



Characterizing Asian and Pacific Islander Veterans and Veterans Living Outside the United States

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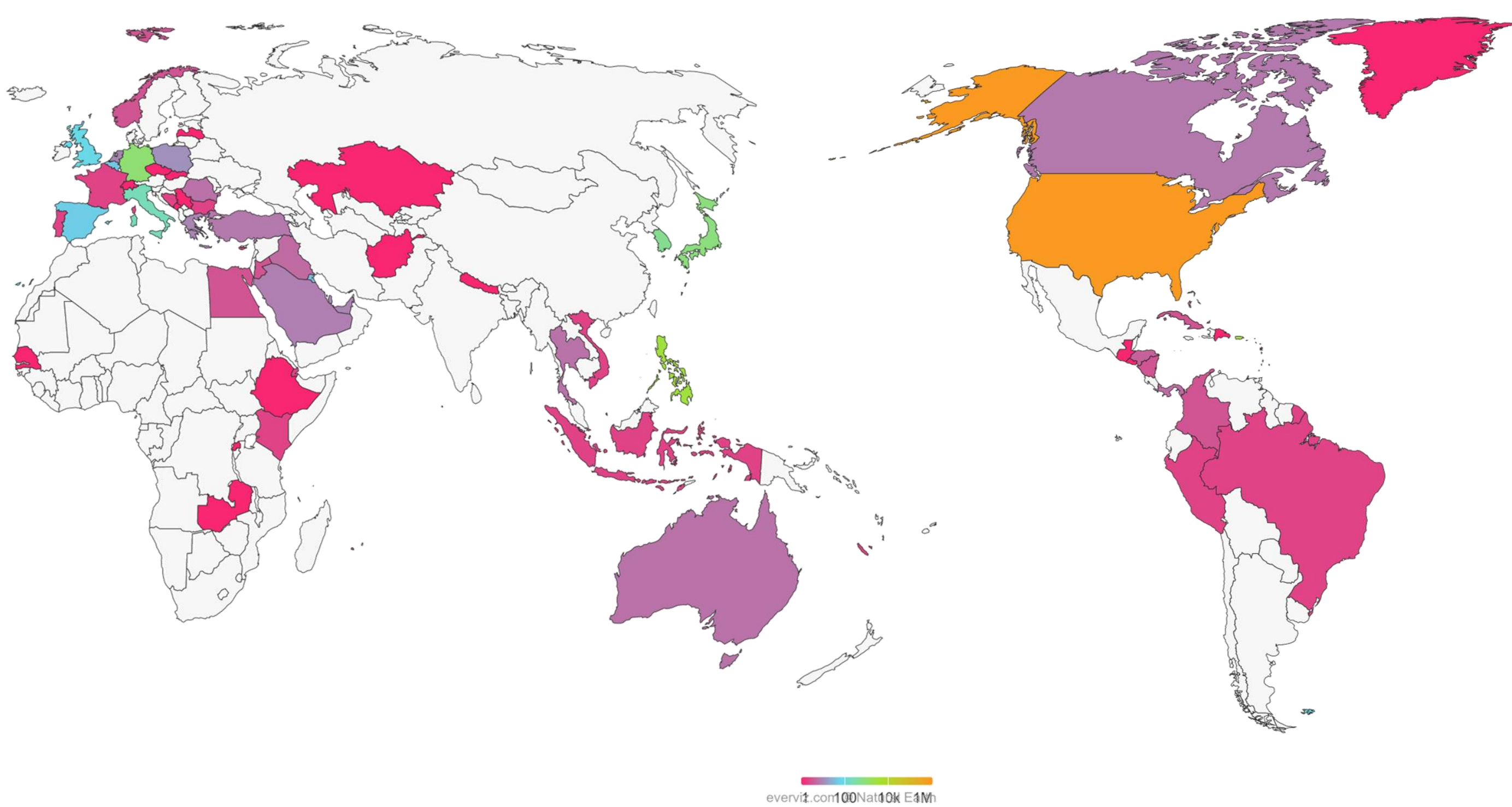
Background

- The United States (U.S.) Department of Veterans Affairs (VA) is the largest integrated provider of health care and mental health services in the U.S.
- VA provides services to military Veterans, so it reflects the demographics of those who served in the U.S. armed forces.
- This population includes increasing representation from groups historically underrepresented in the U.S., such as Asian and Pacific Islanders (API).
- Qualifying Veterans living outside the U.S. can also receive care, but there are unique and sometimes substantial challenges accessing VA benefits.¹
- A recent U.S. law permits VA to expand telehealth, work with community health centers, ship medications, and reimburse travel for care.^{2,3}
- This study seeks to compare API vs non-API Veterans and describe where these Veterans live at home and abroad.

