More than Skin Deep: The Underlying Burdens of Psoriasis and Psoriatic Arthritis

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*The figure of 2.1 million was derived using a calculation of 3% psoriasis population prevalence (Population numbers were derived from the QOF practice data base - https://digital.nhs.uk/data-and-information/publications/statistical/quality-and-outcomes-framework-achievement-prevalence-and-exceptions-data/2019-20.The 3% prevalence calculation was based on applying the estimate given in the Psoriasis Association publication 'Facts about Psoriasis – regional data' which states 3% as the percentage of the UK population suffering from psoriasis (Psoriasis Association quotes their figures sourced from the Office for National Statistics. Region and Country Profiles: Key Statistics 19 June 2013. http://ons.gov.uk/ons/taxonomy/index.html?nscl=Population#tab-data-tables)

Wilmington additionally used a benchmark quoting a mid-point of the 2-4% psoriasis prevalence in Western Populations (Stern 2004, Gefland 2005 , Kurd and Gefland 2009) cited in the following source (Parisi R, Griffiths CEM, Ashcroft DM (2011) Systematic review of the incidence and prevalence of psoriasis. British Journal of Dermatology 165: e5). Estimates of the 640,000 PsA prevalence of have been calculated by applying the upper benchmarks from Ocampo DV and Gladman D (2019) Psoriatic arthritis. 20;8: F1000 Faculty Rev-1665, which indicate that of the population who have Psoriasis, 30% are estimated to have Psoriatic Arthritis (PsA). Existing UK-specific psoriasis population prevalence estimates that provide a lower prevalence figure are likely to constitute an under-representation of the actual psoriasis population due to under-reporting of cases, undiagnosed patients and poor coding practices.

Foreword

Sir Paul Beresford, MP for Mole Valley, Former Chair and Member of the All-Party Parliamentary Group on Skin.

The All-Party Parliamentary Group (APPG) on Skin was established in 1994 to increase understanding about skin care issues in Parliament, and to work towards achieving improvements in the treatment and management of patients with skin disease. As a former Chair, I know first-hand that a key component of the group's work has been focused on the importance of raising awareness of the wider issues that need to be addressed within health and social care, in order to improve the management of interlinked conditions such as psoriasis and psoriatic arthritis (PsA). This report looks to demonstrate that these conditions are not just 'skin deep'. Instead, they can precipitate a range of wider complications and burdens for individuals, including cardiovascular, metabolic, as well as mental health issues.

Those affected by conditions like psoriasis and PsA already faced a number of severe difficulties before the emergence of COVID-19 – unfortunately, the impact of the pandemic has exacerbated these challenges further, as well as placing a strain on the health and care services that were already overstretched and looking for increased resources. We have heard how many dermatology and rheumatology staff have been redeployed to support wider NHS healthcare needs, outpatient appointments have been delayed or cancelled and face-to-face appointments have in many cases been replaced by remote consultations. All to meet the often life and death demands imposed by COVID-19 care.

For some with psoriasis and PsA, the pandemic has resulted in delayed access to vital diagnosis and treatment. Waiting lists that were already too long have since grown significantly, and many of the individuals caught up in this backlog could develop the complications that can present if optimal care is not given.

However, alongside these challenges, there have also been significant changes in the way that dermatology and rheumatology services have been delivered, including an increasing uptake of technology. This has arguably helped to overcome some of the longstanding barriers in making care more accessible. In addition, this has demonstrated that despite perceptions to the contrary, service change can in fact occur rapidly. For those affected by these conditions both now and in the future, it is vital that these improvements are continued and accelerated, where appropriate.

In developing this report, I have been shocked at just how challenging the management of dermatology and rheumatology services are at present. When looking at the number of people with these two interlinked conditions in my constituency of Mole Valley for instance, alongside the staff who are in post and available to manage them, it makes me realise the extent to which there is a need for the wider workforce to be involved in their care pathways. Mole Valley is no different from other constituencies which are similarly challenged, and more so for us all in a post-pandemic world.

Drawing on these stark realities, this timely report highlights a number of areas that can help transform some of the major issues that health and care services face. This will ensure people with psoriasis and PsA receive the right care, at the right time and in the right place. As highlighted by the experts who supported the report's development, it is paramount that, moving forward, we ensure speedy diagnosis, access to treatment and holistic management for those suffering from psoriasis and PsA.

We know the comorbidities associated with both interlinked conditions can in some cases be severe, but we can prevent such adverse effects if we promote best practice among our health and care professionals, ensuring no one is left behind. As we make the transition to new models of care in the form of Integrated Care Systems (ICSs) and Primary Care Networks (PCNs), the health and care sector must now work collaboratively to ensure psoriasis and PsA have a place in local priority-setting discussions to enable high-quality service planning.

We are currently at a crossroads in the future of psoriasis and PsA care in this country – it is beholden upon us to rethink our approach and embrace the recommendations that will help to transform the lives of all those affected by these interlinked conditions.

A snapshot of psoriasis and PsA in Mole Valley

The graphic below provides a snapshot of the prevalence of psoriasis and PsA within a Parliamentary constituency, and the availability of dermatologists within its respective local ICS.

Mole Valley Constituency:

- *Sits within Surrey Heartlands ICS*
- *Constituency potentially has 33,000 people with psoriasis and almost 10,000 with PsA*[99]
- *40 FTE dermatologists in post in Kent, Surrey and Sussex region*[81]
- *This figure equates to 1 FTE consultant per 117,177 population across the region*[81]

Example prevalence estimate table[16,17,18]

Area	Population	Psoriasis prevalence	PsA prevalence
Surrey Heartlands Health and Care Partnership	1,103,582	33,107	9,932

Source: Psoriasis Association (2020); Ocampo DV and Gladman D (2019); and England Quality and Outcomes Framework 2019/2020)

Executive summary

A diagnosis of psoriasis can conjure an image of red irritated skin, but this condition goes much deeper than a rash. As a long-term, chronic condition, psoriasis and its interlinked condition, psoriatic arthritis (PsA) precipitate physical and emotional symptoms and can cause potentially irreversible damage.

Psoriasis is an immune-mediated inflammatory disease that affects the skin and can lead to an inflammatory condition, PsA, which affects the joints. Psoriasis occurs when the immune system sends faulty signals that cause the skin cells to grow too quickly. As a result, cells pile up anywhere on the skin's surface to form psoriatic lesions. It has been previously estimated that 1.8 million people are affected by psoriasis in the UK, with the prevalence of the condition around 2–3%.[19] There are many types of psoriasis that come with their own specific symptoms and some may go on to develop other related health conditions, such as cardiovascular disease (CVD), diabetes and depression. PsA, a form of inflammatory arthritis, develops in up to 1 in 3 people with psoriasis.[7,8]

This report has been developed in consultation with an expert working group (EWG) who have provided insight into how health and social care services are currently managing people with these conditions. The NHS Long Term Plan (2019) and other major recent NHS policy documents have omitted specific detail to address the challenges of people living with psoriasis and PsA, creating concerns that the needs of this patient group are being overlooked.[20] The aim of this report is therefore to raise awareness and improve the understanding of the impact of psoriasis and PsA as interlinked conditions, identifying their personal, NHS and socioeconomic burden in the UK. This report presents the findings from research and qualitative data to highlight the true impact of these conditions, proposing recommendations to strengthen policy and their management across the NHS. The aim being to both alleviate the impact of the condition on individual quality of life, increase speed of diagnosis and improve the efficiency of the health system.

The EWG felt that dermatology and rheumatology services, where psoriasis and PsA are managed, are currently two of the lowest priorities for the NHS, and this has been exacerbated by the COVID-19 pandemic. They collectively agreed that early diagnosis and treatment of psoriasis is critical to reducing the likelihood of an individual going on to develop PsA and other associated complications and comorbidities. As we emerge from the pandemic, the group believes now is the critical time for changes to be made in how these conditions are treated.

For the first time, this report also provides data for individual Sustainability and Transformation Partnerships (STPs), clinical commissioning groups (CCGs), health boards and English parliamentary constituencies to estimate the numbers of people living with psoriasis and PsA. This data analysis suggests that potentially there are in fact approximately 2.1 million people in the UK with psoriasis and 640,000 people with PsA.[1] The availability of this data provides us with a critical opportunity to guide the future commissioning and delivery of services.

Data analysis suggests that there are approximately 2.1 million people in the UK with psoriasis and 640,000 people with PsA.[1]

Key recommendations for improving psoriasis and PsA services

Prioritising psoriasis and PsA as interlinked conditions

1. Raise awareness of psoriasis and PsA as interlinked conditions

Psoriasis and PsA have traditionally been neglected conditions even though it is increasingly recognised that psoriaisis is a chronic inflammatory condition. Failure to recognise this can leave vulnerable patients facing uphill battles to access treatment across disparate ‘Cinderella services’ within the NHS. Recognition of the impact the pandemic has had on services, and the opportunities arising to adopt new ways of working, makes now an important time for raising awareness and taking prompt action. This could be spearheaded through engagement with MPs and the third sector.

2. Prioritising early diagnosis and treatment of psoriasis and PsA

When psoriasis becomes difficult to self-manage or is not responding adequately to first line treatment, there is a critical window for referral from primary care onto specialist services. Early diagnosis and management of psoriasis is essential for delaying progression of an individual going on to develop PsA and other associated complications and comorbidities which include obesity and fatty liver disease.

Optimising service planning

3. Use data to understand local populations and establish a population health management approach to care

It is essential that Integrated Care Systems (ICSs) and specialist teams understand their psoriasis and PsA population and how services are functioning so that good practice and unwarranted variation can be addressed between these interlinked conditions. Establishing clear psoriasis and PsA prevalence, waiting times and hospital admission data will help to embed a population health management (PHM) approach, where at-risk populations can be identified, and targeted interventions can be implemented at scale.

4. Support the development of integrated care pathways

Integrated care pathways for psoriasis and PsA need to be made explicit across clinical networks and led by clinical champions at an ICS level. This is vital for a PHM approach, to reduce variation in service delivery and help minimise health inequalities. The use of integrated pathways means those with psoriasis and PsA should be managed across the continuum of the disease by an integrated team rather than in silos where specialist and community care are divided.

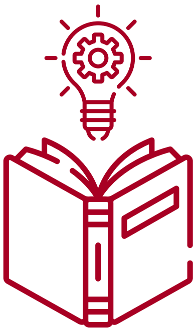
Empowering people with psoriasis and PsA

5. Ensure people living with psoriasis and PsA have a voice within new models of care

The new model of care delivery in the NHS (ICSs) heralded the start of new ways of working and it is essential the implications of the new systems, funding opportunities and challenges, are targeted at improving patient care. Provider collaboratives will include new partners in care including the voluntary sector. Ensuring dermatology and rheumatology have a ‘voice’ in these systems is essential, with patients at the heart of shared decision making.

6. Ensure access to education and management of self-care for patients

It is essential the system empowers and equips people to take a more active role in the coordination and management of their treatment. Self-management should be supported by a variety of high-quality materials and frameworks to facilitate patient education together with use of the range of self-management tools and technology.



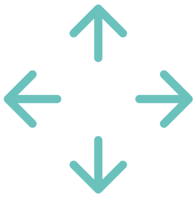
Supporting the workforce

7. Improving education and awareness of psoriasis and PsA disease complexity

Education on disease complexity, and understanding that early escalation to treatment is essential, must be understood by all stakeholders involved in the care and management of psoriasis and PsA. Preventative care for comorbidities should be a particular focus of education and awareness raising for the NHS workforce, which will strengthen efforts to build links with the voluntary sector and other services that can support patients, particularly for cardiovascular screening and mental health.

8. Support service re-design and innovation by the inclusion of the wider workforce in dermatology

Delays often occur in diagnosis and treatment. Capacity in current services can be released by the inclusion of digital technology and incorporation of other HCPs in dermatology services. There are 12 new types of roles within Direct Enhanced Services (DES) and how these might support services should be explored.



Recognising the wider impacts of psoriasis and PsA

9. Ensure widespread understanding and recognition of the socioeconomic implications of psoriasis and PsA

The socioeconomic impact of psoriasis and PsA adversely affects all aspects of people’s lives from schooling, relationships, self-esteem, and career choices to social, sexual and leisure activities and places a huge personal and societal burden. Stakeholders across all levels, from work employers, teachers and healthcare professionals, should be aware of the impact these conditions can have on a patient’s personal and professional life and should take steps to ensure they are able to provide appropriate support where possible.

What actions should be taken now?

The following actions are positive steps that could be taken to help make patient numbers explicit, assist with the identification of patients and ensure that they are on the correct pathway for their condition. This would help with understanding how to plan services in terms of the numbers of staff and level of resources needed for the patient population.

1. Actions for parliamentarians

- **Engage with local commissioners** to understand how they are planning to prioritise psoriasis and PsA as interlinked conditions within new models of care, and how they will support local populations to achieve optimal outcomes.
- **Raise awareness within Parliament** of the importance of improving outcomes in psoriasis and PsA through tabling written parliamentary questions, motions for debate and spoken contributions.

2. Actions for national policymakers

- **Build a clear picture of the COVID-19 backlog** in psoriasis and PsA and prioritise measures that can deliver care to those who need it most.
- Work with **NHSX** and the voluntary sector to understand how psoriasis and PsA patients can be more involved in their care through digital technology.
- Support the dissemination of the **Getting it Right First Time (GIRFT)** Dermatology report recommendations to help reduce variation in practice.
- Accelerate the development of local multidisciplinary team (MDT) networks through **NHS England's Dermatology Specialised Service Clinical Reference Group** workstream.
- Ensure that **Public Health England** (PHE) prevention strategies (e.g., CVD, diabetes and mental health initiatives) are able to support people with psoriasis earlier in the disease course.
- **Share examples of good practice and new models of care** within psoriasis and PsA services, drawing on The Future NHS Collaboration Platform (examples to include effective shared-care protocols between community care and secondary care providers).
- **Protect people with psoriasis and PsA from discrimination** in the workplace and in wider society. Make the law easier to understand and strengthen protection in schools and the workplace by making explicit the cost and distress that currently exists.

3. Actions for local commissioners

- Ensure **psoriasis and PsA as interlinked conditions are reflected within local ICS priorities** and that plans incorporate improving early diagnosis and utilising integrated pathways to improve the management of comorbidities.
- **Make current waiting times for dermatology and rheumatology appointments explicit** to improve visibility of service challenges and support an environment that fosters improvement.
- **Embed local dermatology and rheumatology 'clinical champions'** to support the optimisation of training and function of multidisciplinary teams (MDT), to deliver better care across settings.
- Provide ICSs with examples of **shared-care protocols between community care and secondary care providers that support early diagnosis and rapid care access**.

4. Actions for service providers, schools and employers

- **Dermatology and rheumatology leaders to explore with local GPs how new GP technology systems** like AccuRx[a] can better support patients through improved connectivity and communication.
- Ensure that local MDTs draw on available educational resources from the **British Association of Dermatologists (BAD) and Royal College of General Practitioners (RCGP)**, and that patients are encouraged to draw on available educational resources from leading patient organisations in the area, such as the Psoriasis Association and Versus Arthritis.
- **Utilise digital technology** e.g., virtual consultation, remote self-monitoring, patient passports and Patient Initiated Follow Up Systems (PIFU) to support expansion in psoriasis and PsA service capacity.
- Clinical champions to develop key **'Red Flag' alerts resource** for GPs and HCPs, with opportunities for dermatology trainees to expand their knowledge of psoriasis and PsA.
- Schools and workplace employers should be aware of the potential stigma and lack of confidence that can be associated with these conditions, which could limit a patient's educational attainment, job skills and even career prospects. Stakeholders in this area should support new and existing **awareness campaigns** to help highlight these issues.

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[a] AccuRx is a software package that GP practices and other healthcare providers use to communicate with their patients. It is an NHS-accredited approved supplier that links GPs directly with their patients for appointments and advice as well as repeat prescriptions. It is one of a number of different technology providers used for connecting patients to their GPs.

