行政院及所屬各機關出國報告
（出國類別：開會）

參加「2014 年世界癌症大會(World Cancer Congress)」出國報告

服務機關：行政院衛生福利部國民健康署
癌症組吳建遠組長（女）、
癌症組黃巧文科長（女）

出國地區：澳洲墨爾本
出國期間：民國 103 年 12 月 2 日至 10 日
報告日期：104 年 2 月 26 日

摘要：

由國際抗癌聯盟(Union for International Cancer Control, UICC)主辦之2014年第23屆世界癌症大會(World Cancer Congress)，於2014年12月3日至12月6日，假澳洲墨爾本會議中心（Melbourne Convention and Exhibition Centre）舉行，此次由澳洲癌症委員會(Cancer Council Australia)及維多利亞癌症委員會(Cancer Council Victoria)兩個地主國的組織與UICC共同合辦，澳洲臨床癌症學會(Clinical Oncology Society of Australia, COSA)並將其年會(Annual Scientific Meeting) 合併於此大會中。

UICC是全球抗癌民間團體所組成的最大的國際性抗癌組織, 與世界衛生組織有正式官方關係，於1933年在日內瓦成立，會員來自155個國家800個組織，包含世界主要的癌症社團, 政府衛生單位,癌症研究單位和病友團體。世界經濟論壇也是其主要伙伴。此會為兩年一次的大會，提供世界癌症防治專家交流的平台，受全世界抗癌團體的關注；本年研討會主題為「合力加速進展」(Joining Forces: Accelerating Progress)，範圍涵蓋甚廣，包含四大主題：癌症預防及篩檢、癌症診斷及治療、癌症康復及安寧照護與癌症防制系統等議題。 此次會議有許多突破性的成就，三天的議程內，共有115國家2,700名人員與會；安排120 場次的演講，講者多達 350人，逾 600篇研究摘要投稿。台灣此次則有二個民間團體即台灣癌症基金會及癌症希望基金會參與，二者皆為UICC會員，並皆於午間時段安排研討會與國際人士交流。本署癌症防治組吳建遠組長及黃巧文科長奉派出席，並代理邱署長發表演說。

除學習國外經驗、認識國際重要的防癌人士、和分享我國推動癌症防治的經驗和策略外，因主辦國澳洲在癌症防治許多議題居於領先地位，值得學習，故安排參訪Cancer Council Victoria及Deakin University's Strategic Research Centres兩個機構，瞭解澳洲目前癌症防制的現況，以及Deakin University Strategic Research Centres與政府在醫療健康科技評估合作的狀況，並進行交流。

目錄

壹、 目的

國際抗癌聯盟(Union for International Cancer Control, UICC)歷年來致力於全球癌症防治，每兩年召開世界癌症大會，提供世界癌症防治專家交流的平台，受全世界抗癌團體的好評，此次除藉由參加本會議，學習國外經驗和認識國際重要的防癌人士,並可以將我國推動癌症防治的經驗和策略與其他與會代表分享。2014年主辦國為澳洲，該國在癌症防治有許多居於領先的地位，故同時安排到當地兩個知名的機構實地參訪。

此次會議吳建遠組長代表本署共有 3 場演講,分別是 12 月 4 日由台灣希望基金會贊助的平行場次，講題為「The current status of cancer care in Taiwan 」，12 月 5 日由台灣癌症基金會贊助的平行場次，講題為「Evidence-Based Cancer Screening Policy and Implementation in Taiwan」及「Fighting against obesity in Taiwan — An innovative approach 」。我國自民國 71 年起，癌症已連續 32 年蟬聯國人十大疾病死因之首位，對於癌症防治，我國政府有完整的三段防治策略，積極推動危險因子預防工作，自 98 年菸害防制法新規定實施以來，成年人吸菸率由 97 年 21.9%降至 103 年的 16.4%，減少 89 萬吸菸人口；在檳榔健康危害防制上，18 歲以上男性嚼檳率由 97 年的 15.2%降至 103 年的 9.7%，6 年來推估嚼檳人口減少 43 萬人。成人過重及肥胖率從 82-85 年的 33.2%，增加至 94-97 年的 43.5%，102-103 年初步為 43.3%，顯示我國成人過重及肥胖情形呈趨緩。另，依據教育部體育署 103 年「運動城市調查」結果，13 歲以上國人規律運動比率，已從 99 年的 26%，上升至 103 年的 33%，還成功號召 72 萬人減重 1100 公噸。

此外，國民健康署自 99 年全面推動免費 4 項癌症篩檢（子宮頸癌、乳癌、大腸癌、口腔癌），共計提供服務 2300 多萬人次，人數每年增加，103 年大腸癌、口腔癌、乳癌及子宮頸癌篩檢量已較 98 年擴大提供癌症篩檢前大幅成長 1.7 倍，且 103 年 1 年即提供 508 萬人次篩檢服務，並發現癌前病變或癌症者約 5.7 萬名，等於平均每篩檢不到 100 名，可找到 1 名即將罹患癌症或已罹患癌症卻不自知的個案，成功挽救多人性命。除健保涵蓋全民癌症治療外，國民健康署還有推動診療品質提升、安寧療護及病友服務等，成效卓著，因此受邀與我國民間團體共同將台灣經驗分享到國際，現場並獲到許多國際與會者的讚許與回響。

貳、過程

一、行程摘要：103 年 12 月 2 日至 12 月 10 日

時間	行程
12 月 2 日(W2)	(啟程)出發
12 月 3-6 日(W3-6)	(啟程)抵達澳洲墨爾本及參加會議
12 月 8 日(W1)	參訪 Cancer Council Victoria 及 Deakin University's Strategic Research Centres
12 月 9 日(W2)	(返程)
12 月 10 日(W3)	(返程)抵達臺北

二、行程

(一)實際參與的會議議程

日期 時間	12 月 3 日(W3)	12 月 4 日(W4)	12 月 5 日(W5)	12 月 6 日(W6)
上午		08:30 - 10:00 Plenary : Day 1 – Sustainable health system 10:30 -12:00 The financial morbidity of cancer care	08:30 - 10:00 Plenary: Day 2 - National and international approaches 10:15 - 11:15 Empowering cancer survivors and families for improved medical follow-up and self care	08:30 - 10:00 Plenary Day 3 - Using data to drive decisions 10:15 - 11:15 Position, role and strategies of cancer societies in cancer control
		12:00 - 13:00 The NCD Café Have an NCD perspective	12:00 - 13:00 協助台灣癌症基金會場布	11:45 to 13:15 Measuring the patient perspective in cancer care
下午	17:00 - 18:00 地球村展場開幕 (Welcome reception	13:15 -14:15 Models of care in teleoncology 14:30 -15:30	13:15 - 14:45 Evidence-based implementation on cancer prevention	13:15 - 14:15 Economic burden of cancer in Asian countries: how

	in Global Village)	Developed and developing lung cancer screening strategies 16:00 -17:30 An NGO model for cancer care in Taiwan - a niche to meet patient needs	& screening in Taiwan 15:00 - 16:00 Using cancer population evidence to improve/inform system redesign at a local and national level 16:30 - 18:00 The International Cancer Benchmarking Partnership - global learning from our results	should we face the current situation? 15:00 - 16:00 Funding Cancer Research: How to allocate funds well and how to do it even better
晚上	18:00 - 19:30 大會開幕(2014 World Cancer Congress Opening Ceremony) 20:00-22:00 與希望基金會排練次日研討會	18:00 - 19:00 與台灣癌症基金會討論次日研討會		ACS 安排的「Celebrating and Accelerating Global Leadership」晚宴

(二)會後參訪行程

1. 時間：12 月 8 日早上 9:20 – 下午 5:00

2. 機構：

(1)維多利亞癌症委員會(Cancer Council Victoria,簡稱 CCV)

地點: 615 St Kilda Road, Melbourne, Victoria, 3004, Australia

(2) Deakin University's Strategic Research Centres

地點：221 Burwood Highway Burwood, Victoria, 3125, Australia

時間	活動	主持人
10:20-10:25	長官介紹致詞 Welcoming Remarks	Cancer Council Victoria Craig Sinclair Head, Prevention Division
10:25-12:25	Centre for Behavioural Research in Cancer (1)Cancer screening research & evaluation (2)Obesity prevention research & evaluation (3)Skin cancer prevention research & evaluation (4)Tobacco control research & evaluation (5)Supportive care research & evaluation	
12:30-14:30		
14:30-17:30	(1)Deakin Health Economics (Population Health Strategic Research Centre)-HTA (2)Public Health Innovation (3)Health Services Implementation Research (4)Deakin Epidemiology	Deakin Health Economics Sophy Ting-Fang Shih Senior Research Fellow

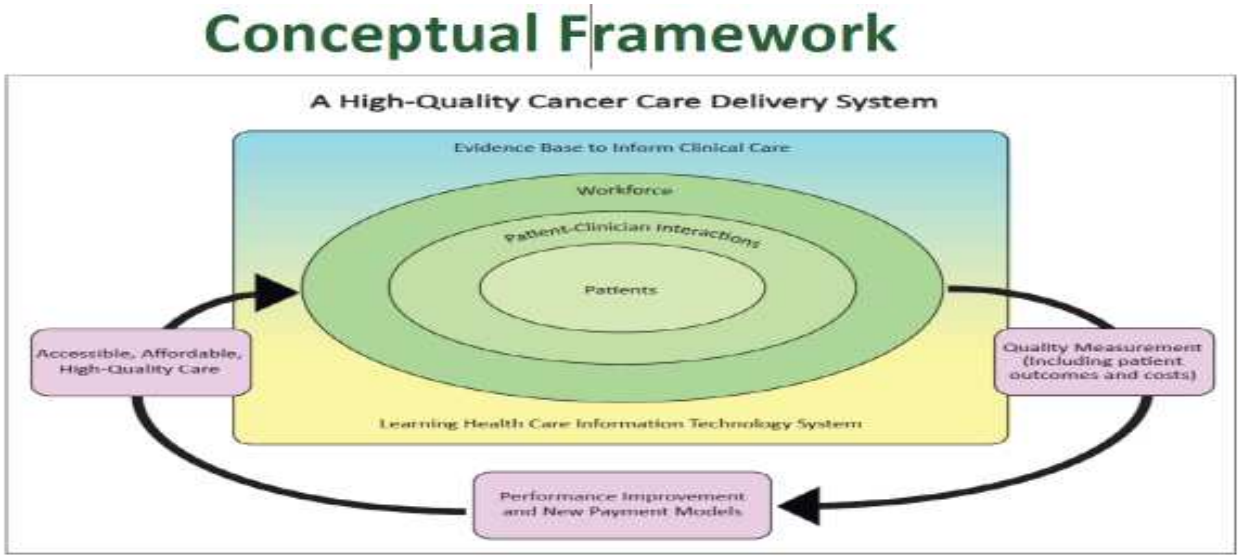
參、會議及參訪重點

茲將大會及參訪摘要重點如下：

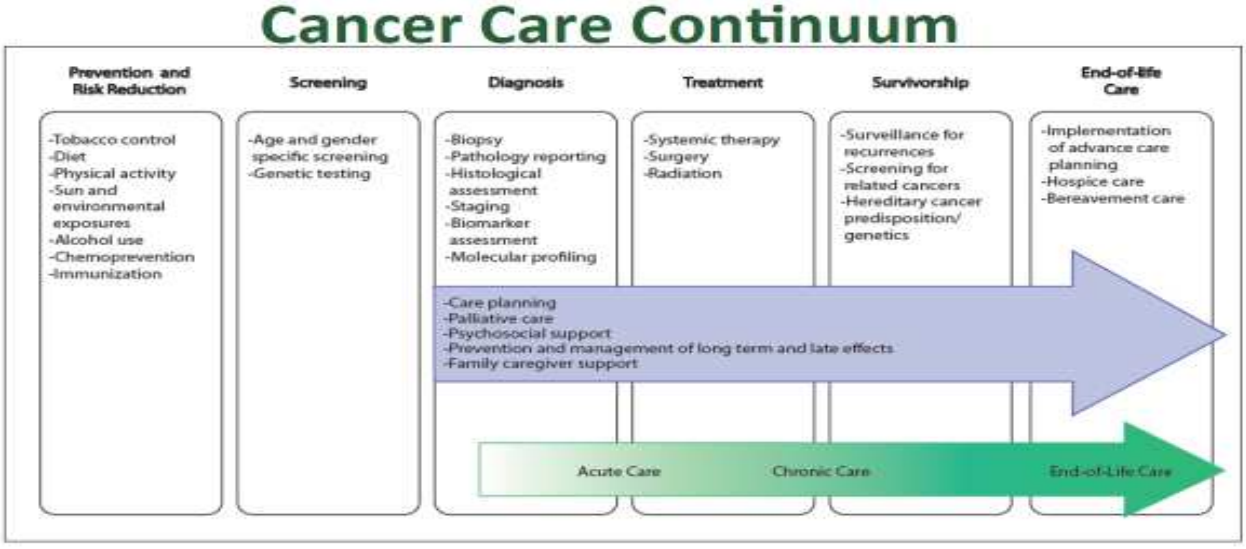
- 大會演講及研討主題

一、癌症防制系統

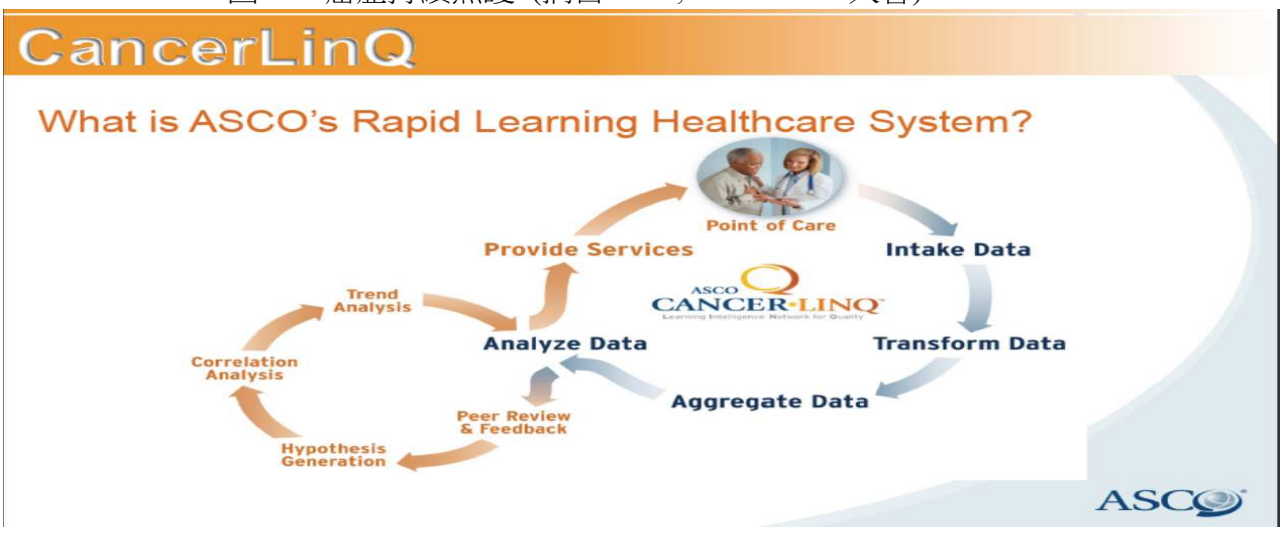
大會主題一是「永續的健康系統(sustainable health system)」，由美國、英國及澳洲分別主講「美國醫學研究院(Institute of Medicine, IOM)對美國癌症照護危機的建議」、「癌症緩和醫療的永續模式」及「永續發展-從免疫經驗談起」，美國 IOM 提出隨著老化問題的日益嚴重，該國到 2022 年癌症存活者會增加 30% ，到 2030 年更提升到 45%，會出現醫療人力短缺，照護需仰賴家屬及第一線照顧者，癌症照護費用到 2020 會高漲到 1.73 億美元。IOM 委員會提出建議應檢視高品質癌症醫療照護系統的機會與挑戰，包括：照護的整合、癌症品質指標成效的通報、癌症存活者照護、緩和照護與家庭照護成長的需求、照護的費用及複雜性增加、新的照護模式的給付改革及高品質癌症照護可近性與不平等議題。並提出高品質癌症醫療照護系統的概念架構、癌症持續照護的模式及癌症資料庫的建置和運用(如下圖一、二、三)如下，這些非常值得學習作為我國癌症政策發展的整體架構與應用。英國提出愈早將緩和醫療介入於癌症的照護中，病人可擁有更好的整體



