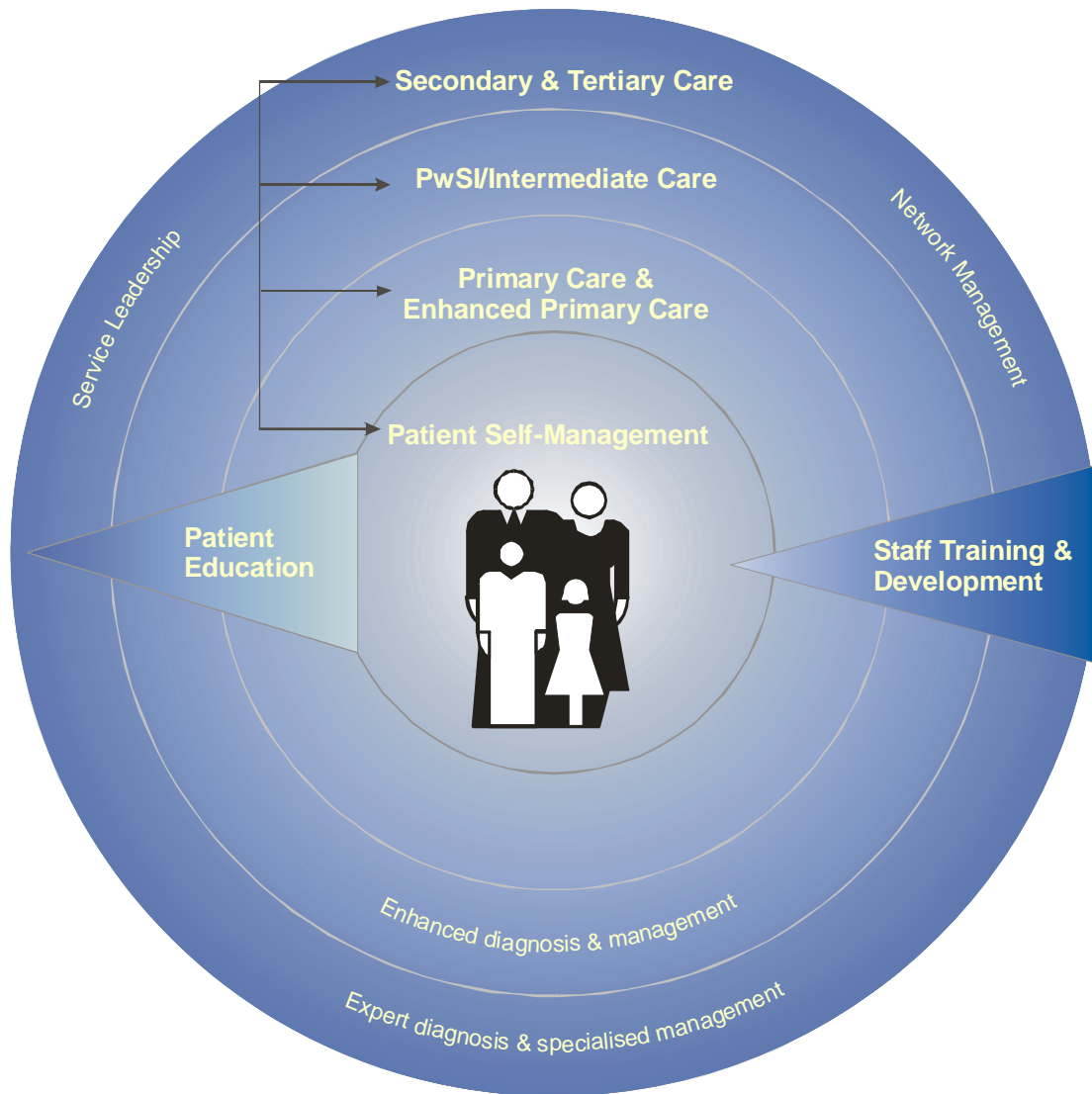


# Models of Integrated Service Delivery in Dermatology



**Author: Dermatology Workforce Group**  
**Date: January 2007**

## Contents Page

Foreword.....	3
Executive Summary.....	4
Introduction.....	6
Membership of Committee.....	7
Background.....	8
General Principles underlying Service Planning.....	10
The Patient Journey.....	11
Self Help.....	11
Current Service Provision.....	12
Recent Service Developments.....	12
Current Workforce: organisation, training and numbers	
- Medical.....	14
- Nursing.....	15
Pharmacy.....	18
Service Models of the future for Chronic Disease Management.....	19
Primary Care.....	21
Intermediate Care.....	21
Intermediate Care and Nursing.....	23
Paediatrics and Older Patients.....	24
Services provided by and Staffing of Dermatology Secondary Care.....	25
Staffing - Medical.....	25
Staffing - Nursing.....	26
Pharmacy.....	26
Secretarial.....	27
Clerical Support.....	27
Clinical Support.....	28
General Dermatology Clinics.....	28
Phototherapy.....	28
Investigation of Contact Allergy.....	29
Cutaneous Surgery.....	29
Laser Units.....	30
In-patient beds.....	30
Dermatology and Critical Care.....	30
Community based Intermediate clinics for chronic skin disease.....	30
Enhanced primary care.....	31
Paediatric Dermatology: Services for Children and Young People.....	32
Current Service provision in Paediatric Dermatology.....	32
Training.....	33
Nursing services and training.....	33
Paediatric Pharmacists.....	33
Paediatric in-patient facilities.....	34
Hospital Education.....	34
Surgery.....	34
Multi-disciplinary Paediatric clinics.....	34
Phototherapy in Childhood.....	34
Professions Allied to Medicine.....	35
Dermatology in Older People.....	36
Conclusions.....	37
References.....	38
List of Abbreviations and Acronyms.....	39

Appendices can be found at: [www.skincarecampaign.org/](http://www.skincarecampaign.org/) and [www.bad.org.uk](http://www.bad.org.uk)

## Foreword

There is an on-going and considerable change in the delivery of healthcare within the NHS, with a greater emphasis on an improved patient focus, and a planned shift of care closer to the patient and their community. Patients with skin diseases can benefit hugely from these changes, mainly through improvements in assisted self-management, but only if the planned changes are coherent, of high quality and integrated through the inevitable journeys patients make in accessing advice and treatment as their skin disease changes.

The over-riding requirements of any service are that it is provided by individuals who have demonstrated their competence to provide it, and that it is consistent with the needs of an integrated service model that works to the benefit of patients. It must also be of high quality, cost-effective, demonstrably safe, and subject to the requirements of clinical governance now so well entrenched into the NHS. Whatever proportion of dermatology services are placed within a community setting, it is essential that these are underpinned by a strong, high quality, adequately resourced hospital based secondary care facility. This central core needs to be responsible for elements of service defined by the availability of skills, expensive equipment, networks of care and the needs of clinical governance, as well as the educational needs of community based services.

This document, written by the Dermatology Workforce Group, describes the organisation of services, including those areas of practice that hospital services must provide, and those that may be provided in other sites, but stresses the essential interactions and interdependence of the overall service. It details the nature of the services necessary, and the workforce needed to deliver them in a modern healthcare system.

The development of a competence framework relevant to the needs of a developing dermatology health community has occurred in parallel with the writing of this document, and reflects its principles. It will be launched very shortly. Educational programmes are essential to the development of competences by the workforce, but must be relevant to a multi-professional audience at a level appropriate to their area of work, not to their profession. The Competence Framework will define the remit of the educational programmes, and will provide a toolkit of skills that may be selected as relevant to a particular role, allowing a job specification to be developed 'off the shelf'.

The implications of this are potentially far reaching with regard to workforce development within the modern health service. Integration of service provision at all levels is an essential part of healthcare delivery, and so is the integration of competences and education to patient need. This document addresses the first part of this equation, so I hope that it is widely used to develop and guide health care purchasers and providers in our developing NHS.



Bruce George MP  
All Party Parliamentary Group on Skin

# **Service Models for Acute and Chronic Disease Management in Dermatology**

## **Executive Summary**

### **Background and principles**

This paper was commissioned by the Workforce Review Board and has been prepared by the Dermatology Workforce Group. It assesses current service models for dermatology and suggests future models.

Skin disorders are amongst the most common diseases encountered by health professionals. Whilst there are some four and a half thousand skin diseases, eight of them make up 80% of consultations for skin disease in general practice, and between 15 and 20% of GP consultations have a dermatological element to them. Accurate diagnosis of skin disease is critical to appropriate management.

The active involvement of the informed patient in their therapy is critical to success. Patients with long term skin disease usually become expert in its treatment and management. One of the major failings in current service provision is the failure to acknowledge this expertise.

The facilitation of well-supported self-management of inflammatory skin diseases is key to the provision of services. Ideally, the support for such self-management should be provided by a primary care clinic staffed by an appropriately trained health professional. As well as providing patients with the service they want, such a system may be expected substantially to reduce the burden of inflammatory skin disease on the NHS.

### **Current service models**

The traditional service model of 'gate keeping' and referral is inimical to optimal care of patients with long term skin diseases, not least because dermatology training for primary care clinicians is inadequate.

Over the last 10 years, there have been increasing deficiencies in this model of service provision due to a crisis in the numbers of trained dermatologists; a significant increase in demand; and a dramatic increase in the treatments available. The result of these changes was an overall increase in waiting times for first appointments, and in some areas a collapse of dermatology service provision.

Some treatments for moderate to severe inflammatory skin diseases are currently only available in secondary care so referral for these patients must be facilitated quickly. Patients with inflammatory skin diseases should also have quick and easy access to secondary care if their condition deteriorates rapidly.

