3

Early Diagnosis and Training

Introduction

3.1 The thicker and deeper a melanoma is, the more difficult it is to treat. The five-year survival rate in Australia for melanomas thicker than four millimetres is 55 per cent, in comparison to 'almost 100 per cent survival for melanomas one millimetre or less'.[1]

3.2 Earlier diagnosis of melanoma skin cancers is therefore 'correlated to successful patient outcomes and longer-term survival'.[2] Despite this correlation, no successful population-wide testing or trial has been conducted in Australia and so there is 'insufficient evidence that screening for melanoma reduces mortality'.[3]

3.3 Taking into consideration that there is insufficient evidence which would link skin cancer screening with a reduction in mortality, the Australian approach on whether to establish a population–based screening program for skin cancer is in line with the World Health Organisation's (WHO) criteria. This approach considers the effect of what can be achieved through a potential screening program coupled with the cost effectiveness of such a program.[4]

3.4 This chapter discusses initiatives for the early detection and diagnosis of skin cancers, improving access to specialist treatment services, and ways to improve skin cancer detection accuracy through the training of health and related service providers.

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1 Cancer Council Australia and Clinical Oncology Society of Australia, *Submission 26*, p. 3.

2 Cancer Council Australia and Clinical Oncology Society of Australia, *Submission 26*, p. 3.

3 Cancer Council Australia and Clinical Oncology Society of Australia, *Submission 26*, p. 3.

4 Dr Bernie Towler, Principal Medical Adviser, Population Health Division, *Official Committee Hansard,* Canberra, 28 March 2014, p. 12.

Early Detection

3.5 Early detection and diagnosis is vital in treating skin cancers as where a skin cancer is detected and treated earlier, a patient has a more favourable longer-term prognosis. As outlined, this is especially the case for melanomas with a thickness of less than one millimetre.[5]

Screening

National Screening Program

3.6 The Peter MacCallum Cancer Centre commented that Australia has attempted 'a randomised trial of patients [some] getting screening and [some getting] no screening'. Unfortunately, the trial had failed mainly 'because of reimbursement issues for the general practitioners involved through Medicare'.[6]

3.7 The most compelling study showing that skin cancer screening raises awareness and assists as a preventative measure was conducted in Germany in 2008. Of this study the Peter MacCallum Cancer Centre stated:

> …they trained up their primary care physicians to undertake screening. They did this for a period of some two years, and then they actually looked at the impact on the mortality from melanoma and compared that to the rest of Germany. There was a reduction in the mortality. Scientifically, it was not the perfect study, because it was not the randomised, perfect controlled trial that we would have liked, but it is quite compelling evidence that screening does work.[7]

3.8 HealthCert International added that the German screening program included almost 20 per cent of the eligible population. While the incidence of melanoma increased by 34 per cent during the 12-month screening program, after five years there had been a 50 per cent decrease in melanoma mortality.[8]

3.9 Professor David Whiteman commenting on the results of the German screening program, stated that:

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5 Professor David Whiteman, *Submission 3*, p. 5.

6 Professor Grant McArthur, Co-Head, Cancer Therapeutics Program; and Director, Skin and Melanoma Service, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 49.

7 Professor Grant McArthur, Co-Head, Cancer Therapeutics Program; and Director, Skin and Melanoma Service, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 49.

8 HealthCert International, *Submission 43*, p. 11.

> While German data will be of interest to Australian researchers, it is difficult to gauge how applicable they will be given the profound differences in the incidence of skin cancer, the differences in medical training, and very different health systems operating in the two jurisdictions.[9]

3.10 The *Clinical Practice Guidelines for the Management of Melanoma in Australian and New Zealand* (the Guidelines) does not support population screening and provides that:

> In the absence of substantive evidence as to its effectiveness in reducing mortality from melanoma, population-based skin screening cannot be recommended.[10]

3.11 Professor David Whiteman advised that it was 'extremely unlikely that a randomised trial can ever be performed in Australia, given the high prevalence of opportunistic screening in the community, and the costs involved'[11] in conducting a trial.

3.12 Population-based screening was not supported by a number of organisations. The Cancer Council Australia and the Clinical Oncology Society of Australia stated that there was 'insufficient evidence that screening for melanoma reduces mortality; current diagnostic practices for melanoma [were] not appropriate for screening'; and that screening for non-melanoma skin cancers was 'unlikely to ever be recommended' because long-term illness and death were rare occurrences for such cancers.[12]

3.13 Professor Jon Emery stated that there was 'no evidence that regular total skin examination of people who are at average risk reduces mortality', but that it was nevertheless 'occurring on a regular basis' in Australia.[13]

3.14 The Skin Cancer College Australasia identified several issues which mitigated against population-based screening:

- setting one year as the examination interval was 'somewhat arbitrary' because melanoma could develop into the dangerous, thicker phase in a matter of weeks or months;

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9 Professor David Whiteman, *Submission 3*, p. 6.

10 Cancer Council Australia; Australian Cancer Network; Ministry of Health, New Zealand, *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand*, 2008, p. 10.

11 Professor David Whiteman, *Submission 3*, pp. 5–6.

12 Cancer Council Australia and the Clinical Oncology Society of Australia, *Submission 26*, p. 3.

13 Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 32.

- physically screening the population on a yearly basis would be prohibitively expensive; and
- there were insufficient numbers of proficient doctors to undertake such screening.[14]

3.15 The Victorian Department of Health and Hunter Medicare Local also did not support population-based screening.[15]

3.16 A limited form of population-based screening was suggested by the Skin & Cancer Foundation Australia. It suggested incorporating skin checks into life events. For example it could be a 'compulsory component of any employment-related health assessments' and a skin assessment could be a 'compulsory requirement of all formal admissions to hospital'. Further, the government could subsidise annual skin checks for employees who worked primarily outdoors.[16]

3.17 The Department of Health further stated that there is a lot of opportunistic work that happens in the primary care space which is considered appropriate for detecting and managing people who are at low, average and high risk. Coupled with general practitioner's (GPs) guidelines on early detection and prevention of melanomas, these still 'fall short of what we would require in Australia to set-up a national screening program'.[17]

Opportunistic Screening

3.18 Opportunistic screening which occurs when a patient visits either a GP for a health reason other than a skin cancer check or decides to visit a health practitioner specifically for a skin cancer check.

3.19 Opportunistic screening is again different from opportunistic diagnosis which occurs when a general practitioner notices a suspicious skin lesion when a patient attends for other reasons.[18]

3.20 Opportunistic screening requires adequate time for a skin examination when a patient visits their GP to ensure mistakes in diagnosis are not made. Dr Felix Choi commented that in a busy general practice, during a regular consultation, opportunistic screening is not a high priority, especially if the skin check equipment is not set up and ready for screening use. Dr Choi stated:

14 Skin Cancer College Australasia, *Submission 21*, p. 2.

15 Victorian Department of Health, *Submission 22*, p. 2; Hunter Medicare Local, *Submission 54*, p. 2.

16 Skin & Cancer Foundation Australia, *Submission 17*, p. 4.

17 Dr Bernie Towler, Principal Medical Adviser, Population Health Division, Department of Health, *Official Committee Hansard,* Canberra, 28 March 2014, p. 12.

18 Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, pp. 32–33.

