



Lymphoedema

**Review of clinical need, current
practice & research evidence**

Australian Health Ministers' Advisory Council

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lymphoedema

Regional accumulation of fluid in body tissues

Due to the interruption of normal lymphatic vessels that transport fluid and protein from tissues to lymph nodes for filtering

Causes

Congenital (present at birth)

Acquired due to:

infection, filariasis

injury- trauma, burns

cancer

surgery

radiotherapy





management

Chronic progressive disease, no cure

Symptoms

Swelling, pain, reduced movement

Complications

Recurrent infection

Thickened skin, fibrosis

Physical and psychological disability

Management

Directed at reducing symptoms & complications:
reduce swelling, maintain range of movement,
avoid trauma and infection



the project

**Report to the Australian Health Ministers'
Advisory Council**

**Goal: to review scope of the problem and
identify priorities for health policy decisions**

Status: completed

Conclusions: to be released

www.health.gov.au/msac



key points

- consumer action
- the evidence review
 - breast-cancer related lymphoedema
- the potential outcomes



consumer action

- 1995 Australian Government House of Representatives
Report on the management and treatment of breast cancer in Australia
- **submissions about financial assistance for women needing compression bandages and garments for lymphoedema**
 - **National Breast Cancer Centre (NBCC) established**
- 1997 NBCC conducts review of Lymphoedema research
Lymphoedema prevalence, risk factors and management
- 1998 NBCC convenes first conference, Canberra
Lymphoedema identified as a key priority action area
- 2000 National Lymphoedema Summit, Adelaide
Meeting of stakeholders funded by DHA in response to NBCC report
- 2000 NBCC Lymphoedema Research Register
- 2001 Primary and Secondary Lymphoedema: Priorities and Strategies Workshop, Melbourne (DHA)
Led to funding for SNB trial, lymphoedema measurement study, development of Quality of Life tool



methods

1. Working group convened by Dept Health & Ageing

Invited from professional colleges, health consumer network
Policy makers, consumer, surgeons, lymphoedema specialist, GP,
physiotherapist, physician

2. Literature search and appraisal

3. Survey of service providers & researchers in the field

[Conducted 2003, Medical Services Advisory Committee Feb 2004]



size of the problem

- 677 hospital admissions over 12 months, 2001
- no state/national data collection of number affected
- no standardised criteria for reporting

**Estimate of prevalence: 1.33 per 1000 population
higher in women**

**UK survey of health professionals and specialised services in one
catchment area - an underestimation (*Moffat et al 2003*)**



breast-cancer related

Largest study = 5,868 women, one US clinic followed for an average of 11 years

- at least 2cm difference in arm circumference
- 24% of women affected
- highest if radical mastectomy and radiotherapy (up to 44%)
- lowest rates following breast conserving surgery (7%)

(Schunemann & Willich 1991)

Australian rates 7% - 39% reported

variation in definition, sampling and follow-up

(Edwards et al 2000, Zissiadis et al 1997, McCredie et al 2001)



at risk

1. Surgical excision of lymph nodes

5,654 lymph node excisions for breast cancer (63% radical)
of total 10,308 lymph node excisions for cancers in 2001

2. Radiotherapy of lymph nodes

XRT figures not available

3. Other factors

past history of arm infection, post-operative wound complications
obesity, age at diagnosis

strongest predictor of severity: time interval since treatment



impact

- **arm swelling impairs function and quality of life**

(Rietman et al 2003)

- **major factor in limiting return to emotional & functional health after treatment**

153 20 year survivors of chemotherapy trial

Lymphoedema and numbness of the limbs/chest were the ONLY cancer factors that were related with ongoing psychological problems

(Kornblith et al 2003)

- **frequency and severity of complications?**

UK Survey of 218 patients 29% reported infection in one year

(Moffat et al 2003)



prevention strategies

1. Surgical techniques (reduce axillary surgery)

Assess safety and effectiveness of sentinel node biopsy for cancer staging compared to axillary dissection in early breast cancer

Australian and international trials, MSAC to review

2. Radiotherapy techniques (reduce field)

Assess safety and effectiveness of intraoperative radiotherapy for cancer control

2002 Australian review – insufficient evidence, international trials including Australia

3. Early intervention (physiotherapy for subclinical disease)

Early small trials suggest an effect

(Box et al 2002)

4. **No studies** to assess content and delivery of patient education materials, although clear messages about need



management

Physical therapy to reduce & control limb swelling

eg: elevation, exercise, external pressure, massage

- **Compression garments**

Good evidence: low-stretch elastic garments or bandaging reduce swelling

- **Complex physical therapy**

combinations of exercise, massage & compression
outcomes from case series consistently favourable