In some areas, the traditional service model is enhanced by the appointment of a GP or GPs with special interest in dermatology (GPwSI), to reduce numbers of referrals to secondary care and provide ongoing chronic disease management in conjunction with the GP.

Inevitably, innovative purchasers have sought ways of providing a service, some of which produced some valuable, sustainable and generalisable lessons about service provision. Some of these systems, however, were neither replicable nor sustainable.

### **Future service model**

In areas that have not undergone modernisation, the present balance of service provision is wrong – too many patients are attending hospital based services for the provision of care that could be managed in a community setting.

Any future model of care should concentrate on service delivery governed by three broad statements:

- Secondary Care Teams should do those things that only they can do (see below);
- Care should be delivered in the right place by individuals with the right skills and at the right time; and
- Policies should facilitate patient self-management.

Secondary Care: Hospital-based secondary care is essential for the core elements of service provision. Consultant dermatologists lead dermatology teams and networks; diagnose, manage and supervise the care of complex and rare skin diseases; lead the training of medical students and doctors, and contribute to the training of nurses and pharmacists. The hospitals within which they work provide an environment for the care of complex patients; technological treatments; in-patient beds; and facilities for multi-professional teaching and training within this specialised area. Without adequate resources of trained personnel, facilities and funding within the secondary care 'hubs' of the dermatology service model, the other tiers will not be able to function as envisaged here.

Although the role of consultant dermatologists may change to become even more educational, the numbers required will continue to increase.

Intermediate Care: once diagnosed by an appropriately trained health professional, the routine management of the most common diseases should generally be community-based.

Such community-based management must be delivered by appropriately skilled and trained staff with defined competencies and supported by secondary care. Such services must be developed within negotiated networks involving all elements of the service.

Primary Care: All patients should have rapid access to diagnosis of their skin disease; all GPs should be able to diagnose the common skin disorders in their characteristic forms; patients with the common inflammatory skin disorders should receive educational and practical input from a trained professional, often a nurse, in a community setting, this may be part of enhanced primary care or as an intermediate care service; after diagnosis, all patients with disease requiring on-going management should be cared for within local protocols for chronic disease management.

The quality statements in the GMS contract encourage such practice in a number of clinical areas but not currently within skin diseases. Given the frequency and the nature of much skin disease, this is a mistake and a missed opportunity.

## Introduction

At a time of great change within the Health Service, there is a need for a clear view of service delivery within Dermatology, particularly following the recent White Paper demonstrating the strength of Government policy with regard to Community based services. A document discussing proposed service models for the specialty of Dermatology would be valuable to inform the service development teams at Strategic Health Authorities, and to allow consistency of provision at PCT level. The Dermatology Sub-group of the Long-Term Conditions Care Group Workforce Team (now known as the Dermatology Workforce Group) has produced such a document, written by that multi-professional committee and reviewed by representatives of the wider Dermatology community, including patients and commissioners.

It was our intention to concentrate particularly on the on-going management of skin disorders, and we have therefore taken as our starting point the position that all patients should have an accurate diagnosis made as early in the history of their condition as possible. This will require access to a trained professional, and may well require a visit to a conventional secondary care unit. We have deliberately not considered the systems necessary for the diagnosis and management of skin cancer which are the subject of specific NICE guidelines, but many of the proposals in this document are equally applicable to this area of service provision.

The document contains background detail, assessment of the current service models and suggestions for the future models of delivery of Dermatology in primary and secondary care, as well as an assessment of numbers needed in each workforce area. It also forms the basis for the development of a multi-professional Competence Framework that will be available concurrently.

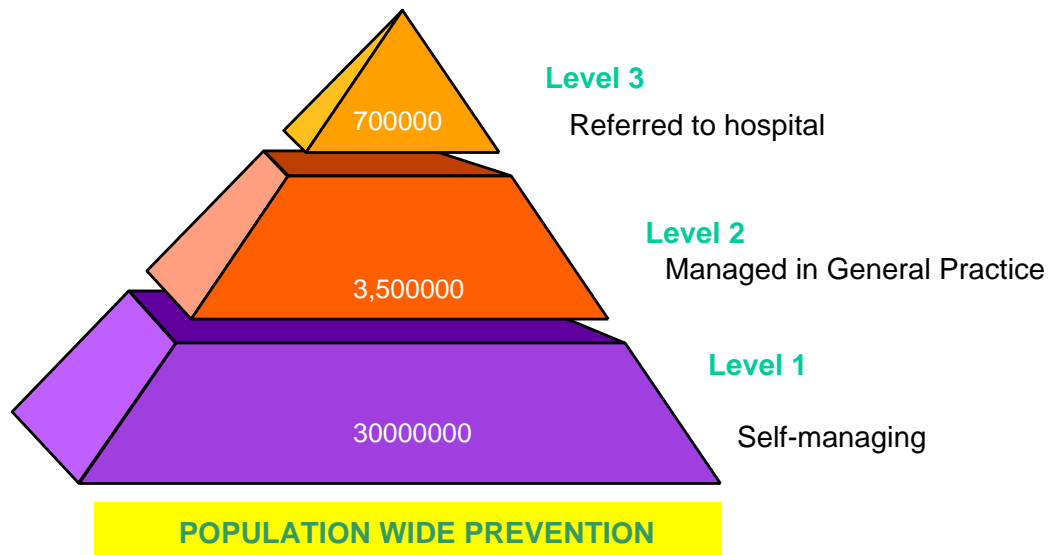
## Membership of the Committee

<b>Dr Mark Goodfield</b> (Chair)	Consultant Dermatologist, Leeds General Infirmary
<b>Mr Peter Lapsley</b> (Vice Chair)	Chief Executive, Skin Care Campaign
<b>Allan Melzack</b>	Community Pharmacist
<b>Barbara Page</b>	Dermatology Nurse Specialist
<b>Christine Clark</b>	Pharmacist
<b>Colleen Gradwell</b>	British Dermatological Nursing Group
<b>Gladys Edwards</b>	Psoriasis Association
<b>Dr Inma Mauri-Sole</b>	Primary Care Dermatology Society
<b>Ivan Bristow</b>	Lecturer in Podiatry, Southampton University
<b>Dr Jenny Shepherd</b>	Non-Consultant Career Grade Committee of the British Association Pharmaceutical Industry representative
<b>Karen Whiteford</b>	Consultant Dermatologist, Leigh Infirmary
<b>Dr Libby Stewart</b>	Pharmaceutical Industry representative
<b>Neil Symmonds</b>	Pharmaceutical Industry representative
<b>Peter Jackson</b>	Dermatology Nurse Representative
<b>Phil Watkins</b>	Project Manager – Skills for Health
<b>Dr Rav Jayram</b>	Dermatology Nurse Specialist
<b>Rebecca Penzer</b>	British Society for Paediatric Dermatology
<b>Dr Sue Lewis-Jones</b>	

## Background

### Management of chronic skin disease

The Pyramid of Skin Disease Occurrence and Levels of Care



Skin disorders are amongst the most common diseases encountered by health professionals. There is a large variation in prevalence ranging from around 10% of the population suffering with atopic eczema, 2% with psoriasis, and less than 1/1000000 for some rare genetic disorders. Skin diseases affect all ages, and the special needs of children and young adults, as well as the older patient, need to be acknowledged and acted upon. Many different disciplines may be involved in the care of such patients.

Although it is the case that the commonest disorders are not life threatening, many of the rarer disorders are, and accurate diagnosis is critical to appropriate management. For those disorders that are not life threatening, the impact on everyday life, work, social interaction and healthy living are substantial. Occupationally acquired skin disease is the second most common cause of lost time from work (after musculoskeletal disorders), and the impact of childhood atopic eczema on family life is greater than that caused by diabetes or asthma. Numbers of basal cell skin cancers are equivalent to the total of all other malignancies

Whilst there are some four and a half thousand dermatological diseases, 8 of them make up 80% of consultations for skin disease in general practice, and between 15 and 20% of GP consultations have a dermatological element to them.

Some of the commonest skin diseases continue to increase in frequency, and in particular there is an epidemic of skin cancer, with basal cell tumours increasing by 235% between 1980 and 1990, and melanoma doubling in frequency every 10 years. Demands upon Dermatology services have increased as a consequence of these changes, and also because of changes in peoples' perception of skin problems. There has also been a very significant improvement in the treatments available for skin problems, and thus in the expectation of a successful outcome to treatment. There are more referrals to Dermatology by General Practitioners than to all of the other medical specialities combined.



**Table 1**  
Frequencies of skin diseases

Diagnosis	Frequency in population
Eczema	15%
Psoriasis	2%
Acne	15% (80% of adolescents)
Urticaria	10%
Rosacea	1%
Skin Cancer – all types	10%
Melanoma	1/10000/year
Epidermolysis Bullosa	50/million live births/year

Inevitably, there is a considerable variation in the severity of skin disorders.

The majority of patients have mild problems that can be, and usually are, easily self-managed. In managing their disease, patients use many sources of information.

Sources of self help and aids for self-prescription for patients:
<ul style="list-style-type: none"> <li>• The internet.</li> <li>• Newspapers and magazines.</li> <li>• Patient self help groups.</li> <li>• Local pharmacies.</li> <li>• Innovations within the health service - NHS Direct or drop in clinics.</li> </ul>

These systems work effectively provided that the patient has had the correct diagnosis made in the first instance.

Much skin disease is self-limiting, and much infective in origin, but much is a life-long problem, and the active involvement of the informed patient in their therapy is critical to success. This remains true as the severity of the patients' skin disease increases. Patients with long term skin diseases usually have an in-depth understanding of their own condition and the treatments that are helpful for them. They are in the best position to make decisions about the timing and nature of changes in therapy. One of the major failings in current service provision is the failure to acknowledge this expertise.

