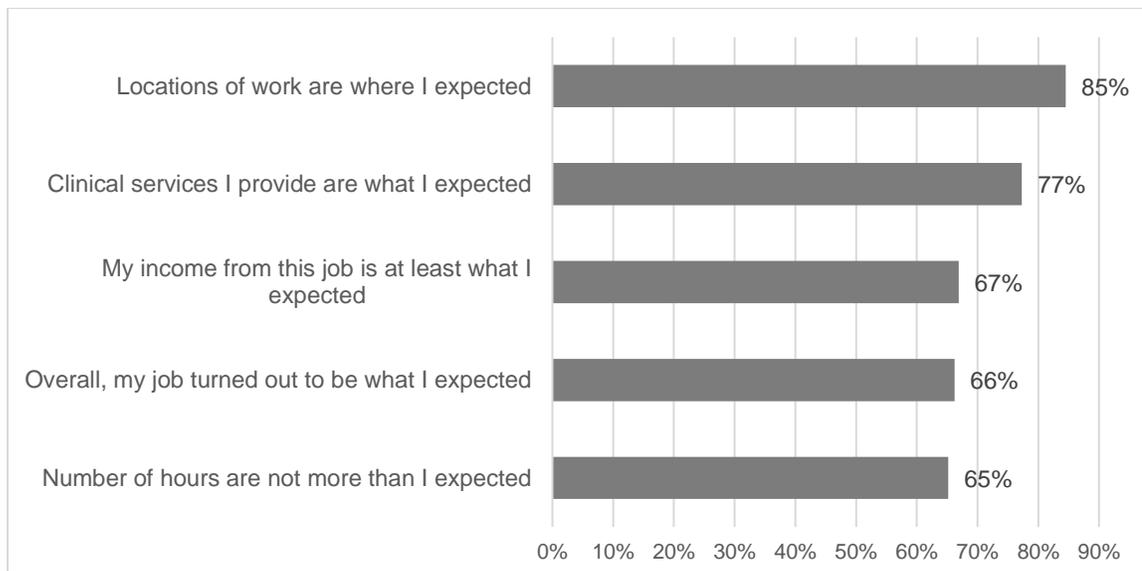
## Finding jobs that met J-1 visa waiver physicians' needs

**How well practices meet physicians' needs. SUMMARY:** *Fewer than half of physicians felt they found at least several practices where they could work while on a J-1 visa waiver. Two-thirds of physicians felt that in finding a practice on a J-1 visa waiver they had to sacrifice some professional needs and three-quarters sacrificed some personal or community needs.*



\* Data for first-year participants only

**How well jobs match what physicians expected. SUMMARY:** *Two-thirds or more physicians found each of the various features of their jobs to be what they expected when they committed to work there. But one-third found their income, number of work hours, and their job overall were not what they expected.*



\* Data for first-year participants only

## Physicians' Practice Types, Job Characteristics, and Patients

### Types of practices, incomes and weekly work hours

**SUMMARY:** 34% of physicians work in academic settings and 12% work in various types of safety net practices. Twenty percent are in designated J-1 waiver flex positions. Half report incomes of \$300,000 or greater from their jobs. On average, physicians estimate that they work 55 hours total each week, including 46 hours in clinical care.

Special practice setting *	Number **	Percent
Academic hospital or clinic	96	34.1%
Critical Access Hospital	15	5.3%
CHC/FQHC	8	2.8%
Mental health facility	7	2.5%
Indian Health Service or tribal facility	2	0.7%
Health department	1	0.4%
None of these special settings	152	54.1%
Flex position in J-1 Waiver Program *		
Flex position	57	20.3%
Not a flex position	224	79.7%
Income		
Less than \$200K	19	9.8%
\$200K – \$299K	85	43.8%
\$300K – \$399K	44	22.7%
\$400K – \$499K	29	14.9%
\$500K or more	17	8.8%

\* Data reported by states

\*\* Counts within categories total less than 281 due to item non-response

Hours worked per week	Mean
Clinical care	45.8 hours
Teaching	4.0 hours
Administration and Leadership	3.2 hours
Community work	1.2 hours
Research	1.3 hours
(Total)	55.5 hours

## Patient characteristics

**SUMMARY:** Physicians as a group estimate that 40% of their patients have a race/ethnicity other than non-Hispanic White. Physicians also estimate that only 14% are covered under private health insurance, although their estimates may be low.

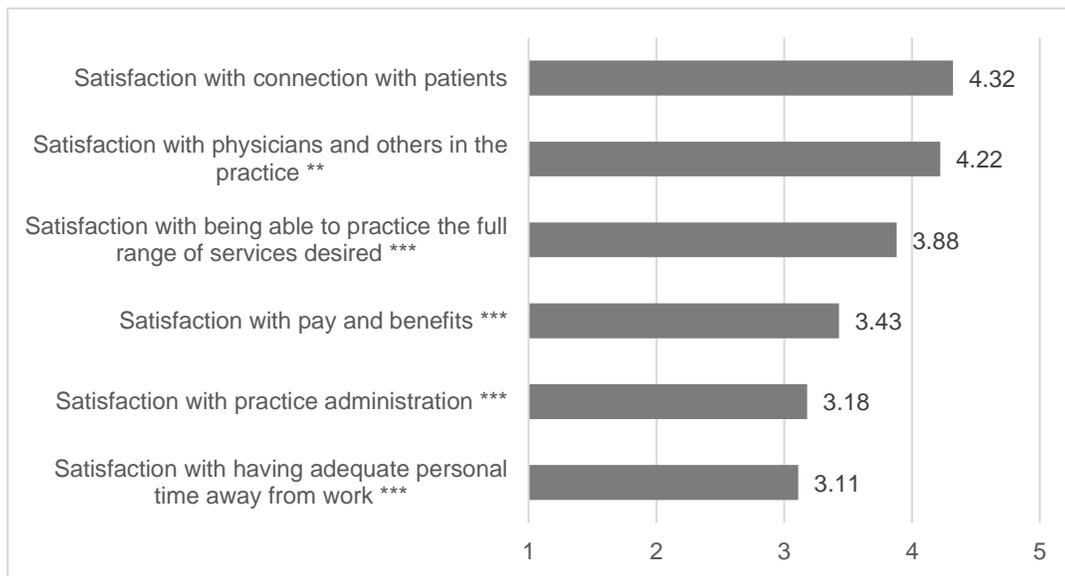
Patient racial-ethnic distribution	Mean
White	60.6%
Black or African American	16.8%
Hispanic or Latinx	13.5%
American Indian or Alaska Native	3.6%
Middle Eastern or North African	2.2%
East Asian	2.0%
South Asian	1.7%
South East Asian	1.1%
Native Hawaiian or other Pacific Islander	0.2%
Patient medical insurance distribution *	
Medicaid	23.9%
Medicare	23.7%
Private health insurance	13.7%
Uninsured	4.3%
Champus or Tricare	2.6%
IHS or tribal coverage	1.7%

