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Inquiry into services and treatment options for persons with cancer, Wednesday 20 April 2005

Acknowledgements

AIHW is a member of and provides the Secretariat to the Australasian Association of Cancer Registries (AACR). AIHW works in close collaboration with the AACR in compiling, analysing and publishing national cancer statistics. AIHW is also funded by the Department of Health and Ageing to monitor national cancer screening programs and to undertake contracted cancer analysis work recommended by the National Cancer Strategies Group—cancer incidence projections, cancer survival.

Key statistics related to demand for services

Risk of developing a malignant cancer

- 1 in 3 for males and 1 in 4 for females by 75 years of age.
- 1 in 2 for males and 1 in 2.6 for females by 85 years of age.

Risk of dying from a malignant cancer

- 1 in 7 for males and 1 in 11 for females by 75 years of age.
- 1 in 3.5 for males and 1 in 5.5 for females by 85 years of age.

Onset

- In 2001, the average age of first diagnosis was 66 years for males and 64 years for females. The median age was 69 years for males and 65 years for females. This impacts on demand for cancer services because the most rapidly increasing age group in the population is that aged 65 and over.

New cases of cancer

- 90,000 new cases of malignant cancer per year, 12.5% attributed to smoking and 3.2% to excessive alcohol consumption.
- 36% increase in new cases over the last 10 years (1991 to 2001) compared with a 12% increase in population. There is likely to be an increase of similar order of magnitude over the next 10 years (AIHW and the National Cancer Strategies Group are currently working on projections to examine this).

- The age-standardised incidence rate for males has been declining by an average of 1.3% per year (following a peak in 1995 in smoking-related cancers).
- Leading cancers:
  Males: Prostate, colorectal, lung, melanoma
  Females: Breast, colorectal, melanoma, lung.

International comparison:

- Australian incidence per 100,000 population age-standardised to the world population was 355 for males in 2000 (323 for Canada, 375 for New Zealand, 260 for the UK, 361 for USA, 202 world-wide).
- Australian incidence per 100,000 population age-standardised to the world population was 279 for females in 2000 (266 for Canada, 303 for New Zealand, 234 for the UK, 283 for USA, 158 world-wide).

Survival

- 5-year relative survival rates for males and females increased steadily during the 1980s and 1990s to 57% for males and 63% for females for persons diagnosed between 1992 and 1997.
- The impact on services is that this means that not only are the numbers of new cases increasing three times faster than the population as a whole but the numbers of people surviving longer or being apparently cured and needing on-going treatment and monitoring are also increasing over and beyond this.
- International cancer epidemiologists have now worked out statistical methods to estimate cure rates and prevalence numbers. These are derived from survival rates. Later this year AIHW is updating national cancer survival estimates to cover persons diagnosed from 1998 to 2002. Estimated cure rates and prevalence estimates will then be calculated.
- Example: colorectal cancer in 1997:
  – 5-year relative survival 58% for males and 60% for females
  – estimated average cure rate 51% for males and 57% for females
  – average time to death for those who die after being diagnosed: 1.9 years for males and 2.6 years for females.

Mortality

- Almost 38,000 deaths from malignant cancer each year and a further 800 deaths from non-malignant cancers—benign cancers and cancers of unknown behaviour.
- A further 4,500 people die with cancer—their main cause of death is something else, most commonly heart disease, chronic obstructive pulmonary disease and stroke. For many people cancer treatment is part of management of multiple chronic disease conditions.
- Since the mid-1990s, the age-standardised mortality rates for all cancers for males have been declining by an average of 1.8% per year and for females by 1.4% per year. This suggests that when survival rates are calculated for persons diagnosed since 1998 they will show substantial further

improvements in survival and in estimates of the numbers of persons with cancer either with cancer under-going treatment or apparently cured.

International comparison

- Australia's age-standardised mortality rate in 2000 was relatively low compared with other developed countries:
  –151 for males (161 for Canada, 167 for New Zealand, 171 for the UK, 162 for the USA)
  –103 for females (117 for Canada, 131 for New Zealand, 128 for the UK, 116 for the USA).

