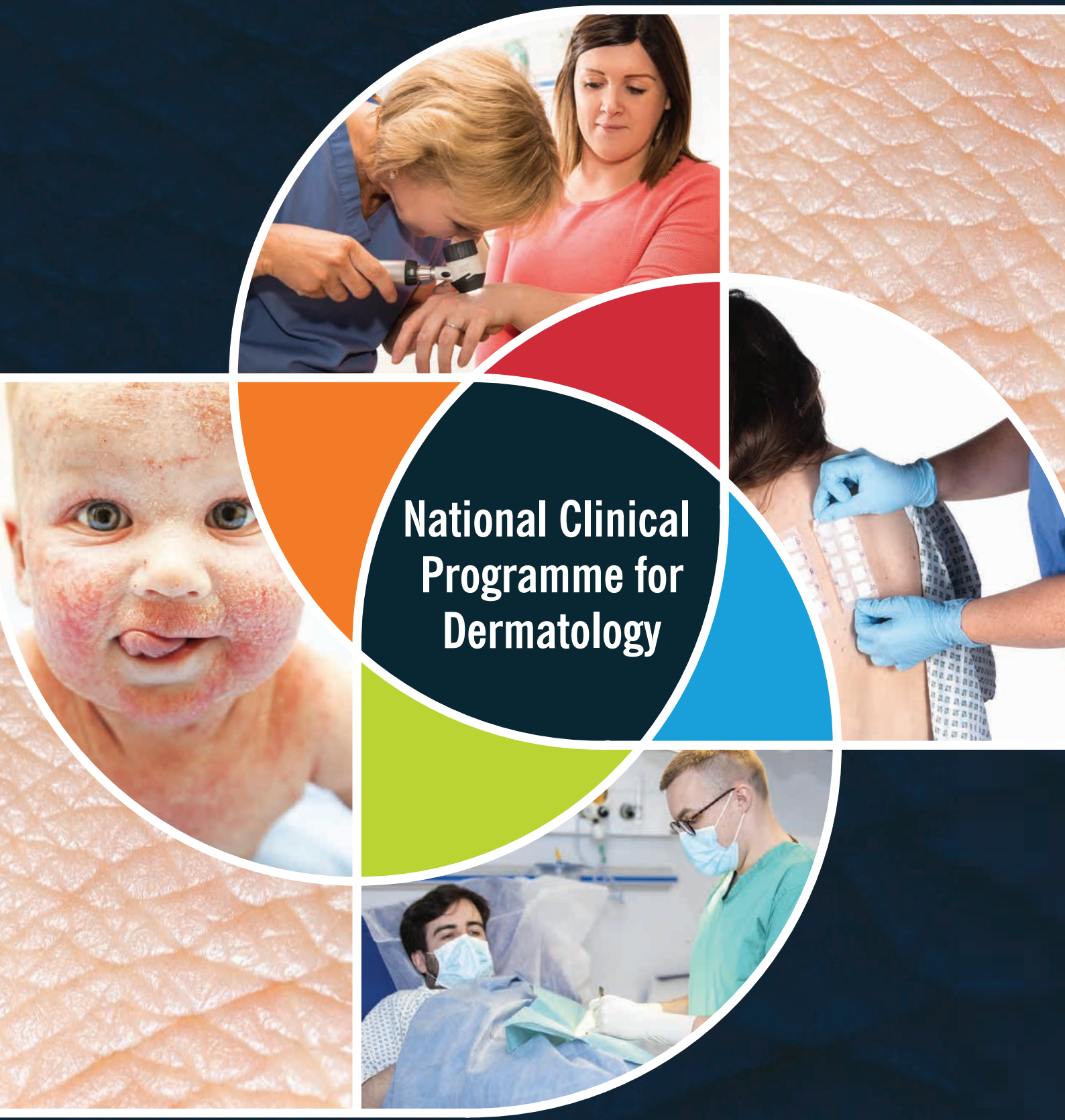

National Clinical Programme for Dermatology

A MODEL OF CARE FOR IRELAND

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ABBREVIATIONS

BAD	British Association of Dermatologists
BCC	Basal cell carcinoma
BIU	Business Intelligence Unit
CAG	Clinical Advisory Group
CHG	Children's Hospital Group
CME	Continuing medical education
CNS	Clinical Nurse Specialist
DNA	Did not attend
DNC	Dermatology Networking Centre
DNE	Dublin North East
DOH	Department of Health
GP	General Practitioner
HIQA	Health Information and Quality Authority
HIV	Human immunodeficiency virus
HSE	Health Service Executive
HSH	Hume Street Hospital
IAD	Irish Association of Dermatologists
ICGP	Irish College of General Practitioners
ICHMT	Irish Committee on Higher Medical Training
IDNA	Irish Dermatology Nursing Association
IMCSR	Irish Medical Councils Specialist Register
ISF	Irish Skin Foundation
LOS	Length of stay
MDT	Multidisciplinary team
MMS	Mohs micrographic surgery
MMUH	Mater Misericordiae University Hospital
NCCP	National Cancer Control Programme
NCHD	Non-consultant hospital doctor

ABBREVIATIONS CONTIN'D

NCRI	National Cancer Registry Ireland
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NP	New patient
OLCHC	Our Lady's Children's Hospital Crumlin
OLOL	Our Lady of Lourdes
OPD	Out-patients department
OTC	Over the counter
PILS	Patient information leaflets
PSG	Patient support group
PUVA	Psoralen ultraviolet therapy
QCCD	Quality & Clinical Care Directorate
RCPG	Royal College of General Practitioners
RCSI	Royal College of Surgeons in Ireland
SCC	Squamous cell carcinoma
SDU	Special Delivery Unit
SIVUH	South Infirmary Victoria University Hospital
SJH	St James Hospital
SVUH	St Vincent's University Hospital
TUH	Tallaght University Hospital
UCD	University College Dublin
UCHG	University College Hospital Galway
UVL	Ultraviolet light
WUH	Waterford University Hospital
WRS	Weekly Return Service
WTE	Whole time equivalent

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FOREWORD
Dermatology National Clinical Lead

The National Clinical Programme in Dermatology is pleased to publish the Dermatology Model of Care. In this document, we outline a model which ensures that the dermatology patient is seen, assessed and treated by the right person, in the right place and in the timeliest manner. We believe that the principles laid out in this document represent best practice that will, in the long term, ensure that all patients in Ireland receive the same standards of quality care wherever they present. The Model is being published at a time when dermatology is evolving and new treatments are available, patient's expectations are justifiably increasing.

The model of care outlined is both ambitious and achievable; the Dermatology community will work closely with all other stakeholders, including hospital managers and CHO managers, to ensure that equity in delivery of the model regionally is achieved.

I am grateful to the Clinical Advisory Group for their careful review of and input into this document and to all who gave feedback. I wish to acknowledge the support of Dr Colm Henry, HSE Chief Clinical Officer and Dr Vida Hamilton, National Clinical Advisor and Group Lead, HSE Acute Hospitals Division and to Dr David Hanlon National Clinical Lead in Primary Care. I want to specially thank Mr Mike Walsh, NCPD Programme Manager, for all his dedication and previous programme managers Sinead Fitzpatrick and Kellie Myers. Prof Louise Barnes, my predecessor in the role of Clinical Lead, laid the foundation for this Model of Care. Prior to the Clinical Programme, Dr John Bourke and the late Dr Paul Collins carried out the Comhairle report of 2003, establishing the principles of care for our patients.

This Model of Care is dedicated to our patients, and their families.

EXECUTIVE SUMMARY

In this document, we outline a Dermatology Model of Care to ensure that dermatology patients are seen, assessed and treated by the right person in the right place at the right time. The model envisages close collaboration between primary and secondary care, between GPs and their local dermatology department to deliver person-centred and integrated care. This model is aligned to Slaintecare. Using a population-based approach and aligned to international best practice, we set out the workforce, service delivery structures and other requirements for the next five years to ensure that all patients in Ireland receive a uniformly high standard of quality care, wherever they present.

Skin disease is extremely common. In Ireland, 54% of the population is affected by skin disease annually with up to 33% of people at any one time having a condition that would benefit from medical care. An estimated 15-20% of GP consultations relate specifically to the skin. Many can be managed at primary care level with approximately 65,000 referrals annually to specialist dermatology departments for more complex or severe forms of skin disease. Some of the commonest skin diseases are increasing in frequency; in particular, skin cancer shows rising rates of incidence, with over 230 skin cancer related deaths each year in Ireland. Approximately 50% of referrals to Dermatology are for skin cancer. Our skin is the most important organ for social functioning. The impact of highly visible skin diseases on quality of life can be far-reaching and profound and many of the non-cancerous inflammatory skin diseases are chronic in nature.

Timely and accurate diagnosis is the key to determining the most effective management approaches for patients, particularly in relation to conditions such as skin cancer, psoriasis and hidradenitis suppurativa (HS). Depending on severity of presentation and stage of disease, management approaches range from health prevention approaches and self-management to a variety of topical and oral medications, injection of steroids or biologics, surgical interventions, and other treatments such as phototherapy and chemotherapy. In many cases, depending on personal and environmental factors, there is also a significant role for psychological and other social supports to reduce the impact and burden of disease.

Primary care is provided mainly by general practitioners and pharmacists. Secondary and tertiary specialist care in Ireland is led by consultant dermatologists, with a variable additional workforce of specialist registrars, non-consultant hospital doctors, advanced nurse practitioners, clinical nurse specialists, staff nurses, pathologists, psychologists, clinical photographers and administrative staff. Some skin surgeries

are carried out by plastic surgeons. In addition, paediatric dermatology services are delivered by the Children's Hospital Group (~57%) and other regional centres (~43%). Some supra-specialist services are provided on a national basis by specialist centres, e.g. Mohs micrographic surgery in Dublin and Cork, Epidermolysis Bullosa clinics, genetic dermatology.

There are 49.96 whole time equivalent (WTEs) dermatology consultant posts directly employed in the provision of dermatology services in acute hospitals in Ireland (as at December 1st, 2019). The majority of consultant dermatologists by WTE (84%) are based in Model 4 hospitals. There are currently 3.8 WTE Advanced Nurse Practitioners (ANPs), 28 Clinical Nurse Specialists (CNSs) and approximately 26 staff nurses allocated to the specialty of Dermatology. There is a dearth of access to psychology, dietetics and smoking cessation programmes for patients with cutaneous skin disease in all dermatology departments. Pathology support is also critical to the care of patients with skin cancer and rare cancers in multidisciplinary meetings.

Dermatology outpatient referral numbers have been increasing significantly over the last 10 years with over 115,000 outpatient visits in 2019. Of these 40,868 were new patients and 74,434 were return patients. It is envisaged that demand for specialist dermatology services will continue to increase in the coming years. Between 2015 and 2019 there has been an increase in the annual total number of patients seen in Irish dermatology departments by approximately 6,000 to 7,000 patients annually. An analysis of referral and activity data demonstrates a very clear and significant demand-capacity deficit based on current resources and how the health system currently operates. As of December 2019 there were 48,850 Irish people waiting on a dermatology outpatient's appointment, representing a rise of 18,895 since December 2015, a 63% increase. This has led to an inevitable increase in waiting times for Irish patients, particularly those waiting longer than 12 months (15,734 in 2019 (32%)). To halt the current rate of growth in the OPD waiting list it is estimated that an additional of ~ 5,000 new patients need to be seen annually.

Currently the main challenges to the delivery of **equitable, timely and geographical accessible dermatology** services in Ireland include:

- A significant and increasing demand on secondary and tertiary dermatology services with a rising demand-capacity gap and the unavoidable increased risk inherent in consistently running dermatology services at near or full capacity.
- Regional variation in service access and service provision.

- Infrastructural deficits at secondary/tertiary care level.
- A need to build more skills and competencies in all stakeholders in the management of skin problems especially in primary and community care and in non-consultant staff.
- A need for greater integration of care delivery especially between primary and secondary care.
- A need for a more systematic approach to data collection, system performance, governance, strategic investment and accountability at regional and national levels for dermatology service provision.

The National Clinical Care Programme for Dermatology was established in 2011. Since then the lives and care of patients diagnosed with skin cancer and inflammatory skin diseases have improved significantly due to advances in diagnostics, treatments, increases in the dermatology workforce and structural developments like rapid access clinics for pigmented skin lesions. In addition, improvements in education, public information, technology and health care prevention have facilitated improved care. However, as outlined above, more is required.

The model of healthcare espoused by Sláintecare enshrines the principle “right care, in the right place at the right time”. The delivery system is evolving to facilitate a more community based, citizen-centred approach to healthcare with greater emphasis on preventative healthcare, self-management and general health and well-being.

To facilitate effective and evidence-based investment in dermatology services and re-design, and in the context of planned restructuring into regional health areas (RHAs), it is imperative at this time to define and publish a fit-for-purpose model of care for dermatology services which will deliver for Irish patients into the future. The National Clinical Programme for Dermatology’s (NCPD) Model of Care aligns closely to Slaintecare’s principles and will serve as the fundamental building block and framework for the development and delivery of dermatology services in Ireland over the coming years.

This model of care outlines an optimum service delivery structure (dermatology clinical networks), workforce plan, integrated processes, educational framework, governance structures, performance management system and other requirements for successful implementation.

The guiding principles of the Dermatology Model of Care are:

- Provision of equitable and patient-centred services.
- Regional self-sufficiency (recommended in Comhairle report 2003) and population-based service development.
- An accurate diagnosis as the starting point for guiding effective and quality care, at whatever level and however organised.
- Strong collaboration and integration between primary and secondary care.
- Standard clinical pathways which will be implemented through local clinical networks.
- Access to diagnostic services and multidisciplinary teams as appropriate.
- Actively engaging people in prevention, improving health behaviours and supporting self-management.

KEY RECOMMENDATIONS

Dermatology Clinical Networks

- To develop a series of Dermatology Clinical Networks within each region linking local populations and the primary care structures which serve them with secondary and supra-specialist care providers. These networks will work collaboratively and ensure equitable provision of high quality, integrated, and clinically effective services to the regional population.

Primary Care

- To facilitate and support screening and treatment of the majority of skin diseases and skin lesions in primary care, referring on, if necessary, for diagnosis and management to the network of secondary care services in each region.
- To develop clear evidence-based care pathways and clinical guidelines, and, to provide on-going education to support primary care. These pathways will be supported by robust processes such as fit-for-purpose and integrated electronic referral and communication systems. These pathways will also be supported by efficient structures such as rapid access pigmented lesion clinics and “see and treat” clinics. The National Clinical Programme for Dermatology (NCPD) will continue to work with the National Cancer Control Programme (NCCP) in the development of skin cancer care pathways.

- The NCPD recommends embedding educational and support activity for all GPs both in training and those in practice. Accredited CPD activity and processes for formal dissemination of, and education on, clinical care pathways will be developed. Delivery can be supported through the Dermatology Clinical Networks facilitated by national and regional leadership.

- The NCPD acknowledges the role that community based pharmacies play in supporting patients to manage skin diseases and supports initiatives which will enhance this role. The NCPD is committed to working with Trinity College Dublin, the Royal College of Surgeons in Ireland and University College Cork to deliver dermatology education at undergraduate level to pharmacists. The NCPD will also work with Pharmaceutical Society of Ireland and the Irish Pharmacy Union to deliver dermatology education to pharmacists in practice.

Secondary Care

- To provide outreach clinics locally in peripheral hospitals (spokes) to support a local network of GPs, providing care closer to home for patients, and on-site dermatology consultations for inpatients. The NCPD recommends the enhancement and further development of peripheral centres within the hub and spoke model outlined. This will be done in line with patient needs and population-based planning regionally.

- To operate dermatology departments (hubs) in teaching hospitals with OPDs, day-care, patch testing, management of complex skin diseases, surgery for skin cancer and multidisciplinary team care for chronic skin disease and skin cancers.

- In line with population based needs, international best practice and geographical equity, to provide supra-specialist services from key locations nationally for a small number of patients requiring the provision of very specialised care for specific disease investigation/care such as Mohs micrographic surgery (Dublin and Cork) or Phototesting.

Workforce

- To meet a desired ratio of 1 per 80,000 population aligning towards international practice, the NCPD recommends an additional 11.5 consultant dermatologists in Ireland over the next 5 years (~ 2.3 per year). Contracts will be designed to facilitate the hub and spoke model of care delivery.

- The NCP recommends at least 1 ANP per dermatology department (hub) and 2 for some centres with larger outreach commitments. Currently there are 3.8 WTE ANPs nationally with an estimated deficit of ~ 11 ANPs. The immediate impact of 11 ANPs will be the capacity to see an additional 19,360 return patients per year as well as freeing up of capacity for dermatologists to see an estimated 9,680 additional new patients. The exact number of Clinical Nurse Specialists (CNSs) will require more detailed analysis. Contracts will be designed to facilitate the hub and spoke model of care delivery.

- The NCPD recommends the development of psychology and other allied health services specifically to support Irish dermatology patients. Existing community based supports for health and wellbeing can be leveraged in the first instance. The NCPD recommends psychodermatologists in each dermatology network with contracts designed to facilitate the hub and spoke model of care. This should include paediatric psychology support in the regions.

- The National Clinical Programme for Dermatology is committed to working with the National Clinical Programme for Pathology to plan the development of histopathology capacity, and specialist dermatopathology services.

- For effective operation of an efficient dermatology service the NCPD recommends a detailed analysis and the provision of a full complement of administrative, clerical and technical staff to support dermatology services.

Prevention/Self- Management

- To develop, promote and support all stakeholders in the prevention of skin diseases, especially cancers of the skin.

- To develop, promote and support all stakeholders in their capacity for self-management or supporting self-management of chronic skin disease and its consequences for patients.

- The National Clinical Programme for Dermatology (NCPD) recommends that patients diagnosed with Psoriasis, Eczema and Hidradenitis Suppurativa be assessed for comorbidities such as cardio metabolic and psychological distress.

Enablers

- To invest in the enablers to deliver on the dermatology model of care including infrastructure, health and digital technologies, data systems, education, research, governance and audit.

- The NCPD recommends the provision of new infrastructure at certain sites which have critical infrastructural requirements. These include South Infirmary Victoria University Hospital, Tallaght University Hospital, Galway University Hospital, and St James's Hospital. Over the five year term of this current iteration of the Model of Care, South Infirmary Victoria University Hospital and Galway University Hospital are in most need of investment.

- The NCPD recommends strategic investment in piloting specific teledermatology and other technology initiatives and examination of the potential for scaling up of such initiatives. It is envisaged that these initiatives, if implemented appropriately, will impact waiting lists and times and improve access and quality of care delivery for Irish dermatology patients. Technology may also facilitate communications, team working, service delivery, integration of care, education and research.

- The NCPD supports the HSE's Medicine Management Programme in promoting the use of Biosimilars in dermatology services in the interests of significant cost savings to the health service and best value use of limited resources.

- The NCPD recommends the collection of a broader set of analytics including data relating to patient experience, outcomes and data to assist in more specific regional service planning. It is important that data collection is meaningful, streamlined and facilitated by technology processes and administrative support.

- The NCPD supports the developments by the ISF and DEBRA Ireland on the establishment of Irish skin registries to include conditions like atopic dermatitis, Epidermolysis Bullosa (EB) and other skin related information. The National Cancer Registry Ireland has provided significant and valuable data to Irish clinicians, service providers, researchers, funders and policy makers in recent years in relation to trends in cancer presentations, management, outcomes and survival rates. Additional similar registries for skin diseases will provide valuable health information which will help provide better care for Irish dermatology patients and inform future service delivery, research and investment.

- The NCPD recommends on-going investment in dermatology and health-related research and national structures to support research delivery and impact for Irish patients.

1 | INTRODUCTION & BACKGROUND

As life expectancy and population numbers in Ireland continue to rise, the provision of high-quality, person-centred and integrated health services which are affordable becomes more crucial. The delivery system is evolving to facilitate a more community based, citizen-centred approach to healthcare with greater emphasis on preventative healthcare, self management and general health and well-being. The Sláintecare Report of the Oireachtas Committee on the Future of Healthcare (1) sets out the ten-year vision for the health service in Ireland. The model of care espoused by Sláinte care enshrines the principle "right care, in the right place at the right time".

Clinical leadership is central to the delivery of the changes envisioned by our healthcare system. Since their inception in 2010, the National Clinical Programmes (NCPs) have been a key transforming force in delivering change. Patients have benefited from models of care and innovations which are focussed on the needs and outcomes that are important to them (2).

To this end the Department of Health and Slaintecare's National Framework and Principles for the Design of Models of Care (3) outlines nine principles for model of care design which will support the NCPs in designing services in a changing and challenging healthcare landscape, not just in Ireland but globally;

- Population Health Perspective
- Person-Centred
- Health and Wellbeing
- Equity
- Coordination of Care
- Self-Care and Self-Management
- Top of License Practice and Teamwork
- Supported by Technology
- Quality and Safety

The National Clinical Programme for Dermatology's (NCPD) Model of Care aligns closely to these principles and will serve as the fundamental building block and framework for the development and delivery of dermatology services in Ireland over the coming years.

2 | RATIONALE FOR MODEL OF CARE

The National Clinical Care Programme for Dermatology was established in 2011. Since then the lives and care of patients diagnosed with skin cancer and inflammatory skin diseases have improved significantly due to advances in diagnostics, treatments, increases in the dermatology workforce, structural developments like peripheral dermatology centres and new multidisciplinary clinics combined with other medical specialties, the development of rapid access clinics for pigmented skin lesions nationally, improvements in education, public information, technology and health care prevention.

Despite these improvements and a very significant increase in activity and patient throughput, dermatology waiting lists and waiting times continue to rise rapidly and are reaching unacceptable levels. There are various reasons for this which will be discussed in more detail later in this document. We know that our dermatology services, as currently designed and resourced, must evolve to meet the growing demands being placed on them.

To facilitate effective and evidence-based investment in dermatology services and re-design, and in the context of planned restructuring into regional integrated care organisations (RICOs), it is imperative at this time to define a fit-for-purpose model of care for dermatology services which will deliver for Irish patients into the future.

This model of service design will focus on providing equitable and timely access to expertise and accurate diagnosis, effective treatments, and quality information and education, so that Irish people with skin cancers and inflammatory skin conditions can live full lives free from stigma, disadvantage and discomfort.

3 | DERMATOLOGY OVERVIEW

3.1 Dermatology Profile

The specialty of Dermatology manages diseases of the skin, hair and nails in adults and children. A significant proportion of the population are affected by a skin condition with an estimated 15-20% of GP consultations relating specifically to the skin. In Ireland this represents between 712,500 and 950,000 GP consultations each year which generates a significant number of referrals for consultant dermatologist advice (4). In 2019 there were 64,220 referrals to consultant dermatologists working in public hospitals.

The International Classification of Disease (ICD 10) lists over 1,000 skin or skin-related illnesses, however a small number of conditions account for most of the disease burden. These include inflammatory conditions, such as eczema, psoriasis, acne and rosacea; skin cancers, including melanoma, basal and squamous cell carcinomas; autoimmune conditions, such as lupus and vitiligo; and hereditary diseases. The impact of skin diseases on quality of life can be far-reaching and profound. Skin conditions are often chronic in nature, with treatment focusing on reducing and controlling symptoms. Many conditions may be managed at primary care level; secondary level dermatology is required however for patients with more complex or severe forms of skin disease.

Skin disease causes over 230 deaths each year in Ireland, including 160 deaths due to malignant melanoma and 70 from non-malignant skin cancer (NMSC), with mortality increasing by 2.3% per year for females and 4.7% for males (National Cancer Registry Ireland (NCRI) 2017). The vast majority of these are avoidable through early detection and well-resourced services. Severe skin disease is also implicated in premature death.

Skin diseases such as psoriasis, eczema and hidradenitis suppurativa (HS) cause significant impairment of quality of life, equivalent to that seen in conditions such as chronic obstructive pulmonary disease (COPD). Patients with inflammatory skin disease have increased co-morbidities, including an elevated risk of cardiovascular disease and diabetes (5). Many people report stigmatisation, impaired personal relationships, a fear of contagion and a failure of others to appreciate the serious health, financial, social and personal impacts of their disease (4).

3.2 Patient Profile

The top presenting complaints for the specialty of Dermatology are outlined in Table 3.1.

Table 3.1: Most common presenting complaints

Dermatology common presenting complaints to outpatient services	
Melanoma and suspicious pigmented lesions	Eczema (Dermatitis)
Basal cell carcinoma	Hidradenitis suppurativa
Squamous cell carcinoma	Vascular lesions
Psoriasis	Rosacea
Acne	Skin Infections

Approximately 50% of referrals to Dermatology are for skin cancer; rates of which are rising rapidly and expected to double between 2020 and 2040 (6). Ireland has one of the highest incidences of skin cancer in the world with 10,089 cases of non-melanoma skin cancer and 1,067 cases of melanoma diagnosed in 2017 (NCRI). Patients surviving chemotherapy, organ transplantation and certain patients receiving immunosuppressive medications are at increased risk of skin cancer. The number of patients older than 65 years is estimated to double to more than one million in 20 years (6), these older patients have increased rates of non-melanoma skin cancer due to cumulative sun exposure.

Psoriasis is one of the most common skin diseases in Ireland and affects an estimated 77,000 people; 20,000 of whom have a severe form of the disease and may benefit from secondary care. Many skin disorders, such as eczema, are increasing in frequency; approximately 1 in 5 children and 1 in 12 adults have eczema (7).

The increasing incidence of skin cancer alone will create a very significant and growing demand on secondary level dermatology services. **At secondary level, dermatology has the fourth longest outpatient waiting list with 48,850 patients waiting for an appointment (December 2019), 32% of these waiting over 12 months.**

3.2.1 Skin Cancer

Skin cancers are the most commonly diagnosed cancers among Caucasian populations with ultra violet radiation (UVR) the most well documented risk factor. For basal cell carcinoma (BCC) and melanoma intermittent/recreational UVR is the main risk factor while long-term chronic sun exposure is the greatest risk factor for squamous cell carcinoma (SCC). Almost 11,000 invasive skin cancers were diagnosed per year in Ireland between 2011 and 2015 inclusive representing over one third (35%) of all invasive cancers (6). The majority of these (91%) were non-melanomatous tumours (non-melanoma skin cancer, NMSC), of which there were 4,373 new cases diagnosed in females and 5,546 in males each year (Table 3.2).