\* Percentages physicians reported total to less than 100%

## Outcomes for Physicians

### Work and job satisfaction

**SUMMARY:** *On scales from 1 (low) to 5 (high) satisfaction, physicians report greatest mean satisfaction with their connection with patients and with physicians and others in their practice, and least satisfaction with practice administration and having adequate personal time away from work.*



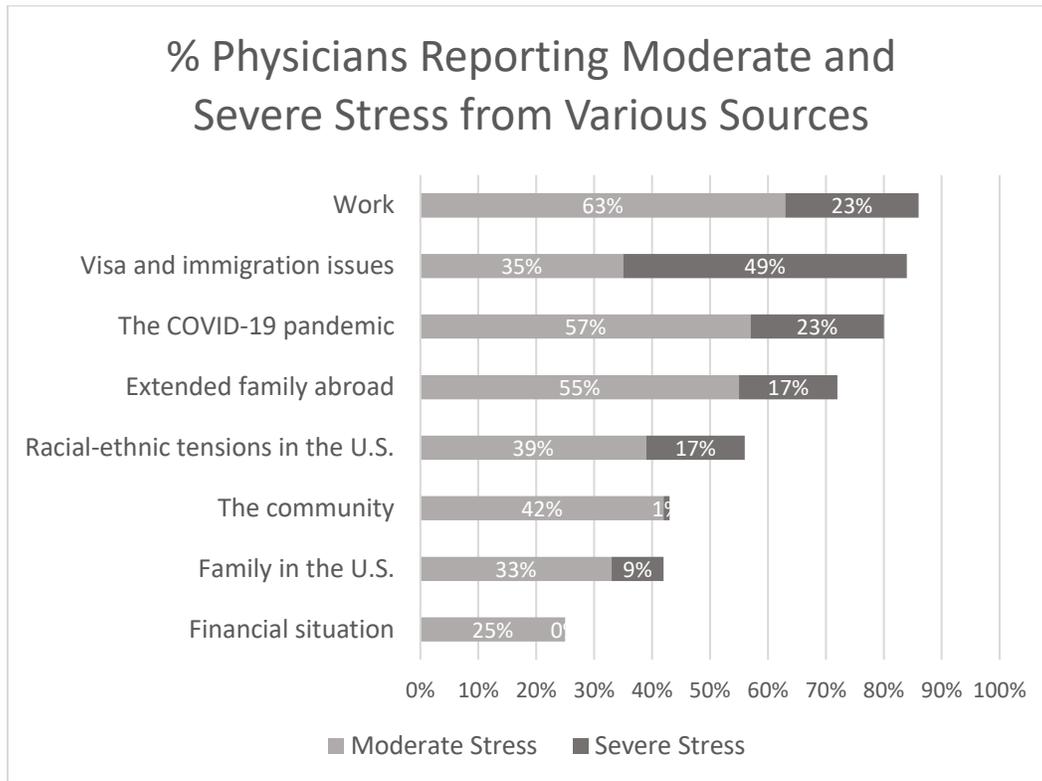
\* Data for scales averaging responses from one to four individual survey questions (see Appendix)

\*\* Data for second-year participants only

\*\*\* Data for first and third-year participants only

## Sources of stress

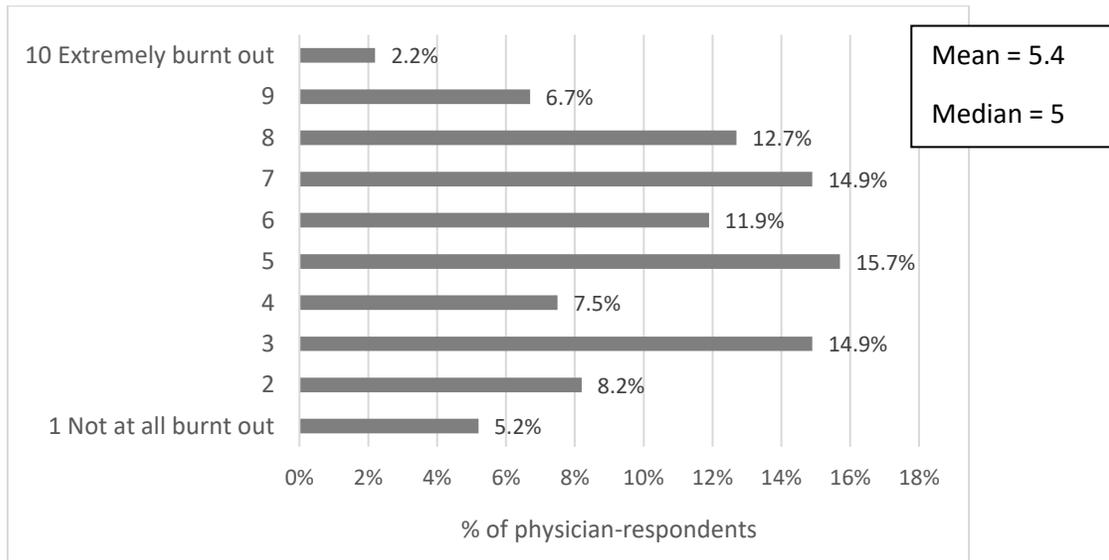
**SUMMARY:** More than four out of five physicians report moderate or severe stress from their work and visa and immigration issues. The next most often stressing issues were the COVID-19 pandemic and issues related to physicians' extended families abroad.



