

FORTY YEARS OF COSA – CONTRIBUTIONS TO ONCOLOGY TEACHING AND RESEARCH

Stephen Ackland¹, David Goldstein,² Margaret McJannett³

1. University of Newcastle, Hunter Medical Research Institute and Calvary Mater Newcastle Hospital, Newcastle, NSW.

2. University of New South Wales and Prince of Wales Hospital, Randwick, NSW

3. ANZUP, Australia and New Zealand Urological and Prostate Cancer Trials Group, Camperdown, NSW
Email: stephen.ackland@newcastle.edu.au

From its beginnings, the essence of the Clinical Oncology Society of Australia (COSA) was its multi-disciplinary approach to treating cancer. While the need for a cross or multi-disciplinary approach was eventually to be seen as obvious and essential, it required considerable effort to break the established pattern of the medical profession. Surgeons were used to meeting and talking with surgeons, radiation oncologists with radiation oncologists, and so on; the long-established medical societies and colleges tended to be single-discipline in their focus.

From about 1966 or 1967 the Australian Cancer Society (ACS) organised annual scientific meetings over one or two days in November, in Melbourne and Sydney alternatively. These meetings were attended by a relatively small group of clinicians/researchers working in universities and major teaching hospitals. The meetings allowed a sharing of knowledge and experiences, and soon reflected the emergence of a multi-disciplinary approach to patient care.

The ACS continued to support these activities and by 1969 the meetings had clinical sessions for both head and neck and breast specialists. Discussions continued about forming a separate society to enhance this co-operation and on September 9 1972, the executives of the Head and Neck and Breast Groups agreed to form the Clinical Oncological Society of Australia (renamed this year to the Clinical Oncology Society of Australia). COSA was chosen as the acronym to avoid any confusion with the American Society of Clinical Oncology (ASCO), although some also liked the symbolism involved: Cosa is the Italian word for family.

The broad principles for COSA's new constitution were adopted at the first annual general meeting in November 1972. At this stage there were 107 members registered with the Head and Neck group and 82 with the Breast group, with some belonging to both groups. There were members in all Australian states except Tasmania and in the Territory of Papua and New Guinea. Brian Fleming was the chairman of the organisation, but was not formally elected President until the constitution was adopted at the November 1973 meeting.

The founding fathers of COSA intended that its original two groups, Head and Neck and Breast, would be joined by others. The first group to join them was the Experimental group, renamed Cancer Research group

six years after its establishment. These researchers came together under COSA "to provide for exchange between all aspects of cancer research - clinical, laboratory, basic and applied." One significant point about this group was that, unlike the other two, it was not focused on a cancer site in the body; COSA was, thus, immediately spreading its coverage. Next to join was the Paediatric Oncology Group. Its Chairman, John Colebatch of the Royal Children's Hospital in Melbourne, was a pioneer of work on childhood leukaemia. His work had brought together pathologists, surgeons, radiotherapists and the newer contributions of medical oncologists.

Although some members of COSA were concerned about the widening membership, in 1977 after a review, the membership clause of the constitution was broadened so that it could include someone who had "made a significant contribution to knowledge in the field of cancer" or "such other persons as the Executive Committee may decide." The continued formation of new groups within COSA can be seen in the complete list appended to this paper (appendix 1). However, two groups that deserve special mention are the Medical Oncology Group, which formally joined COSA in 1979, and the formation of the Oncology Nursing Group in 1980. By 1980 there were 10 groups in COSA, representing a total membership of 900.

From its beginnings, COSA was accepted as representing the clinical side of the Australian anti-cancer campaign. COSA's influence was undoubtedly spread further by two regular publications which emerged during its first 10 years. In 1974 *Cancer Forum* was first published. It was published by the ACS but content largely came from the work of members of COSA. Lawrie Wright, who from 1979 was the ACS Executive Director, continued the close relationship with COSA. On his initiative a COSA newsletter, the *Marryalyan*, first appeared in August 1980. COSA remains affiliated with and provides medical and scientific advice to Cancer Council Australia, (formerly ACS).

Ideal Oncology Curriculum

In the 1990s, Cancer Council Australia and COSA together developed the *Ideal Oncology Curriculum*, as a document describing the essential elements of oncology education for graduating medical students.¹

This initiative was developed after the authors (Smith, Tattersall, Irwig, and Langlands – prominent senior COSA members) had documented substantial variability in training and experience and substantial lack of knowledge about cancer among the graduates from Australian medical schools.²

As a consequence the Oncology Education Committee, Cancer Council Australia and COSA, in conjunction with the authors, developed the *Ideal Oncology Curriculum* for medical schools (published 1999, Australian Cancer Society). The Oncology Education Committee is a multi-disciplinary group of cancer clinicians and educators, mainly COSA members supported by Cancer Council Australia, representing all medical schools in Australia. The objectives of the committee are to monitor and improve the standards of cancer education in Australian medical schools.

