Table II. Residents' Levels of Comfort With Financial Topics*

Financial Topic	Level of Comfort (% of Respondents)	Financial Topic	Level of Comfort (% of Respondents)
Student loan repayment		Retirement planning	
Strongly disagree	7.5	Strongly disagree	18.0
Disagree	9.8	Disagree	44.4
Agree	48.9	Agree	29.3
Strongly agree	33.8	Strongly agree	8.3
Resident budgeting		Home buying	
Strongly disagree	4.5	Strongly disagree	18.8
Disagree	24.1	Disagree	37.6
Agree	53.4	Agree	30.1
Strongly agree	18.0	Strongly agree	13.5
Attending budgeting		Tax planning	
Strongly Disagree	2.3	Strongly disagree	20.3
Disagree	16.5	Disagree	49.6
Agree	50.4	Agree	24.8
Strongly agree	30.8	Strongly agree	5.3
Negotiating salary		Asset protection	
Strongly disagree	18.0	Strongly disagree	30.8
Disagree	58.6	Disagree	49.6
Agree	16.5	Agree	15.8
Strongly agree	6.8	Strongly agree	3.8
Purchasing insurance		Estate planning	
Strongly disagree	11.3	Strongly disagree	35.3
Disagree	47.4	Disagree	48.1
Agree	31.6	Agree	14.3
Strongly agree	9.8	Strongly agree	2.3
Investing		Obtaining financial advice	
Strongly disagree	27.8	Strongly disagree	12.0
Disagree	43.6	Disagree	45.1
Agree	21.1	Agree	33.8
Strongly agree	7.5	Strongly agree	9.0

*In the survey participants responded to statements such as "I am comfortable with student loan repayment."

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The diminishing presence of dermatologists in the care of hospitalized patients receiving Medicare benefits

To the Editor: Dermatology practice continues to positively transform with therapeutic advances, even as the workforce supply decreases.[1] Notably, academic centers have observed decreases in inpatient dermatology consultations.[2] However, these consults may improve the quality of care and health outcomes for hospitalized patients.[3] This study sought to examine recent changes in inpatient dermatology practice and to analyze geographic variations of dermatologists who see patients receiving Medicare benefits.

We used the Centers for Medicare and Medicaid Services Public Use Files from 2012 and 2016 for this cross-sectional, observational study. This publicly available aggregate data were filtered for dermatologists who billed for an inpatient service (Current Procedural Terminology codes 99221-99223 and 99231-99233). Only dermatologists who billed for more than 10 services of at least 1 inpatient Current Procedural Terminology code were included in the inpatient dermatology analysis. However, all billing Medicare providers were included in the total inpatient provider analysis. Data analysis was performed with Excel (Microsoft, Redmond, WA).

Table I. Inpatient consultations for dermatologists and all providers

Inpatient consultations	2012	2016	Cumulative change, %
Number of unique dermatologists*	402	297	−26.1
Number of nonunique providers billing for all inpatient consultative services†	1 291 109	1 354 292	4.9
Number of consultative services from included dermatologists*	19 657	13 018	−33.8
Total number of Medicare inpatient consultative services†	104 278 834	99 233 343	−4.8
Mean number of services per dermatologist*	48.9	43.8	−10.4
Mean number of services for all providers†	80.8	73.3	−9.3
Weighted mean Medicare payment per dermatology inpatient consultative service*	$77.02	$78.00	1.3
Weighted mean Medicare payment for all inpatient consultative service†	$72.62	$74.19	2.2

*Only dermatologists who billed for more than 10 services of at least 1 inpatient Current Procedural Terminology code were included. Includes submitted reimbursements for Healthcare Common Procedure Coding System codes 99221, 99222, 99223, 99231, 99232, and 99233.
†All billing Medicare providers were included. Includes submitted reimbursements for Healthcare Common Procedure Coding System codes 99221, 99222, 99223, 99231, 99232, and 99233.