> … if you are rushing in doing a lot of this work, then mistakes can happen. I am not really interested in that; I am more interested in the patient's health than trying to rush an opportunistic check because you should be doing it. It is better to book them back in. But, if you are booking them back in, the reality of most people's lives is that they are too busy and they will not come back in.[19]

3.21 This view was supported by Hunter Medicare Local which, referring to a study published in 2011, noted that 'GPs nominated time constraints and competing co-morbidities as barriers to performing skin examinations'.[20]

Encouraging Action

3.22 As noted in Chapter 2, there are two main types of public awareness campaigns: primary prevention which is aimed at preventing skin cancer by encouraging behavioural changes; and secondary prevention—aimed at monitoring and so improving the early identification of skin cancers for high risk candidates.[21]

3.23 The Skin & Cancer Foundation Australia advocated a two-level educational approach to improve the rate of early diagnosis of skin cancers complemented by public health awareness campaigns:

> Firstly, population education is fundamental to understand and recognise the early indicators of both skin cancer (including self examination of naevi, chronic ulcers, growths, etc). To date, most self-examination information available to the general public is focused on identifying early signs of melanoma, with non-melanoma skin cancers remaining relatively unaddressed. Secondly, doctors (general practitioners, specialists) and allied health professionals (eg - physiotherapists, podiatrists, occupational therapists) should be formally trained and regularly updated (as a [continuing medical education] program accredited by all colleges) in the detection of skin cancers, as well as identifying high risk patients.
>
> The two-tier educational approach should be complemented by public health awareness campaigns addressing critical messages regarding how to organise regular skin checks, and the seriousness

19 Dr Felix Choi, *Official Committee Hansard,* Sydney, 29 July 2014, p. 32.

20 Hunter Medicare Local, *Submission 54*, p. 4.

21 High risk candidates are those who have already had some form of skin cancer and are at risk of further skin cancer.

> of certain types of skin abnormalities, including pigmented lesions and non-healing ulcers.[22]

Skin Checking Campaigns

3.24 There are several public awareness campaigns either being proposed or already in place which promote early skin cancer diagnosis. These are: *SCAN Your Skin*, *Know Your Own Skin* and *Check Mate*.

SCAN Your Skin

3.25 The Skin Cancer College Australasia advised that the *SCAN Your Skin*[23] project was launched in November 2013 with a brochure and website.[24] The Skin Cancer College Australasia proposed that the project become the basis for an early detection campaign and stated:

> This is a strategy that utilises a simple, effective and practical tool to empower the general public to monitor their skin for lesions that may be cancerous … This will raise the level of awareness in the community with people more aware of their own skin, and to be aware of potentially worrying lesions on their family, friends and others.[25]

3.26 The Skin Cancer College Australasia stated that it was hoping to receive funding for 'analysing the success or effectiveness of this tool in actually helping to change people's behaviour and whether or not people really can detect their own melanomas'.[26]

Know Your Own Skin

3.27 LEO Pharma advised that it had developed the *Know Your Own Skin* awareness campaign 'in conjunction with leading healthcare professionals and relevant stakeholders'. *Know Your Own Skin* was designed to supplement existing awareness campaigns and included educational materials for patients and healthcare professionals including brochures and posters, a website, a video, and an app for mobile phones. The campaign has recently been expanded to incorporate an annual *Pollie Skin Check Day* at Parliament House in Canberra.[27]

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22 Skin & Cancer Foundation Australia, *Submission 17*, p. 3.

23 The SCAN acronym stands for: Sore, Changing, Abnormal, New. Skin Cancer College Australasia, *SCAN Your Skin*, http://scanyourskin.org, viewed October 2014.

24 Skin Cancer College Australasia, *SCAN Your Skin*, http://scanyourskin.org, viewed October 2014.

25 Skin Cancer College Australasia, *Submission 21*, pp. 1, 4, 5.

26 Dr Richard Johns, Director, *Official Committee Hansard,* Brisbane, 22 May 2014, p. 34

27 LEO Pharma, *Submission 24*, pp. 1–2.

3.28 LEO Pharma stated that since the campaign was launched in 2001 it had conducted some 30 events around the country some of which had been in conjunction with key political figures within their own electorates. LEO Pharma added:

> We have reached a big proportion of the Australian population. It has been effective. We have had many hits on our website, and the app that is downloaded on smartphones has been quite successful, but we think that there is a lot more to be done in terms of increasing awareness.[28]

Check Mate

3.29 The Hunter Melanoma Foundation launched its *Check Mate* campaign in 2012.[29] The website contains information on melanomas and provides the opportunity for those with melanoma to share their stories.[30] The campaign is targeted at men aged 40 and over. Hunter Melanoma Foundation advised:

> … the message being a 10-minute skin check could save your life, and urging them to have an annual skin check. This skin campaign went to local pubs and clubs, because we thought that was the best area to target men over the age of 40. It included posters and coasters. To local GPs we sent fridge magnets and posters and our pens … We also have two Newcastle buses on which we promote the selfie and Check Mate campaigns, and bus shelters and poster boards in the region.[31]

Links with Primary Prevention Campaigns

3.30 Primary prevention campaigns—which encourage a reduction in sun exposure, often also encourage regular skin cancer checks. For example, the Commonwealth Department of Health commented that the *Dark Side of Tanning* contained detailed information about how to assess whether it was necessary to seek advice from a medical practitioner.[32]

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28 Ms Rosie-Marie Pennisi, Head of Medical, *Official Committee Hansard,* Brisbane, 22 May 2014, p. 51.

29 Ms Jenny Noblet, Executive Officer, Hunter Melanoma Foundation, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 13.

30 Hunter Melanoma Foundation, *Check mate before it's too late*, http://checkmate.org.au/, viewed October 2014.

31 Ms Jenny Noblet, Executive Officer, Hunter Melanoma Foundation, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 13.

32 Ms Jodie Grieve, Assistant Secretary, Communications Branch, People Capability and Communications Division, Department of Health, *Official Committee Hansard,* Canberra, 28 July 2014, p. 24.

3.31 HealthCert International recommended that the *Slip! Slop! Slap!* campaign should include a fourth step: *Screen!* This was in recognition of the fact that 'skin cancers are often found on areas of the body that are not exposed to the sun and are found often by coincidence rather than design'.[33]

3.32 Professor Jon Emery was supportive of public skin cancer prevention campaigns and stated that 'large public health campaigns showing images of skin cancer certainly increase presentations to general practice but also increase the diagnosis of melanoma'.[34]

3.33 The Royal Australian College of General Practitioners commented on a case in Rockhampton, Queensland, where there had been an unintended consequence of overdiagnosis and overtreatment following a state wide SunSmart campaign. The skin check campaign was conducted independently of the regular primary-health-care system had the effect of a tenfold increase in the number of excisions. The Royal Australian College of General Practitioners stated:

> We discovered that that was associated with one of the SunSmart campaigns that was being run in the state. We analysed that with some interest and worked out that there was probably no benefit from that blip. There was an enormous increase—10 times the number of skin excisions happening—probably because people were seeing a campaign about being sun smart. It was actually a quite confronting campaign because it showed surgical pictures—pictures of people with big lumps of skin being cut out of them. It was actually designed to shock people into wearing hats and being sun smart, but an unintended consequence was that a lot of people went off and had moles checked and had excisions thereby. We then looked to see whether the melanoma rate increased to match that blip, and it did not. There was a huge increase in the number of skin excisions without any benefit. So that is one measure of overdiagnosis, if you like, and overtreatment. So a whole lot of people had things done to them—they had scars; probably secondary infections, because a small proportion of excisions have secondary infections; the worry of it; the inconvenience; the cost—without any benefit. So when you say that there must be some benefit, there is potentially a benefit, but we do know that there

33 HealthCert International, *Submission 43*, p. 13.

34 Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 32.