The systems of 'gate keeping' and referral are a positive disincentive to optimal care of patients with long term diseases. Waiting times are often long, and patients' skin problems may deteriorate in the intervening period, despite the fact that all concerned ( patient, dermatology specialist nurse, GP, hospital consultant) frequently already know the patient's diagnosis, their past history and treatment needs, and that the treatment is itself available.

Disappointingly in the light of these facts, education in Dermatology at all levels and for all professionals is very limited, with the exception of that provided for hospital doctors training in the specialty. This is increasingly standardised, of high quality and competence based. The average medical undergraduate curriculum contains 6 days of Dermatology, and most GPs learn their Dermatology by exposure to problems in their daily practice. Only 1 in 6 GPs has had any formal training in Dermatology. There is no structured post-qualifying educational programme in Dermatology for nurses, although it is possible to build a modular programme on an individual basis. Dermatology content in pre-registration nursing programmes varies hugely and is not currently standardised.

Similarly, educational opportunities in Dermatology for pharmacists are limited and lack structure. There is an accredited open learning course for pharmacists, '*The Management and Treatment of Skin Conditions*', published by the Centre for Pharmacy Postgraduate Education, but there is no requirement that pharmacists should undertake this course and no incentives for them to do so either.

It is encouraging that both the Royal College of General Practitioners and the Royal College of Nursing in conjunction with the British Dermatological Nursing Group are developing or have developed competence based curricula in Dermatology for their members, but how these curricula will be delivered and evaluated has yet to be established.

In this context, there is an urgent need to consider how services should be configured to take advantage of the expertise that exists, and to define the educational elements that will be required to produce competent practitioners at all levels. This is particularly true at a time of great change in the political imperatives that define the priorities of the Health Service. The principles underlying service planning are outlined below.

#### **General Principles underlying Service Planning**

- It is essential that service models are patient driven and orientated. This is not currently the case.
- The starting point for quality of care, wherever it is based and however organised, is an accurate diagnosis
- Care should be delivered as close to the patient's community as is consistent with safety and cost effectiveness. This means that primary care must take responsibility for the more straightforward parts of the management of long term skin diseases, and in particular to facilitate effective, safe and informed patient self management.
- Those functions and facilities that are limited to hospital practice must continue to be supported, and the educational role of secondary care acknowledged and developed.
- The delivery of care in Dermatology requires a multidisciplinary team involving a trained clinician, a trained nurse and an informed pharmacist as a minimum. Developments in primary care must recognise this by the development of appropriate educational modules and the requirement to achieve specified levels of knowledge and expertise.

## The Patient Journey

Patients want and expect the equitable provision of ready access to quality dermatological care and information throughout the UK. This includes an end to so-called 'postcode healthcare', caused both by a shortage of appropriately trained health professionals and by inequality of access to treatments. It must also take proper account of the impact of skin diseases on the quality of people's lives, and it must provide prompt and proper diagnosis, the most effective treatments in the most appropriate settings, continuity of care and flexibility within the system to accommodate changes in both the condition and the patient's needs.

### Self Help

- There needs to be recognition that patients are often experts in their own condition and their views and opinions should be respected – patients need to feel listened to, that their views are valued and that they have been involved in the decisions made about their treatment and treatment outcomes.
- Key to the provision of services is the facilitation of well-supported self-management of inflammatory skin diseases. Ideally, the support for such self-management should be provided by a primary care clinic staffed by an appropriately trained health professional.

<b>Such services should provide:</b>
<ul style="list-style-type: none"><li>• Information about the condition;</li><li>• Information about treatments and their use including the time taken to be effective.</li><li>• Discussion with the patient about the treatments most suited to them and their lifestyle</li><li>• Agreement between patient and/or carer and the clinician to encourage adherence to agreed treatment regimes</li><li>• Access, free of charge to the patient or carer, to the information and support available from the relevant skin patient support group(s)</li><li>• The opportunity to call the primary care clinician for advice or to self-refer back to the primary care clinic if necessary</li><li>• The opportunity for the primary care clinic to fast-track patients to appropriate levels of care in the event of treatment failure.</li></ul>



As well as providing most patients suffering with inflammatory skin diseases with their preferred treatment model, such a system may be expected substantially to reduce the burden of inflammatory skin disease on the NHS, freeing up resources for the diagnosis and treatment of rarer and more severe or complex skin diseases. However, some treatments for moderate inflammatory skin diseases are currently only available in secondary care; for example, UV treatment and systemic treatments for psoriasis, and referral for these patients must be facilitated quickly.

Patients with inflammatory skin diseases should also have quick and easy access to secondary care if their condition deteriorates rapidly. Skin patient organisations believe strongly that people with such skin diseases are as entitled to be fast-tracked to an appropriate level of care as are people with possible skin cancer.

### **Initial professional involvement**

In their daily practice, pharmacists see large numbers of patients with skin disease, often seeking professional help for the first time. Many of these patients could be successfully treated with over-the-counter medicines rather than being referred to their GP. What frequently prevents this is lack of training in Dermatology for the pharmacists, few suitable licensed medicines, or the high cost of treatments.

When a skin disease is persistent or more serious, the patient contacts their general practitioner. At least 80% of dermatological problems in which professional help has been accessed will be managed entirely within primary care. A measure of the frequency of skin problems is the fact that even allowing for this high level of primary care involvement and activity, there are approximately 700,000 referrals to hospital services in Dermatology each year. Up to fifty percent of this workload relates to skin cancer screening, and around 20% for the on-going management of the 3 major inflammatory diseases of eczema, psoriasis and acne.

### **Current service provision**

#### **Primary Care**

Almost all areas of the country run or try to run the conventional model of service provision, with general practitioners screening patients, treating what they recognise, and referring on for diagnosis and management those that they are unable to deal with either through lack of diagnosis or lack of treatment facility.

Within this primary care based service, there are areas of increased service delivery, or *enhanced primary care* based around a GP with an expressed interest in skin disease. This may have been formally demonstrated through the acquisition of a further qualification such as a diploma, but will always be based on additional clinical skills and experience. These individuals will often work within a local hospital based dermatology service, and take their expertise out to their own practice and beyond. Some of them have developed additional skills and work as GPwSIs in a community setting. There may be a specialist nurse practitioner or a nurse with additional skills available within a practice or group of practices who will provide ongoing chronic disease management in conjunction with the GP. It is unusual for enhanced nursing skills to have developed without medical involvement.

#### **Secondary Care**

Hospital provision will be based around a dermatology unit having one or more consultants, some non-consultant posts consisting of highly skilled individuals who for one reason or another have elected not to pursue a conventional training programme through to consultant level and clinical assistants from general practice. There may be trainee dermatologists, and there will be a number of nurses with varied experience of skin diseases. Some may be nurse specialists in particular areas, others will be general dermatology nurses and still others will be generalist nurses spending more or less time working in the specialty of Dermatology. There is also likely to be a number of non-registered members of nursing staff e.g. health care assistants. The department will have a range of facilities allowing the delivery of those areas of therapy that require hospital based support such as phototherapy, patch testing for the detection of contact allergic dermatitis and an increasing array of surgical facilities for the treatment of skin cancer. There will be a variable number of in-patient beds.

### **Recent Service Developments**

Over the last 10 years, there have been increasing deficiencies in this model of service provision, and these have developed for a number of reasons.

Firstly, there has been a crisis in the numbers of trained dermatologists available to take up consultant posts. The advent of fund holding general practitioners led to a sudden increase in the number of consultant posts as GPs indicated the need for much more service provision within Dermatology. Numbers of training posts did not keep pace, and at its worst, there was a deficiency of over 20% in numbers available to fill consultant posts. Lack of suitably skilled other professionals such as nurses have also made it difficult to support this model.

Secondly, and at the same time, there was a significant increase in demand. Referrals increased by some 40% over a 5 year period, and much of this increase was in the area of skin cancer screening, although there has also been a genuine increase in the frequency of atopic eczema in the community and an ongoing increase in the incidence of skin cancers.

Thirdly, there has been a dramatic increase in the nature of treatments available for the management of the common disorders.

The result of these changes was an overall increase in waiting times for first appointments, and in some areas a collapse of dermatology service provision as consultants moved from overcommitted understaffed departments to areas where there were enough doctors to make working life attractive. As a consequence, some areas had no trained dermatological opinion, and away from teaching hospital units, there was no guarantee that any retirement vacancy could be filled.

Inevitably, innovative and desperate purchasers sought ways of providing a service. Some opted for tele-dermatology, often with disappointing results; although within an integrated service model telemedicine demonstrated its value (as in Somerset, Devon, and the Highlands and Islands of Scotland). Others found interested and variably competent general practitioners to fill the holes in service provision. Amongst the various means chosen to deal with the problems, there were valuable, sustainable and generalisable lessons about service provision to be learned. The Action on Dermatology programme identified and assessed many of these models of care, and produced valuable guidance about which were successful and why.

Some of these models utilised the skills of specialist nurses more widely, and followed models of care developed in isolation in individual departments. They were often very successful, with great benefit to patients as well as waiting times and service delivery. However, many of the systems generated were very dependent on particular individuals, both nursing and medical, to make them work – there was neither replicability nor sustainability in the development of these service models. Whilst many such initiatives have been successful, they will inevitably fail when the main practitioner moves on unless steps to train similar individuals are taken. To date, no such training initiative has emerged.