Cancer screening

- The national pap test program targeting women aged 20–69 years identifies pre-cancerous abnormalities which can usually be successfully treated, preventing the onset of cancer. The program has been very successful in reducing cervical cancer incidence and mortality. However, Indigenous screening rates, where available, are low and incidence and mortality very high compared with the non-Indigenous population.
- The BreastScreen Australia program aims at early detection and successful treatment of breast cancer in women aged 50-69 years, reducing mortality. Deaths per 100,000 women aged 50–69 years have fallen from 68.5 in 1990 to 54.1 in 2003.
- Colorectal cancer is the most commonly occurring new cancer. Introduction of a national screening program usually leads to a significant increase for several years in the numbers of new cases detected and therefore has a major effect on demand for services. The increase is due to the early detection of many cancers which would otherwise have gone undetected for some years.

GP consultations

- GPs have 2.2 million patient contacts per year for management of cancer.
- 26% of these are for basal cell carcinomas, 14% for squamous cell carcinomas, 11% for prostate cancer, 10% for female breast cancer, 4% for melanoma and 3.3% for lung cancer.
- There was a significant decrease in prescribing of medications between 1998–2000 and 2002–2004, from 31 to 25 per 100 patient contacts.
- Opioids (synthetic narcotics that have opiate-like activities but are not derived from opium) were the most commonly prescribed medications for cancer, accounting for approximately one quarter of all prescriptions. They were prescribed by GPs at a rate of 7 per 100 cancer contacts in 2002–2004.

Hospital inpatients

- Between 1997–98 and 2001–02 the number of hospital admissions for cancer patients increased by 5% a year.
- Cancer was the principal diagnosis for 317,000 admissions in 2001–02, and there were a further 305,000 cancer-related admissions, together accounting for 1 in 10 of all hospital stays.

- The proportion of cancer admissions involving public patients dropped from 52% to 48% between 1997–98 and 2001–02, and the proportion of cases treated in public hospitals fell from 62% to 55%.

Use of alternate therapies by persons diagnosed with cancer and living in private households (ABS 2001 National Health Survey)

- 257,000 people diagnosed with cancer by a doctor were living in a private household in 2001.
- 7.5% of these said that they used vitamin and mineral supplements as part of their cancer care, while 4.6% used herbal and natural medications for their cancer.
- Non-medical practitioner health professionals consulted in the last two weeks by persons with cancer, but not necessarily about cancer, included the following. Please note that numbers are small, with high standard errors:
  – nurse (7.2%)
  – dietician/nutritionist (3.5%)
  – chiropractor (3.5%)
  – chemist (3.4%)
  – physiotherapist/hydrotherapist (2.7%)
  – podiatrist (1.7%)
  – social worker (1.0%)
  – accredited counsellor (1.0%)
  – naturopath (0.7%)
  – speech therapist (0.5%)
  – other (4.8%)

Expenditure on cancer

- Allocatable expenditure on cancer in 2000–01, excluding public health expenditure, was $2.7 billion, representing 5.7% of total allocatable health expenditure.
- 71% of cancer expenditure was in hospital care ($1,988m) and 9% of all expenditure in hospitals was on cancer.
- Out-of-hospital medical services accounted for 12% of cancer expenditure ($343m) and pharmaceuticals 6.6% ($183m).
- $215m was spent on cancer research in 2000–01, 18% of all health research expenditure in Australia.
- There was a 31% increase in inflation–adjusted cancer expenditure from 1993–94 to 2000–01.

