

Comprehensive Assessment of the Psoriasis Patient (CAPP): A Report from the GRAPPA 2015 Annual Meeting

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ABSTRACT. Outcome measures for psoriasis severity are complex because of the heterogeneous presentation of the disease. At the 2015 annual meeting of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA), members introduced the Comprehensive Assessment of the Psoriasis Patient (CAPP), a novel disease severity measure to more accurately assess the full burden of plaque psoriasis and subtypes, including inverse, scalp, nail, palmoplantar, and genital psoriasis. The CAPP is based on a 5-point physician's global assessment for 7 psoriasis phenotypes and incorporates visual analog scale-based, patient-derived, patient-reported outcomes. By quantifying disease effects of plaque psoriasis, 6 other psoriasis subtypes, as well as quality of life and daily function, the CAPP survey identifies a subset of psoriasis patients with moderate to severe psoriasis that would not be considered moderate to severe when assessed by the Psoriasis Area and Severity Index. The current version of CAPP is focused entirely on psoriasis. Feedback from our industry colleagues and collaborators has suggested that a psoriatic arthritis (PsA) measure may be important to include in the CAPP. At the 2015 GRAPPA meeting, we administered a survey to 106 GRAPPA members to determine whether a PsA measure should be included. A majority (74%) of respondents across all professions agreed that the CAPP should include a measure of PsA. Although responses varied widely on how PsA should be measured, a majority of the respondents reported that presence of PsA in both peripheral and axial joint assessment was important. (J Rheumatol 2016;43:961-4; doi:10.3899/jrheum.160115)

Key Indexing Terms:

INVERSE PSORIASIS NAIL PSORIASIS SCALP PSORIASIS
PALMOPLANTAR PSORIASIS GENITAL PSORIASIS PATIENT-REPORTED OUTCOMES

Validated outcome measures for psoriasis severity are essential for research and clinical practice. The 2 most widely used instruments to assess severity in clinical trials — the Psoriasis Area and Severity Index (PASI) and the static physician's global assessment (sPGA) — focus primarily on chronic plaque psoriasis. PASI measures the level of erythema, induration, and scale from psoriatic plaques by area of involvement, and calculates clinical improvement by percentage change from baseline. The most common forms of the modified sPGA are 5- or 6-point instruments with scores determined by presence of erythema, induration, or scale on areas of the body. The sPGA does not integrate body surface area involvement in its scoring. Both PASI and sPGA

instruments can identify changes in chronic plaque psoriasis; however, they either do not measure or they underrepresent other psoriasis phenotypes, such as scalp, nail, inverse, genital, and palmoplantar psoriasis. These psoriasis subtypes have a major effect on quality of life and daily functioning, and have been shown to correlate with an increased risk of psoriatic arthritis (PsA)^{1,2}. As a result of the limitations of existing psoriasis severity measures to properly assess subtypes, patients with these phenotypes have been largely undertreated.

The CAPP Tool

The Comprehensive Assessment of the Psoriasis Patient (CAPP) was developed over the last 5 years as a severity index for all psoriasis subtypes. The CAPP tool is based on the PGA, a validated, standardized classification of disease activity into 5 grades, which is easy to use in both clinical trials and clinical practice. A unique feature of the CAPP is its incorporation of patient-reported outcomes (PRO), providing equal weight to patient-derived outcomes and physician assessment of disease activity. PRO measures are essential to the evaluation and management of psoriasis patients, in whom quality of life and daily functioning are limited by their burden of disease.

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The CAPP contains questions for grading inverse (intertriginous), scalp, nail, palmoplantar, genital, and chronic plaque psoriasis. For each psoriasis subtype, a clinical severity score (such as the erythema/thickness/scale score) is assigned from 0 to 5, along with a score for percentage area involved (scalp, nail, chronic plaque) or severity of areas involved (inverse, palmoplantar, genital). The sum of the 2 highest severity scores is combined with the higher of 2 PRO scores to obtain the CAPP score. PRO data are evaluated for 2 symptoms (the first symptom is pain; the second symptom is pruritus, ability to work, intimacy, or physical health) with visual analog scales ranging from 1 to 10. The final CAPP score is an estimation of the overall severity of subtype disease ranging from 0 to 20. Individual scoring systems were modified from the reported Brigham Inverse Psoriasis Severity Index and Brigham Scalp Nail Inverse Palmoplantar Psoriasis Composite Index³.

The CAPP tool may provide an opportunity for patients with non-plaque psoriasis phenotypes, who did not previously qualify for research or clinical trials based on PASI measurements, to enroll in studies. Thereby, psoriasis drug development might become more inclusive of the many subtypes of disease. Recent biologics and small molecules have shown considerable promise in the treatment of plaque psoriasis, as they target specific aspects of the pathogenic pathway. However, these drugs are not easily available to patients with non-plaque psoriasis because they do not meet criteria for “moderate to severe” psoriasis by PASI. The CAPP, through improved disease evaluation and measurement, could provide the necessary empirical evidence to start biologic and small molecule treatment in these undertreated subsets of patients to better control disease activity.

