

*Standards for
melanoma professional education
in Australia*

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1. INTRODUCTION

1.1. Aim and scope

Several postgraduate educational programs are available to improve the ability of Australian doctors to detect and diagnose melanoma, manage uncomplicated primary melanoma, and appropriately refer patients with locoregional spread or metastatic disease.

This paper sets out standards for melanoma education programs that target medical practitioners, especially general practitioners (GPs), practitioners in skin–cancer clinics, and non–specialist practitioners who undertake the diagnosis and management of skin lesions.

The purpose of the standards is to enable education providers to ensure that their programs are designed and delivered in accord with the *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand*, as endorsed by the National Health and Medical Research Council (NHMRC).

It assumes that the target workforce:

- *Will* be involved in the prevention, detection and diagnosis of melanoma;
- *May* be involved in the definitive management of uncomplicated primary melanoma occurring in anatomical sites where adequate excision is straightforward;
- *May* be involved in the definitive management of thicker melanoma in anatomical sites where adequate excision is straightforward;
- *May* be involved in the management of locally invasive melanoma in difficult anatomical sites, melanoma that has spread locoregionally, or metastatic melanoma, usually as a member of a multidisciplinary team;
- *Will* be involved in the concurrent care of melanoma patients in other roles, e.g. as specialists in primary care.

The educational programs to which these standards refer must be distinguished from programs of advanced training and continuing education for general surgeons, plastic surgeons, surgical, medical and radiation oncologists, dermatologists and histopathologists. Different standards would be required for such programs.

1.2. The meaning of ‘standard’

In ordinary usage, the term *standard* refers to a level of quality or performance that is considered adequate or acceptable within a specific context, and can be used as a basis for comparison.

In the present context, a *standard* comprises a statement that defines a level of quality or performance that would be considered sufficient for a component of an Australian professional education program on melanoma. A standard may be *general*, referring to aspects of program organisation, or *content-specific*, referring to aspects of program curriculum and delivery.

This set of standards covers components of educational programs within the following broad categories:

- The education provider
- The education program
- Advisory structures
- Eligibility of participants
- Assessment
- Evaluation.

1.3. Intended users of the standards

The following are likely to be the main users of the standards:

- Institutions that deliver professional education on melanoma.
- Professional colleges and other bodies that accredit educational programs and/or credential individuals with responsibility for patient care.
- Potential program participants who wish to assure themselves of the quality of a professional education program on melanoma.

1.4. Melanoma education and Clinical Practice Guidelines

The NHMRC and the New Zealand Guidelines Group (NZGG) approved new *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand* on 31 October 2008¹. The *Guidelines* were jointly developed by the Australian Cancer Network, The Cancer Council Australia, the New Zealand Ministry of Health, the NZGG, the NSW Melanoma Network and the Cancer Institute NSW, with support from the NHMRC. In the absence of advice to the contrary, approval of the *Guidelines* is valid until 31 October 2013, or until emerging evidence necessitates amendments.

Logically, Australian educational programs on melanoma should be attuned to the evidence and recommendations presented in the *Guidelines*. Users of the standards are likely to be interested in ensuring that educational programs reflect the recommendations of the *Guidelines*, and to assess how well such programs prepare participants to practice in accordance with the *Guidelines*. Consequently, the content-specific standards are based on the *Guidelines*.

1.5. Methods for developing the standards

These standards were developed at the request of the NSW Melanoma Network. The development process involved the following steps.

First, the *Guidelines*¹ were reviewed to identify recommendations and practice points that came within the scope of the standards, i.e. aspects of the *Guidelines* that were relevant to general practice.

Second, the authors conducted a brief review of recent publications on trends in continuing professional development in medicine, including quality assurance and accreditation of professional development programs.

Third, the authors examined current requirements for continuing professional development and quality assurance in the Royal Australian College of General Practitioners², the Australian College of Rural and Remote Medicine³, the Royal Australasian College of Surgeons^{4,5}.