<b>Examples of service innovation:</b>
<ul style="list-style-type: none"><li>• Community based nurse led clinics in Norwich and the West Midlands reduced waiting times and led to improvements in patient self management for the common skin disorders.</li><li>• Telephone clinics in Cambridge formed part of an integrated reform of out-patient services and reduced the need for follow-up appointments</li><li>• GpWfI services in Pontefract, integrated with conventional secondary care, reduced waiting times for initial consultation.</li></ul>

## Current workforce: Organisation, training and numbers

### Medical

Data for numbers of consultants and trainees in Dermatology are robust and regularly updated by the RCP and the BAD. Those for non-consultants are less robust but rapidly improving as a result of the hard work of the NCCG committee of the BAD. The most recent entity, General Practitioners with a Special Interest (GPwSI) are still developing, and numbers continue to change rapidly. Tables 2 and 3 contain details of current numbers working in these areas.

**Table 2**

National (UK) numbers of consultants, non-consultant specialists and trainees in Dermatology (July 2006)

	Consultants	SpRs	Associate Specialists	Staff Grade
Headcount	523	269 (including associate trainees)	62	61
Vacancies	67			
Average sessions	8		6	6

### Specialist Training

The training required for consultant accreditation and then appointment to a substantive post is well established and has been developed and controlled by the Specialist Advisory Committee of the Joint Committee for Higher Medical Training of the Royal College of Physicians. These responsibilities have recently been subsumed by the Postgraduate Medical Education and Training Board (PMETB). Increasingly, this training is competence based, and allows individuals who have less conventional training, or have trained abroad, to have their training assessed so that they can apply for appointment to consultant posts.

### Non-Consultant Medical Staff

The training of these staff is very variable, and is not subject to any formal definition or control. Many individuals working within the non-consultant career grade are highly trained and competent, but for varying reasons, usually related to personal circumstances, have not completed specialist training. Others, usually General Practitioners working as clinical assistants, have received little or no formal training, but have acquired knowledge and experience through clinical contact alone, and may have a more limited range of competences.

The on-going educational needs of these two groups are different, undefined and poorly met at present. It is not unusual for professionals working in these areas to have no allocated time for CPD, and to have difficulties being allowed study leave and funding. A recent survey by the NCCG Committee of the BAD has highlighted these deficiencies, and also provided the first real data about numbers, clinical roles and workload (Appendix 1). The numbers of individuals in these non-consultant roles is summarised in Table 3.

**Table 3**  
National (UK) numbers of clinical assistants and GPwSI

	<b>Clinical Assistant (GP)</b>	<b>Clinical Assistant (non GP)</b>	<b>GPwSI</b>
Headcount	371	58	62
Average sessions	4	4	2

## **Nursing**

Data on dermatology nursing workforce numbers are poor. One of the challenges is identifying what a dermatology nurse is. Many generic nursing skills can be identified but in addition a dermatology nurse requires a range of skills specific to care of the skin, and varies with healthcare setting. This ranges from a nurse whose primary purpose it is to provide dermatological care more often in a secondary care setting, to a nurse working in a nursing home where providing dermatological care is a secondary function, but including many levels in between.

Based on secondary care provision and the well documented numbers of dermatology consultants, it has been estimated that around 800 nurses are currently working in dermatology. This is almost certainly an underestimate, firstly because of the nature of outpatient nursing in many medical outpatient departments in which nurses cover a number of specialities within their working day and secondly because it is very difficult to obtain figures for nurses working in primary care.

A snapshot of current numbers has been obtained through a survey conducted by the British Dermatological Nursing Group (BDNG) in 2004. This will form the basis on which the workforce needed to provide dermatology services in the future can be described. These data are summarised below and presented in more detail in Appendix 2. There are several key areas for concern and future consideration:

### **Summary of nursing numbers questionnaire**

- The age profile shows a relatively 'old' workforce with only 17% of respondents being under 30 years of age; whilst 68.7% are over 40 and 31% will have retired within the next 10 years.
- Newly qualified nurses are not attracted into the speciality.
- The work carried out by non-registered members of the team has not been captured by the survey.
- 78.4% of respondents are from hospital trusts leaving the primary care profile largely uncaptured.
- There are no current guidelines or recommendations for patient to staff ratios in any of the care settings.

### **The role of Dermatology Nursing**

Dermatology nurses deliver high quality care to patients with skin diseases. An integral part of this role is to ensure that people with skin conditions have sufficient information, knowledge and confidence to be able to manage their conditions themselves to a large degree. Nurses also provide physical and emotional support to patients, carers and family in managing the patients' conditions. They have a direct role in the application of topical treatments and demonstration of their use. It is essential that the nursing workforce caring for those with dermatological conditions is available and properly trained.

Dermatology nurses work in a variety of care settings, already including primary and secondary care. The role involves education, facilitating self management, support and advocacy, and it requires a range of skills and competencies to manage dermatology patients throughout the course of their disease. Their role has the potential to underpin long-term condition management, improve the quality of life of patients with chronic skin disease and promote a pattern of integrated service delivery across sectors.

### **Background influences for nursing**

Overall, the nursing profession faces considerable challenges in recruitment and retention of staff. Dermatology is no exception. Whilst those working in the specialty recognise its value and attraction, it is often perceived as unattractive to younger nurses in comparison with more superficially glamorous disciplines, possibly because the undergraduate nurse curriculum contains little reference to skin disease despite the fact that generalist nurses require a broad range of dermatological knowledge. Recently more emphasis has been placed on skin related issues in a generic way, for example tissue viability and infection control. Essence of Care seeks to drive up the quality of fundamental care and in general the standards are relevant to skin care and maintaining skin health.

Agenda for Change (AfC), the Government reform of the current pay, career structure and terms and conditions of work applies to all NHS nurses and healthcare assistants. It should be accepted as a positive tool by the dermatology nursing community and used as a driver to determine future education and development needs as well as being an opportunity to make dermatology an attractive career option.

### **Continuing Professional Education and Training for Nurses**

Quality and efficacy of care is dependent on the standard of training, education and continuing development of healthcare professionals. Nurses undertake their initial education and training with little reference to skin care. Currently there is no obligation to undertake postgraduate training to enter the speciality. Post registration training needs have historically been undertaken via work based clinical assessment using a preceptorship-based approach. However there is no national quality assessment of this type of training. Current provision of postgraduate courses appears to be ad hoc and not related to local or national patient or service needs. Education and training needs should be planned to enhance seamless care between primary and secondary health care settings. There is much scope for multi-professional training.

There are additional obstacles associated with postgraduate nurse training. Specifically it is difficult for practising nurses to obtain funding and study leave and to arrange backfill support. Numerous APPG reports have recommended that funding should be made available to nurses to undertake training particularly in priority areas such as specialist dermatology community provision. It is important to note that expertise for this type of training will often come from secondary care and that this will continue to be an essential role of secondary care services. Those nurses working as specialists within a primary care setting need continued contact with secondary care for the purposes of Continuing Professional Education.



**Prescribing by Nurses**

Many treatments used to manage skin disease can be safely prescribed by appropriately trained nurses. It should therefore be a priority to include a dermatology component in nurse prescribing courses, which vary greatly around the country. The BDNG survey shows that of the respondents 18% are waiting to access a nurse-prescribing course with 17.8% already practising as nurse prescribers.

## Pharmacy

### Pharmacists

There is already considerable, but unquantified involvement of pharmacists in the management of individuals with skin disorders. From assisting with self-management, including self-diagnosis, in primary care, through to direct involvement with complex treatment regimes in hospital, pharmacists have a key role to play. Their skills are almost certainly underused, but the changes in prescribing rules allow much greater scope for independent and extended prescribing for patients with skin disorders. The extension of the role of pharmacists, particularly those in the community, will be critical to any extension of long term management into a primary or intermediate care setting. Their educational needs must be met in a way that is not currently provided. Further information can be found in Appendix 3.

**Community pharmacists are frequently the first point of contact for advice on skin problems.** They are able to:

- Provide treatment for minor conditions,
- Direct patients to GPs for diagnosis or treatment of more serious conditions
- Monitor and support treatment for long-term conditions
- Signpost patients to appropriate support groups.

### Numbers

The numbers of pharmacists able to offer services in dermatology are unknown. In future, the number of pharmacists who have requested the CPPE (Centres for Post-graduate Pharmacy Education) open learning package in dermatology (published April 2005 and available free of charge to practising pharmacists) might be a useful indicator.

### Education

Most undergraduate pharmacy courses include some dermatology – often with the emphasis on over-the-counter products for self-treatment.

After registration, continuing professional development is obligatory for pharmacists. This can involve formal diploma or MSc courses, workshops or distance-learning packages provided by the Centres for Post-graduate Pharmacy Education in England, Scotland, Wales and Northern Ireland. Post-graduate courses contain varying amounts of material on dermatology and there is no obligation for pharmacists in any sector to undertake post-graduate training in dermatology. Most pharmacists with an extended knowledge of Dermatology are self taught.

Some hospital pharmacy services are actively developing their services to dermatology. One PCT is planning to provide advanced training in dermatology for a team of three pharmacists, in order to provide support to GPwSIs.