Table 3.2: Annual average number of melanoma and non-melanoma skin cancers in Ireland, 2011-2015

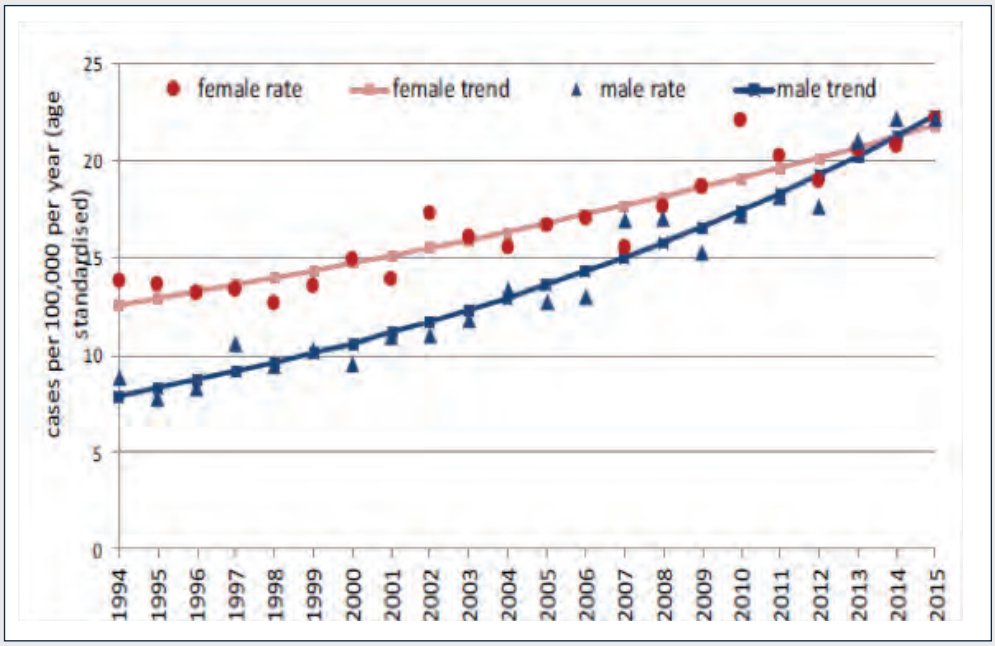
	Female	Male	Total	% all Skin Cancers
All skin cancers	4891	6015	10906	
Melanoma	518	469	987	9%
NMSC	4373	5546	9919	91%
Melanoma				
Superficial spreading	231	166	398	3.6%
Nodular	63	70	133	1.2%
Lentigo Maligna	53	61	115	1.1%
Acral Lentiginous	10	9	19	0.2%
Other & unspecified	160	162	322	3.0%
NMSC				
BCC (Basal cell carcinoma)	3185	3608	6793	62.3%
SCC (Squamous cell carcinoma)	1139	1879	3019	27.7%
Merkel cell carinoma	8	14	22	0.2%
Adnexal carninoma	9	12	21	0.2%
Sarcoma	6	7	13	0.1%
Other & unspecified	25	26	51	0.5%

** Data exclues multiple primary tumours*

One thousand one hundred and sixty seven **melanomas** were diagnosed in 2017 (NCRI) with superficial spreading melanoma being the most common subtype (40%). Incidence rates of melanoma have increased significantly in both sexes since 1994, particularly for males. Case numbers have increased from 237 to 518 per year for females and from 142 to 469 per year for males from the mid 19902 to 2100-2015 (Figure 3.1) Melanoma patients have a younger profile with almost a third of all female patients and a fifth of males diagnosed before age 50. Similar to NMSC, incidence rates for melanoma were higher in older patients.

Tumour stage is an important prognostic factor in melanoma. The majority of melanoma patients are diagnosed at an early stage, although approximately one fifth of males and 13-14% of females were Stage III or IV at diagnosis (tumour depth is ≥4mm, or the cancer has spread to subcutaneous tissue, lymph nodes or distant organs). The proportion of unknown stage has declined over time, accompanied by an increased proportion of early stage diagnoses for both sexes, but the proportion of late stage tumours has remained more or less unchanged. Survival for melanoma has improved quite substantially since the mid 1990's (now almost 90%). Melanomas diagnosed at Stage 1 have a much higher survival than those diagnosed at Stage IV (5).

Figure 3.1: Trend in incidence for melanoma 1994-2015



Non-Melanoma Skin Cancer (NMSC) was almost exclusively either basal cell carcinoma (approximately 6,800 cases per year, 69% of all NMSC) or squamous cell carcinoma (approximately 3,000 cases per year, 30% of all N SC) with ≤60 cases in total per year of other specific subtypes such as Merkel cell and adnexal carcinomas (6).

Similar to many cancers, skin cancers are more common in older age. Almost half of all BCCs, and 69% of male and 74% of female SCC cases, were diagnosed in patients aged 70 years or older.

Incidence rates for NMSC remained largely unchanged (BCC & female SCC) or declined somewhat (male SCC) from 1994 to the early 2000s but thereafter rates for both NMSC subtypes increased significantly.

Between 2011 and 2014 inclusive there were 159 deaths from melanoma and 70 deaths attributed to NMSC per year (5). In 2012 Ireland had the highest mortality rate for melanoma in Europe.

Five year net survival for NMSC has always been very high (almost 100% (slightly lower for SCC).

3.2.1.1 National Cancer Control Programme

The Clinical Lead for the Dermatology National Clinical Programme (DNCP), Chair of the Clinical Advisory Group (CAG) and other members of CAG have worked closely with the National Cancer Control Programme (NCCP) on developing guidelines for skin cancer. In 2012 the NCCP published guidelines for the management of melanoma, focused on prevention and treatment (Appendix 1). All patients with a suspected melanoma must be referred to a consultant dermatologist or plastic surgeon, using a standardised **electronic referral form** which has been rolled out nationally (Appendix 2). All cases involving patients with a diagnosis of melanoma must be discussed at a **multi-disciplinary skin cancer meeting**. The NCCP has streamlined the care of these patients and work is currently on-going to establish key-performance indicators for the management of melanoma to promote standardisation of care nationally. Since its introduction, all dermatology departments operate **rapid access pigmented lesion clinics** on a weekly or fortnightly basis. any of these function as 'see and treat' clinics, with patients often having suspected lesions removed at initial presentation thereby maximising value and "making every contact count". Similarly the national guidelines encourage GPs to opportunistically assess patients for signs of skin malignancy when they attend the GP practice.

Guidelines for the management of patients with non-melanoma skin cancer are being developed. These have the similar goal of streamlining care for NMSC patients, while facilitating the discussion at MDT of patients with high risk NMSC, particularly SCC.

It is recommended that all melanomas, squamous cell carcinomas and high risk basal cell carcinomas are managed in a hospital setting. General practitioners play a vital role in first line management. Their work is critical in recognising skin cancers and treating pre-malignant skin cancers such as actinic keratoses, Bowen's Disease and basal cell carcinomas as per the NCCP guidelines.

The NCCP's National Melanoma GP Referral Guidelines can be accessed on: **https://www.hse.ie/eng/services/list/5/cancer/profinfo/resources/gpreferrals/national-melanoma-gp-referral-guidelines.pdf**

The NCCP's GP Pigmented Lesion GP Referral Form can be accessed on: **https://www.hse.ie/eng/services/list/5/cancer/profinfo/resources/gpreferrals/melanomagpform.pdf**

3.2.2 Psoriasis

Psoriasis is a chronic cutaneous immune-mediated disease with a complex pathogenesis. It affects 2-3% of the population, and is associated with an inflammatory arthropathy in up to 40% of patients (8). It has been recognised by the World Health Organisation as a chronic systemic disease in 2014 (9). Patients with more severe psoriasis also have increased cardiovascular and metabolic risk (10). It is estimated that there are 77,000 patients with psoriasis in Ireland (11). Approximately 30% of patients with moderate to severe disease require care in a dermatology department with either phototherapy or systemic treatments. Patients with mild disease can be managed in primary care with topical therapy. Psoriasis has a significant psychosocial impact on patients' lives and it is imperative that those patients who require phototherapy or systemic treatment have timely and regional access to same.

The advent of biological treatments for psoriasis since 2005 has improved outcomes for patients.

3.2.3 Dermatitis

Up to 12% of adults and 20% of paediatric patients (12) suffer with atopic dermatitis. Eczema causes significant sleep deprivation and can be extremely stressful for families who, because of its genetic nature, may have several members affected. Understanding of the pathogenesis of eczema has advanced and it is apparent that early intervention may alter its natural history (13). New biological therapies are also available which will improve treatment options for patients with severe eczema.

Occupational dermatitis is a significant hazard for certain lines of work. Healthcare professionals, hairdressers, and workers with exposure to chemicals or irritants such as cutting oils are among those affected. Hand dermatitis is one of the most common reasons for disablement benefit.

3.2.4 Acne

Acne is a very common complaint among adolescents and young adults. It causes significant distress and, in a minority of patients, has the potential to leave permanent scars. Most acne is managed in primary care through the ICGP Guidelines for treatment of acne. Treatment depends on severity and can range from topical treatments or oral medications (antibiotics, hormones). Certain types of acne such as scarring acne, acne conglobata and fulminant acne require treatment in secondary care with Isotretinoin.

3.2.5 Rosacea

Rosacea is a common, chronic inflammatory skin condition, which mainly affects facial skin and can be characterised by flare-ups and remissions. In a study of 1,000 Irish individuals 2.7% had papulopustular rosacea (14). It can occur at any age, but usually occurs in adults older than 30 years. Rosacea can be accompanied by frequent flushing, persistent redness of central areas of the face, and in some people, acne-like spots or pimples, telangiectasia (dilated blood vessels), rhinophyma (redness, enlarged pores, skin thickening on nose) and involvement of the eyes.

Treatment depends on severity of presentation and may include topical treatments (gels, lotions and creams that are applied directly to the skin), systemic treatments (oral antibiotics, other) and other treatments (light and lase to treat redness and dilated blood vessels, ophthalmology referral, cosmetic camouflage).

3.2.6 Hidradenitis Suppurativa (HS)

HS, also known as acne inversa, is a chronic or long-term inflammatory skin disease of the hair follicle, characterised by recurrent, painful nodules, 'boil-like' lumps or abscesses that can occur in the armpits, groin, perianal area, buttocks or under the breasts. European studies have suggested that HS may affect between 1–4% of the population, while a recent Irish study indicated a prevalence of 1.4% (15). Women are three times more likely to be affected than men.

HS is often under-recognised and diagnosis is frequently delayed; typically because patients attend their GP or local A&E to have individual abscesses incised and drained, but the recurring pattern is not identified. While not all cases of HS get worse over time, HS can continue to recur and sometimes become more severe if not properly managed. As a result, establishing a diagnosis and early treatment is important (16). Cigarette smoking and obesity appear to be risk factors for developing HS.

Although there is no cure for HS, not all cases are progressive. Management and treatment will depend on severity of presentation. Mild symptoms may be attenuated by lifestyle changes and self-management regimes. Moderate symptoms can be managed by antibiotics, biologics, and other medications. Severe cases can be treated with laser therapy, de-roofing procedures, draining abscesses and surgical excision and repair.

3.2.7 Acute Dermatology Presentations

Dermatologists provide important in-patient consultation services in acute hospitals. These are critical to the care of patients with skin failure secondary to severe drug reactions, vasculitis and graft-versus-host disease. It must also be recognised that patients with severe skin disease such as epidermolysis bullosa, erythrodermic psoriasis or eczema may require hospital admission and treatment. This service ensures that such patients receive the correct diagnosis and are appropriately managed.

3.2.8 Paediatric Dermatological Presentations

Children attend dermatology with severe atopic dermatitis, vascular anomalies, genodermatoses and other inflammatory skin disorders. There are approximately 10,000 referrals for paediatric dermatology annually with pressure on services ever increasing, rising as Ireland has the highest proportion of children within the EU, 25% v 19% (22). Children with more chronic conditions like EB require on-going treatment into adulthood and in this context good transition services and processes are important.

3.3 Summary of Patients' Needs

Figure 3.2 summarises the main needs of Irish dermatology patients in relation to managing some of the more common skin conditions which present in clinical practice. **Timely and accurate diagnosis** is the key to determining the most effective management approaches for patients, particularly in relation to conditions such as skin cancer, psoriasis and hidradenitis suppurativa (HS).

Depending on severity of presentation and stage of disease, management approaches range from **health prevention approaches** and **self-management** to a variety of **topical and oral medications**, injection of steroids or **biologics**, **surgical interventions**, and other treatments such as **phototherapy and chemotherapy.** In many cases, depending on personal and environmental factors, there is also a significant role for **psychological and other social supports** to reduce the impact and burden of disease. Likewise, access to **good information and education** for self-management, preventative behaviours and healthy lifestyles is very important.

Figure 3.2 Summary of patient needs and management approach to common skin conditions

SKIN CANCER (Melanoma)	SKIN CANCER (Non-Melanoma)	PSORIASIS	ECZEMA	ACNE	HIDRADENITIS SUPPURATIVA	ROSACEA
• Understanding risk factors • Prevention • Regular inspection • Assessment • Accurate diagnosis • Surgical removal • Advanced treatments • Follow-up • Psychological support	• Understanding risk factors • Prevention • Regular inspection • Assessment & biopsy • Accurate diagnosis • Non-invasive treatments (creams, liquid nitrogen, curettage, radiotherapy) • Surgical removal • Psychological support	• Accurate diagnosis • Self Care/ Management Healthy lifestyle (smoking, alcohol, diet, exercise, etc.) • Topical treatments • Phototherapy • Systemic medications, • Biologics • Psychological supports • Arthritis treatments	• Accurate diagnosis • Self Care/ Management (emollients, avoid irritants, clothing, wet wraps, skin care) • Lifestyle changes • Topical treatments • Phototherapy • Oral medications • Biologics • Psychological support	• Accurate diagnosis • Self care/ Management • Topical treatments • Oral medications • Other (injection of steroid) • Psychological support	• Accurate diagnosis • Lifestyle changes • Self Care/ Management • Systemic medications (corticosteroids, anti-inflammatories, antibiotics) • Biologics • Surgical treatment • Other (laser) • Psychological support	• Accurate diagnosis • Lifestyle changes • Self Care/ Management • Topical treatments • Oral medications • Other (ophthalmology cosmetic) • Psychological support

Many of these needs can be catered for in community and primary care supported by good information and patient support groups. However, it is critical to patient care and health system value that secondary and tertiary expertise is accessed appropriately and in a timely manner.

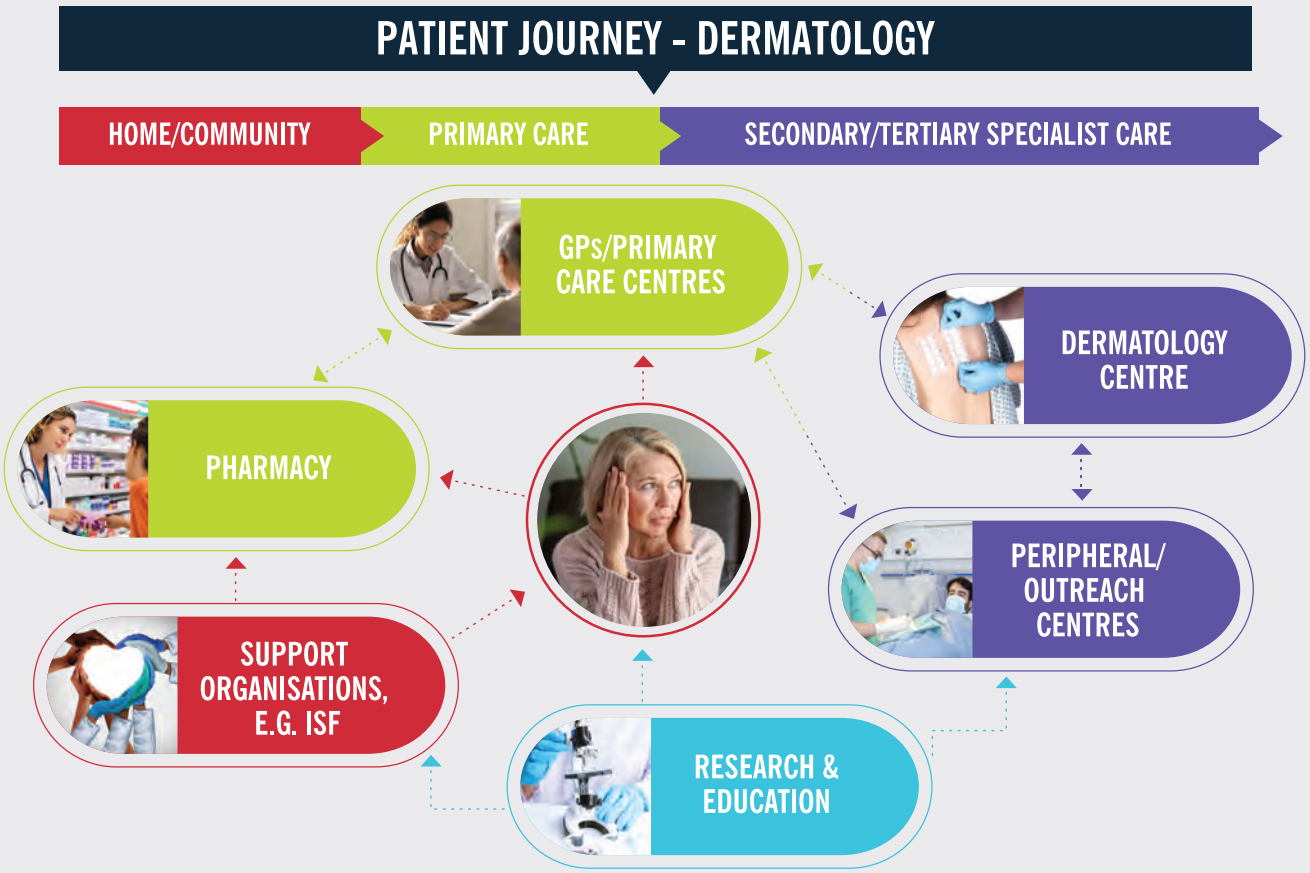
3.4 Summary of Needs for Primary Care Practitioners

Just as patients need timely access to the right expertise for accurate diagnosis and treatment at all levels of the health system, primary care practitioners need timely access to secondary and tertiary service delivery structures for accurate diagnosis, management advice and referral for treatments not available in primary care. This is particularly true in relation to more complex and rare presentations. In addition, GPs, pharmacists and other clinicians need access to on-going education and the most up-to-date information and research in relation to dermatological conditions and treatments.

3.5 Patient-Centred Care and Service Design

Figure 3.3 outlines the dermatology ecosystem in relation to patient needs.

Figure 3.3 Dermatology Ecosystem and Patient Journey



4 | REVIEW OF DERMATOLOGY SERVICES

4.1 Introduction

This section reviews how dermatology services are currently being delivered in Ireland and the challenges facing dermatology services in meeting the needs of Irish citizens and those of the wider dermatology ecosystem, as outlined in the previous section. The model of care for dermatology for the next five years will address these challenges and meet the needs of the Irish population going forwards.

This model of care outlines an optimum service delivery structure (integrated clinical networks), workforce plan, integrated processes, educational framework, governance structures, performance management system and other requirements for successful implementation.

4.2 Current Service Delivery

Figure 4.1 outlines what dermatology services are currently delivered in the community, in primary care and through to secondary and tertiary specialist care in dermatology departments.

Figure 4.1 Delivery of services in Dermatology

PATIENT JOURNEY - DERMATOLOGY

HOME/COMMUNITY	PRIMARY CARE	SECONDARY/TERTIARY SPECIALIST CARE	
			
• Healthy Lifestyle • Smoking Cessation • Diet • Exercise • Stress Management • Cancer Prevention • Self Management of Skin Disease • Public Awareness • Support Organisations • Patient Information • Research • Education	• General Practitioner - Screening - Diagnosis - Rapid referral - Medication & Management - Cryotherapy - Follow-up care and monitoring - Health Promotion - Psychological Support - Education & Info. • Pharmacist - Medication Management - Skin Care - Health Promotion - Education & Info.	• Diagnosis • Dermatology Clinics • Skin Cancer Clinics • Dermatology Surgery • Phototherapy • Systemic Treatment • Education • Patient Information	• Plastic Surgery • Mohs Micrographic Sx. • Photo testing • Patch & Prick Testing • Pathology • Psychological support • Combined Clinics - Rheumatology - Transplant Team - Surgical Team - Gynaecology • Inpatient acute care • Paediatric Dermatology • EB & Fragile Skin • Laser Surgery • Genodermatoses • Education

4.2.1 Primary Care – General Practitioners

A large proportion of dermatological conditions are managed in primary care by general practitioners. Studies in the UK show that up to 24% of the population see their GP each year for skin disease. Approximately 5.5% of these patients were referred for specialist advice, the vast majority within the NHS system (17, 18). There are no similar studies available in Ireland, but it is likely that the UK figures are representative of the numbers of patients visiting their GPs in this country, as a similar system prevails. Thus with an estimated population of 4,921,500 (CSO estimate 2019) primary care in Ireland could currently be accounting for well in excess of 1,181,160 dermatology patients each year. If, as in the UK, some 5.5% of those attending their GPs are referred for specialist advice, that would result in approximately 65,000 new patient referrals to consultant dermatologists annually in Ireland. There were 64,220 recorded referrals to Dermatology Outpatient Departments in 2019 which is consistent with these estimations and indicative that the majority of referrals probably come from GPs in primary care.

In 2019 there were 40,868 new patients seen at dermatology outpatients and 74,434 return patients. It is thus likely that there are considerable unmet needs, particularly in rural areas. A UK report on dermatology services found that 80% of skin consultations with GPs each year are for the 10 most common skin conditions, many of which are managed appropriately in primary care (19).

4.2.2 Primary Care – Pharmacists

Community pharmacists are often the first point of contact for patients with a dermatological condition and provide a vital resource for patients who are self-managing. Every year there are nearly 78 million visits to community pharmacists in Ireland (20). The majority of pharmacists are confident in the day-to-day management of common skin conditions. Advice and sale of non-prescription items (OTC sales) and dispensing of prescription items with advice about their correct usage is all part of an important role that pharmacists play.

4.3 Secondary/Tertiary Care in Dermatology and Workforce

4.3.1 Introduction

Secondary and tertiary specialist care in Ireland is led by consultant dermatologists, with a variable additional workforce of specialist registrars, non- consultant hospital doctors, advanced nurse practitioners, clinical nurse specialists, staff nurses and administrative staff. Some skin surgeries are carried out by plastic surgeons. Most dermatology work occurs in dedicated dermatology departments within hospitals or through outreach from these departments to peripheral centres.

4.3.2 Service Locations

There are 11 Dermatology Departments (Hub) and 16 Peripheral Clinics (Spoke) operating a hub and spoke model (excluding CHI) (Table 4.1, Figure 4.2).

In addition, paediatric dermatology services are delivered by the Children's Hospital Group across the three paediatric hospitals in Dublin. Paediatric patients are also seen regionally in Cork, Tralee, Bantry, Sligo, Limerick, Galway, Mayo, Ballinasloe, Mullingar, Drogheda and Waterford with very small numbers in other centres (Figure 4.3).

Table 4.1: Dermatology service locations

Hospital Group	Dermatology Departments (Hub)	Peripheral Clinics (Spoke)
Ireland East	St. Vincent's Hospital Group	St. Michael's Hospital, St. Luke's Hospital, Kilkenny
	Mater University Hospital	Midlands Regional Hospital Mullingar
Dublin Midlands	Tallaght University Hospital	Naas General Hospital
	St. James's Hospital	Midlands Regional Hospital Portlaoise
RCSI	Beaumont Hospital	Connolly Hospital
	Our Lady of Lourdes, Drogheda	Cavan/Monaghan Hospital
University of Limerick	University Hospital Limerick	Ennis Hospital Nenagh Hospital
South/South West	South Infirmary Victoria Hospital	Kerry University Hospital, Cork University Hospital, Bantry Hospital
	Waterford University Hospital	South Tipperary Hospital Clonmel
Saolta	Galway University Hospital	Portiuncula Hospital Ballinasloe Mayo University Hospital
	Sligo University Hospital	Letterkenny University Hospital
Child Health Ireland	CHI at Crumlin CHI at Tallaght CHI at Temple Street	

4.3.3 Secondary /Tertiary Dermatology Services

In addition to comprehensive assessment and accurate diagnosis of all types of skin conditions, services provided in secondary and tertiary dermatology care include:

- Skin cancer clinics - dermatologists screen over 90% of skin cancer referrals and treat approximately 75%
- Medical management of more complex chronic skin diseases
- Medical or surgical dermatology for complex problems, often in MDT clinics with other specialties such as rheumatology, gynaecology, plastic & reconstructive surgery, maxillofacial surgery allergy specialists and paediatrics
- In-patient care of sick patients with severe skin diseases or skin failure, sometimes requiring intensive care
- Phototherapy, wound care and other day treatments
- Investigation of cutaneous allergy and occupational skin disease by patch and prick testing
- Investigation of photodermatoses – these affect 18% of the population reducing quality of life, psychological welfare and employability
- Management of skin problems in hospital patients with other illnesses, thereby reducing length of stay (LOS)
- Skin cancer screening for organ transplant recipients
- Management of genital skin diseases
- Management of genodermatoses
- Management of cutaneous infections, tropical diseases and HIV skin diseases
- Paediatric dermatology services including laser surgery
- Transition from paediatric to adult services for chronic skin conditions
- Teaching, training and assessment of medical students, GPs, trainee dermatologists and other healthcare professionals
- Collection and analysis of clinical data, clinical audit and compliance with clinical governance requirements
- Clinical research including therapeutic trials

Over the last ten years, with developments in workforce capacity, infrastructure and job descriptions, there have been significant improvements in expanding service provision in all dermatology departments, particularly regional and peripheral centres in a hub and spoke model (Figure 4.2).

Figure 4.2 Dermatology Services in Ireland (Hub and Spoke Model)

These improvements have been in line with the recommendations of a Comhairle review of Irish dermatology services to create regional self-sufficiency (21). These developments need to continue, guided by a new model of care for dermatology with a patient-centred and population health-based approach to service development and investment.

4.3.4 Dermatology Supra-specialist Care

This level of service takes place within some acute hospitals and is carried out by consultant dermatologists and a range of other healthcare professionals with specialist skills in the management of complex and/or rare skin disorders. Examples are outlined in Table 4.2.

These services require a specific multidisciplinary skill-mix and patient throughput at a level which makes these services more suitable for centralisation in specific hospitals nationally.