Fourth, the authors reviewed approaches to standard-setting used by the Australian Medical Council in accrediting medical schools⁶ and the Australian Quality Training Framework⁷. The latter provides a framework for State-based vocational education and training accreditation systems.

The standards were then drafted, drawing on the experience of one of the authors (MF) in the compilation of educational objectives for the graduate Medical Program in the Sydney Medical School. The authors found little in the existing literature or in the references^{2,5,6,7} that could inform the development of the standards for melanoma education.

Finally, the draft standards were reviewed by selected experts in general practice, the training of GPs, dermatology, the delivery of training in the detection and diagnosis of melanoma, and plastic surgery.

2. STANDARDS

2.1. Overview

The standards are grouped under the following headings:

- The education provider (section 2.2)
- The education program (2.3)
- Advisory structure (2.4)
- Eligibility of individuals to participate (2.5)
- Assessment of fulfilment of educational objectives (2.6)
- Evaluation and quality improvement (2.7).

Standards referring to educational objectives and curriculum content that relate directly to the *Guidelines* are given in section 2.3, which deals with the substance of the education program.

2.2. The education provider

2.2.1. Organisational base

The education programs to which the standards are intended to apply are mostly conducted by institutions such as university departments, divisions of general practice, clinical units and professional bodies. In some instances, programs are organised and managed by private-sector organisations, which usually draw on expertise from academia and specialist clinical units. The standards set out in sections 2.2.2, 2.2.3, 2.2.4 and 2.2.5 are intended to ensure that educational providers have the capacity to deliver postgraduate medical education with rigour and integrity.

2.2.2. Purpose or mission of the education provider

Standard: The education provider should have a written statement of its broad rationale for the delivery of melanoma education, and this rationale should refer to improving practice and/or patient outcomes in accordance with the *Guidelines*. The rationale should not conflict or compete with the overall mission and other functions of the education provider, and/or its parent organisation (where one exists).

For example, the statement could be worded as follows:

- 'The intent of the institution is to promote evidence-based practice in the prevention, diagnosis and management of melanoma, as set out in the *Clinical Practice Guidelines for the Management of Melanoma in Australia and New Zealand*' OR
- 'The intent of the institution is to enable medical practitioners who undertake the diagnosis and management of skin lesions to diagnose and treat melanoma in accordance with Australian best-practice recommendations.'

Standard: The education provider must ensure that its melanoma education curricula do not have an implicit or explicit commercial bias that focuses the training exclusively on the use of particular brands of products, e.g. devices or materia medica.

2.2.3. Institutional capability and facilities

Standard: The education provider should have an institutional base that is capable of:

- promoting specified programs to their target audiences;
- providing information on programs and answering questions from potential participants;
- registering participants;
- delivering defined, structured, intensive and accessible programs;
- delivering the programs that are specified in promotional materials;
- enabling participants to determine that they have acquired the requisite knowledge and skills; and
- certifying that participants have met program requirements.

Standard: If a program purports to provide skills training (e.g. in recognising suspicious lesions or excision techniques), the education provider should have the facilities to:

- demonstrate and teach these skills;
- allow participants to practise the skills under simulation conditions or on patients under supervision; and
- assess participants' attainment of the skills.

2.2.4. Teaching faculty

The 'teaching faculty' comprises those engaged by the education provider to deliver the program, including those engaged to supervise course participants as they learn clinical skills. For most programs, the teaching faculty is likely to be a mixture of institutional staff and external experts.

Standard: Faculty members should have appropriate current credentials (relating, for example, to clinical skills and knowledge) for the aspects of the program that they have been engaged to deliver. All faculty members should have a thorough knowledge of the scope of *Guidelines*, their evidence base, and areas of content relevant to their expertise. Those responsible for providing training in specific clinical skills should have an advanced level of expertise and experience in those skills.

Standard: A description of the membership of the teaching faculty, listing individuals, their qualifications and their professional roles and affiliations, should be available to intending participants.