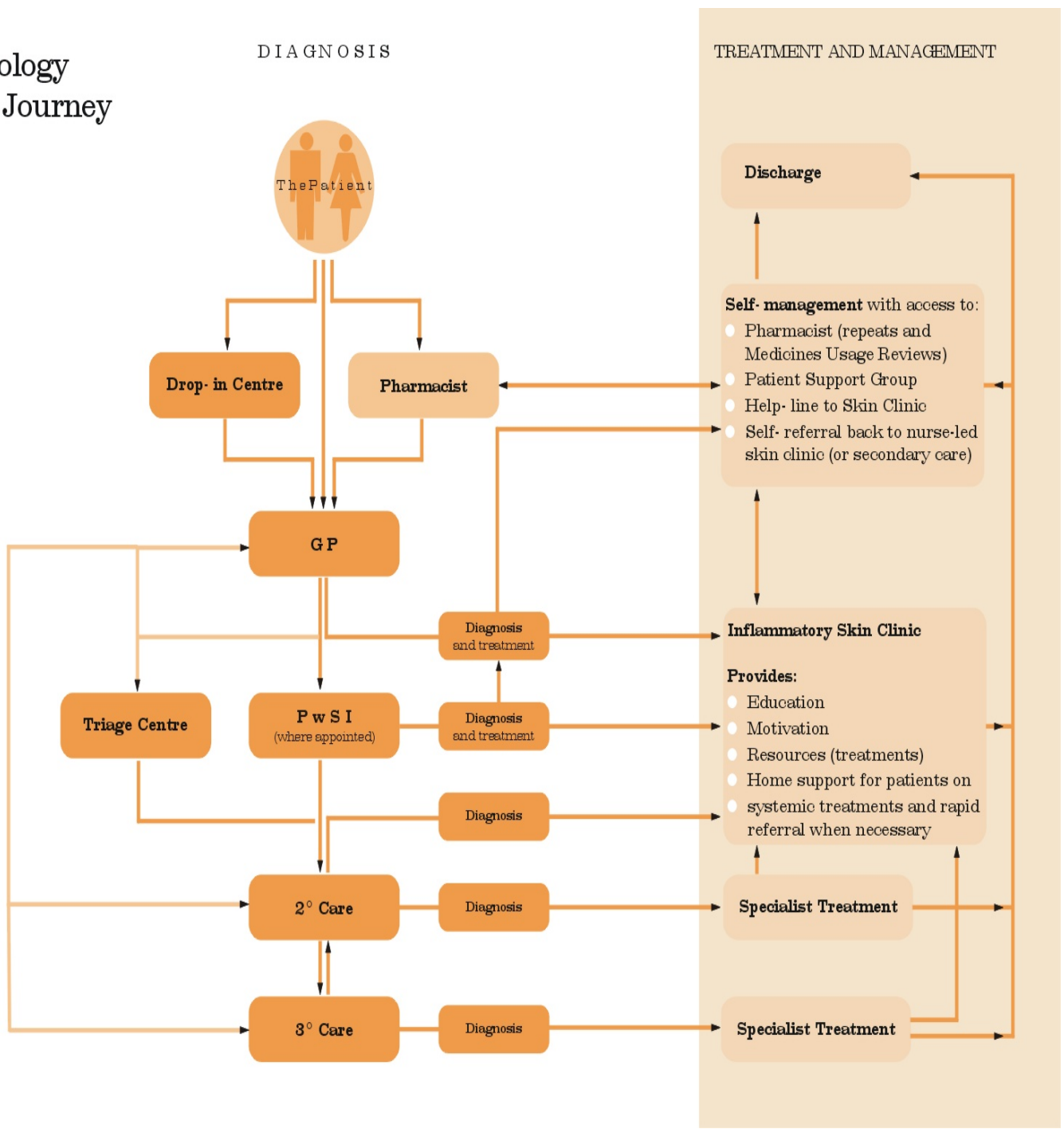
### Prescribing

A number of pharmacists are now undertaking training to become supplementary prescribers. The didactic elements of the courses tend to be focussed on organisational aspects and the handling of consultations. Specific aspects of therapeutics are addressed largely during the supervised hands-on training – and therefore tend to reflect the interests of the supervising clinician. There is no national strategy to train a body of pharmacist supplementary prescribers with expertise in dermatology (or any other therapeutic specialty). The ability of pharmacists to take on a greater role in the treatment of skin conditions depends on the provision and funding of extensive training, particularly for the community pharmacy workforce.

# Service Models of the future for Chronic Disease Management

(Fig. 1)

## Dermatology Patient Journey



Across the field of medicine, driven by political pressure, there is an acknowledgement that the balance of service provision is often wrong – that too many patients are attending hospital based services for the provision of care that could be managed in a community setting. Within Dermatology service provision, much modernisation has already occurred, and there are many examples of alternative service models providing excellent quality of care with extended roles for a range of professions involved in the management of skin disease.

**Any future model of care should use these, but concentrate on service delivery governed by three broad statements:**

1. Secondary Care Teams should do only those things that only they can do; they should lead and coordinate clinical and educational services and manage complex cases.
2. Care should be delivered in the right place by individuals with the right skills and at the first opportunity; and
3. Policies should facilitate patient self management

These statements sum up the current approach to service delivery across the Health Service and it is fortunate that Dermatology is ideally placed to take advantage of the opportunities afforded by this policy change.

The broad concepts of service delivery, both in nature and situation, should be motivated by the elements of quality and appropriateness of care. These are based on an understanding of the essential elements of hospital and consultant practice, accepting the involvement of many other professional groups in this activity:

**What do consultants (have to) do?**

1. Lead teams and networks responsible for the delivery of care to patients with diseases of the skin.
2. Diagnose, manage and supervise the care of complex patients and people with rare diseases (in and out-patient).
3. Lead the teaching and training of medical students and doctors, and contribute to the training of nurses, pharmacists etc.
4. Audit practice and comply with requirements of clinical governance. This includes the performance of appraisals, assessment, using tools such as mini-CEX and DOPS on all those in training.
5. Facilitate patient education and self-management.
6. Research.

**And by extension, what do hospitals have to do?**

1. Provide an environment for the care of complex patients
2. Provide the facility for technological treatments
3. Provide dedicated in-patient beds
4. Provide an environment for specialist teaching and training
5. Collect and analyse audit data

It is important to acknowledge the involvement of many other agencies in some if not all of these roles, and also that the concept of 'complex patients' is variable and changing constantly, as well as being dependent on the available skills – what is complex to a generalist is not necessarily complex to a specialist. However, it is an inescapable fact that hospital based secondary care is essential for the core elements of service provision and facilities, and education of 'specialists', unless there is substantial spending on the provision of peripherally based units for, for example, phototherapy. Similarly, whilst the role of Consultant Dermatologists may

change to become even more educational, the numbers required to provide the range of services will continue to increase as has been previously estimated by the RCP and BAD. It is clear that all other functions can be provided in a variety of ways and situations, but ideally would be delivered in a community setting close to the patient.

## Primary Care

### **The role of Primary Care in Dermatology**

This can be summarised as follows:

1. All patients should have rapid access to diagnosis of their skin disease.
2. All GPs should be able to diagnose the common skin disorders in their characteristic forms.
3. Patients with the common inflammatory skin disorders should receive educational and practical input from a trained professional, often a nurse, in a community setting.
4. After diagnosis, all patients with disease requiring on-going management should be cared for within local protocols for Chronic Disease Management.

The majority of these functions could and should be provided within the framework of enhanced Primary Care. This is already practiced by many GPs, particularly members of the Primary Care Dermatology Society (PCDS). However, since undergraduate and postgraduate dermatology training for GPs is still limited, patients may be receiving a variable quality of care depending on whether or not their GP has a special interest in dermatology. This emphasises the need for better education in Dermatology for all GPs, especially in their GP Registrar year, but also throughout their careers. The quality statements in the GMS contract encourage such practice in a number of clinical areas, but not currently within skin diseases. Quality statements concentrate on minor surgery, which may assist those with potential skin cancer, but not those with chronic inflammatory dermatoses. *It is both a mistake and a missed opportunity to leave such encouragement out of the contract given the frequency and the nature of much skin disease.*

The DH should be encouraged to add skin disease related quality outcomes to the GMS contract. These should refer to eczema, psoriasis and acne, and encourage a multi-professional approach designed to enhance patient self management. Examples of possible quality measures have recently been submitted by the RCP to the DH. (Appendix 4)

## Intermediate Care

There is also a role for a more general transfer of management of the common diseases to a community-based setting (best called intermediate or Tier 2 care).

#### **Characteristics of Intermediate Care:**

1. Limited to most common disorders: Psoriasis, eczema, acne, urticaria, rosacea, chronic sun damage, some skin infections.
2. Confirmed diagnosis essential (requiring access to an appropriately trained professional: this may include GPwSIs working within planned networks of care.
3.
  - i) Delivered by appropriately skilled and trained staff with defined competencies and supported by secondary care within a local network.
  - ii) Monitoring by trained nurses or pharmacists, according to defined protocols.
  - iii) Maintenance prescribing by pharmacists or nurses
  - iv) Self-referral of patients with known diagnosis
  - v) Regular co-consulting with specialist nurses and doctors from secondary care. GpwSIs should have a defined role within these CDM journeys
  - vi) Rapid open access to secondary care for treatment failure
4. Prescribing skills are essential for the non-medical providers – independent and supplementary as required.

There may be expansion into other areas to suit the availability of local skills, and there may be local variability in the extent of what is covered by the service, who delivers it and the relationship between primary, intermediate and secondary care. (There may be no need for an intermediate layer in areas where enhance primary care is very advanced).

#### **An absolute essential to ensure quality and consistency is the development of these services within negotiated networks involving all elements of the service.**

Neither enhanced primary care nor intermediate care is an alternative to an established and high quality hospital based secondary provider. Rather, they supplement and complement each other and allow patients to be seen and treated appropriately. In particular, such a system must allow rapid access to diagnostic services. There are also considerable potential opportunities for teaching and training for professionals of all types, as well for patient education and involvement of patients in the development of self-management strategies.

This version of the patient journey is summarised in Fig 1. This tiered approach to care uses resources wisely, delivers quality care of an appropriate kind in an appropriate setting and most importantly values the patient and their knowledge of their disease.

