



Medical Technology
Association of Australia



Response to Community Skills and Health Industry Skills Council

5 November 2010

Medical Technology Association of Australia Limited
Level 12, 54 Miller Street
North Sydney NSW 2066 Australia
P: (02) 9900 0650
E: reception@mtaa.org.au
www.mtaa.org.au

MEDICAL TECHNOLOGY FOR A HEALTHIER AUSTRALIA

Copyright © 2010 Medical Technology Association of Australia Limited (MTAA)

To the extent permitted by law, all rights are reserved and no part of this publication covered by copyright may be reproduced or copied in any form or by any means except with the written permission of MTAA Limited.

Table of Contents

Table of Contents	3
Section 1: Background.....	4
Introduction	4
Section 2: The Facts	4
Workforce Profile	4
Section 3: The Medical Technology Industry	5
Section 4: Response to <i>Environmental Scan 2011 (EScan)</i>	6
(1) How has the demand for or nature of services changed?	6
(2) Workforce development challenges	6
(3) Addressing workforce challenges	6
(4) The role of training packages	7
(5) Responding to the new workforce development policy environment.....	7
<i>End of document</i>	8

Section 1: Background

Introduction

The Medical Technology Association of Australia (MTAA) represents the manufacturers, exporters, importers and distributors of medical technology products in Australia. Medical technologies are products used in the diagnosis, prevention, treatment and management of disease and disability. Products range from commonplace, everyday items such as bandages and syringes, to high technology items such as cochlear implants and cardiac defibrillators and diagnostic imaging equipment.

Products are approved for supply by the Therapeutic Goods Administration (TGA) as a diagnostic or therapeutic product that works within, on or outside the body, but not regulated as a medicine.

The medical technology industry had sales in Australia of more than \$7 billion in 2008/2009. It is strongly research-based, often working closely with healthcare professionals to design and develop products for improved patient benefit.

Section 2: The Facts

Workforce Profile

Employment within the Australian medical technology industry (MTI) is greater than 17,500 with approximately 50% in manufacturing companies and 50% in wholesaling companies.¹ MTAA members employ 10,786 staff, approximately 57% of the industry.²

Disciplines relevant to the medical technology industry include biomedical engineering, biological sciences, health economics, information technology, law, manufacturing, nursing, physical sciences, regulatory and quality, sales and marketing.

Personnel are generally placed in the one of three stages along the continuum for the development and delivery of medical technology.

¹ MTAA database extrapolation July 2010; ABS catalogues 86240, 82210

² MTAA database July 2010

Diagram 1: Development and Delivery Continuum for Medical Technology



Professionals from a range of disciplines are employed within each stage.

1. Research and Development (biological sciences, biomedical engineering, biomedical sciences, medicine, medical research, medical technology, nursing, physical sciences)
2. Manufacturing (biological sciences, biomedical engineering, biomedical sciences, commerce, information technology, manufacturing, medicine, nursing, physical sciences, regulatory and quality, reimbursement, health economics)
3. Distribution (biomedical sciences, education, medicine, nursing, product specialists, sales and marketing, regulatory and quality, reimbursement, health economics).

Section 3: The Medical Technology Industry

Skills Audit

In April 2005, the Medical Devices Industry Action Agenda for the Department of Industry, Tourism and Resources commissioned a skills audit of the medical technology industry. This was conducted by Deloitte Insight Economics.

The 2007 report found that recruitment barriers identified for those coming into the industry for the first time were:

- lack of 'job readiness'
- perceived riskiness of the industry
- significant competition with other industries
- poor industry profile
- low wage, lifestyle issues for some occupations³.

³ Skills Audit of the Medical Devices Industry: Summary report draft; Deloitte Insight Economics 2007:9

Supply concerns regarding the “industry readiness” nature of university graduates was also identified. To assist in counteracting this perceived shortcoming, the summary report recommended fourteen actions for industry. The first action was the need to “increase the systematic use of industry internships for tertiary students”⁴.

Section 4: Response to *Environmental Scan (EScan) 2011*

The following response addresses the five agenda items of *EScan 2011* in relation to the medical technology workforce.

(1) How has the demand for or nature of services changed?

1. With an ageing population, the health industry will continue to grow. This will place greater demand, not only on frontline services, but on support services and health industries alike. Within the medical technology industry, this will impact upon sales, marketing, quality and regulatory, and reimbursement roles, just to name a few.

(2) Workforce development challenges

2. Effective managers and leaders need to be developed, supported and mentored. With the realisation of the benefits of education and training, a culture of lifelong learners at all levels will be embedded.
3. Access to industry-based training programs that complement educational needs should be encouraged.

(3) Addressing workforce challenges

Through the development of its Professional Development Program, MTAA in consultation with medical technology companies is establishing initiatives to better support tertiary students and newly qualified professionals.

Education

MTAA has established an online **Undergraduate Course Directory** and Post-graduate Course Directory to assist students wishing to make their careers in the medical technology industry identify suitable courses through universities, TAFE colleges or private institutions. Following an education audit, over 2300 undergraduate and post-graduate courses were identified across Australia.

⁴ Skills Audit for the Medical Devices Industry: Summary Report, Deloitte, 2008:12

Workplace learning programs enable students to contextualise their learning while gaining valuable practical skills and knowledge in the workplace. By engaging in these programs, employers support students to understand the workplace while creating career opportunities within industry.

MTAA members can register to join the MTAA Workplace Learning Directory to offer work placements to secondary and tertiary students. To assist students in becoming exposed to the work of the medical technology industry, MTAA has established a **Workplace Learning Directory**. Students from TAFE colleges and universities across Australia can access a list of MTAA medical technology member companies that have volunteered to offer tertiary workplace learning programs. These may be in the form of industrial training, part-time late degree employment, block employment or casual employment.

4. Course directories and workplace learning directories (as described above) for priority areas should be developed by industry.

(4) The role of training packages

MTAA is currently conducting its annual training needs analysis. Initial findings indicate that there is interest from the medical technology industry to complete accredited training. However, it should be noted that the majority of the medical technology workforce come to the industry with a minimum Bachelor degree, and in some cases a masters or PhD. For these employees, their priority moves from completing training to gain accreditation to training for learning.

5. Costs incurred by students to complete tertiary education are extensive. Many have families and large financial commitments. Scholarship availability needs to be increased and more widely promoted. Sponsorships from industry should be encouraged. Specifically for the medical technology industry, intern scholarships with companies that have the potential of future employment opportunities need to be expanded.

(5) Responding to the new workforce development policy environment

6. Career pathways for priority areas need to be developed to assist career planning across all aspects of the health sector.
7. Where a person's career path changes from one discipline to a new discipline, those seeking new horizons should be encouraged to remain in health where their skills can be transferred, or move from other disciplines into health and learn new skills, not leave the health sector.

Promoting the growth opportunities within the health sector to the broad community is one way to achieve this.

End of document