Table 4.2: Supra-specialist services in Dermatology

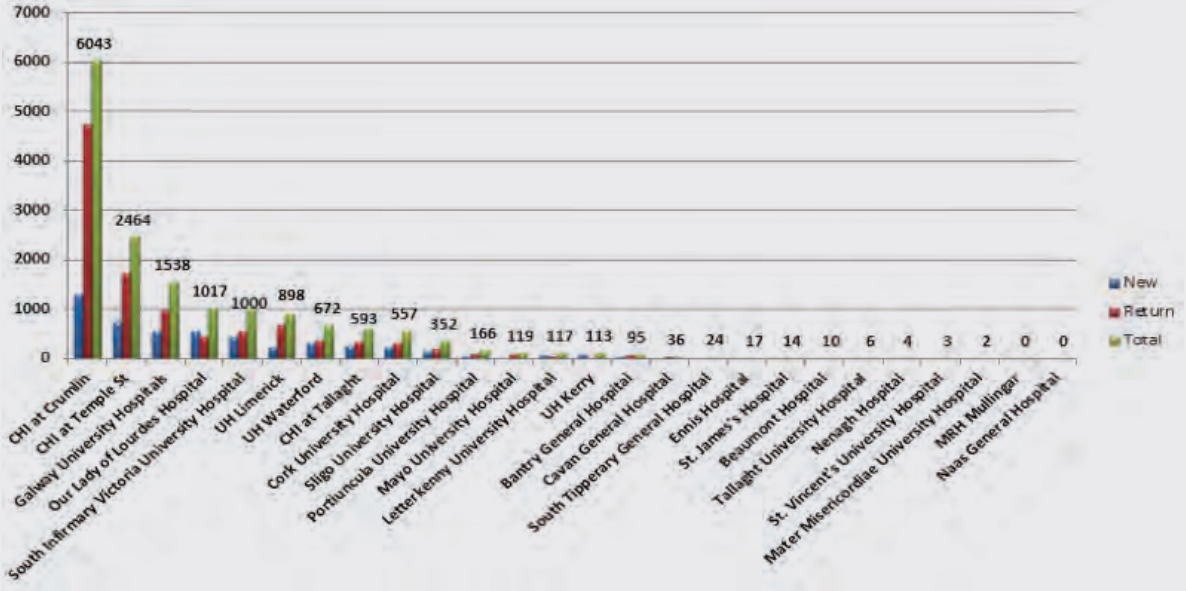
Supra-specialist service	Types of conditions seen	Services offered	Current Locations
Genetic dermatology	Rare and severe inherited skin diseases	Diagnostic and genetic counselling, Outreach	OLCHC, Accredited National Rare Skin Disease Centre Member of European Reference Network for rare and undiagnosed skin disease
Photodermatology	Skin disorders related to sunlight, including rare conditions such as porphyria and xeroderma pigmentosum	Specialist diagnostic services, including light testing.	MMUH
Epidermolysis Bullosa and Fragile Skin	Sub types of Epidermolysis Bullosa and Fragile Skin disease	Diagnosis and Multidisciplinary management	OLCHC (paediatrics) SJH (adults)
Mohs Micrographic surgery	Complex, large and difficult to manage skin cancers.	Mohs micrographic surgery and complex reconstructive surgery involving joint working with a range of specialist plastic and reconstructive surgeons.	St James's Hospital South Infirmary Victoria University Hospital
Vascular anomalies clinic	Venous, lymphatic, arterial and overgrowth disorders	Multidisciplinary management, including radiology, plastic and reconstructive surgeons, haematology, occupational therapy and specialist nurse	OLCHC
Occupational Dermatoses	Contact allergic dermatitis	Extended patch testing, Factory visits	South Infirmary Victoria University Hospital

4.3.5 Paediatric Dermatology

One in five children is affected by atopic dermatitis, and a diverse range of more than 2,500 dermatological diseases are less frequently encountered. Secondary and tertiary level dermatology is characterised by severity or rarity of conditions including genodermatoses, complex vascular anomalies and severe atopic, inflammatory or blistering diseases resulting in skin failure. Based on 2019 activity figures approximately 57% of consultant dermatology appointments for children with skin diseases in Ireland occurred in the three children's hospitals (Figure 4.3). The remaining 43% were spread throughout the regions with the highest numbers seen in University Hospital Galway, Our Lady of Lourdes Drogheda, South Infirmary Victoria Hospital in Cork and University of Limerick Hospital. National specialist paediatric services were also outlined in Table 4.2.

A comprehensive text on paediatric dermatology scope and model of care is outlined in the National Model of Care for Paediatric Healthcare Services in Ireland document (22). The NCP for Dermatology will work closely with the NCP for Children in progression of dermatology model of care and services.

Figure 4.3 Paediatric Dermatology Activity in 2019



4.3.6 Consultant Dermatologist Staffing

There are 49.96 whole time equivalent (WTEs) dermatology posts directly employed in the provision of dermatology services in acute hospitals in Ireland (as at December 1st, 2019, 3 posts unfilled at that time). Most consultant dermatologists by WTE (84%) are based in Model 4 hospitals. Figure 4.4 outlines the WTE spread throughout the regions, dermatology departments and peripheral centres (based on CSO 2016 population figures).

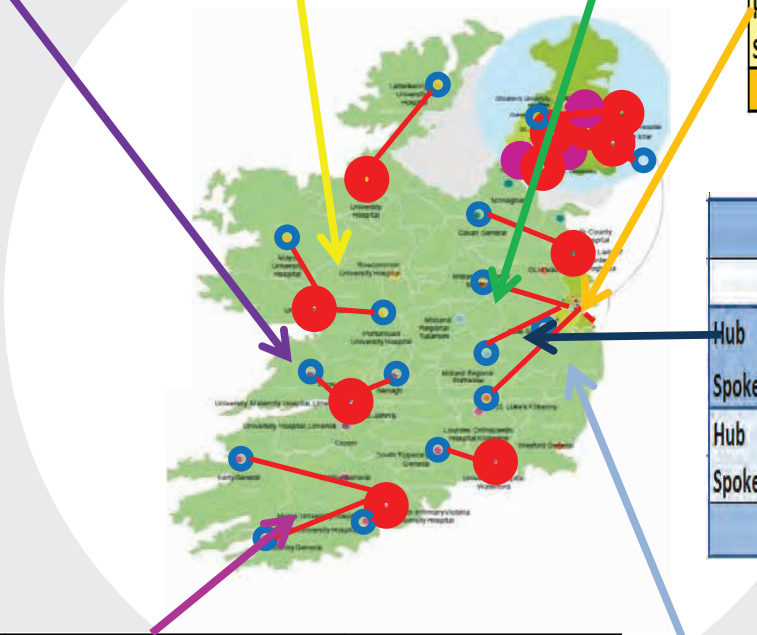
Figure 4.4 Dermatology Workforce (Population figures from Health Atlas Ireland based on Census 2016)

West/North West Saolta Hospital Group (Pop: 730,513)		
	Dermatology Centres	WTE Dermatologists
Hub	Galway University Hospitals	3.7
Spoke	Mayo General Hospital	0.1 (from Galway)
Spoke	Portiuncula Hospital	0.2 (from Galway)
Hub	Sligo General Hospital	2
	Letterkenny General Hospital	Service from NI
	Total WTE Dermatologist	6 (ratio of 1 per 121,752)

RCSI Hospital Group (Pop: 895,843)		
	Dermatology Centres	WTE Dermatologists
Hub	Beaumont Hospital	4.6
Spoke	Connolly Hospital	0.6 (from Beaumont)
Hub	Our Lady of Lourdes Drogheda	2.8
Spoke	Cavan/Monaghan General Hospital	0.2 (from Drogheda)
	Total WTE Dermatologist	8.2 (ratio of 1 WTE per 109,249)

University of Limerick Hospital Group (Pop:347,157)		
	Dermatology Centres	WTE Dermatologists
Hub	University of Limerick Hospital	3.8
Spoke	Mid Western Regional Hospital Ennis	0.1 (from Limerick)
Spoke	Mid Western Regional Hospital Nenagh	0.1 (from Limerick)
	Total WTE Dermatologist	4 (ratio of 1 per 86,789

Ireland East HG (Pop: 1,036,389)		
	Dermatology Centres	WTE Dermatologists
Hub	St. Vincent's University Hospital Elm Park	3.6
Spoke	St Luke's Hospital Kilkenny *	0.2 (from St. Vincents)
Spoke	St. Michael's Hospital Dun Laoghaire	0.2 (from St. Vincents)
Hub	Mater Misericordiae University Hospital	4.75
Spoke	Midland Regional Hospital Mullingar	0.75 (from Mater)
	Total WTE Dermatologist	9.5 (ratio of 1 WTE per 109,094)



Dublin Midlands HG (Pop: 819,340)		
	Dermatology Centres	WTE Dermatologists
Hub	St James Hospital	4.4
Spoke	Midland Regional Hospital Portlaoise*	0.2 (from St. James)
Hub	Tallaght Hospital (Adults)	3.2
Spoke	Naas General Hospital	0.6 (from Tallaght)
	Total WTE Dermatologist	8.4 (ratio of 1 WTE per 97,541)

South/South West Hospital Group (932,623)		
	Dermatology Centres	WTE Dermatologists
Hub	Sth Infirmary University Hosp. Victoria	4.5
Spoke	Cork University Hospital	0.2 (from S. Infirmary)
Spoke	Bantry General Hospital	0.1 (from S.Infirmary)
Spoke	Kerry General Hospital	0.2 (from S. Infirmary)
Hub	Waterford Regional Hospital	2.9
Spoke	South Tipperary General Hospital	0.1 (from Waterford)
	Total WTE Dermatologist	8 (ratio of 1 WTE per 116,578)

Child Health Ireland		
	CHI at Crumlin	3.96
	CHI at Tallaght	0.4 (0.2 from Tallaght Adults, 0.2 from Crumlin)
	CHI at Temple St.	1.5
	Total WTE Dermatologist	5.86

Figure 4.4 also outlines the ratio of dermatologists per head of population in the different regions. (Note: Figures for Dublin hospital groups are exclusive of CHI WTEs, see comment in section 5.3.3.2). Nationally, when all posts are filled, this figure is currently 1 per 95,314 (based on Census 2016 population numbers) with some regional variation. This national total ratio rises to 1 per 98,509 based on Central Statistics Office (CSO) estimates of current population in 2019.

4.3.7 Specialist Registrars in Dermatology

The Irish Committee on Higher Medical Training (ICHMT) programme for dermatology specialist registrars was established in 1999 and is formally accredited by the Irish Medical Council. The training schedule is five years duration with formal annual appraisals to meet requirements for entry to the Irish Medical Council's Specialist Division of the Register in dermatology. There are currently 16 training places in the RCPI, ICHMT Dermatology Specialist Registrar Training Programme with an average of 20 trainees in the programme at any given time, as many engage in clinical research during their training which lasts five years.

The role of SPRs currently in Ireland is:

- Seeing new patients under consultant supervision
- Reviewing return patients
- Surgery
- Ward consultations
- Supervising Day Care services e.g. Phototherapy
- Clinical Audit, Education, Research

Each dermatology department in Ireland has at least one specialist registrar, many complete higher training or fellowships either in Ireland or abroad. Table 4.3 outlines the dermatology non-consultant workforce in Ireland (survey mid 2018). As of July 2017, 34 doctors have completed Specialist Training in Dermatology.

Table 4.3 Dermatology Non-Consultant Workforce in Ireland (mid 2018)

	No. of SPRs	No. of REGISTRARS	No. of SHOs
Dublin Midlands HG	2	5	0
Ireland East HG	2	4	1
RCSI HG	2	5	2.2
South South West HG	3	1	1
West/North West, Soalta HG	3	1	2
University of Limerick HG	1	1	0
Child Health Ireland	2	2	1.5
Total	**15**	**19**	**7.7**

4.3.8 Dermatology Nursing

It is well recognised that dermatology nurses play a key role in delivering dermatology services (23, 24). There are currently 3.8 WTE Advanced Nurse Practitioners (ANPs), 28 Clinical Nurse Specialists (CNSs) and approximately 26 staff nurses allocated to the specialty of Dermatology (Table 4.4). Staff nurse posts in dermatology vary from sole specialisation in dermatology to allocation to the service for a specific time period (e.g. outpatient nurses allocated to dermatology clinic). In Ireland, dermatology nurses are mainly employed in dermatology departments, with 3.8 posts in peripheral hospital services. There are no dermatology nurses in primary care.

Table 4.4 Nurse Practitioner Staffing in Dermatology Services

Number of Posts Total	Location
3.8 ANPs	**1- UL Hospital Group** *(Shared across the group)*
	0.8 - Dublin Midlands *(Tallaght)*
	1- RCSI hospital *(Beaumont Hospital)*
	1- Ireland East *(The Mater)*
28 CNS	-
26 Staff Nurses (approx.)	-

The role of dermatology nurses varies depending on experience and grading and may include:

- Managing and caring for wounds and ulcers
- Treating patients in day-care units and onwards
- Providing and supervising phototherapy
- Assisting with/ performing patch testing under consultant supervision.
- Performing surgical procedures
- Nurse prescribing
- Running monitoring clinics for Isotretinoin and biological/systemic treatments for inflammatory skin diseases.
- Running hospital/outreach services for children with chronic skin disease.
- Co-ordinating the patient journey in skin cancer, including provision of psychological support
- Providing skin cancer support and skin surveillance services
- Providing patient information, demonstrating and applying treatments, dressing wounds, removing sutures and reviewing follow-ups
- Assisting in operating theatres and advising patients undergoing surgery
- Advising and training professional colleagues caring for patients with skin diseases in the hospital/community

The allocation of dermatology trained nurses is considerably lower in Ireland when compared to Britain and Northern Ireland. Some dermatology services have no dermatology nurse specialists and access to staff nurses trained in dermatology is restricted. These services often rely heavily on general trained nursing staff, and are thus regularly unable to develop and appropriately operate essential dermatology services such as phototherapy, patch testing, disease education clinics and topical treatment clinics.

There is significant potential for the expansion of nursing roles in dermatology and this will be addressed in section 5.3.3.3.

4.3.9 Psychodermatology and Allied Health Professionals

Patients with severe common skin diseases such as psoriasis and hidradenitis suppurativa are known to suffer increased levels of anxiety and depression impacting on quality of everyday life and also work lives. Adverse health behaviours such as smoking, excess alcohol consumption, lack of exercise and obesity are over-represented in these patients. Furthermore, cutaneous disease may be the manifestation of psychological disease in conditions such as dermatitis artefacta, delusional parasitosis or other mono-delusional presentations.

While Irish clinicians have been involved in research in this field for many years, there is a dearth of access to psychology, dietetics and smoking cessation programmes for patients with cutaneous skin disease in all dermatology departments. This is a deficit that must be addressed to promote self-care and quality of life for a significant number of dermatology patients and will be discussed later.

4.3.10 Dermatopathology, Immunology and Laboratory Medicine

Dermatopathology is a subspecialty of Histopathology with Dermatopathology services in all Histopathology laboratories nationally but with the more complex cases usually being dealt with in the major tertiary referral centres and cancer centres. Subspecialisation within Histopathology is in place in Cork University Hospital and St James's Hospital currently while other centres have pathologists with a special interest in Dermatopathology and who attend the multidisciplinary meetings. Pathology support is critical to the care of patients with skin cancer and rare cancers in multidisciplinary meetings as well as inflammatory skin diseases.

Appropriate access to multidisciplinary meetings facilitates:

- Standardisation of the ways in which patients with the more common skin tumours and pre-cancerous conditions are managed
- Provision of optimum care to patients with the more unusual or difficult to diagnose types of skin tumour
- Standardisation of the selection of care for those with advanced melanoma
- Provision of a network for review and consultation for cases where diagnosis may be uncertain
- Provision of a network to review specific categories of case (e.g. atypical pigmented lesions) where difficulties and subjectivity in diagnosis exist
- Provision of an informed judgement of appropriateness in relation to emerging and costly ancillary diagnostic techniques and predictive tests in melanoma
- Provision of an enhanced clinico-pathological correlation, central to diagnosis in cutaneous lymphoma, inflammatory and other medical skin conditions

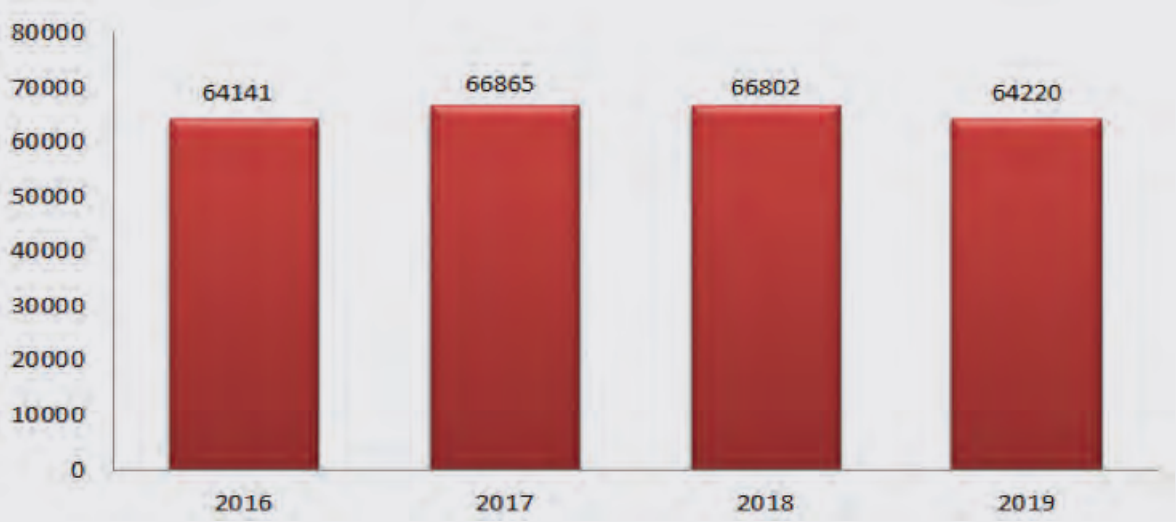
4.4 Current Demand on Dermatology Services

Secondary and tertiary care in dermatology is primarily an outpatient activity with a much smaller component of inpatient practice, although still a very important component of activity. While outpatient referral numbers have been increasing significantly over the last 10 years Figure 4.5 demonstrates a stabilisation of new referrals to Dermatology Outpatients in recent years.

It is envisaged that demand for referral for dermatology services will increase in the coming years for the following reasons:

- Growing population
- Age demographic and increased skin cancer in older persons
- Increased rates of skin cancers and rising
- Increase and improvements in treatments and technologies available
- Peoples' rising expectations about body image, skin, hair, nail appearance

Figure 4.5 New Dermatology OPD Referrals 2016-2019

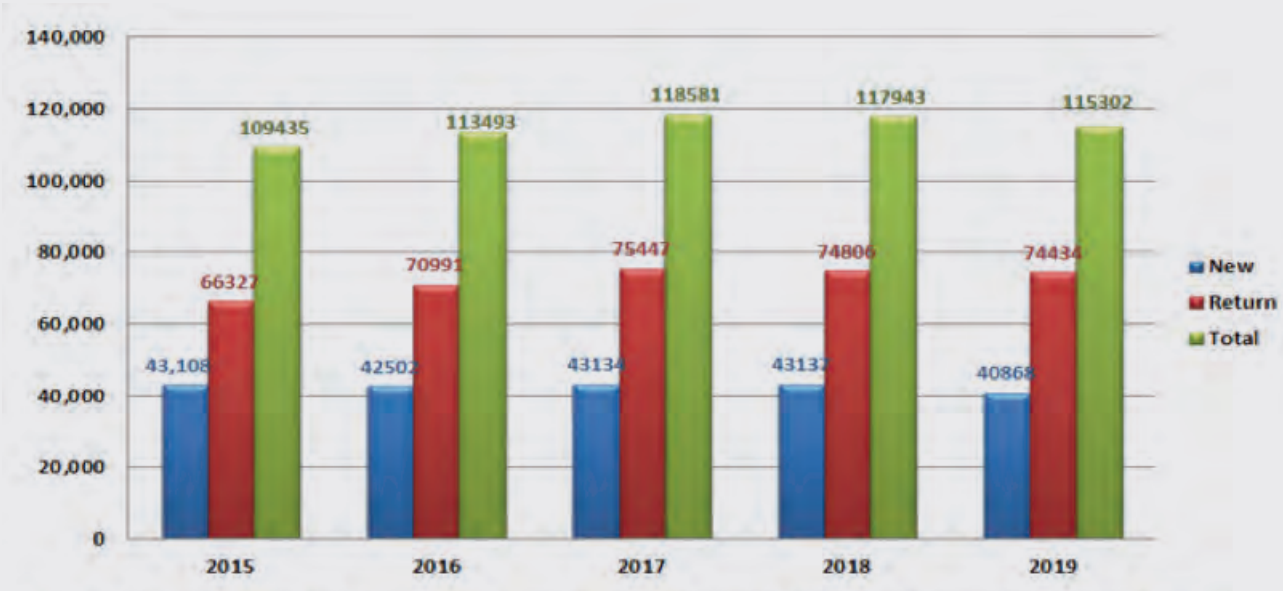


Data Source: OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute (Note: Referrals data is not validated by BIU)

4.5 Current Activity in Irish Dermatology Departments and Trends

Figure 4.6 gives and overview of current outpatient activity nationally in Irish dermatology departments in recent years.

Figure 4.6 National Dermatology OPD Activity (2015-2019)



**2019 data not validated until April 2020 (Data Source: OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute)*

In 2019 there were just over 115,000 outpatient visits to Irish Dermatology Centres. Of these 40,868 were new patients and 74,434 were return patients. This represents a return to new ratio of 1.82, up from 1.54 in 2015. However, this is a very good ratio by international standards and still significantly improved from a return to new ratio of 2.08 in 2010. Regional activity and five-year trends per hospital group are presented in Appendix 3.

Between 2015 and 2019 there has been an increase in the annual total number of patients seen in Irish dermatology departments by approximately 6,000 to 7,000 patients annually.

Figure 4.7 shows the trend in the new to return ratio from 2015 to 2019.The recent increase in ratio may reflect an increasing number of chronic skin conditions or more complex skin cancers requiring follow up visit. Nonetheless, this trend and increase will be monitored under the national clinical programme for dermatology.

Figure 4.7 Trend in Return to New Patient Ratio in Irish Dermatology Services (2015-2019)

Data Source: OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute

Table 4.5 outlines activity per dermatology department for 2018 and 2019. Paediatric numbers for each centre are also presented in this table in addition to total patient numbers (paediatrics and adults combined). In the Dublin regions CHI hospitals see the vast majority of paediatric patients. In the regions the larger dermatology centres see both paediatric and adult patients.

Table 4.5 Activity Figures per Hospital and Dermatology Departments

DEPARTMENT		ALL		PAEDIATRICS *	
		NEW	RETURN	NEW	RETURN
		2019 (2018)	**2019** (2018)	**2019** (2018)	**2019** (2018)
Our Lady of Lourdes Drogheda		**3222** (3199)	**4526** (4783)	**562** (598)	**455** (551)
Cavan		**286** (331)	**506** (590)	**3** (0)	**33** (42)
	Total	**3508** (3530)	**5032** (5373)	**565** (598)	**488** (593)
Beaumont Hospital		**1575** (2408)	**4448** (5239)	**2** (13)	**8** (26)
Connolly		**346** (903)	**741** (873)		
	Total	**1921** (3311)	**5189** (6112)	**2** (13)	**8** (26)
Mater University Hospital		**3076** (3245)	**5847** (5291)	**2** (2)	**0** (1)
Mullingar Regional Hospital		**131** (179)	**23** (160)	**0** (14)	**0** (18)
	Total	**3207** (3424)	**5870** (5451)	**2** (16)	**0** (9)
St James Hospital	Total	**2899** (3241)	**5380** (5510)	**6** (10)	**8** (23)
Tallaght University Hospital		**2455** (2282)	**3914** (4079)	**1** (0)	**5** (0)
Naas Hospital		**1330** (1251)	**1406** (1182)	**0** (0)	**0** (0)
Children's Hospital (Tallaght)		**275** (378)	**470** (433)		
	Total	**4060** (3911)	**5790** (5694)	**1** (0)	**5** (0)
St Vincent's University Hospital		**3385** (3389)	**8965** (8643)	**2** (3)	**1** (5)
St Michael's		**140** (287)	**151** (197)	**0** (0)	**0** (0)
St Luke's, Kilkenny		0 (0)	0 (0)	0 (0)	0 (0)
	Total	**3525** (3676)	**9116** (8840)	**2** (3)	**1** (5)
Waterford University Hospital		**3358** (3958)	**4704** (4075)	**310** (280)	**362** (329)
South Tipp Hospital		**180** (194)	**27** (128)	**21** (24)	**3** (20)
	Total	**3538** (4152)	**4731** (4203)	**331** (304)	**365** (349)
SIVUH		**6659** (6286)	**8439** (8467)	**441** (489)	**559** (610)
Cork University Hospital		**372** (248)	**547** (495)	**239** (106)	**318** (211)
Bantry Gen Hospital		**200** (265)	**415** (459)	**33** (44)	**62** (70)
Kerry Gen Hospital		**553** (547)	**287** (252)	**86** (77)	**27** (28)
	Total	**7784** (7346)	**9688** (9673)	**799** (716)	**966** (919)
Limerick University Hospital		**2515** (2376)	**5664** (5165)	**226** (219)	**672** (644)
Ennis		**40** (21)	**42** (54)	**10** (1)	**7** (14)
Nenagh		**13** (13)	**142** (157)	**1** (0)	**3** (2)
	Total	**2568** (2410)	**5848** (5376)	**237** (220)	**682** (660)
Galway University Hospital		**2963** (2811)	**5074** (5484)	**553** (469)	**985** (1070)
Mayo Gen Hospital		**242** (195)	**455** (431)	**31** (42)	**88** (111)
Portiuncula Hospital		**197** (223)	**409** (428)	**55** (53)	**111** (142)
	Total	**3402** (3050)	**5938** (6343)	**639** (564)	**1184** (1323)
Sligo University Hospital		**1438** (2493)	**3503** (3686)	**154** (168)	**198** (326)
Letterkenny Gen Hosp		**852** (928)	**1001** (977)	**67** (71)	**50** (51)
	Total	**2290** (3421)	**4504** (4663)	**221** (239)	**248** (377)
Our Lady's Crumlin		**1346** (1559)	**5312** (4923)		
Temple Street Children's Hospital		**821** (693)	**2036** (1967)		
	Grand Total	**40869** (43724)	**74434** (74131)		

*** Paediatric numbers are also included in New, Return and Total Numbers**

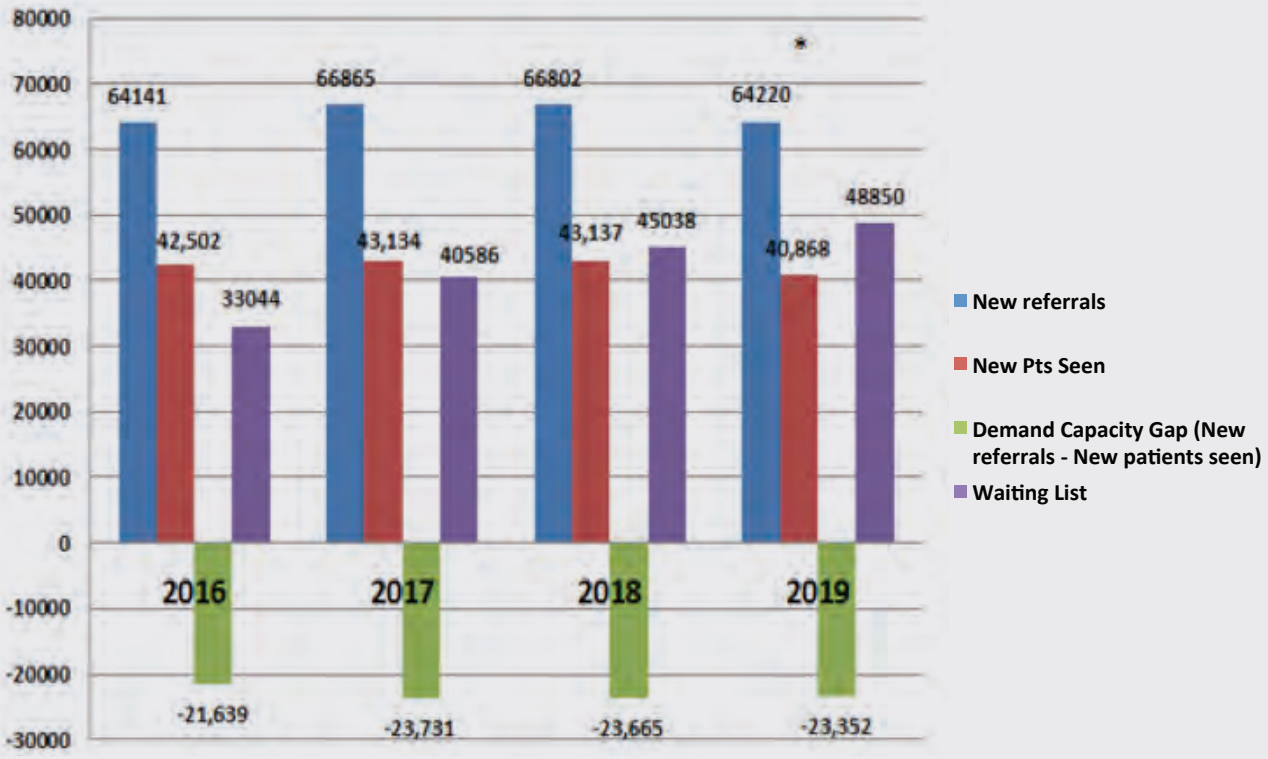
4.6 Demand-Capacity Gap

Figure 4.8 demonstrates the demand-capacity gap in Irish Dermatology services based on current referral rates for new dermatology patients and the rate at which new patients are being seen. While both the rate of new referrals (demand) and the annual number of new patients being seen (capacity) have increased in recent years, these figures have stabilised in the last four years. However, the absolute difference between these two figures is in the order of 23,000+ patients per annum, a figure which represents a very clear and significant demand-capacity deficit based on current resources and how the system operates.