> will be harm. Knowing the balance is actually very difficult. Very often we do not know that there is a balance. [35]

Public Awareness Campaign Design

3.34 The WA Country Health Service—Kimberley (WACHS—K) highlighted the importance of sun protection messages in places like the Kimberly which is 'characterised by high risk solar exposure all year round'. The WACHS—K was of the view that 'the best impact [from health promotion campaigns] comes when there is a synergy between the central planning and the local [health] service to ensure that there is real coordination and a common purpose'.[36] In this context, the WACHS—K was critical of skin check campaigns undertaken by non government organisations and instanced the 2013 campaign sponsored by the Lions Clubs in Kununurra. The WACHS—K stated:

> WACHS—Kimberley is not aware of compelling evidence for the value of skin-check clinics conducted independent of the regular primary-health-care system. WACHS—Kimberley also cautions that such activity conducted outside regular health-care providers generally places an additional and unanticipated burden on overstretched health services. For example, in the Kimberley, visitors to the region might attend such a skin-check clinic, be advised to have a biopsy and then they—not surprisingly—attend a local emergency department with high expectations of immediate investigation and follow-up, but without any link to their own primary-health-care provider. As a general recommendation, any visiting service to the Kimberley is strongly encouraged to link in early with planning, with the regional director of WACHS—Kimberley and relevant managers of primary health care in the Kimberley, to complement local priorities and ensure that the capacity of the ongoing primary-health-care system that stays here can accommodate visiting initiatives.[37]

3.35 WACHS—K recommended that services visiting the Kimberley should link early in planning with the Regional Director and relevant primary health care managers 'to complement local priorities and ensure the

35 Professor Chris Del Mar, Royal Australian College of General Practitioners, *Official Committee Hansard,* Brisbane, 22 May 2014, p. 3.

36 Dr Jeanette Ward, Acting Regional Medical Director, WA Country Health Service, Kimberley *Official Committee Hansard,* Broome, 2 May 2014, p. 17.

37 Dr Jeanette Ward, Acting Regional Medical Director, WA Country Health Service, Kimberley *Official Committee Hansard,* Broome, 2 May 2014, p. 3 and WA Country Health Service—Kimberley, *Submission 44*, p. 2.

capacity of the ongoing primary care system to accommodate visiting initiatives'.[38]

3.36 Many campaign brochures and materials include images of skin cancers. The Skin Cancer College Australasia explained that it did not include images of melanomas or other skin cancers in its *SCAN Your Skin* brochure. This was to prevent patients looking at an image of a melanoma and concluding that their mole was not a melanoma because it did not look like the image. Skin Cancer College Australasia commented that:

- many websites tended to show images of advanced melanomas but patients should not wait until their skin lesion looked like it before seeking help;
- melanomas could occur with differing appearances and in different locations; and
- its website would contain images of skin cancers showing they had 'a range of presentations in terms of appearance, location and patient history'.[39]

3.37 Professor Jon Emery raised concerns that many images used in awareness campaigns are unrepresentative of early-stage skin cancer and stated:

> The problem is the images are usually the more extreme end of melanomas, and the thinner melanomas—the earlier ones—do not actually look anything like the more extreme ones … I think nearly all the other public health campaigns have only shown images of superficial spreading melanomas and often the more extreme ones. I think it is a really important question about how you raise awareness of nodular ones, which do look entirely different to other melanomas.[40]

3.38 There are a variety of effective ways to deliver the skin cancer awareness message. Examples include:

- in rural and remote areas by sharing information on a face-to-face basis through community organisations, such as the Country Women's Association of Australia, Men's Sheds and clubs and other community groups;[41]

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38 Dr Jeanette Ward, Acting Regional Medical Director, WA Country Health Service, Kimberley *Official Committee Hansard,* Broome, 2 May 2014, p. 3 and WA Country Health Service—Kimberley, *Submission 44*, p. 2.

39 Skin Cancer College Australasia, *Submission 21*, p. 4.

40 Professor Jon Emery, Professor of Primary Care, Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 32.

41 National Rural Health Alliance, *Submission 7.1*, p. 4.

- via the media, such as TV, radio, print and social media,[42] magazines[43] and the internet.
- signage, such as messages on buses, billboards, and public transport shelters,[44] and on common items such as fridge magnets, pens, and beer coasters;[45]
- interactive kiosks in pharmacies coupled with awareness brochures, and advice and follow-up communication from the pharmacist;[46] and
- activities, such as the March against Melanoma, and Healthy Skin Awards.[47]

Awareness Campaigns in the Workplace

3.39 Safe Work Australia identified farmers, plumbers, animal and horticultural workers, painters, handy persons, heavy vehicle drivers, and miners as being occupations at risk of skin cancer.[48] Further, the construction industry is another sun-exposed industry which by its nature, is at a greater risk of skin cancer.

3.40 The National Rural Health Alliance highlighted the risk of skin cancer for rural men and women and drew attention to the statistics for farmers. The National Rural Health Alliance stated:

> The incidence of melanoma is higher for country than city men, with farmers having a 60 per cent higher death rate due to melanoma and other malignant skin cancers than the general population. Skin cancer deaths in farmers 65 years of age and over are more than double the rate of other Australians.[49]

3.41 Delivering awareness campaigns in rural and remote areas therefore requires a different strategy, especially for rural men who tend to have a reluctance to attend their doctors for initial consultation or follow-ups.[50]

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42 Skin & Cancer Foundation Inc, *Submission 9*, p. 11.

43 Mrs Joanne Crotty, Awareness Education Manager, Danger Sun Overhead, Melanoma Patients Australia, *Official Committee Hansard,* Brisbane, 22 May 2014, p. 14.

44 Hunter Melanoma Foundation, *Submission 51*, p. 6.

45 Ms Jenny Noblet, Executive Officer, Hunter Melanoma Foundation, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 13.

46 Mr Mark Douglass, National Councillor, The Pharmacy Guild of Australia, *Official Committee Hansard,* Sydney, 5 September 2014, p. 20.

47 Skin & Cancer Foundation Inc, *Submission 9*, p. 11.

48 Dr Jenny Job, Director, Research and Evaluation, SafeWork Australia, *Official Committee Hansard,* Canberra, 28 July 2014, p. 9.

49 National Rural Health Alliance, *Submission 7*, p. 3.

50 National Rural Health Alliance, *Submission 7.1*, p. 4.

3.42 Further, in regard to raising skin cancer awareness in rural and remote areas the Royal Flying Doctor Service stated:

> … less time is spent in doctor's surgeries or similar where promotional material might be displayed, and there is often limited availability of media where awareness raising campaigns might be run.[51]

3.43 The National Rural Health Alliance commented that the standard ways of delivering health promotion campaigns such as through television advertisements, radio campaigns and billboards did not 'suit the means by which rural people tend to receive communications'. To engage with country people it was good to go to 'country shows and field days and to pubs and sports clubs'.[52]

3.44 Rural men's health could also be promoted indirectly through community groups such as the Country Women's Association of Australia. Members of the Country Women's Association of Australia could encourage and inform 'the men in their lives [to] regularly consult with health professionals'.[53] Health messages could also be included in country magazines which farmers will always look through during their work breaks.[54]

3.45 Professor Jon Emery cautioned that public awareness campaigns need to balance raising awareness among the complacent and raising anxiety among the informed, and stated:

> … there is always that balance between how much you raise anxiety in those who have a generally high awareness around the symptoms against those who are much more complacent in general. That is always the challenge with these public health campaigns.[55]

Health Practitioner Awareness

3.46 In Australia the 'vast majority of skin cancers' are diagnosed by general practitioners,[56] so it is these health professionals in particular who are in a

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51 Royal Flying Doctor Service, *Submission 34*, p. 3.

52 Mr Gordon Gregory, Executive Director, National Rural Health Alliance, *Official Committee Hansard,* Canberra, 25 March 2014, p. 3.

53 National Rural Health Alliance, *Submission 7.1*, p. 4.

54 Mrs Joanne Crotty, Awareness Education Manager, Danger Sun Overhead, Melanoma Patients Australia, *Official Committee Hansard,* Brisbane, 22 May 2014, p. 14.