The *Ideal Oncology Curriculum* was developed as a consensus-based curriculum after extensive consumer consultation across the country, and has served as a basis of newly developed medical school curricula and as a guide to development of cancer teaching in other disciplines, including nurse practitioner training and professional development of cancer professionals.

The curriculum includes areas such as prevention, screening, early detection, diagnosis, active management, palliation and terminal care. It focuses on clinical practice, but also on understanding cancer biology. This curriculum has been adopted by the majority of medical schools in Australia, and has led to periodic review of progress in curriculum uptake and outcomes,³⁻⁵ as well as discussion of similar curriculum development in Europe,⁶ and the US.⁷

Australia and Asia Pacific Clinical Oncology Research Development

Workshops

COSA has supported the development and implementation of the Australia and Asia Pacific Clinical Oncology Research Development (ACORD) workshops, which were spearheaded by the Medical Oncology Group of Australia, as the brainchild of Bogda Koczwara. Many COSA members have made valuable contributions as faculty members towards these workshops by providing time and effort with design, conduct and evaluation of the five workshops conducted biennially since 2004. The format has been week-long, live-in, intensive workshop, whereby junior researchers get hands-on experience with design of a clinical trial, education on the principles, strategies and options for all types of trial design, and conduct and analysis, and come away with a complete trial protocol for implementation in their home institution. Designed to increase training and engagement in clinical trials by oncology professionals, ACORD workshops have been well attended by students from diverse disciplines (medical oncology, radiation oncology, surgical oncology, palliative care, nursing, allied health and other fields). These workshops are highly regarded and rank similarly to workshops run in the US and Europe.

COSA Annual Scientific Meeting

COSA has conducted an Annual Scientific Meeting continuously since 1973. These meetings have always had a high level of educational input for COSA members from all disciplines. COSA Annual Scientific Meetings are formatted around oral presentations and posters, with plenary sessions on current issues in cancer care, cancer education and basic science. In recent years, meetings have been held in collaboration with the Australian Health and Medical Research Congress, Australian and New Zealand Gastric and Oesophageal Surgery Association, International Association of Cancer Registries, Australia and New Zealand Breast Cancer Trials Group, Australian and New Zealand Urogenital and Prostate Cancer Trials Group, and International Psycho Oncology Society. These collaborations have led to value-added aspects and broad dialogue with experts not limited to the cancer field.

Several clinical trials cooperative groups, including the Australian and New Zealand Children's Haematology/Oncology Group, Australasian Gastro-Intestinal Trials Group, Australia and New Zealand Melanoma Trials Group and Australian and New Zealand Urogenital and Prostate Cancer Trials Group, were developed out of the COSA clinical groups.

Education in clinical trials

Since the mid-2000s, COSA has conducted a series of workshops and other initiatives providing educational opportunities for members in the area of clinical trials. The COSA Enabling Project (2006–2011), funded by the National Health and Medical Research Council (NHMRC) under the leadership of Steve Ackland and Haryana Dhillon, and in collaboration with the Cancer Cooperative Trial Groups (CCTGs), undertook a review of clinical trials insurance. The trial enlightened the oncology community as to the current clinical trial risk environment and insurance options, including risk mitigation strategies, inefficiencies and areas of insurance overlap. The review highlighted several options for rationalisation, and ultimately led to a consolidation of cooperative groups insurance arrangements that saved about \$150,000 per annum on premiums for CCTGs. COSA continues to facilitate the umbrella insurance policy on behalf of the nine CCTGs participating in this scheme.

Workshops conducted since 2005 have included: the development of clinical trials registers (February 2005), which ultimately lead to the development of the ANZ Clinical Trials Registry; a clinical trials research agreement workshop (2010) that led to a standardised template for agreement between cooperative groups and participating sites; and a clinical trials risk minimisation workshop (2010).

In 2009-10, in partnership with the Association of Regulatory and Clinical Specialists, COSA funded 100 members to undertake the Association of Regulatory and Clinical Specialists online applied good clinical practice education and training modules on clinical trials. These three modules include research and the foundations of good clinical practice, stakeholder roles and responsibilities, and practical considerations in the conduct of clinical trials.

