ongoing and evolving regulations and practice adaptations, 15.7 million patient visits and $3.5 billion in practice revenue could be lost through 2020.

Practices most frequently identified patient social distancing (67.1%; 95% CI, 63.8%-70.3%), patient COVID-19 concerns (67.2%; 95% CI, 63.9%-70.4%), and office workflow and personal protective equipment requirements (56.3%; 95% CI, 52.9%-59.7%) as significant challenges to recovery. Among those who responded, 1% specifically noted they retired from dermatology due to COVID-19 implications.

Limitations include estimations could have led to recall bias, and methodology could have introduced sampling and nonresponse bias. Those with lower work volumes potentially could have had more time to respond, but this bias was minimized by weekend-only data collection. A consistent large sample magnitude, crowdsourced responses,[4] representative demographic distribution, and CIs further mitigate biases and demonstrated significance. Our predictive model also does not account for the impact of a potential second wave or earlier than anticipated vaccine availability.

Our findings demonstrate the significant impact COVID-19 had on US dermatologic care and provide a better understanding of national trends. From an estimated pre-COVID baseline of 50 million annual US dermatology office visits,[5] a 30% decrease may lead to material adverse patient morbidity and practice economics. Telemedicine had mitigating effects, but the implications and magnitude of future integration are unclear. Further analyses will be required to assess the longer-term implications of COVID-19 on dermatology practice, identifying key factors influencing success in the "new normal."

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REFERENCES

1. Litchman GH, Rigel DS. The immediate impact of COVID-19 on US dermatology practices. *J Am Acad Dermatol*. 2020;83(2):685-686.
2. Harris Williams & Co. Dermatology Market Overview. Available at: https://www.harriswilliams.com/system/files/industry_update/dermatology_market_overview.pdf; 2013. Accessed July 18, 2020.
3. Rothstein BE, Gonzalez J, Cunningham K, Saraiya A, Dornelles AC, Nguyen BM. Direct and indirect patient costs of dermatology clinic visits and their impact on access to care and provider preference. *Cutis*. 2017;100(6):405-410.
4. Ranard BL, Ha YP, Meisel ZF, et al. Crowdsourcing—harnessing the masses to advance health and medicine, a systematic review. *J Gen Intern Med*. 2014;29(1):187-203.
5. Rui P, Okeyode T. National Ambulatory Medical Care Survey: 2016 National Summary Tables. Available at: https://www.cdc.gov/nchs/data/ahcd/namcs_summary/2016_namcs_web_tables.pdf. Accessed July 18, 2020.

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Treatment practices for psoriasis and how they are changing

To the Editor: Psoriasis is a chronic inflammatory disorder for which many new treatments are available. The purpose of this study was to assess how treatment for psoriasis has been changing from 2007 through 2016.

The National Ambulatory Medical Care Survey (NAMCS) is a cross-sectional survey of visits to nonfederal, ambulatory-based US physicians.[1] We assessed the prescribed treatments at visits with International Classification of Diseases, Ninth Edition code 696.1 or International Classification of Diseases, 10th edition code L40.9 listed among the 5

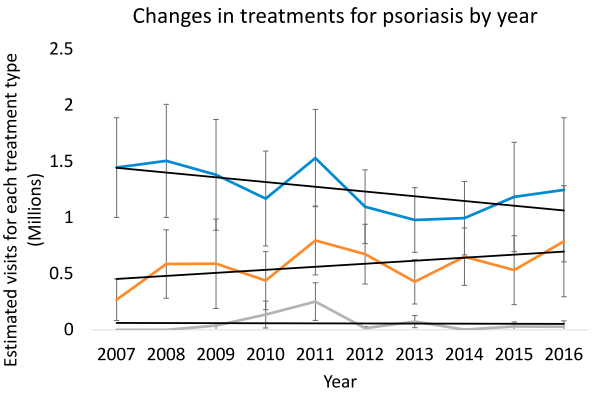

Fig 1. Medications used for psoriasis. The yearly estimates of topical agents (blue), systemic agents (orange), and phototherapy (gray) are presented with 95% confidence intervals and linear trendlines. Topical therapy is declining, and phototherapy use is stable.