1. What are psoriasis and psoriatic arthritis?

Approximately 2.1 million people are affected by psoriasis in the UK, with the prevalence of the condition estimated to be around 2–3%[1]

1.1 Psoriasis

Psoriasis is an inflammatory skin disease that typically follows a relapsing and remitting course.[21] It is typically characterised by thick, red scaling skin (see Figure 1) and it can be itchy and painful.[22] Psoriasis has two peaks of typical onset, the first occurring between 20 to 30 and the second at 50 to 60 years of age.[3]

Figure 1. Common symptoms

The severity of psoriasis is assessed against a number of factors, including the body surface area covered, the intensity of symptoms, the location of symptoms and the personal impact.[23] NICE guidance sets out that people with psoriasis should be offered an holistic assessment of the physical, psychological and social impact at diagnosis and when response to treatment is assessed, in order to help identify those who may need specialist support.[24] Most people with psoriasis will need access to secondary care services at some point.[24]

Certain sites such as the scalp, lower legs and groin can be particularly itchy.[22] If psoriasis affects the hands and feet, painful fissures (cracks) can develop, and these can affect use of the hands and walking.[22] Severe psoriasis on the body can also develop cracks which are painful and can bleed.[22]

Mild psoriasis

- Mild psoriasis affects less than 3% of the body.[23]
- Accounts for around 80% of those affected and is the most common form with just a small number of visible patches.[12]
- Mild psoriasis can still have a considerable impact on those affected, with around 15% of patients with this level of disease severity describing it as a 'significant problem'.[25] EWG members highlighted that early diagnosis and treatment is critical to ensure the condition is controlled.

Moderate psoriasis

- Moderate psoriasis affects 3–10% of the body.[23]
- Around 15% of those affected have moderate psoriasis.[12]
- Moderate psoriasis can require treatments above topical therapies, some of which can only be prescribed from a hospital. A referral to secondary care is often needed.[24,26]

Severe psoriasis

- Severe psoriasis affects over 10% of the body.[23]
- Approximately 5% of people are affected by severe psoriasis.[12]
- When psoriasis becomes severe, large areas of the body are affected; the condition becomes difficult to self-manage or no longer responds to treatment.[12]
- Localised psoriasis can also be classed as severe when associated with functional impairment or it is having a major impact on a person's physical, psychological or social wellbeing.[21]
- At this stage, referral to secondary care at a local hospital outpatient department, or in extreme cases, an inpatient stay may be required to provide optimum care and monitoring.[12]

People with psoriasis, particularly severe psoriasis, may also be at an increased risk of cardiovascular disease, lymphoma and non-melanoma skin cancer.[21]

Around 5% of those affected by psoriasis in the UK have severe psoriasis[12]

Although psoriasis is a chronic condition, it can be controlled and go into remission, often temporarily and sometimes permanently.[12] Difficult-to-treat sites include the face, flexures, genitalia, scalp, palms and soles.[21] Psoriasis at these sites may have especially high impact, and may result in functional impairment, requiring particular care when prescribing topical therapy and can be resistant to treatment.[21]

Around 1 in 3 people with psoriasis develop PsA causing pain, swelling and stiffness in the joints[8]

1.2 Psoriatic arthritis (PsA)

Up to 1 in 3 people with psoriasis develop an inflammatory condition called psoriatic arthritis (PsA).[8] This occurs equally in men and women with peak age of onset between the ages of 40 and 50.[17] PsA causes pain and swelling in the joints and tendons,[8] accompanied by stiffness particularly in the mornings and during periods of rest or inactivity (improving with exercise).[27] The most commonly affected sites are the hands, feet, lower back, neck and knees, with movement in these areas becoming severely limited.[8]

In most people, PsA occurs after the development of skin psoriasis, but some develop the arthritis before they notice any psoriasis on their skin.[27] PsA is not necessarily related to the severity of psoriasis and people with mild or moderate psoriasis can develop PsA.[27] Inflammation of tendons without obvious inflammation of the joints can also occur, which makes it easy to misdiagnose as tendonitis or tennis elbow, for example.[27] PsA commonly affects the small joints of the hands and feet, and so swelling of the fingers and toes (also know as dactylitis) is another common sign.[27]

Patients diagnosed with psoriasis and PsA are more likely to develop obesity, type 2 diabetes, or fatty liver disease[9,10]

> When you have a flare up you stop socialising and can't wear the clothes you want or even sleep due to the pain sometimes. It can take you to very dark places.
>
> **Psoriasis patient Rebecca[28]**

1.3 Effects on quality of life

The Expert Working Group (EWG) felt that the effect of psoriasis and PsA on patients' quality of life is similar to diseases such as cancer (lymphoma), heart attack, arthritis, type 2 diabetes and depression. A number of international studies also demonstrate that people with more severe forms of psoriasis and PsA have an increased mortality risk.[29,30]

Although psoriasis can be a minor irritation for some people, for others it can considerably impact quality of life, employment, productivity and income.[11,15] These harms can result from the impact of the symptoms of psoriasis, treatment-related issues, the potential emergence of PsA, as well as the social stigma or embarrassment of living with a highly visible skin disease.[32]

For many people, psoriasis and PsA results in profound functional, psychological, and social morbidity, with consequent reduced levels of employment and income.[21] Factors that contribute to this include symptoms related to the skin (for example, chronic itching, bleeding, scaling and nail involvement), problems related to treatments, PsA, and the effect of living with a highly visible, stigmatising skin disease.[21] Even people with minimal involvement state that psoriasis has a major effect on their life, and as already mentioned, people with psoriasis and PsA, particularly those with severe disease, may be at increased risk of CVD, lymphoma and non-melanoma skin cancer.[21]

Figure 2. Effects of psoriasis on quality of life[32]

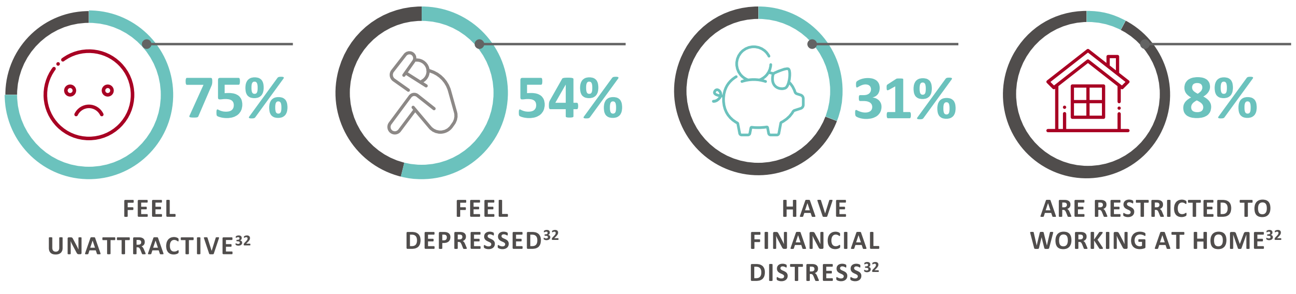
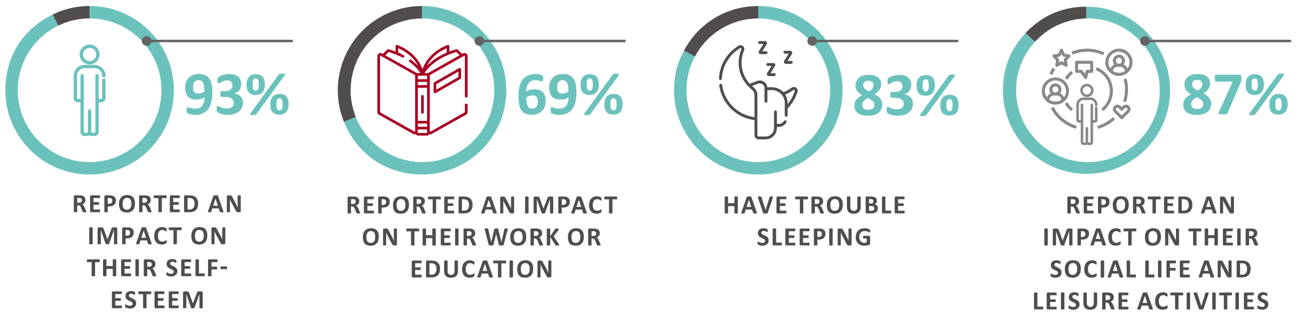
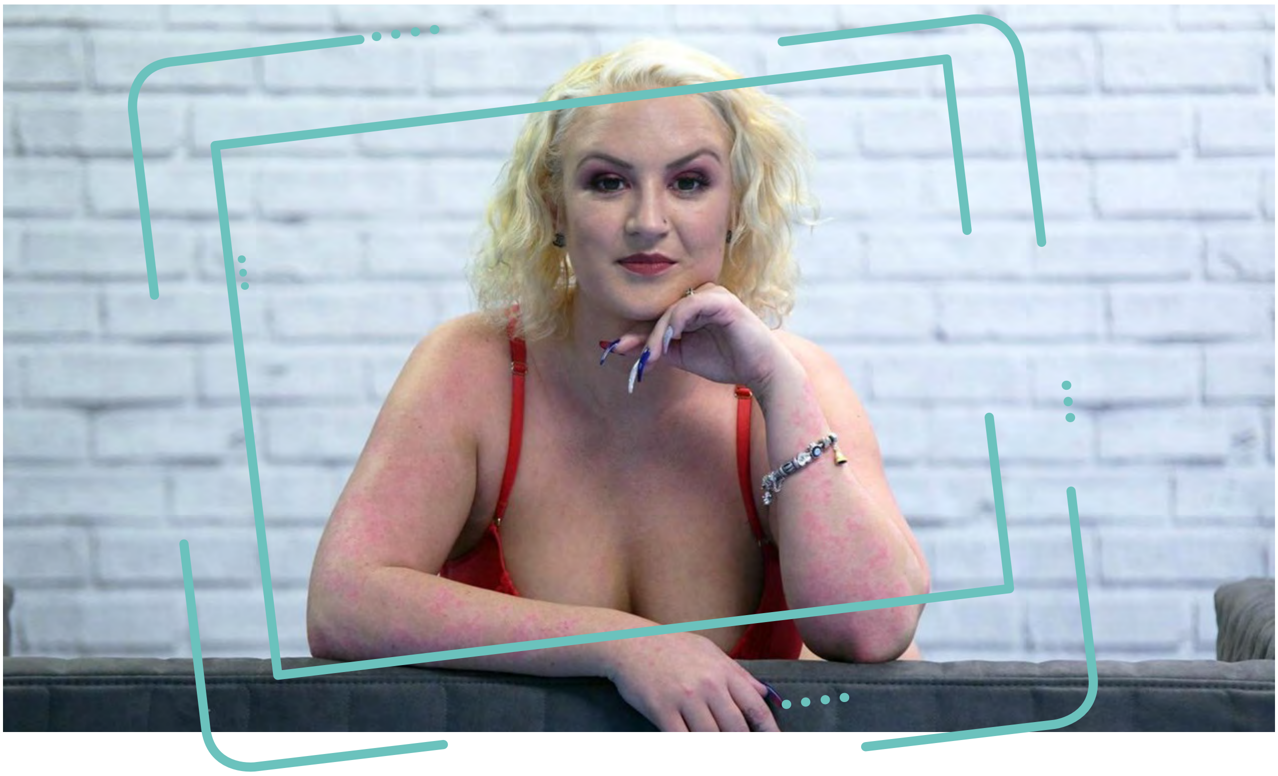


Figure 3. Survey of patients with skin conditions[33]



Sophia’s Story



Source: The Psoriasis Association. Sophia's Story. Available here: https://www.psoriasis-association.org.uk/awareness/your-stories/sophia

In her story Sophia explains the impact her psoriasis has had on her mental health, and how taking part in a recent body positivity photoshoot has helped her to begin to regain her confidence.

It started 15 years ago. I was called fat at school so I decided the best thing to do would be not eat, time went on I got really poorly and also ended up having a kidney infection. My immune system wasn’t strong enough on its own. Then all of a sudden my face trebled in size as a reaction. I started getting red spots come up like a small rash. I thought it was a reaction to the medication the hospital had me on and so did the doctors. Within 2 days I was covered, minus my face, from head to toe.

It took weeks for the doctors to realise what it was.

Then I was told it was psoriasis but it was ok because it would just ‘clear up’. My health got better but my psoriasis was still there. It had calmed down but it was there. I had to go back to school and it was summer so everyone was in just a T-shirt, not thinking I took my jumper off and few people saw it and made fun of it. So that was it, the jumper went back on and in the last 13 years I’ve hid my skin from the majority of people.

Having psoriasis had led to anxiety and depression. I’ve really struggled with this and to this day I still take

> When I have a flare up I literally hibernate. Nobody would see me. I can’t even put into words how psoriasis has made me feel, how embarrassed, disgusted and hateful for myself. I’m just sick of being me.
>
> **Psoriasis Patient Sophia**

antidepressants and tablets for my anxiety because I'm so disgusted by my own skin and I'm petrified of other people's opinions. I have been looked at like it's contagious or people feel the need to stare at it because I'm different and people have made nasty comments about it.

I'd refuse times out with my friends because I didn't want anyone to see it. I've cried way too many tears to count because of psoriasis. My confidence basically disappeared. My relationships have ended because of it. I'm scared to meet new people because of it.

Every treatment I have tried has not worked for me. Or has for a certain amount of time.

When I have a flare up I literally hibernate. Nobody would see me. I can't even put into words how psoriasis has made me feel, how embarrassed, disgusted and hateful for myself. I'm just sick of being me. The way the media is everybody looks so perfect they have beautiful skin why can't that be me? I just want normal skin. Just as I was kind of coming to terms with the skin I'm in it got worse but it wasn't just my skin now, I just felt different. I was then diagnosed with psoriatic arthritis. Stressed and upset by this here comes another flare up of course. That little bit of self-hope I just got back. Gone with in a click of the fingers.

Source: The Psoriasis Association. Sophia's Story. Available here: https://www.psoriasis-association.org.uk/awareness/your-stories/sophia

> I now want to raise awareness for psoriasis and I want us to feel comfortable in our skin. My mind-set has completely changed! I have psoriasis I'm not going to hide anymore.
>
> **Psoriasis Patient Sophia**

Then I was scrolling through social media one day and came across 'Selflovebynatalieamber'. She helps people with body confidence shoots. In a moment of madness I messaged to get involved. Please have me, let's raise awareness for psoriasis.

The shoot wasn't till October so I had a few months to get ready for it.

Those few months flew by, the 2 days before I was panicking like what I could do to get out of this. Everyone encouraged me to go. I bit the bullet I went. I'm so so happy I did. Natalie Amber was/is amazing she made me feel amazing. I started off in my dressing gown so scared to show my skin by the end I was in my underwear! Psoriasis, what psoriasis? I now want to raise awareness for psoriasis and I want us to feel comfortable in our skin. My mind-set has completely changed! I have psoriasis I'm not going to hide anymore. I'm going to help others with it and make people more aware of it! All thank you to Natalie Amber. #selflovebynatalieamber

https://www.psoriasis-association.org.uk/awareness/your-stories/sophia

1.4 The socioeconomic implications of psoriasis and PsA

Whilst not immediately apparent, psoriasis and PsA can be a cause of serious impairment and disability in children, adolescents and adults. The disruptions caused by treatment, comorbidities, associated stigma and lack of confidence can build-up throughout a person's lifetime, limiting educational attainment, job skills, career prospects as well as relationships and family life.

Evidence suggests that patients believe their lives would have been considerably different, particularly with regard to employment and educational opportunities if their condition had been treated effectively earlier.[34] A third of individuals with psoriasis have reported experiencing discrimination in the workplace as a result of their condition (see Figure 4).[34] Societal barriers may also prevent employment, with 19% of individuals feeling they have had to quit a job or have been dismissed because of their condition.[34]

> Skin disease can adversely impact on all aspects of people's lives from schooling, relationships, self-esteem, and career choices to social, sexual and leisure activities. Experiences of isolation, embarrassment, shame, depression, and anxiety are common.
>
> Stigmatisation, discrimination and a lack of social acceptance and understanding is experienced daily for some.
>
> **APPG on Skin (2020)**[33]

Figure 4. Impact of psoriasis on employment[34]

£50 million	Boost to the UK economy from a 10% reduction in sickness absence for people with psoriasis
14.1 sick days	Average absence per year for people with moderate to severe psoriasis, whereas those with severe psoriasis lose up to 26 days
4 million	Total working days lost per year in the UK
£1.07 billion	Total estimated cost of absenteeism and presenteeism from people with psoriasis per year
£61 million	Out of work benefits for people with a skin disease in 2013/14
1 in 3	Report discrimination in the workplace as a result of their psoriasis
31%	Of respondents reported that they had suffered some degree of financial distress resulting from their psoriasis
43%	Of those surveyed feel that psoriasis had limited their income and/or future earnings
£26 billion	Estimated cost per year to employers of sickness absence and reduced work productivity as a result of mental health issues, which are particularly prevalent in people with psoriasis

£1.07 billion: Total estimated cost of absenteeism and presenteeism per year from people with psoriasis in the UK[34]

Psoriasis and PsA can have a significant impact on a person's quality of life and work productivity, with many reporting a sense of frustration and self-consciousness.[35] Patients who are unemployed have often cited their psoriasis or PsA is the sole reason for not working. Among working patients, many have also missed frequent work days due to their condition.[35]

A UK study found that 59% of patients with psoriasis reported a high degree of absenteeism (an average of 26 days from work) during the preceding year because of their psoriasis, and 34% of those not working attributed it to their psoriasis.[36]

> I have been laid off work due to health issues and do not have the confidence to discuss issues in interviews as it results in discrimination.
>
> **Respondent with psoriasis and hives (urticaria), APPG on Skin (2020)[33]**

In 2006, the European Federation of Psoriasis Patient Associations (EUROPSO) undertook a Europe-wide survey examining quality of life, patients' perspectives on treatment and their disease and their perspectives of psoriasis on their lifestyle and wellbeing.[25] This was the largest survey of people with psoriasis in Europe and showed that psoriasis has a profound impact on quality of life: 18,386 patients responded (36%), of whom 17,990 had psoriasis, 59% of which had self-reported moderate to severe psoriasis and 30% had been diagnosed with PsA. The mean Psoriasis Disability Index score was 12.2 (25% of the maximum score), increasing to 21 (44%) in patients with more than 10% body surface area involvement. The greatest impact the group reported was on activities of daily living, especially affecting clothing choice, bathing routine and sporting activities.[25]

> I found it hard to learn to write at school, I couldn't hold a pen properly. I also had psoriatic arthritis so I couldn't straighten my fingers.
>
> **Respondent with psoriasis/PsA, APPG on Skin (2020)[33]**

Using a self-rated web-based survey of 1,760 patients, Anstey et al (2012) highlighted that psoriasis had negatively affected the working life of 59% of patients, and the educational performance of 31%.[37] Psoriasis was 'very' or 'extremely' active in 52%, and 71% had been diagnosed more than 10 years previously. A smaller UK study highlighted support for psychosocial function and emotional distress,[38] a fundamental aspect of psoriasis management, is overlooked but would contribute to improvements in general wellbeing.