Should CAPP Include a Psoriatic Arthritis Measure?

Dr. Abrar Qureshi (Providence, Rhode Island, USA). Dr. Qureshi presented the CAPP measure to audience members at the GRAPPA 2015 annual meeting, followed by discussion of whether evaluation for PsA was a critical component in the assessment of psoriasis. A 4-item survey was administered to GRAPPA members to determine whether a PsA measure should be included in CAPP. A total of 106 members completed surveys, with 54 rheumatologists, 19 dermatologists, 3 rheumatologist/dermatologists, 14 industry professionals, 5 rheumatologist/industry professionals, 1 dermatologist/industry professional, 3 non-clinician scientists, 5 other clinical roles, 1 other clinical role and industry, and 1 medical student. Responses to survey questions are detailed in Table 1 and summarized in Figure 1. A majority (74%) of respondents across all professions agreed that the CAPP should include a measure of PsA. One member added that the measure should be included in CAPP, but as an appendix, to minimize the complexity of the instrument. Similarly, another suggested that PsA should be assessed only in those with a musculoskeletal complaint, and through an instrument separate from CAPP.

While 42% of respondents believed that PsA should be assessed only by presence, 30% recommended assessing PsA by severity. Interestingly, responses varied by profession, with rheumatologists (45%), industry professionals (48%), and other clinicians (67%) preferring assessment by presence/absence, versus dermatologists (39%) and non-clinician scientists (67%) preferring assessment by severity. One member suggested that presence of disease is preferable for clinical use of the instrument, while severity of disease should be assessed if used for investigational study.

Table 1. GRAPPA members' responses to inclusion of a PsA measure in the CAPP.

Question	Response	Total Respondents per Profession *						Total, n (%) †
		Rheumatologist, n (%)	Dermatologist, n (%)	Other Clinical Roles, n (%)	Non-clinician Scientist, n (%)	Industry Professional, n (%)	Other, n (%)	
		62 (58)	23 (22)	6 (6)	3 (3)	21 (20)	1 (1)	
1. Should CAPP include a PsA measure?	Yes	43 (69)	13 (57)	6 (100)	3 (100)	17 (81)	1 (100)	78 (74)
	No	19 (31)	10 (43)	0	0	4 (19)	0	28 (26)
2. Should the measure address PsA (present/absent) or measure PsA severity?	PsA present/absent	28 (45)	5 (22)	4 (67)	1 (33)	10 (48)	0	45 (42)
	PsA severity	15 (24)	9 (39)	2 (33)	2 (67)	5 (24)	1 (100)	32 (30)
	Both	5 (8)	1 (4)	0	0	3 (14)	0	8 (8)
	Neither	14 (23)	8 (35)	0	0	3 (14)	0	21 (20)
3. How should PsA be measured? ‡	Peripheral	6 (10)	0	0	1 (33)	5 (24)	0	11 (10)
	Axial	0	0	0	0	0	0	0
	Both	41 (66)	15 (65)	6 (100)	2 (67)	12 (57)	1 (100)	71 (68)
	Neither	15 (24)	8 (35)	0	0	3 (14)	0	23 (22)*

Respondents claiming multiple professional categories are annotated in all applicable categories. † Respondents claiming multiple professional categories are annotated as a single response. ‡ One response (“peripheral” and “neither”) was omitted. GRAPPA: Group for Research and Assessment of Psoriasis and Psoriatic Arthritis; CAPP: Comprehensive Assessment of the Psoriasis Patient; PsA: psoriatic arthritis.