\* Data for third-year participants only

## Burnout

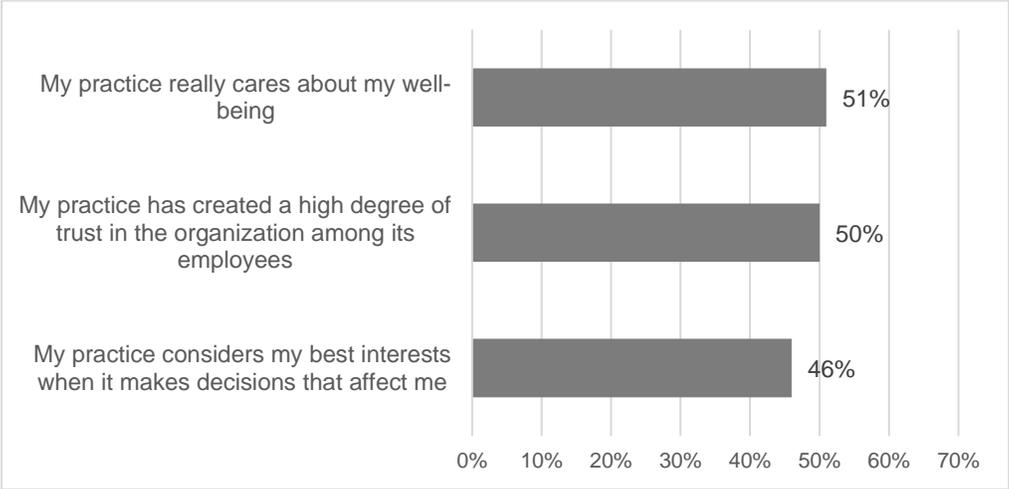
**SUMMARY:** On a 1 to 10 scale of level of burnout, the average reported level of burnout was 5.4, which is in the middle range. 28.4% report low levels of burnout (values 1 to 3), half (49.9%) report mid-levels of burnout, and 21.6% report high levels of burnout (values 8 to 10).



\* Data for second and third-year participants only

# Feeling that their practice cares about them and is trustworthy to employees

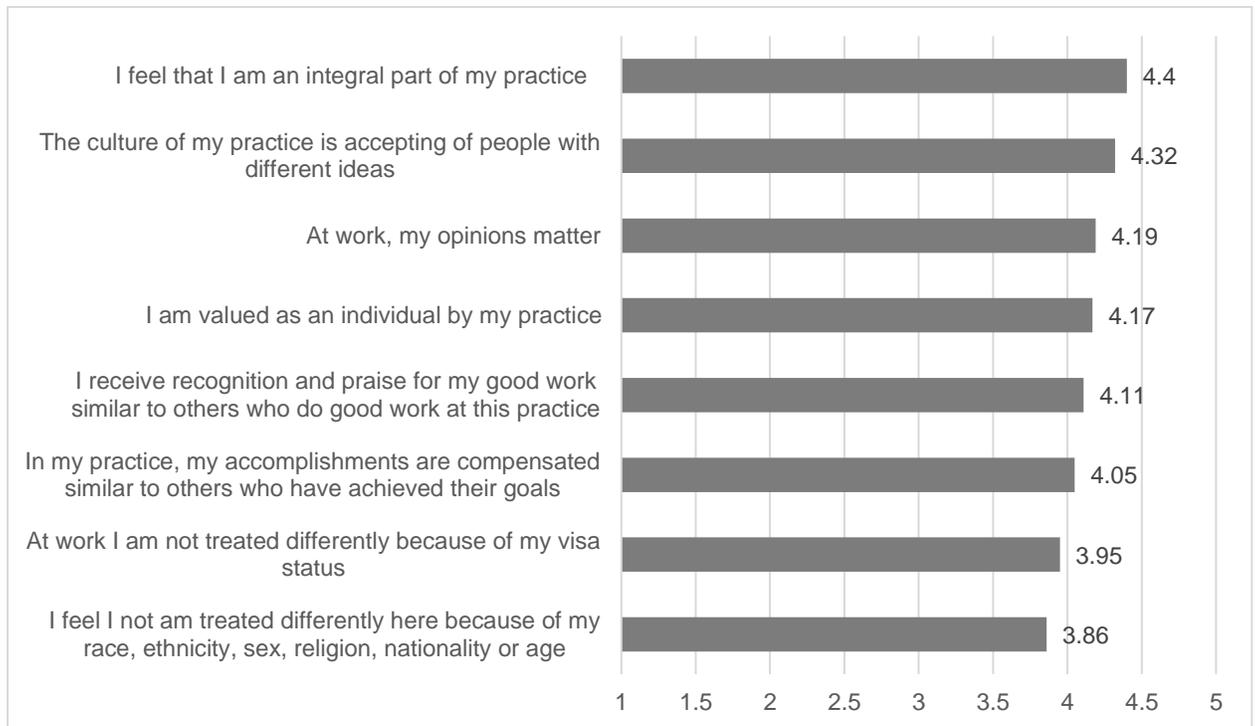
**SUMMARY:** *Half of physicians feel their practice cares about their wellbeing, considers their best interests, and has created a high degree of trust among employees. The other half of physicians feel differently.*



\* Data for third-year participants only

## Feeling valued, treated and rewarded the same as others (Equity and Inclusion)

**SUMMARY:** Physicians as group agreed or strongly agreed \*\* with all eight statements about feeling they are treated, valued and rewarded the same as others in their practices (average item response 4.11). The group's lowest level of agreement was with the two statements that they were not treated differently because of the visa status and because of their demographics (race, ethnicity, sex, religion and national origin).