There is evidence suggesting that for people with PsA, levels of unemployment (20–50%) and work disability (16–39%) are high and are associated with longer disease duration.[39] The study, carried out in 2015, showed that the mean level of absenteeism, presenteeism and productivity loss of the 236 participants in work were 14%, 39% and 46%, respectively.[39] The evidence also suggested that presenteeism and productivity loss were associated with measures of greater PsA disease activity.[39]

Patients with psoriasis and PsA attribute their condition to decisions to retire early and to difficulties retaining employment.[35,40] Among those with a paid job, a reduction in hours or work responsibilities, presenteeism and increased time missed from work can be observed.[35] From a societal perspective, the loss of productivity leads to significant socioeconomic costs.

The causes of unemployment involve a complex interaction between disease-related factors, the working environment, job demands and personal factors. Other factors, such as educational level, type of work, fatigue, health perception, depression, personality and type of immunomodulatory treatment are also involved when predicting work participation.

In response to barriers, members of the EWG highlighted that some with psoriasis and PsA change their lifestyle and develop 'self-management strategies' to try and mitigate these difficulties.

> Changes what you do, who you meet, opportunities you take, clothes you wear, you can never do anything spontaneously.
>
> **Psoriasis patient responding to a survey conducted by the APPG on Skin[33]**

Figure 5. Categories of costs associated with psoriasis and PsA

A French study, published in 2021, highlighted that out-of-pocket (OOP) expenditures for people with psoriasis are much higher than the estimated healthcare costs for other conditions. It found that:[41]

- *The mean out-of-pocket expenditures for the 2,562 patients to manage their condition was €531 (€440 for patients with mild, €791 with moderate and €1,078 for patients with severe psoriasis).*
- *For patients with psoriasis in the genital area, the median expenditure (€251) was significantly higher than that for the face (€184) or limbs (€200).*
- *More than 90% of the patients had out-of-pocket expenditure for over-the-counter products (97.5%) and alternative care (92.0%), especially for emollients and/or hydrating products.*

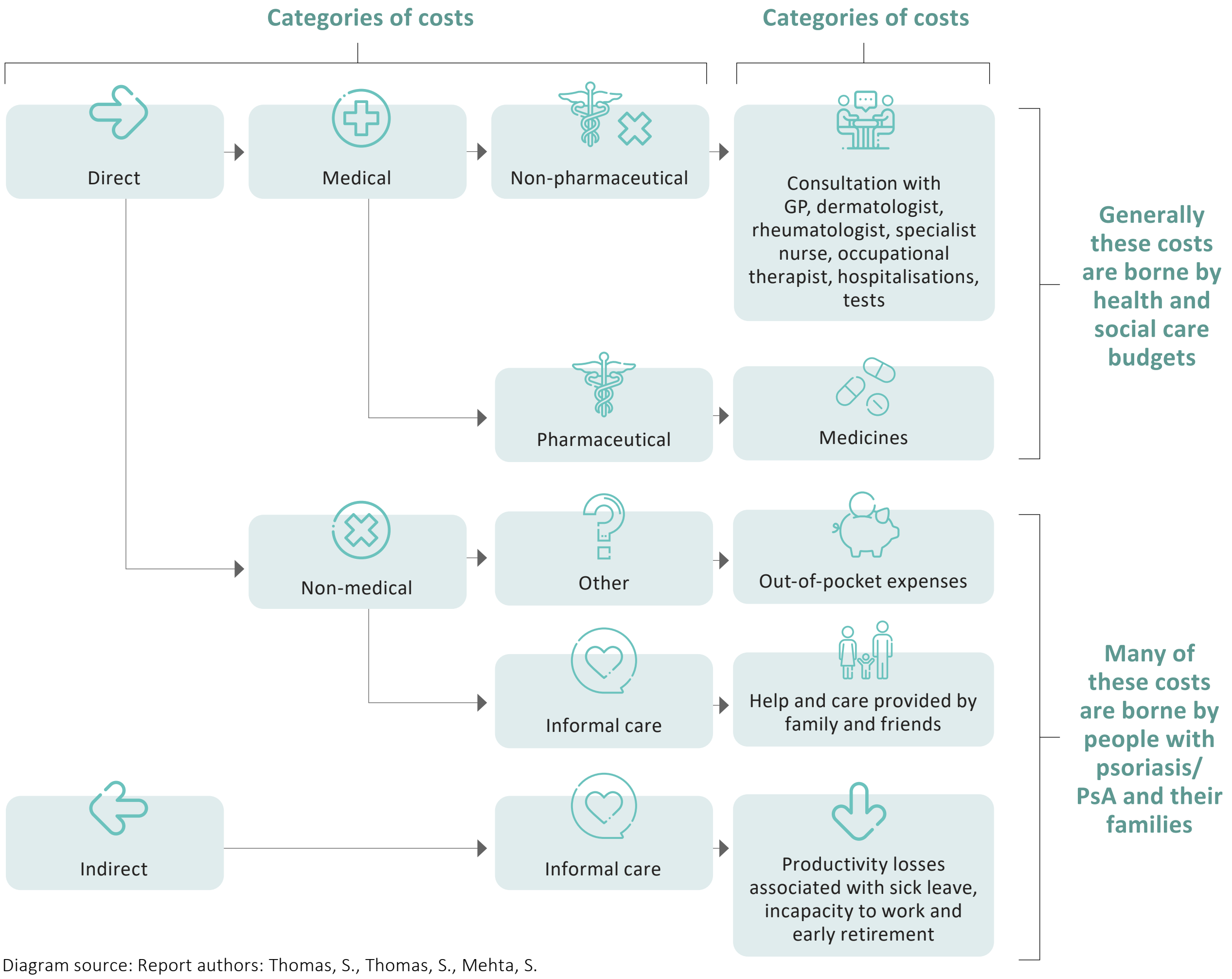


Diagram source: Report authors: Thomas, S., Thomas, S., Mehta, S.

1.5 What causes psoriasis and PsA?

Both inherited and environmental factors play a role in the development of psoriasis and PsA. Infections, stress, damage to the skin, alcohol, and sometimes intense sunlight may trigger flares of psoriasis. Certain medications such as beta blockers (used to treat high blood pressure and angina), lithium and some tablets used to treat malaria can also trigger flare-ups. Suddenly stopping some steroid tablets can also trigger or worsen psoriasis and PsA. Obesity and smoking are associated with a poor response to treatments so exercise and being the appropriate weight can be beneficial.[22]

People with a family history of psoriasis and PsA are more likely to develop the condition. However, the way that the conditions are inherited is complex, involving many genes, and is not completely understood.[22]

1.6 Treatment options

Psoriasis is usually diagnosed on the appearance and distribution of the plaques.
The major forms are:[12]

- **Plaque psoriasis** commonly found on the knees, elbows and scalp.
- **Guttate psoriasis** (localised or generalised) which usually occurs after a sore throat or tonsillitis.
- **Pustular** (localised or generalised) rare but serious requiring urgent medical attention.
- **Erythrodermic psoriasis** where all of the skin is affected.
- **Nail psoriasis** which can be painful and restrict finger and toe movement.
- **Palmoplantar psoriasis** affects the palms of the hands and the soles of the feet.

Severity of symptoms in psoriasis is assessed and monitored using the Psoriasis Area and Severity Index (PASI) and the Dermatology Life Quality Index (DLQI) is also used to measure the impact of the condition on daily activities.[22]

The Psoriasis Epidemiology Screening Tool (PEST) is used to screen for PsA in people with psoriasis.[21,42] It is recommended by NICE that patients with psoriasis who do not already have a diagnosis of PsA complete an annual PEST questionnaire.[21]

In addition to emollients, a wide variety of 'active' treatment options are available for psoriasis. Some are expensive and some are accessed only in specialist care; all require monitoring:[21]

- Topical therapies
- Phototherapy
- Systemic non-biological agents
- Systemic biologic therapies

People with PsA may also receive:[8]

- Topical analgesic creams for the treatment of mild to moderate pain caused by arthritis.
- NSAIDs (non-steroidal anti-inflammatory drugs) to help manage inflammation and pain.
- DMARDs (conventional synthetic disease-modifying anti-rheumatic drugs).
- Corticosteroid joint injections.

NICE has published clinical guidelines for psoriasis assessment and management (2012) and a Quality Standard (2013).[21,24]

For most people, psoriasis is managed in primary care, with specialist referral being needed at some point for up to 60% of people.[21] Supra-specialist (level 4) tertiary care is required in the very small minority with especially complex, treatment resistant and/or rare manifestations of psoriasis.[21]

To access these treatments, people need to receive regular review appointments to monitor their symptoms and assess the treatments from which they could potentially benefit. It is therefore important that patients are actively reviewed and assessed at regular intervals.

For treatment to be effective, patients must also be provided with the appropriate support to manage their symptoms and other health issues that arise from or exacerbate their condition. Ideally, people with psoriasis should receive a holistic approach to care, which considers all aspects of their health, and HCPs should be equipped with a good understanding of psoriasis and training about when to consider and initiate treatment. Care should also include:

- Identification of treatment goals.
- Management of risk factors for heart disease and stroke.
- Education on a healthy lifestyle (diet, exercise, alcohol intake).
- Smoking cessation support.
- Support to manage stress, as well as the wider psychological impacts, including distress, anxiety and depression.

A 2009 UK audit in the adult population demonstrated wide variations in practice, and in particular, access to specialist treatments, appropriate drug monitoring, specialist nurse support and psychological services.[43]

Jack's Story

Source: The Psoriasis Association. Jack's Story. Available here: https://www.psoriasis-association.org.uk/your-stories/jack

Following a stressful period in his life Jack developed psoriasis, and later, psoriatic arthritis. In his story Jack shares the challenges of living with both conditions and how a combination of lifestyle changes and treatment help him to manage.

My name is Jack and I have psoriatic arthritis. I first developed psoriasis about five years ago and have had psoriatic arthritis for roughly the last two. I first started to get psoriasis when I had my own business, a start-up to help the creative sector raise money for projects. Having a start-up is really hard, it's very long hours, very small pay and a lot of pressure.

In order not to take money out of the business I did chef work in the mornings and then I would run my business, followed by working at events in the evening. I was working 14 hour days at my job and unfortunately the business had a lot of problems and after three years we had to close it down.

Winding down a business comes with a lot of stress and in the week our business was closing down my girlfriend of 5 years left me. She told me she wanted more in a relationship and moved out within a week. As you can imagine that was one of the hardest weeks of my life and I developed psoriasis probably from the stress. But if I'm honest I had been working like that for a number of years and having previously worked in sales I was always in a high pace/high stress environment, there was also commuting and I liked to party quite hard to relieve the pressure. I wasn't really looking after myself and I just thought that's how life is.

When I first got psoriasis it developed on my head, I'd previously had dandruff so just thought it was that. I then started to develop dryness around my nose, next to my eye and behind my ears. I thought nothing of it and it was just dry skin. Being a bloke I didn't take it seriously and just thought maybe it's from being in a kitchen. By then I had become the manager for the café at my work and was doing the catering for events in the building.

It wasn't until I left that job and had started a new business that one day I came into work and my colleague thought I had been in a fight because my head was bleeding and a bit swollen. My friend made me go to the doctors. At first, I was diagnosed with eczema. They gave me some eczema cream and told me to come back in a few weeks. This actually made it a lot worse and accelerated the condition. Over the next three months it spread to all over my body, it was on my chest, legs, arms, face, head and I also had it on my bum and in my pubic area. I know that's really embarrassing but I'm sure there are lots of men who are going through the same but too embarrassed to say that.

> Every time I went back to the GP they would just give me different products, after 3 months I got to see the special dermatologist at my GP practice. When he looked at me he said you haven't got eczema but psoriasis.
>
> **Psoriasis Patient Jack**

Eczema tends to be inside of the joints whereas psoriasis is on the outside. Over the next year, things were still getting worse, my hair started falling out and my fingernails started to go weird, they were pitting and getting grooves before starting to fall off, this was happening to my toenails too. That 2-year period was horrible and it took away a lot of my confidence, I looked so scabby and flaky and was bleeding all the time. It took me about 3 years before I felt comfortable being naked in front of someone. If someone sees genital psoriasis they can jump to all sorts of conclusions. Also a lot of my hair had fallen out, my mum would cry if she saw me because I looked so mange, (she told me this after my psoriasis was under control).

The thing is when you have psoriasis it can lead to other problems. For example one shampoo burnt my head, and an ointment I would wear in my hair overnight with a shower cap would warm up, run into my ears and then make them blocked and I'd go deaf.

After two years of this hell and it just getting worse once my fingernail pitted my doctor told me my condition was changing and thought I might have psoriatic arthritis. I thought to myself great, I look scabby and now I'm getting arthritis. This turned out to be a blessing and a curse. But my god having psoriatic arthritis is a real battle.

The reason why I keep talking about the emotional side is that unless you have it you can't understand how self-conscious it makes you feel, and the worst thing is if you start worrying about it, it makes you more stressed and makes you worse.

Now that I have had psoriatic arthritis for 4 years I've learnt to appreciate it. I appreciate it because it has made me slow the pace of my life down, I no longer put myself in high pressure jobs and really try to live a stress free life. Meditation has been a big help to me and I found Reiki helped my hair to grow back. Over that time I had experimented with my diet and I was vegan for a month but when I saw my doctor he told me to stop as I lost too much weight and there was no benefit to my condition. I think holistic therapy is really important as our bodies are attacking themselves. You should really see it as an auto-immune disease rather than just a skin problem. Anything you can do to help calm your systematic nervous system helps. A couple of other items I have incorporated into my routine is not to use any soap or shampoo when showering, I just use Epaderm Ointment (this is the only thing I'll use to clean or use if I have dry patches).

The things I don't think I'll ever get used to are the tiredness, the randomness of a flare up, and not being able to concentrate, I also have long term worries about taking medicine and I think psychologically that can be really hard because there isn't a cure. I also think as psoriatic arthritis is a hidden disease people can look at you and think you're fine but you're not and they don't understand especially in winter how hard life is, and the fact that your focus is always on managing yourself, rather than being super ambitious or really putting pressure on yourself. I no longer want my own business and definitely don't want to be sales director again, I have now trained to be a Reiki therapist and doing this work gives me such a sense of pride and to be given the chance to help people I find very rewarding. Sometimes I believe I needed this condition to force me out of the life I was living and that's where I find some appreciation for my condition.

It's a harder life but it's a simpler life and that can bring you peace, although the contradiction is my condition is fine right now but tomorrow I could be in a whole world of pain, and this would be written very differently.

https://www.psoriasis-association.org.uk/your-stories/jack

Source: The Psoriasis Association. Jack's Story. Available here: https://www.psoriasis-association.org.uk/your-stories/jack

2. Dermatology: the current clinical picture

EWG members reflected that dermatology services have recently become one of the lowest priority areas for the NHS. This has been exacerbated by the COVID-19 pandemic. In 2020, as part of the response to the pandemic, many elective dermatology services were postponed, with attention and resources directed to the 'front-line'. Those dermatology departments remaining open were mainly dealing with urgent skin cancers. Consequently, support for people with psoriasis and PsA has been significantly reduced. The EWG consulted for this report provided their views of current services.