In 2011, COSA received funding from Cancer Australia to develop a comprehensive strategy for increased consumer involvement at all levels of clinical cancer research across all the CCTGs. Through the efforts of COSA and the CCTGs Consumer Network, on February 2013 (World Cancer Day), Cancer Australia launched the Consumer Learning website. This site has been developed to enhance the contribution to clinical trials research of people affected by cancer. Consumers working with the CCTGs now have access to a suite of learning and support initiatives to enhance knowledge and skills in partnering with researchers to conduct quality patient-centred clinical trial research.

Complementary and Integrative Therapies

The COSA Complementary and Integrative Therapies Group was established following two workshops held in 2007 and 2008. These workshops highlighted a broad range of issues relating to the need for information and education about complementary therapies in cancer care. Also highlighted was the need to promote evidence-based information about complementary therapies for patients and health professionals, to empower oncology health professionals to engage in discussions with patients about complementary therapies, to develop and promote guidelines and minimum standards for delivery of complementary therapies, and to utilise and build on existing resources and avoid duplication.

The group has developed the Complementary Toolkit, available on the COSA website. The kit provides educational information about complementary therapies and offers suggested approaches by cancer clinicians to discuss complementary therapies with patients and where appropriate, integrate complementary and alternative therapies into their practice.

The Complementary and Integrative Therapies Group was supported by the evidence-based website group chaired by Alayne Read, whose role was to ensure the toolkit was evidence-based and contained materials necessary to assist cancer health professionals in its objectives.

In May 2013, COSA published a position statement on 'The use of complementary and alternative medicine by cancer patients'. The purpose of this document is to outline COSA's position on the use of complementary and alternative medicine (CAM) by cancer patients and to provide guidance for health professionals involved with the treatment of cancer patients who are using or wish to use CAM.

Clinician burnout survey

COSA promoted and facilitated a cancer clinician burnout survey in 2007, which led to a paper describing the incidence and severity of burnout among Australian cancer clinicians. A total of 740 COSA members (56% of the membership) completed the survey, which used various tools to assess prevalence of burnout, the prevalence of psychological distress, demographic and occupational predictors of burnout, and perceived causes of burnout. The report recommended strategies for preventing or reducing the impact of burnout of cancer care personnel.⁸ Key findings of the report were that self-reported levels of burnout were high, particularly in oncologists and palliative

care physicians, and particularly in those with direct patient contact in their jobs. The proportion of COSA respondents with moderate to severe levels of psychiatric morbidity was comparable to the Australian general population. Predictors of burnout were dissatisfaction with leave arrangements, a high perceived need for communication skills training and a perceived heavy workload.⁹

Clinical practice guidelines

COSA has facilitated and contributed to a variety of guidelines on management of various malignancies, 25 of which are available on the NHMRC website as NHMRC-approved guidelines.

Tom Reeve, Senior Medical Advisor at the Australian Cancer Network (1993-2010), had a pivotal role in managing the development and production of the majority of these guidelines over many years. His mammoth efforts towards this challenging task (cat-herding) are to be congratulated. The Australian Cancer Network, now known as Cancer Council Australia's Clinical Guidelines Network, has developed high standards of preparation and evaluation of guidelines for health professionals. Equally important, most guidelines are also produced in a condensed format for use in general practice and written for patients and non-clinical readers.

Many of these guidelines are still on oncologists' desks, although web-based electronic versions are now preferred. Cancer Council Australia's wiki platform is a web-based portal that provides information and education on clinical practice guidelines that can be updated as the evidence changes.

In 2005, COSA established the Tom Reeve Oration Award for Outstanding Contributions to Cancer Care, to formally acknowledge Tom's remarkable contribution. The aim of this award is to formally recognise a national leader resident in Australia who has made a significant contribution over a relatively long period towards cancer care through research, clinical leadership and/or community service.

In recent years COSA has developed guidelines in the areas of adolescents and young adults with cancer, the nutritional management of head and neck cancer patients and neuroendocrine tumours. All are available on the Cancer Council Australia wiki platform.

COSA chemotherapy guidelines

In 2008, COSA's Pharmacy Group, under the chairmanship of Christine Carrington, convened a working group including nurses and medical oncologists to develop a draft set of guidelines for the safe prescription, dispensing and administration of cancer chemotherapy.

The guidelines aim to assist in the prevention of medication errors and to improve patient safety with respect to the drug treatment of cancer. They are intended for a multidisciplinary audience, including medical nursing and pharmacy staff involved in delivering chemotherapy.