圖一　高品質癌症醫療照護系統的概念架構(摘自 IOM, 2014 UICC 大會)



圖二　癌症持續照護 (摘自 IOM, 2014 UICC 大會)



圖三　癌症資料庫的建置和運用(摘自 IOM, 2014 UICC 大會)

照護品質，且減少出入急診的次數，更有效節省醫療支出。並引用 Cochrane 2104 發表的系統性文獻回顧，用醫療實證結果來提醒大家應該及早發展安寧照護模式，才是永續的癌症照護。澳洲則以 HPV 及 HBV 等病毒免疫治療經驗，提出免疫治療的發展對癌症永續醫療發展的重要。

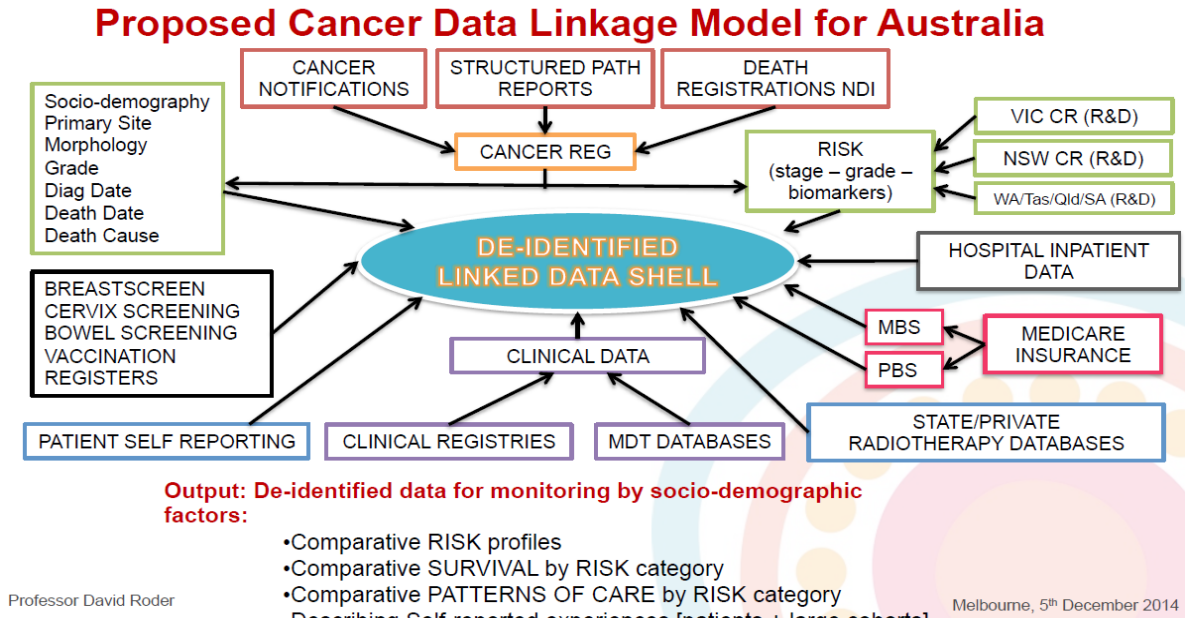
大會主題二是「國家和國際的疾病防治方法(National and international approaches)」，由加拿大及澳洲分別從國際及國家的層面談起，先由世界 AIDS 防治專家 Stephen Lewis 主講，提出 HIV 感染防治是在全球最首要的健康議題，並強調性暴力防治的重要，其次是癌症及非傳染性疾病防治(Non-Communicable Disease, NCD)，並闡述 WHO 提到的 NCD 目標，及未來非傳染性疾病將取代過去傳染性疾病，成為全球最重要的疾病防治；澳洲由前衛生部長 Nicola Roxon 談論研究者、臨床專家與倡議者如何幫政府制定有效的政策，首先請在場與會者假想自己是衛生部長，在有限的時間和資源等壓力下，應如何排優先順序及選擇適合的政策，有那些支持和反對的團體，她以自己過去在澳洲菸害防制成功的經驗為例，從菸品素面包裝法案(Tobacco Plain Packaging Act)推動，與全世界的菸商作戰，喚起各界共同倡議菸害防制，因有許多成功的歷史經驗、堅強的研究實證、民間團體的聯結、良好的公共教育宣傳等，達到卓著的成效，成為全球的典範。因此提出公共政策成功的要素包括：明確的標的族群、符合國家的計畫、有效的民間策動(政策、倡議者及媒體等)、權威官方人士及專業人士的投入、廣大的參與團體、好的研究資料庫、低的介入成本等。

大會主題三是「利用資料驅動決策(Using data to drive decisions)」，由美國史丹佛大學 Atul Butte 主講「Translating a trillion points of data into therapies, diagnostics, and new insights into diseases」藉由大數據(big data)應用，可以改變疾病的診斷與治療，預測未來民眾可以從網路取得物美價廉的基因檢測，檢體傳遞寄送非常便捷，個人健康資訊可以在雲端存取下載，許多政府大數據資料可以開放使用，甚至目前美國已經有高中生利用分析政府大數據資料，研發出創新的乳癌診斷工具，另人讚嘆不已。

有關整個癌症防治，大會安排 NCD Café，每天都有針對非傳染性疾病探討的不同主題，我們選擇參加 12 月 4 日 Session 1. Health in the post-2015 development agenda: Investing in NCDs for a healthy future for all，由來自瑞士 NCD Alliance 執

行長 Katie Dain 開場主持，先說明 NCD 的架構與策略，及後 2015 年的發展期程，全球的與會者一起與他互動，提出不同國家政治上的作法和回應後 2015 年的發展策略，包括：千禧年發展目標(millennium development goals, MDG)、永續發展目標(sustainable development goals, SDGs)等。

12 月 5 日的次子題是「癌症人口群實證資料的資訊系統再設計運用 (Using cancer population evidence to inform system redesign at a local and national level)」，由英、加、澳三國共同發表。英國 Macmillan Cancer Support 分享利用癌症資料庫，將不同癌症別的 5 年存活資料細分不同族群的，以不同的圖像表達，將這些分析找出樣態後，可以從流行病學的變化，看出醫療經濟的差異，重新設計出各類癌症發現與存活的路徑後，將各醫院診治病人的狀況再細分出每個診治時期的花費，最後算出各醫院的醫療成效，然後公布前十名的優劣名單於媒體，藉媒體的力量來刺激醫院的進步。加拿大則運用某一州的乳癌存活者的癌症醫療資料，將不同照護模式(Central multi-disciplinary clinic, Oncology-trained regional primary care physician, Primary care physician with support from cancer agency)下存活率、生活品質、醫療花費等統合計算，找出何種照護模式存活和生活品質最好等。澳洲則利用所有癌症資料庫(如下圖)，先做癌症期別、存活與相關因子包括篩檢、性別、各種不同治療模式、保險給付等作分析，最後將個資去聯結後做社會統計學的分析，可找到各癌最佳治療方式、醫療不平等族群或地域等等。

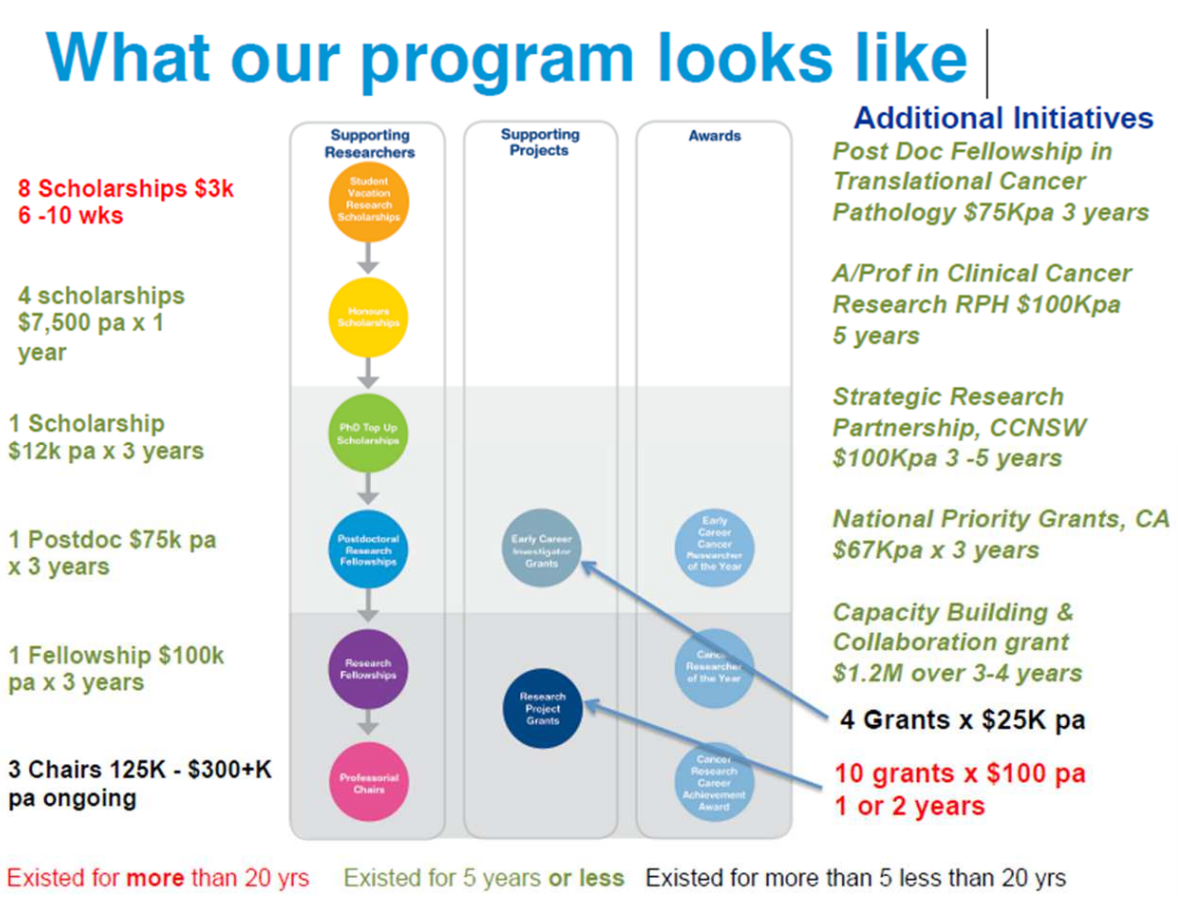


圖四　澳洲癌症資料庫的再分析運用架構

12 月 5 日的最後一個座談會是「國際夥伴標竿學習 (Benchmarking Partnership - global learning from our results)」，由英、加、澳及丹麥 4 國共同發表。國際夥伴標竿學習聯盟(International Cancer Benchmarking Partnership, ICBP)目前有英、加、澳、挪威、瑞典及丹麥 6 國參與，他們先針對 4 個癌症(乳癌、肺癌、大腸直腸癌及子宮頸癌)的癌症存活、分期與治療統合形成國際資料庫，做國與國間統計分析及比較，已建立 5 個癌症相關因子的研究模組，包括：(1)Epidemiological benchmarking study、(2)Public awareness, attitudes and beliefs、(3)The role of primary care and healthcare systems、(4)Variation in patient, diagnostic and treatment time intervals and routes to diagnosis、(5)Data comparability; plus co-morbidities and early deaths (with an initial focus on lung cancer)，發現有許多國間的差異，提出與他國標竿學習的構想，內容非常有趣，現場引發與會者踴躍的討論。

12 月 6 日的次子題是「癌症學會在癌症防治的地位、角色與策略 (Position, role and strategies of cancer societies in cancer control)」，由荷蘭癌症醫學會規畫主持，約旦、愛爾蘭和挪威三國共同發表。約旦公主 Dina Mired 因身為癌症病人的家屬，長期倡議癌症防治，分享民間團體如何跨越障礙，幫助國家癌症防治推動；愛爾蘭則分享民間團體伙伴關係的建立，愛爾蘭癌症醫學會每年辦癌症康復者年會，增加醫療專業團體與民間病友團體等的對話，病人與家屬有機會獲得更多的訊息；挪威則強調政治與法律在民間團體癌症防治的重要性。

12 月 6 日的座談會主題是「癌症研究經費如何善加分配(Funding Cancer Research: How to allocate funds well – and how to do it even better)」，由西澳癌症委員會規畫主持，澳洲和英國共同發表。澳洲的癌症研究分類與分布如圖五，有清楚的架構、執行年限與經費部分配合國家整體發展計畫，應用英國 Brunel 大學的 Health Economics Research Group(HERG)發展的”pay-back framework”，強調如何評估研究的成效，並成立國家醫療資料管理中心；英國則提出未來癌症研究經費分配的趨勢，強調研究的方向已從過去單一學術機構、單一專業領域及單一國家轉變成多機構、跨專業領域及全球整體研究規劃，並應加入病人的需求意見與企業共同合作制定國家重大癌症發展計畫，設立各種獎勵辦法，與國際研究團隊進行大規模的計畫，並利用科技評估來確認計畫執行的成效。



圖五 西澳癌症委員會提供癌症研究計畫之分類與分布

二、癌症預防及篩檢

有關篩檢的部分，參加了由加拿大和美國提出的肺癌篩檢策略(Developed and developing lung cancer screening strategies)，加拿大目前對美國發表的肺癌篩檢結果，對後續推廣肺癌篩檢普遍存有幾項質疑：如何定義篩檢主要族群、戒菸的角色定位、機器普及性不足以解決城鄉差距、陽性率如何定義、檢驗品質的制定及篩檢計畫如何持續等問題，故目前尚無具體國家政策。美國專家則清楚說明肺癌篩檢有利亦有弊，從美國國家 10 年的肺癌研究，到美國預防醫學委員會(USPSTF)提出對 55-79 歲吸菸史為大於 30 包-年(如一天一包達 30 年)，且戒菸小於 15 年，曾吸菸與持續吸菸族群進行篩檢，LDCT 篩檢肺癌之建議評級為 B 等，深入淺出的說明，最後還是強調菸害防制及戒菸的重要性，與我們在台灣專家群的意見非常相近，並未提出其他新的見解。