Figure 6. Reflections from the EWG on the current picture of services for people with psoriasis and PsA

Psoriasis within Integrated Care Systems

Psoriasis is generally seen as a dermatological problem but it is actually an under-recognised multi-faceted disease in which PsA and other complex comorbidities can develop. The lack of national policy relating to psoriasis means it is largely an ‘invisible problem’ in which ICSs have little or no understanding of the numbers and needs of people affected.

The NHS England report *Transforming Elective Care Services in Dermatology* (2019) is currently the only NHS policy specifically targeting dermatology.[44] This promotes the development of primary care dermatology services, tele-management and self-management solutions rather than reinforcing the early specialist intervention this condition might require. The final recommendations of the GIRFT dermatology national specialty report are outlined on the GIRFT website.[45]

Referral: right person, right time

A major challenge for people living with psoriasis and PsA is access to specialist secondary care services that can ultimately provide timely diagnosis and a holistic assessment of their needs. Patients do not receive timely referral to specialist services causing a delay to accessing holistic assessment and opportunities to consider co-morbidities such as cardio-metabolic disease, obesity, diabetes and depression, which can have a negative impact on treatment outcomes and quality of life.

Waiting times

Dermatology is a high-volume outpatient specialty and services are variable across the UK. Members of the EWG suggested that prior to the pandemic, patients would often wait between six and nine months to be seen by a specialist; however, the COVID-19 backlog has exacerbated this. Appointments have been cancelled and virtual appointments have replaced many face-to-face consultations. Remote monitoring of psoriasis is difficult but even more so for patients with PsA. While GPs try to ‘plug the gap’ providing treatment in the community, some may be unaware of an appropriate course of action and may provide topical treatments that could be ineffectual.

> I feel so embarrassed to even go out, I feel I’m the ugliest.
>
> **Psoriasis patient responding to a survey conducted by the APPG on Skin[33]**

Workforce

Workforce is a major challenge for the NHS, and this includes a shortage of consultant dermatologists and rheumatologists with clinical expertise in psoriasis and PsA. An ageing workforce and lack of education to encourage trainees into the specialty compounds this situation. There is also a variation in management and referral to specialist services due to the lack of knowledge of psoriasis amongst some general dermatologists, GPs and primary care practitioners. Condition-specific knowledge is essential for managing patients and, considering shortages, more digital solutions for management will need to be used.

Integration

Integrated services mean greater collaboration between partners in health and care systems to help accelerate progress in meeting health and care challenges. In an ICS, NHS organisations, in partnership with local councils and others, take collective responsibility for managing resources, delivering NHS care, and improving the health of the population they serve. ICSs allow organisations to work together and coordinate services more closely, to make real, practical improvements to people’s lives.

Collaboration

For staff, improved collaboration can help to make it easier to work with colleagues from other organisations, and systems can better understand data about local people’s health, allowing them to provide care that is tailored to individual needs. The importance of joined-up care is particularly important as the impact of psoriasis and PsA spreads across health and social care. Securing a multidisciplinary team (MDT) is key to the integration agenda but expansion of services into primary care should not be at the expense of specialist services where specialty-initiated treatments are prescribed. Dermatology specifically is currently absent from many of the ICS strategic plans which may impact on the importance given to psoriasis and PsA.

Patients as partners

The landscape of health is shifting from a medically-led system where patients are wholly reliant on the information and advice they are given, to a patient–physician partnership where patients have access to numerous information sources and are often experts in their own condition. This shift is driving an empowerment agenda, based on a wish to encourage active participation of people in the type of treatment they receive, the lifestyle they adopt and the way they choose to manage their own conditions.

The immediate priorities for the NHS include dealing with the COVID-19 pandemic, managing the enormous backlog of patients that has developed whilst maintaining the provision of existing services. Over the coming months, NHS Reset and Reform will require providers of dermatology services to focus on how they can meet requirements of the Long-Term Plan by focusing on a population health management approach explicit within the Plan. To increase service capacity the involvement of the wider workforce, digital technology and innovative approaches to service delivery including ‘one-stop shop’ care, remote monitoring and greater involvement of patients as partners in their care will be required.

Decisions about the management of psoriasis and PsA need to be led by secondary and tertiary care clinical specialist teams. These teams need to be supported by ‘clinical champion’ dermatologists or rheumatologists with the GP and primary care workforce activated to be involved in management through provision of education and understanding of patient need.

3. Psoriasis and PsA within Integrated Care Systems

Psoriasis is largely seen as a dermatological condition where the complex comorbidities that can develop are currently under recognised. There is a clear need for both dermatology and rheumatology services to be linked for the management of psoriasis and PsA. Policy relating to dermatology over the last decade includes the NHS England report *Transforming Elective Care Services in Dermatology.*[33,44,46,47,48]

Population Health Management (PHM) is a critical building block for ICSs to enable true personalised care to be delivered by Primary Care Networks (PCNs). PHM enables systems and local teams to understand and look for the best solutions to people's needs – not just medically but also socially – including the wider determinants of people's health.[49] To ensure this happens for psoriasis and PsA, at a minimum ICSs need to understand how many people in their population have these conditions and how services currently meet need (see Figure 7). It is not only those people who currently receive specialist services but those that might need them that require identification.

> The aim of population healthcare is to maximise value and equity by focusing not on institutions, specialties or technologies, but on populations defined by a common symptom, condition or characteristic.

The Long Term Plan (LTP) has set out an ambition for integrated care and the 2021 White Paper has provided the means to do this.[20,50] ICSs are tasked with developing five-year strategic plans in response to the LTP objectives including a focus on integrated care models, PHM, prevention, person-centred care and reduced hospitalisation. In addition, ICSs have greater responsibility in the way budgets are used in their own local areas to provide more joined-up care. Policy to date has failed to raise the profile of psoriasis and PsA which competes against much larger national priorities like cardiovascular disease (CVD) and diabetes; however, the comorbidity complications of psoriasis and PsA also include obesity, type 2 diabetes or fatty liver disease,[9,10] but this may not be widely recognised.

Figure 7. Enabling population health management for psoriasis and PsA: the importance of identifying the population who would benefit most from the specialist service.

3.1 Integration

Integrated care is an essential requirement for the management of psoriasis and PsA and there are numerous services and health care professionals (HCPs) who need to be involved in the integrated optimal patient journey.

The core component of the LTP (2019),[20] and the NHS's Integrating Care report focuses on service integration, and the reforms set out how ICSs will be the basic unit of the local NHS, the finance structure for population-based healthcare, what will be expected of all the partners within systems at all levels and who will be responsible for what. In addition, it sets out the aims for systems such as reducing inequalities, supporting new clinical pathways and involving clinicians in wide-ranging reforms.[51]

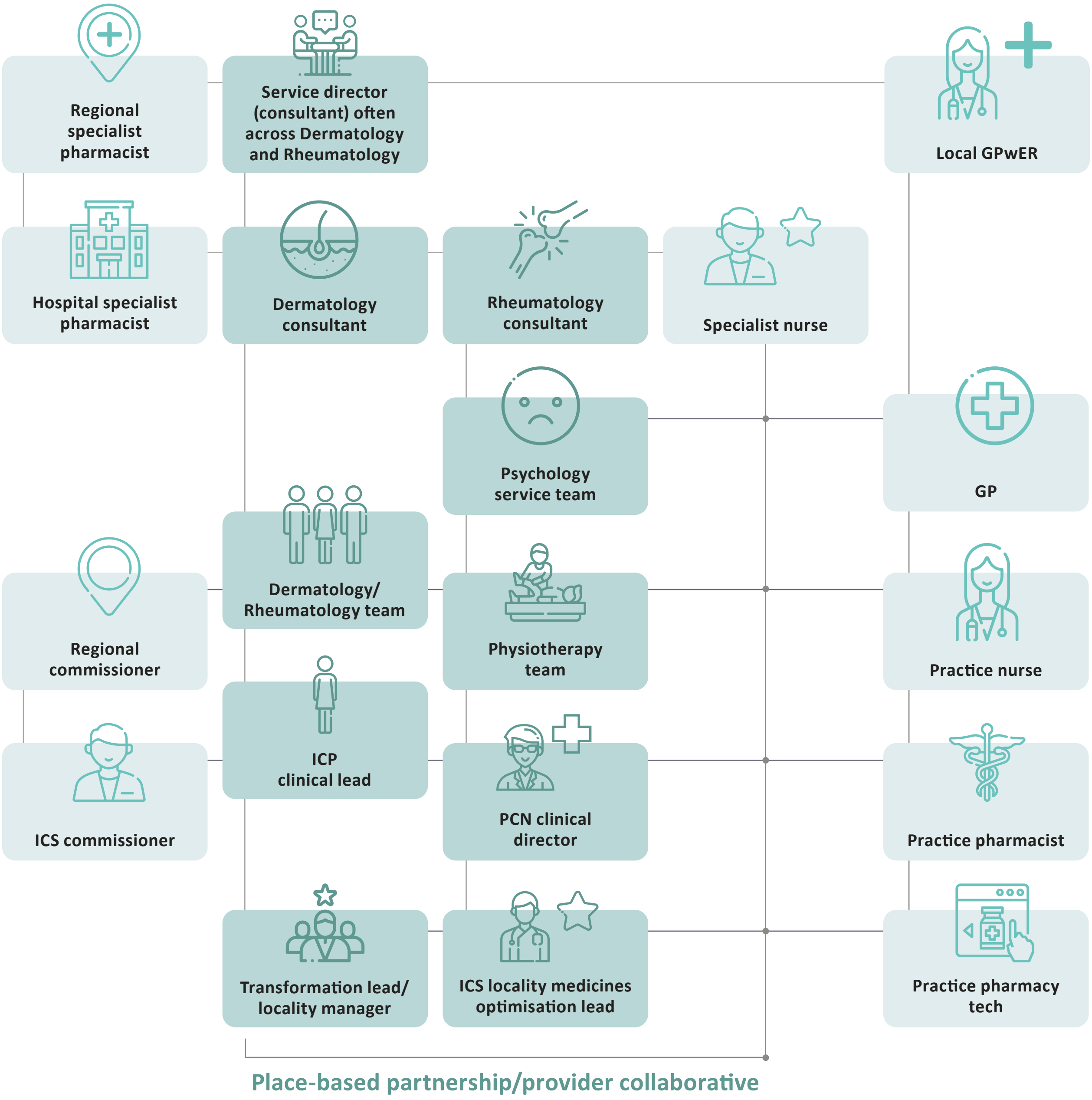
Much of the commentary around service integration is for as much care as possible to move out of hospitals, and this is likely to produce a new working pattern for dermatology and rheumatology consultants, specialist nurses and their MDTs involving remote and community work. While the traditional NHS centre of gravity has pulled towards hospital care as its focus, this is beginning to change. Partnership working will be key and involve dermatology and rheumatology HCPs collaborating and engaging in cross-organisational groupings in order to improve patient outcomes and experience across systems, places, and neighbourhoods (see Figure 8). Local authorities and voluntary organisations are now also considered as NHS partners.

Figure 8. Integrated care structure

Integrated Health and social care	Description	Health	Social care	Function
Neighbourhoods	30,000–50,000	Primary Care Network	Local council services & wards	• Implementation of PHM & prevention
Place level - Integrated Care Partnerships	250,000–500,000 town/city	CCG localities	District/ city council/ borough	• Implement integrated care • Deliver Long-Term Plan commitments on care delivery & redesign • Provider alliances • Implement enhanced care in care homes
Integrated Care System	1.5–3 million x 44	CCG; some specialised commissioning, e.g., renal services	County council(s)	• Strategic planning • Strategic commissioning • Oversight of finance & performance • Collaboration between organisations
Regional	NHSE/I regions x 7	NHS region & specialised commissioning		• Regional Medicines Optimisation Committees (RMOC) • AHSNs

The COVID-19 pandemic has significantly impacted service integration. NHS commissioning of digital communication platforms has meant that it is much easier to implement multidisciplinary team (MDT) meetings and with social distancing and reduced patient MDT contact, this has increased in frequency. Further test and trace emergency changes to data sharing have enabled greater record sharing within the NHS. All of this has resulted in increased collaboration of services, around the patient. While there may be less in the way of one-stop-shop development, collaboration between dermatology, rheumatology and psychological services is set to increase.

Figure 9. System placed-based network influence map



The 2021 White Paper effectively rolls back the Lansley reforms of 2012,[50] which mandated competition in the procurement of services. The new proposals, outlined in the White Paper, intend to bring health and care services closer together. The need for competition and competitive tendering in the NHS has been removed, and ICSs have been put on a formal footing to deliver place-based care.

Within the ICS, Provider Collaboratives will join up services across systems and all NHS provider trusts will be expected to be part of a Provider Collaborative. Greater coordination between providers at scale can support the assessment of population health needs and planning to enable modelling demographics, service use and the workforce changes needed over time:

- Higher quality and more sustainable services.
- Reduction and tackling health inequalities.
- Better workforce planning.
- More effective use of resources including clinical support.
- Ensuring that these priorities are funded to provide good value and health outcomes.

It is important that dermatology and rheumatology services understand the configuration of their local ICS, the provider collaborative organisations and who the relevant leaders and commissioners are within that service. Each of these organisations will have their own published strategic plan.

Figure 10 shows Surrey Heartlands Health and Care Partnership boundaries. The population covered is around 1.1 million,[52] and this is an example of an ICS where health and local government are taking collective responsibility for the area health and social care through budget devolution.[53,54]

The Integrated collaborative providers comprise:

- Guildford and Waverley, North West Surrey and Surrey Downs CCGs
- Ashford and St Peter's Hospitals, Royal Surrey County Hospital, South East Coast Ambulance and Surrey and Borders Partnership NHS Foundation Trusts
- Epsom and St Helier University Hospitals NHS Trust
- Central Surrey Health (community services)
- Surrey County Council
- Local authorities and voluntary organisations partners.

Figure 10. Surrey Heartlands Health and Care Partnership boundaries

As with each area of the UK, it is important for both patients and providers of services to understand where services are located, where the pathways for referral and management are and what services are available in the area to support people with these interlinked conditions.

> As illustrated in Figure 14 (page 34) Surrey Heartlands health and Care Partnership could contain around 33,000 people with psoriasis and almost 10,000 people with PsA.[16,17,18]

During the pandemic, attention has been drawn to how coordination of services around place level was a critical success factor. In practice, this will likely mean a partnership with commissioners and engagement on how system budgets should be spent to best reflect the needs of local health economies and patient cohorts specific to a neighbourhood – considering issues of prevalence, ethnicity, deprivation, facilities and workforce that may not be visible at system or place level. It is vital that dermatological and rheumatological services fit into these local strategic plans.

> In line with the ambitions set out within the NHS LTP, all of England is now covered by systems working as an ICS. At the time of research (December 2021), however only 13 ICSs had published their official response to the LTP.[55-67] Of the responses that have been published, eight make no reference to dermatology whatsoever.[55,56,59,61,63,64,66,67]

Only five ICSs specifically earmark dermatology as an area for improvement within their plans, with some of the strongest references found within the plans for South East London and Hertfordshire and West Essex for instance.[57,58,60,62,65]

The NHS is increasingly using a preventative philosophy for healthcare, identifying early diagnosis as a key driver to improve health, and also placing a premium on personalised integrated care. Proposals for this include developing joint pathways with primary and community care and developing new models of care, such as one-stop shops and community clinics. Examples of where this is happening and can be replicated should be highlighted.