The guidelines define 13 areas where a guidance statement is applicable to all professional disciplines, and three individual sections based on the processes and the

professionals involved in the provision of cancer therapy. The guidelines were published in the *Asia-Pacific Journal of Clinical Oncology*.¹⁰

Wall Report, 2002

In 2001, then COSA president, John Zalcborg, and the COSA Council, developed an issues paper 'Cooperative Clinical Trials in Cancer – the Need for Increased Capacity' (the Wall Report), published in 2002. This document was the result of a number of workshops, attended by COSA members of all disciplines, members of the nine CCTGs, and other stakeholders in the delivery of cancer care and clinical research. The workshops outlined the current status of cancer clinical trials in Australia, gaps in capacity, funding mechanisms and governance issues, and made a number of recommendations regarding funding and support for cooperative trials groups. Several of these recommendations have taken up by the Department of Health and Ageing and subsequently through Cancer Australia, which have provided modest funds as infrastructure support for CCTGs in Australia. One of the recommendations included the development of a clinical trials registry, which led to the highly successful ANZ Clinical Trials Registry. COSA continues to be active in advocacy for cancer clinical trials, with several members contributing to the recent Clinical Trials Action Group report by the Department of Health and Ageing and Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education,¹¹ as well as contributions towards the McKeon Review.¹²

Rural cancer services

Since 2000, COSA has developed a number of initiatives to advance rural health care and education. The 'Cancer in the Bush' conference, convened in 2001, first brought together cancer health professionals from all over Australia to recognise the unique issues facing patients and their service providers. Subsequent workshops in 2006, 2009 and 2012 have all built upon the improved multidisciplinary interaction facilitated by COSA. COSA has also subsequently collaborated with the Australian Rural Health Alliance and presented on rural cancer issues at several Alliance annual meetings. This ultimately led to a closer working relationship with Divisions of General Practice and other organisations involved in rural health.

The Regional and Rural Group of COSA was also formed. This is a multidisciplinary group focused on the unique issues facing cancer service delivery outside metropolitan areas. The group aims to highlight the deficiencies in service delivery, enhance equity of access to current best practice care and facilitate clinical research and access to clinical trials. Critical to success is cancer health education of rural health practitioners and communities, to empower them to reduce inequity in services.¹³ COSA commissioned a cross sectional survey of service provision in 2005, which identified many major gaps in service.¹⁴ This was more recently complemented by the psychosocial unmet needs of patients and of health professionals.^{15,16} COSA's efforts were rewarded with the announcement of enhanced infrastructure for regional cancer services in 2010.

Multidisciplinary education

COSA has been a partner in a major online education activity initiated by Cancer Australia. The Cancer Learning online hub aims to consolidate the enormous variety of evidence-based learning activities, resources and information in cancer care available across Australia and overseas. As a part of this activity, COSA was invited to join the Professional Development Packages Project. The aim of this project is to develop a national professional development framework and educational packages for cancer professionals, counsellors and general practitioners. It is being conducted by a consortium composed of four organisations: COSA; the National Breast and Ovarian Cancer Centre; Cancer Council Australia; and the Royal Australian College of General Practitioners. The project is managed by the Workforce Education and Development Group at the University of Sydney.

A recent educational initiative has been the multidisciplinary trainees workshops, held preceding the Annual Scientific Meeting in 2010, 2011 and 2012. As part of the commitment of COSA to enhancing and promoting multidisciplinary care, COSA developed a plan to run a training weekend that crossed all health professionals. The first workshop covered management of breast cancer, the second focused on colorectal cancer and the third on skin cancer. A broad cross-section of surgical trainees, nurses, medical and allied health professionals were in attendance.

Promoting education by consensus workshops

COSA has been very active in establishing benchmarks of practice through workshops that provide state-of-the-art review of practice in a field. COSA has acted as a facilitator of practice improvement and health system development by identification of issues. Three significant examples have been the cancer care co-ordinators workshops 2006, 2007 and 2012, which have led to benchmarking of desired outcomes and standards of care. The neuroendocrine tumours workshop in 2008 brought together experts from many different disciplines and established an ongoing practice improvement initiative in the form of a national registry – the SIGNETURE registry, facilitated by COSA. Annual adolescent and young adult workshops from 2008 to 2012 have led to greater collaboration and improved co-ordination between disciplines. The geriatric oncology workshop 2008 led to the establishment of a broad multidisciplinary group to foster this growing area of need in both service delivery and innovative care approaches.¹⁷

Conclusion

COSA and its members have been active contributors to cancer training and education for over 30 years. Many initiatives supported by COSA have been novel and have led to substantial improvements in the educational resources available to oncology health professionals, for the improvement of cancer healthcare delivery and ultimately the health of the Australian population. The aim to promote excellence and encourage multidisciplinary collaboration in all aspects of cancer care and research, manifest by COSA's

history of contribution to cancer education, still stands as an important objective in the constitution.

