The assessment and management of patients with psoriasis – Where are we since the last audit?
A national clinical re-audit by the British Association of Dermatologists
based on NICE clinical guidelines and audit standards

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Introduction
This is the report on the second round of the national BAD audit of psoriasis practice, as measured against NICE guidelines and standards CG153, and follows similar analyses in 2013. Additionally, an earlier audit on the provision of psoriasis services was conducted in 2007. Other than a re-audit, action points from 2013 included BAD provision of central resource for access to scoring tools for PGA, PASI, DLOI and PEST, now made available (www.bad.org.uk/healthcare-professionals/psoriasis and www.bad.org.uk/healthcare-professionals/forms-downloads). Multiple versions of the PGA scoring form are available with minor variations in each so in the absence of a consensus form this was not provided. Provision of structured proformas for new and follow-up patients is in progress.

Methods
Data was collected by email from an excel spreadsheet. Each spreadsheet was completed for five consecutive patients covering the work of one or more clinicians. The data collection period was February to May 2017, and analysis was conducted from June to October 2017. All analysis was conducted using the R statistical language.

Results
Responses
In total, 254 responses from 194 Dermatology units were received (17.0% response rate), representing data from 1270 patients. This compares with 360 respondents providing data on 1080 patients from 170 units in 2013. In 2007 a service-level audit was conducted which accrued data from 100 units, with no patient-level data. Figure 1 displays the breakdown of responses by region.

Patient population
Chronic plaque psoriasis (1162, 91.5%) exceeded localised pustular psoriasis (30, 2.3%), generalised pustular psoriasis (3, 0.2 %), erythroderma (15, 1.2%) and other types of psoriasis (60, 4.7%). Similar figures were observed in 2013. The majority (435, 84.3%) had been attending clinic for at least 2 years; 291 (22.9%) for 6-10 years, 251 (19.8%) for 11-20 years and 92 (7.2%) for over 20 years (Figure 2). In 2013, marginally fewer patients (76.9%) had been attending for more than 2 years with corresponding increase in other fractions.

A total of 871 patients (68.6%) were seen in adult general Dermatology clinic, 269 (21.2%) in dedicated psoriasis clinics, 88 (6.9%) nurse-led clinics, and 17 (1.3%) in other settings (Figure 3). Paediatric Dermatology clinics accounted for 25 (2%) of the responses. In 2013 these figures were broadly
similar; none of the changes were statistically significant (all p values >0.05, two-sample proportionality test).

There was a significant rise in the use of biologics from 25.6% (280 cases) to 31.5% (400 cases), p<0.05. A corresponding drop in the use of topical therapy alone was observed from 11.2% (122) in 2013 to 7.4% (94), p<0.05. Other modalities of phototherapy (119, 9.4% in 2017 vs. 109, 10% in 2013), systemic non-biologic therapy with/out phototherapy (649, 51.1% in 2017 vs. 559, 51.2% in 2013) remained similar (Figure 4).

**Nursing and psychological support**

Respondents to this audit answered the questions “Do you have nursing support for patients with psoriasis in your hospital?” and “Do you have the psychological support for patients with psoriasis in your hospital?” A total of 226/254 (89%) had nursing support for their psoriasis patients. This was unchanged from 2013 (88.8%) and higher than 2007 (80.2%). Psychology service provision remained low 61/254 (24%); marginally higher than in 2013 (20%) but lower than 2007 (44%) (Figure 5). None of these differences were statistically significant.

**Availability of phototherapy services**

A total of 228/254 (90%) had PUVA and 249 (98%) had narrowband UVB available. These are slightly higher than in 2013, where 87% had PUVA and 94% had narrowband UVB available, and in 2007 where the proportions were 90% for PUVA and 92% for narrowband UVB (Figure 6). None of these differences were statistically significant.

**Therapies offered**

All except two of the 254 respondents (99.2%) reported prescribing non-biologic systemic therapies, whilst 219 (86.2%) reported prescribing biologic therapies, with 203 (79.9%) contributing to BADBIR (Figure 7).

**Phototherapy services waiting times**

Phototherapy waiting times of greater than 4 weeks were reported by 116 respondents (45.7%) for PUVA and 144 (56.7%) for UVB, with the overall, average waiting times being longer than 4 weeks for the majority (51.1%) and exceeding that in 2007 and 2013 (Figure 8).

**NICE standards – recording clinical information**

Recommended documentation includes the Physician’s Global Assessment (PGA), Body Surface Area (BSA) affected, the involvement of nails, high-impact and difficult-to-treat sites, and assessment for any systemic upset. When assessing the disease severity, all people should have that information recorded at appropriate times in the patient pathway (i.e. at first presentation, at each referral point in the treatment pathway and to evaluate the efficacy of intervention).