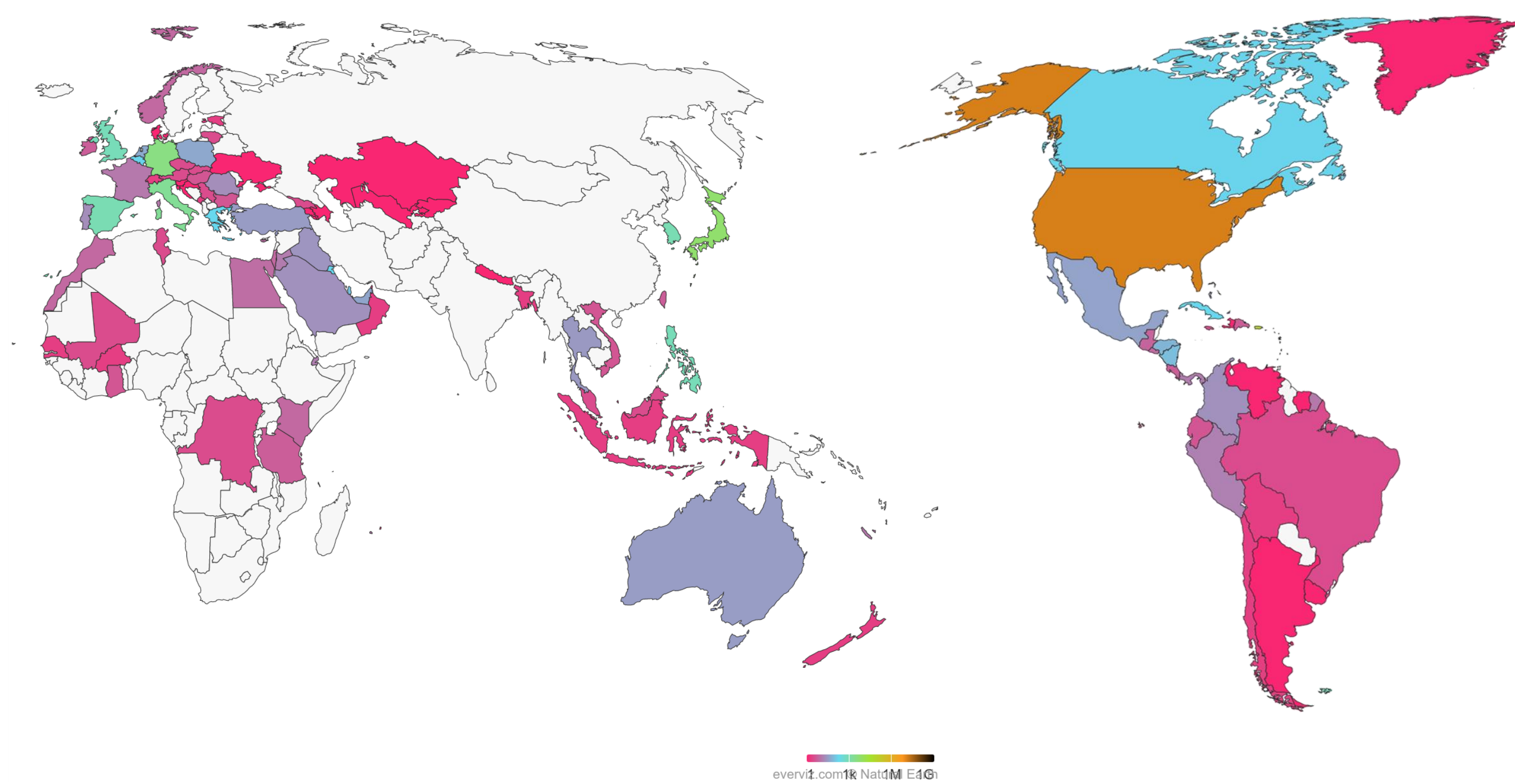
Methods

- Veterans were excluded if a race determination could not be made and if they had at least one visit recorded in a VA facility.
- Determination of API was made using a combination of structured records and clinical text using natural language processing.⁴ This additional demographic data was combined with other VA data transformed into the OMOP Common Data Model v5.3.
- When country of residence could not be determined, the country of the assigned care location was used.
- A common practice for Veterans living abroad is to use military post offices, which use local postage to deliver to an assigned PO Box within the U.S. that is forwarded on to a military base or other facility abroad. These addresses were mapped to the most granular country.