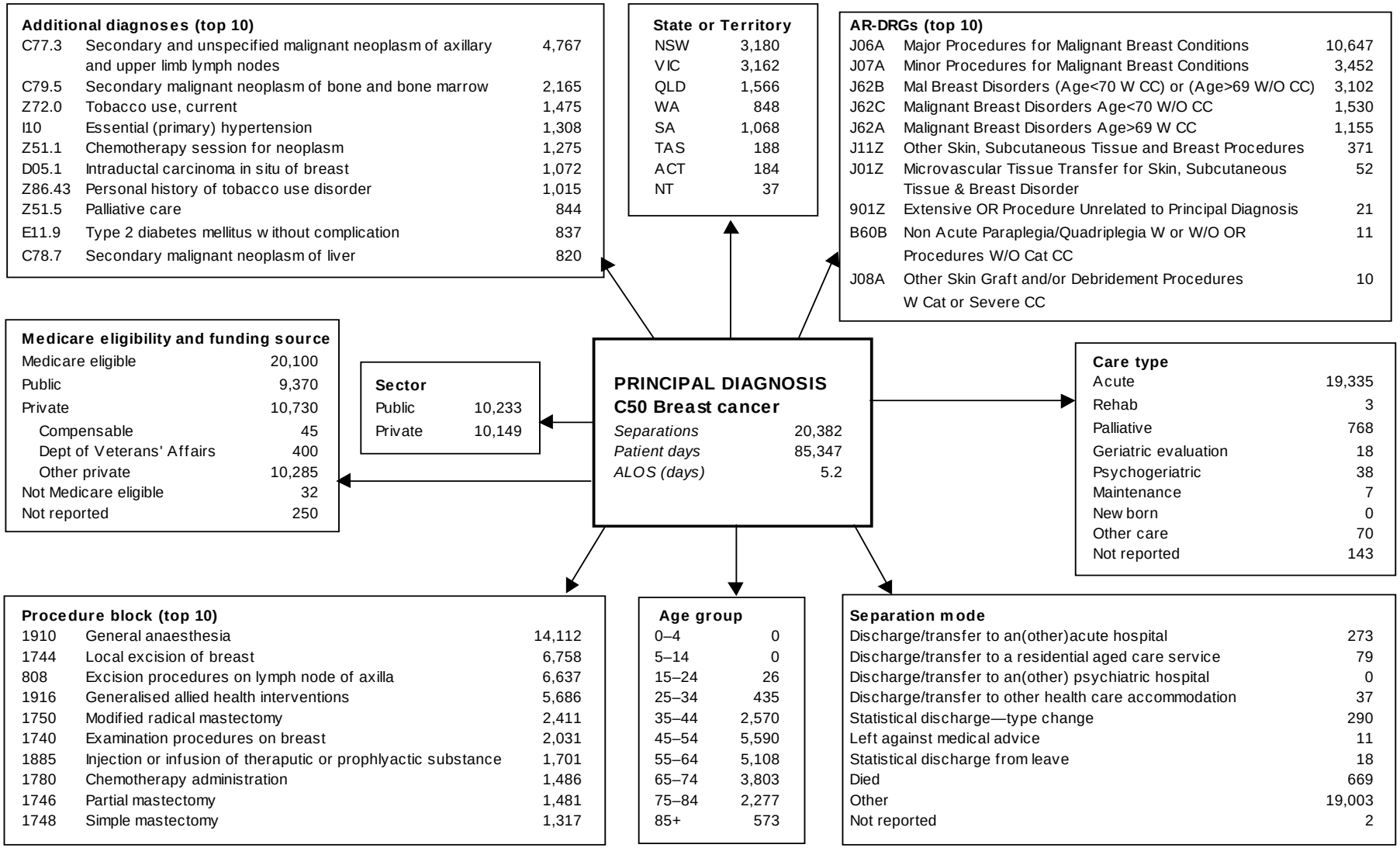
Further analysis

An example of potential further analysis that can be undertaken of hospital inpatient treatment is in the attached figure for inpatient admissions of women for treatment of breast cancer treated in Australian hospitals in 2000–01.

This shows:

- Type of care
- Diagnosis-related groups
- Procedures
- Additional diagnoses
- Type of patient
- Outcome (discharge or death)

These data can be cross-tabulated with geographic data items to facilitate analyses by geographic category and by socioeconomic status quintile.



Note: Main abbreviations: ALOS—average length of stay (excludes same-day), W—w ith, W/O—w ithout, Cat—catastrophic, CC—complication or comorbidity, Mal—malignant, OR—operating room.

Figure : Inpatients with a principal diagnosis of breast cancer, all hospitals, Australia, 2000–2001