A statistical analysis of the data over four years demonstrates a strong correlation between the demand capacity gap for new referrals and the growth in waiting list figures for dermatology outpatients (r=0.8). The inevitable impact of this is an increase in dermatology waiting lists nationally. Waiting lists are presented in the following section.

Regional demand capacity gaps for different hospital groups are presented in Appendix 4.

Figure 4.8 National Demand Capacity Gap for new referrals (2016-2019)

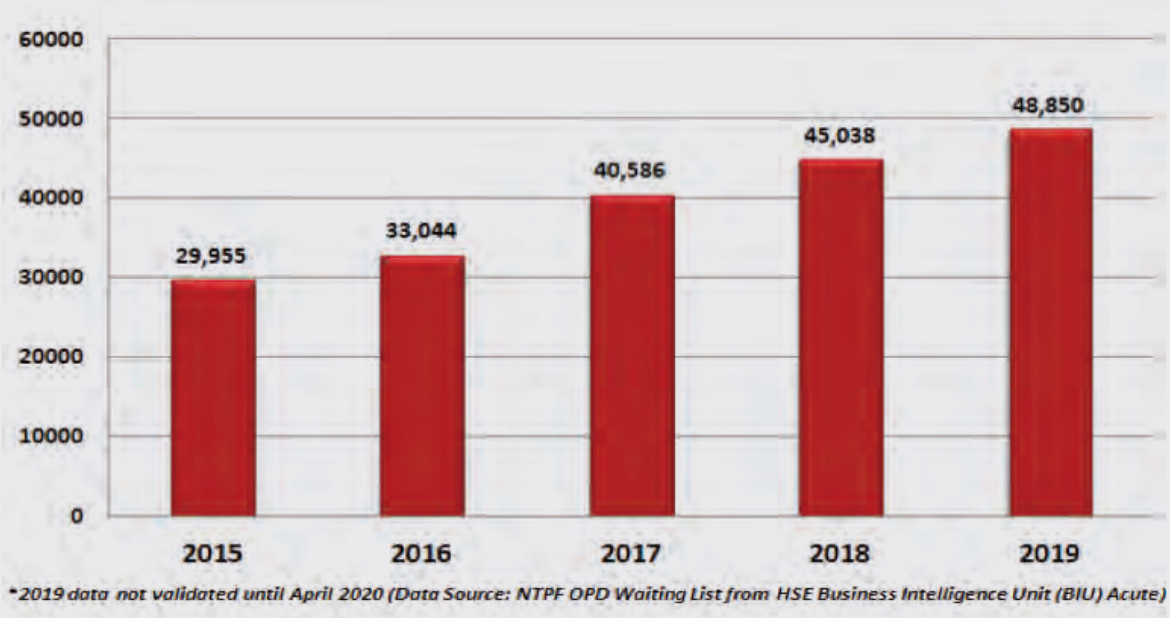


**2019 data not validated until April 2020 (Data Source: OPD Waiting List from NTPF and OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute)*

4.7 Dermatology Waiting Lists

Figure 4.9 outlines waiting list figures for Irish dermatology patients for outpatient appointments and the trend in this waiting list in recent years.

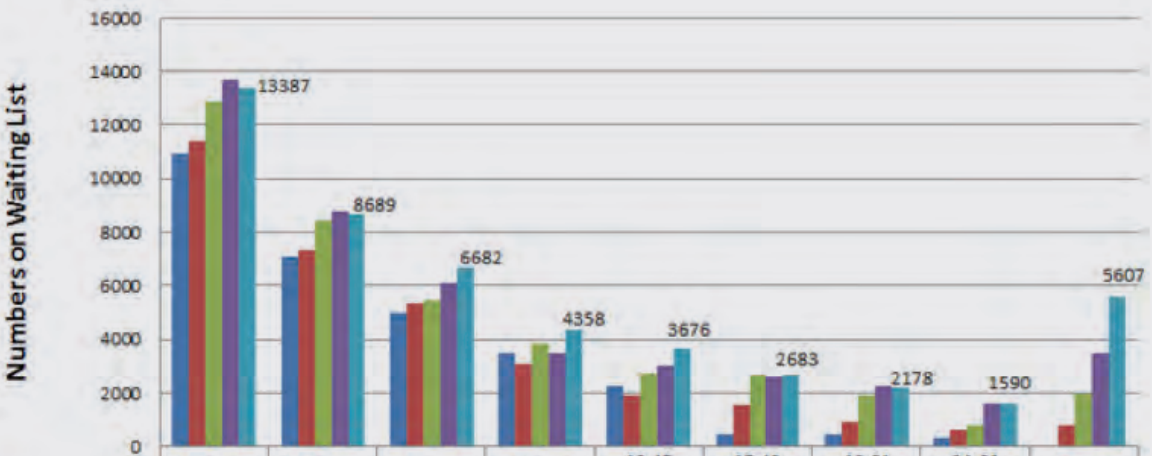
Figure 4.9 National Dermatology Waiting List 2015-2019



**2019 data not validated until April 2020 (Data Source: NTPF OPD Waiting List from HSE Business Intelligence Unit (BIU) Acute)*

As of December 2019 there were 48,850 Irish people waiting on a dermatology outpatient's appointment, representing a rise of 18,895 since December 2015, a 63% increase. This has led to an inevitable increase in waiting times for Irish patients, particularly those waiting longer than 12 months (Figure 4.10). As of December 2019 15,734 patients were waiting greater than 12 months (32%). To halt the current rate of growth in the OPD waiting list it is estimated that an additional of ~ 5,000 new patients need to be seen annually.

Figure 4.10 Waiting Times Trend in Dermatology Services 2015 - 2019

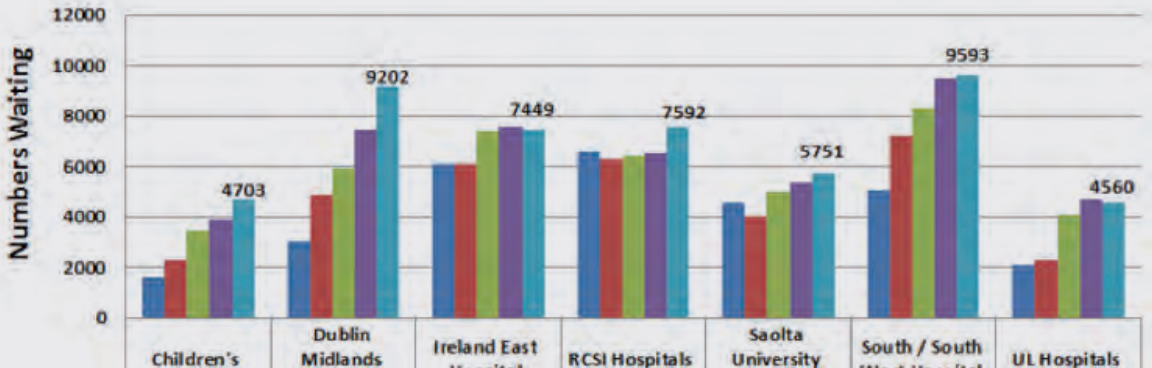


	0-3 mths	3-6 mths	6-9 mths	9-12 mths	12-15 mths	15-18 mths	18-21 mths	21-24 mths	> 24 mths
Sub Total 2015	10918	7121	4989	3453	2257	434	437	321	25
Sub Total 2016	11434	7353	5336	3078	1930	1549	902	651	811
Sub Total 2017	12843	8433	5490	3816	2723	2639	1878	776	1988
Sub Total 2018	13679	8816	6100	3510	2993	2601	2267	1608	3464
Sub Total 2019	13387	8689	6682	4358	3676	2683	2178	1590	5607

**2019 data not validated until April 2020 (Data Source: OPD Waiting List from NTPF to HSE Business Intelligence Unit (BIU) Acute)*

Figure 4.11 outlines the waiting times trend for different hospital groups. The biggest rate of increases are seen in Dublin Midlands, South/South West and Child Health Ireland (CHI). There is evidence of variation throughout different regions in terms of activity, waiting times and waiting list growth rates.

Figure 4.11 Waiting List Trends in Hospital Groups



	Children's Health Ireland	Dublin Midlands Hospital Group	Ireland East Hospital Group	RCSI Hospitals Group	Saolta University Health Care Group	South / South West Hospital Group	UL Hospitals Group
2015	1634	3031	6072	6622	4559	5032	2105
2016	2298	4866	6092	6278	3989	7231	2290
2017	3475	5942	7415	6378	4964	8345	4067
2018	3908	7479	7604	6521	5343	9483	4700
2019	4703	9202	7449	7592	5751	9593	4560

**2019 data not validated until April 2020 (Data Source: OPD Waiting List from NTPF to HSE Business Intelligence Unit (BIU) Acute)*

Figure 4.12 outlines the waiting lists for individual hospitals as of December 2019. Peripheral centres tend to have lower numbers waiting.

Figure 4.12 Waiting Lists for Individual Hospitals (December 2019)

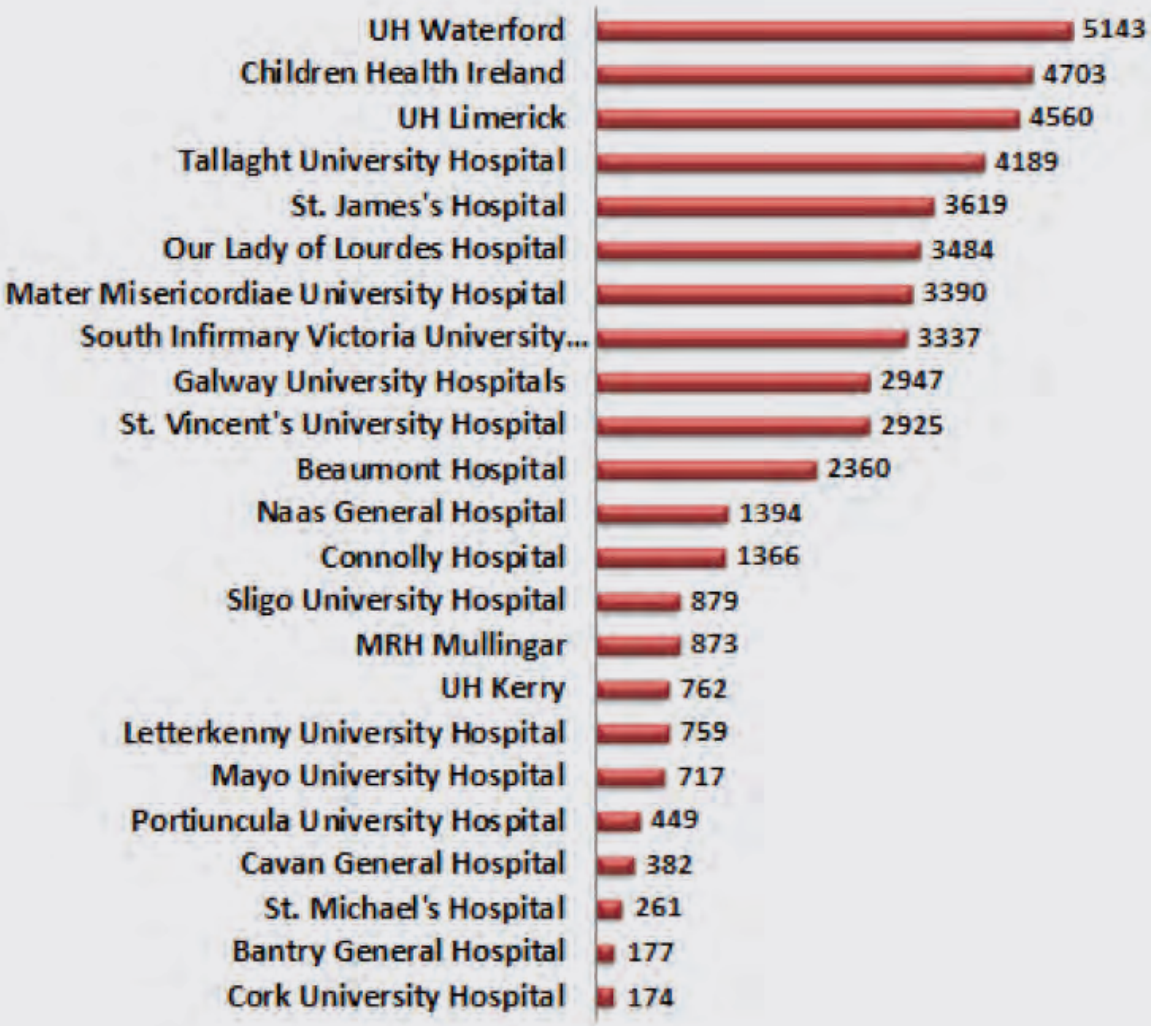
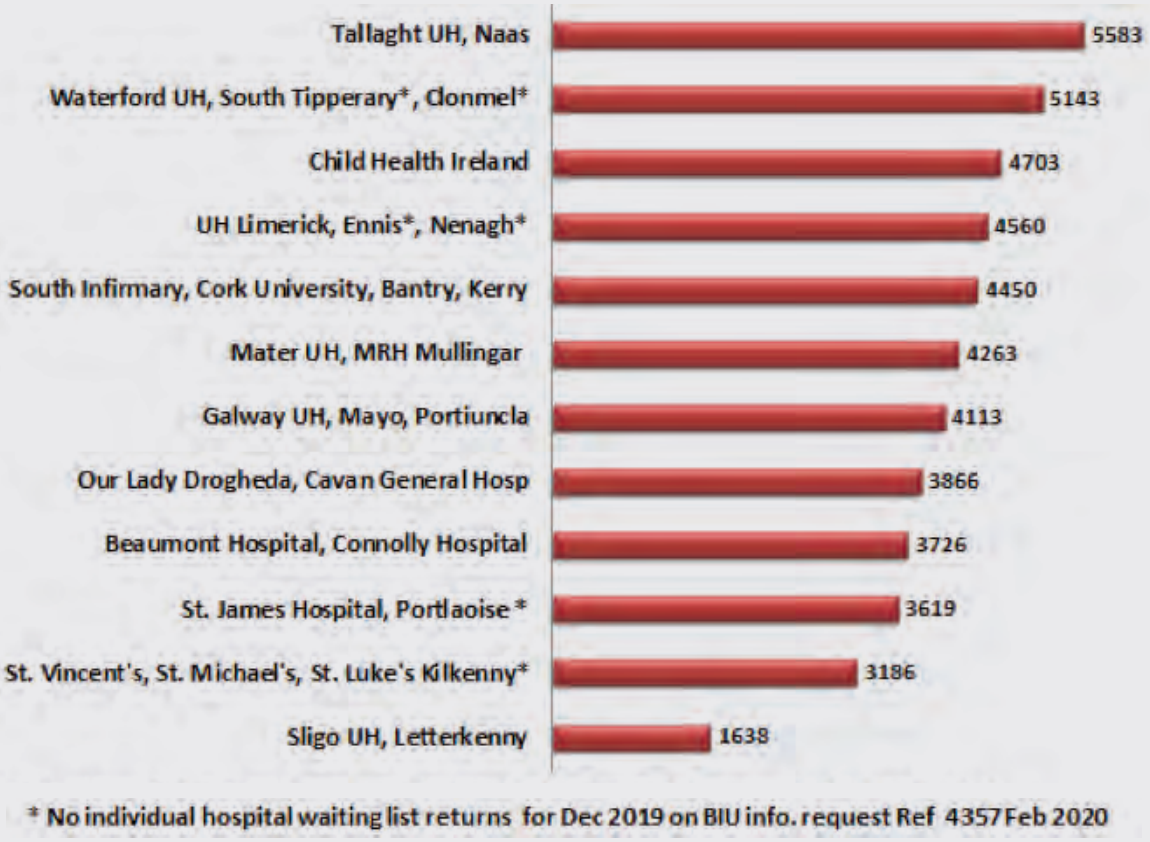


Figure 4.13 outlines demonstrates the waiting lists per dermatology clinical networks which is most reflective of the frontline demand on dermatology departments and their combined workforce as staff are divided between dermatology centre and associated peripheral centre.

Figure 4.13 Dermatology Waiting Lists per Dermatology Clinical Network (Dec '19)



* No individual hospital waiting list returns for Dec 2019 on BIU info. request Ref 4357 Feb 2020

4.8 System Challenges

Currently the main challenges in the delivery of effective dermatology services in Ireland impacting patients include:

- Provision of **equitable and timely access** to secondary care level dermatology services for diagnosis and treatment
- Provision of **equitable and convenient geographical access** for dermatology services especially for on-going regular treatments like phototherapy and priority routes like pigmented skin lesion clinics.

The main system challenges and areas for improvements which need to be addressed are:

- A significant and increasing demand on secondary and tertiary dermatology services with a rising demand-capacity gap
- Regional variation in service access and service provision
- Infrastructural deficits at secondary/tertiary care level
- A need to build more skills and competencies in all stakeholders in the management of skin problems especially in primary and community care and in non-consultant staff.
- There is potential for a greater role for dermatology nursing especially in the management of return patients and those with chronic skin disease, which has the potential to free up significant consultant dermatology capacity for new patients.
- A need for greater integration of care delivery especially between primary and secondary care
- Finding best value and optimal pharmacology and technology solutions
- A need for a more systematic approach to data collection, system performance, governance, strategic investment and accountability at regional and national levels for dermatology services (e.g. of data deficit re. needs of patients, what is profile of referrals and reason for referral,? breakdown of cancer, skin, diagnostics, other, etc., what % need surgery, what % need systemics/biologics?, What % can self-manage with primary care support? What % need on-going secondary care?, How many phototherapy units are required per region, patch testing, rapid access skin lesion clinics).

Section 5 will outline the main aims of the National Clinical Programme for Dermatology (NCPD) and propose a Model of Care to address these aims and the challenges just outlined going forwards.

4.9 Patient Story and Experience

Nicola's Story - "I started getting spots and cysts under my arms," she explains. "I thought it had to do with puberty. The cysts could be painful and would eventually burst, staining my clothing and leaving scars."

Nonetheless, she told no one about these problems; not even her parents, whom Nicola describes as incredibly supportive, selfless and loving. "I was too embarrassed," she confesses. "As a teenager, I avoided getting close to people - especially boys. You'd never see me in togs or a skimpy top. And no matter how nice my outfit was, I'd always wear a cardigan."

Nicola used to fib and tell people she got the scars (which were caused by her skin condition) from getting scraped from jumping over a barbed-wire fence. "I'm a farmer's daughter, and that's where I got that story from," she says quite candidly. As time went on, Nicola became more and more withdrawn, even though that was not her true nature. Then one day, a very big cyst on her inner thigh burst, causing her a lot of pain. This time, in floods of tears, she did turn to her mother for help. "Mam took me to the doctor, who referred me to a dermatologist", says Nicola. "I was told I'd have to wait two years for an appointment. Some 27 months later, I got a letter asking me if I still wanted an appointment. When I said I did, they referred me to a private hospital. But it closed the week before my appointment."

About two months later, Nicola was seen at a dermatology clinic. "Within 10 minutes, I had been diagnosed with hidradenitis suppurativa (HS) and successful treatment begun", Nicola says.

5 | NATIONAL CLINICAL PROGRAMME FOR DERMATOLOGY MODEL OF CARE

5.1 Aims/Principles of Model of care

The National Clinical Programme for Dermatology (NCPD), in line with all national clinical programmes, has three main goals;

- Delivery of improved **quality** of care,
- Improved **access** to care for patients of dermatology services,
- Delivering on **value** which will ensure the sustainability of the programme into the future.

The NCPD proposes a model of care which will address the current system challenges outlined in the previous section and align to Slaintecare principles.

Guiding principles of Dermatology Model of Care:

- Provision of equitable and patient-centred services
- Regional self-sufficiency (recommended in Comhairle report 2003) and population-based service development
- An accurate diagnosis as the starting point for guiding effective and quality care, at whatever level and however organised
- Strong collaboration and integration between primary and secondary care
- Standard clinical pathways which will be implemented through local clinical networks
- Access to diagnostic services and multidisciplinary teams as appropriate
- Actively engaging people in prevention, improving health behaviours and supporting self-management

5.2 Dermatology Model of Care

An effective model of care for dermatology defines the way in which services for the management of skin disease should delivered in Ireland. This section will describe:

- What care and services are required at different levels
- Who will provide them, and,
- How these services or care should be delivered

5.2.1 Key Elements of Model of Care

Dermatology Clinical Networks

To develop a series of **Dermatology Clinical Networks** within each region linking local populations and the primary care structures which serve them with secondary and supra-specialist care providers.

- For these Networks to work collaboratively and ensure equitable provision of high quality, clinically effective services to the regional population.

Primary care

- Facilitating and supporting screening and treatment of most skin diseases and skin lesions, referring on, if necessary, for diagnosis and management to the network of secondary care services in that area. Supporting primary care with **clear evidence-based care pathways**, clinical **guidelines** and **education**.

Secondary Care

- **Outreach clinics in peripheral hospitals (spokes)** to support a local network of GPs, providing care closer to home for patients, and on-site dermatology consultations for inpatients.

- **Dermatology departments (hubs)** in teaching hospitals with OPDs, day-care, patch testing, management of complex skin diseases, surgery for skin cancer, multidisciplinary care of chronic skin disease and skin cancer MDTs.

Supra-Specialist services

- Key locations nationally for a small number of patients requiring the provision of very **specialised care** for specific disease investigation/care:

  ➢ Mohs micrographic surgery
  ➢ Phototesting

Prevention/Self- Management

- Developing, promoting and supporting all stakeholders in the **prevention of skin diseases**, especially cancers of the skin.

- Developing, promoting and supporting all stakeholders in their capacity for **self-management** or supporting self-management of chronic skin disease and its consequences for patients.

Enablers

- Making recommendations on enablers of dermatology model of care including workforce, technology, governance, data systems and audit.

5.3 Dermatology Levels of Care – From Prevention through to Specialist Care

Figure 5.1 presents a broad outline of the care required for some of the most common skin diseases. A lot of care can be provided at primary care level with referral to secondary and tertiary services as appropriate. In line with Slaintecare the NCPD will facilitate a left shift by promoting prevention of skin cancer, healthy lifestyle and self-management of chronic skin diseases. In addition, building capacity and competence in primary care will facilitate a greater proportion of quality care to be provided at that level and more efficient and appropriate use of secondary and tertiary specialist services.

Figure 5.1 Dermatology Levels of Care and Patient Journey

5.3.1.1 Prevention of Skin Cancer

Section 3.2.1.1 outlined the recent approaches in Ireland under the National Cancer Control Programme in relation to the prevention of Skin Cancer. The NCCP for dermatology, Clinical Lead, Chair and members of the Clinical Advisory group will continue to work with the NCCP on this programme.

The National Skin Cancer Prevention Plan (2019-2022), is a landmark commitment by the Irish Government, arising from the National Cancer Strategy 2017-2026. The aim of the plan, through cross-sectoral collaboration, is to develop and implement evidence-based strategies which will increase awareness and adoption of skin cancer prevention behaviours (25). Such strategies include the promotion of awareness of behaviours such as knowing UV Index, wearing appropriate clothing, using sunscreen, wearing hats and sunglasses, seeking shade, avoiding sun beds and targeting priority populations such as children and young people, outdoor workers, sunbed users and outdoor leisure activities. The plan also includes monitoring, research and evaluation.