API Veterans



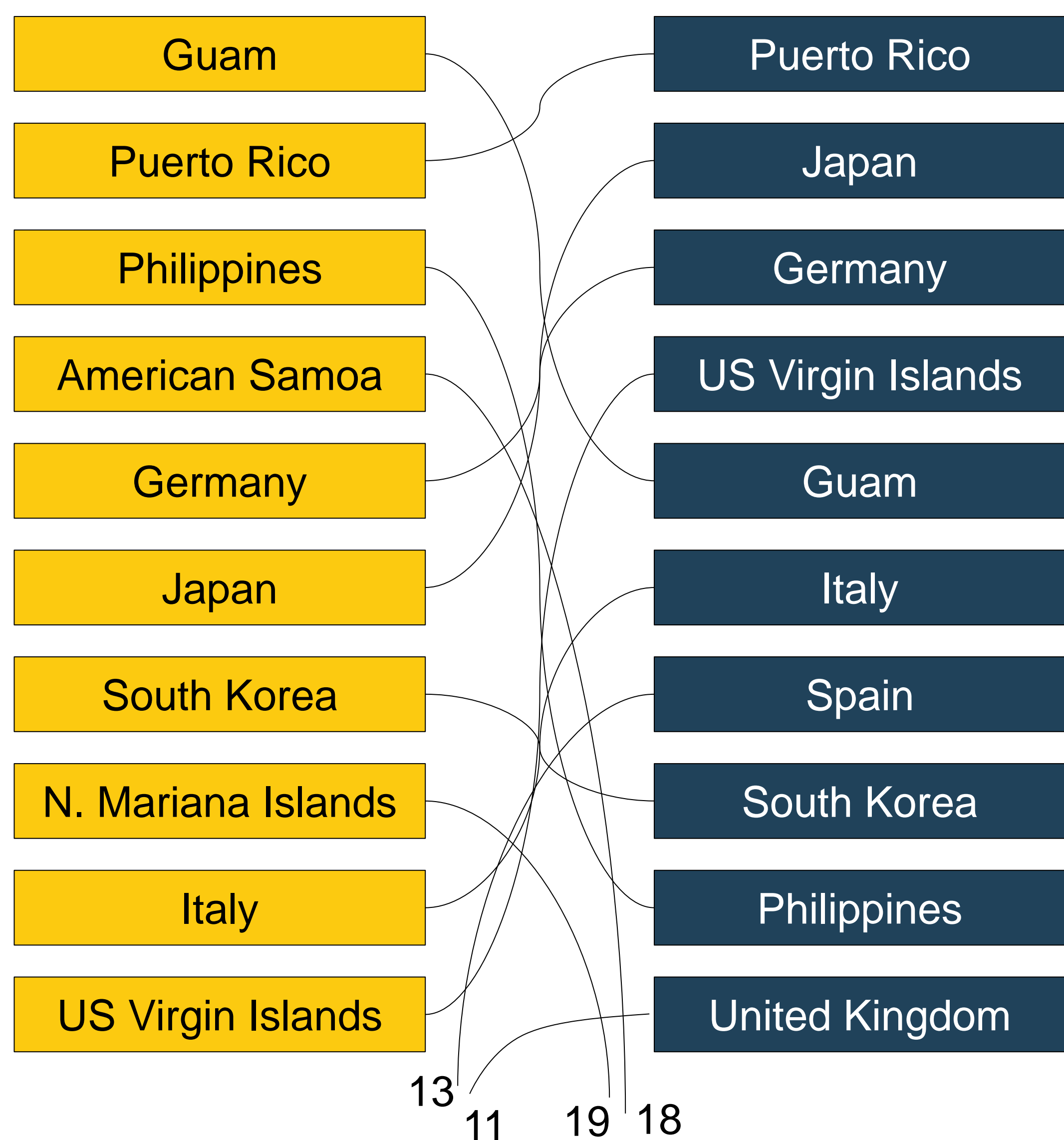
Non-API Veterans



Most common locations for Veterans abroad

API Veterans

Non-API Veterans



Results

- 18,277,162 Veterans had at least one visit at a VA facility.
- 5,061,651 (29.1%) had an unknown race and were excluded.
- 53,654 (4.7%) were classified by the algorithm to be API.
- API Veterans on average are younger, have more female Veterans (which also tracks with a younger population), and have similar observation time than their non-API counterparts.
- API Veterans in general have lower average utilization than on-API Veterans, ranging from 6.3% fewer visits to 27.4% fewer medication instances.
- Almost twice the proportion of API Veterans live outside the U.S. (2.0% vs 1.1%) and almost ten-fold the proportion living abroad live in the APAC region (70.8% vs 7.3%) compared to non-API Veterans.

Demographics	API Veterans	Non-API Veterans
N	853,654	12,361,857
Age: mean (SD)	52.7 (16.7) years	67.1 (18.3) years
Female: n (%)	107,007 (12.5%)	1,232,485 (10.0%)
Observation Time: mean (SD)	12.3 (7.6) years	12.4 (8.0) years
VA Utilization		
Number of Visits: mean (SD)	175.2 (253.0)	187.0 (253.7)
Number of Diagnosis Instances: mean (SD)	224.5 (415.8)	257.8 (415.4)
Number of Measurement Instances: mean (SD)	1097.0 (1751.4)	1464.4 (1968.0)
Number of Procedure Instances: mean (SD)	134.1 (268.0)	153.6 (272.8)