Table I. Odds ratios for treatment modalities based on a 1-year increase in the study interval

Treatment type	Odds ratio (95% CI)
Topical medications overall	0.87 (0.83-0.91)*
Topical corticosteroids	0.90 (0.86-0.95)*
Topical vitamin D analog	0.75 (0.66-0.85)*
Topical calcineurin inhibitor	0.86 (0.74-0.99)*
Systemic corticosteroids	0.89 (0.77-1.0)*
Adalimumab	1.3 (1.0-1.6)*
Infliximab	1.9 (1.1-3.3)*
Etanercept	0.9 (0.76-1.1)
Ustekinumab	0.79 (0.48-1.3)
Secukinumab	—
Acitretin	0.95 (0.70-1.3)
Apremilast	1.4 (0.04-53)
Cyclosporine	0.76 (0.58-0.99)*
Methotrexate	0.92 (0.80-1.1)
Phototherapy	.92 (0.78-1.2)

CI, Confidence interval.
*Indicates $P < .05$.

leading diagnoses.[2] Data were analyzed by using SAS University Edition (SAS Institute, Cary, NC). To correct for multiple hypothesis tests performed, the standard alpha value of .05 was reduced to .005 by the Bonferroni correction.[3]

There were 935 visits, representing 23.2 (95% confidence interval [CI], 21.8-24.7) million visits. There were 12.1 (95% CI, 10.7-13.4) million visits by female patients, which was 51.9% (95% CI, 46.1-57.7) of the total. The most common race was white (68.9%; 95% CI, 63.4-74.4). There were 2.32 million visits per year and no change in visit frequency with an increase in the study year ($P = .2$). Topical medications were listed at about half of all visits (Fig 1). The use of topical agents decreased ($P < .001$) by an estimated 0.23% (95% CI, 0.16-0.30) per year (Table I and Fig 1). There was also a decrease in the use of topical corticosteroids ($P < .001$) and vitamin D analogs ($P < .001$) but not topical calcineurin inhibitors ($P = .04$). Topical corticosteroids represented 75% (95% CI, 68-82) of all topical medications observed, vitamin D analogs represented 28% (95% CI, 26-30), and calcineurin inhibitors represented 7.1% (95% CI, 5.4-8.5).

Systemic medications were listed at about a quarter of all visits (Fig 1). Biologics were listed at 12% (95% CI, 9.7-14) of all visits for psoriasis, with systemic corticosteroids at 7.1% (95% CI, 5.4-8.8) and other small molecule drugs at 8.6% (95% CI, 7.1-10). There was a 1% to 2% increase in visits with adalimumab and infliximab ($P = .03$), which was not significant after correcting for multiplicity. There were fewer visits over time for cyclosporine ($P = .04$). There was no change in visits at which etanercept ($P = .2$), ustekinumab ($P = .3$), acitretin ($P = .8$), apremilast ($P = .9$), and systemic corticosteroids ($P = .7$) were used. Phototherapy was listed at a small fraction of visits (Fig 1), and there was no change in use over time ($P = .3$).

A limitation of this study was that estimating changes in visits required unassigning and reassigning the weighting variable. Therefore, these estimates are more useful for their directionality and magnitude and not as detailed estimates of high accuracy.

Because 7.4 million people in the United States have psoriasis,[4] most patients with psoriasis do not seek ambulatory care in a given year. Since most people with psoriasis have mild disease,[5] our study supports the finding that many patients with mild disease do not seek treatment. Topical agents are the most commonly used treatments; however, their use is decreasing modestly, whereas biologic use is increasing. As more biologic treatments become available, we expect these trends may continue past the end of the study interval and increase in magnitude over time. Systemic corticosteroid use is common, whereas phototherapy has been and continues to be an infrequent and perhaps underused treatment.

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Mylan, Celgene, Pfizer, Valeant, AbbVie, Samsung, Janssen, Lilly, Menlo, Merck, Novartis, Regeneron, Sanofi, Novan, Qurient, National Biological Corporation, Caremark, Advance Medical, Sun Pharma, Suncare Research, Informa, UpToDate, and National Psoriasis Foundation and is founder and majority owner of www.DrScore.com and founder and part owner of Causa Research, a company dedicated to enhancing patients' adherence to treatment. Author Muddasani has no conflicts of interest to declare.