#### **Intermediate Care and Pharmacy**

Suitably trained pharmacists should be integral to patient care, reinforcing self-care messages; sign-posting to self-help groups, encouraging patients and helping them achieve satisfactory treatment outcomes. This involvement should happen at the point of prescription dispensing. There will also need to be good communication between the patient's GP and local pharmacy to ensure continuity of treatment when it is required. Relapse and GP or hospital referral often occur because treatments are not sustained. The dispensing pharmacist is in the ideal position to prevent this and to support treatment use.

Pharmacists could also be trained to be independent prescribers to undertake patient clinics under appropriate medical supervision.

### **Intermediate Care and Practitioners with a Special Interest in Dermatology**

Part of the vision of the Health Service of the future expressed by the Government in 2001 was the development and increasing use of non-consultant practitioners in service delivery. Around 150 medical practitioners and an unknown number of nurse practitioners have been appointed to work within Dermatology. The roles filled have been variable in their remit and degree of commitment to the specialty, but they are an increasing part of the service community. Specialist nurses in particular are an essential part of the Patient Journey identified here. The role of the General Practitioner with a Special Interest will depend on local circumstance and availability, but their involvement in Intermediate Care may be valuable. The cost effectiveness of these roles needs to be established: recent research suggests that they fill effective roles for patient care, but they can be an expensive resource, so their roles should be fully integrated to meet service needs. Most importantly the training recommendations, systems of accreditation and on-going CME must be defined and enforced in the interest of maintaining quality of patient care.

### **Intermediate Care and Nursing**

The active involvement of trained specialist nurses in the development of intermediate care and enhanced primary care are essential to future service delivery.

<b>The role of the nurse in intermediate care would involve:</b>
<ol style="list-style-type: none"><li>1. Assessing current treatment,</li><li>2. Checking understanding of disease and treatment,</li><li>3. Assessing compliance with current treatment regimes</li><li>4. Formalising and agreeing new treatment regimes according to protocol</li><li>5. Arranging follow-up</li><li>6. Referring on to joint medical and nursing clinic at appropriate time</li><li>7. Referring on to secondary care if treatments are unsuccessful</li><li>8. Referring back to enhanced GP when this exists and is appropriate</li><li>9. Helping with treatment application through demonstration and direct care delivery.</li></ol>



**In order to deliver enhanced nursing involvement, a comprehensive national programme of postgraduate nurse dermatology training is urgently needed to address the current patchy and ad hoc system.**

One initial and welcome development in postgraduate training has been the creation of a distance learning package in dermatology for community nurses, commissioned by the Skin Care Campaign in collaboration with the BDNG and developed by the University of Southampton's School of Nursing and Midwifery.

The recent launch of a competence based Integrated Career and Competence Framework (ICCF) for dermatology nursing has been a major development. The document is the result of collaborative work between the BDNG and the RCN Dermatology Forum and aims to standardise dermatology nursing practice and promote equality of care provision to patients. The ICCF supports the development of competent practitioners, raises the profile of dermatology nursing as a viable and progressive career and gives strong guidance regarding accessibility to appropriate education provision. Importantly the ICCF has been mapped to the Knowledge and Skills Framework that underpins pay progression for AfC.

## **Paediatric Dermatology**

The management of children and young adults with skin diseases requires many of the generic skills used in adults. However, the development of the Children's National Service Framework makes it essential that services for this group meet the criteria laid down by the increasing amounts of published guidance. Close collaboration between different service providers is essential, and identifying areas where there are different needs from those of the adult population is fundamental. Amongst these areas are

- the direct and essential involvement of the parents in care of the child
- the need for knowledge of and compliance with child protection regulations
- the potential involvement of social care agencies
- the need for child psychology services
- prescribing differences

## **Care of Older Patients with Skin Disorders**

The National Service Framework for Older People will issue guidance in a similar way to the Children's NSF, and similar principles of consistency will be essential.



## Services Provided by and Staffing of Dermatology Secondary Care

The services and facilities provided by secondary care have recently been described by the BAD ([www.bad.org.uk/guidelines/service](http://www.bad.org.uk/guidelines/service)).

All Units should provide:
General outpatients
Skin Cancer Clinics
Day treatment
Wound Care
Cutaneous surgery
Phototherapy
Clinics for the investigation of contact allergy
Paediatric facilities
Nurse led clinics
In-patient beds
There may be additional specialist clinics depending on the size and interests of the department.

The geographical location of these clinics is subject to local need, but in the context of Government policy identified earlier, there is a demand for diagnostic and chronic management clinics to be placed in community settings. Importantly, if this is to happen, patients must not be disadvantaged by receiving a poorer quality service than is currently available. This is true of the level of medical competence, the availability of nursing support, the available facilities for investigation and treatment and the physical surroundings.

### Staffing - Medical

There is agreement that the target figure for consultant posts in Dermatology is between 1/55000 and 1/90000 population depending on the proportion of patients seen in a primary care setting. This is based on a robust analysis of the workload carried out by the BAD and the RCP. Therefore, the current BAD working target of 1/100000 is still appropriate, even in departments which have modernised.

In any dermatology unit, additional supporting medical staff are essential: the balance of staff will depend on local interest and availability, but there should be an additional FTE (Full Time Equivalent) made up of non-consultant career grade staff and clinical assistants for each consultant.

In most units there will be trainees, both within the specialty, but increasingly trainee General Practitioners who elect to include Dermatology as a specialist module within their training.

### Sub-specialty work

Within each secondary care unit, individuals should be identified to take responsibility for particular sub-specialties:

- Skin cancer screening
- Dermatological surgery
- Paediatric dermatology
- Medical dermatology
- Contact allergy

This should ensure quality of service and appropriate Clinical Governance. These individuals should be involved in the vertical integration of services between primary, intermediate and secondary care, and should be a member of the relevant multi-disciplinary team. In the light of the NICE guidance on the management of skin cancer published in 2006, time and supporting facilities must be provided for MDTs, data collection and analysis. The establishment of formal networks of care based around cancer centres and involving all clinicians seeing patients with skin cancer is already an accepted part of good clinical practice, and is formalised by the NICE guidance.

In larger departments, there may be additional sub-specialty work with individuals taking responsibility for, for example, connective tissue diseases, genital dermatology or laser treatments.

### Staffing - Nursing

As indicated previously, there are few data indicating current nursing numbers, but data from individual departments describing nursing numbers allow the number and grades of nurses working in particular areas of Dermatological practice to be recommended. Variations in local practice will mean some variability in the overall numbers. The role of nurse specialists, and the areas of practice in which they work, will inevitably extend over time.

Table 4 shows the numbers of nurses needed to staff a Dermatology Unit providing an out-patient service to an area of 300,000 patients (the size of an average District General Hospital).

**Table 4**

Numbers of General Nurses		
Level	7	1.0
	6	3.0
	5	3.5
	4	2.0
	2	4.5

### Pharmacy

<b>Pharmacy services should provide support for the dermatology service including:</b>
<ul style="list-style-type: none"> <li>• Formulary development</li> <li>• Emollient sample kits</li> <li>• Patient education , advice and support at the point of dispensing</li> <li>• Liaison with community pharmacists and practice pharmacists</li> </ul>

Pharmaceutical expertise should be available to the Dermatology team at the same level as is now customary for other specialties (such as renal medicine, oncology etc). Clinical pharmacy services should be available in clinics to augment the specialist nursing service and, in particular, to oversee and provide medicines advice for patients who require complex drug regimes for co-existing conditions.

## **Secretarial**

All clinical work generates the need for communication between professionals, and this requires trained secretarial assistance. A full time consultant dermatologist requires a full time secretary. The same is true of other health professionals involved in patient care, who require secretarial services at a level appropriate to the amount of clinical work they perform. The clinical secretaries are often the first point of contact between primary and secondary care, as well as for patients. This role is critical in the functioning of the clinical team, and because of the numbers of patients involved is unique amongst clinical specialties. The complexity of the task increases as patients are cared for in a number of sites. The role of the secretary is essential and usually undervalued.

## **Clerical Support**

Nationally, there are approximately 700,000 referrals to dermatology services each year (DH data). In addition, there are approximately 1.5 million follow up attendances for review or treatment. The organisation of the bookings system that deals with this is both critical and very variable, but in the most efficient systems, a single booking clerk takes responsibility for a single clinician's clinical workload. Many health professionals work across a number of sites, and the coordination of booking systems is very important under these circumstances. The numbers of supporting clerical staff will need to reflect the nature, complexity and geographical distribution of the work. The advent of the 'Choose and Book' system has complicated this considerably: initial experience suggests that it is increasingly difficult to ensure that patients are seen by the most appropriate clinician.

## Clinical Support

### General Dermatology Clinics

Most Dermatology consultants will spend 5 or 6 programmed activities in the out-patient department, either in clinic or in an operating area. They will be supported in clinic by non-consultant staff, including trainees, clinical assistants and non-consultant career grades, and increasingly by consultant and specialist nurses who are non-medical prescribers. Clinics run most efficiently if each clinician has a trained nurse familiar with clinic procedures to work with them. Depending on the level of training of the nurse, they may be able to contribute to patient education and understanding, as well as to enhance significantly the running of the clinic. In all clinics, patients should have access to a senior trained nurse to demonstrate treatments, and re-inforce the content of the initial consultation. Most dermatology units have fewer staff than is necessary to meet these two elements of nursing. Table 4 identifies the staffing necessary for a small District General Hospital unit of two to three consultants servicing a population of 300,000.