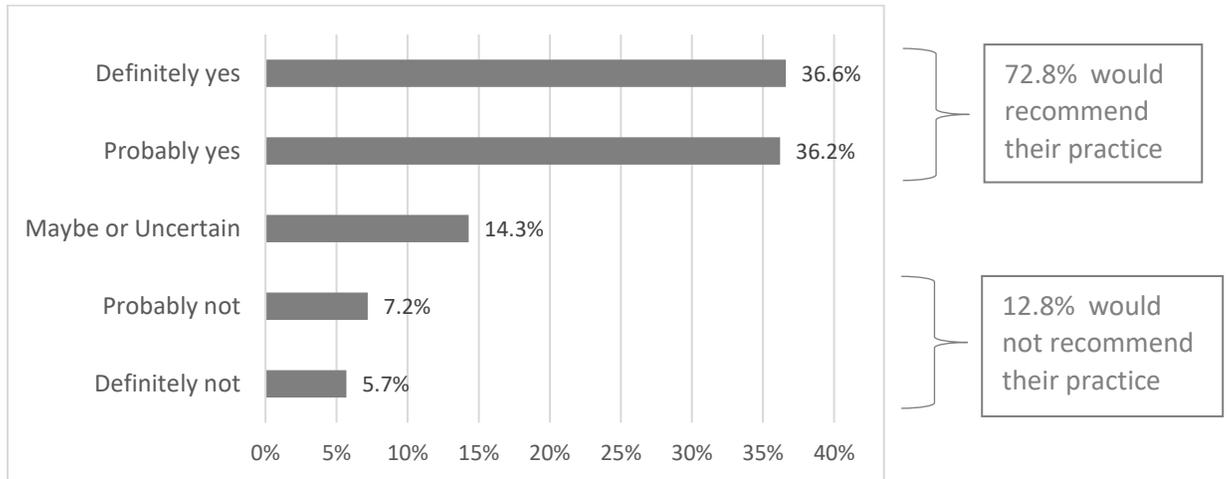


\* Data for second-year participants only

\*\* Response values: 1, strongly disagree; 2, disagree; 3, neither agree nor disagree; 4, agree; 5, strongly agree

## Physicians would recommend their practice to others with J-1 visa waivers

**SUMMARY:** *Almost three-quarters (72.8%) of physicians would recommend their practices to others with J-1 visa waivers, 12.8% would not recommend their practices, and 14.3% are uncertain.*



## Community fit and issues for spouses

### How the community meets physicians' and families' needs.

**SUMMARY:** *Most physicians report that their communities provide them and their families with good friends and the things important to them, and that they feel safe there. But communities reportedly meet the needs of only half of spouses, and only half of spouses who want to work are said to be happily employed. Further, one-in-five married physicians report that their spouses do not live with them, and these spouses are more often said to be happily employed. Thus, some spouses evidently do not live with the physician for employment reasons.*

### Among all physicians

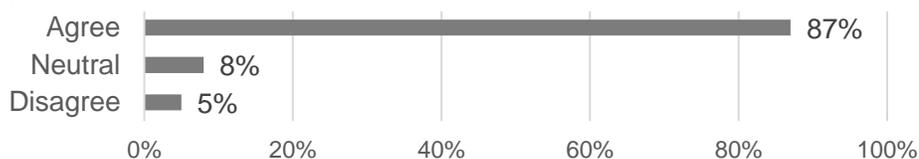
I/My family has access to the things important to us



I/My family has good friends in the area



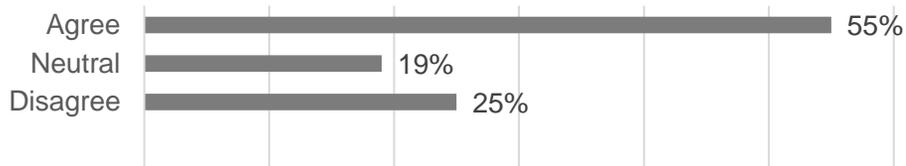
I/My family feels safe in the community



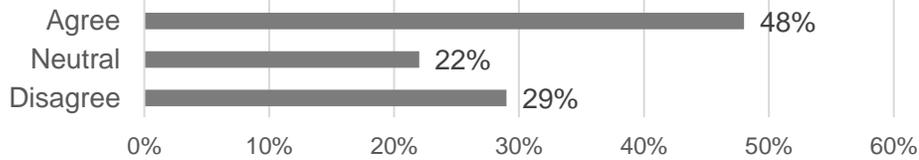
\* Data for second and third-year participants only

## Among married physicians

My spouse is happily employed (among those whose spouses want to work)



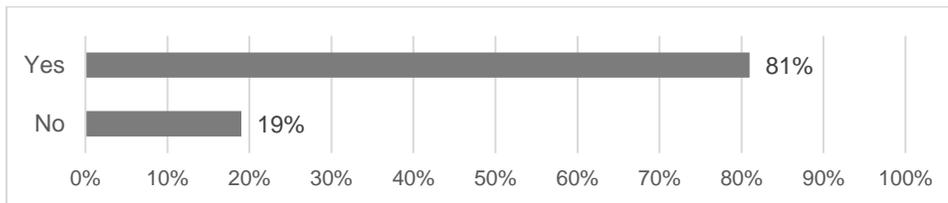
The community meets my spouse's needs well



\* Data for first-year participants only

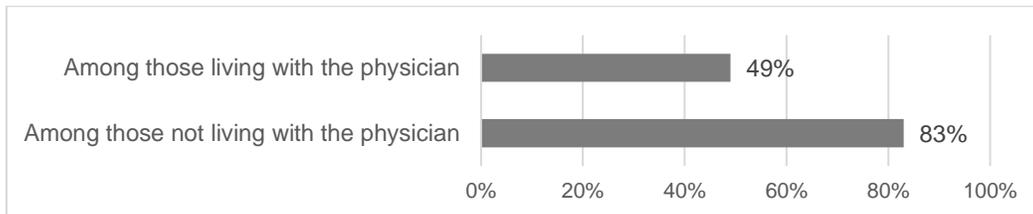
## Among married physicians whose spouses' do or do not live with them

Physician and spouse live together



\* Data for first-year participants only

% of spouses happily employed (among those whose spouses want to work)

