there is space between thumbprints. A mean of 99.3 (standard deviation [SD] 4.0, range 91-104) thumbprints were required to cover the adult SSA (Fig 1, Video). Thus, a thumb projection was 1.0% (range 1.0%-1.1%) of the SSA. The number of thumbprints was mildly greater for female evaluators (mean 101.4, SD 2.2, range 98-104) than male evaluators (mean 97.1, SD 4.4, range 91-103). It is notable that the palm without fingers, which fits 15 thumbprints,[4] could be used to estimate 15% SSA.

Another method for accurately assessing the percentage of SSA involved with alopecia is to use a ruler to measure the dimensions of patches of alopecia and to then apply area formulas according to the shapes of the patches [eg, area of circle = $\pi \times$ radius^2, area of ellipse = π (0.5 $\times$ long axis) (0.5 $\times$ short axis)]. Subsequently, the total area of all patches would be divided by 6.15 cm^2 (or 1% SSA) to determine the percentage of SSA. Unlike counting thumb projections, which can be done quickly, using a ruler and geometry could be time-consuming, not to mention that there is the possibility of introducing error when multiple calculations need to be performed.

Not only is it challenging to measure the amount of hair loss when there are numerous patches of alopecia present, the presence of variable hair density in the alopecic patches makes this assessment even more difficult. When using the thumb tool, the SSA of individual patches can be multiplied by the density of hair in each patch and then the sum taken of all patches. A simple example is a scalp with 12 patches of area equal to 12 thumb projections, each with ~50% hair loss. In this example, the SALT score is 6% (12 thumb projections, 12% SSA, multiplied by 0.50 hair density).

With the emergence of Janus kinase inhibitors for the treatment of alopecia areata, multiple large clinical trials are underway. Because the aim of these trials is to transform severe and moderate scalp hair loss into mild or no hair loss, the accurate assessment of relatively small areas of alopecia is critically important and tools to facilitate such assessment invaluable. Using thumb projections to determine the percentage of scalp hair loss is simple, especially when the area of hair loss is relatively small, and may be one such tool.

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REFERENCES
1. Olsen EA, Hordinsky MK, Price VH, et al. Alopecia areata investigational assessment guidelines—part II. *J Am Acad Dermatol.* 2004;51(3):440-447.
2. Olsen EA, Canfield D. SALT II: a new take on the Severity of Alopecia Tool (SALT) for determining percentage scalp hair loss. *J Am Acad Dermatol.* 2016; 75(6):1268-1270.
3. Donor area harvesting. In: Unger W, Shapiro R, Unger R, Unger M, eds. *Hair transplantation.* 5th ed. New York, NY: Informa Healthcare; 2011:247-290.
4. Dargan D, Mandal A, Shokrollahi K. Hand burns surface area: a rule of thumb. *Burns.* 2018;44(5):1346-1351.

Impact of the Patient Protection and Affordable Care Act on dermatologic health care utilization

To the Editor: The Patient Protection and Affordable Care Act (PPACA) was signed into law in March 2010 and is one of the most significant undertakings to date aimed at increasing equity in access to health care in the United States. Although the PPACA increased access to health care significantly among individuals with low incomes who have completed low levels of education, disparities remain in access to care between non-Hispanic whites and both blacks or Hispanics.[1]

There is little information regarding the effect of PPACA passage on utilization of dermatologic care.[2]

Postelection efforts to repeal, replace, or modify the PPACA and the contentious debate over health care coverage underscore the importance of better understanding the changes in utilization of outpatient dermatologic care after passage of the PPACA.[3] As such, the goal of this study was to investigate the impact of the PPACA on outpatient dermatologic care utilization in different sociodemographic groups.

We analyzed data from the Medical Expenditure Panel Survey (MEPS, a nationally representative survey assessing patterns of utilization of outpatient care in the United States) during 2007-2015 (split into 2007-2010 [pre-PPACA] and 2011-2015 [post-PPACA]).[4] Patients in this study were diagnosed with a dermatologic condition as per the International Classification of Disease, 9th Revision, Clinical Modification code and MEPS clinical classification codes.[4] We investigated per capita visit rates for outpatient dermatologic conditions according to sociodemographic characteristics. Rao Scott chi-squared tests were used to determine if the rate of outpatient dermatologic visits changed after passage of the PPACA (2-sided P values). All analyses were performed at the person level by using R to account for MEPS' complex sample design.