The number of unique dermatologists billing for inpatient services decreased from 402 to 297 (−26.1%) (Table I). The total number of dermatology consultative services similarly decreased by 33.8%. The mean number of inpatient services per dermatologist decreased from 48.9 to 43.8 (−10.4%). Among all billing Medicare providers, the total number of consult services decreased by 4.8%, and the mean number of services per provider decreased by 9.3%. Medicare payment per inpatient consultative service remained relatively stable among dermatologists and all providers.

More than half of all states saw either no change or a decline in the number of unique dermatologists billing for greater than 10 inpatient consults from 2012 and 2016 (Fig 1). More than 15 states had a 50% or greater decline in the number of unique inpatient dermatologists. The number of states without high-volume dermatologists billing for Medicare inpatient consult services increased from 9 to 13, with a majority in the US Rocky Mountain region.

Our results show a decline in dermatology inpatient consults that outpaces the decline seen for all inpatient consultative services. Although this decrease may be due to only a few dermatologists seeing most inpatient consults, the overall decline in total number of consults likely indicates that dermatologists, as a collective, are seeing fewer consults. The geographic differences of dermatology inpatient consults also mirror the maldistribution of practicing dermatologists shown in other studies.[1] These changes may have significant clinical and financial impacts, because dermatology consults can lead to more accurate diagnoses, decreased readmission rates, and a shorter length of stay.[3,4] However, it is also possible that advances in therapeutics, such as home-based treatment for severe psoriasis, have decreased the need for inpatient dermatology.

This study did not capture patients without Medicare and dermatologists who do not participate with Medicare, thus limiting generalizability. Furthermore, low-volume inpatient dermatologists (with fewer than 11 consults per year) were not included in the database for privacy concerns; however, low-volume dermatologists are unlikely to contribute significantly to total inpatient consults. Inpatient dermatologists generally accept Medicare and should be representative of the workforce supply. Of note, the interim analysis for years 2013 through 2015 supported the gradual decline (data not shown).

Health care delivery models focused on improving access to care are needed to limit these gaps in inpatient dermatology. Alternative care delivery models, such as teledermatology, may provide reliable and cost effective methods to provide inpatient care in underserved areas.[5] Given the significant impact of dermatology consultations on clinical outcomes, efforts to increase dermatology involvement in inpatient care should be supported.

Efe Kakpovbia, BA,[a] Randie H. Kim, MD, PhD,[b] David E. Cohen, MD,[b] and Oluwatobi A. Ogbechie-Godec, MD, MBA[b]

From the New York University School of Medicine[a] and The Ronald O. Perelman Department of Dermatology, New York University, New York.[b]