55 Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 35.

56 Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 31.

position to have a 'key role in the prevention of skin cancer' by patients who are at high risk of melanoma. Professor Jon Emery explained:

> …in Australia GPs diagnose the vast majority of skin cancers. Approximately one per cent of all GP consultations are for non-melanoma skin cancer. GPs play a key role in the prevention of skin cancer and identifying patients who are at high risk of melanoma. There are only very specific subgroups of patients for whom total regular skin examination is actually recommended, and yet it is a practice that is happening very widely in the population at average risk. But the college and the [National Health and Medical Research Council] have very clear guidelines around which patients regular skin examination is actually appropriate for, and GPs play an important role in identifying those patients.[57]

3.47 As mentioned by Professor Jon Emery, the Guidelines (referred to by GPs) encourage timely diagnosis of high risk groups in the population and also raising awareness for such individuals. The Guidelines state:

> It is reasonable to posit that successful and timely diagnosis of melanoma will be enhanced if clinicians are aware of high-risk groups in the population, and that people in these groups are aware of their status.[58]

3.48 More specifically, the Guidelines provide assistance to GPs to consider in identifying individuals at risk and state:

> Clinical assessment of future risk of melanoma [should] take into account:
>
> - person's age and sex
> - history of previous melanoma or non-melanoma skin cancer
> - number of naevi (common and atypical)
> - family history of melanoma
> - skin and hair pigmentation
> - response to sun exposure
> - evidence of actinic skin damage.[59]

3.49 The increased risk of developing melanoma for people with a history of skin cancer was highlighted by Professor Rodney Sinclair who stated:

> If you get a [basal cell carcinoma] at 25 your risk of getting a melanoma is increased by a factor of 100 … that means your risk of

57 Professor Jon Emery, Professor of Primary Care Cancer Research, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 31.

58 *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand*, p. 15.

59 *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand*, p. 17.

> getting a melanoma is 300 per cent. It is not a matter of when you are going to get your melanoma or if you are going to get your melanoma, but how many melanomas are you going to get.[60]

3.50 The Guidelines recommend that:

> Individuals at high risk of melanoma and their partner or carer be educated to recognise and document lesions suspicious of melanoma, and to be regularly checked by a clinician with six-monthly full body examination supported by total body photography and dermoscopy as required.[61]

3.51 Dr Helena Rosengren explained why regular skin checks by doctors is important and stated:

> The important thing for most of these patients is not the melanoma that has just been excised, because, as I say, generally it is early, it is detecting the second one. Once one melanoma has been detected, patients often think that is what a melanoma looks like. So part of my education is actually to show them pictures of the different range of what melanomas can look like. Yes, there are the flat, dark ones. But there are also the pimply looking ones, the more reddish ones—there is a whole array of different presentations. My findings have shown that patients are not so good at picking up the second melanoma, because they have the picture stuck in their mind of what the first one looked like. That is why it is very important that we, as doctors, do the skin checks for them and look at the scar from the first excision and also check lymph nodes, where we are dealing with an invasive melanoma.[62]

3.52 Dr David Whiteman considered the advice provided in the Guidelines to be 'well intentioned', but commented that putting them into practice was 'not straightforward since there are no validated clinical tools for reliably identifying patients at high risk of skin cancer. Instead, clinicians must make subjective assessments of risk'.[63]

3.53 Dr David Whiteman added that while there were a number of published risk prediction tools for melanoma, very few had been validated as they

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60 Professor Rodney Sinclair, Professor of Dermatology, University of Melbourne, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 44.

61 *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand*, p. 18.

62 Dr Helena Rosengren, Principal, Skin Repair Skin Cancer Clinic, Townsville, *Official Committee Hansard,* Cairns, 23 May 2014, p. 34.

63 Dr David Whiteman, *Submission 3*, p. 7.

had been 'developed from small datasets sampled from low incidence populations'.[64]

3.54 The Queensland Institute of Medical Research Berghofer Cancer Research Centre was conducting a prospective 10 year research program following 43 794 people through their Medicare records looking for the development of skin cancer. The aim is to develop 'accurate and valid tools' for Australian patients and doctors to assess future risks of keratinocyte cancers and melanomas.[65]

3.55 Dr David Whiteman added that:

> Such data are essential if the Australian guidelines are to be followed. Our study will provide one source of data, but will need to be replicated by other studies using other patient samples to ensure validity.[66]

3.56 Despite this, people at lower risk of developing skin cancer can also develop the disease,[67] so it is important for general practitioners to not only be aware of risk factors but also be able to recognise skin cancer lesions when presented.

Role of Medical and Allied Health Professionals and Others in Diagnosis

3.57 There are a broad range of individuals and organisations who have a role in the early diagnosis of skin cancer—from trained clinicians to non-professionals who facilitate others in diagnosing skin cancers.

General Practitioners

3.58 As a GP 'is the doctor of first contact and has an ongoing relationship with his/her patients, [they] are therefore key to early diagnosis and treatment of skin cancer'.[68]

3.59 The Department of Health stated that 'the diagnosis and management of skin cancer is a core competency of general practitioners' who may treat the skin cancer themselves or make an appropriate referral for treatment'.[69] The Skin & Cancer Foundation Inc commented that the advantage of raising skin cancer concerns with GPs was their ability to

64 Dr David Whiteman, *Submission 3*, p. 7.

65 Dr David Whiteman, *Submission 3*, p. 7.

66 Dr David Whiteman, *Submission 3*, p. 7.

67 Mr Clinton Heal, Chief Executive Officer, Melanoma WA, *Official Committee Hansard,* Perth, 1 May 2014, p. 26.

68 Royal Australian College of General Practitioners, *Submission 10*, p. 3.

69 Department of Health, *Submission 12*, p. 11.

take a general history, and understand the familial background of the patient.[70]

3.60 The Therapeutic Goods Administration stated that the very high prevalence of skin cancer in Australia has led to GPs who are 'very well trained and versed in the detection and management of skin cancer … [and] is part of the reason for' Australia's 'rates of survival from melanoma in particular but also those 400-odd thousand non-melanoma skin cancers [that are estimated to] occur every year'.[71]

3.61 The Hunter Medicare Local, however, drew attention to challenges faced by GPs in screening, diagnosing and managing skin cancer in the primary care setting. Referring to work published in the *Australian Family Physician*,[72] the Hunter Medicare Local stated:

> … While many GPs have become expert in performing skin checks, others feel anxious. Factors that can contribute to GPs feeling anxious include; confusingly named benign skin lesions, the variability in clinical presentation of skin cancer, concern about missing a skin cancer, desire to reduce the number of benign skin lesions excised and limited access to specialist backup, especially for those working in rural and remote settings.[73]

Specialists

3.62 GPs unsure of a skin lesion diagnosis may refer the patient to one of the 454 practising dermatologists in Australia.[74] To become a specialist dermatologist—a Fellow of the Australian College of Dermatology—requires 'successful completion of 4 [full time equivalent] years in accredited training positions (public hospital and private practice days) and examinations'.[75]

3.63 The Australasian College of Dermatologists cited four studies which showed that dermatologists were more accurate in diagnosing melanoma than non-dermatologists. The Australasian College of Dermatologists stated:

> … in Australia a study of GPs and skin cancer clinic doctors indicated that the average number of biopsies required for

70 Mr Chris Arnold, Executive Director, Skin & Cancer Foundation Inc, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 12.

71 Dr Anthony Hobbs, Principal Medical Adviser, Therapeutic Goods Administration, Department of Health, *Official Committee Hansard,* Canberra, 28 March 2014, p. 9.

72 *Australian Family Physician*, 2012: 41(7): pp. 464–69.