此次台灣癌症基金會發表台灣癌症預防與篩檢的實證經驗(Evidence-based implementation on cancer prevention & screening in Taiwan)，由彭汪嘉康院士擔任

座長，由本署吳建遠組長代表發表「台灣癌症篩檢的實證經驗(Evidence-based cancer screening policy and implementation in Taiwan)」及「台灣全民打擊肥胖的創意經驗(Fighting against obesity in Taiwan — An innovative approach)」；台灣癌症基金會副執行長蔡麗娟主講「學校和社區癌症預防的飲食衛教育(Dietary education on cancer prevention — School & community initiative)；賴基銘醫師主講「從實驗室到臨床的中草藥癌症化學預防(Complementary Chinese herbs as cancer chemopreventive agents — from bench to clinic) ，將我國癌症防治的三段防治策略，積極推動危險因子預防工作，將政府到民間的防制經驗做分享。包括國民健康署自 99 年全面推動免費 4 項癌症篩檢（子宮頸癌、乳癌、大腸癌、口腔癌），共計提供服務 2300 多萬人次，人數每年增加，103 年大腸癌、口腔癌、乳癌及子宮頸癌篩檢量已較 98 年擴大提供癌症篩檢前大幅成長 1.7 倍，且 103 年 1 年即提供 508 萬人次篩檢服務，並發現癌前病變或癌症者約 5.7 萬名，等於平均每篩檢不到 100 名，可找到 1 名即將罹患癌症或已罹患癌症卻不自知的個案，成功挽救多人性命。

此外，成人過重及肥胖率從 82-85 年的 33.2%，增加至 94-97 年的 43.5%，102-103 年初步為 43.3%，顯示我國成人過重及肥胖情形呈趨緩。另，依據教育部體育署 103 年「運動城市調查」結果，13 歲以上國人規律運動比率，已從 99 年的 26%，上升至 103 年的 33%， 由國家元首政務官等倡議肥胖防制，成功號召 72 萬國民減重 1100 公噸等經驗，此外還有學校和社區營養衛教，全民練 5 功，與中草藥臨床試驗等，透過活潑生動的表達及解說，台下與會聽眾對我國癌症防制的成效嘖嘖稱奇。

另有一場大會安排英國和印度專家對談篩檢之知情同意議題，印度之專家及台下的聽者都提出知情同意的過程相當之複雜，若在醫療現場要對受篩檢者做到知情同意，因為所要揭露的資訊多，需時甚長，真正能符合標準流程的，實際上並不多，而且病人處於資訊不對等，就算同意接受篩檢，恐怕離真正的知情同意還有一段距離。但英國專家表示，這是最基本的倫理，且她認為民眾要了解篩檢的相關資訊並不難，且可以將其制式化來協助醫護人員完成此項工作。這段討論雖並無結論，但雙方都表達了在篩檢領域中對知情同意不同的的意見。

三、癌症診斷及治療

有關偏鄉的癌症的遠距照護模式(Models of Care in Teleoncology：Innovation in rural cancer service delivery)，澳洲因幅員廣闊，為減少醫療不平等，以發展癌症遠距醫療及護理來解決因交通和等待診治等困境，以達到即時診治或解決問題。此外，透過與癌症醫學中心多專科的視訊會議及腫瘤專科護理師遠距教學等合作，發展在地化療及頭頸癌病人語言吞嚥復健與營養的長期照護。

台灣癌症希望基金會以癌症民間團體模式滿足病友的需求的利基(An NGO model for cancer care in Taiwan - a niche to meet patient needs)為主題，做了三場的演講包括：國民健康署吳建遠組長的「The current status of cancer care in Taiwan 」、邱秀瑜副教授主講「Bridging the gap in cancer care: Cancer resource center and HOPE station as examples」及周俐穎「Advocacy and Campaigns to Promote Cancer Care」，分享台灣政府與民間團體合作建立癌症病人導航的過程和經驗，全台遍佈癌症資源中心及支持團體等，會中設計有獎爭答，有許多國外代表爭相提問，討論熱烈，非常生動有趣，深獲好評，堪稱一次成功的國際交流。

丹麥癌症學會以病人的觀點測量癌症照護品質(Measuring the patient perspective in cancer care)，從自測健康（self-rated health；SRH）和生活品質的測量是疾病和死亡獨立的預測指標概念談起，帶入病人報告健康結果patient-reported health outcomes(PRO)的觀念，目前已廣泛應用在臨床試驗作為重要成果指標的評估工具。病人對這樣的評估感覺自己被重視，病人先填寫 PRO 量表也可縮短醫師看診的時間，對醫師和病人是雙贏的策略，同時可以增進彼此的關係。病人報告結果測量 patient-reported outcome measures(PROMS)可以大幅改善病人及照顧者的回饋機制，並且能充實照護品質及病患生活品質。此次報告偏向以整個治療過程如化療副作用、身體及病人情緒需求滿足的自我評估，尚在概念架構與研究驗證的階段。

四、癌症康復及安寧照護

癌症照護的財務病態(The financial morbidity of cancer care)這個議題比較新，由美國 Memorial Sloan-Kettering Cancer Center 的代表從醫療可近性的倫理議題著墨起，提出醫療資源有限下，人人付得起的癌症醫療成為中低收入家庭及開發中國家的困境。由澳洲代表從癌症醫療對談中禁忌話題如死亡、失能及個人經

濟議題，以臨床調查報告帶出許多腫瘤科醫師基於保護弱勢病人不與病人談論自費抗癌藥的困境，點出醫療人員欠缺與病人及家屬揭露癌症醫療財務問題的溝通技能，並呼籲應正視這個問題的倫理與專業技巧議題。此外，在澳洲提前運用養老金(superannuation)也成為癌症醫療照護的解決方案。

這次大會有不少關於康復者照護的主題發表，我們選擇「如何對癌症康復者及其家屬賦能，以改善病人自我照顧及後續追蹤(Empowering cancer survivors and families for improved medical follow-up and self-care)」，包括：從醫院到社區，美國加州希望之城(City of Hope)醫學中心結合南加州 106 個社區組織，涵蓋 315 個郵政地區，做癌症與慢性病病人長期的教育和研究計畫，特別著重關懷如拉丁、非洲及亞洲少數民族，從癌症預防、篩檢、診斷、治療到癌末的領航與康復照護，藉由領航員提供 5 次的癌友康復照顧計畫(survivorship care plan)衛教，前 4 次間隔 1 週，最後 1 次與第 4 次間隔 1 個月，確保能完整理解整個治療及後續追蹤狀況，弱勢病人因此可完成治療與定期追蹤。另，美國 Case Western Reserve 大學提出攝護腺癌病人尿失禁照護計畫(stay dry program)，澳洲 Flinders 大學提出以慢性病管理模式的經驗，整合癌症康復者自我管理。這些計畫目前尚在試辦中，收案人數規模比較小，尚待未來進一步的成本效益評估。

- 會後參訪主題

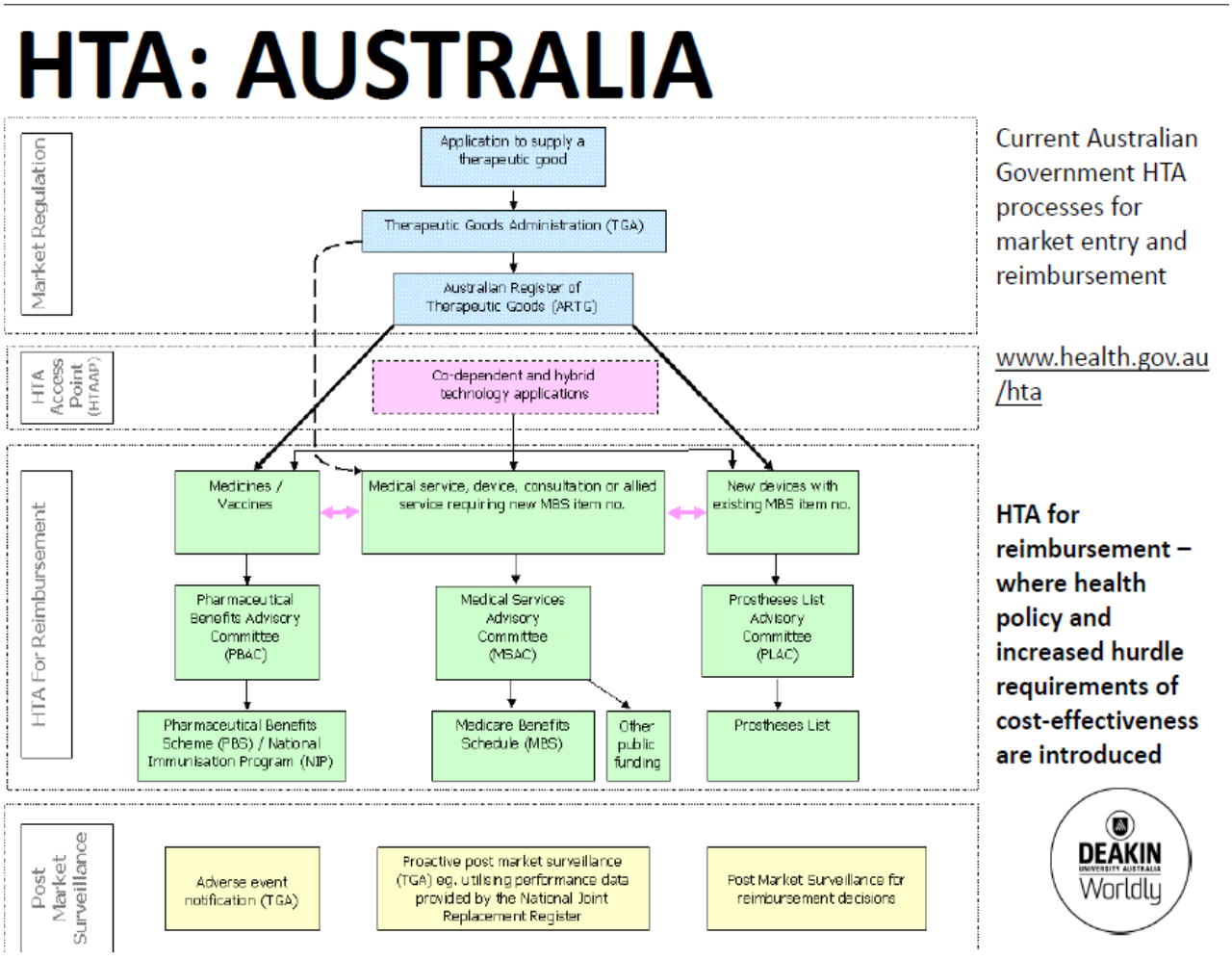
一、澳洲皮膚癌防治經驗

透過參訪 Cancer Council Victoria，先拜會該會主任 Craig Sinclair 後，並由 Sue Heward 介紹澳洲最負盛名的 Sun Smart 計畫及計畫，並與評估經理 Verity Hodgkinson 座談。Sue 先說明皮膚癌是澳洲最嚴症的健康問題，是癌症死亡的第一位，該會是澳洲第一個推動 Sun Smart 計畫的單位，並協助 WHO 在全球推動相關的計畫，全球許多國家都到此受訓，透過各種教育宣傳，特別是從國中小、高中等學校的教育、社區的教育等，搭配符合科學的定期電話抽樣調查，該計畫是澳洲目前最符合成本效益的計畫，成效卓著。據聞現在澳洲人在海灘及休閒度假中心的衣著一改過去的清涼，大家都學會「遮遮掩掩」，我們走在街道上，看到慢跑的民眾也都戴起帽子，全身減少陽光的直接照射，長期以來，協會的成就已成功地大幅降低皮膚癌的發生和死亡率。另，澳洲政府自 2013 年起對超過 100 萬澳幣的計畫要求事前做效益評估，該會有專門的計畫評估經理負責全會的成本

效益評估，確保每個計畫的推動是符合成本效益的。

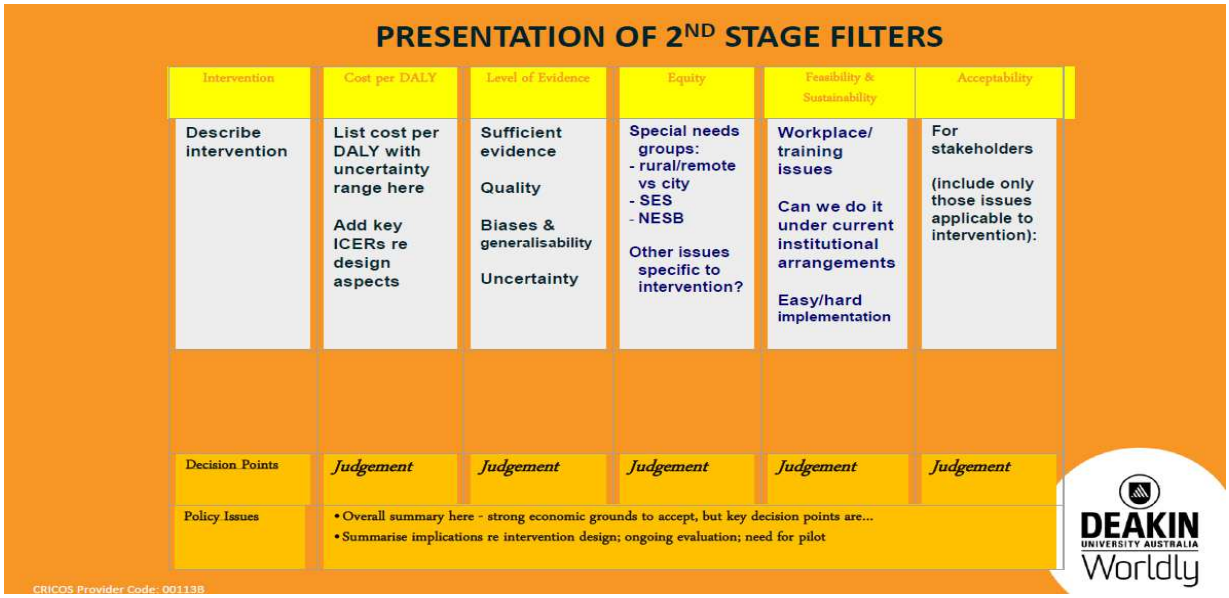
二、澳洲推動醫療科技評估實務經驗

選 Deakin University's Strategic Research Centres 參訪的原因，是該中心長期與澳洲政府在醫療健康科技成本效益評估有許多的合作，此外，也與美國和泰國有一些國際合作，參訪的過程讓我們更瞭解澳洲目前癌症醫療科技評估執行的狀況，澳洲政府要求許多癌症的新藥納入醫療保險前須要科技成本效益評估，為我們解說的研究員 Marcus Tan，曾經在 Pharmaceutical Benefit Advisory Committee(PBAC)工作，除給我們完整科技成本效益評估概念外，清楚解釋澳洲政府如何有系統的納入執行新藥審核機制(如圖七)，如何發展藥商與政府共同分攤癌症病人的藥費，有些病人的藥是藥商免費提供給病人的，這些機制還蠻值得做參考的。