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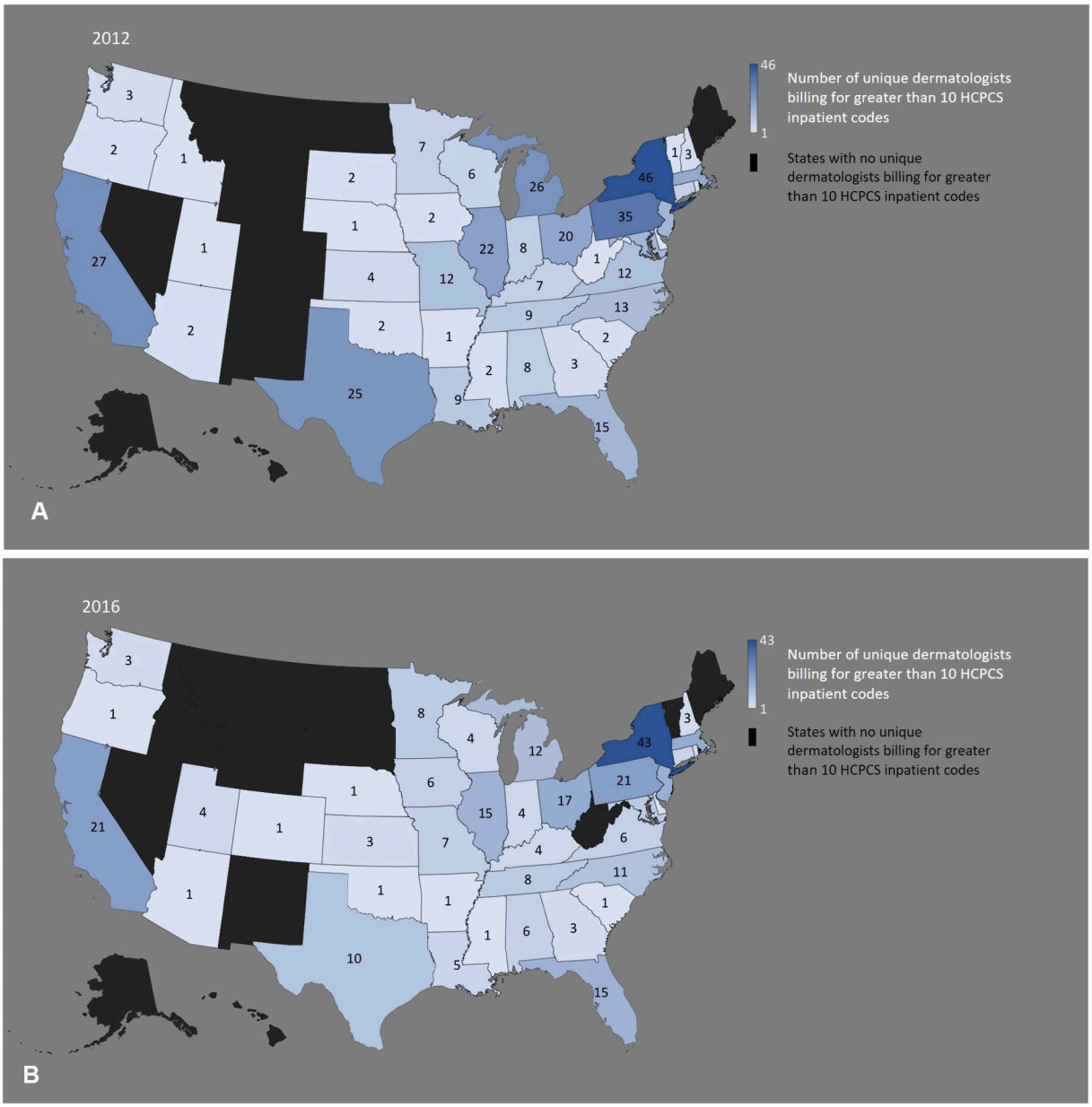

Fig 1. Geographic distribution of Medicare inpatient consultative dermatologists in 2012 and 2016. **A**, 2012. **B**, 2016. Values based on submitted reimbursements for Healthcare Common Procedure Coding System (HCPCS) codes 99221, 99222, 99223, 99231, 99232, and 99233. Only dermatologists who billed for more than 10 services of at least 1 inpatient Current Procedural Terminology code were included in the inpatient dermatology analysis.

Conflicts of interest: Dr Cohen has been a consultant for and received honoraria from Ferndale Laboratories, Medimetriks, Cutanea, Ferrer, Celgene, and Foundation for International Dermatologic Education (FIDE) (FIDE receives industry sponsorship from AbbVie, Almirall, Bristol-Myers, Celgene, Dermavant, Dermira, Janssen, Kyowa Hakko Kirin, LEO, Lilly, Novartis, Ortho Dermatologics, Pfizer, Sun Pharma, UCB); holds stock or stock options in Dermira, Medimetriks, Brickell Biotech, and Kadmon; and serves on the board of directors of Dermira and Kadmon. Ms Kakpovbia, Dr Kim, and Dr Ogbechie-Godec have no conflicts of interest to declare.