Of 183,054 MEPS respondents (mean [standard deviation] age 34 [23] years, 52.1% female), 19,561 (10.7%) self-reported a dermatologic condition and were included in this study. Rates of self-reported dermatologic conditions are given in Table I. White patients, women, and elderly individuals (≥65 years of age) with dermatologic conditions were more likely to visit outpatient dermatologists after PPACA passage ($P < .01$ for all, Table II). Patients with no degree or at least a bachelor's degree were also significantly more likely to visit a dermatologist after PPACA passage ($P < .05$ for both). The outpatient dermatology visit rate increased after PPACA passage among low-income individuals and patients in the Northeast and Midwest ($P < .05$ for all).

Our findings regarding differential effects of the PPACA passage on outpatient dermatologic care utilization in various sociodemographic groups highlights the importance of further research to develop tailored policy interventions for specific patient populations. We found that visitation rates to outpatient dermatologists did not significantly increase among black and Hispanic Americans after PPACA passage, which is concordant with findings regarding the differential impact of the PPACA on health insurance enrollment in minority groups.[1] Increases in outpatient dermatologist visit rates among the elderly might be related to provisions to improve quality, efficiency, delivery, and the cost of

Table I. Sociodemographic characteristics of individuals with a self-reported dermatologic condition, 2007-2015

Characteristic	Population with self-reported dermatologic condition, % (95% CI)
Sex	
Female	11.71 (11.35-12.08)
Male	9.48 (9.17-9.79)
Age, y	
<18	6.60 (6.27-6.93)
18-34	7.55 (7.15-7.96)
35-64	10.11 (9.78-10.43)
≥65	23.14 (22.26-24.01)
Race	
Non-Hispanic white	13.06 (12.69-13.43)
Hispanic	6.01 (5.73-6.3)
Black	6.13 (5.84-6.42)
Education	
No degree	7.69 (7.39-7.99)
High school or GED	10.36 (9.92-10.79)
Some college	11.90 (11.42-12.38)
Bachelor or higher	14.73 (14.09-15.38)
Income level (% of 2015 poverty line)	
Poor (<100%)	7.90 (7.54-8.26)
Near poor (100%-<125%)	8.93 (8.21-9.65)
Low (125%-<200%)	9.00 (8.59-9.41)
Middle (200%-<400%)	9.56 (9.23-9.88)
High (≥400%)	13.36 (12.88-13.84)
Insurance	
Private	11.70 (11.35-12.05)
Medicaid or Medicare	11.05 (10.62-11.49)
Uninsured	4.01 (3.65-4.36)
Region	
Northeast	11.18 (10.43-11.92)
Midwest	11.46 (10.91-12.01)
South	10.10 (9.65-10.55)
West	10.33 (9.86-10.79)

CI, Confidence interval; *GED,* General Education Diploma.

Medicare; the overhaul of Medicare Part B (outpatient services) that provided for more preventative services (eg, skin checks); and increased funding for Medicare Part D as a result of the PPACA.[5] Regional disparities in post-PPACA changes in rates of outpatient dermatologist visits might also reflect the regional impact of the PPACA passage in the United States, as well as draw attention to rural-urban disparities in dermatologic care.[6] Limitations include an inability to determine causation of the PPACA and inability to control for the differential timeline of implementation of the various mandates of the PPACA over the first year of its passage.

Table II. Significance of increase in outpatient dermatologic visit rate after PPACA passage, 2007-2015, among individuals receiving ≥1 outpatient-based dermatologist visit by sociodemographic characteristic

Characteristic	Population with ≥1 dermatologic visit before PPACA (2007-2010), %	Population with ≥1 dermatologic visit after PPACA (2011-2015), %	P value*
Sex			
Female	6.19	6.81	**.0026**
Male	4.76	5.04	.1118
Age, y			
<18	1.97	2.20	.1763
18-34	3.30	3.09	.3268
35-64	5.69	5.62	.7876
≥65	14.83	16.62	**.0065**
Race			
Non-Hispanic white	7.42	8.28	**.0002**
Hispanic	1.70	1.86	.2189
Black	1.62	1.86	.0861
Education			
No degree	2.31	2.72	**.0048**
High school or GED	4.93	4.69	.3748
Some college	6.69	6.50	.5704
Bachelor or higher	10.84	11.79	**.0375**
Income level (% of 2015 poverty line)			
Poor (<100%)	1.98	2.20	.2763
Near Poor (100%-<125%)	3.15	3.09	.8790
Low (125%-<200%)	3.21	3.70	**.0401**
Middle (200%-<400%)	4.66	4.73	.7668
High (≥400%)	8.63	9.63	**.0035**
Insurance			
Private	6.73	7.34	**.0055**
Public (Medicaid or Medicare)	4.40	4.31	.7320
Uninsured	1.03	1.27	.1855
Region			
Northeast	6.08	6.94	.1545
Midwest	4.98	5.83	**.0121**
South	5.83	5.92	.7181
West	5.12	5.49	.2661

Because Medical Expenditure Panel Survey reports data as full-year consolidated files, we were not able to split the 2 groups at March 2010. Bolded values are significant ($P < .05$).
GED, General Education Diploma; *PPACA*, Patient Protection and Affordable Care Act.
*P value for increase in visit rate after PPACA passage. Assessed by Pearson chi-squared test with Rao and Scott adjustment.