5.3.1.2 Health and Wellbeing

The Healthy Ireland – Framework for Health and Wellbeing 2013-2025 outlines the Irish Health Services response to influencing the health and wellbeing profile of Irish citizens. Actions under Healthy Ireland which provide benefit to dermatology patients include initiatives to tackle overweight and obesity, mental health issues, smoking cessation, alcohol and drugs problems and sexual health.

The Making Every Contact Count (MECC) programme is another key action in supporting the implementation of Healthy Ireland. Opportunistic checks for malignant skin lesions, advice on weight control and smoking cessation are examples of actions which primary care practitioners can and do take to prevent and help manage skin diseases in patients.

The National Clinical Programme for Dermatology (NCPD) recommends that all patients diagnosed with Psoriasis, Eczema and Hidradenitis Suppurativa be assessed for comorbidities such as cardio metabolic and psychological distress.

5.3.1.3 The Irish Skin Foundation and Patient Support groups

The Irish Skin Foundation (ISF) is a national charity with a mission to support people with all types of skin disorders. The ISF was formed in 2011 by merging the Psoriasis Association of Ireland, the Irish Eczema Society and the Melanoma & Skin Cancer Society. They work with people in the dermatology community (people with skin conditions, GPs, nurses, clinicians and healthcare providers) to produce accessible health promotion and awareness materials. Their aim is to empower people with skin conditions, support timely diagnosis and treatment, and promote public awareness. The ISF operates a nurse-led Helpline, provides up-to-date specialist guidance, runs events, awareness campaigns and engages in advocacy for people with skin conditions.

The NCPD supports the developments by the ISF and DEBRA Ireland on the establishment of Irish skin registries to include conditions like atopic dermatitis, Epidermolysis Bullosa (EB) and other skin related information. The National Cancer Registry Ireland has provided significant and valuable data to Irish clinicians, service providers, researchers, funders and policy makers in recent years in relation to trends in cancer presentations, management, outcomes and survival rates. Additional similar registries for skin diseases will provide valuable health information which will help provide better care for Irish dermatology patients and inform future service delivery, research and investment.

5.3.2 Primary Care

5.3.2.1 Primary Care – General Practitioners

As outlined in section 4.2.1 GPs play a critical role in assessment, treatment and advice for the majority of Irish dermatology patients. Dermatology services provided by GPs include:

- Assessment and diagnosis
- Prescription and medical management
- Facilitation of self-management
- Screening/Triage and onward specialist referral
- Cryotherapy
- Health promotion
- Psychological support
- Patient information & education

Most referrals for secondary and tertiary specialist dermatology assessment and management originate in primary care. Given the ubiquity of skin conditions presenting to primary care, it is important that GPs are confident in managing and diagnosing the most common skin conditions. There has been a well-documented surge in atopic conditions presenting to primary care. There is good evidence to support the assertion that early intervention in atopic dermatitis can mitigate disease severity and persistence and may prevent development of associated atopic conditions, including asthma, food allergy and anaphylaxis, with significant health and cost implications if not treated appropriately at the time of presentation at primary care level.

To this end clear evidence-based clinical pathways and associated guidelines as well as inclusion/exclusion referral criteria are required. Clinical guidelines and care pathways contribute to integrated care by improving and standardising care across services and sites and defining roles and responsibilities of different healthcare professionals within their particular domain of competence. These pathways need to be supported by robust processes such as the electronic referral system and rapid access pigmented lesion clinics developed in recent years.

Supporting GP's in education and on-going professional development is critical. The NCPD has worked closely with the RCPI and ICGP to develop a dermatology training module for GPs in training. This is facilitated by attendance and supervision at dermatology clinics regionally. In addition, a series of Podcasts on the management of common skin conditions has recently been developed for the ICGP website. ***The NCPD recommends embedding educational and support activity for all GPs, both in training and those in practice. Accredited CPD activity and processes for formal dissemination of, and education on, clinical care pathways should be developed. Delivery could be supported through the Dermatology Clinical Networks facilitated by national and regional leadership.***

While the main emphasis of supportive education and referral processes for GPs is facilitating the right care by the right person at the right time, there is also an expected positive impact for patients by reducing the demand on secondary and tertiary specialist services. A reduction of even 10% of new referrals from primary care would result in approximately 6,000 to 7,000 less new referrals per annum.

The impact of this on patients, in addition to increased availability of appropriate quality care in primary care, will be improved access to secondary and tertiary specialist services and reduced waiting times.

5.3.2.2 Primary Care – Community Pharmacists

Section 4.2.2 gave an overview of the very large number of pharmacy consultations each year in Ireland. While there is no specific data on skin consultations, eexamples of pharmacist-delivered dermatology services are;

- Self-management support for chronic disease such as psoriasis, eczema , acne
- Medication adherence support
- Medication management – examples include the supply of Dovonex without Rx in accordance with guidelines from PSI
- Rational/cost effective use – emollient use, adherence, cost considerations
- Health promotion – e.g. structured smoking cessation programmes
- Advice on sun protection and skin cancer prevention
- Skin care regimes

There is a strong desire by Irish pharmacists to expand their role in the Irish healthcare system in line with government policy of increasing the quantity of healthcare delivered in the community (20). ***The NCPD acknowledges the role that community-based pharmacies play in supporting patients to manage skin***

diseases and supports initiatives which will enhance this role. The NCPD is committed to working with Trinity College Dublin, the Royal College of Surgeons in Ireland and University College Cork to deliver dermatology education at undergraduate level to pharmacists. The NCPD will also work with Pharmaceutical Society of Ireland and the Irish Pharmacy Union to deliver dermatology education to pharmacists in practice.

5.3.3 Secondary/Tertiary Care

5.3.3.1 Dermatology Services

Sections 4.3.3 to 4.3.4 outlined the secondary and tertiary dermatology services currently provided and led by consultant dermatologists in Ireland. A dermatology service should provide patient-centred care, focusing on outcomes that meet national and international standards. All staff must be correctly trained and fully accredited by relevant national agencies and professional bodies. Recommendations for expansion of these services and further development of dermatology departments and peripheral clinics will be outlined in Section 5.4.

5.3.3.2 Dermatology Consultants

Section 4.3.6 identified the current dermatology workforce and regional distribution. The national total ratio of dermatologists per head of population is 1 per 98,509 based on Central Statistics Office (CSO) estimates of current population in 2019.

The British Association of Dermatologists (BAD) guidelines recommend an ideal ratio of 1 per 62,500 (19). The Model of Care recommends an initial workforce expansion to 1 per 80,000 in the current Irish context. Table 5.1 outlines the existing consultant dermatology workforce by hospital group alongside the recommended workforce based on this target and estimated 2019 population.

To meet a desired ratio of 1 per 80,000 the Model of Care recommends an additional 11.5 consultant dermatologists in Ireland over the next 5 years (~ 2.3 per year). The precise location of these consultants will require further more detailed analysis aligned to planned regional and hospital group re-configuration (into Regional Health Areas) as well as local demand, capacity and patient profile. Another factor, as demonstrated in Table 4.5, is that of the profile of patients outside of the Dublin hospitals being different to regional centres due to the fact that CHI hospitals see the majority of children in the Dublin region. Future contractual commitments will need to be aligned to the emerging hub and spoke model and dermatology clinical network structures, ensuring cross-hospital commitments and capacity for developing peripheral centres and networks.

Table 5.1 Dermatology Workforce by Hospital Group

	No. of Dermatologists based on BAD recommended rate of 1 per 80k (Approx.)	Current No. of Dermatologists per Hospital Group	National Deficit
Dublin Midlands HG (846,788)*	10.6	8.4	
Ireland East HG (1,071,108)*	13.4	9.5	
RCSI HG (925,853)*	11.6	8.2	
South South West HG (965,264)*	12	8	
West/North West, Soalta HG (754,985)*	9.4	6	
University of Limerick HG (358,787)*	4.5	4	
Child Health Ireland		5.86**	
Total	**61.5**	**49.96**	**11.54**

* *Gross approximations based on Health Atlas Ireland Hospital Group catchment data per 2016 census and CSO 2019 Irish population growth estimate (3.35% growth from 2016 to 2019)*

** *Note: When calculating deficits for individual hospital groups CHI WTE must be weighted in the main to Dublin Hospital groups*

Appointing 11.5 additional dermatology consultants will allow for approximately 10,350 new patients and 20,700 return patients to be seen per annum. This will immediately address the annual growth in waiting lists, estimated earlier at ~ 5,000 per annum and the current demand capacity gap of ~23,000 per annum.

A sustained expansion of the number of dermatologists at an annual rate of ~ 2.3 WTE nationally for the next 5 years will lead to:

- A reduction in waiting times and waiting lists for patients and meeting national targets
- Continued improvement in the clinical management of patients with skin cancer. Treatment by dermatologists of skin cancer and pre-cancerous lesions with a number of modalities including surgery, topical treatments and photo-dynamic therapy
- More efficient triage of patients with skin cancer and avoidance of unnecessary treatments in patients who have benign lesions - diagnostic accuracy of skin lesions is highest among dermatologists
- Dermatologists' expertise facilitating recognition and monitoring of patients at high risk of skin cancer (e.g. transplant recipients)
- Improved treatment for patients with severe inflammatory disease and patients with rare skin disorders
- Increased capacity to provide essential education to GPs and other health care professionals in training.

- Increased capacity to provide on-going professional development education and skills to GPs and other primary care practitioners, healthcare professionals and general public throughout the regions. This will have an additional impact of increasing the confidence of primary care practitioners to assess, diagnose and manage a higher percentage of skin presentations locally thereby reducing further the demand on secondary and tertiary care services.
- Increased capacity of consultant dermatologists to engage in fully integrated care management with primary care through the provision of structured advisory services around diagnosis and management of skin diseases
- Increased capacity of dermatologists to engage in effective triage of referrals to secondary/tertiary care including e-referrals management and responses

NCHDs, including senior house officers, registrars and specialist registrars, form an integral part of the team in many hospital units. In some dermatology units, there are no NCHDs. This must be taken into account when assessing what services can be delivered in different centres. The drive to a more consultant delivered service and the reduction in the number of NCHDs should be seen as an overall improvement as a result of more senior and experienced clinical decision making.

5.3.3.3 Dermatology Nursing

Section 4.3.8 outlined the current role of nursing in dermatology services in Ireland and existing workforce. To meet current patient demands and develop a sustainable service, there is a need to develop and expand the dermatology nurse role at all levels. This will increase the capacity of existing dermatology centres to operate additional essential services such as phototherapy, patch testing, disease education clinics and topical treatment clinics.

Additional ANPs, appointed within a multidisciplinary team, can manage the review/on-going care of many patients with already diagnosed and chronic skin diseases. This has the potential to free up significant dermatologist capacity to see additional new patients with a direct impact on patients in terms of shorter waiting times and greater local access to dermatology services.

The Dermatology Model of Care recommends the expansion and development of Dermatology nurses. The potential for expanded ANP-led clinics are outlined in Table 5.2.

Table 5.2 – Potential for expanded ANP Led Clinics

ANP - led clinics	Detail
Systemics Monitoring Clinic	Monitoring of patients receiving systemic medication for moderate to severe psoriasis, eczema, hidradenitis suppurativa. The re-allocation of these patients from consultant-led clinics will allow more new patients to be seen and hence help address waiting lists in each department.
Roaccutane Monitoring Clinic	Patients with moderate to severe acne are treated with isotretinoin (Roaccutane), this medication requires monthly monitoring for female patients. These patients are currently being seen in consultant-led clinics and many patients are much more suited to a Nurse-Led Clinic.
Minor surgery	Cryotherapy clinics and skin biopsy clinics are nurse-led and widely delivered by ANPs in the UK, this would be an enormous advantage in Irish Dermatology departments
Nurse led Care Clinics: **Hospital Outreach**	There are many services currently being delivered as nurse-led services e.g. phototherapy, cryotherapy, photodynamic therapy and laser clinics but this could be greatly expanded to include skin surgery, paediatrics, vulval clinics. In addition many Dermatology nurses currently liaise with tissue viability nurses and public health nurses in the community enabling patients with, for example, lower limb dermatoses to be cared for in the community. This role could be greatly expanded with enormous savings to the patient and health service.

It is estimated that one ANP would provide four * three-hour clinics per week (Table 5.3). This equates to approximately 40 return patients per week or 1,760 additional patients per annum (based on 44 weeks). The added impact of this would be to free up consultant dermatologist capacity to see ~ 880 new patients per annum per site.

Table 5.3 Potential number of clinics and patients per week by qualified ANP

ANP Clinic Type	Number of Patients Per Week
Systemics clinic	15
Roaccutane clinic	10
Eczema clinic	10
Vulval clinic	5
Total Patients	**40**

Appointment of ANPs and CNS's will be based on a strategic analysis of regional demand, capacity, existing waiting lists and service development needs especially those of peripheral clinics. The immediate impact of these appointments will be a reduction in waiting times and greater regional access to services like phototherapy, systemics monitoring, etc. This will be particularly beneficial to elderly, poor, vulnerable and more rurally located patients who are less likely to travel. Additional benefits include improved coordination of care especially in skin cancer and better management of chronic disease.

An expansion of the role of dermatology nursing will require the expansion of the pool of nurses with dermatology training. In addition, academic training in this area and the development of specialist nursing skills (e.g. phototherapy, cryotherapy, paediatrics) needs to be advanced. Supporting access to post graduate training programmes such as nurse prescribing will be important for dermatology nursing.

The NCP recommends at least 1 ANP per dermatology department (hub) and 2 for some centres with larger outreach commitments. Currently there are 3 WTE and 1 part time ANPs nationally with an estimated deficit ~ 11 ANPs. The immediate impact of 11 ANPs will be the capacity to see an additional 19,360 return patients per year as well as freeing up of capacity for dermatologists to see an estimated 9,680 additional new patients. The exact number of CNS's will require more detailed analysis which will be carried out as part of a detailed implementation plan to accompany the Model of Care. Contracts should be designed to facilitate the hub and spoke model of care delivery.

5.3.3.4 Psychodermatology and Allied Health Professionals

As outlined in Section 4.3.8 there are little or no specific psychology and other allied health resources such as dietetics dedicated to dermatology in Ireland despite a significant need. A national survey undertaken by the British Association of

Dermatology to assess the availability of psychodermatology services in the UK (23, 24) reported that:

- 17% of dermatology patients need psychological support to help with psychological distress secondary to a skin condition.
- 14% of dermatology patients have a psychological condition exacerbating their skin disease.
- 8% of dermatology patients present with worsening psychiatric problems due to concomitant skin disorders.
- 3% of dermatology patients have a primary psychiatric disorder.
- 85% of patients have indicated that the psychosocial aspects of their skin disease are a major component of their illness.

The NCPD recommends the development of psychology and other allied health services specifically to support Irish dermatology patients. Existing community-based supports for health and wellbeing could be leveraged in the first instance. The NCPD recommends psychodermatologists in each dermatology network with contracts designed to facilitate the hub and spoke model of care. This should include paediatric psychology support in the regions.

The appointment of psychology and other allied health supports specifically for dermatology will immediately improve the quality of care to Irish patients living with chronic skin disease. It will provide a resource which can build resilience and coping strategies for patients, allowing them to better manage the impact of skin disease on their lives. In addition, this will have an impact on days lost from work, less morbidity and greater quality of life.

5.3.3.5 Dermatopathology, Immunology and Laboratory Medicine

It is imperative that dedicated Dermatopathology services are available in to all dermatology centres and that current tertiary referral centres and cancer centres are staffed appropriately to deal with the complexity and expansion within Dermatology services. ***The National Clinical Programme for Dermatology is committed to working with the National Clinical Programme for Pathology to plan the development of histopathology capacity, and specialist dermatopathology services.***

The immediate impact for the Irish patient and Irish health service providers is quicker and greater access to accurate diagnosis of the histopathology of specific lesions, the basic starting point for ensuring the most appropriate care and management of skin diseases. This will negate unnecessary and costly treatments in many cases and more timely interventions.

5.3.3.6 Administration and Other Ancillary Staff

One of the most important components of health service operations in Ireland are the dedicated administrative staff who are the gel who pull frontline services together and are often an important point of contact for patients before, during and after their hospital appointment. Dermatology administration is no exception when it comes to the important job roles of efficiency in processing referrals, organising and coordinating clinics, ensuring clinics are fully attended and resources maximised, efficiency in post clinic administration and managing correspondence, data entries, biologics administration and the important role of liaising with patients, medical consultants, primary care practitioners, referrers and other stakeholders in the dermatology ecosystem.

Likewise technical staff and physicists who support services like phototherapy are an essential part of service.

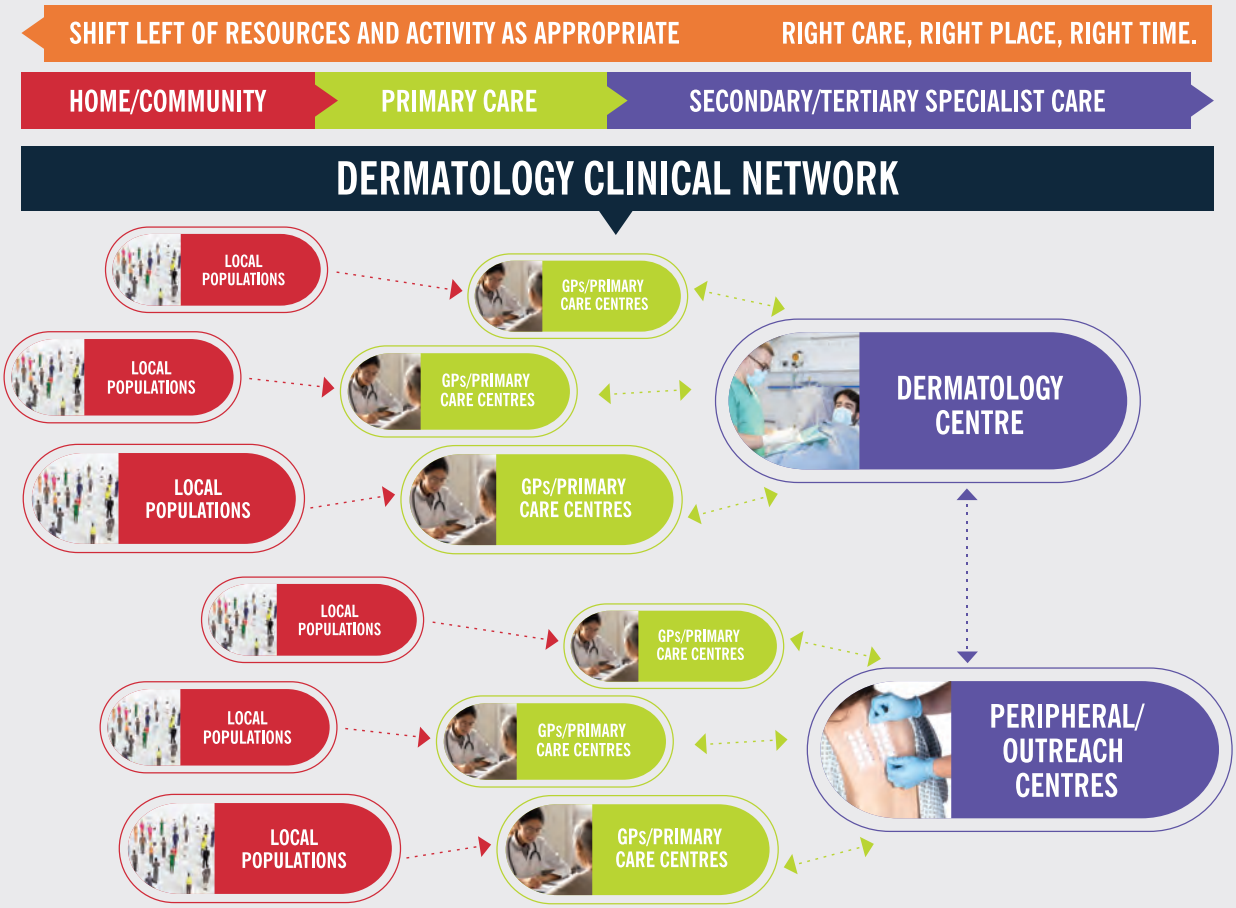
For effective operation of an efficient dermatology service the NCP recommends a full complement of administrative, clerical and technical support staff to support dermatology services.

5.3.4 Dermatology Clinical Networks

The fundamental structure for the delivery of dermatology services in Ireland will be the dermatology clinical network (DCN). Figure 5.2 illustrates the structure of a DCN showing how dermatology hubs and peripheral centres will support a network of GPs and other primary care practitioners to support local populations with their dermatology needs as close to home as possible.

Key to the success of these networks will be clear clinical care pathways between primary care and secondary/tertiary services. In addition to supportive processes, good infrastructure and sufficient workforce, the fostering of local relationships through collaborative working and shared education activities will be very important.

Figure 5.2 Dermatology Clinical Network

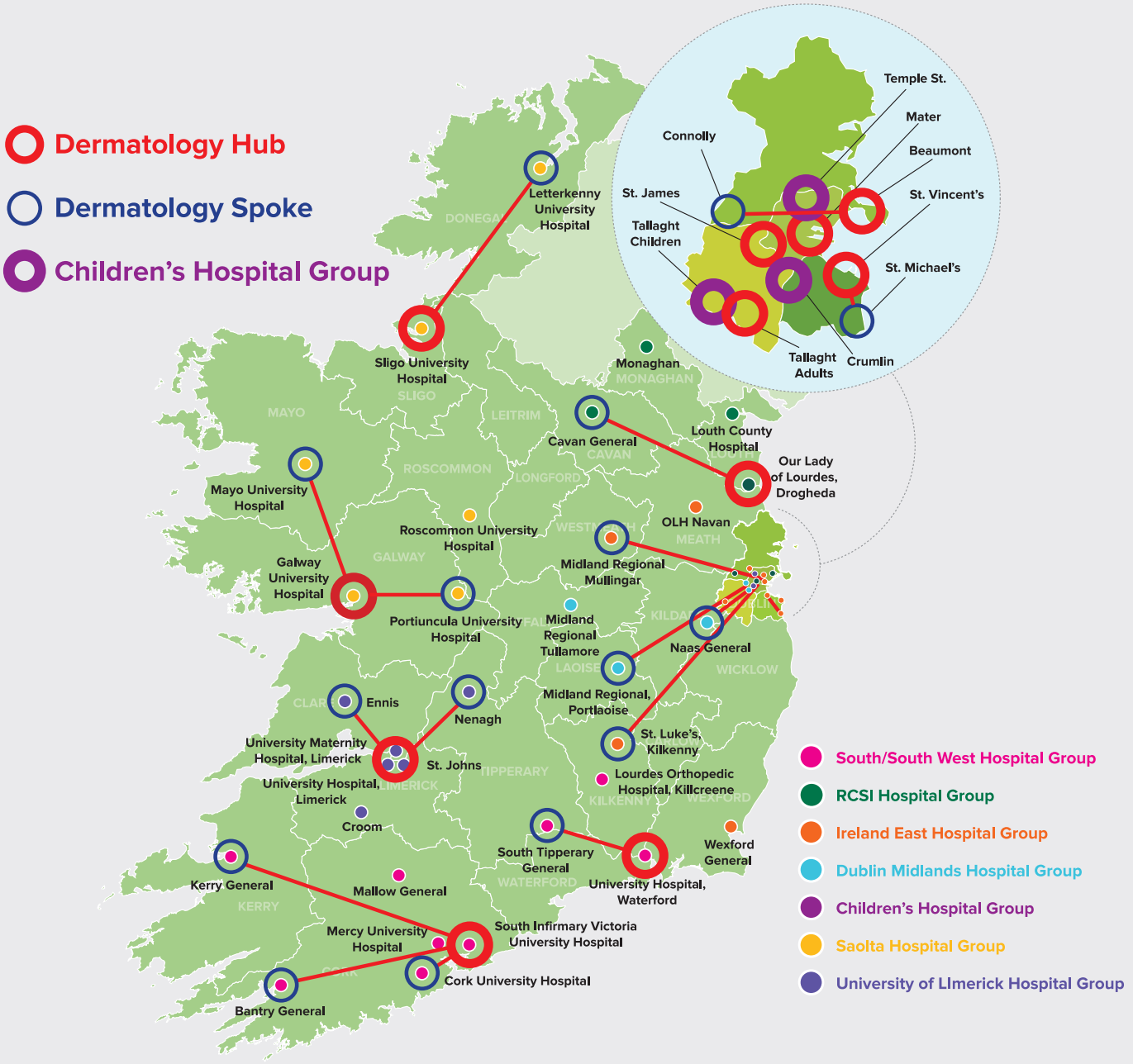


Working together it is envisaged that the development of DCNs nationally will:

- Ensure one standard of care is delivered across regions
- Enable availability of a spectrum of dermatology services to the patient ranging from primary prevention services, self-management and primary care services to secondary and tertiary care specialist services
- Improve communication and access between primary and secondary/ tertiary care services
- Ensure a population-based and consistent approach to service planning and development based on patents' needs locally in each region
- Ensure regional sufficiency as recommended in the 2003 Comhairle na nOspideal report of the committee on Dermatology services (21).

Figure 5.3 illustrates the national spread of dermatology departments (hubs) and peripheral centres (spokes) which have evolved in recent years and upon which the model of local and regional dermatology clinical networks will build.

Figure 5.3 Dermatology Services in Ireland (Hub and Spoke Model)



5.3.4.1 Peripheral Centres/Outreach Clinics

Table 5.4 outlines the peripheral centres currently operating under the governance of dermatology centres (hubs) in Ireland. The type and frequency of dermatology service provision varies among different peripheral centres due to variations in workforce, facilities and historical stages of development (Figure 5.4 shows spread of phototherapy services).This hub and spoke model brings services closer to the locality of the patient and also provides education and support for regional GPs.

Patients requiring patch testing or complex surgery are seen at the hub or base hospital dermatology departments.