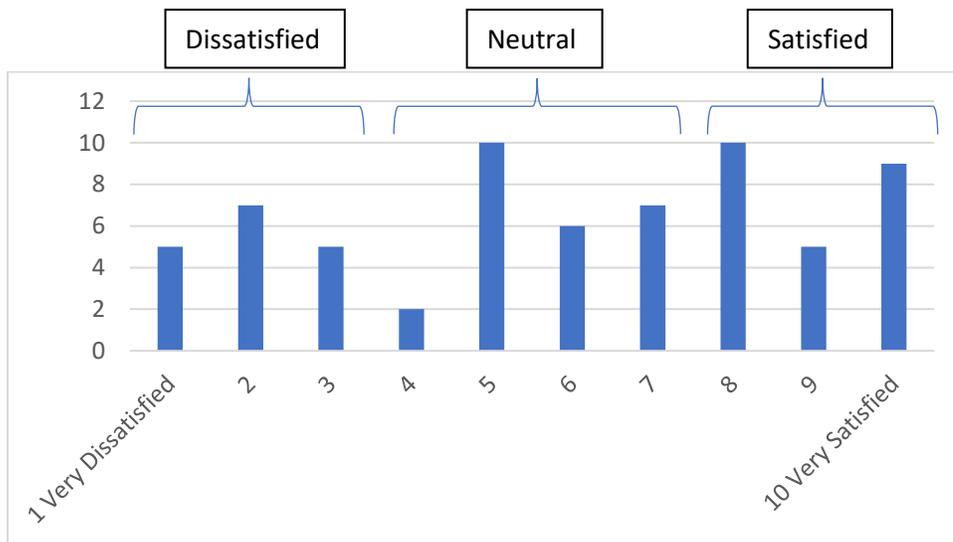


\* Data for first-year participants only

## Overall satisfaction with the J-1 Visa Waiver Program Itself

**SUMMARY:** Physicians' satisfaction with the J-1 Visa Waiver Program varied widely. On a 1 (very dissatisfied) to 10 (very satisfied) scale, physicians' mean rating of their overall satisfaction with the J-1 Visa Waiver Program was 5.94 (neutral range). A total of 36% were satisfied overall with the program, 38% were neutral, and 26% were dissatisfied.

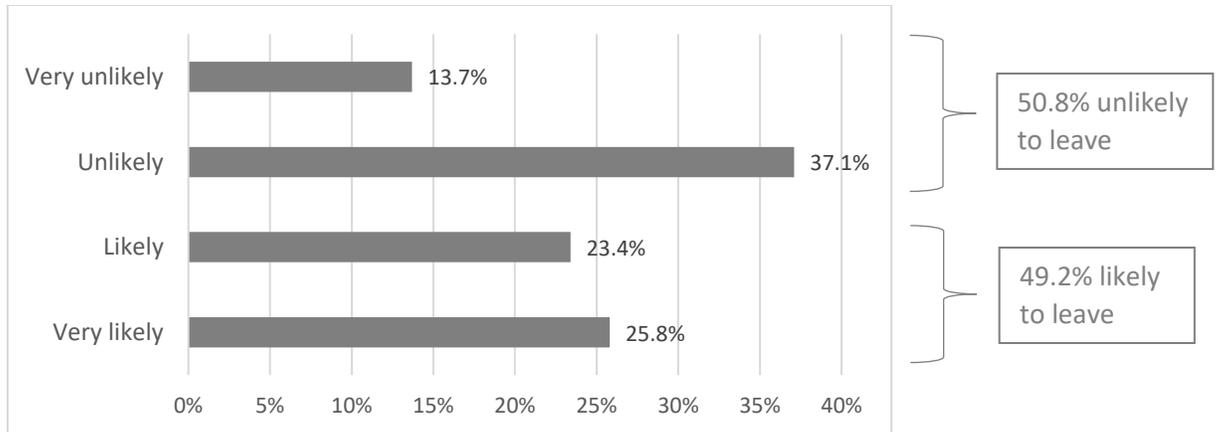
The percentage of physicians' satisfied with the J-1 Visa Waiver Program is lower than the percentage satisfied with their practices.



## Physicians' anticipated likelihood of leaving their practices, and its correlates

**Physicians' anticipated likelihood they will leave their practices within 24 months of completing the three-year J-1 visa waiver term.**

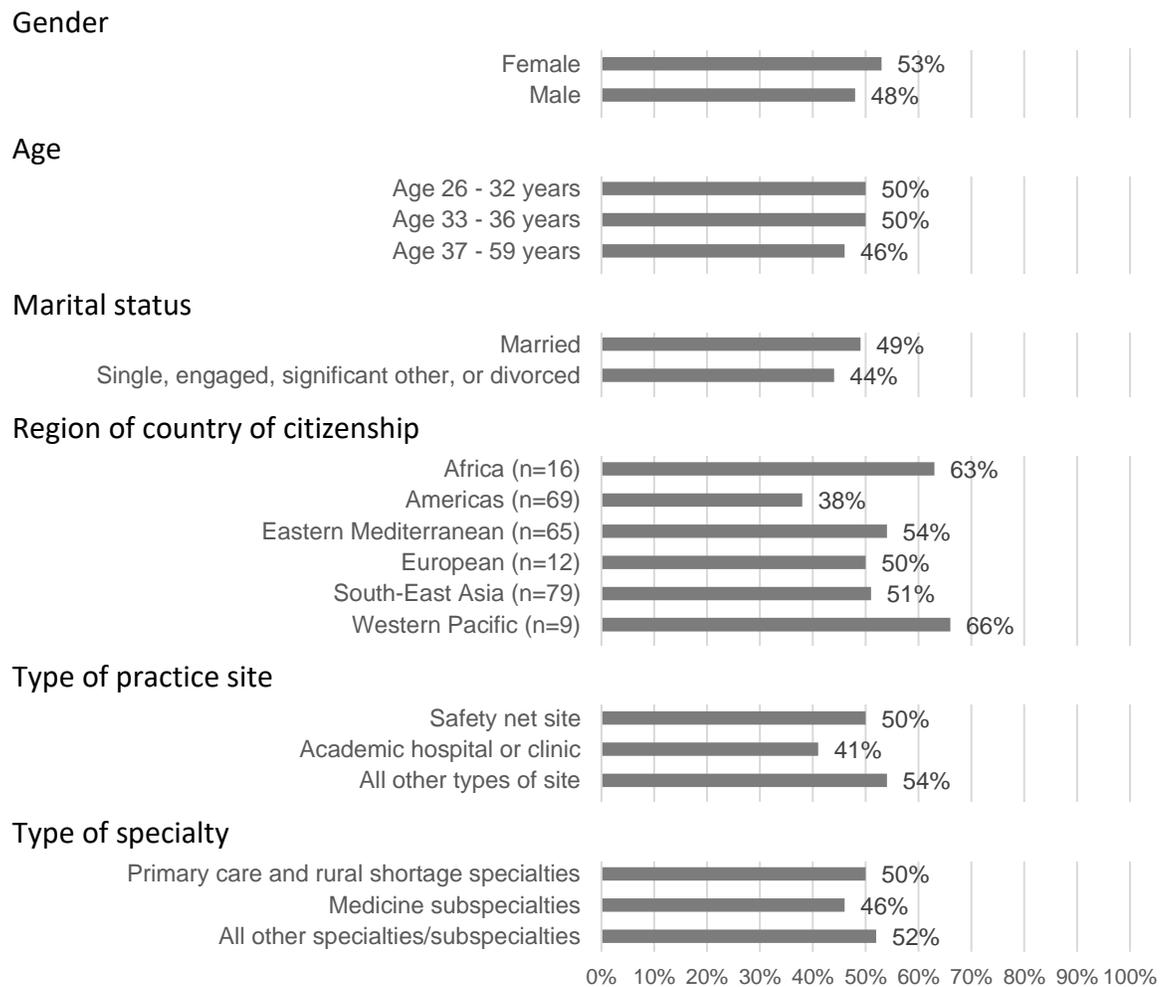
**SUMMARY:** *Half of physicians anticipate they will remain in their practices at least 24 months, and half anticipate they will leave.*