### Phototherapy

Phototherapy services are usually organised within a defined unit within or adjacent to the main dermatology centre. The necessary equipment is expensive, and there are significant safety issues associated with treatment delivery which raise important questions of clinical governance. Historically, the delivery of phototherapy was by physiotherapy staff, but increasingly, and ideally, the service should be delivered and supervised by trained dermatology nurses according to well established protocols. The Scottish clinical network for phototherapy is an ideal way of coordinating, standardising and monitoring the use of phototherapy, and its introduction should be considered across the United Kingdom.

All units should have:
<ul style="list-style-type: none"><li>• A named consultant responsible for the delivery of the service</li><li>• Clear guidelines on protocols and safety.</li><li>• Access to a defined medical physics service, with a named individual responsible for the maintenance and monitoring of the phototherapy equipment</li><li>• Specialist nursing input</li></ul>



In all units, to deal with the issues of clinical governance, there should be clear policies and pathways in place. In larger units, a full time phototherapy technician may take responsibility for monitoring, maintenance, data collection and pre-treatment phototesting. Staffing for phototherapy units is shown in Table 5. Increasingly, specialist nurses take responsibility for the day to day supervision of the delivery of care, monitoring of patient responses and the assessment of side effects. Their role in the safe and effective delivery of phototherapy is increasingly important and valued. Fragmentation of phototherapy units, for instance to community based sites, is difficult to justify on grounds of cost and safety.

Most phototherapy units will treat between 200 and 250 patients/300000 population each year, with three quarters being treated with narrow band UVB and the rest with photochemotherapy (PUVA). This amounts to approximately 4500 treatment episodes. In addition, in larger units, about 50 patients/300000 population will need investigation for photosensitivity.

**Table 5**

Numbers and levels of staff needed for a phototherapy unit serving a population of 300,000

Level	Numbers (FTE)
6-7	1.0
4-5	2.5
2-3	1.0

### Investigation of contact allergy

The investigation of suspected contact allergy is an essential part of any dermatology service. Appropriate investigation requires clinical judgement, trained staff, adequate arrays of allergens for testing, and time. The guidelines on the investigation of contact allergy suggest that the safe rate of referral for investigation (to avoid missing important allergy, but not to over-investigate) is around 100 patients per 70000 population per year. This means that an average District General Hospital providing care for a population of around 300,000 should anticipate investigating approximately 10 patients each week.

#### All units should have:

- A nominated consultant responsible for the overseeing of the service.
- Nursing staff spending a significant proportion of their time in delivering it.
- Pharmacy support.

In large teaching departments, it is usual for there to be a consultant who spends most or all of their time on the investigation of potential contact allergy. They may also provide a service for the investigation of type 1 or immediate allergy, most importantly for latex related problems, and have a valuable role in occupational health related problems. They will have a role in any MDT for the investigation and management of patients with complex and multiple allergy.

A lead nurse at level 6 is ideal to supervise the unit, support at level 4/5 is valuable, and further input at HCA level is beneficial. In total, a unit in a hospital serving 300,000 will require one WTE nursing input for patch testing.

### Pharmacy support for the investigation of cutaneous allergy

In addition, pharmacy support is essential for the preparation of 'as is' allergens. The costs of allergens, the essential expert input to planning and interpretation of results means that large central departments with staff dedicated to the problem are more efficient and accurate in their diagnosis than small non-specialist ones. Multiple community based sites are unlikely to have sufficient workload to maintain quality and be cost effective.

### Cutaneous Surgery

Dermatology units are responsible for treating approximately three-quarters of all skin cancers, and for screening around 90% of those suspected of having cancers of the skin. Within all Dermatology units, there should be a nominated consultant with responsibility for managing the surgical service. The same individual will also probably co-ordinate the skin cancer services. Operating facilities are required, and operating lists in sufficient numbers to deal with the workload are required. All operating lists require adequate administrative support (as with general clinics), and trained nursing assistance – at least one competent nurse to assist in theatre, with a second to 'run' and assist the patient. In many units, specialist nurses also provide

minor surgical skills, and are a very cost effective way of delivering additional surgical capacity and professional satisfaction.

### **Laser Units**

Many departments have significant treatment centres for laser therapy. It is usual for there to be a consultant responsible for this service, with additional medical and non-medical support. In some areas the laser unit is entirely NHS run; in others a private firm may provide the facility on a contractual basis.

### **In-patient beds**

There has been a progressive reduction in the availability and use of in-patient beds by Dermatologists. Much of the reduction has been driven by financial pressures, and little by any needs assessment. Nevertheless, there is agreement that the availability of newer treatments, as well as the appropriate use of day treatment facilities has reduced the need for beds. The RCP specialty profile for Dermatology suggests 2 beds/100,000 population, ideally in a unit of not less than 8 beds. There is a trend for in-patient beds to be centralised in large teaching units. An 8 bedded unit requires 1 FTE nurse at level 6-7, 8 FTE nurses at levels 4-5 and 3 FTE staff at level 2-3.

### **Dermatology and Critical Care**

In addition to beds for general dermatology, there is a need for a small number of patients, both adult and paediatric) with acute severe skin disease to have access to critical care facilities: intensive care units (toxic epidermal necrolysis), highly specialised nursing (Epidermolysis Bullosa), day case units for infusion therapy (psoriasis treated with biological agents, auto-immune skin disease requiring immunosuppression with pulsed therapies).

### **Community based Intermediate clinics for chronic skin disease**

These clinics should be staffed by specialist nurses, with medical support on at least a monthly basis from an appropriately trained medical specialist who may be a GpWSI or a hospital based specialist.

1. For each PCT of 150,000 population, approximately 3000 patients are referred for secondary care services in Dermatology each year (Leeds Dermatology Department data)
2. One third to a half will be for skin cancer screening, one fifth will have one of the three major inflammatory skin diseases (eczema, psoriasis, acne) (data from referral gateway, Leeds South-East PCT).
3. For acne and psoriasis, 50% are referred for hospital only therapies.
4. Approximately one third have other diagnoses, either made and requiring management, or unmade.
5. In addition, approximately 100 cases for each PCT will need on-going drug monitoring (Departmental data, LGI).

This means that around 500 patients from an average PCT could be managed in a community setting after diagnosis. The majority of patients with eczema will be paediatric, and require paediatrically trained staff (but many will already be seeing primary care nurses with their co-existent asthma).

Each PCT will need at least one new patient clinic and one follow up clinic each week to manage patients with eczema who are currently attending hospital clinics. Similar calculations for acne and psoriasis suggest one new patient clinic and 0.5 follow up

clinics each week, and in addition, drug monitoring clinics will be required twice weekly for each PCT.

The total is 5-6 clinics weekly for each PCT. Thus one PCT requires at least a FTE specialist nurse and 0.25 FTE medical practitioner just for these cases. In order to provide continuity and holiday and sickness cover, the sessional commitments should not be for only one individual.

### **Enhanced Primary Care**

Given the frequencies of the common skin disorders, as well as the need for repeat consultations for a proportion of the most severely affected patients, a practice of 5000 patients will need at least 0.5wte of practice nurse time to provide support, education and active management of patients with psoriasis, eczema (mainly children) and acne. There should be close interaction between primary and intermediate care nurses, as well as a clear and simple route for referral between them. These nurses are best supported by a named doctor in each practice (or group of practices) who has additional interest and experience of skin problems. There may be additional areas of disease management that can be supervised in primary care depending on the competences of doctor and nurse, but all depend upon the accuracy of the diagnostic process.

Community pharmacists should be included in the primary care team so that they can reinforce care and self help messages at the point of dispensing. The skills of the practice pharmacist should be utilised in the development of care plans – both generic and patient specific. They should work under the supervision of a named doctor to contribute pharmaceutical expertise to the care of people with skin disorders. Such models already exist in the primary care management of other conditions such as hypertension, heart failure and diabetes.

## **Paediatric Dermatology (PD): Services for Children and Young People**

Dermatological problems in this age group are common and include a large number of childhood infections and rare genetic diseases. However, atopic dermatitis (AD) constitutes at least 25% of new referrals to dermatologists and since it is the commonest childhood chronic skin disease affecting approximately 1 in 5 UK children, it often takes up as much as 50% of clinic time. Other common referrals include benign tumours and naevi, infections, acne and psoriasis. Serious genetic diseases such as epidermolysis bullosa (EB) are rare but potentially or actually fatal. They are very costly in terms of long-term care, and EB is the only dermatological disease recognised as requiring supra-regional expertise. A survey of Paediatric Dermatologists investigating service provision and workload is presented in full in Appendix 5.