圖七　澳洲政府許可藥物或納入給付時所需進行之醫療科技評估流程圖

另 Deakin University's Strategic Research Centres 副教授 Cathy Mihalopoulos 解說該中心發展的 Assessing Cost- Effectiveness Approach (ACE)政策評估內容，從經濟理論(economic theory)、倫理與社會公義(ethics & social justice)、實證(empirical evidence)及決策者需求(needs of decision-makers)四個面向來分析一個政策是否符合成本效益，從政策介入措施的條件選擇是否清晰、標準化評估方法降低方法學的干擾、實際從政策整體運作的現場評估(非僅從文獻中取得)、以實證方法學來驗證，最後提供政府周延政策的目標和利益，過程嚴謹，步驟清晰，從概念架構到執行步驟，的確是一個容易理解的成效評估方法。Cathy 告訴我們，他們的團隊已完成在癌症、心血管疾病、肥胖與心理衛生政策相關的評估，成效斐然。近年全球衛生醫藥領域開始重視及透過醫療科技評估(Health Technology Assessment, 簡稱 HTA)，決定醫療服務利用的優先性，如英, 加, 澳, 韓等，而澳洲是在此方面相當有經驗及已長期實際應用於政策制定的國家，故與會人員亦藉由參與此次會議之便，參訪當地與政府單位合作許多 HTA 案件的 Deakin 大學，了解澳洲如何進行醫療衛生科評估。



圖八　ACE 標準化評估方法降低方法學的干擾

HTA 是指系統性地評估某醫療科技的特質、效果或其他衝擊，提供政策決策者整合性資訊，對不同醫療科技(藥品；生物製劑；醫療器材；內外科處置及臨床檢驗室等等) ，通常決策者會將欲了解的問題，以研究方式委託學界或 HTA 機構做出有科學依據的選擇。HTA 是一個跨專業領域的政策研究，它須整合運用醫

療、組織、社會、倫理及經濟面的科學證據，包含考慮醫療科技效果、使用適當性以及成本。主要藉由四個基本問題，亦即此科技是否安全有效？對誰有效？成本為何？與所選擇之對照服務比較結果如何？

澳洲有全民醫療保健系統，澳洲的公立醫院系統由澳洲政府，以及州和領地政府共同出資設立，並由州和領地衛生部管理；其 Medicare 為符合者提供免費公立醫院治療，並透過藥物福利計劃 （Pharmaceutical Benefits Scheme），幫助支付大部分處方藥物的費用。Medicare 讓澳洲人可在公立醫院得到多數的免費治療，但其同時也可自由選擇私人醫療服務。 民眾對醫療保健系統的貢獻依其收入而定，而服務提供的財源則來自稅收和國民保健稅（Medicare levy）。

澳洲政府或私人保險對於要支付何種服務，或藥品製造者或服務提供者要促其產品(依該項產品的性質)，可分為下列幾種：藥物 Pharmaceutical Benefits Scheme (PBS) ，疫苗 National Immunisation Program (NIP) ，醫療服務和處置 Medicare Benefits Schedule (MBS) ，植體 Prostheses List，血液製劑 National Blood Agreement)被納入給付，透過三個主要的諮詢委員會來做成建議，亦即 PBAC，MSAC，PLAC，政府並置一單一窗口(Health Technology Assessment Access Point，HTAAP) 來受理申請。 HTA 視上述服務相對的臨床和成本效果，來決定是否給付，確保有最好的健康狀況改善和最少的成本。

舉例而言，藥品給付表 PBS 的依據於國家衛生法 (*National Health Act)* 中規定，依該法澳洲政府並製訂了國家藥物給付的相關規定 National Health (Pharmaceutical Benefits) Regulations . 依國家衛生法，PBAC 是一獨立單位，對衛生部長(Minister for Health and Ageing) 負責提出藥品是否納入 PBS 給付的建議 。新藥一定須 PBAC 的審議和推薦才能列入 PBS，PBS 表每月更新。而納入給付的新藥也須進行上市後監測 (Post-Market Surveillance，PMS) ，確認其是否依然如原先審核時，被認為安全、有效或與其它新出現的醫藥或科技比較時亦具成本效益，並廣為公告週知。

經過這些年來，澳洲政府在 HTA 的投入是否有監測其績效和表現? 澳洲政府亦出版 HTA Review，要求其具成效和當責，並指出此評估體系的需要改進的地方。有關審查案件申請和其成果，以及其時間表，這些有關於該諮詢委員會的執行是否具成效的資料都會被公開，依照委員會應盡的職責，如是否依時開會，與

會人數及會中是否提供專業意見，是否迴避利益衝突等都是重要指標。而 HTA Review 對可改進的方法提出幾項核心做法，包含: 永續性(sustainability)、透明度及當責 (transparency and accountability)、行政效率（administrative efficiency）、彈性 （flexibility and fit for purpose ），且以實證為基準 （evidence-based）。

肆、心得與建議

茲將此次出國心得與建議整理如下：

一、應持續強化癌症病人導航與康復者(survivorship)政策：由於癌症康復者快速成長，全世界都積極發展癌症康復者計畫，以因應未來的需求，我國應及早規劃及發展，從政策的制定到長期照護，政府與民間團體共同形成支持網絡，如許多國家發表癌症康復者照護計畫，開辦大型的癌症康復者年會。這次大會的模式就是最好癌症康復者會議的典範，有許多癌症病友代表參與，會議現場發言踴躍，提出許多不同的癌症防治觀點，感受到癌症病友的發聲在癌症防制上的重要，透過癌症康復者、民間倡議團體與各類醫療專業人員的對話，增加癌症防治力量的凝聚，這種多元性與過去參加專業研討會多數是專業人員的感受非常不同，深覺未來應積極開展癌症康復者的策略規劃，在國內形成網絡和溝通平台，才能因應癌症康復者快速成長的需求。

二、推動緩和醫療及早介入於癌症照護：緩和醫療及早介入於癌症發病之初的觀念，如同出院準備應該開始於住院之初一樣，是已具實證的有效作法。英國是最積極推動的國家，他們的長期推動發現對病人、家屬和國家醫療耗費來說，是多贏的策略，國民健康署長期致力於安寧照護模式的建立，應可藉由癌症品質提升計畫，來導引這個模式，達到此次大會強調永續且高品質的癌症照護理想。

三、師法澳洲推動菸害防制：這次對澳洲前衛生部長 Nicola Roxon 印象最深刻，她的演講內容讓人不禁要舉大姆指讚嘆一下(真有 guts!)，她過去為澳洲推動菸品素面包裝法案，不惜與全世界的菸商作戰，喚起各界共同倡議菸害防制，從研究實證、民間團體的聯結、公共教育宣傳等，展現無比堅強的意志，成功的完成歷史使命，成為全球的典範。她所提出公共政策成功的要素，包括明確的標的族群、符合國家的計畫、有效的民間策動(政策、倡議者及媒體等)、

權威官方人士及專業人士的投入、廣大的參與團體、好的研究資料庫、低的介入成本等，非常值得我們參考。

四、發展偏鄉離島癌症遠距醫療：澳洲幅員廣大，積極發展偏鄉癌症遠距醫療，台灣雖地小，但存在偏鄉離島癌症醫療不平等的問題，我們可利用遠距醫療發展偏鄉離島癌症醫療與護理教育支援系統，提高這些資源不足的地區醫療與護理照護的能力，讓民眾能獲得在地醫療，免於長途的奔波。

五、加速巨量資料的應用與國家資料庫的開放：此次研討會可以看出美國在巨量資料應用做了許多努力，還有他們國家資料庫開放後的成果，展現新的醫療契機，當然現場與會者對巨量資料與國家資料庫的開放提出不少爭論，包括資料分析判讀可能的謬誤與個資保護的議題，非常值得關注。

六、癌症資料庫整合性分析與再利用：我國有許多癌症資料庫，包括：癌登、癌篩、就醫導航及健保檔等等，國內已有許多專家做分析與再利用，惟我們政府部門間的整合不足，尚未能將這些資料做更有效的利用，應可思考如何將這些系統再造，產生更大的效益。

七、發展癌症資料庫與他國區域統整分析比較：從英、加、澳、挪威、瑞典及丹麥 6 國組織國際夥伴標竿學習聯盟，對 4 個癌症(乳癌、肺癌、大腸直腸癌及子宮頸癌)的癌症存活、分期與治療統合形成國際資料庫，做國與國間統計分析及比較，建立 5 個癌症相關因子的研究模組等研究分析的經驗，可以從跨國比較後學習國與國政策推動的良痞，是很好的標竿學習方法。

八、推動大型計畫補助或委辦前預先做科技成效評估：癌症防治工作包含各項從預防、篩檢和治療，直至安寧療護之各項服務，而篩檢佔所有經費的大宗，且自 84 年政府開始提供子宮頸癌篩檢(亦即子宮頸抹片)以來，至今健康署已完整提供世界衛生組織所推薦的四種癌症篩檢，包含子宮頸癌、乳癌、大腸和口腔癌篩檢。然而癌症篩檢政策，因為政府預算的逐年拮据，以及新的癌症的篩檢實證的出現，而遭到了挑戰。例如美國預防醫學委員會近年公布的使用低劑量電腦斷層掃描(LDCT)來篩檢肺癌，以及搭配人類乳突病毒(HPV)和子宮頸抹片來進行子宮頸癌篩檢是否成本效益更佳等，釐清新的且被認為有效的服務，是否較現行的服務具有更佳的成本效益而適合由政府來提供。目前癌症領域中需進行的ＨＴＡ議題是以ＬＤＣＴ對重度吸菸者進行肺癌篩

檢，以及各項癌症篩檢之間隔是否有需調整必要，宜儘速進行。

九、應用世界咖啡館(world café)的模式於未來的國際研討會：這次大會 NCD café 是我第一次參加這種 world café 形式的國際研討，先四人一桌圍坐，提供茶點咖啡，在輕鬆愉快的氣氛下交流各國不同 NCD 防制的意見，後來還特別去了解 world café 是這幾年很流行的意見交流法，可增加會議過程的趣味性，達到更廣泛的交流。

十、推動父母支持子女施打 HPV 疫苗：澳洲是 HPV 疫苗的發源地，Ian Hector Frazer 是 HPV 疫苗發明專家，在這次大會中被稱為 Australian National Living Treasure，他推動 HPV 疫苗施打，改善澳洲子宮頸癌的發生率和死亡率，澳洲還有許多推動父母支持子女施打 HPV 疫苗的行為研究，這部分值得我們學習。

活動照片

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吳建遠組長演講</td>
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吳建遠組長演講</td>
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與 Cancer Council Victoria 主任 Craig Sinclair 合影</td>
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與 Sun Smart 計畫經理、計畫評估經理 Verity Hodgkinson 合影</td>
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與 Deakin University's Strategic Research Centres 副主任 Prof Marj Moodie 合影</td>
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與 Deakin University's Strategic Research Centres 副教授 Cathy Mihalopoulos 合影</td>
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附件 1 研討會議程


2014 WORLD CANCER CONGRESS PROGRAMME AT A GLANCE
Tuesday 2 December
Wednesday 3 December
Thursday 4 December
Friday 5 December
Saturday 6 December
JOINT DAY WITH COSA
08:00 Global Village opens
08:30 – 10:00 Plenary (Joint with COSA)
10:00 – 10:30 Networking Break
10:30 – 12:00 Concurrent Track Sessions
13:00 – 13:15 Lunch and Learn
13:15 – 14:15 - Parallel sessions - Abstract Oral Sessions
14:15 – 14:30 BREAK
14:30 – 15:30 - Parallel Sessions - Abstract Oral Sessions - The Big Debate (Joint with COSA)
15:30 – 16:00 Networking Break
15:30 – 17:00 The Big sCreen
16:00 – 17:00 - Parallel Sessions - Rapid Fire Sessions
17:30 – 19:00 'A Day Without Cancer' A exclusive documentary screening event organised by Princess Margaret Cancer Foundation
18:00 Global Village closes
EVENING Sponsored Dinner (Invite only) Organised by the American Cancer Society
09:00 – 14:00 World Cancer Leaders' Summit (Invite only)
09:00 – 14:00 UICC Master Courses
WORLD CANCER CONGRESS
15:00 - Global Village opens - Registration Opens
16:00 – 18:00 UICC General Assembly (UICC Members only)
17:00 – 18:00 Welcome Reception in Global Village
18:00 – 19:00 UICC President's Reception (UICC Members only)
18:00 – 19:00 2014 World Cancer Congress Opening Ceremony
19:00 Global Village closes
08:00 Global Village opens
08:30 – 10:00 Plenary
10:00 – 10:15 BREAK
10:15 – 11:15 Sub-plenary
11:15 – 11:45 Networking Break
11:45 – 13:15 Concurrent Track Sessions
13:15 – 14:45 Lunch and Learn
15:00 – 16:00 - The Big Debate - Parallel sessions - Abstract Oral Sessions The Big sCreen
16:00 – 16:30 Networking Break
16:30 – 18:00 - Parallel Sessions - Rapid Fire Sessions
18:15 Global Village closes
19:00 – 19:00 Australian Concert: Organised by Cancer Council Australia and the Local Host Committee
08:00 Global Village opens
08:30 – 10:00 Plenary
10:00 – 10:15 BREAK
10:15 – 11:15 Sub-plenary
10:15 – 12:00 The Big sCreen
11:15 – 11:45 Networking Break
11:45 – 13:15 Concurrent Track Sessions
13:15 – 14:45 Lunch and Learn
15:00 – 16:00 - The Big Debate - Parallel sessions - Rapid Fire Sessions
16:00 – 17:00 2014 World Cancer Congress Closing Reception
17:00 Global Village closes
17:00 – 19:00 Public Event "Inspiring Lives, Inspiring Music"

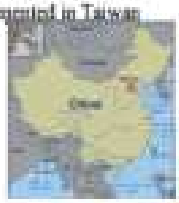
附件 2 「The current status of cancer care in Taiwan」報告簡報

The current status of cancer care in Taiwan

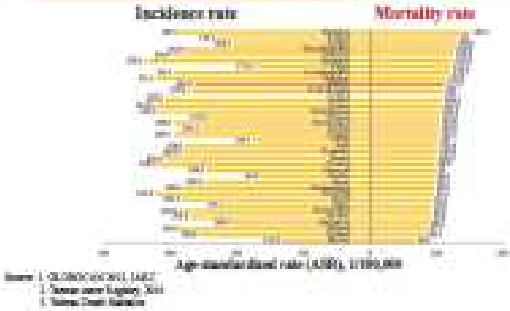
Chien-Yuan Wu
Director of Cancer Prevention and Control Division
Health Promotion Administration
Ministry of Health and Welfare, Taiwan

Where is Taiwan?

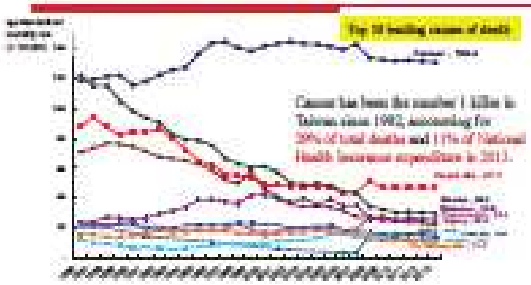
- Taiwan is situated on the northeastern edge of the Pacific Ocean, off the southeastern coast of the Chinese mainland. Located midway between Korea and Japan to the north and Philippines to the south.
- Household registration has been implemented in Taiwan since 1906.
- At the end of 2013, the total population of Taiwan was 23 millions.