**How characteristics of physicians and practices relate to their anticipated likelihood of leaving their practices.**

**SUMMARY:** *The percentage of physicians that anticipates leaving their practices within 24 months after completing their J-1 visa waiver term is not related to their gender, age, marital status, specialty group, or the region of the world they come from, or the general type of practice they work in.*

Percentage anticipating they will leave



\* None of these group differences is statistically significant

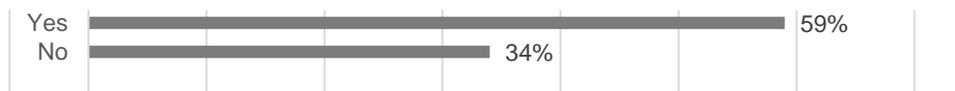
**How *finding enough and well-fitting practices* to work on a J-1 Visa Waiver relates to physicians' anticipated likelihood of leaving their practices.**

**SUMMARY:** *The percentage of physicians who anticipate they will leave their practices within 24 months after completing their J-1 visa waiver term is higher for those who did not find at least several practices that met their needs, had to sacrifice professional, personal and/or community needs, and those who found jobs in states where there they had not previously lived.*

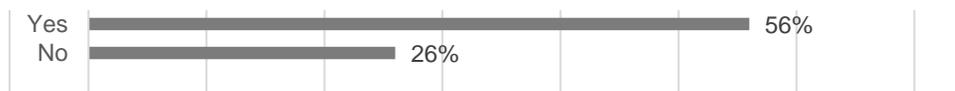
Found at least several practices that met professional, personal and community needs ( $p = .003$ )



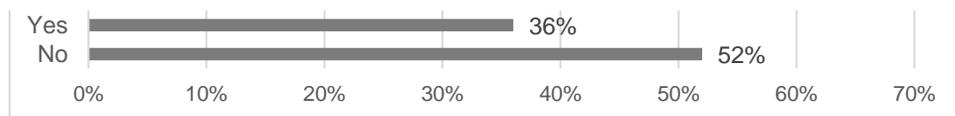
Had to sacrifice some professional needs ( $p = .008$ )



Had to sacrifice some personal or community needs ( $p = .006$ )



Had previously lived or trained in the state ( $p = n.s.$ )



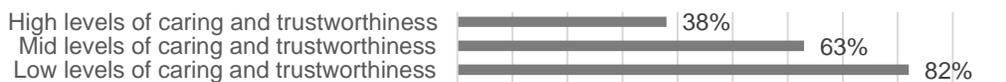
**How physicians' *perceptions of and satisfaction with their practices and jobs* relate to their anticipated likelihood of leaving their practices.**

**SUMMARY:** *The percentage of physicians who anticipate they will leave their practices within 24 months of completing their J-1 visa waiver term is substantially greater among those who feel less valued, less cared about, and less satisfied with most of the queried aspects of their practices, as well as those reporting greater burnout.*

Feeling treated, valued and rewarded the same as others\* ( $p < .001$ )



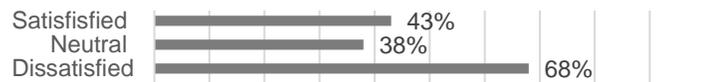
Practice cares for the physician and is trustworthy to employees ( $p = .009$ )



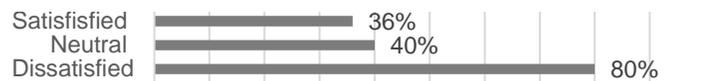
Satisfaction with pay and benefits ( $p < .001$ )



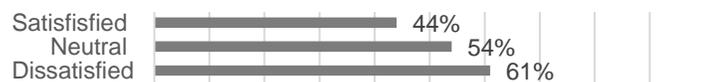
Satisfaction with having adequate personal time free from work ( $p = .001$ )



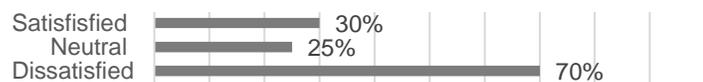
Satisfaction with practice administration ( $p < .001$ )



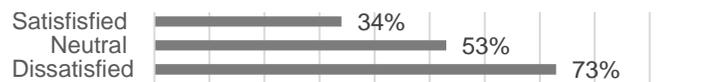
Satisfaction with connection with patients ( $p = n.s.$ )



Satisfaction with relationships with physicians and others in the practice ( $p = .008$ )



Satisfaction with being able to practice full range of services desired ( $p < .001$ )



Level of burnout ( $p < .002$ )



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

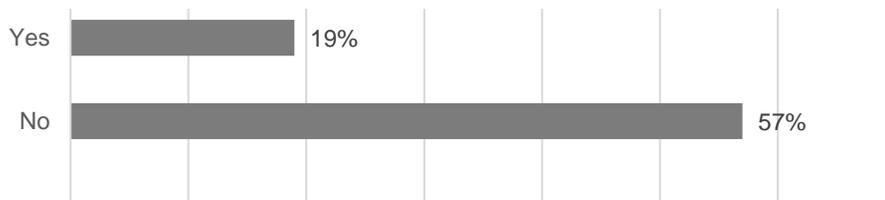
\* Scale of mean responses to eight survey questions (see Appendix)

\*\* Scale of mean responses to three survey questions (see Appendix)

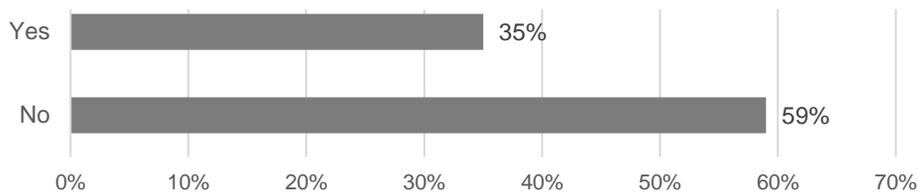
How the *benefits and opportunities* practices provide to physicians that remain beyond their three-year J-1 visa waiver term relate to their anticipated likelihood of leaving their practices.