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Reprint requests: Oluwatobi A. Ogbechie-Godec, MD, MBA, The Ronald O. Perelman Department of Dermatology, New York University School of Medicine, 240 East 38th St, 11th Floor, New York, NY 10016

E-mail: Tobi.ogbechie@post.harvard.edu

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Nagashima-type palmoplantar keratosis in Finland caused by a *SERPINB7* founder mutation

To the Editor: Nagashima-type palmoplantar keratosis (NPPK) is an autosomal recessive PPK caused by mutations in the serpin family B member 7 (*SERPINB7*) gene.[1] It has been reported only in Japanese, Chinese, and Korean populations, with a common founder mutation c.796C>T p.(Arg266*).[1-3] NPPK is characterized by well-demarcated, mild, nonprogressive, diffuse hyperkeratosis with transgradient erythema expanding onto the dorsal aspect of the hands, wrists, and Achilles tendon area. Palmoplantar hyperhidrosis, aquagenic whitening, and fungal infections are frequent.[1,4] Loss of functional SERPINB7 in skin probably leads to overactivation of intracorneocyte proteases causing skin barrier defects with hyperkeratosis, mild inflammation, and increased water permeability.[1]

We report 3 non-Asian patients with NPPK, with a typical NPPK phenotype and homozygous *SERPINB7* mutation. Since the age of 2 months, the 27-year-old Finnish male proband (P1) had a mild diffuse PPK with a well-demarcated erythema extending to the wrist and Achilles tendon area (Fig 1, Table I). His whole exome sequencing (Supplemental Text 1, available at Mendeley doi: 10.17632/z8tjpfdj3v.1) revealed a homozygous *SERPINB7* c.1136G>A p.(Cys379Tyr) (NM_003784.3) variant (rs201208667) in exon 8 encoding the second-last amino acid of *SERPINB7*. His unaffected mother and sister were heterozygous carriers of the variant.

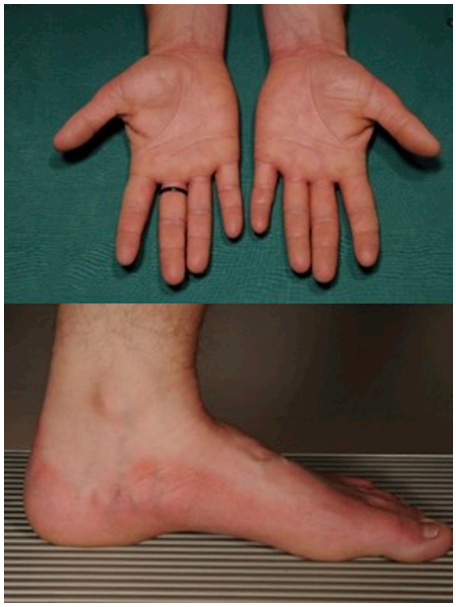

Fig 1. Clinical characteristics of Nagashima-type palmoplantar keratosis. Mild palmoplantar hyperkeratosis with transgradient erythema extending to the wrist and Achilles tendon area in P1 homozygous for *SERPINB7* c.1136G>A.

Sanger sequencing among 44 unrelated Finnish patients with PPK revealed 2 other homozygous patients and 4 heterozygous carriers (Table I). Whole exome sequencing of 3 heterozygous patients (P4, P5, and P6) revealed no other likely pathogenic variants or copy-number variations in *SERPINB7* or other genes. Whole exome sequencing was unfeasible for P7, but a single nucleotide polymorphism array for haplotype analysis revealed no other *SERPINB7* variants or copy-number variations. The cause of their PPK thus remains unknown. Other plausible *SERPINB7* variants were not analyzed in the other patients.

SERPINB7 c.1136G>A p.(Cys379Tyr) has not been reported in NPPK (Supplemental Table 1, available at Mendeley doi: 10.17632/z8tjpfdj3v.1). It was predicted damaging by Sorting Intolerant From Tolerant (SIFT), Polymorphism Phenotyping (PolyPhen), MutationTaster, logistic regression test (LRT), and Combined Annotation Dependent Depletion (CADD) (score 19). Only heterozygous