Incidence and mortality, OECD countries



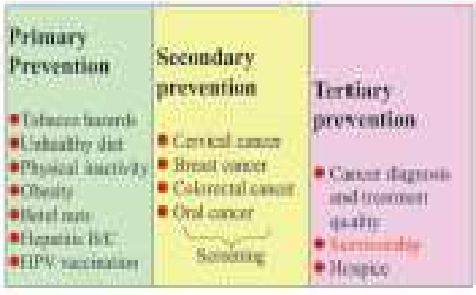
Burden of Cancers in Taiwan



Cancer control infrastructure

- Taiwan Cancer Registry, a population-based cancer registry, was founded in 1979, and Death Statistics.
- Cancer Control Act, which came to effect in 2003, regulate hospitals with greater than 50-bed capacity, involved in cancer care, to participate in reporting all newly diagnosed malignant neoplasms to the registry. Eighty percent cancer patients are diagnosed and treated in these hospitals.
- National Health Insurance was implemented since March 1995, with 99.8% coverage of the population.
- National Cancer Control Programme is in place, now we are in the Phase III NCCP.

National Cancer Control Programme



Cancer survivors in Taiwan

Survivorship - Living With and Beyond Cancer: Life and health after a cancer diagnosis and once treatment is over (NCI, USA) ; Living With and Beyond Cancer: (NHS, U.K.)

- Taiwan Cancer Registry: 520,000 cancer survivors (474,000 are registered in the health insurance system who were issued catastrophic illness certificate).
- Diagnosis and treatment of cancer is covered by the national health insurance. Cancer patients with a catastrophic illness certificate, his/her co-payment can be exempt.
- The medical cost of cancer patients were 5 times higher than the average and accounts for 11% National Health Insurance Expenditure.

Cancer care and strategy

U.S Cancer Control Continuum(1970-mid)

adapted from the NCI figure on the "Cancer Control Continuum".

What survivors need

- Long-term follow-up/ surveillance
- Late-effects management
- Rehabilitation
- Coping
- Health promotion & prevention

NCCN Guidelines for Survivorship

- Anxiety & Depression
- Cognitive function
- Exercise
- Fatigue
- Immunizations and infections
- Pain
- Sexual function
- Sleep disorders

Comprehensive service network aimed at cancer patients

Strategies to improve Diagnosis and management

- Accreditation for comprehensive cancer care quality
  - Treating more than 500 new cancer cases/ yr
  - Domains
    - Organizational policy and management of cancer care quality and clinical procedures
    - Establish cancer registry long-form database for use in quality improvement
    - Provide diagnosis and tx according to evidences and guidelines
    - Establish multi-disciplinary team care models
    - Establish chemotherapy coherence and safety
    - Establish clinical and pathological peer review mechanisms
- Subsidy plan (pay for cancer care performance)
  Monitor improvement on quality of care, and pay for performance

Core measurement (Breast cancer)

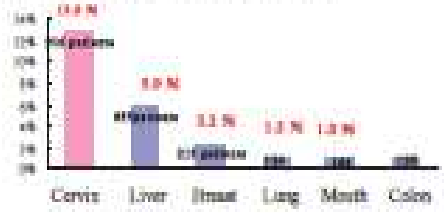
Breast cancer treatment core indicators all improve

Indicators	[illegible]	[illegible]
1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]
4	[illegible]	[illegible]
5	[illegible]	[illegible]
6	[illegible]	[illegible]

Distribution of hospitals with accreditation of the comprehensive cancer care quality

Patients not undergo treatment

- According to registry, 18% newly diagnosed patients did not receive treatment within three months after diagnosis (patients above 80 y/o are excluded)



Every Life Counts!
Cancer patient medical navigation service

- Mission：
  - Ensure golden timing for treatment
  - Best medical service efficiency (quality + hospice)
  - Saving lives
- Main target：Golden Decade Megaplan and 25 X 25
  - 20% reduction on mortality rate by 2020
  - 25% reduction on premature mortality rate by 2025
  - Extend lifespan, raise awareness for healthy living
- Target：Newly diagnosed patients

Navigation program in hospitals

- By care coordinator
  - Require hospitals which participate in our subsidy plan have care coordinators work as navigators
- By one-stop cancer resources center
  - HPA supports P4P hospitals to provide direct services to patients, include medical, mental social and other needs

NGO's as partners to provide patient support

- Providing information
- counseling
- Emotional support
- Nutrition education
- Ward / home visit
- Instrument and material
- Day care
- Grief counseling
- Peer support
- Healing programmes

Promotion.
Prevention.
Protection.
Participation!

Taiwan
Health
Promotion
Administration

Ministry of Health & Welfare

Evidence-Based Cancer Screening Policy and Implementation in Taiwan

Chien-Yuan Wu, Division Director
Director of Cancer Prevention and Control Division,
Health Promotion Administration
Ministry of Health and Welfare of Taiwan

Outline

1. Background
2. Strategies to promote cancer screening
3. Results and the way forward

Background

Cancers Incidence & Mortality Rate Compared with OECD Countries

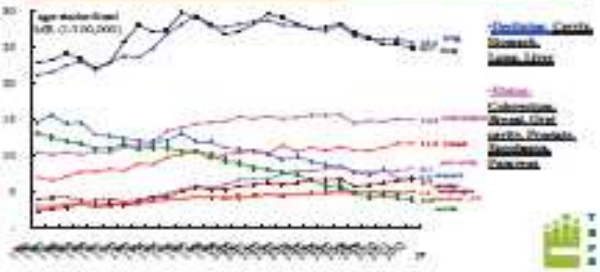
Table 1. Recommended activities for early detection of selected cancers

	Activities	
	Early diagnosis	Screening
Breast	Yes	Yes
Cervix	Yes	Yes
Colon and rectum	Yes	Yes
Endometrium	Yes	No
Lung	Yes	No
Oral cavity	Yes	No
Oropharynx	No	No
Stomach	Yes	No
Nasopharynx	Yes	No
Other skin cancers	Yes	No
Ovary	No	No
Urinary bladder	Yes	No
Prostate	Yes	No
Haematological	Yes	No
Testis	Yes	No

Among all cancers, screening has been proven to do more benefit than harm in 4 sites of cancers.

WHO, 2007

Long term trend of major cancer mortality in Taiwan



Strategies to promote cancer screening

Strategies to advocate screening policy

(I). Reduce economical barriers

(II). Infrastructure & quality control

(III). Innovative payment design

(IV). Enhance multiple channel service system

(V). Enforce positive case follow-up

(VI). Education and mobilization

(I) Reduce economical obstacles

- Funding for screening services:
  - Civil service budget
  - New financial resource: tobacco surcharge was increased from $10 NTD/pack to $20 NTD/pack in 2009, 6% of total revenue (55 million USD) was used on cancer.
- Screening for 4 major cancer (cervical cancer, breast cancer, colorectal caner, oral cancer) full subsidy
- Local government giving extra bonuses to target public members

(II) Enhance quality control and infrastructure

- Establish cancer screening SOPs, including illustration, service, report and follow-up
- High quality cancer screening resources:
  - Medical personnel training and accreditation.
  - **Accreditation of equipment, facilities and institutes** : pathology of cervical cancer, breast imaging device, iFOBT test proficiency.
- **Continuous quality assurance and control** : Set up QC standards, monitoring performance of service providers.

(III) Improve reimbursement

- United payment for service providers
  - FFS (fee for service) : payment improved
  - P4P (pay for performance) : pay more for higher colorectal and oral cancer positive case follow-up rate
- Extra P4P
  - Hospitals with 5,000+ outpatient number (aged 30+) / year can join
  - To enhance hospital capacity for better screening rate

Transforming healthcare practice to increase national screening capacity

1. Project-based subsidy
   - ✓ Oral Screening, mammography, pap smear test, iFobt
2. A module for transforming hospital practices based on the WHO-ICPH model, including:
   - ✓ extra personnel,
   - ✓ new IT function for automatic recruiting and tracking of results,
   - ✓ total mobilization of providers, services and patients,
   - ✓ internal monitoring and analysis of cancer screening performance.
3. External audit, monitoring, feedback and public reporting on hospital performances

(IV) Enhance multiple channel service system

- Clinical channel: integrate hospital resources , to compensate shortage of public health facilities and clinics.
- Community channel: enhance workplace and community screening, increase availability, reduce the gap between urban and rural areas.
- Postal self sampling: Pilot programs for postal self sampling (HPV screening, iFOBT)

Cancer screening service providers

Three ways to get target population screened

1. Proactive reminding to patients who are already in the hospital

2. Call out to patients not yet returning

3. Facilitate community screening

"Every visit to a provider can be an opportunity to prevent cancer by making sure men and women are referred for screening appropriately."

Mammography facility growth

Sensible usage of grants to benefit the public (P4P4P)

Souvenir / Gifts prepared for " Get your price for cancer screening" activity (photo by : National Taiwan University Hospital)

News report

i-FOBT recommended by nurse in a hospital visit for DM , stage I colon cancer was found

[United Daily News / 101/08/11]

(V) Enforce positive case follow-up

（1）SOP for positive case follow-up

（2）Reward for positive case referral

（3）Unconfirmed positive cases are referred to public health system for further follow-up.

Test report reminds
1 colorectal cancer / polyps is found for
every 2 iFOBT positive cases

(VI) Education and mobilization

Results and the way forward

Evidence based screening policy and cost effectiveness

Unit（NTD）

Policy	Cost per year (NTD)	Mortality reduction for screened individuals	Additional cost per person/year gained (lifesaving interval)
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

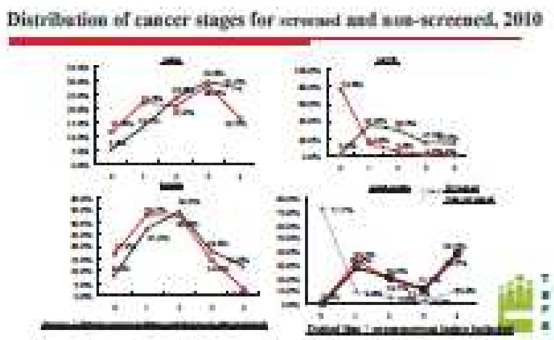
[illegible]

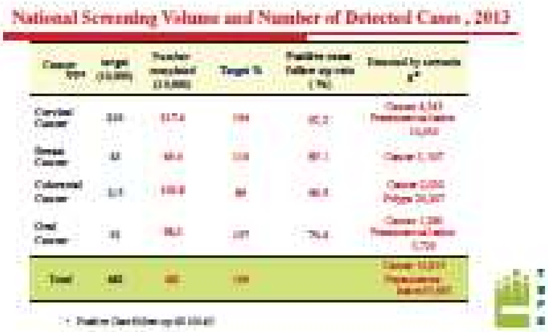
Volume of Cancer Screening Services, 1995-2013

Comparison on growth of screening volume between subsidized hospitals and non-subsidized health service

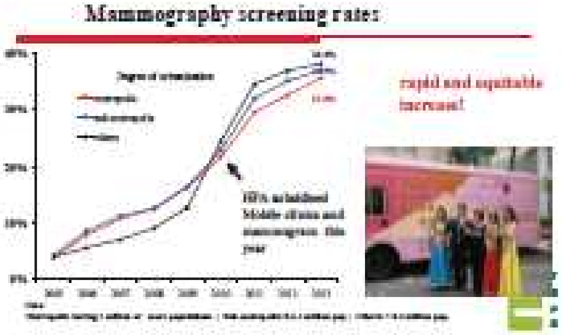
Screening volume increase significantly in subsidized hospitals but not in the non-subsidized health services


News report
"Kaohsiung Medical University Chung-Ho Memorial Hospital was ranked the Champion of Life Saviors of 2010" 【Apple Daily / report from Taipei , 2010/08/15】


Distribution of cancer stages for screened and non-screened, 2010


National Screening Volume and Number of Detected Cases , 2012


Overall performance of the national screening program, 2012
1 colorectal polyp is found for every 24 iFOBT done
1 colorectal cancer is found for every 307 iFOBT done
1 breast cancer case is found for every 179 mammograms done
PPV
Case Yields


Mammography screening rates
rapid and equitable increase!
HPA subsidized Mobile clinics and mammogram this year

Objectives for 「National Cancer Control Program」

Cancer site	Target pop.	Tests and intervals	Screening rate achieved, 2007	Screening rate achieved, 2012	Objectives 2017
Cervical Cancer	F, 30-69 yrs	Pap smear or HPV testing, Every 3 yrs	55%	70%	70%
Breast Cancer	F, 45-69 yrs	Mammography, Every 2 yrs	7%	30%	40%
Colorectal Cancer	50-69 yrs	IFOBT, Every 2 yrs	11%	30%	40%
Oral Cancer	Smokers or betel-quid chewers, ≥30 yrs	Oral mucosa inspection, Every 2 yrs	14%	44%	50%

Conclusions - 1

- Taiwan has recognized our extraordinarily high burden of cancers and has turned it into strong political commitment and evidence-based actions.
- **Effective funding and widespread transformation of the health system has brought about the highest-ever and equitable growth in cancer screening volume by 1.5 folds** within a short period of time.

Conclusions - 2

- **We recognized the importance of prevention as a core component for long-term success and has included these in its future plan.**
- **In our way forward, Taiwan will:**
  - further reduce its smoking rate by half through periodic review of tobacco price and full coverage of cessation services;
  - turn the trend of obesity by policy intervention and creation of more supportive built environment for healthy eating and physically active living; and
  - Increase prevalence of physical activity by 2-folds through intersectoral collaboration, public-private partnership and improved built environment.

Fighting Against Obesity— An Innovative Approach

Health Promotion Administration
Ministry of Health and Welfare, Executive Yuan, Taiwan, R.O.C.