Photo attachment

TO GP REFERRALS WHERE APPROPRIATE

Closer to home

APPOINTMENTS THROUGH COMMUNITY SERVICES

Clinical leadership

FOR SERVICE PROVISION

Pathway redesign

BEING EXPLORED INCLUDING TELEPHONE & VIDEO CONSULTATIONS

Collaborative approach

BEING DEVELOPED TO SUPPORT SERVICE MANAGEMENT AND DEVELOPMENT

Network development

IN SERVICES CHALLENGED BY INCREASING WORKLOAD AND CAPACITY CONSTRAINTS

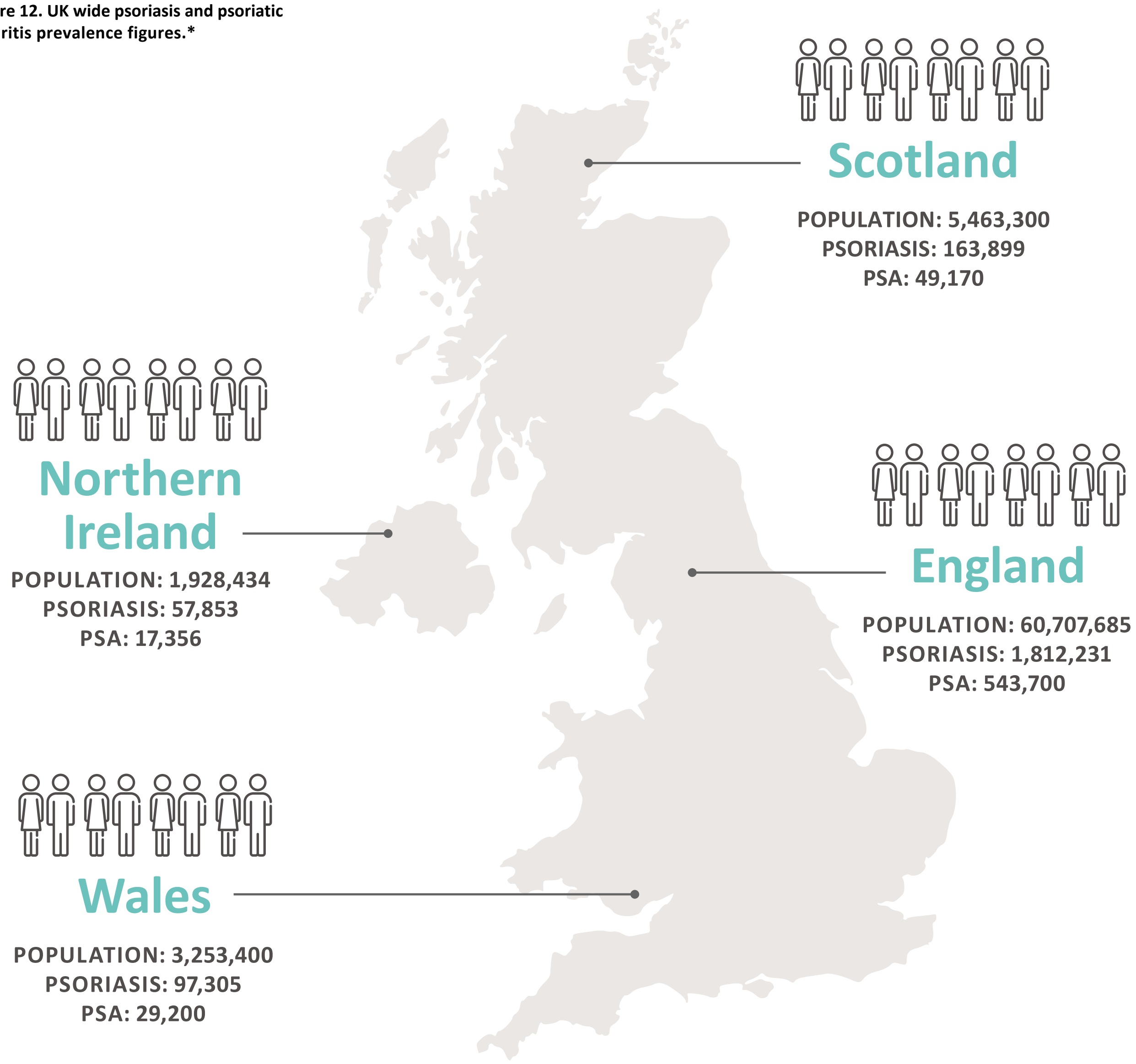
It is essential that ICSs and their system leaders are aware of the complexity of these conditions and have a clear understanding of the needs of their local population. Without this, services will not be planned and delivered to meet patient needs, particularly the complex needs of those with more severe disease. EWG members suggested that managing people with psoriasis earlier in the disease could help to avoid downstream costs elsewhere in the health and social care system before associated comorbidities have a chance to manifest. A first step is understanding local prevalence of these conditions.

> My daily skin routine took three or four hours each day, just to make my life bearable – soaking in a bath, cleaning the skin, creaming, bandaging.
>
> **Psoriasis patient responding to a survey conducted by the APPG on Skin (2020)[33]**

3.2 Prevalence

Our population analysis suggests that approximately 2.1 million people are affected by psoriasis in the UK with PsA affecting up to 640,000 people.[1] Figure 12 provides country-specific estimates of people with psoriasis and PsA (rounded to nearest 100).[16,17,18,68,69,70]

Figure 12. UK wide psoriasis and psoriatic arthritis prevalence figures.*



** Figures have been calculated by applying the upper benchmark estimates of: 3% psoriasis prevalence (Parisi R, Griffiths CEM, Ashcroft DM (2011) Systematic review of the incidence and prevalence of psoriasis. British Journal of Dermatology 165: e5) and 30% PsA prevalence (Ocampo DV and Gladman D (2019) Psoriatic arthritis. 20;8: F1000 Faculty Rev-1665). Please see footnote on page 3 for more detailed methodology.*

3.3 Population health management

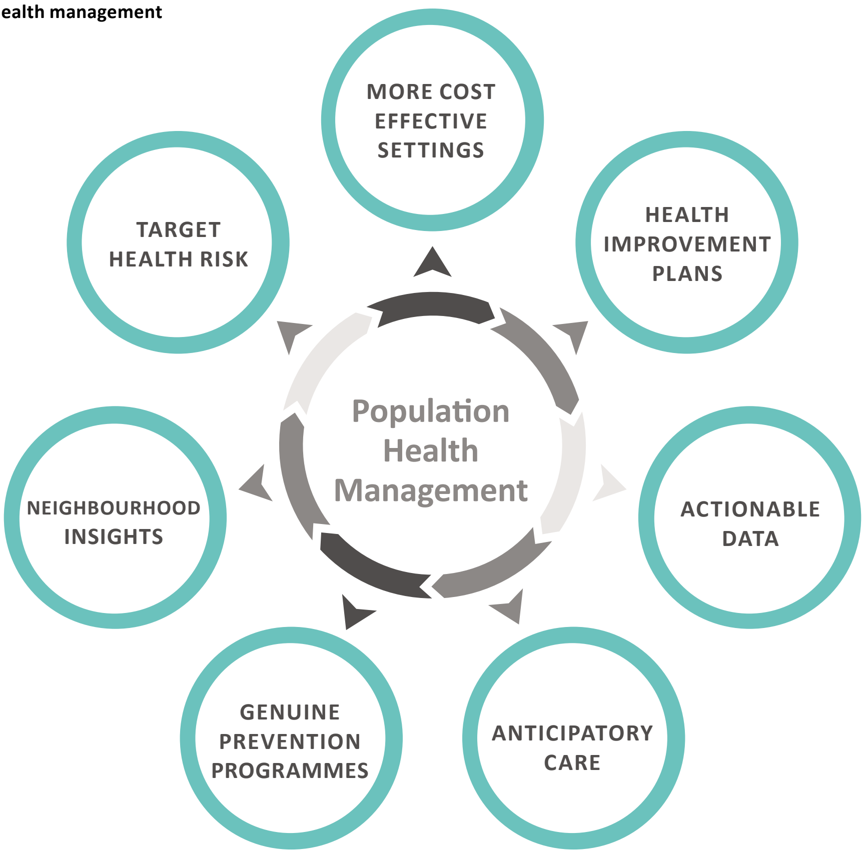
The work of the NHS RightCare Commissioning for Value programme shows a marked variation in the way healthcare services are delivered, highlighting a need to focus on the value that populations receive from the money invested in healthcare with a greater emphasis on preventative care.[71] While dermatology was not part of the Commissioning for Value programme, the basis of this lends itself to dermatology. Reducing unwarranted variation in healthcare is also a key priority of the GIRFT dermatology programme.[72]

Quality focuses on the patients who are treated but value focuses on all the people in need. Value must be taken into account and there may currently be either overuse or underuse of services, neither of which is a good thing. Overuse can lead to waste and even patient harm while underuse leads to failure in prevention and unfairness of access to services. These problems are not addressed by focusing just on quality of care.

PHM will be the model that ICSs and PCNs work with in the future and it is essential psoriasis and PsA is included within this. Not all people with these conditions will need to use services at the same time, but PHM is a means of ensuring that patients with the greatest needs are seen, as well as those who may be receiving treatment. Currently, services in the main see patients who are actively receiving therapy. Serious comorbidity issues can result in this condition, so early diagnosis, assessment and preventative care are vital considerations to ensure that those who would benefit most from specialist services do so.

If necessary, this could mean reducing the number of people seen by that service directly or by introducing new models of care management for those in a stable condition. Workforce issues also require solutions to expand the capacity of services. As well as incorporating new elements of care such as digital technology and social prescribing. Patient support organisations could lead or support service innovation projects to help people with psoriasis and PsA maintain their health.

Figure 13. Population health management



(Source: author)

> Explicit data on the total numbers of people likely to have psoriasis and PsA in an area is essential and can bring greater clarity for health service planning.

The EWG highlighted that the prevalence of psoriasis and PsA is not evenly distributed across the UK and areas of high need may not receive the necessary attention as the issue of geographical prevalence is not properly understood.

Population information will raise awareness, not only of the numbers of patients currently being seen within specialist services, but those who are likely to have the condition. Up-to-date information about dermatology and rheumatology services for people with psoriasis and PsA should also be made explicit so there is awareness for both HCPs and patients. As an example, Figure 14 highlights the possible number of people living in the Surrey Heartlands Health and Care Partnership area with psoriasis and PsA.[16,17,18]

For the first time this report sets out by individual STPs, CCGs, health boards and English parliamentary constituencies an estimation of the numbers of people living with psoriasis and PsA. This data will be a useful aid to service planning by enabling commissioners to understand the appropriate workforce and service delivery requirements for their local population. Full data tables are listed at the back of this report in section 11.

Figure 14. Example prevalence estimate table[16,17,18]

Area	Population	Psoriasis	PsA
Surrey Heartlands Health and Care Partnership	1,103,582	33,107	9,932

Source: Psoriasis Association (2020); Ocampo DV and Gladman D (2019); and England Quality and Outcomes Framework 2019/2020)

The challenge now for health and social care is to ensure that health inequalities in relation to access to services do not exist for people with psoriasis and PsA.

Key considerations

1. **Ensure greater clarity on the potential numbers of people living with psoriasis and PsA in each CCG, STP and health board to improve commissioner understanding for service planning and delivery.**
2. **Dermatology clinics in departments and regional joint clinics should keep a database of all patients according to a nationally agreed template for the purposes of audit. This could be compared to prevalence numbers for each health economy. Locally gathered audit data could then inform strategic planning for commissioners.**
3. **Examine national, STP and PCN priorities which could assist with influencing resources and care delivery for psoriasis and PsA. Associated comorbidities and preventative strategies e.g., CVD, diabetes and mental health issues, prioritised in the Long-Term Plan may help link patients into additional support.**[20]
4. **The dermatology team should be aware of the structure of NHS ICSs and the interface within their own service. ICPs will hold the budget for services in the future and engagement with them is essential.**

4. Referrals: right person, right time

A major challenge for some people living with psoriasis and PsA is access to specialist secondary care services that can provide a holistic assessment of their needs

There is often a long delay in referring patients into secondary care, which can impact on the consideration and treatments of the range of comorbidities associated with psoriasis such as PsA, cardiovascular disease, obesity, diabetes and mental health issues, which can have a significant impact on their quality of life.[2,73]

NHS England's *Transforming Elective Care Services in Dermatology* programme has sought to identify opportunities to manage dermatology services in more efficient ways, such as:[44]

- Rethinking referrals
- Shared decision making
- Transforming outpatient appointments

These service changes include the development of more GP champions for dermatology, e-referral systems, tele-dermatology, community triage clinics, self-management, education and support and PIFU. Examples of how digital technology can be used in dermatology services are also available in the NHSX Dermatology Playbook and self-management initiatives are supported by the ABPI Dermatology Initiative.[74,75]

System recovery is now also seriously impacted with further waves of COVID-19. The BAD state in their 2020 white paper, *COVID-19 – Dermatology: Priorities in the second wave,* that as far as possible, face-to-face encounters should be in one-stop clinics to reduce the frequency and duration of trips to hospital.[76] The BAD further states that many departments are setting up Referral Assessment Services (RAS), with e-RAS enabling tele-triage of referrals to ensure patients are prioritised to the correct pathways. This work is to be supported by NHS England and Improvement's *Teledermatology Roadmap* for 2020/21.[77]

In a recent study, findings predict patients with PsA have a greater coronary heart disease (CHD) and type 2 diabetes propensity by 27% and 83% respectively, compared with controls.[78] Mental health issues are also a major factor; The All-Party Parliamentary Group (APPG) on Skin (2020) highlighted the need for psychological support for people with skin diseases because of the emotional distress they encounter.[33] The EWG also described how living with psoriasis or PsA can put a strain on personal relationships. Low self-esteem can also interfere with day-to-day employment and relationships. Stress and anxiety of the disease itself can lead to an increase in flare-ups, and often leaves patients feeling disenfranchised. Therefore, early diagnosis and mental health impact should be key components of care.

For younger patients who have psoriasis, early diagnosis and mental health are invariably interlinked, as one expert noted that the impact of bullying during a child's early and school years could be avoided with earlier diagnosis and subsequent treatment.

Members of the EWG also noted that since psoriasis is a fluctuating condition with symptoms lying on a continuum, 'success rates' can be much harder to define than cancer outcomes, for example.

The implications of delayed referral and not receiving early diagnosis were highlighted by the EWG, which agreed that many patients develop *cumulative life damage* in the form of irreversible impairment that builds up over time.

5. The patient journey

A patient's journey with psoriasis and PsA can often be a complex one. Therefore, the use of a fictional patient scenario is intended to help commissioners and providers understand the implications and changes in management that can help clinicians and commissioners improve the value and outcomes of the care pathway.

Through a fictional patient, Melissa, a care pathway is used to illustrate the health and social care elements of the journey for someone with psoriasis. It highlights the journey the patient follows when she receives optimal care, but also outlines the implications of what can happen when a patient does not receive the correct care. The critical window, when Melissa could have been referred on to a specialist, was lost which had a major impact on her and her family's experience of the condition.

5.1 Meet Melissa

Melissa is a 32-year-old computer programmer who lives in Birmingham with her husband, Dan. Her symptoms first started when she was 14 years old and she has been diagnosed with psoriasis, PsA, obesity and hypertension.

She finds her condition very difficult to cope with, saying that "psoriasis impacts every decision that I make every single day." She always worries about triggers that might cause a flare up and subsequently finds it very difficult to lead a normal home and work life: "The hardest part is my mobility - PsA is wreaking havoc with my joints. Standing up from my chair at work might take me 20 minutes before I can stand and walk comfortably."