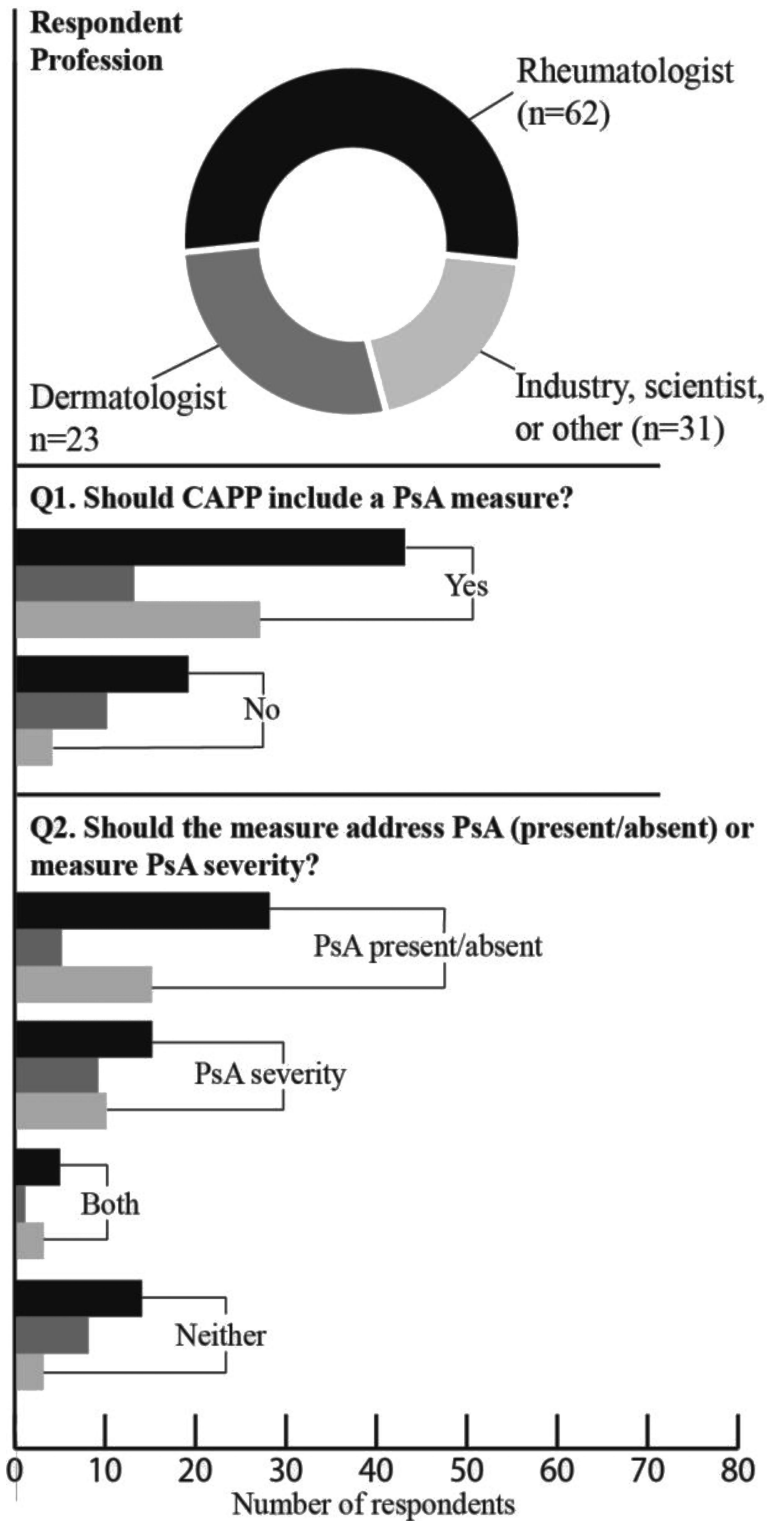


Figure 1. Summary view of GRAPPA responses to inclusion of a PsA measure in the CAPP. CAPP: Comprehensive Assessment of the Psoriasis Patient; GRAPPA: Group for Research and Assessment of Psoriasis and Psoriatic Arthritis; PsA: psoriatic arthritis.

Members were also asked which joints to assess, with most (68%) agreeing that both peripheral and axial joints

should be evaluated. A small group (10%) preferred assessment only of peripheral joints, while no respondents

preferred assessment of axial joints alone. One member argued for a measure of total burden of disease to include both skin and joints. Regarding the survey as a whole, one member expressed concern that dermatologists would not be able to accurately assess measures of PsA, and therefore a more global patient assessment is best, while another expressed preference for CAPP as a research tool, citing too many healthcare provider entries as burdensome for clinical practice.

The CAPP tool provides an inclusive process to measure disease severity, by incorporating patient-surveyed PRO into physician assessment. By measuring severity of areas that the PASI does not take into account, the CAPP is able to fully record disease activity for inverse, scalp, nail, palmoplantar, and genital psoriasis phenotypes. Individual scoring systems may be used alone or as a composite index. In addition, PRO are essential to the evaluation and management of patients

with psoriasis, in whom quality of life and daily functioning are limited by their burden of disease. A majority of GRAPPA members agreed that the CAPP should include a measure of PsA. Our investigators are in the process of pilot-testing a PsA measure that will eventually be included into CAPP.

REFERENCES

1. Eder L, Haddad A, Rosen CF, Lee KA, Chandran V, Cook R, et al. The incidence and risk factors for psoriatic arthritis in patients with psoriasis—a prospective cohort study. *Arthritis Rheumatol* 2015 November 10 (E-pub ahead of print).
2. Williamson L, Dalbeth N, Dockerty JL, Gee BC, Weatherall R, Wordsworth BP. Extended report: nail disease in psoriatic arthritis—clinically important, potentially treatable and often overlooked. *Rheumatology* 2004;43:790-4.
3. Patel M, Liu SW, Qureshi A, Merola JF. The Brigham Scalp Nail Inverse Palmoplantar Psoriasis Composite Index (B-SNIPI): a novel index to measure all non-plaque psoriasis subsets. *J Rheumatol* 2014;41:1230-2.