Table 5.4: Dermatology peripheral centres

Hospital Group	Dermatology Departments (Hub)	Peripheral Clinics (Spoke)
Ireland East	St. Vincent's Hospital Group	St. Michael's Hospital, St. Luke's Hospital, Kilkenny
	Mater University Hospital	Midlands Regional Hospital Mullingar
Dublin Midlands	Tallaght University Hospital	Naas General Hospital
	St. James's Hospital	Midlands Regional Hospital Portlaoise
RCSI	Beaumont Hospital	Connolly Hospital
	Our Lady of Lourdes, Drogheda	Cavan/Monaghan Hospital
University of Limerick	University Hospital Limerick	Ennis Hospital Nenagh Hospital
South/South West	South Infirmary Victoria Hospital	Kerry University Hospital, Cork University Hospital, Bantry Hospital
	Waterford University Hospital	South Tipperary Hospital Clonmel
Saolta	Galway University Hospital	Portiuncula Hospital Ballinasloe Mayo University Hospital
	Sligo University Hospital	Letterkenny University Hospital
Child Health Ireland	CHI at Crumlin CHI at Tallaght CHI at Temple Street	

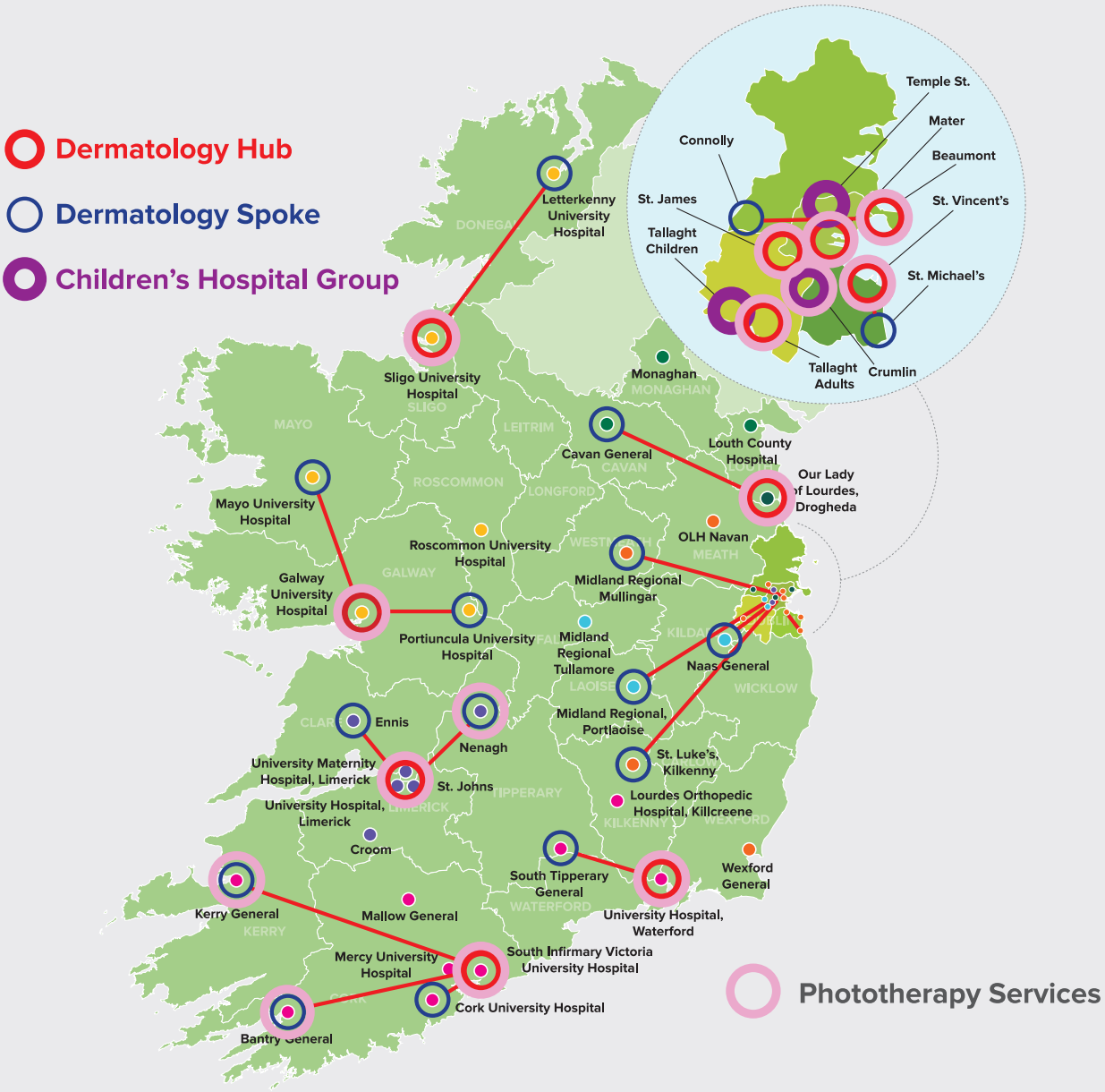
The basic requirements of a peripheral centre are:

- Adequate OPD clinic rooms
- Adequate clerical support
- Nursing which can include clinical nurse specialists attending from the "base hospital"
- Day care with adequate staffing
- Minor surgery equipment as necessary

The NCPD recommends the enhancement and further development of peripheral centres within the hub and spoke model previously outlined. It is also envisioned that pigmented skin lesion clinics and phototherapy clinics will be provided in all peripheral centres. This will be done in line with patient needs and population-based planning regionally.

An example of one such potential development is in the area of Phototherapy services. This is a service for which patients must travel three times a week for at least 6 weeks. Currently this isn't available equitably throughout the country, particularly through the midlands, North East, South East and parts of the Western seaboard (Figure 5.4). In particular the elderly, poor and vulnerable are disadvantaged because of travel. An expansion of this service more locally will address this inequality and provide for better quality of care to Irish dermatology patients.

Figure 5.4 Geographical spread of phototherapy services



5.3.4.2 Hospital Based Services

A fully integrated department with outpatient clinics, outpatient day care treatment centre and dedicated day surgery facilities is the gold standard in hospital dermatology service delivery. In Ireland there are few such well-integrated departments. Notable exceptions are the dermatology department in St. Vincent's University Hospital, University Hospital Limerick and OLCHC, centres which have benefited from additional external funding. The necessary structural provisions for a modern integrated department are:

- Dedicated outpatient units with rooms for patient education.

- Areas for contact allergy testing with storage areas for allergens meeting national published standards.
- Surgical facilities that meet national standards for space, cleanliness and equipment, with storage for liquid nitrogen.
- Laser-safe areas where required.
- Facilities meeting national standards for Mohs' micrographic surgery where required.
- Day-care centres staffed by dedicated dermatology nurses.
- Phototherapy units meeting national standards for equipment and safety for adults and children and adequately staffed by trained personnel. Medical physicists should monitor UV output. A named consultant dermatologist should be responsible for the service.
- Hospital beds staffed by trained specialist dermatology nurses with 24 hour medical care are the gold standard. This is difficult to attain with increasing demand upon acute medical beds, thus there are few or no dedicated dermatology beds. Dermatology patients require a specialised dermatology nurse to apply treatments and provide education, with adequate bathing and treatment rooms.
- Diagnostics Laboratory support including chemical pathology, haematology, microbiology, mycology, histopathology and immunopathology and radiology.
- IT hardware and software that is robust, modern, reliable, fast, in the right place and immediately available.
- Medical photography services
- Appropriate accommodation for paediatric dermatology clinics and inpatient care.

The NCPD recommends the provision of new infrastructure at certain sites which have critical infrastructural requirement. These include South Infirmary Victoria University Hospital, Tallaght University Hospital, Galway University Hospital, and St James's Hospital. Over the five year term of this current iteration of the Model of Care, South Infirmary Victoria University Hospital and Galway University Hospital are in most need of investment.

Expansion and development of peripheral centres and hospital-based dermatology departments needs to be conducted in tandem with the required increases in workforce and development of dermatology skills and competencies to a broader range of professionals already outlined.

In terms of service provision by dermatology departments, areas for potential service expansion include additional rapid access skin lesion clinics. Figure 5.5 shows the spread of rapid access pigmented lesion clinics throughout Ireland.

Figure 5.5 Rapid Access Pigmented Skin Lesion Clinics

These developments need to be supported by greater integration both within each dermatology clinical networks and between networks regionally and nationally, supported by fit for purpose processes and infrastructure. The pigmented skin lesion electronic referral form and accompanying guidelines for GPs under the NCCP are an example of such processes (Appendices 1 & 2).

One other innovation which has facilitated better integration between primary and secondary/tertiary care is the e-referral system which has enhanced communications between centres significantly. There is huge potential for more technological innovations to enhance integration and improve the patient journey and experience and these will be discussed later.

5.3.4.3 Supra Specialist Dermatology Services

Section 4.3.4 and Table 4.2. outlined the national dermatology specialist services provided from a few locations in Ireland. These services are provided in hospitals by consultant dermatologists, often in partnership with other medical specialties and healthcare professionals with specific skills and experience in the management of complex and/or rare skin disorders.

In order to prevent limited tertiary resources being overwhelmed and to ensure efficiency and appropriateness of use of such resources the NCPD recommends:

- ***To develop clear clinical care and referral pathways to these services from the clinical networks and regions***
- ***To establish better linkages to specialist care in each clinical network and region***
- ***Invest in education of primary and secondary care providers (including community paediatricians in the case of paediatrics) in the assessment and management skin diseases***

5.4 Managing Outpatient Access and Patient Journey

5.4.1 Care Pathways

Clinical guidelines and care pathways contribute to integrated care by improving and standardising care across services and sites and defining roles and responsibilities of different healthcare professionals within their particular domain of competence.

Clinical care pathways from primary care to secondary referral for four dermatology conditions are outlined in **Appendix 6**. These include pathways for acne, psoriasis, eczema and hidradenitis suppurativa. Irish dermatologists are members of the British Association of Dermatologists (BAD) and generally use clinical guidelines published by BAD and other international organisations.

The National Cancer Control Programme (NCCP), with whom the NCPD collaborates, has developed a pathway for melanoma skin cancers and is currently developing a pathway for non-melanoma skin cancers.

The NCPD recommends a web-based repository of clinical care pathways, clinical guidelines and referral criteria to support dermatology service provision in Ireland. Education on and dissemination of the pathways should be driven through the Clinical Dermatology Networks and supported by national and regional leadership. This will facilitate education, relationship building and a consistency of evidence-based care delivery locally in the regions. Electronic referral processes which are aligned to the pathways should be developed.

5.4.2 Referrals/Appointments/DNA Management/Waiting Lists

To facilitate the "right person, right place, right time" approach, referrals to dermatology services should be triaged by experienced clinicians working as part of the same dermatology team. Within each department there will be dedicated clinics, and the experienced clinician will know where best to direct each referral. It is essential that GPs have immediate access to senior decision makers within the department. The e-referral system enhances communication between primary and secondary care.

In a health care system such as the HSE, resources are inevitably limited and must be directed to those most in need. An arbitrary line must be drawn between who can and cannot access and benefit from HSE provided care. The Dermatology Clinical Programme has introduced an exclusion letter for benign lesions that will not be treated or seen in secondary care unless there is diagnostic uncertainty (Appendix 5). These include viral warts such as verrucae and molluscum, seborrhoeic warts/keratosis, skin tags, dermatofibromas, spider naevi, epidermal cysts, sebaceous cysts, lipomas, tattoos, xanthelasma and physiological male balding.

The NCP recommends that dermatology referrals, appointments and waiting lists are managed in accordance with national policies, protocols and on-going plans for managing outpatient appointments and scheduled care access *(26, 27, 28, 29).*

5.5 Teledermatology/Telemedicine

Telemedicine, as defined by the World Health Organization, is the use of communication technologies in healthcare for the exchange of medical information for diagnosis, treatment, prevention, research, evaluation, and education over a distance (29).

There is evidence from a recent pilot study for the use and benefits of teledermatology in an Irish context.

A group from Cork University Hospital and South Infirmary Victoria University Hospital (SIVUH) demonstrated positive results in a project on the use of electronic photo-triage for infantile haemangiomas (30). Using a dedicated HSE email address, Irish GPs were able to email anonymised photographs of the infantile haemangioma (IH) for review by a paediatric dermatologist within 5 working days. In the first year of the project 80 images were photo-triaged, indicating quick adoption by Irish GPs. There was significant uptake on the Western and Southern seaboard, areas that are geographically disadvantaged in terms of access to paediatric dermatology services.

The use of photography as a triage tool offers the potential to shorten waiting lists and improve healthcare access and delivery, while identifying and fast tracking patients with suspicious skin lesions. The process will also allow patients with evidently benign lesions to be discharged, representing cost efficiencies for dermatology departments.

The NCPD recommends strategic investment in piloting specific initiatives such as the project above and examining the potential for scaling up such initiatives. It is envisaged that these initiatives, if implemented appropriately, will impact waiting lists and times and improve access and quality of care delivery for Irish dermatology patients. Technology may also facilitate communications, team working, service delivery, integration of care, education and research.

5.6 Biologics/Biosimilars in Dermatology

Biological medicines containing tumour necrosis factor-alpha (TNF-α) inhibitors are licensed for the treatment of a variety of inflammatory conditions including psoriasis, psoriatic arthritis and hidradenitis suppurativa. The Health Service Executive (HSE) Medicines Management Programme (MMP) recommends the safe, effective and cost-effective use of biological medicines including biosimilar medicines (or

'biosimilars') (31). There is robust clinical evidence (including phase III trials) which demonstrates that switching from a reference biological medicine to a biosimilar does not impact patient outcomes (32). There is considerable international experience with the use of biosimilars and there are very significant potential savings to the State from increased utilisation of best-value biological (BVB) medicines, including biosimilars.

The MMP makes the following recommendations:

1. **When initiating a patient on a biological medicine containing a TNF-α inhibitor, the clinician should prescribe the BVB medicine.**

   In limited circumstances, there may be a clinical justification for prescribing a non-BVB medicine containing a TNF-α inhibitor; such circumstances should be clearly documented.

2. **When issuing a repeat prescription for a biological medicine containing Adalimumab or Etanercept, the clinician should prescribe the BVB medicine.**

Other biological medicines not reimbursed through the HTDS include Infliximab (dispensed and administered in hospital system) and a range of medicines used in paediatric medicine. The MMP recommends that prescribers in these settings should also be mindful of the availability of biosimilars of THF-α inhibitors that are licensed for this patient cohort, and should support the cost effective prescribing of these agents.

More detailed information on the prescribing of biosimilars, high tech hub and gain sharing arrangements for specific departments who switch to more cost effective Biosimilars are available from the HSE's Medicine Management Programme (31).

The NCPD supports the HSE's Medicine Management Programme in promoting the use of biosimilars in dermatology services in the interests of significant cost savings to the health service and best value use of limited resources.

5.7 Professional Associations

5.7.1 The Irish Association of Dermatologists

The Irish Association of Dermatologists is the professional organisation of which all Irish dermatologists are members. It is a cross-border organisation and is affiliated with the British Association of Dermatologists. The organisation holds bi-annual meetings promoting clinical education and research.

5.7.2 The Irish Dermatology Nurses Association

The Irish Dermatology Nurses Association (IDNA) was established in 2002 to provide support for the practice and development of dermatology nurses on the island of Ireland. It is a cross border organisation open to all nurses working in dermatology and currently has a membership of over 70 people. The group holds an annual conference and offers educational bursaries to members.

6 | CLINICAL GOVERNANCE AND QUALITY

6.1 Clinical Governance

Over the last 10 years there has been significant progress towards a more structured and connected system of specialist dermatology centres and peripheral clinics throughout Ireland, subscribing to national and international standards of care and clinical guidelines. A recent survey (2018) demonstrated that the majority of Irish dermatology departments use British Association of Dermatology (BAD) clinical guidelines and standards to guide the quality management of different dermatological conditions in addition to emerging national guidelines and pathways (e.g. NCCP guidelines and referral pathways for melanoma). Other guidelines and standards used in Irish dermatology centres include:

- European Academy of Allergy and Clinical Immunology (EAACI)
- European Academy of Dermatology and Venereology (EADV)
- National Cancer Control Programme (NCCP)
- American Academy of Dermatology (AAD)
- European Dermatology Forum (EDF)
- National Institute of Health and Care Excellence (NICE)
- Scottish Intercollegiate Guidelines Network (SIGN)

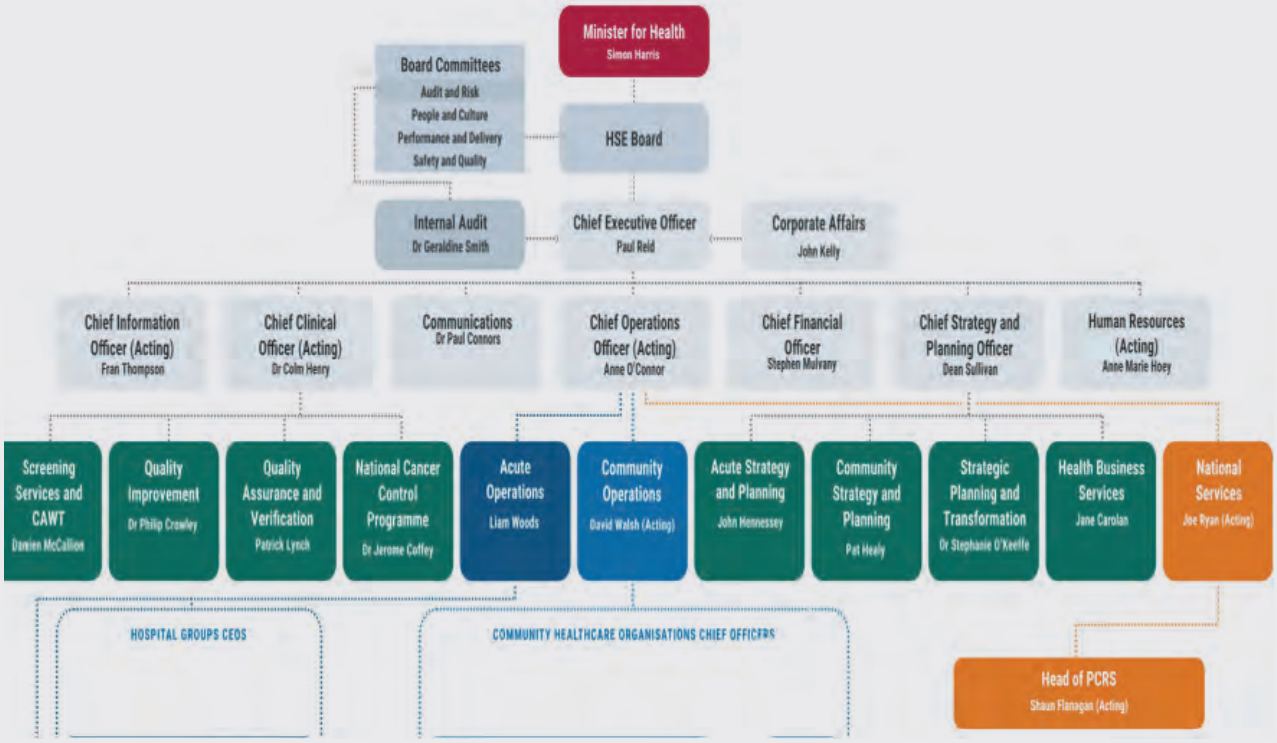
The proposed expansion and enhancement of Dermatology Clinical Networks (outlined in Section 5.3.4), operating agreed care pathways and associated guidelines, will ensure greater access by Irish dermatology patients to a high level of clinical expertise and excellence at each level of care in the regions.

It is expected that dermatology networks and all involved personnel will operate in line with existing structures, policies and frameworks for good clinical and corporate governance, quality and safety, audit and risk management within their existing organisations and regions.

Individual professionals will be accountable to their professional bodies and statutory regulating organisations for professional matters, to their team and service managers/leads for dermatology services and to their corporate entities for performance and other organisational responsibilities and expectations.

Accountability will be driven through existing governance lines of management, clinical directorships, senior executive teams, CEOs/Hospital Managers, Boards (if voluntary), Hospital Group Management and Senior Management structures, HSE regional and national management, HSE Board and Minister for Health (Figure 6.1).

Figure 6.1 Governance of HSE Services



The National Clinical Programme for Dermatology reports to the National Clinical Advisor and Group Lead for Primary Care who in turn is accountable to the Chief Clinical Officer of the HSE. The programme operates under the Clinical Design and Innovation Office with an overall aim of supporting high quality, efficient and evidenced-based dermatology services to be delivered in a timely manner and close to those who need it.

The national programme is led by a National Clinical Lead who is a consultant dermatologist and the programme is guided by a Clinical Advisory Group (CAG) which is chaired by another consultant dermatologist. The Clinical Lead and a Programme Manager work together to ensure the delivery of the objectives of the programme. The Clinical Advisory Group provides clinical oversight and strategic guidance to the programme. It is a Royal College of Physicians of Ireland (RCPI) committee and all dermatology consultants in Ireland are invited to become members.

A nursing lead, patient rep and other professional representatives are often in attendance at CAG meetings to facilitate broader input and discussion as required.

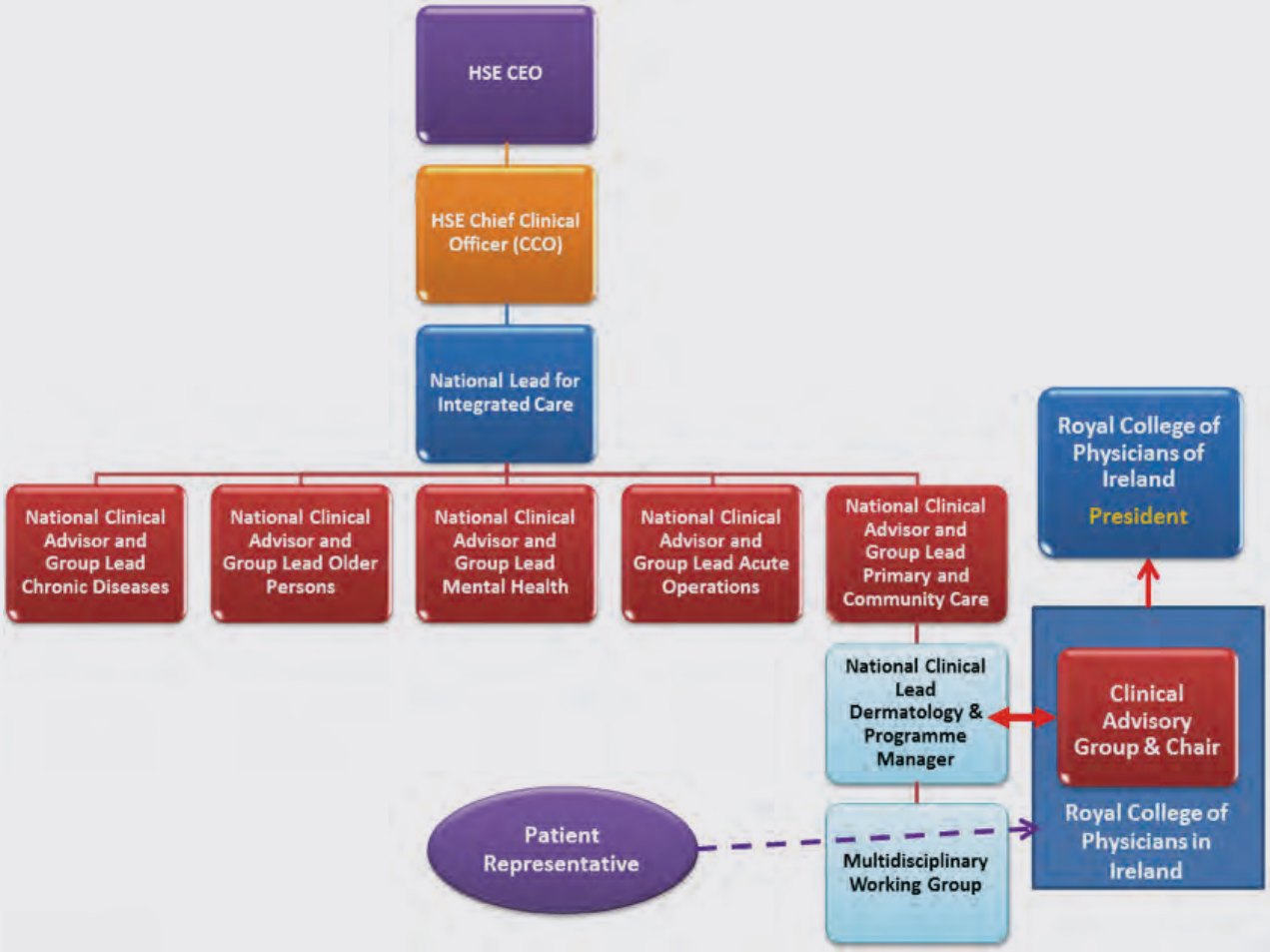
A multidisciplinary working group is tasked with agreeing and facilitating the implementation of the work-streams devised to deliver the objectives of the programme. The working group is chaired by the Clinical Lead. Sub groups may be established to work on specific work-streams; including members with the required expertise in the area of practice.

Specific programme objectives include:

- Completion of care pathways for common dermatological conditions.
- Supporting the NCCP in the development of guidelines for the management of melanoma and non-melanoma skin cancers.
- Supporting timely access to secondary care (reduction in waiting lists).
- Supporting all dermatology departments to offer phototherapy, surgery, patch testing.
- Revising and completing the model of care for dermatology.
- Supporting clinical staff education in common dermatological conditions.
- Developing KPIs for dermatology.

While the dermatology programme is primarily responsible for service design and innovation it is important that the programme links closely with the operational and strategic side of service delivery through the various governance structures outlined above in Figure 6.1 as well as engaging with patient representative bodies. The Clinical programmes governance is outlined in Figure 6.2. This structure will ensure that design solutions and programme deliverables are driven directly by patient and frontline services' needs and challenges. The Clinical Programme will work with hospital groups and regional health authorities to promote and evaluate the hub and spoke model and align with workforce development. The successful implementation of any programme initiatives will depend strongly on patient and frontline participation and engagement in identifying needs in the first place, and input into designing practical solutions.

Figure 6.2 Governance of Clinical Programme



6.2 Clinical Audit and Clinical Effectiveness

The NCPD expects that all dermatology departments and related peripheral centres will engage in regular clinical audit to demonstrate compliance with national and international clinical standards and to ensure on-going accountability, quality of care and the fostering of an ethos of continual service improvement. Clinical audit will be conducted in accordance with national clinical audit guidelines (33) and reported through routine organisational governance structures. It is expected that clinical audit results, matters arising and recommendations will be reported, discussed and required actions implemented at local, regional and national levels as appropriate and also within local clinical dermatology networks. Local clinical leadership will be an important success factor.

6.3 Risk Management

All providers of services for people with skin conditions should have procedures in place to minimise risk to both service users and staff. All services should be compliant with local and national requirements outlined in the HSE's Integrated Risk Management Policy (34). Clear mechanisms should be in place to report, review and respond formally to all clinical incidents and complaints using incident and near-miss recording, with investigation and root cause analysis as required. All incidents should be reported on the National Incident Management Information System (NIMIS) as appropriate.