73 Hunter Medicare Local, *Submission 54*, p. 3.

74 Australasian College of Dermatologists, *Submission 15*, p. 1.

75 Australasian College of Dermatologists, *Submission 15*, p. 1.

> identification of one melanoma was 30. This compared with dermatologists who required 12 excisions in one study and only 4 in another for identification of 1 melanoma. This translates to greater efficiency in the diagnosis of melanoma, evidenced by reduced number of unnecessary biopsies and hence reduced costs. Importantly, it also means diagnosis of thinner lesions and thus overall improved melanoma survival rates. The implication for mortality is important but later diagnosis will likely result in greater cost burden and loss of productive years.[76]

Skin Cancer Clinics

3.64 As noted earlier there is limited time during a standard GP consultation for a full skin cancer check as a secondary purpose for visiting, especially if the issue is raised towards the end of the visit.[77] In addition, the long waiting times to see dermatologists, and the cost and availability of dermatologists in rural areas has led to the emergence of skin cancer clinics over time. HealthCert International explained how skin cancer clinics have developed and stated:

> … the skin cancer clinic doctor model, evolved as a consequence of long waiting lists to see specialists combined with their limited geographical distribution and associated cost of consultation and or associated treatment. Beginning in the late 1990s skin cancer clinics grew to become a staple of skin cancer management in Australia.
>
> GPs with a special interest in skin cancer … filled the void between GPs who do not have the skills to manage more complex skin cancers, and dermatologists who have the skills but long waiting lists.[78]

3.65 Dr Helena Rosengren advocated for the use of skin clinics for people wishing to get skin checks because local GPs were 'not frequently offering complete checks'. They were good at looking at individual legions and at diagnosing and non-melanoma skin cancer, but Dr Rosengren suggested GPs fell down in identifying 'the rarer presentations for melanoma, such as nodular melanomas—things that look like little pimples, pink things et cetera'.[79] Dr Rosengren cited research showing that GPs 'who

76 Australasian College of Dermatologists, *Submission 15*, p. 4.

77 Dr Brett Morrison, Local Medical Officer, Molescan Skin Cancer Clinics, *Official Committee Hansard,* Cairns, 23 May 2014, p. 2.

78 HealthCert International, *Submission 43*, p. 7.

79 Dr Helena Rosengren, Principal, Skin Repair Skin Cancer Clinic, Townsville, *Official Committee Hansard,* Cairns, 23 May 2014, p. 34.

subspecialise in skin cancer have a higher use of dermatoscopy and diagnose melanoma with greater accuracy than their generalist counterparts'.[80]

3.66 Dr Siaw Ho commented that clinic doctors 'have also decided to undertake extra training in this area [the management of skin cancer] to be more effective and competent in the area of diagnosis and treatment of skin cancers'.[81] Dr Felix Choi also advised that it was much easier to manage skin cancers from a dedicated practice:

> Many procedures can be done on the spot reducing time and need for multiple bookings. Having other colleagues who are also working there allows for more opinions about suspicious lesions.[82]

3.67 The Victorian Department of Health drew attention to criticism of skin cancer clinics by the Australasian College of Dermatologists and the Australian Society of Plastic Surgeons regarding 'diagnostic performance and appropriate patient management within skin cancer clinics of both overtreatment and under treatment issues'.[83] The Royal Australian College of General Practitioners, however, stated that 'general practice delivers care very effectively and efficiently and certainly just as, if not more, effectively than specialist skin clinics'.[84]

3.68 The Skin & Cancer Foundation Inc was concerned that there is a developing number of skin cancer clinics which are not staffed by (skin cancer specialist) dermatologists or plastic surgeons, 'but rather by GPs with limited skills and experience'.[85] The Skin & Cancer Foundation Inc stated:

> The emergence of this practice is market-driven. There is an increased awareness of the risk of skin cancer, the need for regular checks, especially in the later age groups where skin cancer is prevalent. It is important for the GP to have some basic skills that would take the load off dermatologists and plastic surgeons for these routine cases. It is really valuable that they also have the skills to detect and assess, and provide treatment for the simple

80 Dr Helena Rosengren, Principal, Skin Repair Skin Cancer Clinic, *Submission 48*, p. 1, citing Rosendale C I at al., *The impact of sub specialisation and dermatoscopy use on accuracy of melanoma diagnosis among primary care doctors in Australia* in Journal of the American Academy of Dermatology, 2012 November; 65 (5), pp. 846–52.

81 Dr Siaw Ho, *Submission 46*, p. 2.

82 Dr Felix Choi, *Submission 18*, p. 2.

83 Victorian Department of Health, *Submission 22*, p. 2.

84 The Royal Australian College of General Practitioners, *Submission 10*, p. 4, citing Youl P H et al, *Diagnosing skin cancer in primary care: how do mainstream general practitioners compare with primary care skin cancer clinic doctors?*, in Medical Journal of Australia 2007; 187 (4): pp 215–20.

85 Skin & Cancer Foundation Inc, *Submission 9*, p. 10.

> cases. And it is critical that they know when to refer to a skin specialist….But it is wrong for some to market themselves as specifically trained skin cancer specialists or experts when they are not.[86]

3.69 Dr Jonathan Levy, a GP, was of the view that there are many assumptions made by the specialist groups as to the skills and levels of experience in the area of skin cancer diagnosis by GPs. Dr Levy also highlighted that many GPs were highly skilled surgeons overseas and some have other relevant experience before they became GPs. Further, across the professional spectrum Dr Levy added that 'in ALL craft groups there are those who excel in some areas or are merely adequate (or less) in others'. Dr Jonathan Levy stated:

> … Many GPs were highly skilled surgeons overseas, some were dermatology or plastics trainees here and still others have vast surgical experience both via hospital training or rural general practice exposure.
>
> … However, none of this is seen; the assessment of my ability is predicated *solely* upon my membership of the General Practice craft group.
>
> … That GPs are unable to manage anything more than basic skin cancer is clearly a fallacy as if it was asserted that *all* Dermatologists did good surgery or Plastic surgeons were *all* good skin cancer diagnosticians. These assertions are patently absurd…..as is the first.[87]

3.70 Dr Paul Fishburn suggested there needed to be a process whereby the public could assess the likely competency of skin cancer clinic doctors. Dr Fishburn suggested that to ensure that skin cancer clinic doctors were of a competent standard there 'could be a requirement to have completed Fellowship of the Skin Cancer College Australasia, or pass the Master of Medicine (Skin Cancer) degree program to achieve accreditation'. Dr Fishburn added that the Australian Medical Council should consider accrediting the Skin Cancer College Australasia because it was well placed to provide training, assessment, and accreditation of clinicians.[88]

3.71 HealthCert International commented that the National Health Service in the UK in 2000 had recognised the challenge of a short supply of

86 Skin & Cancer Foundation Inc, *Submission 9*, p. 10.

87 Dr Jonathan Levy, *Submission 31*, pp. 1, 2.

88 Dr Paul Fishburn, *Submission 57*, p. 3.

specialists by introducing the 'GP with a Special Interest' (GPwSI). HealthCert International explained:

> These GPs had to undertake additional university certified professional development and participate in continuous professional development. The GPwSI in Dermatology became a recognised additional layer of care and a resource for dermatologists. The GPwSI facilitated a reduction in waiting lists by taking ownership and management of the lower level skin cancer cases.[89]

3.72 Newcastle Skin Check, a private skin cancer clinic, acknowledged that 'not all doctors working at a skin clinic have necessarily undergone more training' which lent weight to criticisms that the public misperceived they were seeing a skin cancer specialist or expert when they visited a skin cancer clinic. The Newcastle Skin Check also stated 'there does need to be regulation of practice standards and recognition of further training'.[90]