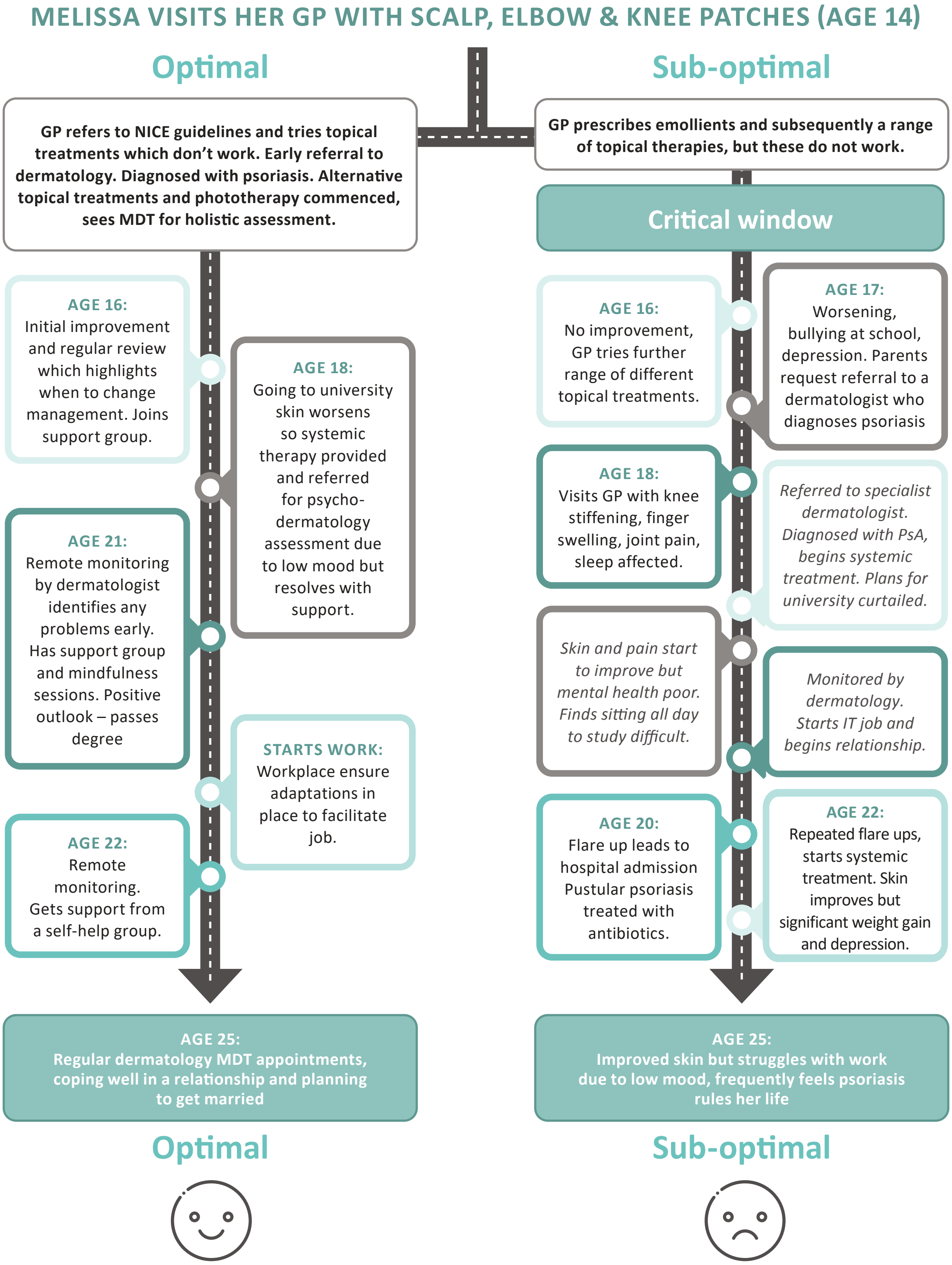
She has severe anxiety about her appearance, both in terms of her skin and her weight which she finds very difficult to control. She worries a lot about whether she will be able to start a family. "People are suggesting remedies to me all the time. It is so irritating – I've already tried everything."

Fictitious patient image

> The hardest part is my mobility - PsA is wreaking havoc with my joints. Standing up from my chair at work might take me 20 minutes before I can stand and walk comfortably.
>
> Melissa (fictitious patient with psoriasis)

Figure 15 below outlines two different storylines that follow what both an optimal and suboptimal patient care pathway may look like for someone like Melissa, who has suffered from psoriasis and its comorbidities.

Figure 15. Optimal and suboptimal patient care pathways



MELISSA VISITS HER GP WITH SCALP, ELBOW & KNEE PATCHES (AGE 14)

Optimal

GP refers to NICE guidelines and tries topical treatments which don't work. Early referral to dermatology. Diagnosed with psoriasis. Alternative topical treatments and phototherapy commenced, sees MDT for holistic assessment.

AGE 16: Initial improvement and regular review which highlights when to change management. Joins support group.

AGE 18: Going to university skin worsens so systemic therapy provided and referred for psycho-dermatology assessment due to low mood but resolves with support.

AGE 21: Remote monitoring by dermatologist identifies any problems early. Has support group and mindfulness sessions. Positive outlook – passes degree

STARTS WORK: Workplace ensure adaptations in place to facilitate job.

AGE 22: Remote monitoring. Gets support from a self-help group.

AGE 25: Regular dermatology MDT appointments, coping well in a relationship and planning to get married

Optimal

Sub-optimal

GP prescribes emollients and subsequently a range of topical therapies, but these do not work.

Critical window

AGE 16: No improvement, GP tries further range of different topical treatments.

AGE 17: Worsening, bullying at school, depression. Parents request referral to a dermatologist who diagnoses psoriasis

AGE 18: Visits GP with knee stiffening, finger swelling, joint pain, sleep affected.

Referred to specialist dermatologist. Diagnosed with PsA, begins systemic treatment. Plans for university curtailed.

Skin and pain start to improve but mental health poor. Finds sitting all day to study difficult.

Monitored by dermatology. Starts IT job and begins relationship.

AGE 20: Flare up leads to hospital admission Pustular psoriasis treated with antibiotics.

AGE 22: Repeated flare ups, starts systemic treatment. Skin improves but significant weight gain and depression.

AGE 25: Improved skin but struggles with work due to low mood, frequently feels psoriasis rules her life

Sub-optimal

5.2 Summary

For patients like Melissa, the ideal situation is for early diagnosis and rapid treatment escalation. However, there is evidence of huge variation in the recognition, treatment and management of psoriasis/PsA across the country and the need for focused improvements cannot be overstated.

In the optimal scenario, the opportunity is taken to proactively improve her health outcomes, manage pre-existing conditions, enhance quality of life and reduce the cost of her care. Melissa is:

- Quickly referred, aided by digital care records, guidelines and information, coordinated between HCPs which helps improve her awareness of how to manage the condition and self-manage.
- Expedited and proactively assessed with onward MDT management through the specialist service to make sure she has the right treatment at the right time.
- Given psychological support to help manage the distress many individuals get as a result of the condition.

In the suboptimal scenario this **critical window** for support is missed:

- There is a lack of coordinated proactive care and comorbidity issues develop.
- Melissa's mental and physical health deteriorate to the point this impacts her education, employment and social interactions.
- The lack of patient education and training impacts her ability to cope.

Key considerations

1. **Some GPs may be unaware of the most appropriate course to manage the disease and in some instances topical treatments are ineffective. Developing a key 'red flags' alert framework for GPs as a resource for referral and ongoing management could assist with education. Ensuring easily accessible psoriasis and PsA education for GPs and primary health care teams could increase primary care understanding of patient need and ensure that referrals are prioritised to the correct pathway.**

2. **Identify a GP with extended role (GPwER) for dermatology within each STP which could enhance primary care engagement.**

3. **Use one-stop shop dermatology clinics where available.**

4. **Do not underestimate the complexity of living with psoriasis and PsA – outline a broader definition of treatment success in dermatology care planning rather than just clear skin. There should be greater awareness of potential comorbidities within healthcare systems and links to other policy initiatives that support earlier detection of comorbidity aspects of the disease such as CVD, diabetes and mental health. Setting treatment goals should include quality of life and overall health and wellbeing.**

6. Waiting times

Dermatology is a high-volume outpatient specialty and services are variable across the UK. It has been the responsibility of NHS service providers to have staffing arrangements in place that deliver safe and effective care. Each provider should make sure they have sufficient expertise in each area and a critical mass of HCPs to ensure NHS England's 18-week target from referral to treatment is consistently met. There was a proposal to remove the 18-week target in 2020 but this decision was deferred until 2021; in the meantime, the COVID-19 pandemic intervened, and this has had an enormous impact on dermatology services.

> The EWG highlighted that prior to the pandemic, patients would often wait between six and nine months to be seen by a specialist; however, the COVID-19 backlog has impacted this and, in many cases, appointments have been cancelled and virtual appointments have replaced face-to-face consultations.

While virtual appointments are useful for some patients, they are not acceptable to everyone with psoriasis or PsA and may exacerbate health inequalities. Some patients struggle to get the most from virtual health appointments due to a lack of access to a phone or internet, difficulties with hearing and understanding, poor health literacy, language barriers or appointment length. For HCPs, while virtual appointments have ensured some contact is maintained, it is not always easy to assess a patient with psoriasis or PsA in a remote consultation and there may be challenges with investigative procedures or monitoring.

Currently, most dermatology departments have backlogs of outpatient reviews and treatments like phototherapy. EWG members highlighted the significant backlog that arose in dermatology services during the start of the COVID-19 pandemic from March to August 2020.

Recommencement of services has been variable across the UK due to space, location and social distancing measures which will likely lead to worse outcomes, long-term pain and distress and increased need for acute hospital admission.[76]

While it is recognised that service transformation needs to take place in dermatology, the complexity of psoriasis and PsA also needs to be recognised. There are significant opportunities to improve dermatology services, but a key goal of service delivery should be to ensure that patients have access to effective treatment as early as possible. If dermatology services are centred within the community, essential interactions with hospital-based specialists could become more challenging for patients to access.

For example, HCPs can spend a disproportionate amount of time attempting to deal with patients with skin conditions and mental health distress if they are not seen in a specialist setting. EWG members highlighted that not only does this have associated resource costs, but a longer duration of untreated mental health distress may also lead to significantly less favorable clinical outcomes.

Hospital managers and commissioners may mistakenly believe that dermatology clinics are more expensive if they involve multiple HCPs and longer consultation times. However, this may not be the case; greater understanding of the value of remote consultations is needed alongside highlighting the benefits that face-to-face consultations provide. Examples of models of service delivery need to be highlighted, particularly where they can help to widen access to care.
Addressing the backlog in the NHS will be difficult, both in the immediate months following the pandemic, and over the longer term in the coming years as the NHS deals with the 'hidden waiting list'.[79]

Key considerations

1. **Each ICS should review its regional service provision for dermatology and rheumatology services based on prevalence statistics. An estimation of service requirements for psoriasis and PsA should be identified.**
2. **The location of dermatology and rheumatology services for people with psoriasis and PsA should be made explicit for each CCG/PCN so there is an improved understanding of service need.**
3. **There should be local audits of service provision and waiting times for specialist psoriasis and PsA appointments within dermatology/rheumatology services and commissioners should carry these out regularly. The findings should be used to inform future investment in services at a local level which must match the needs of the area.**
4. **Availability of specialist support to services and treatment should be explicit alongside waiting times for treatment, i.e., psycho-dermatology, phototherapy.**

7. Workforce

The GIRFT Dermatology report has highlighted the challenges that have existed within the dermatology workforce in the COVID-19 pandemic.[45] Problems that were encountered in the first waves of the pandemic were exacerbated by a backlog of patients, winter pressures and further COVID-19 spikes. The BAD state that the provision of quality services needs to be balanced against pressures due to the pandemic, but this will mean that many patients will not be receiving services.[76]

The Royal College of Physicians and Higher Specialty Trainees Census (2020) of the medical workforce as a whole also revealed that 2020 was dominated by the profound effects of the pandemic.[80] Although this latest census covers the pre-COVID-19 period, as the NHS moves from crisis management to recovery, longer-term issues such as the fact that the number of consultant posts continues to significantly outnumber supply need to be addressed. The latest census outlines the continuing pressures on the medical workforce and the systems in which they work. More specifically, the census states:[80]

43%

OF ADVERTISED CONSULTANT POSTS IN ENGLAND & WALES WERE UNFILLED DUE TO A LACK OF SUITABLE APPLICANTS.

WIDE VARIATION

IN THE RATIO OF CONSULTANT PHYSICIANS TO POPULATION SERVED.

10%

TIME CONSULTANTS ESTIMATE THEY WORK MORE THAN THEY ARE CONTRACTED TO DO.

15%

OF THE WORKFORCE IS MADE UP OF CONSULTANTS WHO HAVE RETIRED AND RETURNED.

Figure 17 illustrates the number of full-time equivalent (FTE) consultants working in dermatology, which reinforces the vast regional variation in consultant support for people with psoriasis and PsA.[81]

Numbers range from 42,139 people per FTE consultant in South London to 326,120 people per FTE in the north of Scotland.[81]

Figure 17: Dermatology Workforce numbers across the UK

Nation	NHS Region	Sub region	Female	Male	Total Headcount	Total FTEs	Population	Population per FTE
England	London	London- Central and North East	36	29	65	48	3,506,448	72,879
		London - North West	17	6	23	16	2,095,479	133,673
		London - South	69	32	101	78	3,306,154	42,159
	Midlands and East	East Midlands	17	20	37	35	4,804,149	136,803
		East of England	40	25	65	50	6,201,214	123,433
		West Midlands	40	26	66	56	5,900,757	105,749
	North	North West	51	36	87	78	6,793,205	86,876
		Northern	12	17	29	23	2,879,534	122,651
		Yorkshire and the Humber	39	23	62	53	5,756,878	109,152
	South	Kent, Surrey and Sussex	38	17	55	40	4,740,249	117,177
		South West	35	21	56	45	4,878,675	109,037
		Thames Valley	14	10	24	20	2,407,593	119,036
		Wessex	19	15	34	29	2,705,843	94,079
Northern Ireland		Northern Ireland	14	9	23	19	1,881,641	96,978
Scotland		Scotland - East	6	4	10	10	416,080	43,239
		Scotland - North	1	3	4	3	978,360	326,120
		Scotland - South	17	9	26	20	1,384,950	68,436
		Scotland - West	23	17	40	35	2,658,710	74,942
Wales		Wales - North	2	6	8	6	698,369	116,395
		Wales - South	14	16	30	27	2,440,262	89,127

Source: The Royal College of Physicians. Focus on physicians: 2018–19 census (UK consultants and higher specialty trainees) - 2018-19 Consultant census data tool non macro version. Available at: https://www.rcplondon.ac.uk/file/18576/download (accessed November 2021).

It has been suggested that there is a lack of clinicians working in dermatology and also insufficient training and educational opportunities.[82] At some medical schools (15%) for instance, it is possible to complete undergraduate education without ever completing any formal dermatology focused education. The longest period of training is six weeks.[83]

To develop a comprehensive service for psoriasis and PsA, an appropriate number of trainees who are actively interested in dermatology and ready to face the future growing needs to run local dermatology services are needed. This could have a significant impact on reducing the variance in services across the UK. Within the existing workforce we also need ‘clinical champions’ who will promote greater focus on dermatology.

7.1 The GP workforce

The APPG on Skin has, since 1994, been working to increase understanding about skin care and achieve improvements in the treatment and management of patients. Within this work there have been several reports relating to workforce.[84,85,86,87,88,89] The consistent message in these reports has been that education and training for primary care in dermatology is insufficient.

Given that approximately a quarter of the UK population consult a GP each year because of a skin condition, there is an acute need for improved GP training within dermatology to support the high population need.[90]

Evidence submitted to the APPG on Skin inquiry indicated that "many patients feel let down by the level of knowledge of their GP."[33] The evidence reported that some GPs misdiagnose, lack support and do not fully acknowledge the severity of symptoms. This may have a severe impact on young people, who are at a vulnerable developmental stage and consequently may be inhibited from seeking medical and/or psychological help from HCPs in the future.[33]

Therefore, formal dermatology training modules, learning resources and educational events for primary care practitioners should be accessible and promoted by PCNs. There are training modules available free to all healthcare practitioners including GPs; however, these need to be better promoted by CCGs and PCNs as the EWG felt uptake was currently insufficient.

Primary and community care training hubs provide education and workforce training for a local area. Their education programmes respond to local needs and can act as a catalyst for the adoption of best practice. They can play a huge role in meeting the dermatological educational needs of multi-disciplinary primary care and community teams, including GPs, nurses and other HCPs. All ICSs and STPs should belong to and work closely with a training hub.

The Primary Care Dermatology Society (PCDS) delivers education on a national level and addresses the issue of skin disease and mental health in all its presentations. Local providers should ensure staff have access to their educational training and events.

The APPG on Skin believes that there is an "*urgent need for an inquiry to review GP knowledge and training.*"[33] This should evaluate knowledge and training based upon population need. In England, the APPG felt that Health Education England (HEE) and the medical royal colleges and faculties should lead this inquiry with respective education and training bodies in Wales. Scotland and Northern Ireland should likewise conduct a formal review into GP knowledge and training.

The APPG also felt that HEE should work with the Royal College of General Practitioners (RCGP), Royal College of Nursing (RCN) and Royal Pharmaceutical Society (RPS) to ensure that urgent priority is given to the provision of dermatological training for all GPs, nurses and pharmacists. This training should emphasise that many skin diseases are long-term conditions that require ongoing care. Similarly, the psychosocial effects of skin disease should be incorporated into the teaching and examination of training courses for GPs, nurses and pharmacists.