**SUMMARY:** *The percentage of physicians who anticipate they will leave their practices within 24 months of completing their J-1 visa waiver term is substantially higher among those who do not see an opportunity for career advancement and possibly those who will not receive a good salary. Employment benefits offered by practices (good health insurance, family health insurance, a retirement plan, vacation days, and sick and family leave days), whether alone or summed together, are not related to physicians' anticipated likelihood of remaining in their practices (data not shown).*

Would have good opportunities for career advancement ( $p = .01$ )



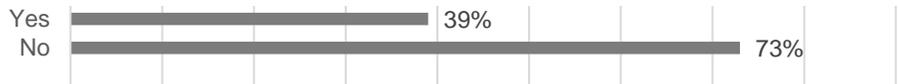
Would receive a good salary ( $p = .08$ )



**How physicians' and their families' fit with their community is related to physicians' anticipated likelihood of leaving their practices.**

**SUMMARY:** *The percentage of physicians who anticipate they will leave their practices within 24 months of completing their J-1 visa waiver term is substantially higher among those who report that the community does not provide them and their families good access to things important to them, good friends, and a feeling of safety.*

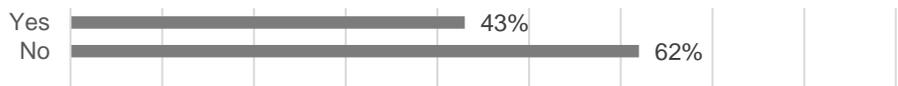
Physician/Family has access to things important to them in the community ( $p < .001$ )



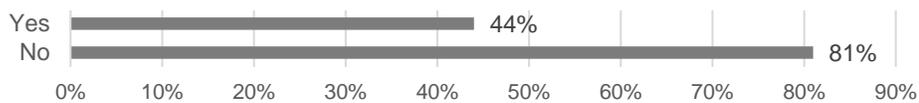
Spouse's needs are well met in the community ( $p = n.s.$ )



Physician/Family has good friends in the area ( $p = .05$ )



Physician/Family feels safe in the community ( $p = .005$ )



## Appendices

### Survey response rates

	Number	Response rate
<b>First-Year Questionnaire</b>		
# surveyed with good email address	462	---
Responded	136	29.4%
<b>Second-Year Questionnaire</b>		
# surveyed with good email address	371	---
Responded	75	20.2%
<b>Third-Year Questionnaire</b>		
# surveyed with good email address	290	---
Responded	70	24.1%
<b>Questionnaires for all 3 years combined</b>		
# surveyed with good email address	1,123	---
Responded	281	25.0%

**Number of respondent physicians by state.**

**SUMMARY:** *Respondent physicians work in 22 states. Fifteen states have 10 or more respondent physicians.*

	Number	Percent
Kentucky	27	9.6
Arizona	25	8.9
New Mexico	19	6.8
Maine	19	6.8
Missouri	18	6.4
Maryland	18	6.4
Virginia	17	6.0
Iowa	16	5.7
New York	16	5.7
Pennsylvania	15	5.3
Rhode Island	15	5.3
Alabama	12	4.3
Nebraska	10	3.6
Oregon	10	3.6
South Dakota	10	3.6
Delaware	9	3.2
North Dakota	9	3.2
Minnesota	6	2.1
Arkansas	5	1.8
Utah	2	.7
Alaska	2	.7
Montana	1	.4

## Description of respondent physicians

### **Country of citizenship.**

**SUMMARY:** Physicians report citizenship in 50 countries in their J-1 visa waiver applications. Nearly one-third are from India, with Canada and Pakistan being the next most common countries.

	Number *	Percent **
India	80	29.1%
Canada	43	15.6%
Pakistan	29	10.5%
Lebanon	12	4.4%
Nigeria	12	4.4%
Egypt	8	2.9%
Jordan	8	2.9%
Ecuador	7	2.5%
Nepal	6	2.2%
Iran	5	1.8%
Colombia	4	1.5%
Ghana	4	1.5%
Great Britain & Northern Ireland	4	1.5%
Peru	4	1.5%
Malaysia	3	1.1%
Mexico	3	1.1%
Philippines	3	1.1%
El Salvador	2	0.7%
Ireland	2	0.7%
Japan	2	0.7%
Saudi Arabia	2	0.7%
Spain	2	0.7%
Sri Lanka	2	0.7%
Trinidad & Tobago	2	0.7%
<u>Countries with one respondent:</u> Argentina, Armenia, Barbados, Brazil, Burma, Cameroon, China, Denmark, Dominican Republic, Ecuador, Greece, Iraq, Iraq, Jamaica, Libya, Nicaragua, Palestinian Authority, Poland, Portugal, South Africa, Sudan, Syria, Turkey, Ukraine, Venezuela, Zambia	26 total	9.5%

\* Counts total less than 281 due to item non-response

\*\* Percentages among those with known country of citizenship

**Countries of citizenship grouped by World Health Organization region.**

**SUMMARY:** Respondent physicians reported on their J-1 visa applications that they are citizens of countries in all six WHO regions. Nearly one-third are from countries of the South-East Asian region, one-quarter are from the Americas, and one-quarter are from the Eastern Mediterranean region. The most numerous reported countries within each region are shown.