Trial evidence required to assess effect & define an optimal strategy

(NSW Breast Cancer Institute trial, 2003 Westmead Hospital)



other issues

- patient education and support
- health care provider education & training
 - Case identification and primary care for mild cases
 - Specialised care for severe cases
- service delivery and access
- service costs
- recent advances in the laboratory



co-ordinating care

Surgeon

Physician

General Practitioner

Registered nurse – ward, breast care, community

Lymphoedema specialist

Physiotherapist

Occupational therapist

Social worker

Rehabilitation

Specialist lymphoedema clinic

Palliative care

Other: Support services, massage clinics



inequity

Lymphoedema National Service Equity Survey, 2002

Australasian Lymphology Association

National survey of 171 lymphoedema service providers

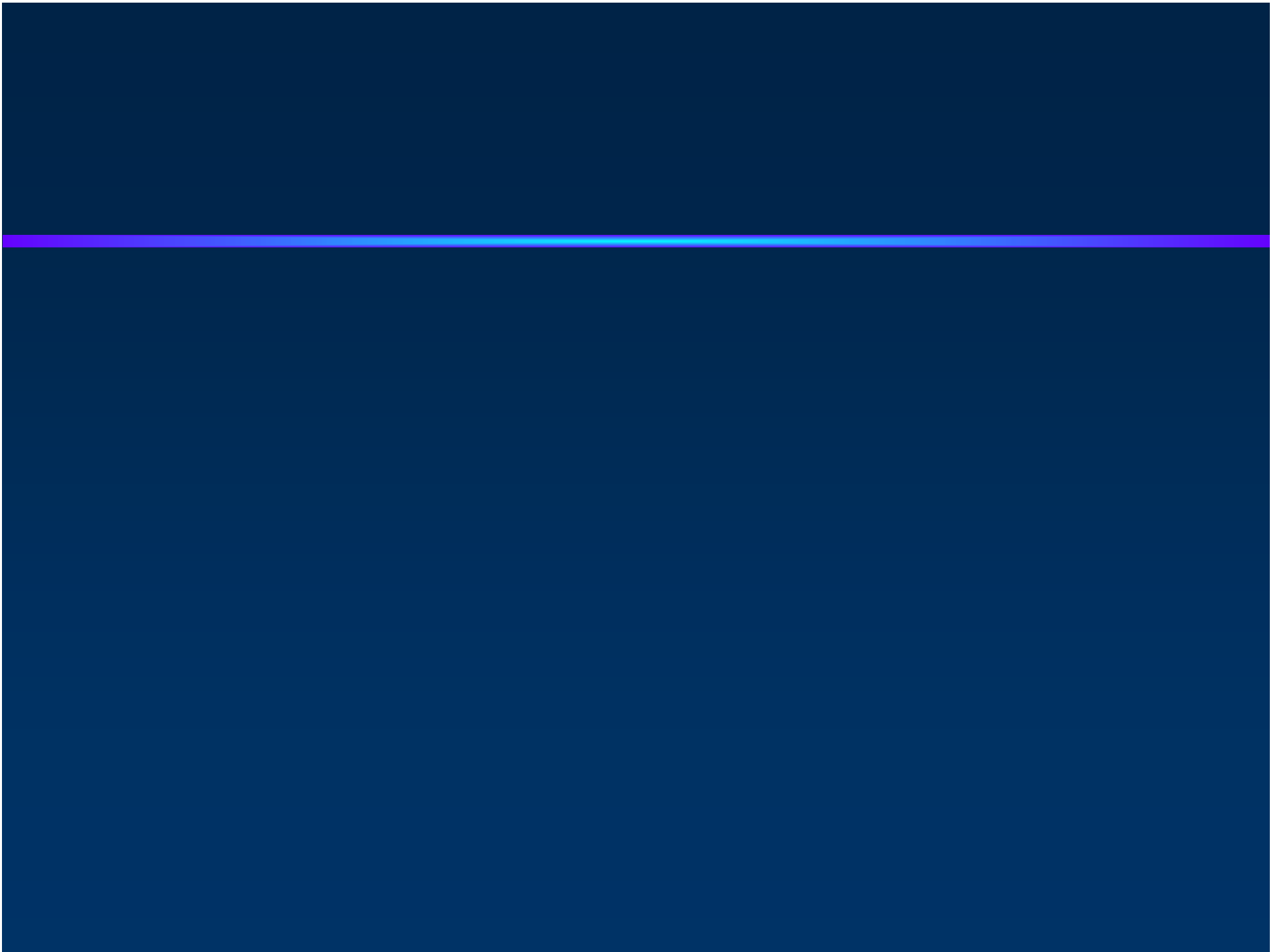
- Disparity in the number and type of services provided in each state and between urban and rural areas
- Disparity in the garment provision practices in each state

www.lymphology.asn.au



potential outcomes

- **state & territory programs**
- **national policy for public funding?**
 - clinical need
 - safe
 - effective
 - cost-effective





health services

risk reduction

patient education

diagnosis

Symptom control
&
maintenance

Treatment for complications