7.2 Social prescribing

Social prescribing is a way for individuals with psoriasis and PsA to be referred to a link worker. Link workers take a holistic approach to an individual's health and wellbeing, giving them time and focusing on 'what matters to me'. They connect people to community groups and statutory services for practical and emotional support. Link workers also support existing community groups to be accessible and sustainable, and help people to start new groups, working collaboratively with all local partners. There is emerging evidence that social prescribing can lead to a range of positive health and wellbeing outcomes for people (see Figure 18), such as improved quality of life,[91] which is often reduced in psoriasis and PsA. Social prescribing works for a wide range of people, including those:

- With one or more long-term conditions
- Who need support with their mental health
- Who are lonely or isolated or have complex social needs that affect their wellbeing

Figure 18. Social prescribing case study: Tower Hamlets [92]

The three key workstreams:

"Front door"

A SINGLE POINT OF ACCESS TO TOWER HAMLETS HEALTH AND SOCIAL CARE

Joint intermediate care team

A SINGLE POINT TO PROVIDE SHORT-TERM REHABILITATION AND REABLEMENT

Long-term care locality team model

COORDINATED CARE FOR INDIVIDUALS NEEDING SUPPORT

Impact:

Improvement

REDUCTION IN EMERGENCY ADMISSIONS AND DO-NOT-ATTEND RATES

Collaboration

STRUCTURAL CHANGES HAVE ENABLED GREATER COLLABORATION BY PARTNER ORGANISATIONS AT THE STRATEGIC LEVEL

Self-care

HCPS RECOGNISE THE IMPORTANCE OF SELF-CARE AND OF ADDRESSING THE SOCIAL DETERMINANTS OF HEALTH

This initiative works closely with hospitals and GPs in Tower Hamlets to engage socially isolated people, who may traditionally be reluctant to accept help and support – particularly from the statutory care sector. It signposts and refers people into support services provided by the NHS, the council and the voluntary sector. The service undertakes needs assessments in order to understand people's requirements in their last years of life. It provides a befriending service and practical help in the home that is not covered by social services. It also provides support to carers, enabling them to have short-term 'care-free' time and provides holistic support (e.g., therapeutic services). It also provides preventative services to protect the health and wellbeing of both cared-for people and their carers through befriending, practical and emotional support.

7.3 Direct Enhanced Services

Direct Enhanced Services (DES) underpin the role of PCNs in empowering general practice within the wider NHS and improving the range and effectiveness of primary care services.

There are a range of new roles that have or can be developed in primary care as a result of the LTP which may support dermatology patients in the community. These DES include clinical pharmacists, health and wellbeing coaches, care coordinators, first-contact physiotherapists, occupational therapists, social prescribers and link workers.[93] Exploring how these roles may benefit patients especially those with more complex needs may help with workforce capacity, providing this workforce are trained to understand the issues related to skin disease, for example health and wellbeing coaches may help support the adoption of healthier lifestyles or help with the social isolation some patients experience. Additionally, first contact physiotherapists may be able to provide more support to maintain mobility and reduce prevent impairments arising when joints are affected.

Direct Enhanced Services are nationally negotiated services, over and above those provided under usual contracts, which the Area Team or CCG is obliged to commission.

7.4 Clinical Champions for psoriasis and PsA

It is clear that the way dermatology services are planned, commissioned and delivered will change with the priorities identified in the LTP.[20] In the future, care provision across many specialties would benefit from the development of local 'clinical champions' in each area who can ensure that the needs of people with psoriasis and PsA are highlighted to the ICS. Lack of engagement between clinical teams and their commissioners and service managers may lead to a lack of understanding about the benefits of some services and aspects of care.

Figure 19. A local system approach for service transformation

Clinical champion
FROM WITHIN THE ICS IS IDENTIFIED FOR PSORIASIS AND PSA

Consultant lead
AND CLINICAL CHAMPION WORK TOGETHER WITH THE SERVICE BUSINESS DEVELOPMENT MANAGER

Commissioner
ADDS CHECKS AND CONTROLS

Service redesign
IS THEN PROVIDER NOT COMMISSIONER LED

The shape and function of services should be dictated by local need not geography. As a result, there is a need to reduce variation and ensure the quality of service is consistent and that all services are delivered to current established standards and guidelines by HCPs who are appropriately trained and qualified. Service structures should reflect the fact that patients will need access to various tiers of service and services on both an elective and emergency basis.

Key considerations

1. **Establish relationships with local service leaders, commissioners and service managers to support better communication for service transformation.**
2. **Dermatology/rheumatology clinical leads could support the development of establishing common referral processes and pathways.**
3. **Awareness of dermatology educational opportunities for GPs and primary care staff should be made more explicit to ensure all HCPs are aware of patient need.**

8. Examples of new models of care

The Glasgow Integrated Psoriasis and PsA service

Adult dermatology services in Greater Glasgow and Clyde are provided by the clinical directorate of dermatology, the Alan Lyell Centre for Dermatology, and are an example of integration in psoriasis and PsA services. The directorate works on a hub and spoke model, with inpatient beds and some specialised and tertiary services based at the Queen Elizabeth University Hospital (QEUH).

Local adult dermatology services are delivered at eight hospital sites – Glasgow Royal Infirmary, Inverclyde Royal Hospital, Royal Alexandra Hospital, Queen Elizabeth University Hospital, Stobhill Hospital, Vale of Leven Hospital, New Victoria Hospital and West Glasgow ACH. Each of these sites provides a range of dermatology out-patient services.

Dermatology services are provided by a multidisciplinary team of practitioners including Consultants, Specialty doctors, GP clinical assistants and specialist dermatology nurses, working within an inpatient ward and outpatient department. The QEUH forms the hub for subspecialty clinics and is the tertiary adult inpatient unit.

The PsA clinic enjoys close links with the psoriasis dermatology service with prompt access to their team of consultants, specialist registrars, clinical nurse specialists and clinical psychologists. Referral to the PsA clinic is via a formal referral from GPs, the NHS e-referral service, the dermatology service or from within rheumatology.

Royal Free PsA clinic

The PsA clinic is run by a consultant rheumatologist who also runs a monthly combined clinic with a dermatology consultant. The PsA clinic has close links with the psoriasis dermatology service with prompt access to their team of consultants, specialist registrars, clinical nurse specialists and clinical psychologists. Referral to the PsA clinic is via a formal referral or the NHS e-referral service.

The unit has a considerable number of patients under their care with PsA and experience in managing patients with a spectrum of skin and joint symptoms and disease courses. They have experienced and supportive rheumatology clinical nurse specialists who are closely involved with patients who attend the PsA clinic.

The Trust has a special interest in adopting a holistic approach to patient health and wellbeing, understanding the wider impact that psoriasis and PsA and its treatments have on a person with this condition.

The unit also has on-site recruitment into multi-centre, international clinical trials into PsA, providing opportunities to access specialist therapies for PsA and associated conditions.

The unit tries to adopt a holistic approach helping patients lead the life they want to. The aim of the service is that all new patients are seen by one of the lead psoriasis consultants, in order to formulate an effective management plan which includes treatment, follow-up and psychological intervention, if required.

Psoriasis Rapid Access Clinic (P-RAC) Salford

The P-RAC is a research study in collaboration with The University of Manchester, Salford Royal NHS Foundation Trust (Part of Northern Care Alliance NHS Group) and funded by Health Innovation Manchester. The clinic runs in a community practice in Salford with patients who have recently been diagnosed with psoriasis. Care is delivered by a specialist team including a dermatology consultant, a health psychologist and a dermatology nurse.

The model promotes early intervention and management of psoriasis with:[28]

- Increased self-care.
- Increased adherence to medication.
- Early referral to hospital services for those most at risk.
- Increased understanding of cardiovascular risk factors in this population.
- Prevention of serious comorbidities.
- Reduced absenteeism (when an employee has an unscheduled absence from the workplace due to ill health or injury) and presenteeism (when an employee is physically present but their productivity levels have declined due to ill health, injury or other conditions).

As is clear from the name, ICPs are destined to be partnerships with a variety of provider organisations, crossing sectors, often involving mergers and sharing of resources. It is vitally important that services for people with psoriasis are included in these models of care.

Surrey Heartlands BP+

From an integration perspective it is important that dermatology services try to link to local priorities. Patients with psoriasis and PsA experience a range of comorbidity issues such as hypertension, CVD and diabetes. Being aware of how these comorbidities are managed within local services may support patient management.

For example, Community Pharmacy Surrey and Sussex (CPSS) has partnered with Surrey Heartlands ICP to develop a pharmacy service offering blood pressure and atrial fibrillation checks alongside healthcare advice to manage these conditions.[94]

Only six out of every ten people who have hypertension in Surrey Heartlands have been diagnosed, leaving more than 80,000 people potentially unaware they have a condition.[94] That is in addition to one-third of people with atrial fibrillation being undiagnosed, leaving them exposed to the single biggest risk factor for a debilitating or potentially fatal stroke. This could be a useful support for patients with psoriasis and PsA to have further monitoring provided by a local pharmacist.

9. Patients as partners

Supported self-management (SSM) forms part of the LTP's commitment to encourage personalised care.[20] This means people have overall choice and control over the way their care is planned and delivered, based on a 'what matters to them' approach and their individual needs. This happens within a system that makes the most of the expertise, capacity and potential of people, families and communities in delivering better outcomes and experiences. Personalised care takes a whole-system approach, integrating services around the person and encompasses both mental and physical health support.

This represents a new relationship between patients, professionals and the health and care system. It provides a positive shift in power and decision making that enables people to feel informed and have a voice to be considered as a partner in their health care.

Personalised care is implemented through the NHS Comprehensive Model of Personalised Care and brings together six evidence-based interlinked components:[95]

1. Shared decision making
2. Personalised care and support planning
3. Enabling choice
4. Social prescribing and community-based support
5. Supported self-management.
6. Personal health budgets and integrated personal budgets.

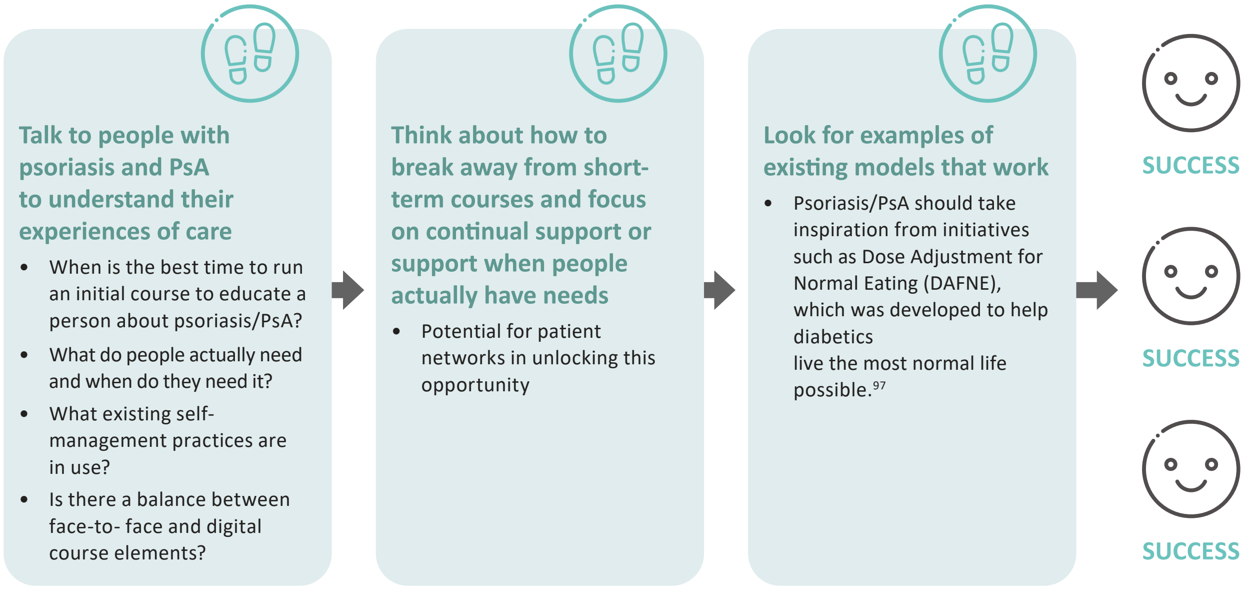
At a time of unprecedented disruption to health services, there has never been a more pressing need for health solutions to empower those diagnosed to learn about their condition, and the key role they can take in proactively managing it.

Patients working as partners could increase the number of engaged people with psoriasis across the UK and with the right support, this will enable people to integrate effective self-management and self-monitoring into their daily lives, supporting them to make positive lifestyle changes and optimise their engagement with health services, including making them more likely to seek a diagnosis for PsA.

The Psoriasis Association and Versus Arthritis are already providing a wealth of support to enable supported self-management in the form of information leaflets, social media support such as the COVID-19 virtual assistant,[96] apps and forums. There will be a range of additional opportunities in local health and care services who will be able to provide further support.

There are many ways in which technology can support people to take more control of their care. The internet already allows people to gather information from trusted sources about the disease, its causes, how it progresses, symptoms, and therapy. Some people use it to find information about ongoing clinical studies, scientific research and prepare for a consultation with a dermatologist – such information is often empowering and leads to more productive consultations with HCPs.

Figure 20. Patients as partners: steps to success



Talk to people with psoriasis and PsA to understand their experiences of care

- When is the best time to run an initial course to educate a person about psoriasis/PsA?
- What do people actually need and when do they need it?
- What existing self-management practices are in use?
- Is there a balance between face-to- face and digital course elements?

Think about how to break away from short-term courses and focus on continual support or support when people actually have needs

- Potential for patient networks in unlocking this opportunity

Look for examples of existing models that work

- Psoriasis/PsA should take inspiration from initiatives such as Dose Adjustment for Normal Eating (DAFNE), which was developed to help diabetics live the most normal life possible.[97]

SUCCESS

SUCCESS

SUCCESS

Access to apps and online health records have also already shown promise, as they empower people to better understand and manage their health and wellbeing. Not only does this mean people are better able to cope with their condition in their everyday lives but also that they can ask more insightful questions of their HCPs when they get to see them.

Accessible and coordinated care

It is becoming easier to collect data electronically and to develop and use technologies to share and link that data across organisations. This presents opportunities to ensure that all professionals involved in someone's care know what is occurring and are able to see all the professionals and services that could help them.

Some local areas are already trying to share data across GPs, hospitals and social care or to make sure each person has a single record that all the people involved in their care can see.

Ensuring patients are equal partners is not an easy task, but by recommending actions for organisations across the system we should be able to achieve a future where services, patients and technology work to give people affected by psoriasis and PsA the best care possible.

Figure 21 illustrates the potential of data and technology; however, rather than immediately reaching for technology or data solutions, the future needs to be built on a culture and context that enables this to unfold.[98] That means creating a collaborative culture between clinicians, commissioners, patients, the third sector and technology developers. If everyone works together patients as partners can become a reality.

Figure 21. The potential of data and technology (adapted from Castle-Clarke et al 2018)[98]

Key considerations

1. **Ensure patients are linked into charities, national and local, as soon after diagnosis as possible to enable access to support and reliable information.**
2. **HCPs to engage patients soon after diagnosis to recognise the importance of taking an active role in their healthcare otherwise they may become disempowered.**
3. **Consider the development of a national psoriasis and PsA patient partners programme to upskill people with psoriasis and PsA on how to navigate their local services and how to self-monitor and self-manage their own condition.**

10. Report methodology

10.1 Aim

This report aims to raise awareness and improve the understanding of the impact of psoriasis and PsA and its manifestations, identifying the personal, NHS and socioeconomic burden of these interlinked conditions in the UK. It has been developed using quantitative and qualitative data to highlight the impact of the disease and propose recommendations to strengthen policy and the management of psoriasis and PsA across the NHS, helping to both alleviate its impact on individual quality of life and improve the efficiency of the health system.

10.2 Method

The findings of this report are based on expert opinions gathered from an expert workshop held virtually on the 4 December 2020, desk research and online commentary from people living with psoriasis and PsA accessed via the Psoriasis Association, Versus Arthritis and social media channels, Facebook and Twitter. Attending the workshop were:

- Multidisciplinary HCPs who were currently, or have in the recent past, been responsible for the care of people with psoriasis/PsA.
- Senior and/or policy representatives from psoriasis/PsA charities.

These included:

- 1 member of parliament who is a member of the APPG on Skin.
- 1 consultant rheumatology specialist
- 3 consultant dermatology specialists
- 1 specialist dermatology nurse
- 3 patient organisation representatives
- 1 Senior Lead Pharmacist.

The HCP virtual workshop sought to understand:

- HCP views on the current management of psoriasis/PsA.
- What they considered as priorities for management, which would inform an action improvement plan for psoriasis/PsA.

Following the workshop, NVivo qualitative software and thematic analysis was used to identify the key emerging themes from the EWG and desk research. The key considerations are outlined in section 1.