2.2.5. Rationale for tuition fees

Continuing medical education can be costly to run and impose a significant financial load on practitioners, especially GPs. An aspect of the integrity of an education provider is to charge reasonable fees and allow program participants to be able to assess what they are getting in relation to the cost.

Standard: Fees for educational programs should reflect the level of education provided, and take account of the following:

- The type of institution providing the training, e.g. university or health service.
- Whether or not the institution is accredited within its field.

- Whether or not the program has been accredited by an external body, e.g. the Royal Australian College of General Practitioners, for the award of continuing medical education points.
- The experience and qualifications of the program's faculty.
- The facilities provided, which may include library facilities, on-line materials, and sophisticated simulation facilities.
- The ratio of number of faculty to number of participants.
- Whether or not a supervised clinical placement is provided for education and/or assessment purposes.
- Whether or not an additional fee is charged for course materials.

2.3. The education program

2.3.1. Components

The emphasis in the standards is on the education program itself – its educational objectives, its curriculum and the modes of educational delivery that it uses. The standards are intended to ensure that these elements are explicit and that they reflect the content of the *Guidelines*.

Educational objectives specify what a participant should be able to do upon completion of the program. The core curriculum specifies the content of the program, i.e. what is to be delivered in order to fulfil the objectives.

2.3.2. Overall and specific educational objectives

Standard: The melanoma education program should have a clear statement of overall educational objectives. These objectives should reflect an intention to train program participants for practice in accordance with the *Guidelines*.

Standard: The melanoma education program should also have specific educational objectives that define intended learning outcomes for participants, indicating the level of detail or expertise to be attained with respect to the components of the core curriculum. The format of the objectives should enable program participants to determine, on completion of the program, the extent to which they have fulfilled the objectives. The specific educational objectives should thus require participants to:

- *Be able to define* terms.
- With increasing levels of detail, *be able* either *to list*, or *to outline*, or *to summarise*, or *to describe*, or *to explain*, phenomena or areas of knowledge.
- *Be able to demonstrate* communication or the ability to carry out clinical procedures.
- *Be able to identify* lesions or other clinical manifestations.

Educational objectives should avoid terms like 'understand...' or 'be aware of...' because such terms do not directly enable assessment or self-assessment of knowledge, cognitive processes or skills.

For example:

By the end of the program, participants will *be able to*:

- *Define* the term ‘synoptic reporting’ in relation to the pathology results from biopsy of a suspicious pigmented lesion.
- *List* the essential components of an adequate histopathological report on a suspicious pigmented lesion.
- *Outline* indications for referral of a patient for genetic testing and counselling.
- *Summarise* the major risk factors for melanoma.
- *Describe* the recommended follow-up of a patient diagnosed with stage I or II primary cutaneous melanoma.
- *Demonstrate* an ability to communicate with a patient (and the patient’s family or carer), informing him or her of a new diagnosis of melanoma from biopsy of a suspicious pigmented lesion, explaining the significance of the diagnosis, the need for referral, and the likely next steps following referral.
- *Demonstrate* an ability to carry out an excision-biopsy of pigmented lesion that is considered likely, on clinical grounds, to be a stage I primary cutaneous melanoma.

2.3.3. Core curriculum

Standard: The melanoma education program should have a written core curriculum that defines the scope of the program. The core curriculum should:

- (1) Cover the following general issues relating to the *Guidelines*.
Programs should explicitly refer to the *Guidelines* and ensure that participants:
 - Can find and use the *Guidelines* to inform their practice.
 - Recognise that their practice should be evidence-based and that the *Guidelines* provide an authoritative Australian compilation of the best available evidence.
 - Can interpret the levels of evidence and the grades ascribed to the strength of individual recommendations, noting that, where recommendations have a low grade, this may be due either to weak evidence (i.e. the available research is of low quality) or gaps in the evidence (i.e. the topic has not been researched).
 - Can describe the spectrum of cancer care (see Box 1) as applied to melanoma.
 - Can explain the rationale and benefits of the multidisciplinary team approach to the management of patients with invasive melanoma.
 - Can outline the epidemiology of melanoma in Australia, including geographical variations in incidence.
- (2) Define whether the program encompasses one or a combination of (a) prevention; (b) early detection; (c) clinical diagnosis and assessment; and (d) management and follow-up.
- (3) Cover the relevant content, as listed below.