Outline

- Background
- Design & Implementation
- Results
- Conclusion

The impact of obesity on health

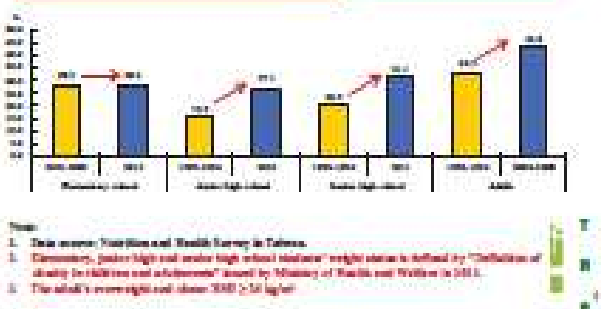
- The relative risks of diseases in obese versus normal weight individuals, WHO 2000

BMI > [illegible]	[illegible]	[illegible]
Diabetes Metabolic syndrome Gallbladder diseases Dyslipidemia Insulinoma sleep apnea	Hypertension Hyperuricemia/Gout Osteoarthritis	Breast cancer Endometrial cancer Colorectal cancer Reproductive hormone abnormalities Polycystic Ovary syndrome Infertility Lower back pain Risks of anesthesia Fetal malformations

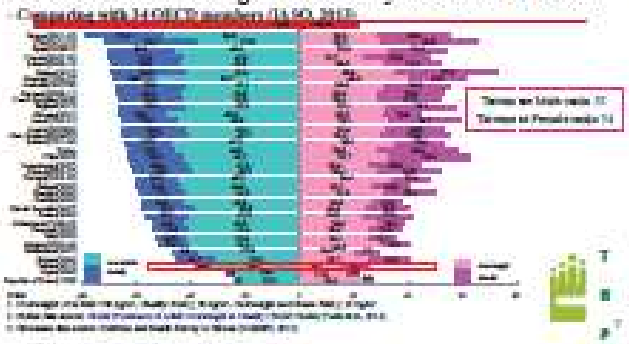
Obesogenic environment

Availability of food, Taiwan vs. Asia

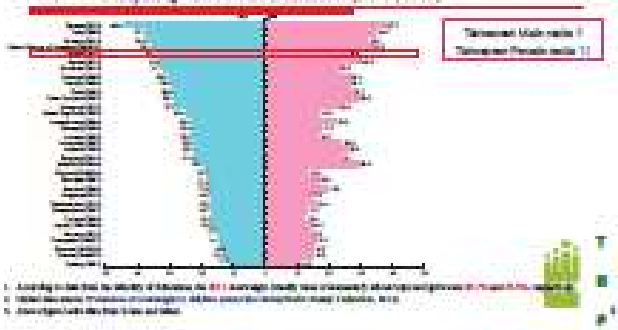
Prevalence of overweight and obesity in Taiwan



Prevalence of overweight and obesity in Adults in Taiwan

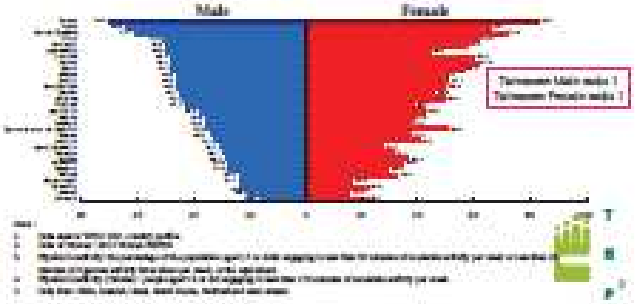


Prevalence of overweight and obesity in Children in Taiwan- Comparing with 34 OECD members (IASO, 2013)



Prevalence of insufficient physical activity

Comparing with 30 OECD members



Q:

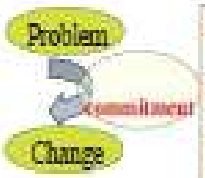
How to mobilize our society and people to fight against obesity?

"Healthy Centenary, Healthy Taiwan- 600 metric tons away" campaign in 2011

- To mobilize 600,000 persons to collectively lose 600,000 Kg of excessive body weight;
- A social movement of synchronized momentum to
  - [illegible] persons to collectively lose 600,000 Kg
  - Individuals to collectively learn and practice "Eat smartly, Exercise joyfully, Weigh yourself daily". Eat NOW!!

A multi-level, multi-sector ecological approach

Creating positive changes in settings



strategies:
Develop Personal Skills

strategies:
1. *Develop Personal Skills*
2. *Strengthen Community Actions*
3. *Reorient Health Services*

Ottawa Charter for Health Promotion, WHO, 1986

Implementation

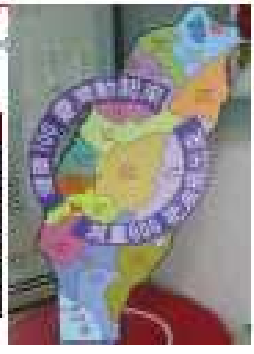
1. Political commitment

President Ma, Prime Minister Wu and Minister Yang kicked off the campaign

Committed goals by ministries & counties/cities

Goals declared by counties/cities

Ministry	Goals
National Fire Agency	0.36 tons
National Police Agency	2.5 tons
Ministry of Defense	7.2 tons
Ministry of Education	80 tons
Council of Labor Affairs	100 tons
Total	190 tons



Minister Wang of Labor Affairs demonstrated her will to work with HPA and to help labors lose 120 metric tons in 2011

Political commitment and leading by example by mayors and magistrates

2. Enable personal skills:

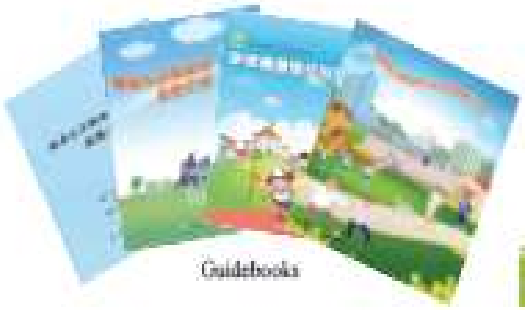
Capacity building for:
–workforce and program managers;
–participants

Capacity building

- Feb 23-24, 2011 International Conference on Obesity Prevention

- Workshops on obesity prevention

Modules: "How-to" manuals for hospitals, workplaces, schools, and local health bureaus



Self-help manual & App for the public

3. Strengthen community action


It's happening everywhere! Have you joined?
Community folk-dance groups


And the winner is…
"1 kg rice in exchange of 1 kg weight loss"
Lottery for participants with "health" as the reward

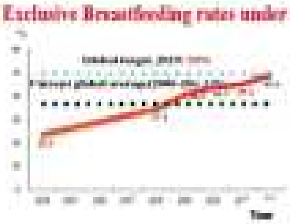

Media promotion
Press Conference / Press Release (Traditional Festival Smart Eats)
Jan
Feb
Mar
Apr
May
Jun
The Spring Festival
Mother's Day

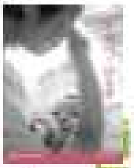

4. Reorient health services


Advocacy & role models


Bodyweight screening for patients (and staff)
Integrate obesity screening and weight management into routine checkup and clinical services
For patients
For staff

Exclusive Breastfeeding rates under 6 months





I am happy, because of you.

5. Build supportive environment

-make healthier choices available, accessible, affordable, adorable, adoptable

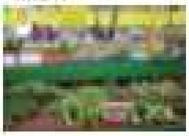
Innovation of delicious and affordable healthy meals and food products

- Healthy food certification

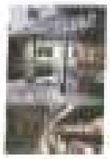
- Aboriginal healthy meal

- Healthy Snacks

- Three bundle of veggie cost NTD$ 10

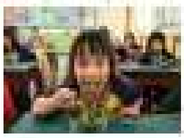


- Fashionable restaurant



School policy

- All primary and junior high schools in Taiwan are doing the health-promoting school program, and healthy bodyweight management is a priority issue.
- Guidelines on food products to be sold in schools (ex. upper limit of sugar, fat and sodium in drinks and foods)
- Healthy lunch with menu designed and supervised by dieticians provided at very low prices
- Every Monday as Meat-free Day



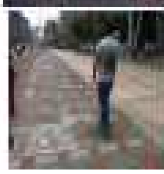
Convenient stores

- Healthy Meal Boxes, Light Meals, Fruits and Salads

- Serving as "Your Healthy Neighbors"

Active living

- Renovation of stairway and marketing in front of elevators



- 15 minutes healthy exercise in work places, two times per day.

- Spent calories are marked on walking paths, cycling paths, trails

Outdoor leisure time activity

- walking trails



- Cycling paths


Obesogenic Environment Examination

Rating	Result
Category 1: Strategies to promote the availability of affordable healthy food and beverages	●
Category 2: Strategies to support healthy food and beverage choices	●
Category 3: Strategy to encourage breastfeeding	●
Category 4: Strategies to encourage physical activity or limit sedentary activity among children and youth	●
Category 5: Strategies to Create safe communities that support physical activity	●
Category 6: Strategy to encourage communities to organize for change	●

● Supported ● Unchanged ● Worse

6. Develop healthy public policy

Policy support

- Healthy purchasing
- Population Nutrition Act (draft)
  - Implement National Health Interview Survey (NHIS);
  - Promote Nutrition Supportive Environment;
  - Promote National Nutrition Education;
  - Require mandatory Nutrition Labeling for certain types of food establishment
  - Does not include sin tax.

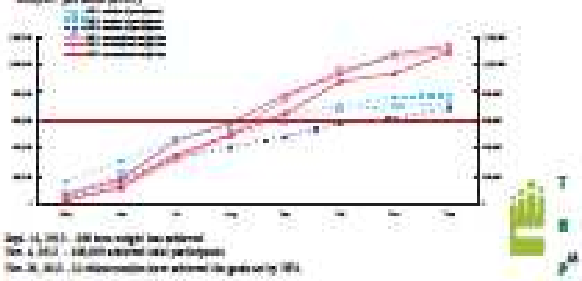
Policy support

- To amend of Act Governing Food Sanitation
- Allow the government to introduce restrictions on advertisement or promotion of junk foods;
- Discourage consumption of sugar-sweetened beverages.(Per school)
- "Drink more water" press conference
- Off-Campus Healthy Eating Consultation Project


- Gift voucher of drink more water campaign for children.

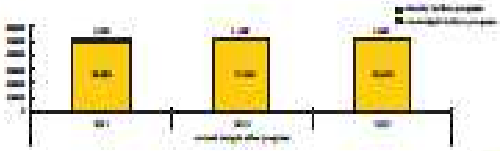
Results

Progress of Campaign 2011-13

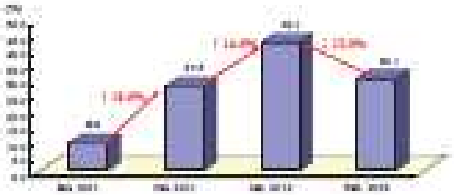


Number of Participants Reverted Back to Normal BMI, 2011-2013

More than 50,000 people decreased their BMI from overweight and obese range to normal range in 2011, 2012 and 2013, with 52,130 (7.2%) people in 2011, 52,515 (6.7%) people in 2012 and 51,682(7.5%) people in 2013 respectively.



Public awareness of this campaign achieved 100%



The trends in adult weight status by BMI-NAHSIT

Media Report

Internal (Global Views Monthly)

Vol. 308, Feb 2012

Special issue, July, 2012

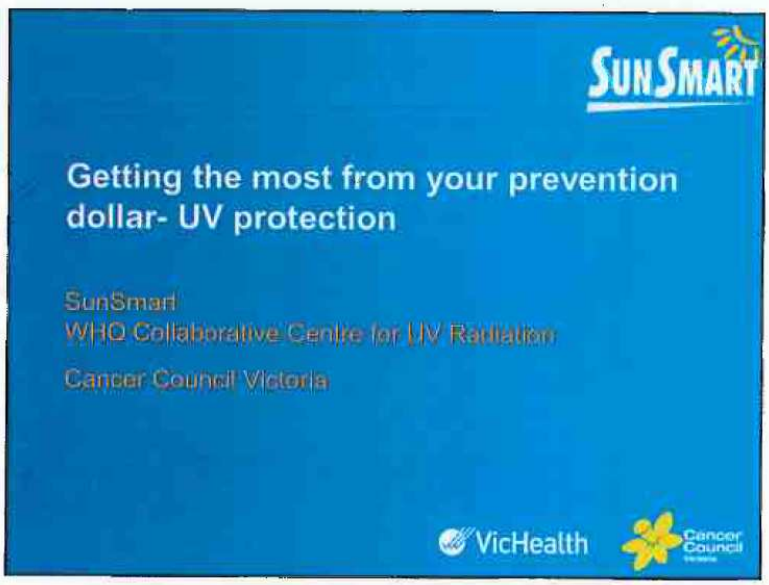
Media Report

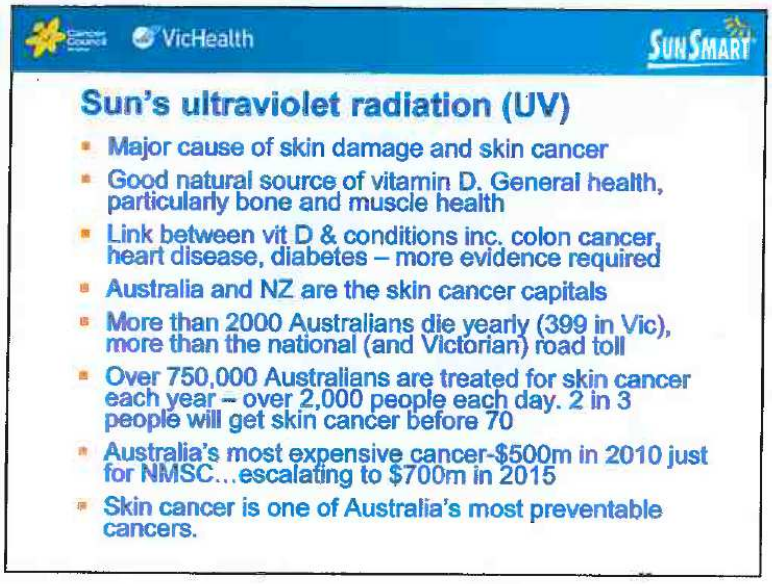
-International

Conclusion

- There is strong political support both at the national and local levels.
- Inter-sectoral and public-private partnership has been developed.
- The healthy weight management was welcomed and well-accepted and has achieved significant results on weight management.
- The obesogenic environments, though difficult to change, have shown some positive development at the community level, too.

附件 5 參訪 Cancer Council Victoria 報告簡報





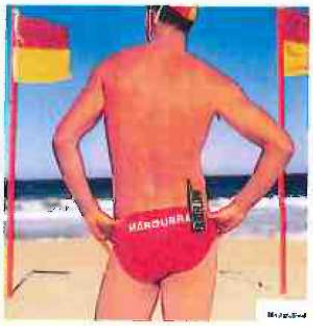
VicHealth SunSmart

30 years on

- 1980 Slip! Slop! Slap! limited public education campaign
- 1988 developed into multi-faceted program
- Now programs in each state and territory
- UV index 3 and above – Slip,Slop,Slap,Seek,Slide
- Evolving role to include both the harms and benefits of UV exposure.

VicHealth SunSmart

1980 Lifesavers looked like this.....



VicHealth

SUN SMART

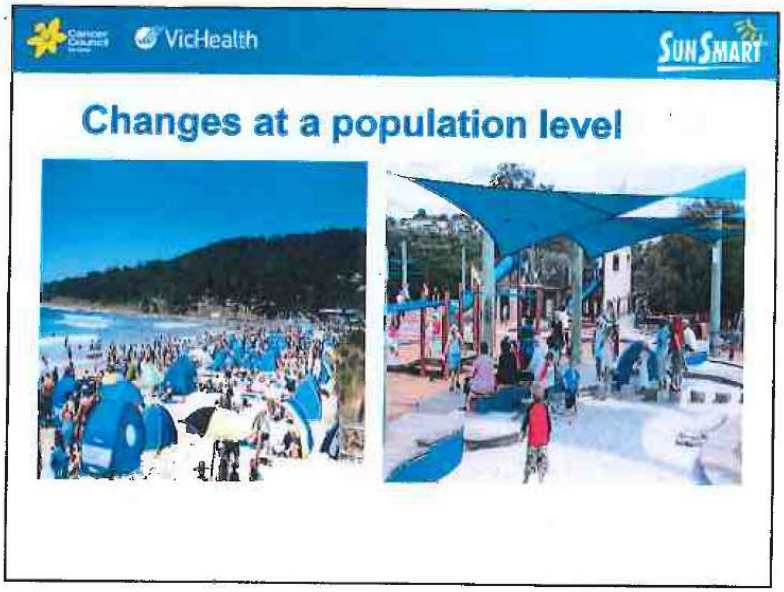
and now.....