3.73 Professor Claire Heal also supported the view that skin cancer clinics should be accredited.[91]

Allied Health Professionals

3.74 The Skin & Cancer Foundation Australia suggested that besides GPs and specialists, allied health professionals such as physiotherapists, podiatrists and occupational therapists, 'should be formally trained and regularly updated … in the detection of skin cancers, as well as identifying high-risk patients'.[92] This view was supported by Dr Siaw Ho.[93]

3.75 The National Rural Health Alliance drew attention to a current Commonwealth-funded training program for registered nurses, *A Nurse Led Skin Cancer Screening Program – Contributing to Health Reform*. Under the program, 11 registered nurses across Australia had been trained to refer suspicious skin lesions to appropriate medical specialists and to provide health education on skin cancer prevention.[94]

3.76 The Sunspot Skin Cancer Clinic suggested that paramedical services such as physiotherapy, the chiropractors and nursing services as well as pharmacies could provide its Spotcheck service to the public. The Sunspot Skin Cancer Clinic explained how its Spotcheck worked and stated:

89 HealthCert International, *Submission 43*, p. 8.

90 Newcastle Skin Check, *Submission 55*, p. 4.

91 Professor Claire Heal, Associate Professor, James Cook University, *Official Committee Hansard,* Cairns, 23 May 2014, p. 28.

92 Skin & Cancer Foundation Australia, *Submission 17*, p. 3.

93 Dr Siaw Ho, *Submission 46*, p. 2.

94 National Rural Health Alliance, *Submission 7.1*, p. 2.

> The Spotcheck service involves a customer entering a pharmacy and having an image taken of a lesion of concern. Both an overview image and a dermatoscopic (magnified with glass plate contact) image are taken. Along with a brief clinical history, the images are then transmitted to a secure server where medical practitioners with training in dermatoscopy can interpret the images and suggest a diagnosis and plan of action. The customer receives a report within 24 hours, and often within 2-3 hours.[95]

3.77 In describing Spotcheck, the Sunspot Skin Cancer Clinic emphasised that it recognised 'the limitations of this service, and regarded it as an adjunct to the full skin check rather than a replacement'.[96]

3.78 The Pharmacy Guild of Australia advised that there were more than 50 pharmacies in Western Australia who were using Spotcheck. The Pharmacy Guild of Australia stated:

> This service commenced in February 2014 and uses smart phone technology and a password protected secure 'app' to allow a trained staff member to take a photograph of up to 3 'spots' including sunspots, moles and freckles, at a cost to the consumer of up to $65 depending on the number of areas assessed … If a consumer identifies that they require more than three areas assessed, they will be referred for a comprehensive skin check by an appropriate health professional.[97]

3.79 The Pharmacy Guild of Australia commented that similar systems were being operated by Boots Pharmacies in Europe with more than 80 pharmacies participating, and in New Zealand where the technology was called 'Molemap'.[98]

3.80 The Pharmacy Guild of Australia stated that its role is to pick up those people who are being missed because not everyone wants, can afford or has time to go to a GP.[99] This view was supported by the Chemmart Pharmacy which offers the Spotcheck service.[100]

3.81 The Pharmacy Guild of Australia advocated that there should be training for those operating the Spotcheck technology and stated:

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95 Sunspot Skin Cancer Clinic, *Submission 13*, p. 2.

96 Sunspot Skin Cancer Clinic, *Submission 13*, p. 2.

97 The Pharmacy Guild of Australia, *Submission 30*, p. 2.

98 The Pharmacy Guild of Australia, *Submission 30*, p. 2.

99 Mr Mark Douglass, National Councillor, The Pharmacy Guild of Australia, *Official Committee Hansard,* Sydney, 5 September 2014, p. 17.

100 Mr Jonathan Layton, Executive Director, Chemmart Pharmacy, *Official Committee Hansard,* Melbourne, 6 June 2014, p. 28.

> I think any diagnostic or any collaborative relationship with anyone that you are working with should be independently certified, and the training should be applied … there should be independent certification, it should be robust …[101]

3.82 The Lions Cancer Institute was concerned that the pharmacy-based cancer screening was not a full-body check and could provide a false sense of security and stated:

> One example that I have personal knowledge of is now available through one Pharmacy group who are promoting checking three (3) spots for $35-00. Several of those patients have been through the Lions screening units and lesions have been found that were not checked.
>
> … from discussions with those who have used the service it would appear that the check offered is self-selective, not full body and when the patient receives the all clear on those photos they believe they are not at further risk.[102]

Others

3.83 Non government and community groups can become involved in diagnosis or awareness campaigns through sponsorship or facilitating a service.

3.84 The Lions Cancer Institute has conducted screening services in rural and remote areas in conjunction with the local Lions Clubs. The local clubs advertise and take bookings for screenings. Trips to rural and remote areas usually last four to five weeks with screening staff changed weekly. The cost, excluding some accommodation and meals, for each mobile unit is just under $50 000.[103]

3.85 The Lions Cancer Institute noted that 'demand always exceeded availability' and described how its mobile units operated:

> The mobile unit with experienced screeners can screen ninety (90) people per day, this figure will be reduced if a number of serious lesions are detected as screeners will usually seek a second opinion and will need time to ensure that patient understands the necessity to visit their nominated GP as soon as possible.[104]

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101 Mr Mark Douglass, National Councillor, The Pharmacy Guild of Australia, *Official Committee Hansard,* Sydney, 5 September 2014, p. 17.

102 Lions Cancer Institute, *Submission 41*, p. 2.

103 Lions Cancer Institute, *Submission 41*, p. 2.

104 Lions Cancer Institute, *Submission 41*, p. 2.

3.86 The Lions Cancer Institute recounted that in 2010 a trip to the Western Australia Goldfields:

> … the mobile unit screened 1,517 patients, 328 of whom were referred to their nominated GP's with 427 suspect lesions for further investigation. Of those 427 lesions, 304 were considered possible life threatening.[105]

3.87 Melanoma WA supported the Lions Cancer Institute's activities commenting that cancer screening had occurred during the Melanoma March in 2014 in Karratha; Onslow with the Wheatstone Project; and Bunbury. Forty three people had had their skin checked with eight categorised as having life threatening lesions.[106]

3.88 As noted earlier WACHS—K was critical of the value of the skin check clinic offered independent of the regular primary health care system. WACHS-K recommended that any visiting service to the Kimberley, such as that provided by the Lions Club, should at an early stage communicate with the Regional Director and relevant managers of primary health care 'to complement local priorities and ensure the capacity of the ongoing primary care system to accommodate visiting initiatives'.[107]

Technology and Techniques

3.89 Accuracy of diagnosis is important in screening for skin cancer. Not only should cancers be detected, but also harmless abnormalities should be identified to minimise patient concern and reduce unnecessary procedures. To this end it is important that the most appropriate technology and techniques be used.