Chronic skin diseases have a huge impact on all aspects of Quality of Life both for patients and their families. These include physical symptoms, emotional and social stress, loss of schooling and treatment difficulties. This is particularly true for AD which with asthma and allergic rhinitis have been demonstrated to cause the largest Quality of Life (QoL) burden of all common chronic childhood diseases because of itching, sleep loss, loss of schooling, teasing and bullying. Ninety percent of parents report feeling frustrated and disheartened and also suffer physical exhaustion, depression and feelings of guilt. A 1993 survey of several thousand members of the National Eczema Society [NES] found great deficits in service provision: there has been little improvement since that time ([www.eczema.org](http://www.eczema.org))

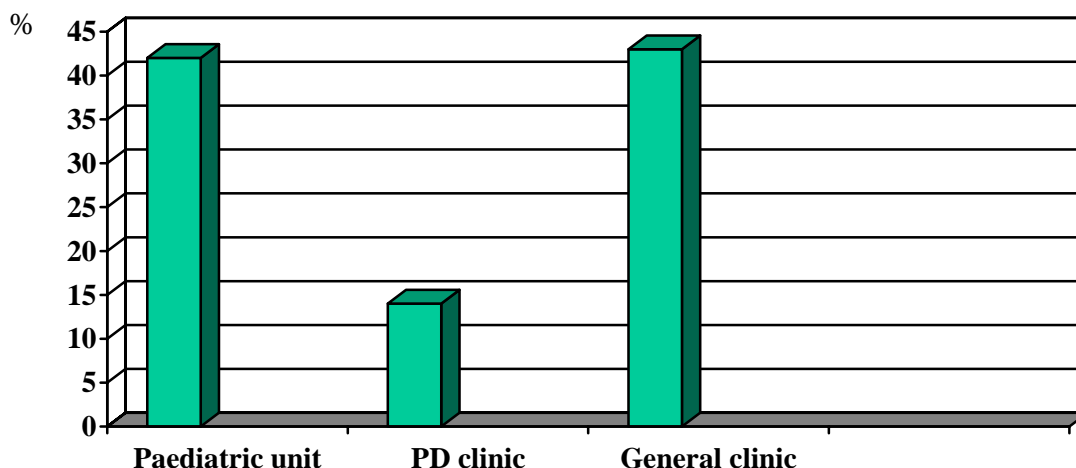
### **Current Service provision in Paediatric Dermatology**

#### **Medical**

Paediatric dermatology (PD) is currently considered as a sub-specialty of adult dermatology with few dermatologists having any formal paediatric training, although a few senior dermatologists hold a dual qualification (FRCP and FRCPCH). There are also 1 or 2 trained paediatricians undergoing dual training in dermatology. Only 4 UK dermatologists currently practice exclusively in PD, others have more or less mixed practices. Data collected from the 2003 survey by the British Society for Paediatric Dermatology (BSPD) is summarised in Figure 2. The full survey is available as an appendix to this report (Appendix 5). Paediatricians with or without a specific interest in PD treat children, mainly those with atopic dermatitis, and may be involved in the early diagnosis of those with more complex disorders.



**Figure 2:** Percentage of children with dermatological conditions seen in either dedicated Paediatric units [62], Paediatric Dermatology clinics within Dermatology dept [28] or General dermatology clinics mixed with adults [228]



### Training

Current training in PD for SpRs in dermatology is defined in the JCHMT curriculum and is competence based. There is no specific training in Dermatology for doctors other than SpRs, nurses or any of the other professions involved with the care of children.

#### **Future requirements for training:**

A training programme for PD within the RCPCH is planned. The route by which paediatricians achieve specialist training and accreditation in Dermatology remains unclear at this time.

### Nursing services and training

Most general or even specialist dermatological nurses have little or no specific training in paediatrics. This is directly relevant to both the practicalities of providing nursing care, and to the development of patient and carer self-management. There is mounting evidence that education of children and their parents, particularly in those with AD, greatly improves treatment usage and outcome. This is most cost-effective and efficient when given by a specialist nurse. Chronic disease clinics, mainly for AD, already exist in some specialist units.

The imperatives of the NSF for Children and Young People will make it essential that those dealing with this age group have received specific training and experience in a Paediatric environment, but also that those who have paediatric training are competent in the care of skin diseases.

### Paediatric Pharmacists

Pharmacists are an essential part of the dermatological team especially with the preparation of non-proprietary topical therapies. Paediatric Pharmacists in hospitals are particularly important for the management of children requiring systemic therapies for severe cutaneous disease. Many of these are used outside their licence and have special features of dosage and formulation. All pharmacists should have a sound knowledge of the principles of paediatric prescribing, and community

pharmacists are an integral part of any community based service model. All large units should have a nominated paediatric pharmacist.

### **Paediatric In-patient facilities**

All children should be nursed in dedicated Paediatric units. Unfortunately most paediatric nurses have little or no formal dermatological training and it falls to adult-trained dermatology nurses to give appropriate advice and ad hoc training to their paediatric colleagues. The BSPD 2003 survey found that only 9 out of 132 inpatient units had designated paediatric dermatology beds. It should be a priority that specialist nurses in paediatric dermatology are available to provide care to in-patients.

### **Hospital Education**

This is particularly important for children with chronic severe disease such as eczema and EB and facilities should be made available in all hospitals.

### **Associated Paediatric specialties**

Paediatric dermatologists liaise with colleagues across the full range of paediatric practice. Whilst many are specialist paediatricians with a sub-specialty interest, many are trained in adult medicine but deal with all ages of patient, as in Dermatology.

### **Surgery**

Even minor skin surgery in children may require general anaesthesia. This requires access to paediatric surgeons and anaesthetists, which is not available in many DGHs.

### **Multi-disciplinary Paediatric clinics:**

Many of the larger centres run regional multidisciplinary clinics for a range of problems.

<b>Potential Multi-disciplinary clinics:</b>
Genetic diseases, Vascular anomalies, with easy access to laser therapy Food allergy, Epidermolysis Bullosa, Transplant patients, Rheumatology, Suspected child abuse cases.

### **Phototherapy in childhood**

Treatment of children with phototherapy requires special expertise in dedicated treatment centres with appropriately trained staff. Most DGHs have access to their own phototherapy units but there are several larger centres in the UK with a particular expertise in treatment of children.

### **Professions Allied to Medicine**

There is a significant, but largely unmet, need for a range of allied professionals within paediatric dermatology.

<b>Professions Allied to Medicine Required in Paediatric Dermatology</b>
Dieticians Social workers Clinical psychologists, Red Cross cosmetic camouflage service Play therapists

### **Paediatric Dieticians**

There is a national shortage of paediatric dieticians. The lack of paediatric dietetic support leads to sub-standard care, and all specialist units should have a nominated individual in this role, whilst smaller units should have access to appropriately skilled dieticians when needed.

### **Child protection issues**

Child abuse often produces cutaneous signs, which may be difficult to interpret especially by the untrained. Conversely skin disease can mimic child abuse cases and dermatologists are frequently involved. It is essential that dermatologists, paediatricians and family doctors receive adequate training in this difficult field.

### **Paediatric Clinical psychologists**

Access to clinical psychologists is difficult or impossible in most UK centres. Clinical psychologists are essential for the optimal management of a number of conditions, most particularly dermatitis artefacta and trichotillomania, but also in chronic skin diseases where there is bullying or loss of self-esteem.

### **Social workers**

There are no dedicated PD social workers in most centres. Access to paediatric social workers is often through liaison with the local paediatric service. Ideally there should be a dedicated PD social worker as part of a multidisciplinary team. The availability of the Disability Living Allowance is essential for children with severe dermatological disease such as EB or severe eczema/ psoriasis and a few genetic skin conditions.

### **Play therapists**

Play therapy is essential for children in both out-patient and inpatient settings.

### **Summary**

Whilst much of Paediatric dermatology has characteristics that are common to the world of adult dermatology, there are areas of variation and difference that are important and require special attention. The Children and Young Peoples NSF defines the needs and responsibilities with regard to this group, and it is essential that service delivery in Dermatology acknowledges and addresses these adequately.

## **Dermatology in Older People**

Older people suffer with the full array of skin disease, as well as developing conditions related to the aging process. They are also exposed to an increasing number of drug treatments, increasing their risk of drug reactions. Their overall needs are being considered as part of the programme of National Service Frameworks, and as with children, it is important that there is consistency of approach between the various bodies considering the needs of this population group. There are no specific services for older people with skin problems, but the involvement of community services is particularly relevant to their needs. There is now a multi-professional special interest group within the British Association of Dermatologists that has been formed to further the study of skin diseases and their treatments in older patients.

## Conclusions

This document summarises the approach to service development favoured by the Dermatology Sub-group of the Long-Term Conditions Care Group Workforce team, which includes representatives of all parties with an interest in Dermatology Service provision. It covers the areas of service provision relevant to the management of most inflammatory skin diseases, and suggests models of care, as well as staff numbers, to deal with the problems of patients with skin disease: the exception is the field of skin cancer.

Adoption of the principles of this document have implications for teaching, training, assessment and continued professional development. Competence Frameworks that are multi-professional will be required, and Skills for Health has been commissioned to begin developing these, although the recently launched Integrated Career and Competence Framework from the RCN/BDNG provides a very valuable starting position for this extended work.

The establishment of agreed models of service provision is a beginning, rather than the end, of a process, but should give guidance to Strategic Health Authorities and aid the provision of consistent, high quality care for patients.

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## List of Abbreviations and Acronyms

AD	Atopic Dermatitis
AFC	Agenda for Change
APPG	All Party Parliamentary Group
BAD	British Association of Dermatologists
BDNG	British Dermatological Nursing Group
BSPD	British Society for Paediatric Dermatology
CDM	Chronic Disease Management
CEX	Clinical Examination
CPD	Continuing Professional Education
DH	Department of Health
DOPS	Directly Observed Procedures
EB	Epidermolysis Bullosa
FRCP	Fellow of the Royal College of Physicians
FRCPC	Fellow of the Royal College of Physicians Paediatrics and Child Health
FTE	Full Time Equivalent
GMS	General Medical Services
GP w SI	General Practitioner with a Special Interest
GP	General Practitioner
HCA	Health Care Assistant
ICCF	Integrated Career and Competence Framework
MDT	Multi-Disciplinary Team
NCCG	Non-Consultant Career Grades
NES	National Eczema Society
NICE	National Institute for Clinical Excellence
NSF	National Service Framework
P w SI	Practitioner with a Special Interest
PCDS	Primary Care Dermatology Society
PCT	Primary Care Trust
PMETB	Postgraduate Medical Education and Training Board
PUVA	Psoralen UVA
QL	Quality of Life
RCP	Royal College of Physicians
RCPCH	Royal College of Paediatrics and Child Health
SpR	Specialist Registrar
UVB	Ultra-Violet B