VicHealth

SUN SMART

Advertising looked like this.....


VicHealth
SUNSMART
And now .....


VicHealth
SUNSMART
Changes at a population level

So have we made a difference!

- More than 103,000 skin cancers were prevented in Victoria 1988 – 2003.....1000 deaths averted
- Value for money $2.30 net saving for every dollar spent. One of a handful of Australian public health interventions assessed as being 'excellent value for money'
- Positioned Victoria as a national leader in solarium legislation. Now total bans Australia wide from Jan 2015
- Increased use of hats and sunscreens, reductions in sunburn and decreased desire for a tan
- Decreased rates of melanoma and non-melanoma skin cancer in young people
- 90% of all primary schools participating reaching approx 430,000 Victorian children.

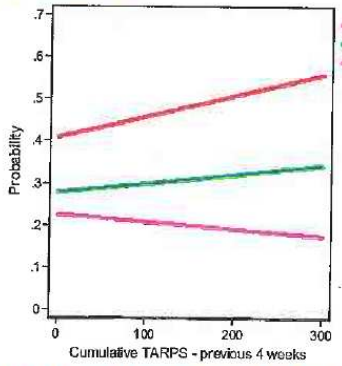
Why success?

- Mix of interventions and capacity building strategies
- History of population wide social marketing as part of this mix
- A long-term commitment to individual behavioural and broader environmental change
- Partnership approach between Cancer Council and VicHealth
- Integration of research and evaluation into program planning

But 20+ years of data is telling

- Behaviour and Sunburn- still doing better than 1988, but peaked in the mid 1990s
- For most measures, gradual drift back to baseline from mid-1990s to 2003, now starting to see improvements since 2006
- The trend mirrors spending on television advertising.

Hats, sunscreen and unprotected skin improved as SunSmart TV media increased



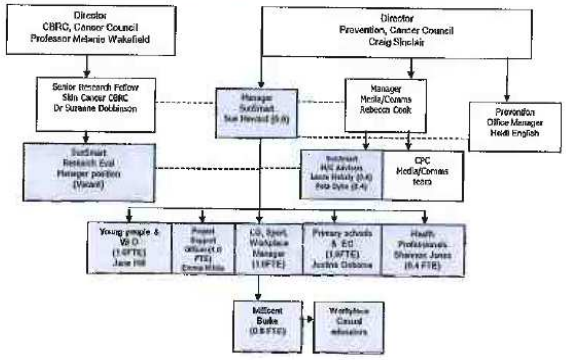
Modelled example outcomes for levels of accumulated Target Audience Ratings Points (TARPs) (using coefficients from the logistic or linear regression models and selecting for illustration purposes data for a specific respondent profile: 14–17 year-old men, with highly sensitive skin, who were outdoors on weekend days of 22–27°C in 1998).

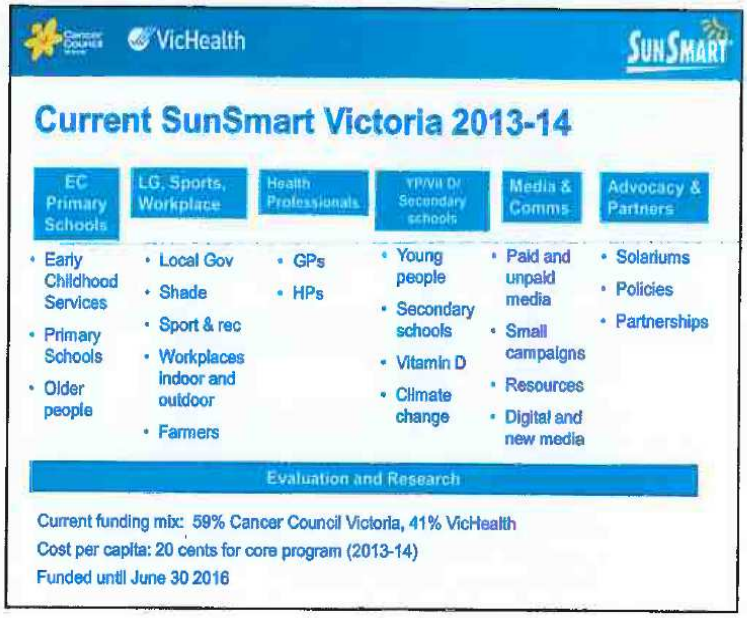
Dobbinson SJ et al. Weekend sun protection and sunburn in Australia: Trends (1987-2002) and association with SunSmart television advertising. *American Journal of Preventive Medicine* 2008; 34: 94-101.

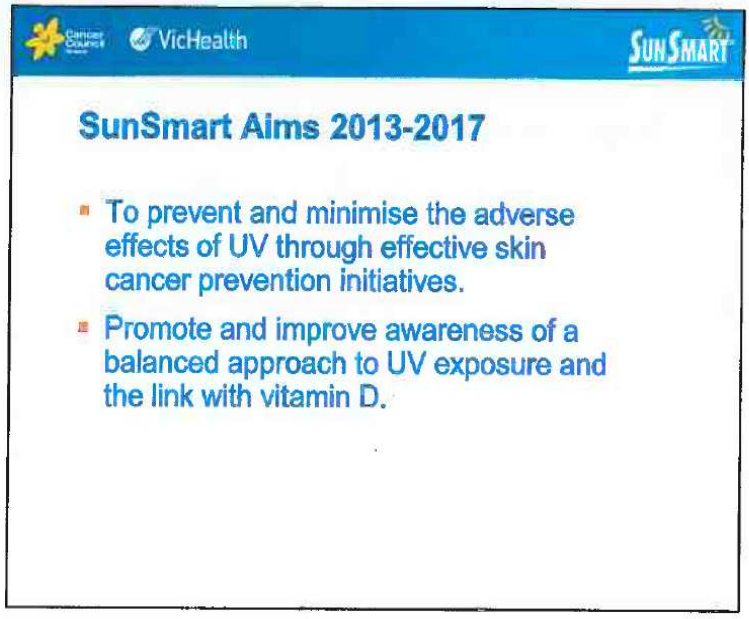
Priorities

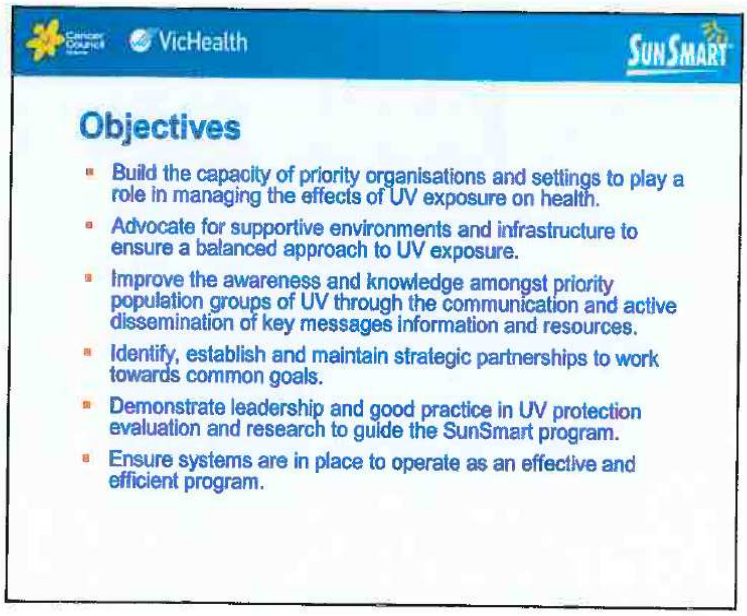
- Paid social marketing
- Priorities: Young people and people over 50 years
- Education strategies for vitamin D with health professionals
- Integration of skin cancer prevention in Healthy Together Victoria- Community Model and Achievement Program.
- Advocacy for quality shade provision - schools and early childhood settings; public spaces such as parks, sporting, and aquatic and recreation facilities.
- Continuing to innovate, implement and evaluate campaigns and health promotion tools using new technologies and social media

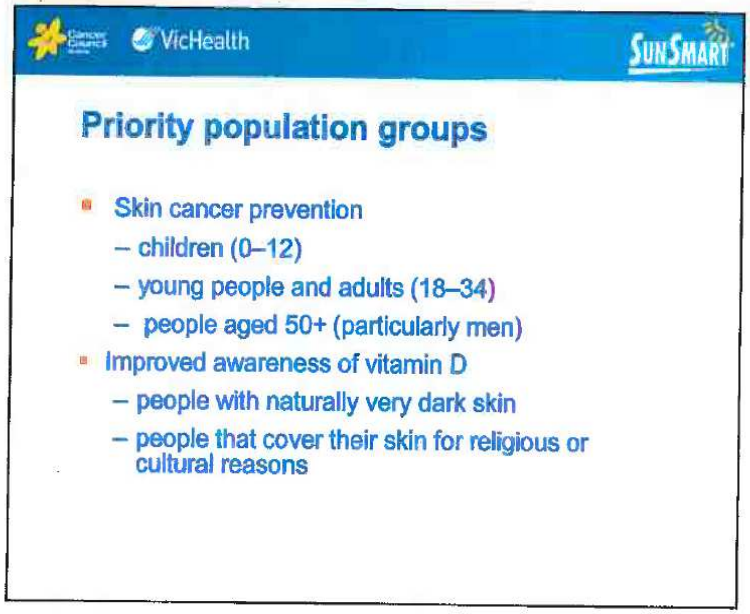
Organisational structure




VicHealth
SunSmart
Current SunSmart Victoria 2013-14
EC Primary Schools
LG, Sports, Workplace
Health Professionals
YP/Vit D/ Secondary schools
Media & Comms
Advocacy & Partners
Early Childhood Services
Primary Schools
Older people
Local Gov
Shade
Sport & rec
Workplaces indoor and outdoor
Farmers
GPs
HPs
Young people
Secondary schools
Vitamin D
Climate change
Paid and unpaid media
Small campaigns
Resources
Digital and new media
Solariums
Policies
Partnerships
Evaluation and Research
Current funding mix: 59% Cancer Council Victoria, 41% VicHealth
Cost per capita: 20 cents for core program (2013-14)
Funded until June 30 2016


VicHealth
SunSmart
SunSmart Aims 2013-2017
To prevent and minimise the adverse effects of UV through effective skin cancer prevention initiatives.
Promote and improve awareness of a balanced approach to UV exposure and the link with vitamin D.


VicHealth
SUNSMART
Objectives
Build the capacity of priority organisations and settings to play a role in managing the effects of UV exposure on health.
Advocate for supportive environments and infrastructure to ensure a balanced approach to UV exposure.
Improve the awareness and knowledge amongst priority population groups of UV through the communication and active dissemination of key messages information and resources.
Identify, establish and maintain strategic partnerships to work towards common goals.
Demonstrate leadership and good practice in UV protection evaluation and research to guide the SunSmart program.
Ensure systems are in place to operate as an effective and efficient program.


VicHealth
SUNSMART
Priority population groups
Skin cancer prevention
– children (0–12)
– young people and adults (18–34)
– people aged 50+ (particularly men)
Improved awareness of vitamin D
– people with naturally very dark skin
– people that cover their skin for religious or cultural reasons

2013–17 SunSmart evaluation framework and program indicators

1. Introduction

SunSmart will be an acknowledged as a national and global leader in the field of influencing behaviours, social norms and environments to ensure a balanced approach to UV exposure.

SunSmart aims to:

- Prevent and minimise the adverse effects of UV through effective skin cancer prevention and early detection initiatives.
- Promote and improve awareness of a balanced approach to UV exposure and the link with vitamin D.

The Program objectives for 2013–17 include to:

1. Build the capacity of priority organisations and settings to play a role in managing the effects of UV exposure on health.
2. Advocate for supportive environments and infrastructure to ensure a balanced approach to UV exposure.
3. Improve the awareness and knowledge amongst priority population groups of UV through the communication and active dissemination of key messages information and resources.
4. Identify, establish and maintain strategic partnerships to work towards common goals.
5. Demonstrate leadership and good practice in UV protection evaluation and research to guide the SunSmart program.
6. Ensure systems are in place to operate as an effective and efficient program.

2. Priority population groups and settings

SunSmart aims to influence lifestyles, behaviours and environments across the entire community to ensure a balanced approach to UV exposure in Victoria. However there are priority population groups and settings that require focussed attention between 2013–17 including:

<table>
<tr><th colspan="4">Priority Population Groups</th></tr>
<tr><td colspan="2">Children (0–12)</td><td>Adolescents (13–17) and Young people (18–24)</td><td>People aged 50+ (particularly Men)[1]</td></tr>
<tr><th colspan="4">Priority settings for action and engagement</th></tr>
<tr><td>Schools</td><td>Recreation and community settings</td><td>Workplaces</td><td>Primary Care Sector- health professionals GPs</td></tr>
</table>

[1] Any planned activity will be limited to partnership development and PR activity at the time of writing strategic plan.

3. SunSmart organisational structure

The SunSmart team and program areas have been structured to be able to respond to the program aims, objectives, priority population groups and settings. From 2013 SunSmart operated across the following program areas/settings (9.4 FTE positions as at January 2013):

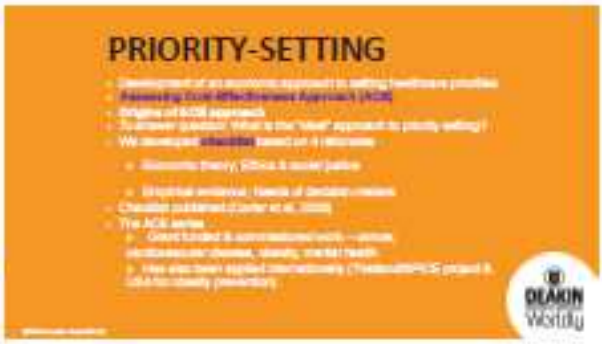
- Communications and media
- Local government, shade and recreation
- Program management
- Research and evaluation
- Schools, early childhood services and tertiary institutions
- Vitamin D
- Workplaces and farmers
- Young people and events

The SunSmart program evaluation framework (section 4) has been adapted from the outcomes framework presented in The Evidence of Health Promotion Effectiveness – A Report for the European Commission by the International Union for Health Promotion and Education. Section 5, 6, and 7 outlines the Long term and intermediate health outcomes, Impact measurement by priority population group and process indicators for the program.