Dermatoscopes

3.90 Dermatoscopes[108] are used to examine suspicious skin lesions. They consist of a times 10 magnifier and a light source. Older types of dermatoscope have a liquid medium between the instrument and the skin and use non-polarised light (the liquid minimises skin surface reflections). Recent dermatoscope dispense with the liquid and use polarised light. Dermatoscopes:

> … are now of a suitable quality that the device brightness is comparable with the oil immersion instruments. They are more

105 Lions Cancer Institute, *Submission 41*, p. 3.

106 Mr Clinton Heal, Chief Executive Officer, Melanoma WA, *Official Committee Hansard,* Perth, 1 May 2014, p. 27.

107 WA Country Health Service—Kimberley, *Submission 44*, p. 2.

108 A 'decent quality' dermatoscope costs between $1200 and $1500, Dr Anthony Azzi, Director, Newcastle Skin Check, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 4.

expensive, however they are more versatile, smaller and lighter, and multiple lesions can be examined quickly without the need for interface fluid application. Newer devices have an extendable faceplate for use with interface fluid if needed; this can improve the image quality.[109]

Figure 3.1 Dermatoscopes

3.91 The Skin Cancer College Australasia highlighted the improvements in diagnostic accuracy which could result from the use of a dermatoscope:

- Doctors not trained in dermoscopy will excise up to 30 moles to diagnose one melanoma.
- Doctors experienced in dermoscopy cut less than 10 moles to diagnose one melanoma …
- Doctors trained in dermoscopy will find more melanomas at an earlier stage with fewer unnecessary excisions/histology i.e. they can improve health outcomes and save the government money.[110]

3.92 The Newcastle Skin Check advised that the Skin Cancer College Australasia and HealthCert International provided training in the use of the dermatoscope and stated that it is the frequency of use which determines how quickly skills are improved.[111] The Newcastle Skin Check stated:

109 Dermascopy.com.au, *Dermoscopy Frequently Asked Questions*, http://www.dermoscopy.co.uk/faq.html, viewed November 2014.

110 Skin Cancer College Australasia, *Submission 21*, p. 3.

111 Dr Alister Lilleyman, Director, Newcastle Skin Check, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 4.

> To be competent takes weeks, to be good takes months, and to be an expert takes years.[112]

3.93 HealthCert International pointed to a European study which followed the outcomes of a single day training course in skin cancer detection and the use of the dermatoscope delivered to 73 GPs. The study tracked the GPs over a 16 month period during which the GPs examined 2522 patients. HealthCert stated:

> The study found that doctors performing naked eye observations missed 23 malignant skin [lesions] but doctors using dermatoscopes missed only six without increasing the number of unnecessary expert consultations.[113]

3.94 Professor Scott Menzies advocated the use of sequential digital dermoscopy imaging (SDDI) where a sequence of images could be used to detect change. This would detect melanomas that experienced a change in appearance. Professor Menzies stated that SDDI 'in combination with dermoscopy reduced excisions/referrals of benign pigmented lesions by 64 percent in Australian primary care physicians'. There was also a near doubling of sensitivity—the percentage of correctly diagnosed true melanomas.[114]

Digital Communications Technology

3.95 The use of digital communications technology has enabled health practitioners, especially those in rural and remote areas, to access specialist services. In 2011, Medicare Australia introduced *Telehealth*, a program which provided financial incentives to eligible practitioners to facilitate patients to videoconference with a specialist.[115] The Skin & Cancer Foundation Inc stated that, unfortunately, insufficient use of this technology was being made by rural and remote GPs and that 'only very limited take-up has been seen by dermatologists'.[116]

3.96 Teledermatology, for example Tele-Derm[117], which allows rural doctors to submit digital images of affected skin and history to an experienced dermatologist. The dermatologist then reports back to the doctor 'usually

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112 Newcastle Skin Check, *Submission 55*, p. 3.

113 HealthCert International, *Submission 43*, p. 5.

114 Professor Scott Menzies, *Submission 56*, p. 1.

115 Victorian Department of Health, *Submission 22*, p. 2-3.

116 Skin & Cancer Foundation Inc, *Submission 9*, p. 10.

117 'Tele-Derm is an online resource, administered by the Australian College of Rural and Remote Medicine. Tele-Derm is 'designed primarily for rural doctors interested in obtaining practical advice on the diagnosis and management of skin disease in general practice'. National Rural Health Alliance, *Submission 7*, p. 15.

within two days with diagnosis and/or treatment options.[118] This technology can be referred to as 'store and forward teledermatology' and is similar to that employed by Spotcheck but is designed for GPs.

3.97 Teledermatology does not have a Medicare Benefits Schedule (MBS) item number so there is no funding made available to the referring doctor.[119]

3.98 The National Rural Health Alliance drew attention to the debate surrounding the use of teledermatology:

> Some experts believe that because of the highly-visual nature of the specialty, most skin conditions can be diagnosed from an image, especially if there is some history available. Such opinions suggest that dermatological treatments can be instituted and monitored by practitioners without any specialist training, making telemedicine an ideal solution.
>
> Contrary views are held by some medical practitioners, particularly specialists, who believe that the best medical assistance for diagnosing skin cancers entails face-to-face consultations between doctors/specialists and patients, where clinicians can study lesions and surrounding skin and access a patient's history.[120]

3.99 The Victorian Department of Health advised that the Commonwealth Department of Health had identified store and forward teledermatology as 'a viable and economic solution for doctors in rural and remote areas to access professional specialist opinions to assist in providing services to the patient'.[121] The National Rural Health Alliance suggested that the technology was also useful for immobile nursing home patients who had difficulties in accessing specialists.[122]

Future Directions

3.100 Dr Anthony Azzi identified some of the future directions in computer software and technology for undertaking analysis of skin lesions. Dr Azzi stated:

> You take a photo and the software will do an analysis of the likelihood of this lesion being a melanoma. There are new programs being developed at the moment with machines that measure the electrical impedance through a lesion to give you a

118 National Rural Health Alliance, *Submission 7*, p. 15.
119 Victorian Department of Health, *Submission 22*, p. 3.
120 National Rural Health Alliance, *Submission 7* p. 16.
121 Department of Health, Victoria, *Submission 22*, p. 3.
122 National Rural Health Alliance, *Submission 7* p. 16.

> likelihood of whether or not it is abnormal. There are other machines that look through images and slice through the skin as if you are putting it under the microscope so that you can actually look at the cells. There is one in development at the moment at the University of Queensland … but it is another system where you apply an instrument to the skin and it looks at the likelihood of this being a melanoma.[123]

3.101 Computer systems are expensive and bulky when compared to dermatoscopes. Image resolution may be a factor as well as the limitations of the software. Further, lesions have to be first selected by an operator for examination.[124]

Training Primary Health Providers

3.102 The present level of GP training in Australia was described by Dr Paul Fishburn, who has written dermatology and skin cancer curricula.[125] Dr Fishburn was of the view that the Royal Australian College of General Practitioners Fellowship program had limited training relevant to skin cancer and stated:

> … dermatology training was limited to a couple of hours discussion with supervisors. There was no formal training, nor examination in the use of dermoscopy within [Royal Australian College of General Practitioners] training. This adds the requirement for GP's to attend post-graduate courses in order to become proficient at dermoscopy.[126]

3.103 The Hunter Medicare Local stated that it was 'recognised that dermatology training for medical students in Australia is considered poor by international standards'. The Hunter Medicare Local supported increased training for medical students on performing skin cancer checks.[127] This view was also supported by Dr Felix Choi,[128] and the Newcastle Skin Check.[129]

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123 Dr Anthony Azzi, Director, Newcastle Skin Check, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 18.

124 Dermascopy.com.au, *Dermoscopy Frequently Asked Questions*, http://www.dermoscopy.co.uk/faq.html, viewed November 2014.

125 Dr Paul Fishburn, *Submission 57*, p. 1.

126 Dr Paul Fishburn, *Submission 57*, p. 2.

127 Hunter Medicare Local, *Submission 54*, p. 3.

128 Dr Felix Choi, *Submission 18*, p. 1.

129 Newcastle Skin Check, *Submission 55*, p. 4.

3.104 Dr Paul Fishburn listed six organisations providing post graduate training in skin cancer,[130] and added that there is formal training and examination required to achieve Fellowship of the College of Dermatologists and the Skin Cancer College Australasia.[131]

3.105 HealthCert International advocated compulsory once-off training for GPs in dermatoscopy and extended to nurses operating in rural Australia.[132] The Skin & Cancer Foundation Australia supported the formal training of doctors with regular updates in the detection of skin cancers as well as identifying high-risk patients.[133] This view was also supported by Newcastle Skin Check.[134]

3.106 The Australian Melanoma Research Foundation suggested that a strategy to promote the early diagnosis of skin cancers could be 'better web based education modules for GPs, medical students and specialist groups'.[135]

3.107 The Cancer Council Australia advised that it planned to 'integrate educational modules into online clinical practice guidelines [developed] to support implementation and uptake, and reinforce content knowledge among clinicians'.[136]

Concluding Comment

Screening

3.108 The Committee endorses the current skin cancer screening strategies. General population screening would be prohibitively expensive and would place high demands on those undertaking the screening. Also, it may not improve outcomes given the current opportunistic and targeted screening strategy.