**Clinical recording**

PGA was recorded in 843 (66.4%) cases and affected BSA was recorded in 724 (57%), see Figure 9, compared with 77.5% (p<0.05) and 53%, respectively, in 2013. The involvement of nails, high-impact and difficult-to-treat sites was recorded in 910 (71.7%) cases, similar to the proportion in 2013 (70.9%). Systemic upset was recorded in 551 (43.4%) down from 51% in 2013, p<0.05.
Severity assessment and patient impact

All patients with psoriasis should be assessed using a validated tool to determine severity of psoriasis at appropriate times in the patient pathway. Of the 1270 patients sampled in this audit, 898 had chronic plaque psoriasis, of which 881 (98.1%) had their severity assessed using a validated tool. All patients, regardless of psoriasis subtype, should be assessed for the impact of psoriasis on physical, psychological and social well-being at appropriate times in the patient pathway using a validated tool. Of the 1270 patients sampled, the impact of psoriasis was recorded in 1111 (87.5%) on physical well-being (78.3% in 2013, p<0.05), 1004 (79.1%) on psychological well-being (71.4% in 2013, p<0.05) and 994 (78.3%) on social well-being (69% in 2013, p<0.05). Of the 1270 sampled patients, 812 (63.9%) had this assessment performed using a validated assessment tool (Figure 10).

Psoriatic arthritis

All psoriatic patients should be offered annual assessment for psoriatic arthritis. Of the 1270 patients sampled, 881 (69.4%) were assessed for psoriatic arthritis compared with 61.7% in 2013 (Figure 11). Of the 864 positive cases, 97 (11.2%) were already under the care of a rheumatologist, and 536 (69.9%) of the remaining 767 patients were assessed using a validated tool (PEST) (Figure 11). NICE states that those with suspected psoriatic arthritis should be referred to a rheumatologist. Of the 185 cases where psoriatic arthritis was suspected, 18 were already under the care of a rheumatologist and of the remaining 167, 139 (83.2%) were referred to specialist rheumatology services (Figure 12).

Discussion

The response to the audit was similar in volume and geographic spread to 2013, with fewer overall respondents but more patient data recorded. Clinic and patient type has not changed much. In 2013, the lack of availability of psychological services was apparent, and there has been no improvement. There has been a rise in waiting times for both PUVA and narrowband UVB in successive audits. There has been a shift towards biologics since 2013. The way we manage psoriasis continues to evolve with increasing use of biologics and small molecules. This is borne out in this audit and will have implications on funding issues as dermatology is becoming a more expensive specialty which has been seen traditionally as a relatively low-cost one. This may have implications for funding of emerging treatments.

Conclusions

Psoriasis continues to be treated appropriately and according to national guidelines and standards in the U.K. for the majority of sampled cases. Provision of psychological support and timely access to phototherapy are areas where improvements could be made in the provision of services to psoriasis patients. Data recording and collecting according to standardised measures and proformas lend themselves to paperless practice which is underway in the U.K. The next phase of practice and the audit of this will be affected by this transition.
**Figure 10.** Number of recorded assessments of impact on physical, psychological and social wellbeing in patients with psoriasis, and number in which this was performed using a validated tool.

**Figure 11.** Number of recorded assessments of psoriatic arthritis in 2013 and 2017.

**Figure 11a.** Proportion of recorded assessments of psoriatic arthritis and use of validated tools in 2017 by region.

**Figure 12.** Number of recorded assessments of psoriatic arthritis.

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### ACTION POINTS

<table>
<thead>
<tr>
<th>Suggested action</th>
<th>Implementation date</th>
<th>Additional notes</th>
<th>Staff member responsible</th>
<th>Change Stage</th>
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<tbody>
<tr>
<td>Raise the issue of access to psychological support for patients with psoriasis with the All Party Parliamentary Group on Skin</td>
<td>August 2018</td>
<td>To be undertaken through the BAD Executive</td>
<td>Health Informatics sub-committee in association with the British Society for Medical Dermatology</td>
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<tr>
<td>Produce structured guidance for clinicians seeking psychological support for their psoriatic patients</td>
<td>2019</td>
<td></td>
<td>Health Informatics sub-committee in association with the British Society for Medical Dermatology</td>
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<tr>
<td>Finalise the introduction of new patient and follow-up patient clinic proformas for psoriatics and to ensure compatibility with model of paperless data entry</td>
<td>December 2019</td>
<td></td>
<td>Health Informatics sub-committee in association with the Therapy &amp; Guidelines sub-committee and British Society for Medical Dermatology</td>
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Change stage key: 1 Agreed but not yet actioned; 2 Action in progress; 3 Made – partial; 4 Full implementation completed