The landscape of psoriasis provision in the UK

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Abstract
Psoriasis remains one of the commonest conditions seen in dermatological practice, and its treatment is one of the greatest cost burdens for the UK NHS. Treatment of psoriasis is complex with numerous overlapping lines and modalities of therapy employed in combination. This complexity reflects the underlying pathophysiology of the disease as well as the heterogeneous population which it affects. NICE guidance for the treatment of psoriasis has been available since 2013 and has been the subject of 3 national audits conducted by the British Association of Dermatologists (BAD). This report synthesises the results of the most recent of those exercises and places it in the context of NICE guidance and previous audits. It clearly shows the significant burden of disease, issues with provision of services and long waiting times as well as the marked shift in therapeutic modalities towards targeted biologic therapies.

Introduction
Psoriasis continues to be one of the most common diseases seen in hospital dermatology practice in the United Kingdom. The emergence of biological targeted therapies in the last decade has revolutionised treatment of the disease, but it remains a lifelong chronic condition with significant morbidity and health economic impacts. 2011 saw the publication of the British Association of Dermatologists (BAD) initiated Quality Standards for Dermatology which defines the expected provision of skin care services in the UK. In 2013 the National Institute for Health and Care Excellence (NICE) published standards and guidance for the treatment of psoriasis (CG153). Immediately following this, the BAD conducted an audit of the provision of psoriasis therapy in UK and Irish hospitals. The primary actions arising from that audit were to re-audit in order to assess uptake of the standards over time, and to provide centralised scoring tools.

Report
In 2017/2018 a further national audit was conducted across the UK and Ireland to assess the uptake of CG153’s recommendations and standards and assess the adherence to the Quality Standards for Dermatology. In all cases 100% adherence to the standards are
expected. Data were collected by email using an Excel (Microsoft Corporation) spreadsheet with set fields completed by respondents (supplementary material). 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, analysis was conducted from June to October 2017. Analysis was conducted using a novel and reproducible program written in the R statistical language\(^5\) (supplementary data).

The response to the audit was similar to the previous cycle, with fewer overall respondents (254 respondents from 194 units in 2017 vs 360 respondents from 170 units in 2013) but more patient data (1270 patients in 2017 vs 1080 patients in 2013) recorded (as a result of using five rather than three sampled cases for each respondent). The regional spread of responses was also not significantly different than that in 2013 (Fig. 1). Similar proportions of psoriasis subtypes, balances of patient clinics and availability of services for those patients were recorded (Supplementary Data). In 2013 the lack of availability of psychological services (standard 1 of the Quality Standards for Dermatology) was apparent, and action was suggested to increase that. However, there is no evidence that there has been an increase in the provision of psychological services reported in each clinical unit (Fig 2).

Phototherapy remains an important therapeutic modality for the treatment of plaque psoriasis\(^6\). A significant trend was seen in this audit in waiting times for phototherapy services with a striking rise in the waiting times for both PUVA and narrow-band UVB (figure 2). This may represent an increasing number of patients without a concomitant increase in provision of resources to the trusts providing the phototherapy to patients. Over the last decade there has been a rapid rise in availability of targeted biologic therapies for the treatment of moderate to severe psoriasis\(^7\). In keeping with this, the audit data demonstrated that there has been a change in the balance of modalities of therapy with more patients now being prescribed biological therapies (Fig 3). If this trend continues the pressure on resources may be more acutely felt in future years.

Discussion

There has been significant improvement in the recording of patient well-being since the publication of CG153 but little other positive change in the practice with longer phototherapy waiting times and ongoing lack of psychological support for patients. A
constrained economic landscape, restricted availability of other resource (staff, equipment, etc.) and competing clinical priorities are likely factors in this. The marked increase in use of biological therapies is positive for patients with severe disease but carries potential financial consequences. There is no evidence of significant change in the patient population in this study (supplementary data). An important question for clinicians and policymakers must therefore be whether the NICE standards and guidelines require review or if an alternative approach to psoriasis management needs to be envisaged to alter UK practice.

Learning points
1: Provision of care for patients with psoriasis continues to be challenging.
2: Provision of psychological support remains below the standards in NICE CG153.
3: Phototherapy treatment waiting times are lengthening.
4: A greater proportion of patients are being treated with biologic therapies.

References
1: Boehncke WH, Schön MP. Psoriasis. Lancet. 2015;386(9997):983–994. doi:10.1016/S0140-6736(14)61909-7
2: Langley RG, Krueger GG, Griffiths CE. Psoriasis: epidemiology, clinical features, and quality of life. Ann Rheum Dis. 2005;64 Suppl 2(Suppl 2):ii18–ii25. doi:10.1136/ard.2004.033217
3: The National Institute for Health and Care Excellence. Psoriasis: assessment and management Clinical guideline (CG153) 2012, Updated 2017, Accessed 2019. https://www.nice.org.uk/guidance/cg153
4: Eedy DJ, Griffiths CE, Chalmers RJ, et al. Care of patients with psoriasis: an audit of U.K. services in secondary care. Br J Dermatol. 2009;160(3):557–564. doi:10.1111/j.1365-2133.2008.08987.x
5: R Core Team (2013). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. http://www.R-project.org/.
6: Rácz E, Prens EP. Phototherapy of Psoriasis, a Chronic Inflammatory Skin Disease. Adv Exp Med Biol. 2017;996:287–294. doi:10.1007/978-3-319-56017-5_24

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7: Egeberg A, Ottosen MB, Gniadecki R, et al. Safety, efficacy and drug survival of biologics and biosimilars for moderate-to-severe plaque psoriasis. Br J Dermatol. 2018;178(2):509–519. doi:10.1111/bjd.16102

8: Quality standards for dermatology: providing the right care for people with skin conditions. 2011. https://www.bad.org.uk/shared/get-file.ashx?itemtype=document&id=795.
Figure 1: Regional responses to the audit. There were responses from a wide range of regions in the UK and Ireland. The figure shows the numbers of respondents from each of those regions.
Figure 2: Provision of psychological services and waiting times for phototherapy. A illustrates the change over time of access to psychological (upper part) and nursing (lower part) support in psoriasis clinics over the years of national audits. There remains a low rate of psychological support which has not improved over time. B shows the distribution of waiting times for phototherapy for patients with psoriasis and clearly demonstrates an increasing delay over the years, with most patients waiting more than 4 weeks for phototherapy in 2017.

A: Access to Nursing & Psychological Support

B: Waiting times for phototherapy by audit year.
Figure 3: Balance of therapeutic modalities used for psoriasis. Modality of therapy was not recorded in 2007, but between 2013 and 2017 there has been a significant ($p<0.05$, Fisher's exact test) decrease in use of topical therapy alone and marginal ($p>0.05$) decrease in phototherapy use, with concomitant increase in the use of biologic therapies. This reflects the increase in availability of biologics and possibly the increased confidence of clinicians in their use. The “other” category comprised 3/7 Apremilast, 2/7 topical then non-systemic biologic, 1/7 acitretin and 1/7 NA.

Supplementary data: Original Excel questionnaire, R code and full dataset