Box 1: Spectrum of cancer care

The spectrum of cancer care encompasses:

- Prevention.
- Screening and/or early detection.
- Diagnosis.
- Assessment of tumour grade and stage.
- Treatment (surgical, medical and radiation oncology, and psychosocial support).
- Rehabilitation.
- Follow-up.
- Detection and management of recurrence.
- Palliative care.

(a) Prevention

Programs encompassing prevention should cover:

- The risk of melanoma in relation to patterns of sun exposure and the use of sunbeds and tanning booths.
- The minimum sun exposure required to maintain vitamin D levels.
- The use and value of sunscreen preparations and sun-protective clothing and behaviours.

(b) Early detection

Programs encompassing early detection should cover:

Population-based screening

- Current evidence regarding the value of population-based whole-body skin screening for melanoma.

Identification of individuals at high risk of melanoma

- Major risk factors for melanoma, and clinical assessment of (future) risk of melanoma.
- Management of individuals at increased risk of melanoma (education for personal skin vigilance and self-monitoring, and current recommendations for ongoing clinical examinations and documentation).
- Indications for referral of a patient for genetic testing and counselling.

(c) Clinical diagnosis and assessment

Programs encompassing clinical diagnosis and assessment should provide knowledge and skills with reference to the range of situations in which they can be applied. They should cover:

- The ways in which patients may present with a melanoma.
- The ways in which a doctor may detect melanoma.
- The main characteristics of the major clinical subtypes of melanoma of the skin (superficial spreading melanoma, amelanotic melanoma, nodular melanoma, lentigo maligna and lentigo maligna melanoma, acral lentiginous melanoma, subungual melanoma and desmoplastic melanoma), and how they may appear at different sites in patients with different skin phenotypes.
- The use of dermoscopy (leading to proficiency in dermoscopy).
- The value and use of sequential digital dermoscopic imaging.
- The use of total body photography in high-risk patients.

- Recommended technique for excision–biopsy of a suspicious pigmented lesion with an adequate excision margin (leading to proficiency in excision–biopsy).
- Situations in which partial biopsies may be indicated, and recommended partial biopsy techniques.
- Indications and acceptable timeframes for surgical referral of a patient with a suspicious pigmented lesion (e.g. a lesion in a difficult site or a lesion that is likely to be invasive).
- The information that a clinician should provide in requesting histopathology of tissue from biopsy of a suspicious pigmented lesion.
- The essential components of an adequate histopathological report on a suspicious pigmented lesion.
- The interpretation of a descriptive and a synoptic histopathological report on a suspicious pigmented lesion that has been excised.
- The conceptual basis for the currently recommended TNM (tumour, node, metastasis) classification used in clinical staging of patients with melanoma, stage groupings based on the TNM classification, and the importance of staging with regard to therapeutic decisions and prognosis.

(d) Management and follow-up

Programs encompassing management and follow-up should cover all of the items listed under (c) (Clinical diagnosis and assessment), plus:

- The need for further investigations in a patient diagnosed with (a) uncomplicated primary cutaneous melanoma, (b) locoregional disease, and (c) metastatic melanoma.
- Appropriate referral of a patient diagnosed with uncomplicated primary melanoma.
- Appropriate referral of a patient with a possible or likely diagnosis of locoregional disease or metastatic melanoma.
- Recommended follow-up of a patient diagnosed with uncomplicated primary cutaneous melanoma.
- The nature and organisation of multidisciplinary care for melanoma patients, including palliative care.
- Communication skills, focusing on supportive and empathetic communication with a patient (and, where relevant, the patient’s family or carer) on the diagnosis of melanoma, including the significance of the diagnosis, appropriate referral, the likely next steps following referral and shared decision-making.
- Education of a patient with a successfully excised early melanoma (and, where relevant, the patient’s family or carer) on the risk of recurrence or a new primary lesion, and on personal skin vigilance, self-monitoring and follow-up.
- Diagnosis and initial management of, and appropriate referral for, complications of melanoma surgery, complications of systemic therapy for melanoma, and complications of radiotherapy.

2.4. Advisory structure

The objectives and curriculum of any advanced educational endeavour should incorporate the knowledge and perspectives of the target audience (whose needs must be understood), content experts (whose areas of expertise may be diverse), and educational experts. This range of input is usually drawn from an advisory group.

Standard: The education program should be developed and regularly reviewed and updated with input from an appropriately-qualified group whose members have both expertise relevant to the core curriculum and educational expertise.

2.5. Eligibility of individuals to participate

A postgraduate melanoma education program should serve the needs of its target audience, and enrolment should give preference to the defined target audience.

Standard: The pre-requisite qualifications, professional registration, and/or levels of knowledge, skill and experience for participation in the education program should be clearly described and provided to potential participants prior to registration.

2.6. Assessment of fulfilment of education objectives

Individuals participating in a melanoma education program should be able to determine whether, and to what extent, they have fulfilled the requirements of the program. If the education provider certifies individuals who have completed a program, the provider has a responsibility to ensure that those awarded certificates have acquired the relevant competencies.

Standard: Assessment of individuals following participation in the program should be based on the overall and specific educational objectives of the program. Assessment should determine whether participants have obtained the knowledge and skills specified in the objectives, and how well they have been prepared to practice in accordance with the *Guidelines*. Methods of assessment should reflect the scope of the program, differentiating between knowledge and skills.

Standard: Where assessment requires participants to demonstrate clinical skills, a standardised report template should be used by assessors to evaluate competency in clinical procedures.

Standard: Institutions conducting melanoma education programs should retain records of participants' assessment results.

2.7. Evaluation and quality improvement

Evolution and improvement based on evaluation and feedback are essential elements of high-quality education.

Standard: Institutions that conduct melanoma education programs should have a commitment to evaluation and quality improvement. Obtaining feedback from participants on the quality and effectiveness of the educational program should be an integral part of program evaluation. Feedback should encompass questions on how well the program prepared participants to practice in accordance with the *Guidelines*. This feedback should be used to improve the program content,

structure and delivery. Where relevant and feasible, feedback should also be sought from the teaching faculty, including invited external faculty.

For example: Feedback may be sought from participants on the following aspects:

- Program structure and duration.
- Program activities and materials.
- Teaching skills of program presenters.
- Physical resources, e.g. teaching venues, audio–visual facilities and simulation facilities.
- Program organisation.
- Assessment methods.
- Opportunities to practice clinical procedures under supervision (where relevant).
- The extent to which programs met participants’ needs and expectations.
- Participants’ perceptions of ‘value for money’ in relation to program fees.

Standard: Institutions that conduct melanoma education programs should analyse the results of assessments of the knowledge and competency of participants, and use the information to detect any areas of deficiency in program content or delivery.

Standard: As part of their commitment to evaluation and quality improvement, institutions that conduct melanoma education programs should undergo external review and evaluation on a regular basis. External reviews should determine whether core curricula and program content are up-to-date, confirm the continuing capacity of institutions to conduct the programs that they promote, and confirm that participants who have completed the programs have acquired the expected knowledge and skills. The frequency of reviews should be determined with reference to the nature of the educational program, the frequency of changes in content or teaching faculty, and advances in knowledge pertaining to melanoma. An indicative frequency for reviews is once every five years.

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