More research is necessary to further characterize the mechanisms behind differential effects of large health policy undertakings as we approach an era of substantial uncertainty in health care policy. Although our results show that the PPACA might not have led to statistically significant increases in outpatient visit rates to dermatologists for all Americans, almost all demographic groups showed an increase in outpatient dermatologic visit rate after PPACA passage. Should the provisions of the PPACA become fully eroded with no replacement, it is possible that visits to outpatient dermatologists will decline in many demographic groups. Ultimately, this research suggests that more tailored interventions might be beneficial for specific demographic groups to ensure equity in access to outpatient dermatologic care.

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REFERENCES

1. Yue D, Rasmussen PW, Ponce NA. Racial/ethnic differential effects of Medicaid expansion on health care access. *Health Serv Res*. 2018. https://doi.org/10.1111/1475-6773.12834.
2. Richardson AS, Davis SA, Feldman SR. The Patient Protection and Affordable Care Act's rationing of health care: implications for dermatology. *J Am Acad Dermatol*. 2014; 71(5):998-999.
3. McClellan M, Japinga M. The Affordable Care Act: what's next? *Annu Rev Med*. 2018;69(1):41-52.
4. Agency for Healthcare Research and Quality. Medical Expenditure Panel Survey: survey background. meps.ahrq.gov/mepsweb/about_meps/survey_ back.jsp#household; 2015. Accessed January 1, 2018.
5. Maga J, Lewis M. Patient Protection and Affordable Care Act (PPACA). *Int Anesthesiol Clin*. 2014;52(4):58-63.
6. Barker AR, Londeree JK, McBride TD, et al. The uninsured: an analysis by income and geography. *Rural Policy Brief*. 2013; (2013 6):1-4.

Effect of testosterone on chests and abdomens of transgender men

To the Editor: The chest is one of the greatest sources of dissatisfaction among transgender men,[1,2] and medical interventions, such as masculinizing chest surgery and testosterone, show significant improvements in self-confidence and quality of life.[3] This retrospective and prospective cross-sectional analysis evaluates the effects of testosterone on hair growth and acne on the chests and abdomens of 90 transgender men by using control groups of 30 cisgender men and 30 cisgender women.

Patients were retrospectively and prospectively recruited if they had no history of chest or breast surgery; did not use performance-enhancing drugs, systemic steroids, oral contraceptive pills, testosterones, estrogens, or medications known to cause gynecomastia; had no history of gender-affirming procedures, therapy, or treatment; did not have hormonal abnormalities; were not currently using acne treatment; and had no history of or were currently pregnancy. Patient demographics, including Fitzpatrick skin type, were similar among groups. Acne lesions and hair growth on the chests and abdomens were assessed by 2 blinded dermatologists with the Investigator Global Assessment scale and modified Ferriman-Gallwey scoring method, respectively.

Exogenous testosterone showed significant effects on the incidence of acne in transgender men ($P < .001$, relative risk 5.666, attributable risk 82%), which was present on the chest of 52% of transgender men taking testosterone and 9% of those not taking testosterone; differences in Investigator Global Assessment scale between groups were not significant (Fig 1). Transgender men taking testosterone had significantly higher Ferriman-Gallwey scores (median 5 [IQR 3-9], $P < .001$) than cisgender women and transgender men not on testosterone; however, their scores remained lower than those of cisgender men (median 10.5 [IQR 7.25-12], $P < .001$) (Fig 2). Chest binding and formulation of testosterone (100 mg/week intramuscularly or 5 mg/week transdermally) were not associated with acne or hair growth. However, duration of testosterone therapy was positively correlated with both hair growth (ρ 0.588, $P < .001$) and severity of acne (ρ 0.262, $P < .022$).

Exogenous testosterone stimulates male-patterned hair growth and body contour, improving self-confidence, sense of safety, symptoms of gender dysphoria, and societal perceptions of these patients.[4] The body hair pattern of transgender men on testosterone more closely resembled that observed on cisgender men than those on cisgender women or transgender men not on testosterone. Compared with those not on masculinizing hormonal therapy, patients taking testosterone had higher rates of acne, which was unrelated to route of testosterone administration or chest binding—the practice of compressing breast tissue to create a more masculine appearance of the chest.[5] Although the clinical relevance of these differences might vary from patient to patient, these results highlight the need for dermatologists to engage in the management of these patients, who might desire further hair growth or management of acne that occurred as a consequence of masculinizing hormonal therapy.

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