3.109 The Committee has received evidence of several campaigns promoting the need for skin cancer checks. These differ in aspects of their message and modes of delivery. The Committee notes the debate on whether to include images of cancers and which skin lesion images are appropriate.

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130 College of GP and College of Dermatologists Diploma; Master of Medicine (Skin Cancer) University of Queensland; Skin Cancer College of Australasia Diploma Dermoscopy and Skin Cancer; HealthCert/University of Queensland Weekend Courses; Skin Cancer Foundation Victoria; Skin and Cancer Foundation New South Wales.

131 Dr Paul Fishburn, *Submission 57*, p. 3.

132 HealthCert International, *Submission 43*, pp 2, 4.

133 Skin & Cancer Foundation Australia, *Submission 17*, p. 5.

134 Newcastle Skin Check, *Submission 55*, p. 4.

135 Australian Melanoma Research Foundation, *Submission 33*, p. 2.

136 Cancer Council Australia and the Clinical Oncology Society of Australia, *Submission 26*, p. 2.

3.110 Several witnesses supported the suggestion that a note reminding people to seek a skin cancer check be included in the bowel cancer screening invitation letter.[137]

3.111 Currently, the bowel cancer screening program is being progressively expanded and by 2020 will become a biennial screening program. At this date 'approximately four million eligible Australians will be invited annually' to have a bowel cancer check.[138] People aged 50 and over are being targeted by the screening program and this group is also at increased risk of developing skin cancer. It would be opportune and cost effective to remind people to seek a skin cancer check when letters are sent as part of the National Bowel Cancer Screening Program. The Committee also believes there is an opportunity for information to be provided by general practitioners at health assessments of people aged 75 years or older.

3.112 The Committee notes the evidence from the Hunter Melanoma Foundation that there is no structure for sharing success stories,[139] and considers there is a need for a systematic review of the effectiveness of screening awareness campaigns.

Access to Medical Advice

3.113 The *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand* provide advice on identifying groups at high risk of developing skin cancer. The Committee welcomes the research undertaken by the Queensland Institute of Medical Research Berghofer Cancer Research Centre into quantifying the level of risk faced by an individual. While this research is necessarily long term in nature, there is an expectation that the research will result in a valuable tool for GPs.

3.114 There is debate about how best to provide medical services, whether through referrals to dermatologists, through skin cancer clinics, or a mix of both. Skin cancer clinics have developed in response to the increased

137 Professor Adele Green, Senior Scientist, Berghofer Institute, *Official Committee Hansard,* Brisbane, 22 May 2014, p. 26; Dr Helena Rosengren, Principal, Skin Repair Skin Cancer Clinic, *Official Committee Hansard,* Cairns, 23 May 2014, p. 33; Mr Shayne Connell, Regional Manager, Cancer Council, Hunter Central Coast Region, *Official Committee Hansard,* Sydney, 5 September 2014, p. 24; Associate Professor Pablo Fernandez-Penas, Head of Research and Education, Skin & Cancer Foundation Australia, *Official Committee Hansard,* Sydney, 5 September 2014, p. 30.

138 Department of Health, *National Bowel Cancer Screening Program,* http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/bowel-about, viewed November 2014.

139 Mrs Jenny Noblet, Executive Officer, Hunter Melanoma Foundation, *Official Committee Hansard,* Newcastle, 30 July 2014, p. 14.

demand for skin cancer checks and long waiting times to see dermatologists as well as cost, distance and time constraints.

Rural and Remote

3.115 Rural and remote areas of Australia pose particular challenges in combating skin cancer. Not only are there fewer specialist dermatologists, but the demographics and occupations in those areas create a higher risk profile.

3.116 The Committee recognises the role of pharmacies, especially those in rural and remote areas, in providing limited store and forward skin lesion evaluation services such as Spotcheck. The Committee, however, is concerned that the public might see such a service as a substitute for regular skin cancer check.

3.117 The Committee considers that the Pharmacy Guild of Australia should develop a protocol for pharmacies offering skin lesion checking services. This protocol should include the provision of written advice to customers on the limitations of the service and include a comment that the service is not a substitute for a complete skin check.

3.118 Another service of value in rural and remote areas is the provision of skin checks facilitated by organisations such as the Lions Club. These activities have undoubtedly contributed to the well-being of the local population.

3.119 The Committee is mindful, however, of the potential for additional demands being placed on local health services. The Committee therefore urges groups offering additional screening services, particularly in rural and remote areas, to liaise early in the planning stage with local health authorities to ensure efficient use of Health resources.

Use of New Technology and Medical Training

3.120 Particularly useful technologies for GPs with limited access to specialist dermatologists are the teleconference, and store and forward teledermatology. Store and forward technology[140] is also used by pharmacists for initiatives such as Spotcheck. While teleconferencing is covered by an MBS item number, store and forward teledermatology is not.

3.121 It is clear that the use of the dermatoscope is key to the early detection of skin cancers. All GPs should be required to attain proficiency in their use.

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140 'Store and forward teledermatology' is the process whereby the patient healthcare data and still digital images are captured by a clinician, the digital images and patient data are packaged as a case file and forwarded via a telecommunications (similar to email) service to a dermatologist.

3.122 The undergraduate medical curriculum is subject to competing demands of various disciplines and the Committee has come to the view that the dermatology component should be expanded. A dermatoscope in the hands of a well trained person has been shown to be a highly useful tool in accurate skin cancer detection. At the very least, therefore, training in the use of the dermatoscope should be included in the curriculum. This should also be the case for those training to be rural nurses.

Recommendation 4

3.123 **The Committee recommends that the Department of Health include information reminding people to seek a skin cancer check when letters are sent out as part of the National Bowel Cancer Screening Program and that information be provided by general practitioners at health assessments for people aged 75 years and older.**

Recommendation 5

3.124 **The Committee recommends that the Department of Health consider the effectiveness of public awareness campaigns to increase the awareness of the need for skin checks, especially strategies to target high risk groups.**

Recommendation 6

3.125 **The Committee recommends that the Royal Australian College of General Practitioners conduct an assessment of ways to provide firm assurance to the public concerning skin cancer clinics. The assessment should consider potential accreditation options as well as a requirement for such clinics to be staffed by a minimum number of suitably qualified and experienced staff including dermatologists.**

Recommendation 7

3.126 **The Committee recommends that store and forward teledermatology[141] as used by registered medical providers be included on the Medicare Benefits Schedule.**

Recommendation 8

3.127 **The Committee recommends that:**

- **Dermatology components of the undergraduate medical curriculum be expanded; and**
- **Proficiency in the use of the dermatoscope be included in the practical component of all undergraduate medical courses and in rural nursing training courses.**

Recommendation 9

3.128 **The Committee recommends that all sun-exposed industries incorporate mandatory sun-safety education in their induction programs.**

141 'Store and forward teledermatology' is the process whereby the patient healthcare data and still digital images are captured by a clinician, the digital images and patient data are packaged as a case file and forwarded via a telecommunications (similar to email) service to a dermatologist.