References

1. Oncology Education Committee (of COSA and ACS). Ideal oncology curriculum for medical schools. Australian Cancer Society, Sydney, 1999.
2. Smith WT, Tattersall MHN, Irwig LM, Langlands AO. Undergraduate Education about Cancer. *European J Cancer*. 1991; 27:1448-1453.
3. Tattersall MH, Langlands AO, Simpson JS, Forbes JF. Undergraduate Education about cancer: a survey in Australian medical schools. *Eur J Cancer Clin Oncol*. 1998; 24:467-471.
4. Barton MB, Simons RG. A survey of cancer curricula in Australian and New Zealand Medical schools in 1997. *Oncology Education Committee of the ACS. Med J Aust*. 1999; 170:225-227.
5. Barton MB, Tattersall MH, Butow PN, Crossing S, Jamrozik K, Jalaludin B, et al. Cancer knowledge and skills of interns in Australia and New Zealand in 2001: comparison with 1990, and between course types. *Med J Aust*. 2003; 178:285-289.
6. Pavlidis N, Vermorken JB, Stahel R, Bernier J, Cervantes A, Audisio R, et al. Oncology for medical students: a European School of Oncology contribution to undergraduate cancer education. *Cancer Treat Rev*. 2007;33(5):419-26.
7. Koczwara B, Barton MB J. The ideal oncology curriculum for medical students. *J Clin Oncol*. 2006; 24:5334.
8. Girgis A, Hansen V. Prevalence and predictors of burnout in the COSA oncology workforce. [Internet] Centre for Health Research and Psycho-oncology (CHERP). 2007. Available from: <https://www.cosa.org.au/publications/reports-and-papers.aspx>
9. Girgis A, Hansen V, Goldstein D. Are Australian oncology health professionals burning out? A view from the trenches. *Eur J Cancer*. 2009;45(3):393-9.
10. Carrington C, Stone L, Koczwara B, Searle C. Development of guidelines for the safe prescribing, dispensing and administration of cancer chemotherapy. *Asia-Pac J Clin Oncol*. 2010;6(3):213-9.
11. Clinical Trials Action Group. Clinically Competitive: boosting the business of clinical trials in Australia. <http://www.innovation.gov.au/Industry/PharmaceuticalsandHealthTechnologies/ClinicalTrialsActionGroup> (accessed Sep 10, 2013).
12. Strategic Review of Health and Medical Research – Better Health through Research [Internet] Available from: www.mckeenreview.org.au [accessed Sep 10 2013].
13. Underhill CR, Goldstein D, Grogan PB. Inequity in rural cancer survival in Australia is not an insurmountable problem. *Med J Aust*. 2006;185(9):479-80.
14. Underhill C, Bartel R, Goldstein D, Snodgrass H, Begbie S, Yates P, et al. Mapping oncology services in regional and rural Australia. *Aust J Rural Health*. 2009;17(6):321-9.
15. Butow PN, Phillips F, Schweder J, White K, Underhill C, Goldstein D. Psychosocial well-being and supportive care needs of cancer patients living in urban and rural/regional areas: a systematic review. *Support Care Cancer*. 2012;20(1):1-22.
16. Grimison P, Phillips F, Butow P, White K, Yip D, Sardelic F, et al. Are visiting oncologists enough? A qualitative study of the needs of Australian rural and regional cancer patients, carers and health professionals. *Asia Pac J Clin Oncol*. 2013; 9(3): 226-38.
17. Steer CB, Marx GM, Singhal N, McJannett M, Goldstein D, Prowse R. Cancer in older people: a tale of two disciplines. *Intern Med J*. 2009;39(11):771-5.

Appendix 1: Professional groups within COSA

- Adolescent and Young Adult
- Biobanking
- Breast Cancer
- Cancer Biology
- Cancer Care Coordination
- Cancer Pharmacists
- Clinical Trials and Research Professionals
- Complementary and Integrative Therapies
- Developing Nations
- Epidemiology
- Familial Cancer
- Gastrointestinal Cancer
- Geriatric Oncology
- Gynaecological Cancer
- Lung Cancer
- Melanoma and Skin Cancer
- Neuroendocrine Tumours
- Neuro-oncology
- Nutrition
- Paediatric Oncology
- Palliative Care
- Psycho-oncology
- Radiation Oncology
- Regional and Rural Oncology
- Social Work
- Surgical Oncology
- Survivorship
- Urological Oncology