Staff involved in clinical services should be trained appropriately and everyone should understand their roles and responsibilities in managing risk including prevention, managing incidents, reporting and escalation mechanisms. It is important that mechanisms are in place to learn from incidents, accidents and near misses and to foster a culture of proactive risk management and continuous learning.

6.4 Education, Training and Continuing Professional Development

It is essential that all providers of care for people with skin conditions are appropriately trained and competent to deliver care at the level in which they operate and to know when to refer on for more specialist care or opinion. Specialist providers of dermatology care should support the provision of training for the management of the full range of skin conditions.

Procedures should be in place for the dissemination and implementation of new evidence-based practice, disease and treatment specific guidelines, research, national standards and audit outcomes to achieve quality service delivery.

Dermatology education should be delivered at all levels within the undergraduate and postgraduate training systems and across all relevant stakeholder professions. In addition to formal academic programmes and specific conferences, Dermatology Clinical Networks are a potential structure through which to address local Continuing Professional Development (CPD) needs in dermatology education to a range of professionals including GPs, nurses and pharmacists.

6.4.1 Undergraduate Training

Consultant dermatologists deliver teaching and training on most relevant undergraduate training programmes in Ireland including medicine, nursing and pharmacy.

6.4.2 Dermatology Specialist Registrar Programme

The Irish Committee on Higher Medical Training (ICHMT) programme for dermatology specialist registrars was established in 1999 and is formally accredited by the Irish Medical Council. The training schedule is five years duration with formal annual appraisals to meet requirements for entry to the Irish Medical Council's Specialist Division of the Register in dermatology. There are currently 16 training places in the RCPI, ICHMT Dermatology Specialist Registrar Training Programme.

6.4.3 Irish College of General Practitioners Training Programme

The majority of skin complaints can be managed by GPs in Ireland but dermatology is not a mandatory part of GP training. The ICGP in partnership with the National Clinical Programme for Dermatology updated the dermatology section of the ICGP trainee curriculum in 2018 and developed a national network to allow GP trainees undertake a module in dermatology if they chose to do so. A lead consultant was identified in each dermatology service to be the point of contact for any GP trainee wishing to undertake a module. A one year review of the programme yielded very positive feedback from GP trainees and participants.

In 2019 the NCPD also collaborated with the ICGP to develop a series of 11 podcasts for GPs to support the assessment and management of a range of common skin disorders. These are hosted on the RCPI's website for access by registered GP members and trainees. This initiative promotes greater standardisation of information and practice amongst GPs in the care of skin disorders for adults and children nationally and themes include:

Episode 1: Inflammatory Papules and Nodules
Episode 2: Vascular Reactions
Episode 3: Cutaneous Vasculitis
Episode 4: Clear Fluid-Filled Lesions
Episode 5: White Lesions
Episode 6: Skin-Coloured Lesions
Episode 7: Brown Lesions
Episode 8: Yellow Lesions
Episode 9: Eczematous Disease

Episode 10: Pustular Diseases
Episode 11: Cryotherapy

The fostering and promotion of further education delivery and continuing professional development (CPD) to primary care through the Dermatology Clinical Networks will be an essential component of a successful implementation of the Dermatology Model of Care and ensuring improvements in dermatology care in Ireland.

6.4.4 Nursing Training

As outlined in section 5.3.3.3 there is a need to develop and expand the role of dermatology nurses. Academic programmes that facilitate training in the specialty, while also allowing progression to the roles of clinical nurse specialist and advanced nurse practitioner are needed. There are no such educational programmes in Ireland. Nurses wishing to train in the specialty can only access courses in the UK.

Additionally, access to postgraduate training programmes such as nurse prescribing, leadership and management will be important for dermatology nursing development.

Nurses in Primary Care can also play a key role in managing patients with chronic inflammatory skin disease. Education is required for these health care professionals in managing the most common skin diseases. Greater linkages between practice nurses and dermatology clinical nurse specialists regarding patients with severe inflammatory skin disease will enhance care. Dermatology Clinical Networks are again a potential structure to foster and develop this type of activity.

The career of nurse specialist in dermatology should be promoted by the rotation of trainee nurses through the speciality.

6.5 Research

There is a very healthy and active community in dermatology research in Ireland making regular and important significant contributions to the scientific understanding of the causes and treatments on skin disorders nationally and internationally. Research is a vital component of a progressive health system, especially quality research driven by patients' needs and which translates directly to improved outcomes and services for patients. Support for on-going research by personnel attached to frontline dermatology services is very important.

The NCPD welcomes the recent establishment by the HSE of a **Research and Development** function. The aim of this structure is to develop a framework for governance, support and strategic direction for health research, to enable existing activity and to grow future research activity within the Irish public health service. The ultimate aim is to foster the translation of research into policy and practice and embed evidence-based practice within service delivery, in order to improve the quality of health and social care services and the health and wellbeing of our patients and the population.

The ***HSE Action Plan for Health Research 2019 – 2029*** was approved by the HSE leadership team in 2019 and has the full support of the Department of Health (36). This plan aims to put in place the building blocks within the Health Service that will enable research and innovation to integrate with healthcare delivery and to grow in a sustainable manner.

In addition to the on-going research by personnel in dermatology departments throughout Ireland specific dermatology research structures include:

Charles Institute of Dermatology – The UCD Charles Institute of Dermatology is a purpose built research facility exclusively dedicated to translational research in cutaneous biology. It is the first academic research institute devoted to dermatology in Ireland. Research at the institute addresses common skin diseases such as psoriasis, atopic dermatitis, rosacea, rare genodermatoses and common symptoms such as itch. The Institute is supported via a mixed portfolio of government, charity and Pharma/industry partnerships. Clinically, the Charles Institute of Dermatology aims to collaborate with national and international dermatology centres interested in participating in translational research in dermatology with a combined goal of improving our understanding of dermatology and ultimately of improving the care of our patients.

National Children's Research Centre (NCRC) - The Dermatology research programme in the NCRC focusses on two thematic areas, namely, the study and treatment of rare genetic skin disorders and vascular anomalies, and the study of the most common inflammatory disease of childhood, Atopic Dermatitis (Eczema). The research programme is closely aligned with the dermatology department at Our Lady's Hospital for Sick Children in Crumlin which is uniquely a full member of two European Reference Networks (ERN), one for R***are Skin Anomalies*** and one for ***Vascular Anomalies***, reflecting on-going expertise in these two areas.

In addition to these two centres dermatology research is carried out in St Vincent's University Hospital, Tallaght University Hospital, South Infirmary Victoria University Hospital, Galway University Hospital and Sligo University Hospital.

6.6 KPIs & Metrics

Currently the main metrics used to review dermatology services are drawn from outpatient data sources returned nationally by each individual hospital. These are namely:

- Numbers of new patients seen monthly and annually
- Numbers of return patients seen monthly and annually
- Ratio of return to new patients
- Waiting list data – numbers and waiting times
- Number of new referrals to dermatology departments monthly and annually

The NCPD recommends the collection of a broader set of analytics including data relating to patient experience, outcomes and data to assist in more specific regional service planning. It is important that data collection is meaningful, streamlined and facilitated by technology processes and administrative support.

Additional measures may include:

- Source of referrals
- Reason for referral
- Prioritisation
- Time from referral to being seen for suspected cancer cases
- Time from diagnosis to treatment for cancer cases
- Use of Systemics/Biologics
- Phototherapy activity
- Numbers of transplant patients
- Skin cancer data
- Skin surgeries
- Outcomes
- Patient experience
- Staff experience

7 | IMPLEMENTATION

7.1 Interdependencies with Other Clinical Programmes

The NCPD will engage closely with other relevant national clinical programmes in relation to a national and coordinated approach to the implementation of the proposed model of care for dermatology. These include:

- Medicines Management
- Pathology
- Paediatrics and Neonatology
- Rare Diseases
- Cancer Control Programme

7.2 Implementation Plan

The NCPD will engage in an up to date site survey of and engagement with all dermatology departments in Ireland. This includes an up to date workforce analysis and a trend analysis of referral patterns, activity and waiting lists for individual hospitals, dermatology clinical networks and hospital groups in recent years. Activity will be compared to international standards and recommendations. In addition the programme is also examining the potential changes and impact of the proposed Regional Integrated Care Organisation (RICO) structures under the Slaintecare health programme. This data and analysis will inform a detailed implementation plan which will follow the publication of this Model of Care.

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NATIONAL MELANOMA GP REFERRAL GUIDELINES

A patient with a suspected melanoma may be referred to a consultant dermatologist or plastic surgeon for diagnosis. All patients with a confirmed melanoma should be discussed at the melanoma or skin cancer MDT at the cancer centre for further management.

Every year in Ireland, just over 1,000 new cases of melanoma are diagnosed. There are over 150 melanoma related deaths. Melanoma incidence rates are now similar among men and women, due to steep increases in male incidence in recent years. Compared with other skin cancers, melanoma patients are younger with one-third of female patients and one-fifth of male patients diagnosed before age 50.

Data Source: National Cancer Registry Ireland, 2017

RISK FACTORS

- Atypical moles
- A large number of moles (>50)
- Fair complexion e.g. fair skin, blue eyes, red/blond hair
- A previous melanoma or other non-melanoma skin cancer
- Immunosuppresion
- A family history of melanoma
- History of childhood sunburn
- Sun bed exposure
- Higher socio-economic status

GENERAL RECOMMENDATIONS

The prognosis for melanoma is closely related to the thickness of the tumour. A patient who presents with signs and symptoms suggestive of melanoma should be referred to a consultant dermatologist or consultant plastic surgeon. Primary healthcare professionals should encourage all patients to be aware of skin changes, in order to minimise delay in presentation of symptoms. Lesions suspisious of melanoma should not be removed in primary care.

GP BIOPSY ADVICE

If a patient presents with a suspicious pigmented lesion the patient should be referred with the lesion intact to a consultant dermatologist or consultant plastic surgeon.

All excised lesions should be sent for histopathological diagnosis. Prophylactic excision of naevi in the absence of suspicious features should not be carried out.

If a melanoma has been inadvertently excised, the patient should be referred urgently to a consultant dermatologist or consultant plastic surgeon for multi-disciplinary follow-up and care.

Shave excisions and punch biopsies should not be carried out on naevi.

OPPORTUNISTIC ASSESSMENT

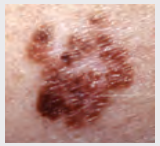
General practitioners are encouraged to opportunistically assess patients attending their practice for signs of skin malignancy.

SUSPICIOUS LESIONS WHICH MAY REQUIRE URGENT REFERRAL TO A CONSULTANT DERMATOLOGIST OR PLASTIC SURGEON

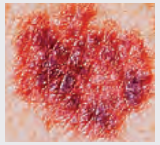
- Any new or changing lesion which is pigmented
- A long-standing pigmented lesion which is changing progressively in shape, size or colour regardless of age
- A new pigmented line in a nail, especially where there is associated damage to the nail, or a lesion growing under a nail.
- A pigmented lesion which has changed in appearance or which is persistently itching or bleeding
- An "Ugly Duckling", pigmented lesion, is one that looks different to all the other pigmented lesions

The ABCDE Lesion System

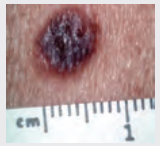
A **A**symmetry in two axes



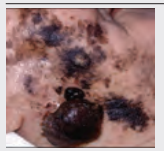
B Irregular **B**order



C At least two different **C**olours in lesion



D Maximum **D**iameter >6mm



E **E**volution of lesion

Photographs reproduced courtesy of British Columbia Cancer Agency

NCCP-COM-031-03

APPENDIX 2 - NCCP GP REFERRAL FORM

NATIONAL PIGMENTED LESION GP REFERRAL FORM

A patient with a suspected melanoma may be referred to a consultant dermatologist or plastic surgeon for diagnosis. All patients with a confirmed melanoma should be discussed at the melanoma or skin cancer MDT at the Cancer Centre for Further Management.

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

FAX or **POST** this **FORM** to **ONLY ONE** of the hospitals listed.

HOSPITAL	PHONE	FAX
☐ Beaumont Hospital, Dublin 9	01 8092529	01 7974833
☐ Cavan General Hospital	049 4376535	049 4376801
☐ Galway University Hospital		
☐ Mater Hospital, Dublin 7	01 8032295	01 8034036
☐ University Hospital Limerick	061 585660	061 585826
☐ Midland Reg. Hosp., Mullingar	044 9394516	044 9394529
☐ Our Lady of Lourdes Hos., Drogheda	041 9874796	041 9875260

HOSPITAL	PHONE	FAX
☐ Roscommon General Hospital	090 6632301	090 6627060
☐ Sligo Regional Hospital	071 9171111 ext 3062	071 9174549
☐ South Infirmary Hospital, Cork	021 4926280	021 4926628
☐ St James's Hospital, Dublin 8		01 4284158
☐ St Vincent's Hospital, Dublin 4	01 2214189	01 2213717
☐ Tallaght Hospital, Dublin 24	01 4143472	01 4144848
☐ Waterford Regional Hospital	051 842150	051 842290

Patient Details

Surname: _____

First Name: _____ DOB: _____

Address: _____

_____

Mobile No: _____ Tel day: _____

Tel evening: _____

Hospital No. (if known): _____

First language: _____ Interpreter required: Yes ☐ No ☐

Gender: Male ☐ Female ☐ Wheelchair assistance: Yes ☐ No ☐

General Practitioner Details

Name: _____

Address: _____

_____

Telephone: _____ Mobile: _____

Fax: _____

GP Signature: _____ Date of Referral: _____

Medical Council Registration No.: _____

Referral Information (please tick relevant boxes):

Is this a pigmented lesion?

☐ Yes ☐ No

Site: _____ Size: _____ mm

Duration of symptoms

_____ (weeks)

Do you think this is:

☐ A likely melanoma
☐ A changing mole – requires assessment
☐ A benign mole, but would like an opinion
☐ Ugly duckling sign (*Mole or lesion which looks different than the patient's other moles)*
☐ Other *(please specify)* _____

MELANOMA CHARACTERISTICS:

The ABCDE Lesion System

☐ **A** **A**symmetry in two axes
☐ **B** Irregular **B**order
☐ **C** At least two different **C**olours in lesion
☐ **D** Maximum **D**iameter >6mm
☐ **E** **E**volution of lesion

☐ Atypical moles
☐ A large number of moles (>50)
☐ Fair complexion e.g. fair skin, blue eyes, red/blond hair
☐ A previous melanoma or other non-melanoma skin cancer

Risk Factors

☐ Immunosuppresion
☐ A family history of melanoma
☐ History of childhood sunburn
☐ Sun bed exposure

Anticoagulants: Yes ☐ No ☐

Aspirin ☐ Plavix ☐ Warfarin ☐ Other ☐

If yes please specify _____

Allergies: Yes ☐ No ☐ _____

If yes please specify

Past medical history:

Comments:

FOR HOSPITAL USE:

Date of referral receipted: _____

Date of appointment offered: _____ Dates patient available: _____

Reason patient did not accept first appointment offered: _____

Skin Team Triage

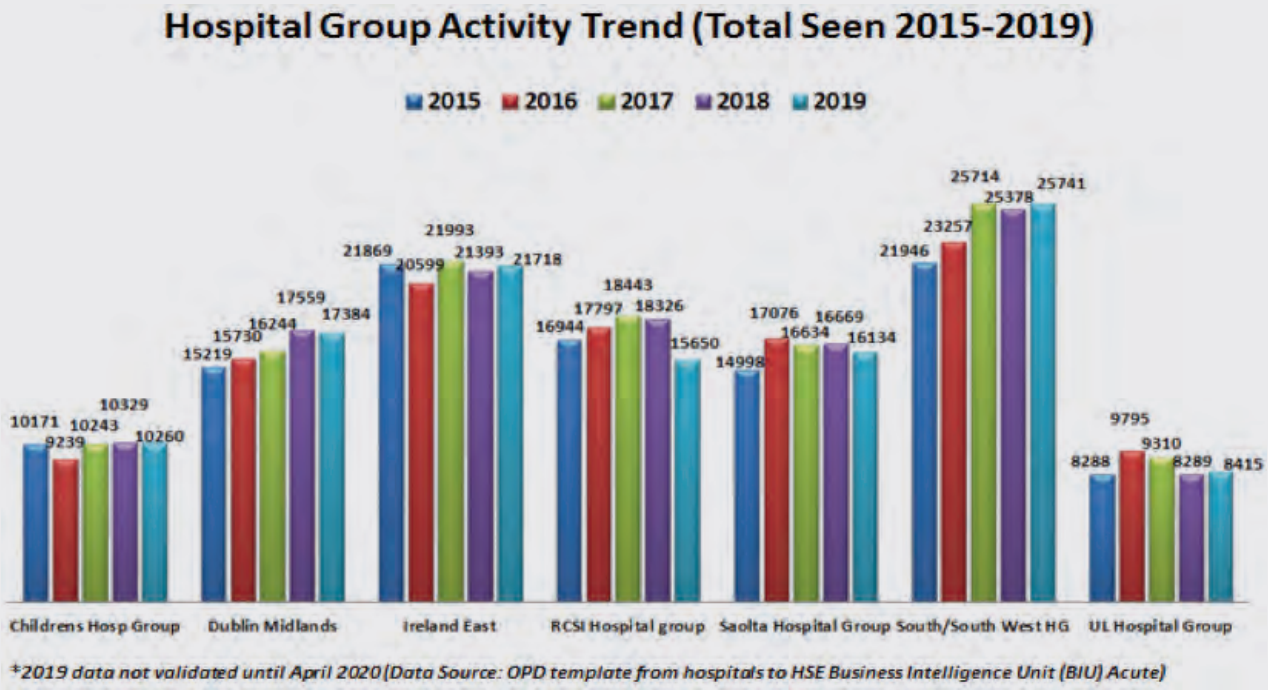
☐ Urgent referral
☐ Soon
☐ Routine referral

Triaged by: _____

Additional forms can be obtained by ringing the NCCP on (01) 8287100 or at www.cancercontrol.hse.ie

March 2015 NCCP-COM-032-03

APPENDIX 3 - REGIONAL OPD ACTIVITY



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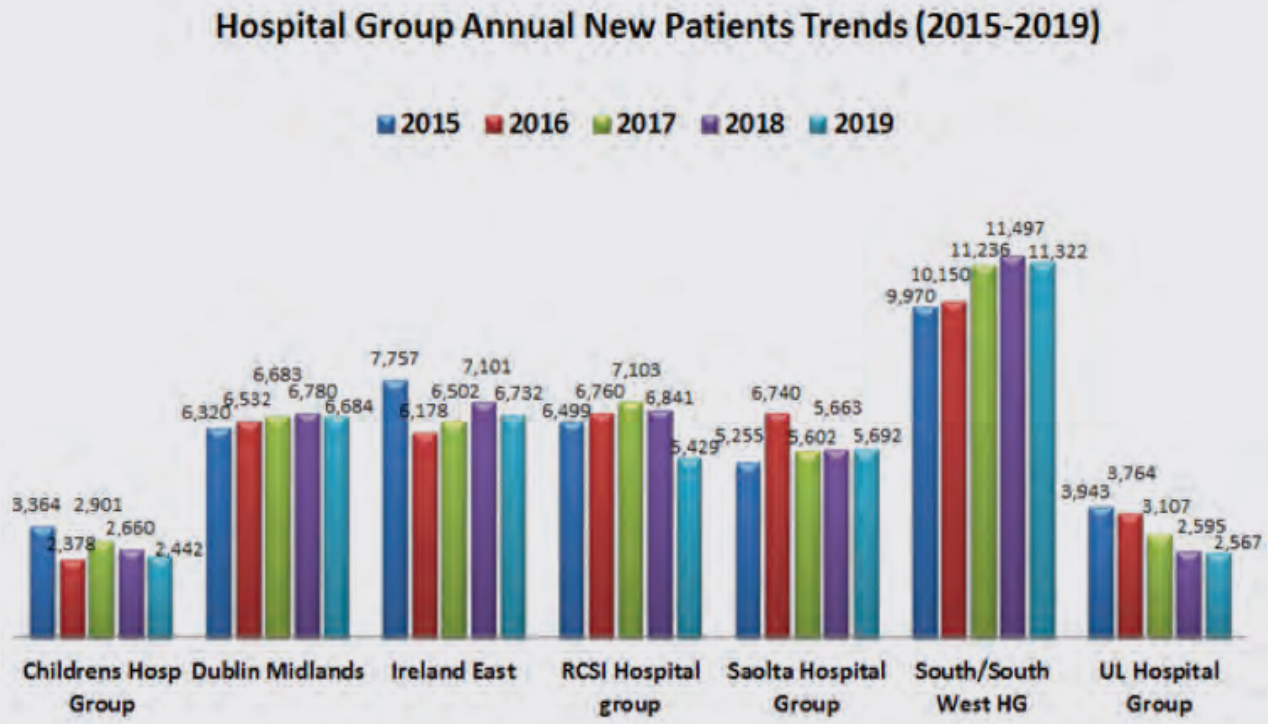

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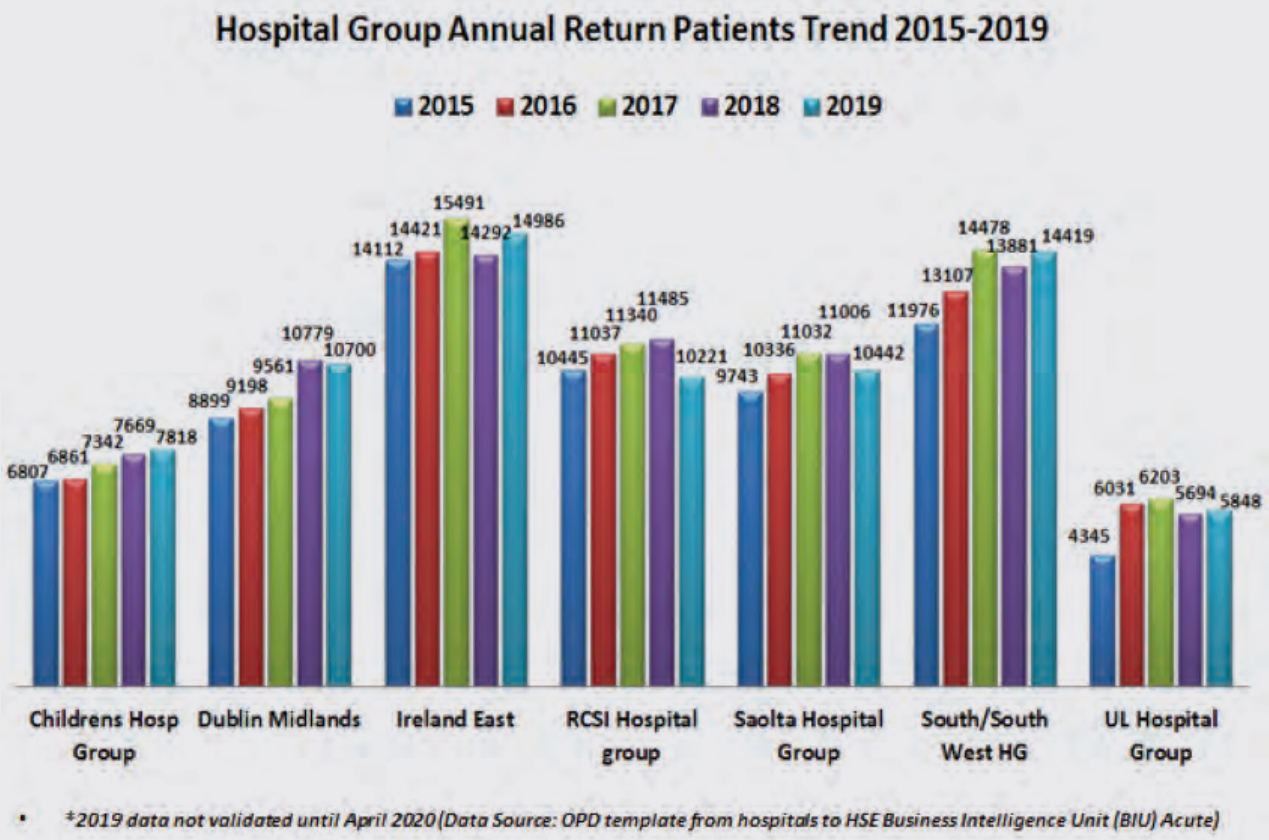
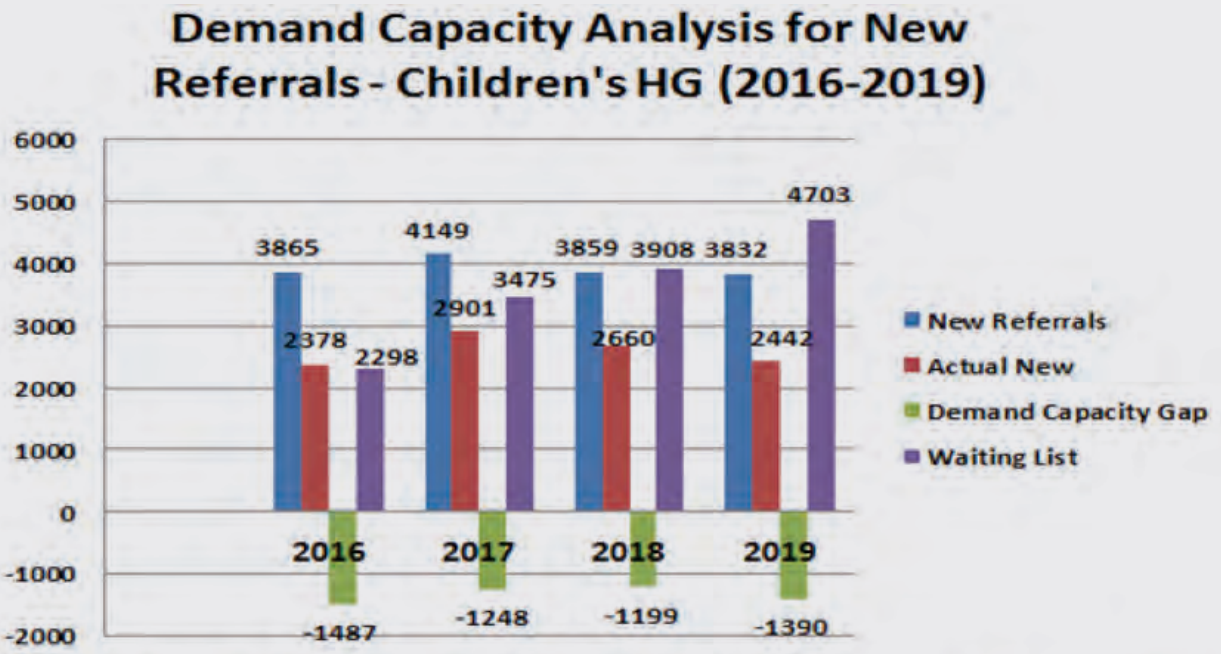
APPENDIX 3 - REGIONAL OPD ACTIVITY (CONT'D)