11. Data tables

11.1 Psoriasis prevalence by STP/ICS in England, 2019/20[16,17,18]

		Prevalence estimate	
STP / ICS Name	**Population**	**Psoriasis**	**PsA**
ENGLAND TOTAL	**60,407,685**	**1,812,231**	**543,669**
Bath And North East Somerset, Swindon And Wiltshire STP	960,204	28,806	8,642
Bedfordshire, Luton And Milton Keynes STP	1,038,666	31,160	9,348
Birmingham And Solihull STP	1,335,447	40,063	12,019
Bristol, North Somerset And South Gloucestershire STP	1,039,306	31,179	9,354
Buckinghamshire, Oxfordshire And Berkshire West STP	1,901,306	57,039	17,112
Cambridgeshire And Peterborough STP	998,986	29,970	8,991
Cheshire And Merseyside STP	2,672,943	80,188	24,056
Cornwall And The Isles Of Scilly Health & Social Care Partnership (STP)	585,470	17,564	5,269
Coventry And Warwickshire STP	1,023,724	30,712	9,214
Cumbria And North East STP	3,121,507	93,645	28,094
Devon STP	1,247,260	37,418	11,225
Dorset STP	809,235	24,277	7,283
East London Health & Care Partnership STP	2,261,503	67,845	20,354
Frimley Health & Care (STP)	802,577	24,077	7,223
Gloucestershire STP	660,718	19,822	5,946
Greater Manchester Health & Social Care Partnership	3,125,128	93,754	28,126
Hampshire And The Isle Of Wight STP	1,897,552	56,927	17,078
Healthier Lancashire And South Cumbria	1,781,274	53,438	16,031
Herefordshire And Worcestershire STP	802,860	24,086	7,226
Hertfordshire And West Essex STP	1,589,782	47,693	14,308
Humber, Coast And Vale STP	1,757,499	52,725	15,817
Joined Up Care Derbyshire STP	1,062,791	31,884	9,565
Kent And Medway STP	1,914,385	57,432	17,229
Leicester, Leicestershire And Rutland STP	1,161,741	34,852	10,456
Lincolnshire STP	798,699	23,961	7,188
Mid And South Essex STP	1,239,869	37,196	11,159
Norfolk And Waveney Health & Care Partnership (STP)	1,066,974	32,009	9,603
North London Partners In Health & Care (STP)	1,680,887	50,427	15,128
North West London Health & Care Partnership (STP)	2,598,023	77,941	23,382
Northamptonshire STP	786,205	23,586	7,076
Nottingham And Nottinghamshire Health And Care STP	1,106,643	33,199	9,960

		Prevalence estimate	
STP / ICS Name	**Population**	**Psoriasis**	**PsA**
ENGLAND TOTAL	**60,407,685**	**1,812,231**	**543,669**
Our Healthier South East London STP	2,017,832	60,535	18,160
Shropshire And Telford And Wrekin STP	508,445	15,253	4,576
Somerset STP	583,921	17,518	5,255
South West London Health & Care Partnership STP	1,713,325	51,400	15,420
South Yorkshire And Bassetlaw STP	1,589,608	47,688	14,306
Staffordshire & Stoke On Trent STP	1,159,853	34,796	10,439
Suffolk And North East Essex ICS	1,030,771	30,923	9,277
Surrey Heartlands Health & Care Partnership STP	1,103,582	33,107	9,932
Sussex Health And Care Partnerships	1,791,624	53,749	16,125
The Black Country And West Birmingham STP	1,487,194	44,616	13,385
West Yorkshire And Harrogate Health & Care Partnership STP	2,592,366	77,771	23,331

11.2 Psoriasis prevalence by CCG in England, 2019/20[16,17,18]

		Prevalence estimate	
CCG Name	**Population**	**Psoriasis**	**PsA**
ENGLAND TOTAL	**60,407,685**	**1,812,231**	**543,669**
NHS Barking And Dagenham CCG	232,895	6,987	2,096
NHS Barnsley CCG	264,011	7,920	2,376
NHS Basildon And Brentwood CCG	284,079	8,522	2,557
NHS Bassetlaw CCG	119,431	3,583	1,075
NHS Bath And North East Somerset, Swindon And Wiltshire CCG	960,204	28,806	8,642
NHS Bedfordshire CCG	495,751	14,873	4,462
NHS Berkshire West CCG	556,075	16,682	5,005
NHS Birmingham And Solihull CCG	1,335,447	40,063	12,019
NHS Blackburn With Darwen CCG	178,557	5,357	1,607
NHS Blackpool CCG	174,729	5,242	1,573
NHS Bolton CCG	316,292	9,489	2,847
NHS Bradford District And Craven CCG	644,014	19,320	5,796
NHS Brent CCG	402,623	12,079	3,624
NHS Brighton And Hove CCG	326,136	9,784	2,935
NHS Bristol, North Somerset And South Gloucestershire CCG	1,039,306	31,179	9,354
NHS Buckinghamshire CCG	570,371	17,111	5,133
NHS Bury CCG	207,043	6,211	1,863
NHS Calderdale CCG	222,153	6,665	1,999
NHS Cambridgeshire And Peterborough CCG	998,986	29,970	8,991
NHS Cannock Chase CCG	134,873	4,046	1,214
NHS Castle Point And Rochford CCG	185,973	5,579	1,674
NHS Central London (Westminster) CCG	237,986	7,140	2,142
NHS Cheshire CCG	780,622	23,419	7,026

		Prevalence estimate	
CCG Name	**Population**	**Psoriasis**	**PsA**
ENGLAND TOTAL	**60,407,685**	**1,812,231**	**543,669**
NHS Chorley And South Ribble CCG	183,954	5,519	1,656
NHS City And Hackney CCG	328,557	9,857	2,957
NHS County Durham CCG	557,693	16,731	5,019
NHS Coventry And Rugby CCG	532,361	15,971	4,791
NHS Derby And Derbyshire CCG	1,062,791	31,884	9,565
NHS Devon CCG	1,247,260	37,418	11,225
NHS Doncaster CCG	325,592	9,768	2,930
NHS Dorset CCG	809,235	24,277	7,283
NHS Dudley CCG	327,796	9,834	2,950
NHS Ealing CCG	454,909	13,647	4,094
NHS East And North Hertfordshire CCG	609,574	18,287	5,486
NHS East Berkshire CCG	472,910	14,187	4,256
NHS East Lancashire CCG	384,410	11,532	3,460
NHS East Leicestershire And Rutland CCG	336,911	10,107	3,032
NHS East Riding Of Yorkshire CCG	307,138	9,214	2,764
NHS East Staffordshire CCG	145,489	4,365	1,309
NHS East Sussex CCG	560,333	16,810	5,043
NHS Fareham And Gosport CCG	205,139	6,154	1,846
NHS Fylde And Wyre CCG	179,326	5,380	1,614
NHS Gloucestershire CCG	660,718	19,822	5,946
NHS Greater Huddersfield CCG	251,311	7,539	2,262
NHS Greater Preston CCG	214,180	6,425	1,928
NHS Halton CCG	133,419	4,003	1,201
NHS Hammersmith And Fulham CCG	304,995	9,150	2,745
NHS Harrow CCG	278,301	8,349	2,505
NHS Havering CCG	282,240	8,467	2,540
NHS Herefordshire And Worcestershire CCG	802,860	24,086	7,226
NHS Herts Valleys CCG	660,437	19,813	5,944
NHS Heywood, Middleton And Rochdale CCG	238,421	7,153	2,146
NHS Hillingdon CCG	324,944	9,748	2,924
NHS Hounslow CCG	332,508	9,975	2,993
NHS Hull CCG	303,052	9,092	2,727
NHS Ipswich And East Suffolk CCG	413,630	12,409	3,723
NHS Isle Of Wight CCG	144,933	4,348	1,304
NHS Kent And Medway CCG	1,914,385	57,432	17,229
NHS Kernow CCG	585,470	17,564	5,269
NHS Knowsley CCG	167,954	5,039	1,512
NHS Leeds CCG	897,014	26,910	8,073
NHS Leicester City CCG	423,324	12,700	3,810
NHS Lincolnshire CCG	798,699	23,961	7,188
NHS Liverpool CCG	550,914	16,527	4,958
NHS Luton CCG	240,418	7,213	2,164
NHS Manchester CCG	673,643	20,209	6,063

		Prevalence estimate	
CCG Name	**Population**	**Psoriasis**	**PsA**
ENGLAND TOTAL	**60,407,685**	**1,812,231**	**543,669**
NHS Mid Essex CCG	397,994	11,940	3,582
NHS Milton Keynes CCG	302,497	9,075	2,722
NHS Morecambe Bay CCG	352,016	10,560	3,168
NHS Newcastle Gateshead CCG	534,061	16,022	4,807
NHS Newham CCG	420,810	12,624	3,787
NHS Norfolk And Waveney CCG	1,066,974	32,009	9,603
NHS North Central London CCG	1,680,887	50,427	15,128
NHS North Cumbria CCG	326,342	9,790	2,937
NHS North East Essex CCG	359,685	10,791	3,237
NHS North East Hampshire And Farnham CCG	231,459	6,944	2,083
NHS North East Lincolnshire CCG	170,358	5,111	1,533
NHS North Hampshire CCG	231,007	6,930	2,079
NHS North Kirklees CCG	195,473	5,864	1,759
NHS North Lincolnshire CCG	181,658	5,450	1,635
NHS North Staffordshire CCG	218,051	6,542	1,962
NHS North Tyneside CCG	222,116	6,663	1,999
NHS North Yorkshire CCG	430,912	12,927	3,878
NHS Northamptonshire CCG	786,205	23,586	7,076
NHS Northumberland CCG	328,834	9,865	2,960
NHS Nottingham And Nottinghamshire CCG	1,106,643	33,199	9,960
NHS Oldham CCG	260,609	7,818	2,345
NHS Oxfordshire CCG	774,860	23,246	6,974
NHS Portsmouth CCG	233,026	6,991	2,097
NHS Redbridge CCG	336,084	10,083	3,025
NHS Rotherham CCG	265,018	7,951	2,385
NHS Salford CCG	284,750	8,543	2,563
NHS Sandwell And West Birmingham CCG	579,084	17,373	5,212
NHS Sheffield CCG	615,556	18,467	5,540
NHS Shropshire CCG	315,483	9,464	2,839
NHS Somerset CCG	583,921	17,518	5,255
NHS South East London CCG	2,017,832	60,535	18,160
NHS South East Staffordshire And Seisdon Peninsula CCG	214,967	6,449	1,935
NHS South Eastern Hampshire CCG	218,369	6,551	1,965
NHS South Sefton CCG	156,690	4,701	1,410
NHS South Tyneside CCG	158,561	4,757	1,427
NHS South Warwickshire CCG	296,694	8,901	2,670
NHS South West London CCG	1,713,325	51,400	15,420
NHS Southampton CCG	292,348	8,770	2,631
NHS Southend CCG	189,943	5,698	1,709
NHS Southport And Formby CCG	125,658	3,770	1,131
NHS St Helens CCG	198,525	5,956	1,787
NHS Stafford And Surrounds CCG	150,128	4,504	1,351

		Prevalence estimate	
CCG Name	**Population**	**Psoriasis**	**PsA**
ENGLAND TOTAL	**60,407,685**	**1,812,231**	**543,669**
NHS Stockport CCG	316,691	9,501	2,850
NHS Stoke On Trent CCG	296,345	8,890	2,667
NHS Sunderland CCG	284,403	8,532	2,560
NHS Surrey Heartlands CCG	1,103,582	33,107	9,932
NHS Surrey Heath CCG	98,208	2,946	884
NHS Tameside And Glossop CCG	251,124	7,534	2,260
NHS Tees Valley CCG	709,497	21,285	6,385
NHS Telford And Wrekin CCG	192,962	5,789	1,737
NHS Thurrock CCG	181,880	5,456	1,637
NHS Tower Hamlets CCG	341,212	10,236	3,071
NHS Trafford CCG	243,353	7,301	2,190
NHS Vale Of York CCG	364,381	10,931	3,279
NHS Wakefield CCG	382,401	11,472	3,442
NHS Walsall CCG	291,979	8,759	2,628
NHS Waltham Forest CCG	319,705	9,591	2,877
NHS Warrington CCG	220,742	6,622	1,987
NHS Warwickshire North CCG	194,669	5,840	1,752
NHS West Essex CCG	319,771	9,593	2,878
NHS West Hampshire CCG	572,730	17,182	5,155
NHS West Lancashire CCG	114,102	3,423	1,027
NHS West Leicestershire CCG	401,506	12,045	3,614
NHS West London CCG	261,757	7,853	2,356
NHS West Suffolk CCG	257,456	7,724	2,317
NHS West Sussex CCG	905,155	27,155	8,146
NHS Wigan Borough CCG	333,202	9,996	2,999
NHS Wirral CCG	338,419	10,153	3,046
NHS Wolverhampton CCG	288,335	8,650	2,595

11.3 Psoriasis prevalence by health board in Scotland, mid-2019[16,17,68]

		Prevalence estimate	
Scottish Health Board	**Population**	**Psoriasis**	**PsA**
SCOTLAND TOTAL	**5,463,300**	**163,899**	**49,170**
Ayrshire and Arran	369,360	11,081	3,324
Borders	115,510	3,465	1,040
Dumfries and Galloway	148,860	4,466	1,340
Fife	373,550	11,207	3,362
Forth Valley	306,640	9,199	2,760
Grampian	585,700	17,571	5,271
Greater Glasgow and Clyde	1,183,120	35,494	10,648
Highland	321,700	9,651	2,895
Lanarkshire	661,900	19,857	5,957
Lothian	907,580	27,227	8,168
Orkney	22,270	668	200
Shetland	22,920	688	206
Tayside	417,470	12,524	3,757
Western Isles	26,720	802	240

11.4 Psoriasis prevalence by Local Health Board in Wales, 2018/19[16,17,69]

		Prevalence estimate	
Welsh Local Health Board	**Population**	**Psoriasis**	**PsA**
WALES TOTAL	**3,243,498**	**97,305**	**29,191**
Betsi Cadwaladr University Local Health Board	710,076	21,302	6,391
Powys Teaching Local Health Board	139,149	4,174	1,252
Hywel Dda Local Health Board	395,001	11,850	3,555
Abertawe Bro Morgannwg University Local Health Board	553,625	16,609	4,983
Cwm Taf Local Health Board	307,631	9,229	2,769
Aneurin Bevan Local Health Board	618,655	18,560	5,568
Cardiff and Vale University Local Health Board	519,361	15,581	4,674

11.5 Psoriasis prevalence by Health and Social Care Trust (HSCT) in Northern Ireland, 2019/20[16,17,70]

		Prevalence estimate	
Northern Ireland HSCT	**Population**	**Psoriasis**	**PsA**
NORTHERN IRELAND TOTAL	**1,928,434**	**57,853**	**17,356**
Belfast HSCT	420,019	12,601	3,780
South Eastern HSCT	324,649	9,739	2,922
Northern HSCT	467,423	14,023	4,207
Southern HSCT	384,584	11,538	3,461
Western HSCT	331,759	9,953	2,986

11.6 Psoriasis prevalence by Primary Care Network in England, 2019/20[99]

Visit: https://wilmingtonhealthcare.com/wp-content/uploads/2021/11/COE028-Psoriasis-Prevalence-Data-v1.0-protected.xlsx

11.7 Psoriasis prevalence by constituency in England, Mid-2019[99]

Visit: https://wilmingtonhealthcare.com/wp-content/uploads/2021/11/COE028-Psoriasis-Prevalence-Data-v1.0-protected.xlsx

12. Glossary of abbreviations

APPG	All-Party Parliamentary Group
BAD	British Association of Dermatologists
CCG	Clinical Commissioning Group
CHD	Coronary heart disease
CPSS	Community Pharmacy Surrey and Sussex
CVD	Cardiovascular disease
DES	Direct enhanced services
DLQI	Dermatology Life Quality Index
EUROPSO	European Federation of Psoriasis Patient Associations
EWG	Expert working group
FTE	Full-time equivalent
GIRFT	Getting It Right First Time
GPwER	GP with extended role
HCP	Healthcare professional
HEE	Health Education England
ICS	Integrated care system
ICP	Integrated care provider
MDT	Multidisciplinary team
NICE	National Institute for Health and Care Excellence
NSAIDs	Non-steroidal anti-inflammatory drugs
PASI	Psoriasis Area and Severity Index
PCDS	Primary Care Dermatology Society
PCN	Primary care network
PEST	Psoriasis Epidemiology Screening Tool
PHM	Population health management
PIFU	Patient-initiated follow up.
P-RAC	Psoriasis Rapid Access Clinic
PsA	Psoriatic arthritis
PUVA	Psoralen plus UVA light
RAS	Referral Assessment Centre
RCGP	Royal College of General Practitioners
RCN	Royal College of Nursing
RPS	Royal Pharmaceutical Society
SSM	Supported self-management
STP	Sustainability and Transformation Partnerships

13. Resources

- **British Association of Dermatologists**: www.bad.org.uk
- **PSOteen**: www.psoteen.org.uk
- **Psoriasis Association**: www.psoriasis-association.org.uk
- **Psoriasis and Psoriatic Arthritis Alliance**: www.papaa.org
- **Skin Support**: skinsupport.org.uk
- **Versus Arthritis**: www.versusarthritis.org

14. References

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