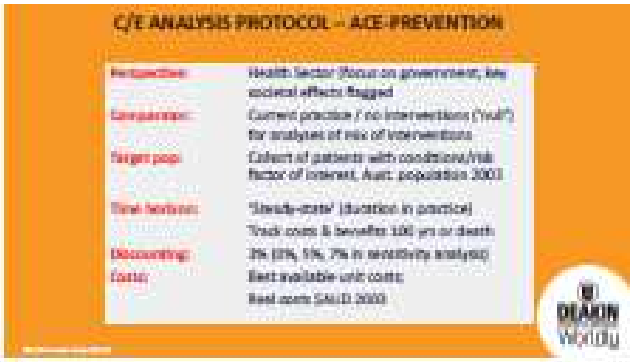
4. SunSmart evaluation framework- summary of measures

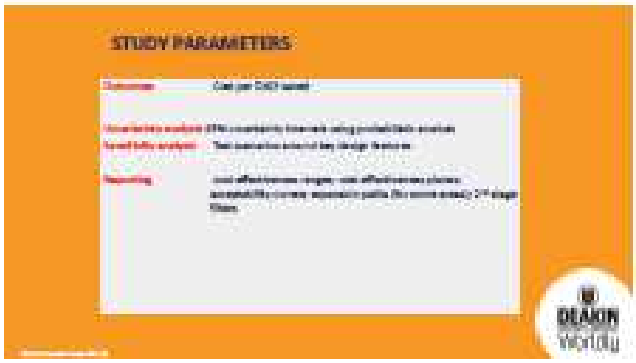
Long term health outcomes	**Reduced skin cancer mortality, incidence trends, sunburn incidence including;** • Trends in incidence of melanoma in Victoria (by sex and age group) • Rates of melanoma and NMSC persons in Victoria (per 100,000 by sex) • Weekend summer sunburn incidence (population-level sunburn, adults and adolescents)	
Intermediate health outcomes (modifiable determinants of health)	**Healthy lifestyles and attitudes** Sun-protective behaviours (adults, adolescents, children 0-12 years): hats, sunscreen, mean body exposure, clothing; solarium use;	**Healthy settings and environments** EC services - wearing sun protective hats, apply sunscreen and reapplication; report sun protection not used from May to August Primary schools- wearing hats; report sun protection not used from May to August Victorian outdoor workers reporting their workplace provides sunscreen, hats or other sun protective headwear, shade Shade availability and use in public places Changes in solarium legislation and solarium numbers
Impact: *Health literacy- Awareness and knowledge*	**Awareness and knowledge (adults and adolescents/general pop):** report using UV Alerts or sun protection times to make decisions about sun protection; recall Slip! Slop! Slap! Seek! Slide!; report having seen or heard weather forecast with information on the times of day when you need sun protection; correctly identify when summer and winter vitamin D recommendations by skin type. **Rural and outdoor workers** recognise/recall Slip! Slop! Slap! Seek! Slide!; report having seen or heard weather forecast with information on the times of day when you need sun protection; report using UV Alerts or sun protection times to make decisions about sun protection; report knowledge improvement in workplace education programs. **Victorian GPs** correctly when summer and winter vitamin D recommendations for patients by skin type; prompt at risk groups to be alert to vitamin D status	
Impact: *Social action/norms and influence*	**Attitudes (adults and adolescents):** Preference for no suntan; perceived susceptibility, perceived safety of solariums; ; TV advertisements in Australia (Children in hats/ Sunscreen vs tanning oil/Community expectation for shade (build upon for 2013-2017 plan)	
Impact: *Health public policy and organisational practice*	**Early childhood services- evidence of policy and practice such as** sun protection policy; clothing; learning & development program; report enough shade/conducted a shade audit/report using sun protection times/address vitamin D in their sun protection policy; **Primary schools - evidence of policy and practice** with a sun protection policy; allow only wide-brimmed, legionnaire or bucket hats/ clothing in school uniform / dress code/ sun protection is incorporated into school curriculum/ report enough shade/ have conducted a shade audit/address vitamin D in their sun protection policy/ report using sun protection times. **Workplace/ Organisations evidence of policy and practice such as** provide employees with shade/sun protective clothing/ sunglasses/ sunscreen/ hat or attachment/ have a UV policy/ report using the SunSmart UV Alert/ report intending to make changes to organisational policy or practices **Victorian General practice** advising patients to use sun protection times to protect themselves during the sun protection times (or not through winter)/ provide advice for vitamin D at-risk groups (*GP survey 2011*). **Shade; Evidence of shade in state or local government policy/strategic documents** Shade – parliamentary submission – combined case study on shade which covers partnerships and advocacy (see obj. 2); inclusion of shade in quality standards for early childhood. **Government policy:** State cancer action plan, UV strategy, skin cancer as health promotion priority, funding; National OHS guidelines	
Process indicators	Resources and community information; Media coverage; Events; Education sessions; Technical advice; Policy support; Shade audits; Government submissions; Research; Partnership development and meetings	

附件 6　參訪 Deakin University’ s Strategic Research Centres 報告簡報




Quick overview of ACE Approach
1. Clear criteria for selection of interventions
2. Standardised evaluation methods to minimise methodological confounding
3. Evaluation conducted as integral part of exercise (not collation from literature)
4. Evidence-based approach with extensive uncertainty & sensitivity testing
5. Careful thought given to government policy objectives and concept of 'benefit'


C/E ANALYSIS PROTOCOL – ACE-PREVENTION
Perspective: Health Sector (focus on government; key societal effects flagged
Comparator: Current practice / no interventions ('null') for analyses of mix of interventions
Target pop: Cohort of patients with conditions/risk factor of interest, Aust. population 2003
Time horizon: 'Steady-state' (duration in practice)
Track costs & benefits 100 yrs or death
Discounting: 3% (0%, 5%, 7% in sensitivity analysis)
Costs: Best available unit costs
Real costs $AUD 2003


STUDY PARAMETERS
Outcomes: Cost per DALY saved
Uncertainty analysis: 95% uncertainty intervals using probabilistic analysis
Scenario analysis: Best scenarios selected key design features
Reporting:

HEALTH TECHNOLOGY ASSESSMENT – PBAC

Marcus Tan
Deakin Health Economics

HEALTH TECHNOLOGY ASSESSMENT (HTA)

- HTA provides policy makers, funders, health professionals and health consumers with the information necessary to understand the benefits and comparative value of health technologies and procedures to inform policy, funding and clinical decisions, and assist with consumer decision making

1. Audience
   - Policy makers, funders (government/insurers), health professionals and health consumers → competing demands
2. Health technology
   - Pharmaceuticals, diagnostic tests, biologics, medical devices, surgically implanted prostheses, medical procedures and public health interventions
     - Co-dependent, hybrid, converging technologies
   - Applied across: prevention, screening, diagnosis, treatment and rehabilitation
   - Stage of development: investigational → established
3. Clinical evaluation of health technology
   - Systematic review of the clinical evidence: comparative benefits and harms
4. Comparative value
   - Cost effectiveness: economic evaluation

HTA

LINKING EVIDENCE BASED MEDICINE AND HEALTH POLICY

KEY CONCEPTS OF HTA

1. Does the technology improve health outcomes?
2. Is the health technology safe?
3. Is the intervention cost effective?

Figure 1 pg7 Kelly (2013)

ORIGINS OF HTA

- Technological innovation
- Proliferation of health care technology and associated health care costs
  - Eg. Antibiotic, biotechnology, diagnostic imaging, molecular diagnostics, organ and tissue replacement, surgical techniques
  - Clinical standpoint: interventions informed by evidence based practice of maximal 'health benefit' for the patient
    - Lacking in cost considerations and critical evaluation of patient relevant comparative claims
    - Especially of difficulty in the healthcare market where monopolies exist and an information void exists between the end user and the provider → unique imperfect information scenario
  - Limited resources → possible outcomes within this setting that are within society's acceptance of cost effectiveness
    - Acceptable cost/QALY benchmarks → $30k - $50,000?
- For governments/insurers: it is the challenges involved with providing high quality, innovative care whilst managing health care budgets and safeguarding equity, access and choice

ORIGINS OF HTA

Goodman 2004

- Technology Assessment – 1960s – USA
- Identify desirable first-order, intended effects of technologies as well as higher order, unintended social, economic and environmental effects
  - Congressional Committee on Science and Astronautics – Chairman Daddario:
    - *"[T]echnical information needed by policymakers is frequently not available, or not in the right form. A policymaker cannot judge the merits or consequences of a technological program within a strictly technical context. He has to consider social, economic, and legal implications of any course of action [US Congress, House of Representatives 1967]".*

ORIGINS OF HTA

Goodman 2004

- Development and application of TA via National Academy of Sciences (NAS) and the National Academy of Engineering (NAE)
  - Resulted in the Office of Technology Assessment (OTA): Health program assessment established in 1975
- Rather than impeding the development and use of technology, the NAE emphasized that:
  - *"Technology assessment would aid the Congress to become more effective in assuring that broad public as well as private interests are fully considered while enabling technology to make the maximum contribution to our society's welfare (National Academy of Engineering 1969)."*

HTA: EARLY MODELS

- Drummond 2005
- Office of Technology Assessment (OTA): Early HTA methods drew upon a variety of analytical, evaluative and planning techniques
  - Systems analysis
  - Cost benefit analysis
  - Consensus methods (Delphi methods)
  - Feasibility studies
  - Market research
  - Technological forecasting

HTA: EARLY MODELS

- Sweden: Statens beredning för medicinsk utvärdering (SBU); established 1987
  - Loosely modeled on OTA
  - SBU: independent body to provide unbiased scientific technology assessments of health care interventions for healthcare decision makers as well as patients
  - Involved in development of International Network of Agencies for HTA (INAHTA) and International Journal of Technology Assessment in Health Care
  - https://www.sbu.se/en/About-SBU/

HTA: EARLY MODELS

- Canada
  - Quebec
    - 1998: Conseil d'évaluation des technologies de la santé (CETS)
    - 2000: Agence d'évaluation des technologies et des modes d'intervention en santé (AETMIS)
  - National Level: http://www.cadth.ca/en/about-cadth/history
    - 1998: Canadian Coordinating Office for Health Technology Assessment (CCOHTA)
    - 2006: Canadian Agency for Drugs and Technologies in Health (CADTH)

HTA: UK - NICE

- UK
  - 1999: National Institute for health and care excellence (NICE)
    - Significantly contributed to globalization of HTA
    - HTA processes and methods used by NICE are described in detail in:
      - NICE's Process and methods guides: Guide to the processes of technology appraisal
      - http://www.nice.org.uk/article/pmg9/resources/non-guidance-guide-to-the-processes-of-technology-appraisal-pdf
  - NICE Guidance often referred to by other HTA organizations; publically available decisions; robustness of review process → guidance often available prior to drug approval in other countries

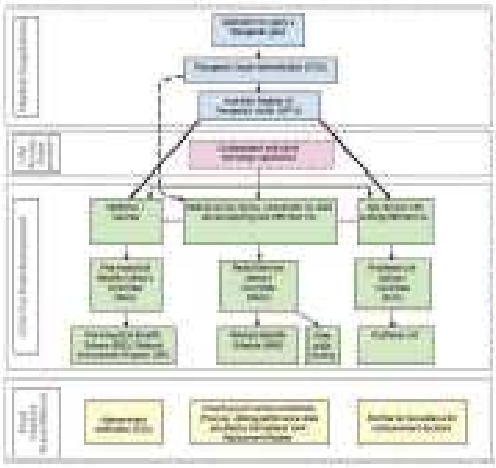
HTA: UK - NICE

- Proactive process to technology appraisal: topic selection process via National Institute for Health Research Horizon Scanning Centre
  - Notification of key, new and emerging healthcare technologies that may be suitable for NICE technology appraisal:
    - Process of elimination and filtering; prioritization;
    - Refer to: http://www.nice.org.uk/article/pmg9/resources/non-guidance-guide-to-the-processes-of-technology-appraisal-pdf
  - Notify NICE of new drugs in development 20 months before marketing authorization and new indications 10 months before marketing authorization
  - Healthcare professionals, researches can also suggest potential technologies to NICE
  - Sponsor can also notify NICE via UKPharmaScan

HTA: UK - NICE

- Transparent review process via technology appraisals (TA):
  - Single TA: single technology, single indication: sponsor submits primary evidence →
    - Evidence review group (ERG) reviews company submission
      - Refer to Section 3.2 – 3.3
  - Multiple TA: >1 technology/1 technology for >1 indication:
    - Assessment group (AG): independent review of evidence
    - Review of evidence and assessment of cost effectiveness may be separate to that provided by the sponsor
      - Refer to Section 3.4 – 3.5

HTA: AUSTRALIA



Current Australian Government HTA processes for market entry and reimbursement

[redacted]

HTA for reimbursement – where health policy and licensed bodie requirements of cost-effectiveness are introduced

HTA: AUSTRALIA

- **Pharmaceutical Benefits Advisory Committee (PBAC):**
  - Independent statutory body established on May 11, 1954 under Section 101 of the national Health Act 1953
  - Recommends medicines and medicinal preparations to the Minister for Health for funding under the Pharmaceutical Benefits Scheme (PBS) and vaccines for funding under the National Immunisation Program (NIP).
    - Consider the effectiveness and cost of a proposed PBS listing compared with other therapies
- **Medical Services Advisory Committee (MSAC):**
  - Established in 1998: advises the Minister for health on whether a new medical service should be publically funded on the basis of an assessment of medical services for comparative safety, effectiveness, cost effectiveness and total cost
- **Prostheses List Advisory Committee (PLAC):**
- Other programs (breast prosthesis, MDSS, stoma appliance scheme, continence aids payment scheme, etc) that do not involve formal HTA processes
- Hospital system (public/private): informal processes, therapeutics committees
- Fragmentation between federal and state HTA → 'silo' decision making → opportunity cost from other health care budgets are not considered

PBAC

- Assessment of 'value for money'
  - PBAC considers the clinical place, overall effectiveness, cost effectiveness and cost of a proposed medicine compared with:
    - Other medicines already listed on the PBS for the same/similar indications; or
    - Standard medical care
- Major submissions requesting the inclusion of a pharmaceutical product/vaccine on PBS/NIPS are generally prepared by the manufacturer/sponsor of the product
  - Horizon scanning not actively done for the PBAC process (in contrast to MSAC); sponsors may approach the Department of Health prior to the presentation of a submission for PBAC consideration

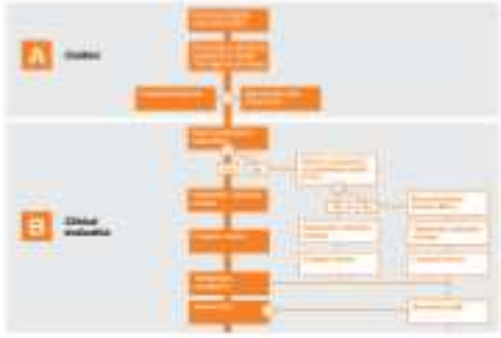
PBAC

- Guidelines introduced for pharmaceutical reimbursement were introduced in 1992
  - Guides the preparation of submissions: developed to communicate to stakeholders the considerations that the PBAC makes
  - Not a prescriptive set of rules, but a reflection upon the approaches that are likely to influence the PBAC's decision making: example of best practice in clinical and economic evaluation
  - Establish some level of consistency across submissions

STRUCTURE OF MAJOR SUBMISSION TO THE PBAC

PBAC GUIDELINES

KEY DECISIONS: MAJOR SUBMISSIONS TO THE PBAC



KEY DECISIONS: MAJOR SUBMISSIONS TO THE PBAC