- *2019 data not validated until April 2020 (Data Source: OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute)

APPENDIX 4 - REGIONAL DEMAND-CAPACITY GAP



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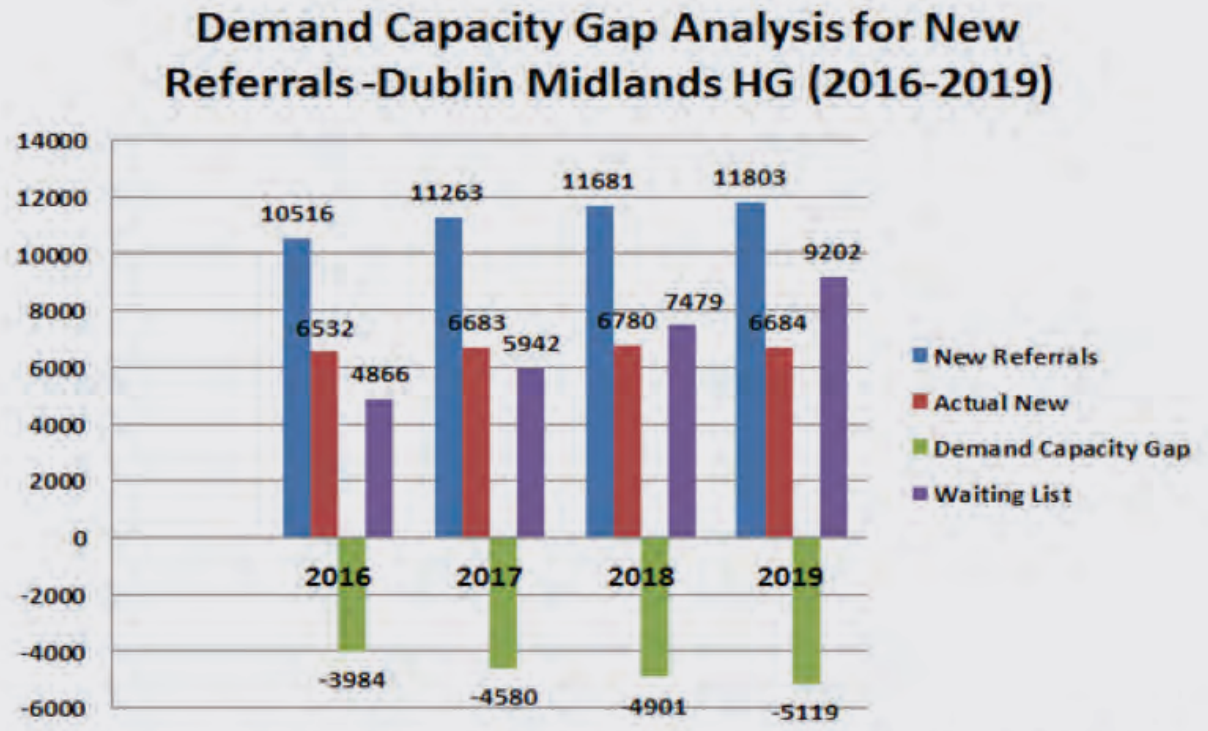
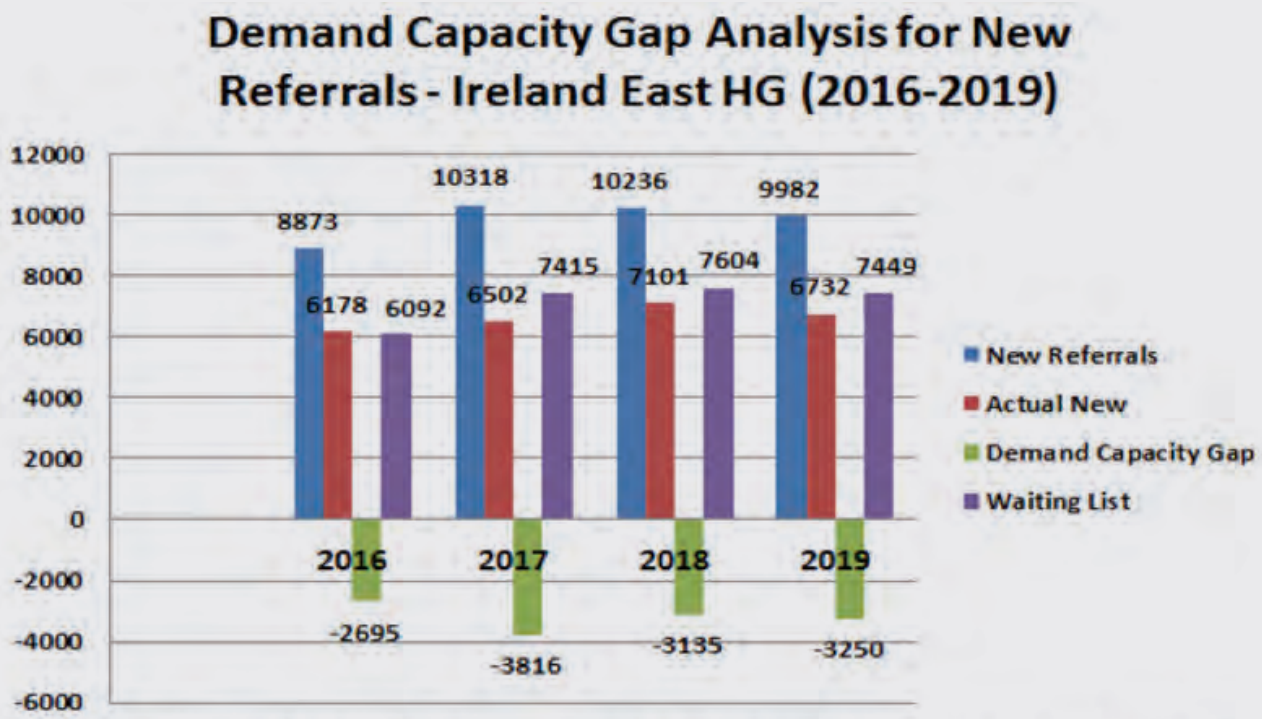


*2019 data not validated until April 2020 (Data Source: OPD Waiting List from NTPF and OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute)

APPENDIX 4 - REGIONAL DEMAND-CAPACITY GAP (CONT'D)



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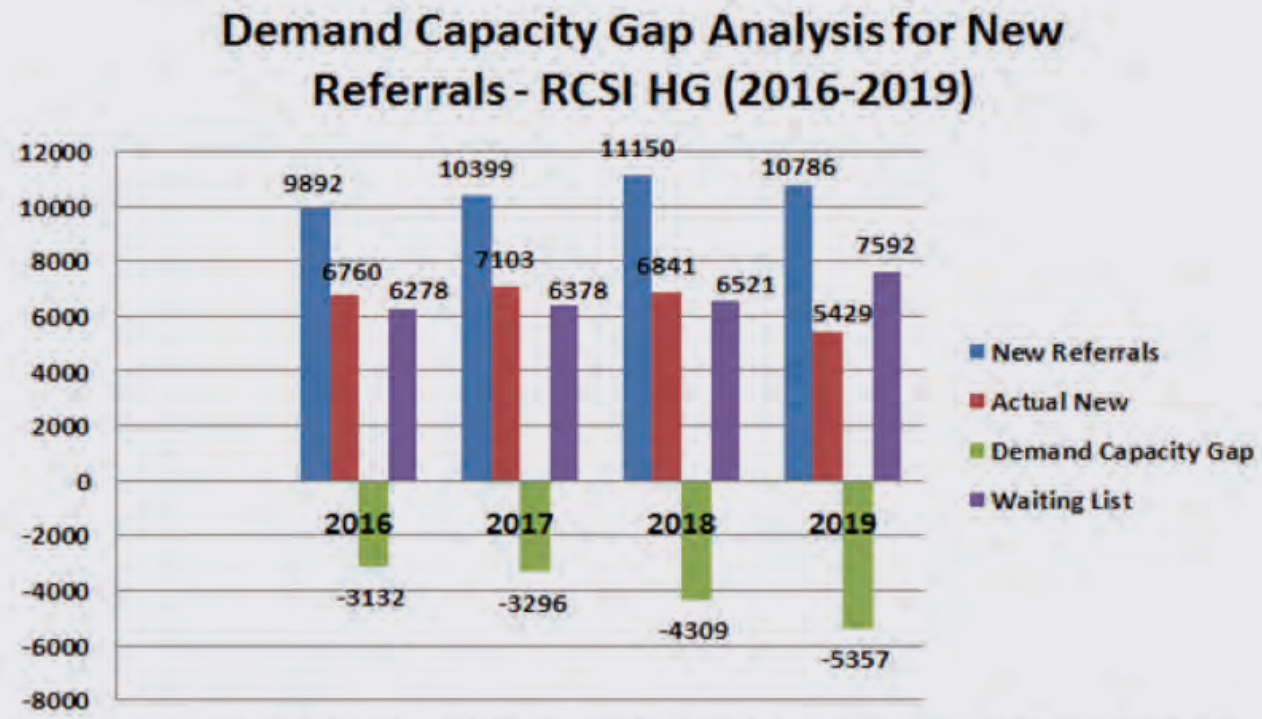

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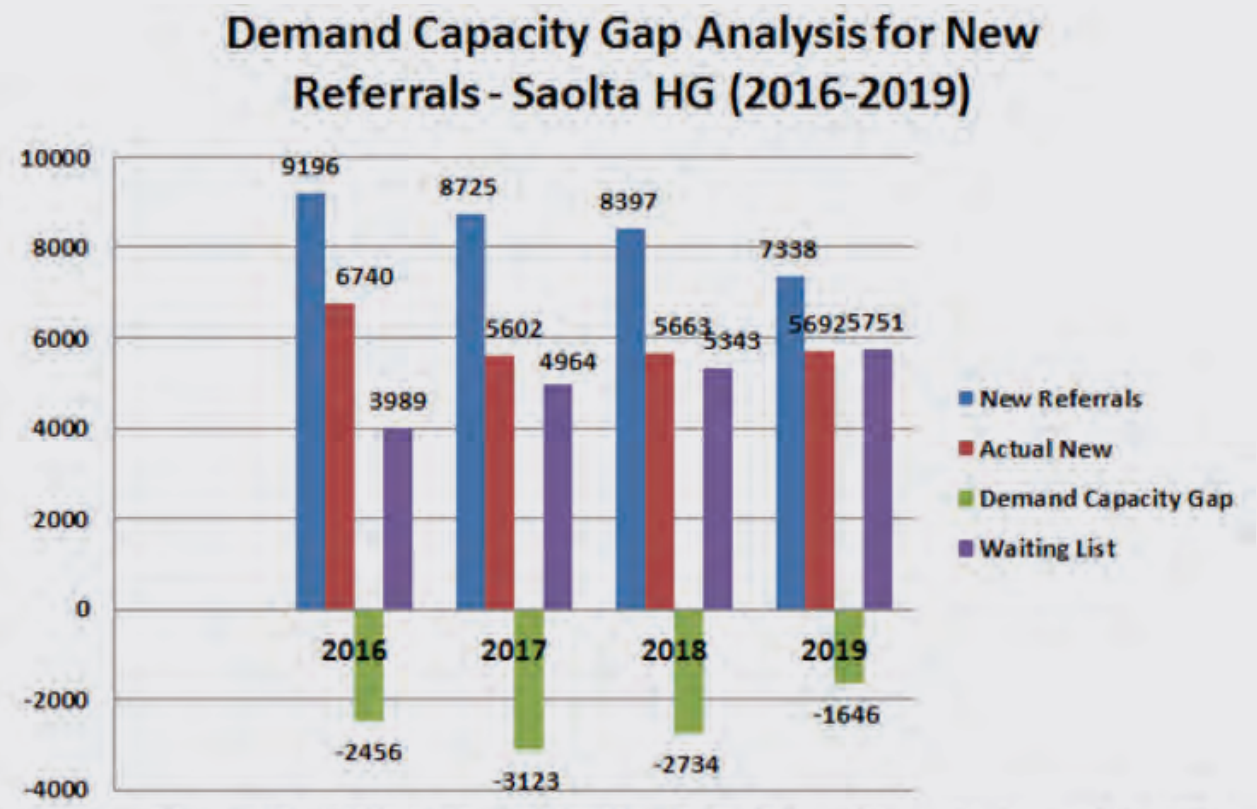
APPENDIX 4 - REGIONAL DEMAND-CAPACITY GAP (CONT'D)



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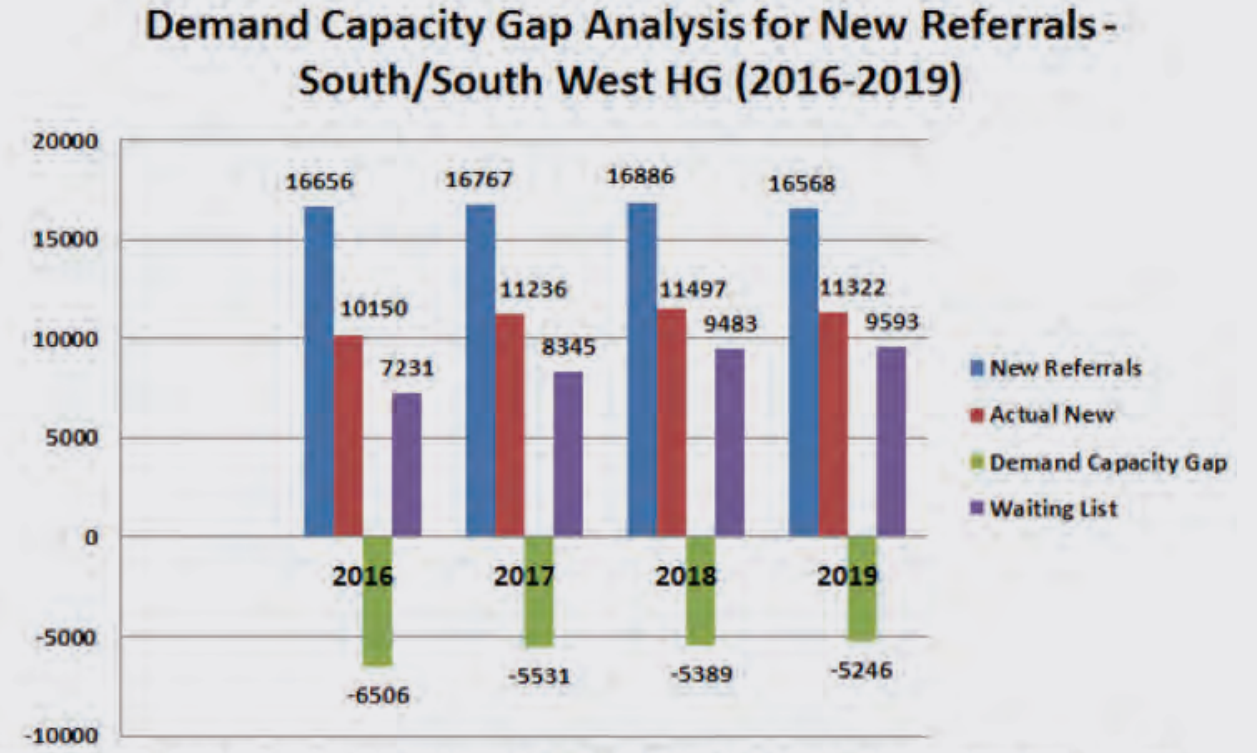
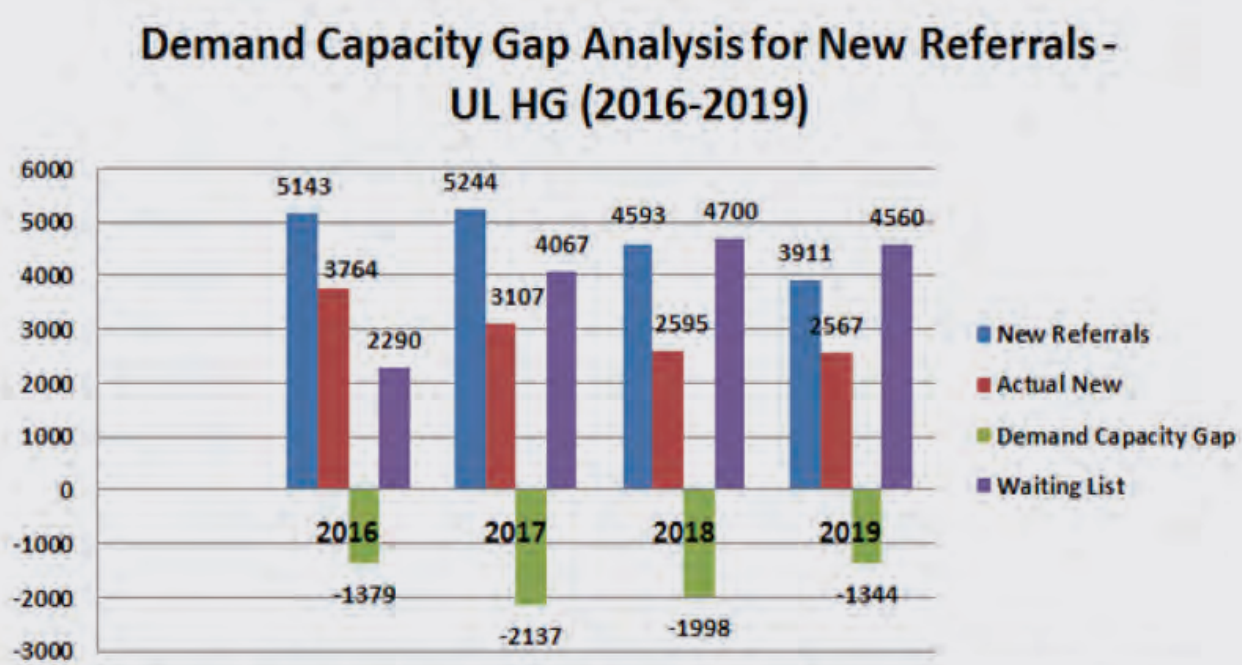


*2019 data not validated until April 2020 (Data Source: OPD Waiting List from NTPF and OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute)

APPENDIX 4 - REGIONAL DEMAND-CAPACITY GAP (CONT'D)



*2019 data not validated until April 2020 (Data Source: OPD Waiting List from NTPF and OPD template from hospitals to HSE Business Intelligence Unit (BIU) Acute)

APPENDIX 5 - GP EXCLUSION LETTER

Re: Exclusion criteria for referral to dermatology services

Dear Doctor

There are currently lengthy waiting lists for dermatology services nationally; many patients with significant and debilitating conditions are waiting for prolonged periods. A significant part of dermatology OPD workload can consist of evidently benign lesions which require no treatment or cosmetic problems.

This has been examined by the National Clinical Programme for Dermatology (RCPI/HSE) and the following conditions were identified for exclusion:

1. Viral warts including verrucae, molluscum
2. Seborrhoeic warts/keratoses
3. Skin tags
4. Dermatofibromas
5. Spider naevi
6. Epidermal cysts
7. Sebaceous cysts
8. Lipomas
9. Tattoos
10. Xanthelasma
11. Physiological male balding
12. Melasma

Patient information leaflets on these conditions are available at *https://www2.hse.ie/skin/* or *www.dermnentnz.org*

In the context of current service availability we regret that we cannot normally accept referrals for these conditions unless there is diagnostic uncertainty, and we will not be providing treatment for these conditions once diagnosed. It is important that patients are made aware of this. The purpose of these restrictions is to prioritise resources and improve services for those with more significant conditions. This list will be reviewed on an annual basis by the National Clinical Programme for Dermatology and feedback is most welcome through *clinicalprogrammeadmin@rcpi.ie*

APPENDIX 6
DERMATOLOGY CARE PATHWAYS

PATIENT MANAGEMENT PATHWAY - ACNE

DIAGNOSIS & ASSESSMENT

- Presence of open and closed comedones, papules, pustules, nodules or cysts
- Presence of scarring: atrophic/ice pick scarring, keloid scarring
- Assessment of psychological impact

1 Comedonal acne
2 Mild–moderate papulopustular acne
3 Severe papulopustular acne, moderate nodular acne,
4 Severe nodular acne, conglobate acne

COMEDONAL

Topical retinoid (M)

BPO (I)

Azelaic acid (I)

MILD TO MODERATE PAPULOPUSTULAR

BPO + clindamycin (fc) (H)

Tretinoin + clindamycin (fc) (M)

BPO am and topical retinoid pm (L)

INADEQUATE RESPONSE

Systemic antibiotic + topical retinoid (L)

Systemic antibiotic + BPO (L)

Systemic antibiotic + BPO am and topical retinoid pm (L)

SEVERE PAPULOPUSTULAR MILD NODULAR

Refer for isotretinoin (H)*

Systemic antibiotic + topical retinoid (M)

Systemic antibiotic + azelaic acid (M)

Systemic antibiotic + BPO (L)

INADEQUATE RESPONSE

Refer for isotretinoin (H)

ALTERNATIVES FOR FEMALES

Antiandrogenic COC + topical retinoid or BPO or azelaic acid (L)

Antiandrogenic COC + systemic antibiotic (L)

NODULAR

Refer for isotretinoin (H)*

Systemic antibiotic + topical retinoid (L)

Systemic antibiotic + BPO (L)

ALTERNATIVES FOR FEMALES

Antiandrogenic COC + systemic antibiotic (L)

Adopted from - Acne Management in Primary Care – ICGP Quality in Practice Committee 2016

PATIENTS WITH:

- Nodulocystic acne
- Uncontrolled acne with scarring
- Severe psychological distress
- Failing to respond to multiple therapeutic interventions

Refer to secondary care for consideration for Isotretinoin treatment

BPO + benzylperoxide, fc = fixed combination product, COC = Combined oral contraceptive. Systemic antibiotic =lymecyline or doxycycline. •When referring for isotretinoin it is recommended to also start appropriate systemic antibiotic plus topical therapy. L = low strength recommendation, M = Medium strength recommencdation, H = High strength Recommendations.

PATIENT MANAGEMENT PATHWAY - PSORIASIS

PATIENT WITH PSORIASIS PRESENTS TO GENERAL PRACTITIONER

- Assess Severity
- Assess for Joint Involvement

GP TREATS THE PATIENT

- Topical therapy reviewed at 4-6 weeks

While awaiting review treat topically 2+3

REFERRAL TO DERMATOLOGIST

1. Emergency referral if Erythrodermic/ Generalised Pustular Psoriasis
2. **Paediatric Patients with psoriasis**
3. If acute Guttate and may benefit from Phototherapy

GOOD RESPONSE TO THERAPY

GP CONTINUES TO MANAGE

DISCHARGED / SELF MANAGEMENT PLAN

If poor response to topical therapy or Body Surface Area > 10% or significant impact on life quality

REFER TO DERMATOLOGIST

ASSESS SEVERITY (PASI AND DLQI) ASSESS CO-MORBIDITIES

PHOTOTHERAPY

SYSTEMIC TREATMENT

BIOLOGICAL THERAPY

PATIENT MANAGEMENT PATHWAY - PAEDIATRIC ECZEMA

DIAGNOSIS & ASSESSMENT

- Time of onset, pattern and severity
- Possible trigger factors (irritant and allergic)
- The impact of the condition on children and their parents or carers
- Personal and family history of atopic diseases

INITIAL MANAGEMENT

- Use of Emollients and Soap Substitutes
- Avoidance of trigger factors
- Topical corticosteroids/calcineurin inhibitors
- Treatment of intercurrent infections

Children with eczema herpeticum should be referred for same day dermatological and ophthalmological advice

CHILDREN WITH ECZEMA SHOULD BE REFERRED TO A DERMATOLOGY SERVICE IF:

- management has not controlled the atopic eczema satisfactorily based on a subjective assessment by the child or parent/carer (for example, the child is having 1–2 weeks of flares per month or is reacting adversely to many emollients)
- atopic eczema on the face has not responded to appropriate treatment
- the child or parent/carer might benefit from specialist advice on treatment application (for example, bandaging techniques)
- you suspect contact allergic dermatitis (for example, persistent atopic eczema or atopic eczema of the face, eyelids or hands)
- the atopic eczema is causing significant social or psychological problems for the child or parent/carer (for example, sleep disturbance, poor school attendance)
- the atopic eczema is associated with severe and recurrent infections, especially deep abscesses or pneumonia

PATIENT MANAGEMENT PATHWAY - HIDRADENITIS SUPPURATIVA

MAKING A DIAGNOSIS

- Typical Lesions: inflamed nodules, open comedromes, sinus tracts, bridging scars
- Predominantly flexural locations: axillae, groins, perineum, infra- or inter mammary
- Chronicity: 2 lesions in last 6 months, lifetime history of ≥ 5

INITIAL MANAGEMENT

- Record Hurley Stage I, II, III (mild, moderate, severe) respectively for reasons worst affected
- Hurley stage III (severe) disease consider immediate referral to dermatology secondary care
- Measure pain (e.g. using VAS) and treat if needed (e.g. NSAID)
- Measure quality of life (e.g. DLQI) and lesion count/number of flares in the last month
- Provide patient information leaflet *http://irishskin.ie/hidradenitis-suppurativa/#causes*
- Consider 1% clindamycin solution twice daily for affected skin regions
- Oral tetracycline, e.g. lymecycline 408mg or doxycycline 100mg for 12 weeks, once or twice daily (in Hurley stage III disease, consider immediate clindamycin and rifampicin therapy – see below)
- Provide dressings for pus producing lesions
- Offer smoking cessation referral, if relevant
- Offer weight management referral, if relevant
- Screen for depression/anxiety
- Screen for treatable cardiovascular risk factors (Measure BP, lipids, HbA1c)

ASSESS RESPONSE AT 12 WEEKS

- Pain VAS, quality of life
- Lesion count/number of flares in the last months

LACK OF RESPONSE

REFER TO DERMATOLOGY SECONDARY CARE

TREATMENT SUCCESS

- Ongoing oral lymecycline or doxycycline
- Consider treatment break to assess need for ongoing therapy and to limit risk of antimicrobial resistance

NOTES

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