Number of Medication Instances: mean (SD)	341.3 (1456.2)	469.9 (1613.9)

Location	API Veterans	Non-API Veterans
Non-U.S.: n (%)	17,003 (2.0%)	133,937 (1.1%)
AP: n (%)	12,033 (70.8% of non-U.S.)	9,717 (7.3% of non-U.S.)
Guam: n (%)	5,999 (49.8% of AP)	1,956 (19.6% of AP)
Philippines: n (%)	2,851 (23.7% of AP)	783 (7.9% of AP)
American Samoa: n (%)	1,386 (11.5% of AP)	110 (1.1% of AP)
Japan: n (%)	721 (6.0% of AP)	5,904 (59.2% of AP)
AE: n (%)	1,453 (8.5% of non-U.S.)	8,388 (6.3% of non-U.S.)
Germany: n (%)	909 (61.4% of AE)	3,253 (37.0% of AE)
Italy: n (%)	202 (13.7% of AE)	1,935 (22.0% of AE)
United Kingdom: n (%)	75 (5.1% of AE)	755 (8.6% of AE)
Spain: n (%)	49 (3.3% of AE)	891 (10.12% of AE)
AA: n (%)	3,509 (20.6% of non-U.S.)	115,782 (86.4% of non-U.S.)
Puerto Rico: n (%)	3,382 (96.4% of AA)	112,228 (96.9% of AA)
US Virgin Islands: n (%)	90 (2.6% of AA)	3,110 (2.7% of AA)
Cuba: n (%)	10 (0.3% of AA)	175 (0.2% of AA)
Other non-U.S.: n (%)	<10 (<0.01% of non-U.S.)	50 (<0.1% of non-U.S.)
U.S.: n (%)	827,929 (97.0%)	12,211,824 (98.8%)
California: n (%)	109,390 (13.2% of U.S.)	870,583 (7.1% of U.S.)
Texas: n (%)	81,404 (9.8% of U.S.)	1,025,172 (8.4% of U.S.)
Florida: n (%)	58,706 (7.1% of U.S.)	1,105,581 (9.1% of U.S.)
Unknown: n (%)	8,722 (1.0%)	16,096 (0.1%)



U.S. Department of Veterans Affairs



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