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REFERENCES

1. Centers For Disease Control and Prevention. National Ambulatory Medical Care Survey. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NAMCS; 2016. Accessed November 3, 2020.
2. 2014 micro-data file documentation. https://data.nber.org/namcs/docs/namcs2014.pdf. Accessed November 3, 2020.
3. Leon AC. Multiplicity-adjusted sample size requirements: a strategy to maintain statistical power with Bonferroni adjustments. *J Clin Psychiatry*. 2004;65(11):1511-1514.
4. Rachakonda TD, Schupp CW, Armstrong AW. Psoriasis prevalence among adults in the United States. *J Am Acad Dermatol*. 2014;70(3):512-516.
5. Stern RS, Nijsten T, Feldman SR, Margolis DJ, Rolstad T. Psoriasis is common, carries a substantial burden even when not extensive, and is associated with widespread treatment dissatisfaction. *J Investig Dermatol Symp Proc*. 2004;9(2):136-139.

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Tofacitinib for cutaneous and pulmonary sarcoidosis: A case series

To the Editor: Sarcoidosis is a multiorgan inflammatory disease characterized histologically by noncaseating granulomas. Cutaneous involvement occurs in approximately 25% of cases. Although not all patients require treatment, for those who do, corticosteroids and steroid-sparing agents may be useful. Unfortunately, these agents are not universally effective, and use may be limited by toxicity. Unmet need exists for new safe and effective therapies. The Janus kinase (JAK)—signal transducer and activator of transcription (STAT) pathway appears to play a role in pathogenesis. Experimental studies suggest tofacitinib may downregulate JAK-STAT—dependent pathways and reduce levels of proinflammatory cytokines implicated in granuloma formation[1,2]; successful treatment of sarcoidosis with JAK inhibitors tofacitinib[1,2] and ruxolitinib[3,4] has since been reported. In this series, we report 5 patients with cutaneous sarcoidosis successfully treated with tofacitinib.

We performed a single-center retrospective study of patients who received tofacitinib for biopsy-proven cutaneous sarcoidosis between September 2017 and June 2020. Patient characteristics are presented in Table I. The patient group comprised 5 women with a mean age of 57.4 years. Diagnosis of sarcoidosis was made on clinical and histopathologic correlation. All patients had investigations for extracutaneous involvement; 3 of 5 patients had pulmonary involvement confirmed by high-resolution computed tomography (HRCT). All patients had persistent, active cutaneous disease despite previous treatment.

Tofacitinib dose ranged from 2.5 to 16 mg daily (mean: 9.0 mg), and treatment duration ranged from 4 to 9 months (mean: 6.4 months). Tofacitinib was titrated according to response and tolerability. Patient 5 also received prednisone 25 mg at treatment onset, tapered over 6 weeks. Efficacy was assessed by using the activity portion of the Cutaneous Sarcoidosis Activity and Morphology Instrument (CSAMI). The response to treatment was recorded by calculating the difference in CSAMI activity score from baseline to the most recent evaluation; a decrease in score of 5 points reflected the minimal clinically important difference (MCID).[5] Pulmonary disease was assessed by subjective improvement in exercise tolerance and, where available, serial HRCT.

All 5 patients achieved the minimal clinically important difference with tofacitinib (Supplemental Fig 1; available via Mendeley at https://doi.org/10.17632/626cszwvm2.1). Initial improvement was recorded by most ($n = 4$) within 2 months of starting treatment. One patient who achieved complete remission and discontinued treatment experienced mild relapse after 5 months; subsequent reintroduction of tofacitinib led to rapid resolution. A mean continued remission duration of 8 months was recorded for the 2 patients who achieved complete response at the time of review. The 3 patients with pulmonary sarcoidosis reported cough reduction and improved exercise tolerance. Serial HRCT imaging in patient 1 showed progressive resolution of radiologic changes. Oral tofacitinib was well tolerated in all patients. Patient 1 had transient lymphocytopenia of 0.60×10^9/L (range, 1.0-4.0 $\times 10^9$/L), which spontaneously resolved.

In this small case series, oral tofacitinib improved skin disease in all 5 of our patients with cutaneous sarcoidosis and improved respiratory symptoms in