	Number *	Percent **
South-East Asian	89	32.4%
India	80	---
Nepal	6	---
Americas	73	26.5%
Canada	43	---
Ecuador	7	---
Peru	4	---
Eastern Mediterranean	70	24.5%
Pakistan	29	---
Lebanon	12	---
Iran	5	---
African	19	6.9%
Nigeria	12	---
Ghana	4	---
European	15	5.5%
Great Britain and Northern Ireland	4	---
Ireland	2	---
Spain	2	---
Western Pacific	9	3.3%
Philippines	3	---
Malaysia	3	---

\* Counts total less than 281 due to item non-response

\*\* Percentages among those with known country of citizenship

**Physician specialties.**

**SUMMARY:** As reported by states, one-third of physicians work in primary care or other recognized rural shortage specialties, one-third practice in subspecialties of internal medicine, and one-third are in other specialties. The most numerous practice specialties are internal medicine and hospital medicine. Few are in family medicine or pediatrics.

	Number	Percent
Primary care and other rural shortage specialties	86	30.6%
Internal Medicine	35	---
Psychiatry (inc. child psych and palliative psych)	17	---
Primary Care	9	---
Family Medicine	8	---
Pediatrics	7	---
General Surgery	7	---
Obstetrics and Gynecology	2	---
Geriatrics	1	---
Medicine subspecialties	90	32.0%
Cardiology	16	---
Pulmonology (inc. critical care)	15	---
Hematology and/or Oncology	14	---
Nephrology	11	---
Gastroenterology	9	---
Infectious Disease	9	---
Endocrinology	8	---
Rheumatology	7	---
Allergy and Immunology	1	---
Other specialties and subspecialties	105	37.3%
Hospital Medicine	33	---
Neurology	21	---
Radiology	9	---
Anesthesiology	9	---
Vascular Surgery	4	---
Neonatology	3	---
Urology	3	---
Pain Management	2	---
Pathology	2	---
Pediatric Neurology	2	---
<u>Other specialties and subspecialties with a single respondent:</u> Critical Care, Emergency Medicine, Hand Surgery, Maternal-Fetal Medicine, Neurosurgery, Orthopedic Surgery, Otolaryngology, Pediatric Cardiothoracic Surgery, Pediatric Critical Care, Pediatric Emergency Medicine, Pediatric Endocrinology, Pediatric Gastroenterology, Pediatric Genetics, Pediatric Intensivist, Pediatric Nephrology, Pediatric Otolaryngology, Trauma Surgery	17	---

## Physician demographics.

**SUMMARY:** *Two-thirds of physicians are under 35 years of age, and two-thirds are male. Forty-five percent identify as South Asian race/ethnicity. Seventy percent are married and 44% have children.*

Physician age	Number *	Percent **
29 years and younger	7	2.6%
30 to 34 years	166	60.6%
35 to 39 years	80	29.2%
40-49 years	14	5.1%
50 years and older	4	1.5%
(mean = 34.1 years; median = 33 years)	---	---
Physician gender		
Male	176	65.9%
Female	91	34.1%
Physician race/ethnicity		
South Asian (e.g., Pakistani, Indian, Sri Lankan)	114	45.1%
White	39	15.4%
Middle Eastern or North African (e.g., Lebanese, Moroccan)	34	13.4%
Hispanic/Latinx	30	11.9%
Black and African American	18	7.1%
East Asian (e.g., Chinese, Korean, Japanese)	13	5.1%
South East Asian (e.g., Indonesian, Vietnamese)	5	2.0%
American Indian and Alaska Native	0	0%
Native Hawaiian and other Pacific Islander	0	0%
Relationship status		
Married	175	70.3%
Engaged or has "significant other"	24	9.6%
Separated, divorced or widowed	8	3.2%
Single	42	16.9%
Children		
Has children 18 years old or younger	112	43.9%
No children 18 years old or younger	150	56.1%

\* Counts within categories total less than 281 due to item non-response; 6 respondents reported more than one race

\*\* Percentages among those who responded

## Key survey items and scales used in this report

### Perceptions of being treated, valued and rewarded the same as others in the practice (Equity and Inclusion)

Item source: Adapted from Person SD, et al. Measuring diversity and inclusion in academic medicine: The Diversity Engagement Survey (DES). *Academic Medicine*. 2015;90(12):1675-1683.

Eight item scale; alpha, .926; mean, 4.107; median, 4.25.

Items: (1) The culture of my practice is accepting of people with different ideas. (2) I feel that I am an integral part of my practice. (3) In my practice, my accomplishments are compensated similar to others who have achieved their goals. (4) I feel I am treated differently here because of my race, ethnicity, sex, religion, nationality or age.[reverse coded] (5) At work, my opinions matter. (6) I receive recognition and praise for my good work similar to others who do good work at this practice. (7) At work I am treated differently because of my visa status.[reverse coded] (8) I am valued as an individual by my practice.

### Feeling the practice cares about them and is trustworthy to employees

Item source: Linzer M, et al. Working conditions in primary care: Physician reactions and care quality. *Annals of Internal Medicine*. 2009;151:28-36.

Three item scale; alpha, .95; mean, 3.36; median, 3.67.

Items: (1) My practice really cares about my wellbeing. (2) My practice has created a high degree of trust in the organization among its employees. (3) My practice considers my best interests when it makes decisions that affect me.

### Satisfaction with various facets of the job and work

Item source: Williams ES, et al. Refining the measurement of physician job satisfaction: results from the Physician Worklife Survey. *Medical Care*. 1999;37:1140-1154.

#### Satisfaction with connection with patients.

Two-item scale; alpha, .72; mean, 4.32; median, 4.5.

Items: (1) I feel a strong personal connection with my patients. (2) The gratitude displayed by my patients keeps me going.

#### Satisfaction with physicians and others in the practice.

Four-item scale; alpha, .74; mean, 4.22; median, 4.50.

Items: (1) I get along well with my physician colleagues. (2) Non-physicians in my practice support my professional judgement. (3) My physician colleagues are an important source of personal support. (4) My non-physician colleagues are a major source of personal support.

Satisfaction with pay and benefits.

Two-item scale; alpha, .92; mean, 3.43; median, 4.00.

Items: (1) My total compensation package is fair. (2) I am well compensated given my training and experience.

Satisfaction with practice administration.

Two-item scale; alpha, .71; mean, 3.18; median, 3.50.

Items: (1) The administrator of my practice/organization is effective. (2) I have real input into administrative decisions.

Satisfaction with having adequate personal time away from work.

Two-item scale; alpha, .79; mean, 3.11; median, 3.00.

Items: (1) Work rarely encroaches on my personal time. (2) My work leaves me enough time for my personal life.